



ASIAN DEVELOPMENT

# Outlook 2010

Macroeconomic management  
beyond the crisis

Asian Development Bank

© 2010 Asian Development Bank

All rights reserved. Published 2010.  
Printed in the Philippines.

ISSN 0117-0481  
Publication Stock No. FLS101545

#### Cataloging-in-Publication Data

Asian Development Bank.  
Asian development outlook 2010.  
Mandaluyong City, Philippines: Asian Development Bank, 2010.

1. Economics. 2. Finance. 3. Asia. I. Asian Development Bank.

The annual *Asian Development Outlook* provides a comprehensive economic analysis of 45 economies in developing Asia and the Pacific.

The views expressed in this book are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use.

By making any designation of or reference to a particular territory or geographic area, or by using the term “country” in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

6 ADB Avenue, Mandaluyong City  
1550 Metro Manila, Philippines  
Tel +63 2 632 4444  
Fax +63 2 636 2444  
[www.adb.org](http://www.adb.org)

For orders, please contact:  
Department of External Relations  
Fax +63 2 636 2648  
[adbpub@adb.org](mailto:adbpub@adb.org)

# Foreword

As developing Asia rebounds from the global economic crisis ahead of the rest of the world, the *Asian Development Outlook 2010 (ADO 2010)* predicts growth exceeding 7% in the region this year and next. Although that is still lower than the precrisis outcome of 9.6% in 2007, such a healthy rebound, from a low of 5.2% in 2009, would be welcome.

The global economy has also turned the corner, with the United States, eurozone, and Japan beginning a mild recovery in late 2009. From a collective contraction of 3.5% last year, the three are forecast to expand by 1.7% and 2.0% in the next two years, respectively.

Extraordinary fiscal and monetary stimulus packages implemented in countries around the world to mitigate the negative effects of the global financial crisis fueled the quick turnaround. Large and fast-tracked public spending, targeted transfers, low interest rates, and unconventional liquidity measures combined to lift growth, albeit with varying effectiveness.

But there are substantial downside risks to the recovery that could still see regional and global growth falter in the near term. Mistimed withdrawal of macroeconomic stimulus measures could derail the fragile recovery. A reversal of last year's commodity price deflation and a sharp rise in international commodity prices could also thwart the global and regional revival. The persistence of global imbalances, meanwhile, risks sparking future turmoil, while deteriorating debt positions could imperil fiscal credibility in some countries.

*ADO 2010* highlights two additional risks that are particularly relevant to developing Asia. The region's early recovery is attracting large capital flows, the perils of which were made clear in the 1997–98 Asian financial crisis; volatile capital flows could again have serious implications for exchange rates and money supply. Moreover, the quick return to high growth could accelerate the increase in consumer and asset prices.

As it exits the worst effects of this crisis, therefore, developing Asia must remain faithful to its tradition of sound and responsible fiscal and monetary policies. Just as they did before the crisis, these policies will promote macroeconomic stability and sustained growth. Such macroeconomic prudence will provide the needed resources and credibility for tackling any large and adverse shocks in the future.

There is also plenty of scope for improving and strengthening the region's fiscal, monetary, and exchange rate policy frameworks. As Part 2 of *ADO 2010* lays out, such adjustments will enable the region to better adapt to the postcrisis world.

In monetary policy, price stability must remain the overriding objective. But the global crisis highlights the need to prevent asset price bubbles. This suggests that financial regulation should be more closely coordinated with monetary policy.

More flexible exchange rates are desirable to reduce the region's current account surpluses. This also requires coordinated effort to

overcome the fear of losing competitiveness, especially during the transition to greater flexibility.

Finally, while safeguarding fiscal sustainability, supported by strong medium-term fiscal policy frameworks, a wide range of institutional and policy measures can contribute to economic rebalancing by removing structural impediments to domestic demand.

As developing Asia's recovery gains momentum, policy makers must embed these macroeconomic policy prescriptions in their longer-term planning. Doing so will enhance the sustainability not only of the region's economic recovery, but, increasingly, of the world's as well.



HARUHIKO KURODA  
President

# Acknowledgments

The *Asian Development Outlook 2010 (ADO 2010)* was prepared by the staff of the Asian Development Bank from the Central and West Asia Department, East Asia Department, Pacific Department, South Asia Department, Southeast Asia Department, Economics and Research Department, as well as the resident missions. Representatives from these departments and the Office of Regional Economic Integration constituted a Regional Economic Outlook Task Force, which met regularly and coordinated closely to develop consistent forecasts for the region.

The economists who contributed the sections are bylined in each chapter. The subregional coordinators were Safdar Parvez, Tomomi Tamaki, and Kiyoshi Taniguchi for Central and West Asia; Jan Hansen for East Asia; Tadateru Hayashi for South Asia; Puran Rajapakse for Southeast Asia; and Craig Sugden for the Pacific.

A team of economists from the Economics and Research Department, led by Joseph E. Zveglic, Jr., Assistant Chief Economist, Macroeconomics and Finance Research Division, assisted by Editha Laviña, coordinated the overall production of the publication. Technical and research support was provided by Shiela Camingue, Gemma Esther Estrada, Nedelyn Magtibay-Ramos, Maria Cynthia Petalcorin, Pilipinas Quising, Aleli Rosario, Lea Sumulong, Ronaldo Tamangan, and Raquel Tabanao. Richard Niebuhr and Anthony Patrick as the economic editors made substantive contributions to the country chapters and other parts of the book.

Niny Khor and Iva Sebastian of the Economics and Research Department provided material on the uneven job recovery; while Hsiao Chink Tang and Ganeshan Wignaraja of the Office of Regional Economic Integration contributed materials on the central bank credibility and business impacts of free trade agreements, respectively.

Jonathan Aspin did the style and manuscript editing. Fred Dahl handled the initial copy editing for Part 2. Elizabeth E. Leuterio was responsible for typesetting and data linking, as well as graphics generation in which she was assisted by Maria Susan Torres. Art direction of the cover design was by Anthony Victoria, with watercolor artwork from Alvin Dennis Cristobal. Zenaida Acacio, Lagrimas Cuevas, and Elenita Pura provided administrative and secretarial support. The publication would not have been possible without the cooperation of the Publishing, Info and Web Unit of the Department of External Relations and the Logistics Management Unit of the Office of Administrative Services.

Ann Quon, Omana Nair, and Andrew Perrin of the Department of External Relations planned and coordinated the dissemination of the *ADO 2010*.



JONG-WHA LEE  
Chief Economist  
Economics and Research Department

# Contents

## Highlights—*ADO 2010*

### Part 1: Momentum for a sustained recovery? 1

- Momentum for a sustained recovery? 3
- Gauging the strength of industrial countries' recovery 4
- Developing Asia's prospects in the recovery 25
- Sources of Asia's growth during and beyond the crisis 29
- A case for monetary and fiscal activism? 39

### Part 2: Macroeconomic management beyond the crisis 41

- Macroeconomic management beyond the crisis 43
- Introduction 43
- Monetary policy 48
- Exchange rate and capital account liberalization 62
- Fiscal policy 77
- Key policy messages 93

### Part 3: Economic trends and prospects in developing Asia 105

#### Central Asia 106

- Armenia 107
- Azerbaijan 111
- Georgia 114
- Kazakhstan 117
- Kyrgyz Republic 121
- Tajikistan 124
- Turkmenistan 127
- Uzbekistan 129

#### East Asia 133

- People's Republic of China 135
- Hong Kong, China 142
- Republic of Korea 146
- Mongolia 151
- Taipei, China 155

**South Asia 159**

Islamic Republic of Afghanistan	161
Bangladesh	164
Bhutan	169
India	172
Maldives	179
Nepal	182
Pakistan	186
Sri Lanka	192

**Southeast Asia 196**

Brunei Darussalam	197
Cambodia	199
Indonesia	203
Lao People's Democratic Republic	208
Malaysia	211
Myanmar	216
Philippines	219
Singapore	224
Thailand	228
Viet Nam	233

**The Pacific 238**

Fiji Islands	239
Papua New Guinea	242
Democratic Republic of Timor-Leste	246
Small Pacific countries	249

**Statistical appendix 257**

Statistical notes and tables	258
------------------------------	-----

## Definitions

The economies discussed in *Asian Development Outlook 2010 (ADO 2010)* are classified by major analytic or geographic groupings. For purposes of *ADO 2010*, the following apply:

- **Association of Southeast Asian Nations (ASEAN)** comprises Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
- **Developing Asia** refers to the 44 developing member countries of the Asian Development Bank and to Brunei Darussalam, an unclassified regional member.
- **Central Asia** comprises Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
- **East Asia** comprises People’s Republic of China; Hong Kong, China; Republic of Korea; Mongolia; and Taipei, China.
- **South Asia** comprises Islamic Republic of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Southeast Asia** comprises Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
- **The Pacific** comprises Cook Islands, Fiji Islands, Kiribati, Republic of the Marshall Islands, Federated States of Micronesia, Nauru, Papua New Guinea, Republic of Palau, Samoa, Solomon Islands, Democratic Republic of Timor-Leste, Tonga, Tuvalu, and Vanuatu.
- Unless otherwise specified, the symbol “\$” and the word “dollar” refer to US dollars.

*ADO 2010* is generally based on data available up to **16 March 2010**.

## Acronyms and abbreviations

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
FY	fiscal year
GDP	gross domestic product
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
PRC	People’s Republic of China
US	United States
VAT	value-added tax
WTO	World Trade Organization



## Highlights—*ADO 2010*

*Developing Asia can look ahead to a robust recovery in the next 2 years. Growth is forecast to rise to 7.5% in 2010 and moderate to 7.3% in 2011, marking a healthy rebound from the 2009 slowdown. Shifting the drivers of growth from the support of monetary and fiscal expansion to robust private sources is now the key challenge for sustaining the recovery, both globally and regionally. Inflation pressures are increasing but still manageable in most developing Asian economies. Beyond the crisis, developing Asia faces the challenge of adjusting its monetary, exchange rate, and fiscal policies to foster macroeconomic stability and sustained growth within the broader direction of a return to prudence and discipline.*

## Key messages

- Developing Asia weathered the harsh global environment in 2009 well. It was the first region to emerge from the global turmoil, helped by decisive policy responses. Supported by improving global prospects, the *Asian Development Outlook 2010* (ADO 2010) projects developing Asia's growth to rebound to 7.5% in 2010, a strong acceleration from 5.2% in 2009, though still well below the record 9.6% growth of 2007. The region faces the challenge nonetheless of maintaining momentum against the backdrop of a gradual unwinding of expansionary measures and a slow pickup in external demand. The projection for 2011 is a moderate 7.3%.
- As recovery takes hold, inflation pressures, particularly in asset prices, may well start to mount in the region. ADO 2010 projects that inflation will increase, but to a still moderate 4.0% in 2010, conditional on the implementation of appropriate policy measures. Unusually easy monetary policy throughout the region cannot be kept for too long, and there is a need to revert to a normal stance. The surplus in developing Asia's current account balance narrowed for a second consecutive year to 4.9% of gross domestic product (GDP) in 2009 from a recent peak of 6.5% in 2007. It is forecast to narrow further to 4.1% in 2010 and 3.6% in 2011.
- Several downside risks to the global outlook—a slower global recovery, mistimed withdrawal of macroeconomic stimulus measures, a sharp increase in international commodity prices, deteriorating fiscal positions, and the persistence of global imbalances—could derail developing Asia's growth momentum. In addition, the region's stronger recovery and higher interest rates relative to those in the major industrial countries are already attracting potentially volatile capital flows, complicating macroeconomic management. Rising food prices, which disproportionately impact the poor, also pose a risk.
- Beyond the global crisis, the region's policy makers face the key challenge of adapting monetary, exchange rate, and fiscal policies to foster stable and sustainable growth. A long-standing tradition of fiscal and monetary prudence served the region well during the crisis. For example, ample fiscal space built up over years of sustained fiscal discipline enabled the unleashing of decisive and large fiscal stimulus programs. Part 2 of ADO 2010 calls for the region to remain faithful to sound and responsible fiscal and monetary policy, while adapting those policies appropriately as recovery takes hold and the economic crisis recedes.
- There is plenty of scope for improving and strengthening Asia's monetary, exchange rate, and fiscal policy frameworks. As Part 2 lays out, such adjustments will enable the region to better adapt to the postcrisis world. For example, while price stability must remain the overriding objective of monetary policy, the global crisis highlights the need to prevent asset price bubbles, suggesting a need to improve coordination between financial regulation and monetary policy. In fiscal policy, while it is of paramount importance to safeguard sustainability with strong medium-term fiscal policy frameworks, a wide range of measures can contribute to more balanced growth by removing structural impediments to domestic demand. Finally, more flexible exchange rate systems are in the region's own interest, and carefully designed capital controls that mitigate disruptive capital inflows may be desirable during the transition to greater flexibility, at least in the short run

## Performance in 2009

- At 5.2% in 2009, developing Asia's growth was its lowest in 8 years. Economies decelerated across the region, with only South Asia performing marginally better than in 2008. The larger economies, such as the People's Republic of China (PRC) and India, fared better. But for many economies, slower growth resulted from a sharp decline in exports to the industrialized world.
- Inflation in developing Asia was subdued at 1.5%, held down by depressed economic activity and lower international commodity prices. In some economies, such as the PRC; Taipei,China; and Thailand, consumer prices even declined on average during the year as deflation pressures persisted. Current account surpluses fell marginally. Although demand for the region's exports slowed sharply, imports also weakened, leaving the surplus in developing Asia at 4.9% of GDP, down from 5.4% the previous year. Surpluses in East Asia, Central Asia, and the Pacific declined substantially in 2009.
- Though most economies in East Asia contracted in 2009, solid growth in the PRC buoyed the aggregate performance. Overall GDP expanded 5.9%, almost entirely a result of 8.7% growth in the PRC, which was based heavily on exceptional fiscal and monetary stimulus adopted to combat the impact of the global recession. The Republic of Korea grew marginally, also helped by fiscal stimulus, but global headwinds battered Hong Kong, China; Mongolia; and Taipei,China, all of which contracted in 2009. Consumer prices fell slightly in the PRC and Taipei,China, and were flat on a subregional basis.
- Southeast Asia's growth slowed sharply to just 1.2% in 2009, the weakest outcome since the 1997–98 Asian financial crisis. Aggregate GDP would have declined if it had not been for relatively high growth of 4.5% in Indonesia, the subregion's biggest economy. Indeed, half the 10 economies contracted (Brunei Darussalam, Cambodia, Malaysia, Singapore, and Thailand), as the global recession cut into exports and investment flows. In many economies, imports fell even more steeply than exports, such that the subregional current account surplus rose. Aggregate inflation decelerated to 2.7%.
- South Asian growth edged up to 6.5% in 2009 from 6.4% in 2008, but only India and Afghanistan saw gains. India experienced a strong rebound to an estimated 7.2% for the year, despite the impact of a drought on crops. Continued fiscal stimulus and monetary easing in India over the year, alongside an improving global environment, prompted large capital inflows as investor and consumer confidence strengthened. Afghanistan recovered from a drought, posting 15.1% growth. But the Pakistani economy again slowed, though macroeconomic imbalances narrowed, as worsening security and power shortages obstructed any meaningful improvement in economic performance. GDP growth also slipped in Bangladesh, Bhutan, Maldives, and Sri Lanka, although Sri Lanka revived markedly from May, after the end of its long civil conflict. Inflation in the region was back to around pre-crisis levels, at 5.6%.

- In Central Asia, growth fell by half for a second year, to 2.7% from 6.1% in 2008, with all countries putting in a weaker performance. Armenia and Georgia were jolted by contractions in GDP. Kazakhstan eked out a 1.2% expansion, despite major bank failures and depressed non-oil activity. And growth in the Kyrgyz Republic and Tajikistan was clipped sharply, in part by reduced inflows of workers' remittances and economic difficulties in Central Asia and the Russian Federation. Among the four oil and gas producers, Azerbaijan, Turkmenistan, and Uzbekistan experienced only moderate slowing in growth. Across the subregion, inflation slowed to an average of about 6%, down from double-digit rates of the past 2 years.
- Aggregate growth in the Pacific decelerated to 2.3% in 2009, from 5.4% a year earlier. In Papua New Guinea, the biggest subregional economy, GDP grew by 4.5% (slowing from 2008), supported by fiscal spending and expectations of a large new natural gas export project. However, seven of the 14 Pacific economies contracted in 2009, with Fiji Islands' GDP declining for a third consecutive year. GDP in three others was estimated to be flat. Inflation slowed from high rates in the previous year, to 5.2% on a subregional basis in 2009.

## Global outlook

- After the historic first-quarter contraction in GDP, the global economy began to revive in the second quarter of 2009. But uncertainty still clouds the global outlook, particularly beyond the first half of 2010. Emergency policy measures are gradually being unwound, but the strength of broader demand components is not robust enough to take over from these temporary forces. On aggregate, GDP in the United States (US), eurozone, and Japan is expected to show a mild recovery in 2010, and grow by 1.7%. Growth in 2011 will rise only slightly to 2.0%, still below potential. Inflation is forecast to pick up to 1.4% this year and 1.3% in 2011.
- Several substantial short-term downside risks remain for the global outlook. Continued weakness in the US housing market is worrisome, as the uncertainty may impede the resumption of new lending there. Mistimed macroeconomic policy responses by authorities in the major industrial economies could squelch recovery, but any weakening of fiscal sustainability would undermine financial stability. Globally, a sharp rise in commodity prices cannot be ruled out.
- Among the medium-term risks is the failure of countries with current account deficits and surpluses to take measures to reduce those imbalances. Any reignition of the growth of global imbalances could lead to another bout of global instability. Moreover, poor international policy coordination could delay global financial regulatory reform. Failure to tackle the unfinished reform agenda will leave financial markets vulnerable to future shocks. Multilateral cooperation is equally important to avoid bilateral conflicts over exchange rate and trade issues.

## Outlook for developing Asia

- Prospects for developing Asia in the next 2 years have improved after better than expected growth in the second half of 2009. GDP is projected to grow by 7.5% in 2010 as a moderate global recovery supports a modest revival in global trade. Investment is expected to remain strong as the stimulus measures of last year continue to have a positive impact. Private consumption is projected to improve as income prospects pick up and unemployment continues to decline. In 2011, GDP growth will edge back to 7.3%, as the effects of the emergency policy measures begin to fade.
- Robust regional growth in the next 2 years will lift domestic demand, boosting consumer price inflation to about 4% in each year. The overall current account surplus is predicted to decline further this year and next as external demand only slowly picks up and domestic demand strengthens.
- Growth in East Asia is forecast to accelerate to 8.3% in 2010, with strong recoveries in the three economies that shrank last year (Hong Kong, China; Mongolia; and Taipei, China). GDP growth will remain buoyant in the PRC, while the Republic of Korea is expected to rebound to a 5.2% expansion, driven by stronger private investment and consumption and the pick up in global trade. Similar factors will benefit both Hong Kong, China and Taipei, China. In 2011, the five subregional economies are likely to see a slight easing in the pace of expansion, partly a result of a phasing out of stimulative policies and because this year's rebound will set a higher base.
- The PRC economy is forecast to grow by 9.6% in 2010. Aggressive fiscal and monetary stimulus is being adjusted, but will continue to contribute to strong growth, and firmer external demand will back buoyant domestic demand. The trade surplus will resume its upward trend. Economic growth is forecast to ease to about 9.1% in 2011, as the stimulus policies are phased out. Inflation is seen picking up to 3.6% this year and moderating to 3.2% next year as the highly stimulatory monetary policy is reined in.
- In Southeast Asia, aggregate growth is forecast to rebound to 5.1% in 2010, based in large part on the recovery in global trade and a rebound in investment. The five contracting economies of 2009 will return to growth in 2010. Next year, the pace of growth in most of the subregion will likely quicken a bit. Inflation is seen averaging a moderate 4.5% in 2010. Viet Nam is the outlier, where consumer prices might rise by 10%, partly on account of last year's rapid growth in money supply and local currency devaluation.
- Growth is expected to pick up in most of South Asia in 2010. India will lead the group with a projected 8.2% performance. Its rebound a year earlier and continued strong expansion stem largely from domestic demand—a revival of exuberance of the years prior to 2008. For its part, Sri Lanka is expected to see an uptick of 6.0%, boosted by the peace dividend of stronger investor confidence. Improved domestic economic fundamentals should allow Pakistan to attain higher growth of 3.0%. Bangladesh and Nepal are projected to see growth ease slightly.

- Inflation is expected to pick up but remain moderate in South Asia, provided that monetary policy makers remain alert. The countries are not highly open to trade, but are vulnerable to abrupt changes in commodity prices, especially oil. Bangladesh, Nepal, Pakistan, and Sri Lanka all rely heavily on workers' remittances to offset large trade deficits; but these earnings have held up quite well over the past 2 years. Maldives, Pakistan, and Sri Lanka have all experienced large losses in foreign exchange reserves in the past 2 years and have turned to the International Monetary Fund (IMF) for adjustment assistance. All three countries are in the process of working down the macroeconomic imbalances that have caused their difficulties.
- Growth in all of Central Asia's economies should edge up in 2010, underpinned by higher oil prices and recovery in the Russian Federation, the major trade and financial partner. Ongoing weakness in Kazakhstan's non-oil economy will hold its overall growth down to 2.5%, while the Armenian and Georgian economies are projected to turn around but record anemic growth (about 2%). In the Kyrgyz Republic and Tajikistan, expansion is expected to accelerate slightly, to about 4%–6%.
- Inflation is expected to pick up to 6.7% this year in the subregion, but not to be a major issue in any country. Stronger oil prices will bring higher current account surpluses for the hydrocarbon exporters. But Armenia, Georgia, the Kyrgyz Republic, and Tajikistan will continue to face relatively large deficits of 8%–15% of GDP, little changed from 2009: these four countries will continue their adjustment programs with the IMF.
- Aggregate growth in the Pacific is forecast to rise to 3.7% in 2010, buoyed mainly by stronger growth in Papua New Guinea and Timor-Leste, both of which benefit from higher export demand and prices for natural resources. However, GDP in the Fiji Islands is expected to contract again, and most of the smaller economies will grow by less than 1%. In Papua New Guinea, a large new gas project is likely to spur growth in 2011. Inflation in the Pacific is expected to remain around an average of 5.3% in the next 2 years.

## Macroeconomic policy for postcrisis developing Asia

- Governments across developing Asia quickly rolled out large fiscal and monetary stimulus packages to fight the sharp slowdown of economic activity stemming from the global financial crisis. The crisis highlights the potential usefulness of countercyclical fiscal and monetary policies for coping with the impact of large shocks. This positive experience has sparked debate on whether the region should pursue fiscal and monetary activism in the postcrisis period.
- As the global crisis recedes and normalcy returns, developing Asia should revert to the sound and responsible fiscal and monetary policies that fostered macroeconomic stability and sustained growth. There is, however, plenty of scope to improve and strengthen monetary, exchange rate, and fiscal policies to better prepare the region for the postcrisis world.
- In the area of monetary policy, the global crisis highlights the potentially huge risks of an excessively narrow focus on consumer price inflation. After all, the combination of lax monetary policy and inadequate financial regulation contributed to inflating the US housing market bubble that was the immediate catalyst of the global financial crisis. For developing Asian policy makers, this means that asset price trends must be watched and preventive action taken before disruptive asset bubbles materialize. More effective financial supervision and regulation, and its closer coordination with monetary policy, will help avert a homegrown financial crisis.
- Developing Asia would also benefit from a shift toward more flexible exchange rates. Reducing the excessive rigidity imposed by heavy foreign exchange market intervention would allow exchange rates to move more in line with their fundamentals, and help economies rebalance demand toward domestic sources. Intraregional exchange rate policy coordination among developing Asian countries can help promote greater exchange rate flexibility in the region, with less concern over losing export competitiveness vis-à-vis neighboring economies. Carefully designed capital controls can help guard against disruptive short-term capital flows and prevent extreme volatility in exchange rates.
- Developing Asia should maintain the fiscal discipline that served it well in the past and enabled it to aggressively boost public spending and cut taxes during the global crisis. The potentially more challenging postcrisis global environment strengthens the case for setting up strong and credible medium-term fiscal frameworks that can withstand even large negative shocks. Well-designed and well-implemented automatic stabilizers can be core components of such frameworks. A wide range of fiscal measures can also promote the rebalancing process by easing the structural distortions that constrain domestic demand.
- In general, addressing this wide range of structural challenges will require authorities to coordinate monetary, exchange rate, and fiscal policies more closely and systematically. During the global crisis, the coordinated easing of fiscal and monetary policies magnified the countercyclical impact of the macroeconomic expansion. Exiting current expansionary policies, likewise, calls for a closer coordination of fiscal and monetary policies within an economy and among regional economies. Monitoring asset price trends to prevent bubbles also requires coordination between monetary policy and financial regulation. Fiscal measures—such as strengthening social protection—in tandem with more flexible exchange rates, can boost domestic consumption and demand and maximize the impact of macroeconomic policy on developing Asia's rebalancing process.



Subregion/economy	Table 1 Growth rate of GDP (% per year)					Table 2 Inflation (% per year)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
<b>Central Asia</b>	<b>12.0</b>	<b>6.1</b>	<b>2.7</b>	<b>4.7</b>	<b>5.9</b>	<b>11.2</b>	<b>16.5</b>	<b>5.9</b>	<b>6.7</b>	<b>6.6</b>
Azerbaijan	25.1	10.8	9.3	9.5	9.7	16.7	20.8	1.5	5.8	6.0
Kazakhstan	8.9	3.3	1.2	2.5	3.5	10.8	17.3	7.3	6.8	6.5
<b>East Asia</b>	<b>10.4</b>	<b>7.3</b>	<b>5.9</b>	<b>8.3</b>	<b>7.7</b>	<b>3.9</b>	<b>5.4</b>	<b>0.0</b>	<b>3.3</b>	<b>3.0</b>
China, People's Rep. of	13.0	9.6	8.7	9.6	9.1	4.8	5.9	-0.7	3.6	3.2
Hong Kong, China	6.4	2.1	-2.7	5.2	4.3	2.0	4.3	0.5	2.2	2.8
Korea, Rep. of	5.1	2.3	0.2	5.2	4.6	2.5	4.7	2.8	3.0	3.0
Taipei,China	6.0	0.7	-1.9	4.9	4.0	1.8	3.5	-0.9	1.5	1.6
<b>South Asia</b>	<b>8.7</b>	<b>6.4</b>	<b>6.5</b>	<b>7.4</b>	<b>8.0</b>	<b>5.6</b>	<b>9.3</b>	<b>5.6</b>	<b>6.0</b>	<b>6.0</b>
Bangladesh	6.4	6.2	5.9	5.5	6.3	7.2	9.9	6.7	7.5	7.8
India	9.2	6.7	7.2	8.2	8.7	4.8	8.3	3.6	5.0	5.5
Pakistan	6.8	4.1	2.0	3.0	4.0	7.8	12.0	20.8	12.0	8.0
Sri Lanka	6.8	6.0	3.5	6.0	7.0	15.8	22.6	3.5	6.5	8.0
<b>Southeast Asia</b>	<b>6.5</b>	<b>4.3</b>	<b>1.2</b>	<b>5.1</b>	<b>5.3</b>	<b>4.1</b>	<b>8.8</b>	<b>2.7</b>	<b>4.5</b>	<b>4.5</b>
Indonesia	6.3	6.0	4.5	5.5	6.0	6.4	9.8	5.0	5.6	6.2
Malaysia	6.2	4.6	-1.7	5.3	5.0	2.0	5.4	0.6	2.4	3.0
Philippines	7.1	3.8	0.9	3.8	4.6	2.8	9.3	3.2	4.7	4.5
Singapore	8.2	1.4	-2.0	6.3	5.0	2.1	6.6	0.6	2.3	2.0
Thailand	4.9	2.5	-2.3	4.0	4.5	2.2	5.4	-0.9	3.5	3.0
Viet Nam	8.5	6.2	5.3	6.5	6.8	8.3	23.0	6.9	10.0	8.0
<b>The Pacific</b>	<b>5.0</b>	<b>5.4</b>	<b>2.3</b>	<b>3.7</b>	<b>5.0</b>	<b>3.6</b>	<b>9.5</b>	<b>5.2</b>	<b>5.1</b>	<b>5.4</b>
Fiji Islands	-0.5	-0.1	-2.5	-0.5	0.5	4.8	7.7	3.7	3.4	3.1
Papua New Guinea	7.2	6.7	4.5	5.5	7.7	0.9	10.6	7.6	7.1	7.7
<b>Developing Asia</b>	<b>9.6</b>	<b>6.6</b>	<b>5.2</b>	<b>7.5</b>	<b>7.3</b>	<b>4.4</b>	<b>6.9</b>	<b>1.5</b>	<b>4.0</b>	<b>3.9</b>

Notes: **Developing Asia** refers to 44 developing member countries of the Asian Development Bank and Brunei Darussalam, an unclassified regional member; **East Asia** comprises People's Republic of China; Hong Kong, China; Republic of Korea; Mongolia; and Taipei,China; **Southeast Asia** comprises Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam; **South Asia** comprises Islamic Republic of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka; **Central Asia** comprises Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan; and **The Pacific** comprises Cook Islands, Fiji Islands, Kiribati, Republic of the Marshall Islands, Federated States of Micronesia, Nauru, Papua New Guinea, Republic of Palau, Samoa, Solomon Islands, Democratic Republic of Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Data for Bangladesh, India and Pakistan are recorded on a fiscal year basis. For India, the fiscal year spans the current year's April through the next year's March. For Bangladesh and Pakistan, the fiscal year spans the previous year's July through the current year's June.



1

Momentum for a sustained recovery?



# Momentum for a sustained recovery?

The year 2009 opened with a global economic maelstrom in full fury. The questions put forth by pundits and policy makers alike at that time were how long the storm would last and how much wreckage would be left in its wake. Yet by midyear, it seemed that governments' rapid emergency responses had limited the damage, and that a tentative calm had returned.

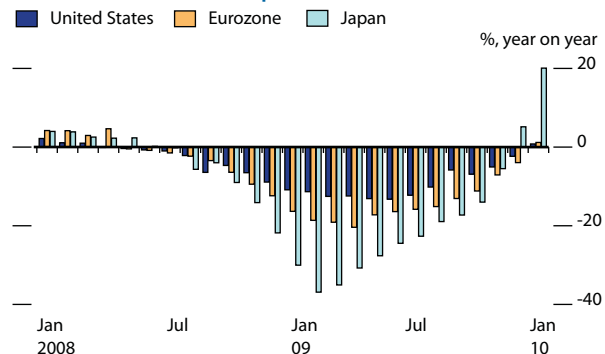
After the historic first-quarter contraction in gross domestic product (GDP), the global economy began to revive (Figure 1.1.1). Financial instability was contained, consumer sentiment brightened, businesses started restocking, and cross-border trade revived. Taken together, these signs suggest a solid global recovery—and even optimism for 2010.

Yet clouds remain on the horizon. The upswing in consumer sentiment can be easily derailed if income prospects do not improve. The recovery must generate more jobs to eliminate the anxiety over eroded personal wealth and income, which is holding back spending. Consumer lending is inching up, but continued weakness in banks' mortgage portfolios makes them hesitant to offer new loans, and such hesitancy hinders the growth of private investment. Building inventories is itself a transient process, and firms will not restock for long if economic activity is sluggish. Robust recoveries in developing economies cannot serve as the sole engine of global recovery. Trade with the industrial world is still fuel for emerging economies' dynamism.

Underlying these concerns is the fact that the recovery was driven mainly by temporary forces—including huge government stimulus measures. Markets are closely scrutinizing the sustainability of these measures, and increasing sovereign risks could complicate the normalization process. In the end, a shift from public support to private forces is needed to maintain the momentum. Yet, because of the fragility of the recovery and the sheer size of the various stimuli, the winding down of public support must be carefully managed.

In place of the temporary emergency response measures, therefore, what robust sources of growth will come to the fore to sustain the recovery?

1.1.1 Growth in industrial production



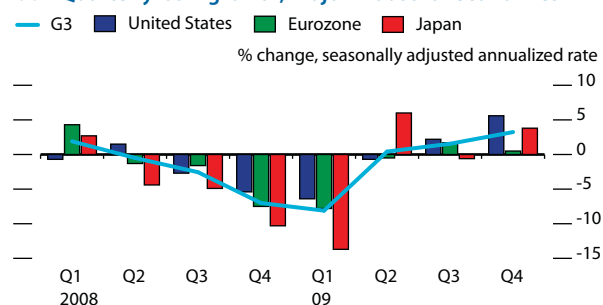
Sources: Board of Governors of the Federal Reserve System. <http://www.federalreserve.gov>; Ministry of Economy, Trade and Industry. <http://www.meti.go.jp>; European Commission. <http://ec.europa.eu> (all accessed 23 March 2010).

## Gauging the strength of industrial countries' recovery

The global economic turmoil that began in 2008 accelerated rapidly, as is evident from the quarterly GDP growth rates of the major industrial economies of the United States (US), Japan, and eurozone (Figure 1.1.2). Cumulatively, production in these economies plummeted by 8.1% in the first quarter of 2009 (annualized), but in a dramatic reversal of this trend, the contraction ended and industrial economies grew by 1.5% and 3.1% in the third and fourth quarters of the year. While the main driving forces varied—inventory restocking pushed the US revival while net exports helped Japan and parts of the eurozone (particularly Germany)—support from government spending was a common theme.

The recovery's momentum relies on the potency of the underlying sources of growth, since it is unclear how long government interventions can continue to buoy economic activity. Yet looking to the private sources of demand, signs that temporary factors have been replaced by a more robust foundation for future expansion are not yet obvious. Assessing the extent to which these shifts are under way—from public support to private demand and from transient factors to stable sources—is critical for setting the medium-term growth forecasts for the major industrial economies.

1.1.2 Quarterly GDP growth, major industrial economies



Sources: US Department of Commerce, Bureau of Economic Analysis. <http://www.bea.gov>; Economic and Social Research Institute, Cabinet Office, Government of Japan. <http://www.esri.cao.jp> (both accessed 3 April 2010); CEIC Data Company (accessed 7 April 2010).

### Crisis response and normalization

Governments and monetary authorities responded quickly to the financial crisis and economic slump, stabilizing financial markets in the early stages and later shoring up flagging GDP. Central banks across the major industrial countries aggressively lowered interest rates, strengthened bank deposit guarantees, and adopted a raft of unconventional approaches to keep credit flowing. Governments also approved substantial multiyear fiscal measures, which began to be implemented in the first half of 2009. The fiscal support was meant to be considerably front loaded, such as the US 10-year fiscal package that was to disburse the bulk of its support within the first 3 years.

As the global recovery seemingly consolidates, policy makers have to tackle the dilemma of when to start reining in their stimuli. The recovery could falter if policy makers tighten too early. The 1937–38 US recession that came in the wake of the Great Depression is a frequently cited cautionary tale of the effect of pulling back policy support too soon. In the mid-1930s, signs of recovery prompted US policy makers to raise taxes, reduce spending, and tighten money supply—actions which quickly pushed the economy back into recession. Alternatively, normalizing too late may lead to higher inflation and unsustainable fiscal deficits in



the longer term. Authorities are clearly concerned about repeating the expansion of credit that created the conditions for the subprime crisis that ultimately sparked the latest global financial crisis.

In fact, while lacking the fanfare that surrounded the announcements of the stimulus packages, the normalization process has begun. Many temporary measures have finished or are set to end this year, particularly finance sector stabilization measures and nonrecurring fiscal expenditures. While other elements of the stimulus require direct interventions to reverse their effects—such as raising policy interest rates and reversing tax cuts—new support is unlikely as long as the recovery takes hold. With policy normalization under way, an issue is how much monetary and fiscal policy will continue to boost growth in the months ahead.

### Concluding finance sector support

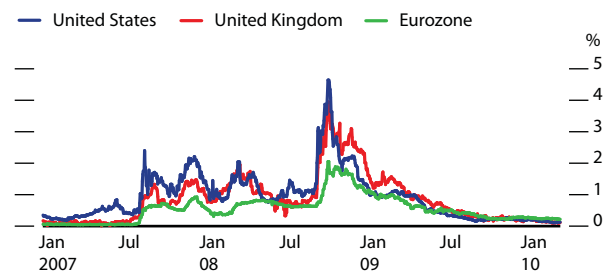
Uncertainty surrounding the health of the international financial system that began in mid-2007 was reflected in the elevated risk premiums on interbank lending (Figure 1.1.3). The spike in interest rates in the aftermath of the Lehman Brothers collapse jolted policy makers into action. Central banks took drastic steps to ensure the stability and liquidity of the finance sector.

Risk premiums have since returned to their precrisis levels, and monetary authorities have begun to roll back their emergency support to the finance sector. For example, US Federal Reserve's support provided to money market mutual funds, commercial paper markets, and dollar swap lines with foreign central banks were closed in February 2010. In late 2009, the European Central Bank (ECB) began phasing out nonstandard operational measures, such as providing unlimited liquidity to the eurozone banks at longer than usual maturities (12 months), planning to gradually reach normal 3-month maturities by end-April 2010. As an exception to the trend, the Bank of Japan doubled the total amount of loans to be provided through an existing fund-supplying operation in March 2010 to encourage a further decline in long-term interest rates.

Some unconventional measures will take more time to unwind, but as calm has been restored to financial markets, further expansion of this support is unlikely. For example, the Federal Reserve ended its purchases of publicly guaranteed mortgage-backed securities in March 2010 after accumulating \$1.1 trillion in these securities (Figure 1.1.4). Its purchases of such securities have helped hold mortgage rates to near-record lows to foster recovery in the housing market. For such unconventional measures, policy makers are faced with the challenge of managing the assets they have acquired, to maximize recovery value at the time of disposal. But they will need to be careful not to disrupt recovering asset markets, where trading may still be thin and price discovery mechanisms not yet well anchored.

Weak spots remain, and difficult tasks lie ahead, despite overall stabilization of financial markets (Box 1.1.1). While lending conditions remain tight and inflation is still low, policy

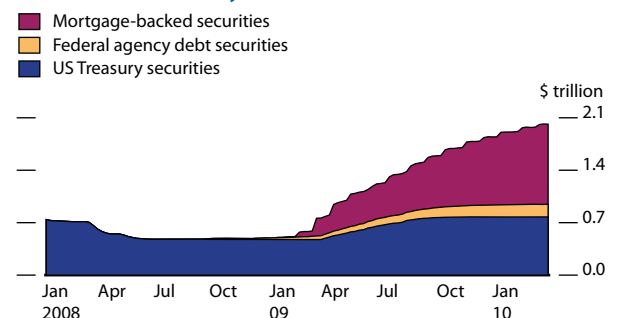
1.1.3 TED spread, selected economies



Note: The TED spread is the difference between 3-month LIBOR and the yield on 3-month Treasuries.

Source: Bloomberg (accessed 22 March 2010).

1.1.4 Securities held by the Federal Reserve

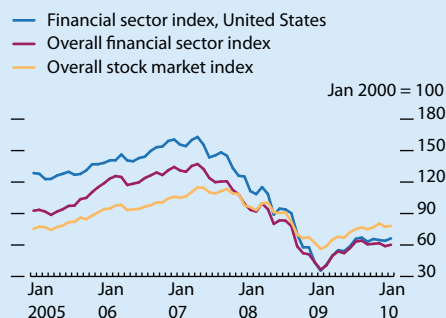


Source: The Federal Reserve Board. <http://www.federalreserve.gov/> (accessed 4 April 2010).

### 1.1.1 Financial systems stabilized for now

With tight global credit conditions persisting, many industrial economies' financial institutions are still fragile, especially banks. Finance sector equity prices have recovered from their trough of March 2009, but they remain weaker than the market as a whole (Box figure 1), largely reflecting banks' need to rebuild their balance sheets.

#### 1 Financial sector development



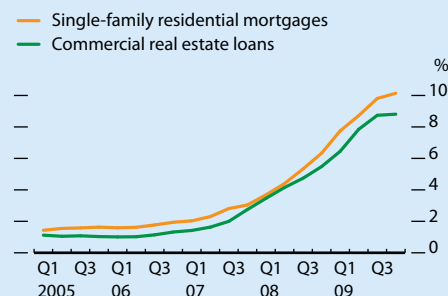
Note: Index averages are averages of Dow Jones Industrial Average Composite index (US), Nikkei300 (Japan), FTSE100 index (UK), Dax index (Germany), and SBF250 index (France).

Source: Bloomberg (accessed 23 March 2010).

The weakness in the finance sector has its origins in the meltdown of the United States (US) subprime mortgage market. Several countries—not just the US—experienced property bubbles. The housing sector in the US and United Kingdom have stabilized since then, albeit in part due to special measures. However, the picture is still wobbly for commercial and industrial property prices in the US, reflecting the sluggish recovery of business activity. Low real estate prices depress the resale value of the property relative to the unpaid mortgage balance, raising the risk of default. Delinquency rates on residential mortgages and commercial real estate loans are on the rise (Box figure 2), and bank balance sheets are suffering as a consequence.

The process of absorbing bad credit losses is set to run a long while yet. After the huge provisioning for nonperforming residential mortgages, losses from commercial real estate exposure to falling prices are now on the rise (Box figure 3). Finance sector writedowns on securities and loans will continue in the quarters ahead. Banks may need substantial additional capital before they fully recover. For example, at end-2009, the European Central Bank estimated that total eurozone bank writedowns for 2007–2010 would reach €553 billion, 13% higher than its €488 billion estimate made 6 months earlier. The expected writedowns are concentrated in countries that experienced the largest runups in prices and subsequent corrections.

#### 2 Delinquency rates on real estate loans, United States

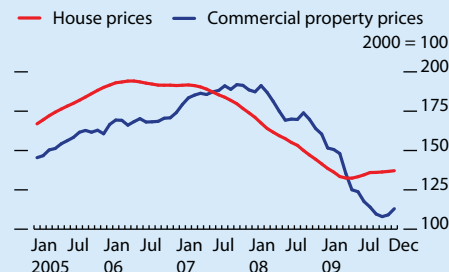


Note: Loans are from all commercial banks; commercial real estate loans exclude farmland.

Source: The Federal Reserve Board. <http://www.federalreserve.gov> (accessed 15 March 2010).

Given that banks in the US and Europe are still weak, the withdrawal of central bank liquidity facilities and government guarantees for their debt is a concern. While the use of both types of programs has fallen as money markets and funding markets have stabilized, some banks remain more dependent than others on such support, and unless these more fragile banks' weaknesses are addressed, renewed distress is a risk. Longer term, uncertainty about more stringent regulatory frameworks may also constrain banks in their lending, as banks will surely need additional capital if these frameworks are adopted.

#### 3 Property price indexes, United States



Sources: MIT Center for Real Estate. <http://mit.edu/cre/>; Standard and Poor's. <http://www.standardandpoors.com> (both accessed 26 March 2010).

Bank credit growth has yet to recover in the major industrial economies. Bank lending officer surveys show that lending conditions remain tight in the US and eurozone, though the severity has eased greatly. While the improving economic outlook should shore up both the demand for credit and banks' ability to lend, considerable work lies ahead before the system fully recovers.

makers should stay watchful of financial market developments and be ready to intervene as necessary. Timing, though, is of the essence.

### Timing monetary tightening

In setting monetary policy, authorities must choose the right timing to withdraw the exceptionally accommodative monetary stance as the economy gets to a firm recovery. If the economy is susceptible to overheating, authorities should further tighten monetary policy. One indicator is the output gap. This is the difference between what is currently being produced (actual GDP) and the theoretical production level that the economy can sustain without accelerating inflation (potential GDP). Various estimates suggest that economic activities in the major industrial countries are currently far below their potential (Figure 1.1.5), implying that central banks can maintain accommodative monetary policy until recovery becomes firm without undermining price stability.

However, it is difficult to measure potential output precisely. In addition, the global slowdown may have had permanent effects, lowering these economies' potential output. The point where monetary policy needs to be tightened may, therefore, be closer than the figure suggests.

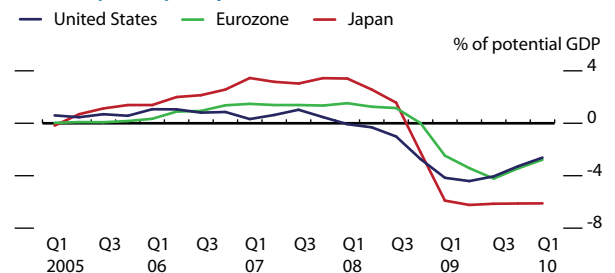
Inflation expectations are another important indicator of an economy's susceptibility to overheating. Economic agents' assessments of future price movements will affect their behavior today in ways that tend to reinforce the anticipated price movements. For example, if workers feel that prices will be higher next year, they will incorporate this into their wage negotiations, which will create inflation pressures through higher costs of production.

Central banks need, consequently, to consider expectations of future inflation as well as current inflation when setting the monetary stance. One of the measures is based on the yield differential between nominal and inflation-indexed bonds. This yield spread is also called the "breakeven inflation rate." An increase in the breakeven rate can be viewed as a sign that market inflation expectations may be on the rise (Figure 1.1.6).

The breakeven inflation rates for the US and eurozone are in a positive range. The inflation expectation for the US rebounded sharply from its low in March and, although the yield spread is a slightly downward trend in the eurozone, the timing for normalizing the policy rates seems to be in sight for these two economies. In Japan, though, deflation is expected, implying the need to continue with the accommodative policy.

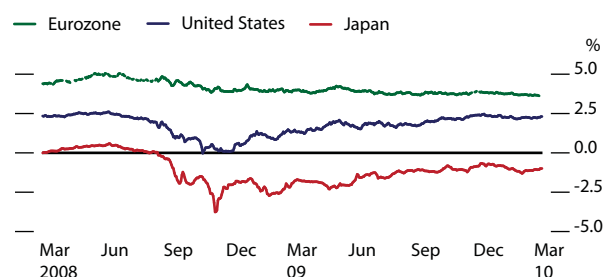
Entering 2010, the Federal Reserve, ECB, and the Bank of Japan all held their main policy rates close to zero. With output below potential and low inflation expectations, this accommodative monetary stance is likely to remain in place at least through the first half of 2010, and possibly longer for Japan given the lingering threat of deflation there. However, in February 2010 the Federal Reserve raised its discount rate by 25 basis points to 0.75%. While the differential between this rate and the Federal Funds rate,

1.1.5 Output Gap, major industrial economies



Sources: International Monetary Fund, World Economic Outlook online database (accessed 6 April 2010); Bloomberg (accessed 22 March 2010).

1.1.6 Breakeven inflation rates



Note: Breakeven inflation is calculated by subtracting the real yield of the inflation-linked maturity curve from the yield of the closest nominal Treasury maturity. Ten-year bond is used for US; 15-year bond for eurozone; and for Japan, 10-year bond for March 2008–15 June 2009 and 5-year bond thereafter.

Source: Bloomberg (accessed 6 April 2010).

which is the main monetary policy instrument in the US, is still below its precrisis level of 100 basis points, the move is indicative of the Federal Reserve's intentions.

Monetary policy of course, was only one weapon in the authorities' armory. Fiscal policy was also aggressively used in aid of economic recovery.

### Completing fiscal stimulus measures

The multiyear fiscal packages approved in most industrial economies will likely be fully implemented. However, as mentioned, this support was intended to be heavily front loaded, and the vast majority will have been spent by the end of this year. Of the \$787 billion (5.5% of GDP) 10-year US fiscal package, about one-third of the total was disbursed last year and about half is to be spent this year. The four largest eurozone economies—France, Germany, Italy, and Spain—spent about 43% of their collective €225 billion (3.2% of GDP). In Japan, the fiscal stimulus approved last year has been mostly spent, yet the government has approved a new budget for 2010, which includes extensions of some packages.

While it is likely that these stimuli will bring about some impacts this year, additional significant fiscal stimulus for 2011 appears unlikely in a context of mounting sovereign risks for 2011 (Box 1.1.2). Indeed, pressures are already mounting on eurozone countries to rein in large deficits and growing public debt ratios, which are expected to surge to average 84.0% of GDP in 2010 (Figure 1.1.7). The European Commission has increased pressure on governments to take firmer action toward reaching the Stability and Growth Pact 3% deficit target by fiscal year 2014/15. For most eurozone countries, this will require structural consolidation efforts starting in 2011.

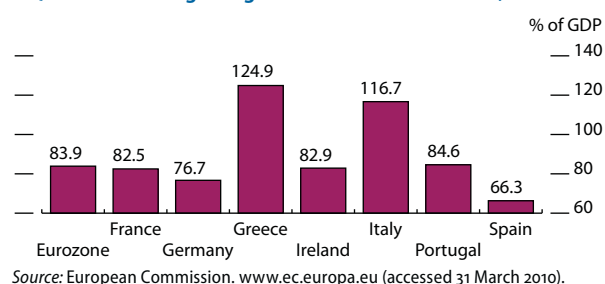
### Winding down policy support

Looking back on 2009, emergency finance sector stabilization measures as well as the monetary and fiscal support that the major industrial economies employed have generally been effective. Finance sector support managed to assure liquidity, and monetary policy provided an accommodative environment. Fiscal measures played a large role in the immediate economic recovery, such that public spending solidly contributed to GDP growth throughout 2009 (Figure 1.1.8).

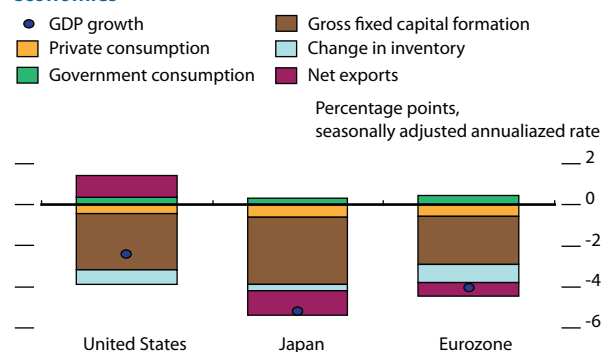
Nonetheless, these policy measures are temporary and will be withdrawn in time. Authorities are beginning to remove finance sector support, though the winding down of some of the unconventional support to less liquid segments (such as purchases of mortgage-backed securities) will need to be managed carefully to avoid disrupting these markets. Industrial economies' central banks will likely maintain an accommodative monetary policy through the first half of 2010 (possibly longer in Japan).

Relatively high levels of fiscal support are likely to continue in 2010 as commitments under approved fiscal packages are fulfilled in the US and some eurozone economies. Japan will also

1.1.7 Forecasts of gross government debt for 2010, eurozone



1.1.8 Contributions to GDP growth, major industrial economies



Sources: US Department of Commerce, Bureau of Economic Analysis. <http://www.bea.gov>; Economic and Social Research Institute, Cabinet Office, Government of Japan. <http://www.esri.cao.jp> (both accessed 3 April 2010); CEIC Data Company (accessed 7 April 2010).

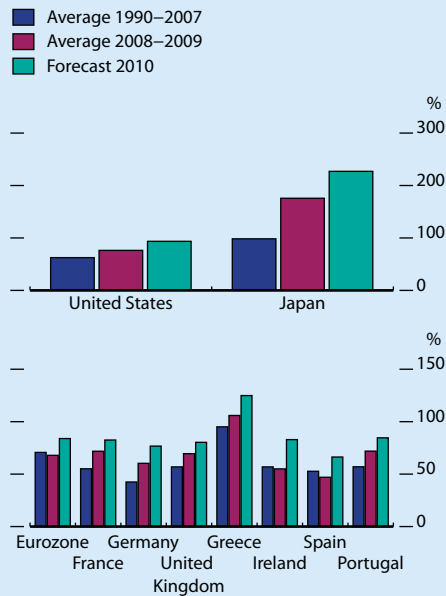


### 1.1.2 Mounting sovereign debt and constraints on policy

Fiscal instability is becoming a major concern in some industrial economies. The expansionary macroeconomic policies—fiscal stimuli in particular—cannot be sustained indefinitely as they add to the preexisting sustainability concerns related to, for example, public pension funding.

Crisis-related stimulus and lower tax revenue have put public debt on a sharply steeper trajectory. This has emphasized the need for structural reform in the medium and long run and, given worrisome unemployment levels, has complicated near-term exit strategies (Box figure 1).

#### 1 Public debt to GDP ratio

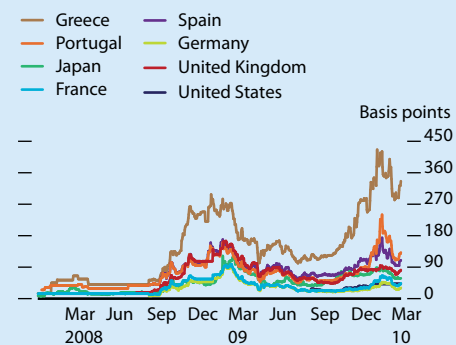


Note: For eurozone, average is from 1995 to 2007.

Sources: The Office of Management and Budget. <http://www.whitehouse.gov/omb/>; Bank of Japan. <http://www.boj.or.jp/en/>; European Commission. [http://ec.europa.eu/index\\_en.htm](http://ec.europa.eu/index_en.htm) (all accessed 30 March 2010).

Financial markets are increasingly reacting to fiscal stability issues in industrial economies, especially as substantially more public sector debt is to be issued in the next 2 or 3 years. Such concerns (coupled with political uncertainties) have led to a surge in sovereign credit default swap spreads in some industrial economies, such as Japan and the United Kingdom, in early 2010. European issuers—most notably Greece, but also Portugal and Spain—have come under greater pressure after their ratings were downgraded or as uncertainty heightened over their fiscal imbalances and consolidation plans (Box figure 2).

#### 2 Credit default spread, senior 5-year



Source: Bloomberg (accessed 24 March 2010).

These increasingly heavy deficits and debts impose fundamental challenges to policy makers and present risks to financial stability. One risk is that issuance of new public debt could crowd out private sector credit growth through higher interest rates and therefore undermine economic growth. Another risk is from a rapid increase in interest rates on public debt valuations. With a steepening of the yield curve, this would hit both financial institutions and growth, as sovereign debt is repriced.

continue with fiscal support with the new 2010 budget. However, not all economies have the fiscal space to continue their spending given rising concerns on sovereign risk, particularly in 2011. Hence, the effects of these public support measures are likely to gradually fade next year.

How well, therefore, will sources of private demand take up the baton?

## Potential private demand sources

With the normalization of monetary and fiscal policy set to come on stage, sustained recovery must be led by private demand sources. So far, there are no obvious candidates among consumption, investment, and external demand. There have been some signs of private demand returning since the second half of 2009, but whether they have enough

strength to support continued growth in the medium term is not yet clear.

### Gradual return of private consumption

In the initial stages of the global downturn, the deterioration of personal wealth from falling stock and property prices inhibited consumption spending across the major industrial countries, especially in countries that experienced a burst property bubble. Tightening credit further reinforced the declines in asset values, as well as lowering consumption directly as consumer credit evaporated. Uncertain labor market conditions served to further depress spending.

The US experienced the worst of all of these elements, but a gradual recovery is under way. The slide in residential property prices eased in the second quarter of 2009 but they are only picking up slowly. Government subsidies to promote vehicle trade-ins for new more fuel-efficient models provided a boost in the third and fourth quarters. However, consumer credit only finally started to grow in January 2010, following 17 consecutive months of decline. Even though private consumption picked up in the last half of 2009, it dropped by 0.6% overall for the year—the second consecutive year of contraction and the first multiyear contraction in consumption in the US since the 1930s.

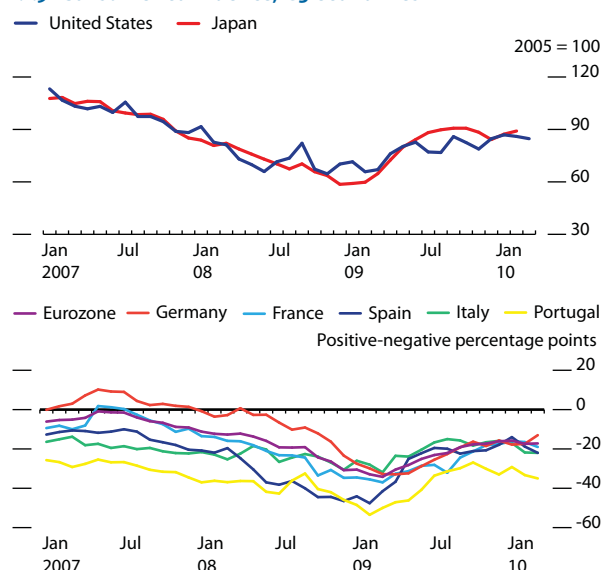
Private consumption plummeted in the eurozone as the global turmoil set in, but the recovery in consumption that began in the second quarter of 2009 has been mild. Indeed, retail sales remain weak and car registrations have slowed as the generous subsidy schemes are being terminated in several countries. High and growing unemployment remains a drag on private consumption—and in the European Union more broadly. For the countries that experienced a bust in domestic asset price bubbles, such as Ireland, Spain, and the UK, households' balance sheets need to deleverage further for household consumption to pick up.

In Japan, in contrast, private consumption was the first among the demand components to pick up, contributing to growth for 3 consecutive quarters. The recovery in consumption was driven by “eco-friendly” stimulus policies and by a car trade-in subsidy. As these programs have been extended in scope and duration, private consumption this year will continue to benefit from public support.

The global pulse of private consumption is, therefore, not strong. Many consumer confidence indexes—especially in Europe—showed signs of fragility in the first months of the year (Figure 1.1.9) on the back of still weak labor markets. Retail sales, too, have begun to flag a little, after recovering sharply during the second half last year (Figure 1.1.10).

In countries that are still recovering from the detritus of a burst property bubble, households are undergoing the protracted process of repairing their balance sheets, which will require an extended period of lower spending. In the US, outstanding household debt has contracted for an unprecedented seven consecutive quarters, but it still remains

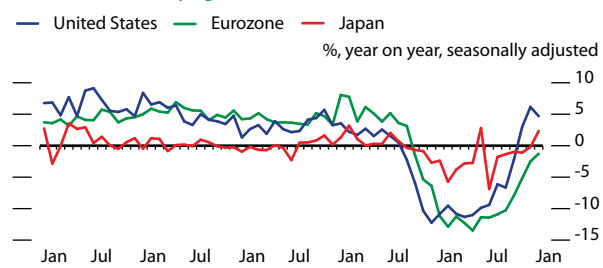
1.1.9 Consumer confidence, G3 economies



Note: The confidence indicator for eurozone is calculated as the arithmetic average of the difference between positive and negative answers given in percentage points of total answers.

Sources: Survey Research Center: University of Michigan. <http://research.stlouisfed.org>; Economics and Social Research Institute, Cabinet Office. <http://www.esri.cao.go.jp>; Bloomberg (all accessed 27 March 2010).

1.1.10 Retail sales, G3 economies

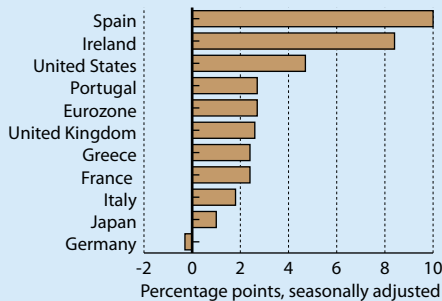


Sources: US Census Bureau. <http://www.census.gov>; Ministry of Economy Trade and Industry. <http://www.meti.go.jp>; Eurostat. <http://www.ec.europa.eu/eurostat> (all accessed 27 March 2010).

### 1.1.3 Threat of jobless recovery

The pace of the economic recovery is likely to be slow given sluggish private sector prospects, specifically the slow improvement of labor markets. Elevated unemployment persists in many industrial countries, such as 10.1% in France, 7.5% in Germany, and 19.0% in Spain in February this year (Box figure 1). In the US, unemployment has stuck at 9.7% through the first quarter of 2010, and a broader measure of underutilized labor (which adds those who have given up searching or are employed part time involuntarily to those unemployed) hovered near 17%.

**1 Harmonized unemployment rate difference, January 2008 to February 2010**



Note: Latest data for Greece and the United Kingdom are December 2009; for Japan, January 2010.

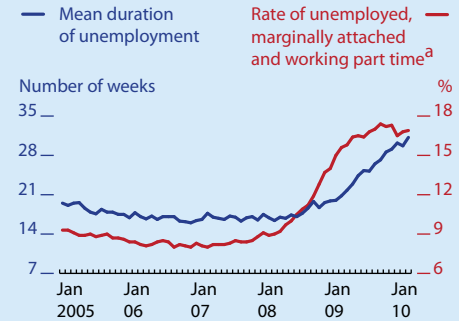
Source: Eurostat. [www.ec.europa.eu/eurostat](http://www.ec.europa.eu/eurostat) (accessed 30 March 2010).

The apparently jobless recovery may stem from a variety of reasons. Cyclically, companies may tend to overhire during a boom, exaggerating the rise in unemployment in an extended recession. Structurally, production shares by industry change, such that some laid-off workers may not have their old jobs to go back to. Prolonged underutilization of workers can lead to deterioration in human capital and labor productivity, raising the structural unemployment rate (and undermining the economy's potential growth rate).

During the early phase of any economic recovery, companies face uncertainties—strength of recovery in consumer spending, changes in consumer habits—making them reluctant to hire workers. Firms therefore often meet early increased demand by relying on temporary workers and more overtime work.

The data themselves are worrisome. The average length of US unemployment rose above 30 weeks by early this year (Box figure 2), while in the eurozone one unemployed person out of three has been jobless for over a year. The largest increase in the year to the third quarter of 2009 is recorded for the categories of unemployed between 3 and 11 months (Box figure 3).

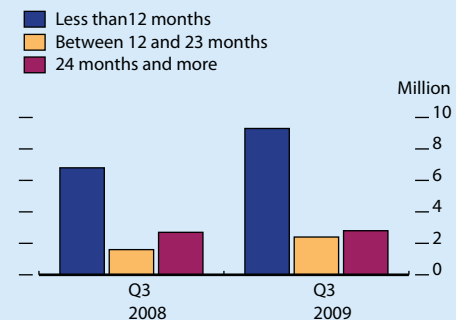
### 2 Unemployment, United States



<sup>a</sup> Unemployed and marginally attached and part-time for economic reasons as percent of labor force plus persons marginally attached to the labor force.

Source: US Bureau of Labor Statistics. [www.bls.gov](http://www.bls.gov) (accessed 4 April 2010).

### 3 Number of unemployed by duration, eurozone



Source: Eurostat. <http://www.ec.europa.eu/eurostat> (accessed 5 April 2010).

In Japan, too, the omens are not good. For the first time since 2003, unemployment exceeded 5% in July 2009, and has only edged back to 4.9% since, as only four jobs were on offer for every 10 applicants. Improving industrial production toward the end of 2009 has generated little new full-time employment. As of February 2010, the index of regular workers' employment shows no sign of improvement, while overtime surged 11.4% from a year earlier.

In the next couple of years, income constraints and wealth erosion will likely prompt discouraged workers and female workers to reenter the labor force on signs of economic recovery. The same factors may also encourage workers to delay retirement. Either scenario will boost the labor force, helping keep unemployment high. And if hiring in the private sector grows only sluggishly, it will be unable to absorb the labor force increase.

abnormally high at well above 100% of disposable income. Stagnant job markets across the major industrial countries (Box 1.1.3) weigh heavily on prospects for further expansion of consumption.

The recovery in consumption was helped by temporary support imbedded in some fiscal stimulus packages. But deflated wealth in property-boom countries (and the related cleanup of household finances), coupled with weak job market prospects suggests that consumption will not be a strong growth driver in the medium term. What, then, about investment?

### Hesitancy in private investment

Facing rising and at times enormous uncertainty in economic activity, private investment tumbled from late 2008, and this was responsible for much of the GDP contraction in 2009. Gross capital formation subtracted more than 3 percentage points from GDP growth in the US—a magnitude beyond what happened during the oil crises in the 1970s. Similarly, Japan and the eurozone suffered severe investment downdrafts. While gross fixed capital formation improved steadily across these economies during 2009 and early 2010, it is still far from contributing to overall growth.

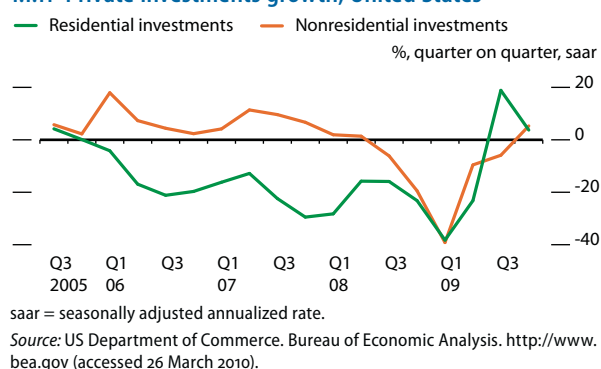
US investment showed buoyant growth in the fourth quarter in 2009. The turnaround was supported by the pickup in residential investment and robust inventory restocking. Business inventory adjustments added a surprising 3.9 percentage points, a reversal of the drag this component had on GDP during the depths of the crisis. Nonresidential investment, however, continued to contract until the fourth quarter (albeit less rapidly) (Figure 1.1.11). While residential property prices seemed to have hit the trough and are recovering, commercial property prices are still low, and demand remains weak.

Inventory adjustments have also progressed in the eurozone, contributing 0.3 percentage points to GDP growth in the second half of 2009. However, capital spending is likely to remain depressed in the near term, as capacity utilization remains weak and firms continue to keep low inventories despite improving demand. Residential investment recovery has been slowed by a particularly harsh winter, which postponed construction work, and is likely to remain subdued during 2010.

In Japan, private investment edged up in the last quarter in 2009 after recording six consecutive quarters of decline until the third quarter of last year, but it has yet to show clear signs of recovery. New house building is still at low levels, reflecting tight financing conditions for real estate firms and a distressed labor market situation. Machinery orders inched up by 1.9% year on year in December after declining for 17 consecutive months since the second half of 2008. Corporate investment, however, may still be sluggish as the Tankan survey (of both large manufacturers and nonmanufacturing industries) showed only a slow improvement in negative sentiment on the back of still-declining corporate profits and uncertainty over the strength of the global recovery.

Whether, globally, private investment and corporate activities will help sustain growth this year and next is uncertain, particularly once

1.1.11 Private investments growth, United States



restocking is complete. Indicators related to private investment are still weak across the industrial economies.

The trend in the number of building permits is a useful indicator of future developments in housing markets and construction, and offer a pointer to the level of current corporate optimism and future investment. Unfortunately, the number issued remains sluggish across the major industrial countries (Figure 1.1.12).

New orders for capital goods, another indicator of investment strength, are still weak and may not yet have hit their nadir. Industrial production, which tends to lag new orders for capital goods, also appears soft without any clear sign of improving soon (except for Japan where the recent surge in exports contributed to the latest pickup in manufacturing output).

Japan's capacity utilization index, too, increased by 45% by January this year from its trough in February 2009 (Figure 1.1.13). However, those for the US and the eurozone remain at around 70%, or well below the historical average of above 80%.

Putting the evidence altogether, while the fourth quarter investment performance was striking in the US, it may not be sustainable in the coming quarters based on the other indicators. There is some hope for Japan, though, which may see a pickup in private investment earlier than the other two economies. Hence, as with consumption, the world should expect to see only a gradual recovery in private investment in 2010.

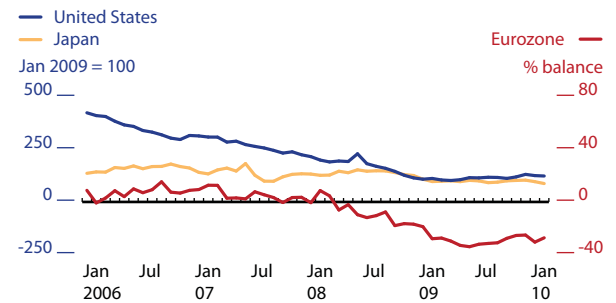
Does external demand—the third leg of the private demand sources—offer better prospects than the first two?

### Role of international trade in the recovery

The gradual recovery of international trade is as much a consequence as it is a driving force of the economic bounceback. Reflecting the large role played by global supply chains in production, the traded parts and components of many manufactured goods cross borders several times, magnifying the effect of changes in global demand for final products on growth in trade volume. This helps explain why trade volume contracted much more strongly than global GDP during the global downturn, and why its recovery has outpaced that of production since. As inventories have rebuilt and as new industrial orders have increased to meet the gradual pickup in global demand, international trade in both capital and consumption goods has been recovering, at a pace exceeding that of income growth.

In 2009, as US consumers continued to rebuild their household balance sheets by raising saving, demand for imports declined such that imports fell by 23%—much more than exports at 18%—almost cutting the US trade deficit to about \$520 billion from \$840 billion in 2008. This has led net exports to be the only other contributor to GDP growth aside from the public consumption in 2009. But this trend toward reduced current account imbalances does not appear durable. As the US recovered in the second half, net exports again subtracted from growth.

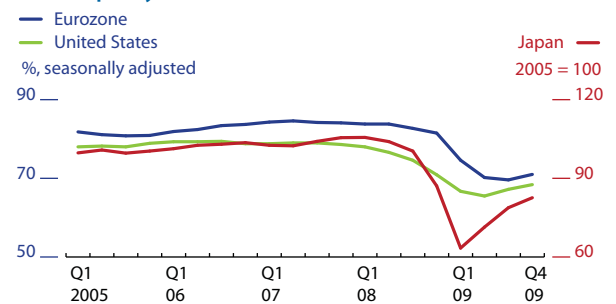
1.1.12 Building permits and construction activity



Note: US: New privately owned housing units authorized by building permits; Japan: New construction starts, private dwellings; eurozone: Residential building activity development over the past 3 months measured as “balances”—i.e., the differences between the percentages of respondents giving positive and negative replies.

Sources: Eurostat. [www.ec.europa.eu/eurostat](http://www.ec.europa.eu/eurostat); Japan Ministry of Land, Infrastructure, Transport and Tourism. [www.mlit.go.jp](http://www.mlit.go.jp); US Department of Commerce Bureau of Economic Analysis. [www.bea.gov](http://www.bea.gov) (all accessed 5 April 2010).

1.1.13 Capacity utilization, G3 economies



Sources: Federal Reserve Board. [www.federalreserve.gov](http://www.federalreserve.gov); Ministry of Economy Trade and Industry. <http://www.meti.go.jp>; European Commission. [www.ec.europa.eu](http://www.ec.europa.eu) (all accessed 29 March 2010).



The picture is different from the US in the eurozone and Japan. Improving export performance often helps drive these economies out of recession. During the second half of last year, the rebound of eurozone and Japanese trade was particularly pronounced with regard to demand for merchandise exports from developing Asia, confirming the region's leading role in the global recovery.

For both the eurozone and Japan, exports to developing Asia remained strong throughout 2009. In the case of Japan, robust export growth in automobile parts and components to the PRC led this growth but exports of computer chips to Taipei, China and to Malaysia were also strong. If this surge in external demand is transmitted to corporate profits, fixed investment, and employment, both the eurozone and Japan will be on a slightly firmer footing again.

While it is still too early to point to any definite trends, there are signs that developing Asia may contribute to the recovery by increasing its role as a net importer of US high-technology manufactured goods such as aerospace, information technology, and pharmaceutical products (Box 1.1.4).

What are the prospects for world trade and its role in the global recovery? Leading trade-related indicators suggest a steady pickup in trade volume this year and beyond. The Baltic Dry Index—an indicator of demand for shipping services—rebounded significantly in early 2009 and has kept up this momentum, pointing to increased economic activity (Figure 1.1.14).

New export orders, too, seem to be holding up well (Figure 1.1.15). The recovery in world trade is both a cause and a consequence of the recovery in global GDP. As such, the positive leading indicators for trade growth bode well for growth in the major industrial economies. Taken together, though, with the weak consumption and investment demand, is there enough private demand to sustain the recovery?

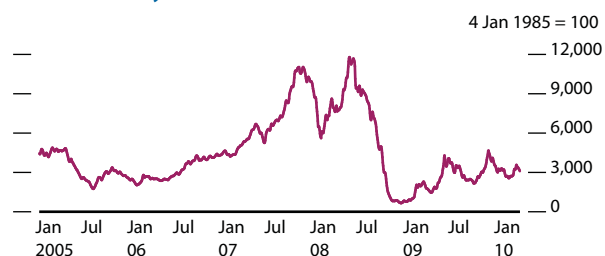
### Uncertainty in private demand

All in all, permanent forces have not emerged strongly to take over the transitory sources. A shift from the public policy support to the private forces may not be as smooth as hoped for. As many of the emergency measures are being unwound, growth prospects are clouded by the weak spots. There is considerable uncertainty surrounding the strength of the global recovery.

## Cautious return to global growth

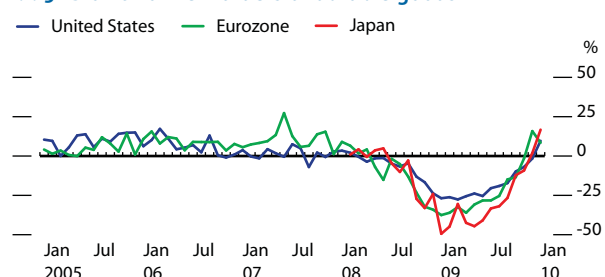
Despite this uncertain environment, the *Asian Development Outlook 2010* (ADO 2010) forecasts that the mild recovery in the major industrial economies will continue through 2010–2011 (Table 1.1.1). GDP in the US, Japan, and eurozone will expand by 1.7% in 2010 and slightly accelerate to 2.0% in 2011, rates that are still less than potential growth. A mild recovery in world trade is also projected for 2010–2011.

1.1.14 Baltic Dry Index



Source: Bloomberg (accessed 26 March 2010).

1.1.15 Growth of new orders of durable goods



Sources: US Census Bureau. <http://www.census.gov/>; Ministry of Economy Trade and Industry. <http://www.meti.go.jp/>; Eurostat. <http://www.ec.europa.eu/eurostat/> (all accessed 27 March 2010).

### 1.1.4 Developing Asia in the new export economy of the United States

During the high-growth years prior to the global financial crisis, developing Asia's prosperity was furthered by the US absorbing much of the large and expanding volume of global exports. US merchandise trade deficits during 2006–2008 averaged nearly \$1 trillion annually, providing a strong and steady external market for the world's exporters, particularly those in developing Asia.

Before the crisis, the US trade balance had started to adjust, with net exports expanding at a modest pace in 2007–2008. With the onset of the crisis, however, US trade—and with it, world trade—contracted. The US trade deficit fell by one-third in 2009 as its imports collapsed even faster than its exports.

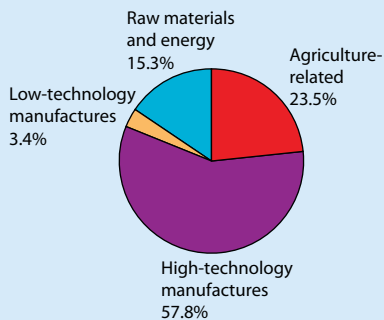
Coming out of the crisis, US households and firms will have to reduce their debt by saving a higher share of disposable income and profits, which will further narrow the trade deficit in the short term. Whether the US can sustain the increase in exports relative to imports in the long term is an open question.

What industries are emerging from the rebalancing of US trade and how will this affect developing Asia?

To explore these questions, US International Trade Commission data on total net exports were compiled into detailed product categories (specifically, the 4-digit level of aggregation in the harmonized system of tariff classifications for those products that averaged at least \$100 million in real net exports during 2007–2008). The 2007–2008 average of real net exports was used for the precrisis levels. The detailed product groups were then grouped by factor content into four broad categories: high-technology manufacturing, low-technology manufacturing, agricultural-related, and raw materials and energy. Two hundred and thirty-one detailed products met the criteria with an overall average value of over \$246 billion (in 2001 prices), nearly 58% of which were in high-technology manufacturing (Box figure 1).

Next, data from the same source were examined for the group of economies that account for the bulk of US exports to developing Asia: the PRC, India, ASEAN-10, and the newly

**1 US real net exports to rest of the world, by factor intensity, 2007–2008**



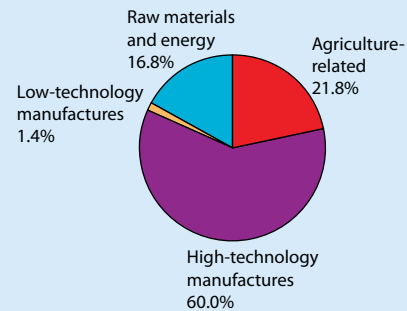
Note: Data refer to net exports of over \$100 million. Real values were derived using the average of export and import price indexes.

Source: United States International Trade Commission. *Interactive Tariff and Trade DataWeb*. <http://www.usitc.gov/> (accessed 26 February 2010).

industrialized economies. Data were compiled into the same detailed product categories as was used for total trade, where real net exports averaged at least \$10 million per year in 2007–2008. In the precrisis period, the US had net exports to developing Asia of least \$10 million per year for 177 of the 231 products—with an even greater concentration in the high-technology category (60%) (Box figure 2).

In contrast to the precrisis performance, in 2009 there was

**2 US real net exports to developing Asia, by factor intensity, 2007–2008**



Note: Data refer to net exports of over \$10 million. Real values were derived using the average of export and import price indexes.

Source: United States International Trade Commission. *Interactive Tariff and Trade DataWeb*. <http://www.usitc.gov/> (accessed 26 February 2010).

a huge shift in US net exports from high-technology to the other three categories and especially agriculture, but this is almost certain to be reversed as recovery unfolds. Much of this apparent shift was a result of the worldwide collapse in demand for new aircraft (the most important product in US net exports in “normal” years) and in information technology products. With new commercial airliners coming off the assembly lines soon, this shift is likely to be reversed.

Interestingly, India, ASEAN-10, and the newly industrialized economies are destinations for US high-technology net exports to an even greater extent than for the world as a whole. In contrast, the PRC tends to receive a lower portion of high-technology net imports (28%) but a larger share of agriculture-related (41%) and raw materials and energy products (30%) than the world as a whole.

As developing Asia renews its emphasis on improving the quality of life and improving health and environment, its demand for US-produced high technology goods is likely to accelerate and thus to contribute to a more balanced global trade relationship. This will be mutually beneficial as the US seeks to raise savings and exports and to curb consumption and imports.

#### Reference

William E. James. Forthcoming. *Asia's Role in the New United States Export Economy*. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

## 1.1.1 Baseline assumptions for external conditions

	2008 Actual	2009 Actual	2010 ADO 2010 projection	2011 ADO 2010 projection
<b>GDP growth (%)</b>				
Major industrial economies <sup>a</sup>	0.2	-3.5	1.7	2.0
United States	0.4	-2.4	2.4	2.6
Eurozone	0.6	-4.1	1.1	1.6
Japan	-1.2	-5.2	1.3	1.4
<b>World trade (% change)</b>				
Merchandise exports volume	1.5	-12.0	7.1	8.1
<b>Prices and inflation</b>				
Brent crude spot prices (average, \$ per barrel)	97.3	61.7	80.2	84.6
Energy price index (% change)	40.1	-36.9	8.0	8.1
Food and beverage price index (% change)	23.3	-13.1	4.7	2.9
CPI inflation (G3 average, %)	3.2	-0.2	1.4	1.3
<b>Interest rates</b>				
US Federal Funds rate (average, %)	1.9	0.2	0.3	1.0
EU refinancing rate (average, %)	3.9	1.3	1.1	1.5
Japan interest rate (average, %)	0.5	0.1	0.1	0.2
US\$ Libor <sup>b</sup> (%)	2.7	0.3	0.3	1.3

<sup>a</sup> Average growth rates are weighed by GNI, Atlas method. <sup>b</sup> Average rate on 1-month US\$ deposits.

Sources: US Department of Commerce, Bureau of Economic Analysis. <http://www.bea.gov>; Eurostat. <http://www.ec.europa.eu/eurostat>; Economic and Social Research Institute of Japan. <http://www.esri.cao.go.jp>; World Trade Organization. <http://www.wto.org>; Consensus Forecasts; Bloomberg; International Monetary Fund. Primary Commodity Prices. <http://www.imf.org>; World Bank. Global Commodity Markets. <http://www.worldbank.org>; ADB estimates.

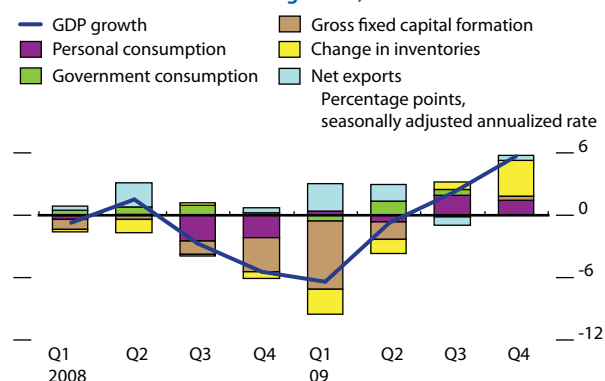
## Outlook for industrial country growth and world trade

The US led the major industrial countries in terms of the strength of its recovery in 2009. The demand components of GDP turned broadly positive in the third quarter (2.2% growth) accelerating to 5.6% in the fourth—a far cry from the 6.4% contraction suffered in the first quarter. Private consumption and inventory restocking led the turnaround and were joined by private fixed capital accumulation in the last quarter (Figure 1.1.16). However, GDP still contracted by 2.4% for the year. The index of leading indicators in the US provides support for the view that the trough in economic activity has passed (Figure 1.1.17). The index reached its lowest in February 2009 and has since risen for 11 consecutive months.

Labor market concerns and persistent finance sector weakness weigh heavily on the prospects for the US economy this year and next. The uncertainty surrounding the extent to which fiscal and monetary stimulus can be maintained further clouds the picture. The sources of growth beyond the first half of 2010 are uncertain. The projections are for a moderately paced recovery, with GDP expanding by 2.4% in 2010 and 2.6% in 2011. While this appears strong when compared to the forecasts for the eurozone and Japan, the downside risks make for a fragile US outlook.

After contracting by 2.5% and 0.1% (q-o-q) in the first and second quarter of the year, respectively, the eurozone pulled out

1.1.16 Contributions to GDP growth, United States



Source: US Department of Commerce, Bureau of Economic Analysis. <http://www.bea.gov> (accessed 1 April 2010).



of recession in the third quarter of 2009 with a 0.4% increase in GDP (Figure 1.1.18). This brought to an end a recession lasting 5 consecutive quarters, and the strength of recovery exceeded consensus expectations. However, the nascent optimism was soon damped by the release of fourth quarter data, showing eurozone growth to have stalled, as France's strong performance (0.6%) was offset by stagnation in Germany (0.0%) and contraction in Italy (0.3%) and Spain (0.1%). For all 2009, the eurozone economy is estimated to have contracted by 4.1%.

Looking ahead, confidence indicators provide positive signals for continued expansion of eurozone activity (Figure 1.1.19), but industrial production and internal demand remain subdued, while unemployment figures are still rising. Assuming a robust recovery of external demand for eurozone exports as the main driving force in the years ahead, against a slow and gradual rebound in domestic demand, eurozone GDP is forecast to expand by an anemic rate of 1.1% in 2010 and by 1.6% in 2011.

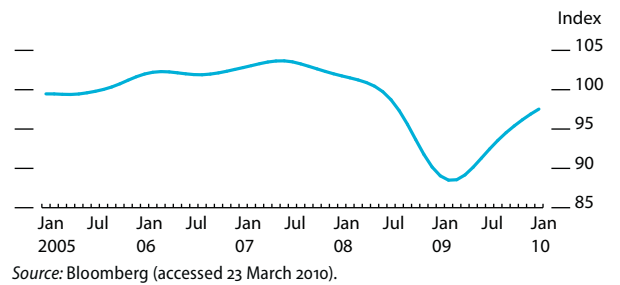
Further risks to the eurozone's outlook relate to the impact of worsening labor market conditions on household saving and consumption, and the combined effect of low capacity utilization and higher interest rates on firms' investment spending. With both the consumption and investment components of demand likely to remain fragile over the entire forecasting period, any unexpected disruption to external demand, including from Asia, risks putting the eurozone's recovery in jeopardy.

Japan's economy is on the recovery path, but it is far from being self-sustainable. Expansionary policies and the upturn in exports to developing Asia have been the main drivers of recovery so far. Initially, it was public demand, both consumption and capital formation, which helped lift the economy from its deep first-quarter dip in 2009 (Figure 1.1.20 below). Then, private consumption and net exports came in, in the second quarter. As public investment softened in the second half, public consumption became the sole contributor to overall growth in 2009. As a result, Japan's GDP contracted by 5.2%—the worst in its postwar history.

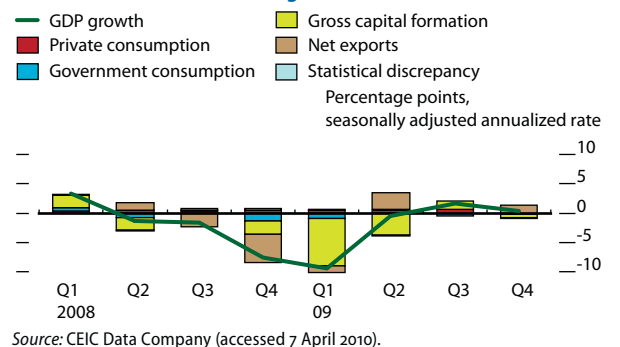
Although the rebound in exports is hoped to serve as an engine of growth, there is an increasing awareness that the degree of external demand (of a limited set of trading partners) dependence needs to be reduced, and that Japan's source of growth needs to come from domestic sources (Box 1.1.5).

The prolonged recession is further straining the already disturbing fiscal situation in Japan, in which general government debt reached 189% of GDP by the end of 2009, the highest among industrial nations. The expected increase in bond issuance to finance the deficit may start adding upward pressure on financing costs this year. The worsening fiscal situation too poses a threat if tax revenues do not recover as fast and financing cost starts to climb. (Figure 1.1.21) Overall, the outlook for Japan remains sluggish while

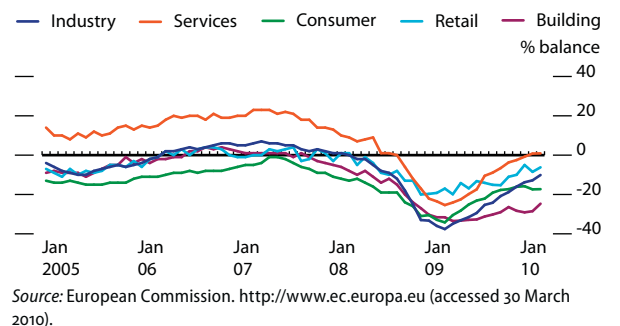
1.1.17 Composite leading indicators, United States



1.1.18 Contributions to GDP growth, eurozone



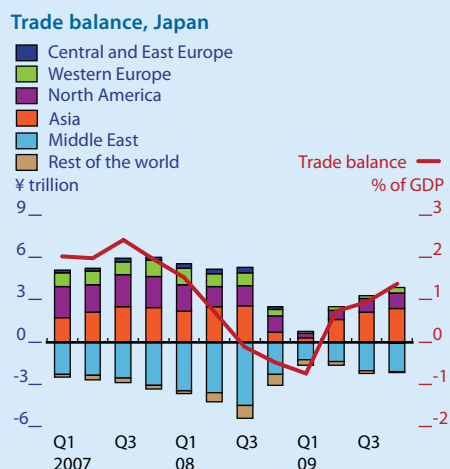
1.1.19 Economic sentiment indicator, eurozone



### 1.1.5 Rebalancing growth and the New Growth Strategy in Japan

Japan will, over the longer term, have to rebalance its economy so as to reduce its dependence on exports of its sophisticated products to the major industrial economies. Even in the short term, these markets are extremely unlikely to revert to their precrisis levels of Japanese imports.

Japan's exports to Asia are now rebounding (Box figure). In particular, capital goods exports to the PRC have increased due to the stimulus outlays on infrastructure. But it is unclear if exports to the PRC—and to the other smaller markets in Asia—can be sustained to drive recovery in Japan.



Sources: Trade Statistics of Japan. Ministry of Finance. <http://www.customs.go.jp>; Economic and Social Research Institute, Cabinet Office, Government of Japan. <http://www.esri.cao.go.jp> (both accessed 17 March 2010).

In an attempt to move away from the export-led growth model, the government announced a “New Growth Strategy” at end-2009. Instead of emphasizing output growth (as many previous strategies have done), it seeks to assign more importance to improving people's welfare more generally; to focus on new sources of domestic demand (rather than on promoting supply); and to promote closer Asian economic integration.

The strategy aims to increasing domestic demand—led growth by a focus on safeguarding the environment, boosting tourism, improving health services, and strengthening technology. The idea is to take advantage of the aging population and to utilize the country's achievements in advanced technology to develop products where potential markets are large (both domestic and abroad).

This focus, while serving to reduce vulnerability to

changes in the external environment by stimulating an enlarged domestic demand, would also lead (on the supply side) to the development of new products and processes, thus contributing to rebalancing the sources of growth. Japan's potential growth and international competitiveness would be also boosted.

How the goals in the strategy are to be achieved is not, however, clear. In the budget for FY2010, social welfare expenditure will grow by 9.8% from what was planned in the initial budget for FY2009 (under the previous government) to ¥27.3 trillion, while spending on public works will fall by 18.3% to ¥5.8 trillion, the lowest level in 32 years (Box table).

#### 2010 budget allocation

Major expenditures	FY2010 ¥ trillion	% change (FY2009 to FY2010)
Social security	27.3	9.8
Education and science	5.6	5.2
National defense	4.8	0.3
Public works	5.8	-18.3
Miscellaneous and others	9.3	2.7

Note: Others include expenditures for pensions for former military personnel, economic assistance, official development assistance, promotion of small and medium-sized enterprises, energy, and food supply.

Source: Based on *Highlights of the Budget for FY2010*. Ministry of Finance. December 2009, p. 2. <http://www.mof.go.jp/english>.

These moves reflect increasing direct transfers to households to boost domestic demand, as the new party of government pledged at the election last year. Other concrete measures to support the strategy are yet to be announced.

To fund the FY2010 budget, however, the government is planning record bond issuance of ¥44.3 trillion, partly because tax revenues are projected to fall to ¥37.4 trillion this year, the lowest level since FY1984. Yet Japan's wobbly fiscal trajectory in the next few years at least suggests that such transfers are unsustainable, nor are enough to achieve the new strategy's goals.

While greater details will be disclosed in the coming months, it seems apparent that the strategy will have to entail more significant structural reforms than it currently does to yield any visible outcome to rebalance Japan's sources of growth. Potential areas for such reforms include promoting deregulation in key major nontradable industries such as airlines and medical care.

the stimulus measures are gradually unwound. The sources of growth, particularly after the second half of this year, are uncertain, leading to relatively pessimistic growth projections of 1.3% in 2010 and 1.4% in 2011.

World trade volume (as measured by merchandise exports) contracted by an estimated 12% in 2009, and this sharp reversal accompanied an overall global economic contraction of about 2.2%. Quarterly estimates of world merchandise trade (exports) in current dollars during 2009 indicate that growth declined year-on-year by as much as 33.2% in the second quarter of 2009 but exhibited mild growth of 3.9% in the fourth quarter.

Overall trade after the first three quarters of 2009 was a cumulative 30% below the level of the same period in 2008. With the recovery of world GDP growth to 2.7% in 2010, world trade volume is also expected to recover, to 7.1%. In 2011, with GDP forecast to rise by 3.2%, world trade is set to increase by 8.1%.

### Outlook for commodity prices and industrial country inflation

Some commodity prices, such as food, are trending upward, but recently oil prices have been relatively steady. However, with the output gap still large, inflation will remain under control in the major industrial countries.

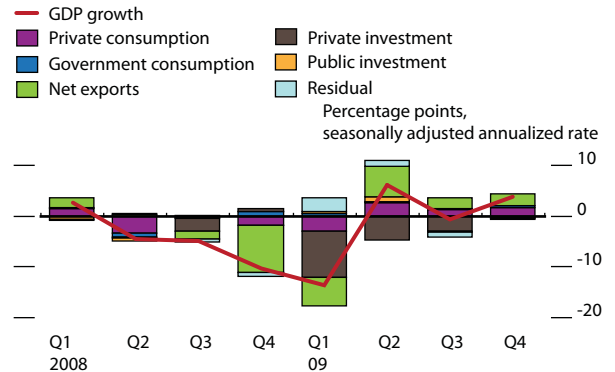
Commodity prices have begun to trend upward in tandem with the global economic recovery, with a particular thrust coming from demand by emerging market economies (Figure 1.1.22). The drop in prices since the spike in mid-2008 masks the fact that commodity prices in 2009 have remained elevated compared to the average of 2005–2007, the years immediately preceding the spike.

After falling from their peak in July 2008, energy prices hit a trough in the first quarter of 2009 and have been rallying since. By January 2010, the energy commodity price index, which includes coal, crude oil, and natural gas, had risen 57% from the low base of a year earlier. (In comparison, nonenergy commodity prices rose by 25% in the same period.) This rebound in prices, despite generally high inventories, can be primarily attributed to the expected strong demand in the near term as global economic activity picks up. While elevated prices encourage producers to boost supply, most producers—especially in the extractive industries—cannot do so quickly. Energy prices are expected to rise by about 8% annually in 2010–2011.

On oil specifically, the average monthly price of crude oil (Brent crude spot) has recovered from its low of \$41.34 per barrel in December 2008 to \$74.76 per barrel in February 2010. Prices are expected to range between \$80 and \$85 per barrel in 2010–2011 (Box 1.1.6).

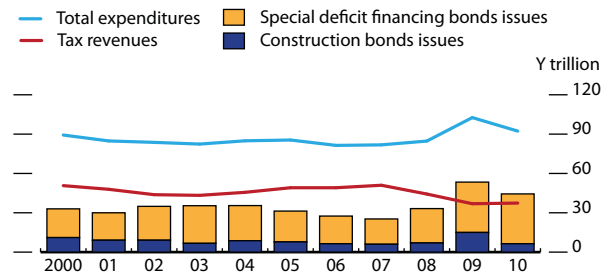
For most of 2009, prices of base metals went up in sync with the gradual recovery in industrial production and reflected some supply constraints. The metals and minerals price index increased by 46% in January 2010, compared to the same month of the previous year,

#### 1.1.20 Contributions to GDP growth, Japan



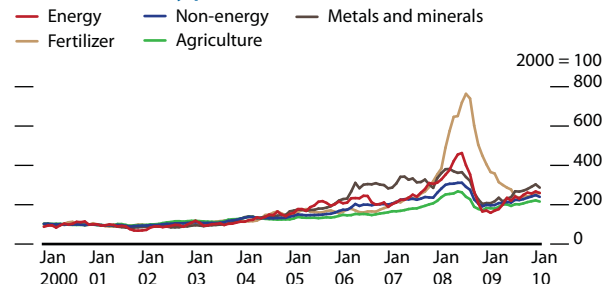
Source: Economic and Social Research Institute, Cabinet Office, Government of Japan. <http://www.esri.cao.go.jp> (accessed 22 March 2010).

#### 1.1.21 Fiscal condition, Japan



Source: Ministry of Finance. <http://www.mof.go.jp> (accessed 30 March 2010).

#### 1.1.22 Commodity price indexes



Source: World Bank. Commodity Price Data (Pink Sheet). <http://www.worldbank.org> (accessed 5 April 2010).

## 1.1.6 Recent global oil price trends and short- to medium-term prospects

### Introduction

One potentially significant external variable that could impinge on the region's performance is the path of global oil prices. The general pattern of oil prices for 2009 was a marked but fitful climb. An intensification of the upward momentum in 2010 would burden the region, with sizable terms-of-trade losses and additional inflation pressures. An unexpectedly robust global recovery could lead to an unexpected strong surge in global oil demand.

What is the likely trajectory of oil prices in the short and medium term, and what are the key drivers?

### Oil-price rally in 2009–2010: On the back of developing country demand

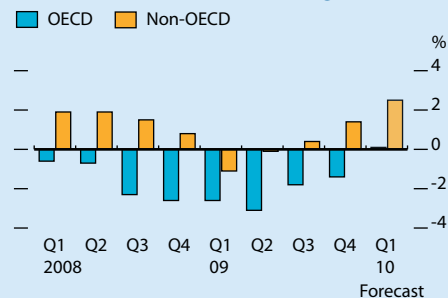
The global crisis had a pronounced impact on global oil prices. Just before the crisis in July 2008, prices surged to a record high of over \$140. Due to a dramatic weakening of demand as a result of the crisis, they collapsed toward \$40 in a few months. Prices have bounced back since the end of 2008 as the Organization of the Petroleum Exporting Countries (OPEC) quickly cut its output target by 4.2 million barrels per day (mb/d) from September 2008. Output reduction was substantial, and amounted to about 15% of total OPEC output and 5% of total world supply. Another major driver behind the rebound in oil prices has been the improvement in the global economic outlook.

Economic recovery has been visibly faster and stronger in non-Organisation for Economic Co-operation and Development (OECD) countries, in particular developing Asia, than in OECD countries. The OECD versus non-OECD growth gap, which is expected to persist in the short term, was already evident in the global pattern of oil demand in 2009 and is continuing to make itself felt again in 2010. More specifically, in 2009 OECD accounted for the entire drop in world demand of 2.2 mb/d whereas non-OECD demand remained stable.

Global oil demand is projected to grow by 1.2 mb/d in 2010. OECD oil demand is projected to remain in negative territory in 2010, declining by 0.2 mb/d. Although United States demand will grow again, OECD Europe and Japanese demand will continue to shrink, albeit marginally.

On the other hand, reflecting the much firmer footing of recovery outside OECD, non-OECD demand is likely to gather momentum. Aggregate non-OPEC demand will grow by about 1.4 mb/d on average, with the People's Republic of China, India, and Brazil leading the way. A look at the quarterly trends further confirms that the slump in world oil demand was concentrated in the OECD (Box figure 1).

1 OECD and non-OECD demand growth



OECD = Organisation for Economic Co-operation and Development.

Source: Facts Global Energy (2010).

### Short term: Ample supply likely to contain price pressures

Global supply and demand trends point to a further rise in inventories during 2010, even after 2009's significant buildup. While global demand is projected to rise by 1.2 mb/d in 2010, global supply of oil and oil substitutes is projected to rise by as much as 1.5 mb/d. The increase in output will come from a variety of sources—700,000 barrels per day (b/d) from OPEC, 300,000 b/d from non-OPEC, 400,000 b/d in OPEC natural gas liquids, and further increases in biofuel supply due to government mandates. The resulting excess supply will further add to inventories and exert downward pressure on prices.

The main source of uncertainty surrounding this baseline scenario is the speed and strength of global economic recovery. In particular, the global demand increment may overshoot the projected 1.2 mb/d by a sizable margin if OECD's recovery surprises on the upside.

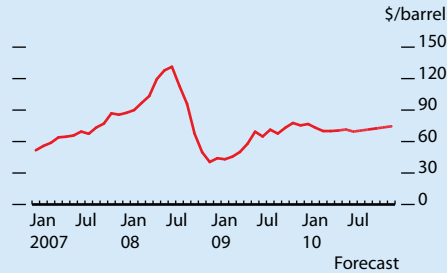
The generally soft price outlook raises some questions about whether OPEC members will comply with their output quotas in the coming months. Any drop in compliance and consequent increase in aggregate output will further add to downward pressures. Offsetting this supply-side factor is the possibility of unexpectedly robust rebound in the industrial countries. Taking all the relevant factors into consideration, Dubai crude is expected to average \$70–\$80 per barrel in 2010, with a gradual increase during the course of the year (Box figure 2).

### Medium and long term: Fundamentals to re-ignite upward price pressures

At a broad level, the plausible range of prices is between a fairly robust floor of around \$50–\$60 per barrel, protected by OPEC, and an unsustainable peak of \$150. In fact, in the medium term, oil prices are unlikely to go above \$100

## 1.1.6 Recent global oil price trends and short- to medium-term prospects (*continued*)

### 2 Dubai crude oil prices

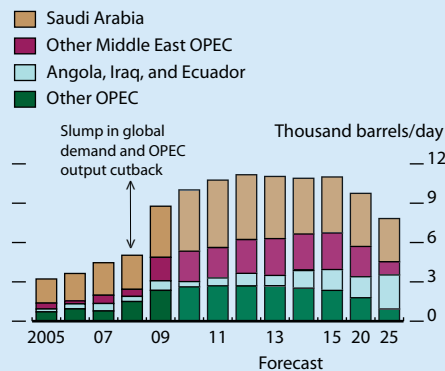


Notes: Actual oil prices are up to January 2010. Data for February 2010 is preliminary figure and values after that are forecasts.

Source: Facts Global Energy (2010).

on a sustained basis. The dominant feature of the market, at least through the medium term, is the large amount of spare production capacity being carried by the OPEC members (Box figure 3).

### 3 OPEC's installed spare production capacity



OPEC = Organisation of the Petroleum Exporting Countries.

Notes: Actual oil prices are up to January 2010. Data for February 2010 is preliminary figure and values after that are forecasts.

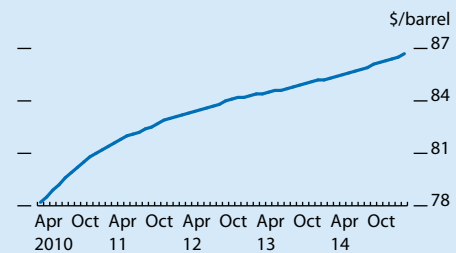
Source: Facts Global Energy (2010).

Installed spare capacity is likely to increase from around 4 mb/d in 2007 to 10 mb/d by the end of 2010. This rapid expansion is due to a combination of soft demand and new production capacity. Significantly, this level of spare production capacity in OPEC will be only slightly less than the record high of 1982.

Beyond the short term, as the global crisis recedes, supply and demand fundamentals will reassert themselves. In particular, strong demand growth from developing countries, in particular the People's Republic of China and

India, will exert upward pressure. An anticipated increase in marginal costs will also push up prices. At the same time, structural demand growth from developing countries will begin to play a bigger role in price determination. The perception of the futures markets is that global oil prices are set to rise in the medium term. In fact, NYMEX crude futures for 2015 are trading at about \$10 above current spot prices (Box figure 4).

### 4 NYMEX forward price—West Texas Intermediate crude



NYMEX = New York Mercantile Exchange.

Source: Facts Global Energy (2010).

### Asia's need to use the short term to prepare against price pressures in the medium term

The impact of the global financial and economic crisis on the global oil market cannot be overstated. To a large extent, the rebound in prices during 2009 reflects the gradual reversion of prices toward values consistent with oil market fundamentals. Since mid-2009, prices have stayed relatively stable in the \$70–\$80 per barrel range. In the short term, ample spare capacity will limit the scope for price increases. However, upward pressures are likely to reemerge by the middle of this decade and those pressures are set to intensify by its end.

Therefore, the next 5 years offer a relatively narrow opportunity for Asian governments to take the necessary measures to prepare their economies for a medium-term environment of higher prices and greater volatility. Foremost among those measures should be policy actions that catalyze firms and households to use energy more efficiently.

### Reference

Based on Facts Global Energy. 2010. Oil Price Outlook and Implications for Developing Asia. Background note prepared for the Asian Development Bank. March.



consistent with the acceleration of global industrial activity. Further price increases are expected.

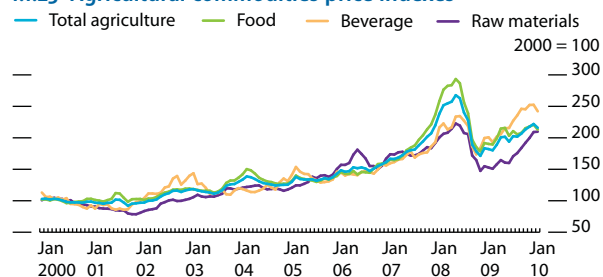
Prices of agricultural goods were more stable and lower than in the previous year on average in 2009 (Figure 1.1.23). Throughout 2009, food and raw materials price indexes fell by 17% and 14%, respectively, reflecting weaker demand for food, feed, and biofuel; good harvests; and larger stockpiles of key agricultural commodities, particularly rice, wheat, and maize (Figure 1.1.24). But these prices rose steadily in the second half of 2009 as a result of robust demand, rising fertilizer prices, and adverse weather conditions. Overall, the forecast is for moderate increases in the food and beverage index: 4.7% in 2010 and 2.9% in 2011.

Consumer price movements in the US remain subdued. Core inflation (that is, consumer prices excluding food and energy) averaged 1.7% in 2009 and 1.4% in the first 2 months of 2010 (Figure 1.1.25). Rising fuel and food prices, though, have led to a more rapid increase of consumer prices overall. The CPI inflation gradually picked up in 2009, and accelerated to 2.4% in January–February 2010. As GDP growth is still below its potential, inflation is manageable, and inflation expectations are in check, the Federal Reserve is likely to maintain its 0% to 0.25% target for the federal funds rate through the first half of 2010.

Eurozone inflation remained subdued throughout the year, due to the high and persistent output gap and growing unemployment. The year-on-year Harmonized Index of Consumer Prices indicates fourth quarter eurozone annual inflation at 0.43%, back from a temporary dip into deflation during the third quarter, mainly on account of declines in global commodity prices (Figure 1.1.26). Annualized headline inflation reached 1.0% in January 2010 and is expected to pick up further as global commodity prices increase and recovery gains momentum. However, inflation pressures on wages and consumer prices will be damped by sluggish economic growth, subdued credit expansion, and low capacity utilization. Consumer price inflation is therefore expected to remain subdued, and to increase gradually to 1.3% in 2010 and to 1.7% in 2011.

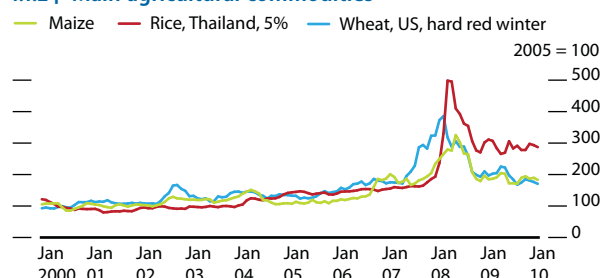
In Japan, however, the concern is the declining consumer price index. Excluding volatile fresh food, it declined constantly in 2009 averaging 1.3% year on year (Figure 1.1.26). The decline was initially due to the base effects of the high oil price in 2008, but prices started to fall broadly in the second half of last year. In December, prices of 377 of the total 585 items in the consumption basket fell compared to the previous month, confirming deflation pressures. Yet, given the recent pick up in private consumption, the CPI deflation was gradually being whittled back, to 1.2% in February.

### 1.1.23 Agricultural commodities price indexes



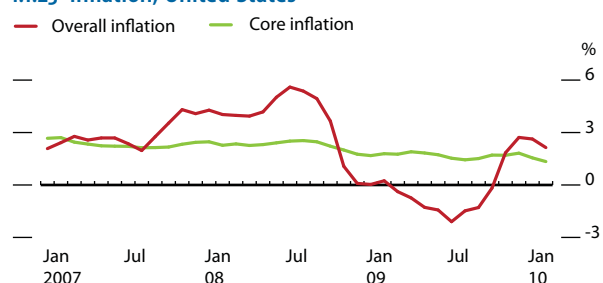
Source: World Bank. Commodity Price Data (Pink Sheet). <http://www.worldbank.org> (accessed 5 April 2010).

### 1.1.24 Main agricultural commodities



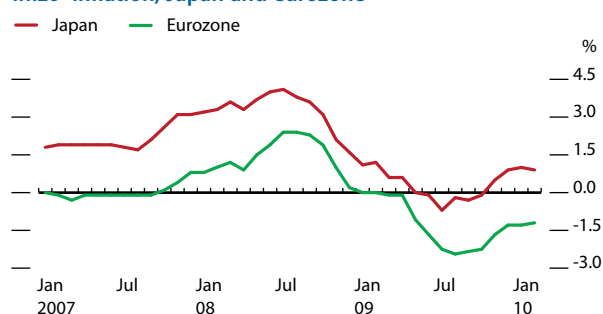
Source: International Monetary Fund. Primary Commodity Prices database. <http://www.imf.org> (accessed 5 April 2010).

### 1.1.25 Inflation, United States



Sources: US Department of Labor. Bureau of Labor Statistics. <http://data.bls.gov> (accessed 23 March 2010).

### 1.1.26 Inflation, Japan and eurozone



Note: Overall excluding fresh food, Japan.

Sources: Eurostat. <http://www.ec.europa.eu/eurostat> (accessed 30 March 2010); CEIC Data Company (accessed 7 April 2010).

## Risks to the global outlook

The *ADO 2010* forecasts for the global economy are conservative—continued mild expansion of GDP in the US, eurozone, and Japan, with an uptick in international trade and manageable inflation rates. Yet the still-fragile outlook for major industrial economies has to contend with various downside risks.

***Continued weakness in US mortgage markets.*** US residential property prices have picked up slowly from their 2009 trough. Yet nearly one-quarter of mortgaged properties in the US still have loan balances that exceed their market values. If mortgage defaults continue to rise, credit market difficulties will become even deeper and harder to resolve. With the specter of large mortgage defaults hanging over them (directly or through holdings of derivative instruments), financial institutions may be hesitant to restart lending to businesses. Such an incomplete resumption of credit flows could further disrupt the real economy, weakening the prospects for recovery.

***Mistimed macroeconomic policy responses.*** Massive macroeconomic stimulus measures provided support to the major industrial economies during the depth of the crisis, and helped usher in the mild recovery in the latter half of 2009. Already, policy makers have begun to unwind some of the temporary emergency measures, particularly those with set expiration dates.

Other stimulus measures—such as tax cuts or reduced interest rates—may require direct intervention to reverse. As discussed earlier, the timing of such actions is critical, since policy makers have to balance the need to provide an environment that fosters the recovery today, while keeping an eye on signs of future problems such as inflation, asset bubbles, and unsustainable public debt. Mixed signals, including rising asset prices concurrent with increasing loan delinquencies and weak labor markets, further complicate the task of getting the timing right.

***Weakening fiscal sustainability.*** Although liquidity constraints generally eased by early 2009, financial markets still suffered intermittent episodes of turbulence. With the emergency past (it would seem), attention has shifted to a new source of stress in global financial markets: the deteriorating fiscal balances of many industrial countries. As the Dubai and Greek crises highlight, sovereign risk may be on the rise with dire consequences for financial stability.

***Jump in commodity prices.*** Even though commodity prices plummeted with the global slowdown, they have remained above their 2005–2007 average. Non-oil commodity prices—particularly food—are again on the rise. As happened during the 2008 price spike, rising food prices could lead commodity producers to halt exports in the name of food security, which would only exacerbate the problem. Such terms-of-trade shocks for the major industrial countries would contribute to inflation pressures.

In comparison, oil-market supply and demand conditions suggest only moderate price changes in the next couple of years. Large inventory levels and excess capacity throughout the supply chain should prevent abrupt price increases—though geopolitical conflict would likely push up the price of oil, undermining the global recovery.

***Persistent global imbalances.*** A medium-term risk to the global outlook is the failure of deficit and surplus countries to take measures to reduce their imbalances. US households' saving rate has risen as they adjust their balance sheets, but whether it will be sustained long and deeply enough to unwind that country's contribution to global imbalances is uncertain. Asia, for its part, will have to undertake structural reforms to shift its demand away from excessive dependence on the US export market. Failure by either set of economies to make the necessary adjustments may reignite the growth of global imbalances, ultimately leading to another bout of global instability.

***Incoherent international policy coordination.*** Another medium-term concern, poor international policy coordination could delay global financial regulatory reform and also global rebalancing. Building a resilient global financial system, which absorbs and diminishes shocks rather than amplifying them, is crucial to support vibrant economic growth. Coordinated policies are important for regulations to be effective, particularly among the G20 group of countries, so as to avoid "regulatory arbitrage," a situation where financiers direct resources toward institutions in the least regulated markets. Multilateral cooperation is equally crucial to avoid bilateral conflicts over exchange rate and trade issues. Yet despite the huge issues at stake, there has been limited progress in cross-country coordination of efforts so far. Without such efforts, financial vulnerabilities that induce volatile cross-border capital flows will persist, posing future challenges for policy makers.



## Developing Asia's prospects in the recovery

Developing Asia weathered the harsh external environment in 2009—emerging first from the global turmoil—helped by decisive policy responses. Economies with large domestic markets performed well, while those relatively more dependent on external demand suffered. Yet even these weakened economies, where activity plunged in the early months of the year, strengthened by year-end.

In tandem with the improving global outlook, developing Asia's growth is expected to rebound in 2010. The region's growth should accelerate beyond 2008's outturn, though it will still come in below 2007's record 9.6% growth.

As in the major industrial countries, developing Asia's outlook is fraught with uncertainty as support from fiscal and monetary stimulus gives way to private demand sources. Authorities in the region face inflation risks stemming from maintaining expansionary monetary policies, and most of them will begin normalizing their operations as recoveries become more solid. Developing Asia's ability to maintain strong domestic demand will be tested while external demand picks up only slowly.

### Recent trends

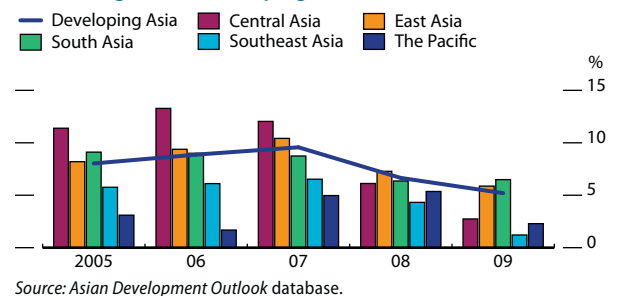
Growth in 2009 decelerated across developing Asia with only South Asia performing slightly better than in 2008. Developing Asia's growth fell by 1.4 percentage points to 5.2% in 2009 (Figure 1.2.1).

The aggregate performance of the East Asian subregion, where GDP expanded by 5.9%, stemmed almost entirely from the 8.7% expansion in the People's Republic of China (PRC). The PRC's performance was based heavily on its exceptional fiscal and monetary stimulus. The Republic of Korea grew marginally, helped by fiscal stimulus and currency depreciation, but global headwinds battered the economies of Hong Kong, China; Mongolia; and Taipei, China, all of which contracted in 2009.

Southeast Asia's growth slowed sharply to just 1.2% in 2009, the weakest outcome since the Asian financial crisis of 1997–98. Aggregate GDP would have declined had it not been for relatively high growth of 4.5% in Indonesia, the biggest economy in this subregion. Indeed, half the 10 economies contracted (Brunei Darussalam, Cambodia, Malaysia, Singapore, and Thailand), as the global recession cut into exports and investment flows.

The story in South Asia was somewhat different, partly because major countries report figures in fiscal year terms, which shifts the severely hit first quarter to the previous year. Growth in 2009 inched up to 6.5%

1.2.1 GDP growth, developing Asia



from 6.4% in 2008 but only India and Afghanistan saw gains. India experienced a strong rebound in growth to an estimated 7.2% for the year, despite a drought-impacted crop. Continued fiscal stimulus and monetary easing in India over the year, alongside an improving global environment, prompted large capital inflows as investor and consumer confidence strengthened.

The Pakistan economy again slowed, but fiscal imbalances narrowed. A worsening security environment and power shortages obstructed any meaningful improvement in economic performance. The annual rate of growth slipped, too, in Bangladesh, Bhutan, Maldives, and Sri Lanka, but Sri Lanka experienced a marked revival from May, after the end of its long civil conflict.

Central Asia saw growth plummet for a second year, to 2.7% from 6.1% in 2008, with all countries putting in a weaker performance. Armenia and Georgia were jolted by contractions in GDP. Kazakhstan managed to eke out a 1.2% expansion despite banking distress and depressed non-oil activity.

Growth in the Kyrgyz Republic and Tajikistan was sharply clipped, in part on reduced workers' remittance inflows and economic difficulties elsewhere in Central Asia and in the Russian Federation. The oil and gas producers (Azerbaijan, Turkmenistan, and Uzbekistan, but excluding Kazakhstan) experienced only a moderate slowing in growth.

Growth in the Pacific pulled back to 2.3% in aggregate in 2009, from 5.4% a year earlier. Papua New Guinea, the biggest of these economies, grew by 4.5% (slowing from 2008), supported by fiscal spending and initial investment associated with expectations of a large new liquefied natural gas project. However, seven of the 14 Pacific economies contracted in 2009, with Fiji Islands' GDP declining for a third consecutive year. GDP in three others was estimated to be flat.

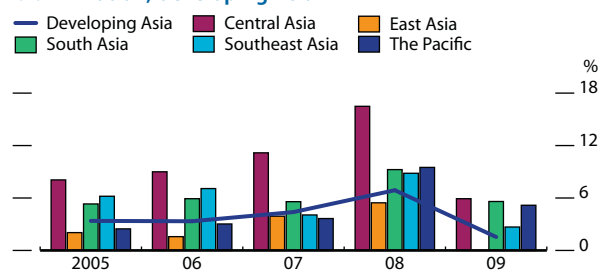
The significant output gap across developing Asia coupled with food and fuel prices that were lower than their 2008 averages led to a sharp decline in regional inflation (Figure 1.2.2). Aggregate inflation in East Asia was flat, with the PRC and Taipei,China both recording deflation.

Inflation in both South Asia and the Pacific almost halved in 2009 while that of Southeast Asia decelerated by around two-thirds. Central Asia's inflation rate of about 6%, though much below the average of the past 5 years, remained the highest of all the subregions.

In many open economies, such as Indonesia; Korea; Taipei,China; and Thailand, imports fell even more steeply than exports, so that current account surplus as a share of GDP increased (Figure 1.2.3). However, the overall developing Asia's current account surplus as a share of GDP fell for the second year, to 4.9% from 5.4%, as the imbalance narrowed in all subregions except for Southeast Asia.

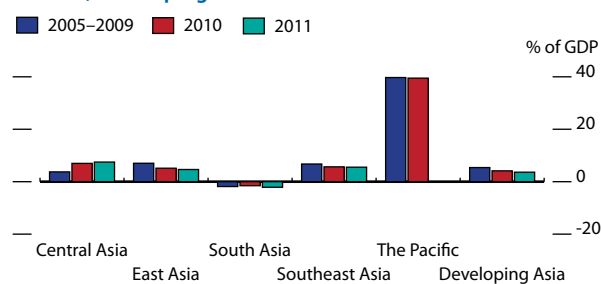
Most notably in the PRC, the current account narrowed by a significant 3.6 percentage points to 5.8% from 9.4% due to reduced exports and robust domestic demand.

### 1.2.2 Inflation, developing Asia



Source: Asian Development Outlook database.

### 1.2.3 Five-year average and forecast of current account balance, developing Asia



Source: Asian Development Outlook database.

## Outlook

With global recovery now under way, the outlook for developing Asia looks brighter. GDP growth is forecasted to rebound to 7.5% in 2010, with every subregion expected to perform better than last year. On the assumption that the global economy will continue to recover (slowly) and with softening domestic demand as monetary and fiscal policies are normalized, regional growth is projected to slow a bit to 7.3% in 2011 (Figure 1.2.4).

Despite steep declines, commodity prices in 2009 remained elevated compared to period before the commodity price boom. As global economic recovery started to impact, they began an upward trend, and as food and energy are major components of Asia's consumer price indexes, their rebound will force developing Asian policy makers to keep a close eye on inflation pressures. Still, with the pickup in economic activity and the impact of monetary policy easing becoming more tangible, inflation is expected to accelerate a little, to an average of 4.0% in 2010 and 3.9% in 2011 (Figure 1.2.5).

Growth in the five economies of East Asia is forecast to accelerate to 8.3% in 2010, with strong recoveries in the three that shrank last year (Hong Kong, China; Mongolia; and Taipei,China). GDP growth will remain buoyant in the PRC, while Korea is expected to rebound to 5.2%, driven by stronger private investment and consumption and the pickup in global trade.

Similar factors will benefit both Hong Kong, China and Taipei,China. But while East Asia's exports will recover from their contraction in 2009, the contribution to growth of net exports will be tempered by the rise in imports as domestic demand increases.

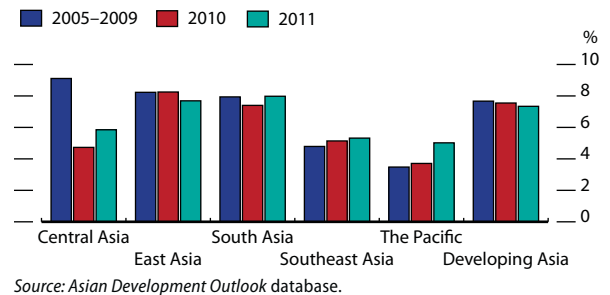
Inflation is expected to nudge up to an average of 3.3% in the region. All East Asia's economies (again, apart from Mongolia) will record current account surpluses. In 2011, all five economies are likely to see a slight easing in the pace of expansion, partly a result of a phasing down of stimulative policies and because this year's rebound will set a high base.

The PRC is forecast to grow by 9.6% in 2010, up by about one percentage point from 2009. Aggressive fiscal and monetary stimulus is being adjusted, but will continue contributing to strong growth. Buoyant domestic demand will be backed by firmer external demand. The trade surplus will resume its upward trend. Economic growth is forecast to ease to about 9.1% in 2011, as the stimulus policies are phased out. Inflation in the PRC is seen picking up to 3.6% this year and 3.2% next year. Rising asset prices are a concern, particularly real estate prices in major coastal urban centers, which calls for close monitoring and possible regulatory intervention.

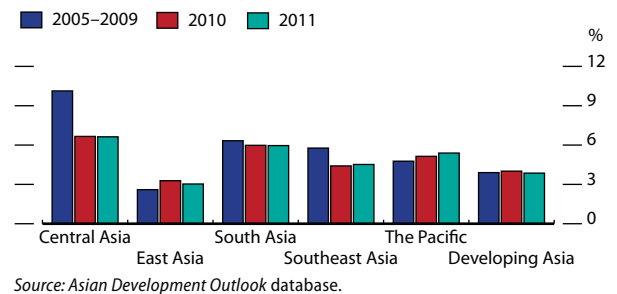
Against the backdrop that external demand will only slowly pick up, strong domestic demand should further narrow the current account surplus in the PRC as well as economies such as Hong, Kong, China; Korea; and Taipei,China. East Asia's outlook for the current account surplus is a decline to 5.1% in 2010 and 4.7% in 2011.

In Southeast Asia, aggregate growth is forecast to rebound to 5.1% in

1.2.4 Five-year average and forecasts of GDP growth, developing Asia



1.2.5 Five-year average and forecasts of inflation, developing Asia



2010, based in large part on the recovery in global trade and a recovery in investment. The five economies that shrank in 2009 will return to growth in 2010. In 2011, the pace of growth in most of the subregional economies will likely quicken a bit. Inflation is seen averaging a moderate 4.5% in 2010 (the outlier is Viet Nam, where consumer prices might rise by 10%, partly on account of last year's rapid growth in money supply and local currency devaluation). The subregional current account surplus will decline, mainly on account of the expected rise in imports as domestic consumption recovers.

Growth is expected to pick up the most in South Asian countries in 2010. India will lead the group with projected 8.2% growth. Its rebound a year earlier and continued strong expansion stem largely from domestic demand conditions—a revival of exuberance of the years prior to 2008. For its part, Sri Lanka is expected to see an uptick of 6.0%, boosted by the peace dividend of investor confidence. Improved domestic economic fundamentals should allow Pakistan to attain higher growth of 3.0%. Bangladesh and Nepal are projected to see growth ease slightly. Inflation is expected to pick up but remain moderate in South Asia, provided that monetary policy makers remain alert. Bangladesh, Pakistan, Nepal, and Sri Lanka all rely heavily on workers' remittances to offset large trade deficits. These earnings have held up quite well over the past 2 years, helping narrow their current account imbalances in 2009.

Recovery is slow in Central Asia, but the subregion is expected to grow faster than in 2009 throughout the forecast period, underpinned by recovery in the Russian Federation and higher oil prices. A still weak non-oil exporting economy in Kazakhstan will hold back its overall growth only slightly to 2.5%. The Armenian and Georgian economies are projected to turn around but record anemic growth (also about 2%). Both the Kyrgyz Republic and Tajikistan should see slightly accelerating expansions of about 4%–6%.

Inflation is seen edging up in Central Asia in the next 2 years to about 6.7%. Stronger oil prices will bring higher current account surpluses for the hydrocarbon exporters. Armenia, Georgia, the Kyrgyz Republic, and Tajikistan will continue to face relatively large deficits of 8%–15% of GDP, little changed from 2009: these four countries will continue their adjustment programs with the IMF.

Aggregate growth in the Pacific is forecast to rise to 3.7% in 2010, mainly owing to accelerations in Papua New Guinea and Timor-Leste, both of which benefit from higher export demand and prices for natural resources. However, GDP in the Fiji Islands is expected to contract again, and most of the smaller economies will grow by less than 1%. Papua New Guinea will likely see a spurt in growth from 2011, based on a large new liquefied natural gas project. Subregional inflation is seen staying at around 5.3% both this year and next.

# Sources of Asia's growth during and beyond the crisis

Despite the steep fall in global trade, developing Asia outperformed the rest of the world in 2009 (Figure 1.3.1), a surprising outcome for an export-oriented region. With prospects for global recovery fragile, how it did this is important for the regional outlook.

## Openness and domestic demand

Developing Asia started 2009 facing the collapse in external demand from the major industrial countries. Exports from developing Asia plunged in the first half of the year—by 24.5% in the first quarter and 23.5% in the second. Economies more open to trade suffered more than the relatively closed ones. Equally, although it is true that the regional financial system as a whole was not affected severely by the crisis, the financially more open economies suffered more than relatively closed economies.

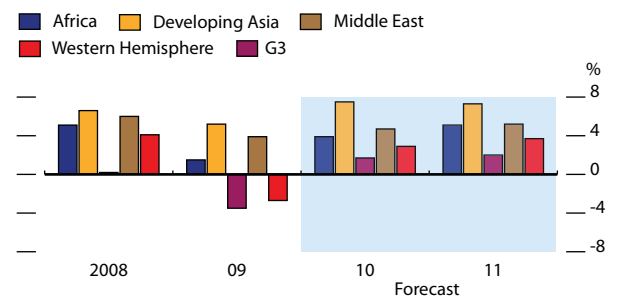
While the collapse in regional trade was about as much as the decline in goods to the major industrial countries (38% versus 40%, Figure 1.3.2), this understates the importance of industrial-country trade. The US, eurozone, and Japan have a predominant role as final goods importers. The collapse in regional trade was itself due to crumpled import demand from the major economies as the movement of parts and components along cross-border production networks stalled.

Varied GDP growth performance across Asia highlighted the importance of resilient domestic demand—both consumption and investment—when hit by a large external shock. The severe impact of the export collapse was felt particularly through the fall in business sentiment and hence private investment. The impact was particularly severe for the more open economies: in six of 12 economies (shown in Figure 1.3.2) that experienced severe export contractions, the fall in gross capital formation was the main factor taking economic activity so low in 2009. Increased uncertainty, particularly for export orders, reduced business investment.

Business sentiment and investment picked up in the second half of the year, particularly in Hong Kong, China; Korea; Taipei, China; and Malaysia. Buoyant import demand from the PRC seemed to account for this turnaround (Figure 1.3.3) because demand from the industrial economies was still subdued.

The three largest economies—the PRC, India, and Indonesia—stood out in showing robust investment, which contributed significantly to their GDP growth throughout 2009

1.3.1 World GDP growth, 2008-2011



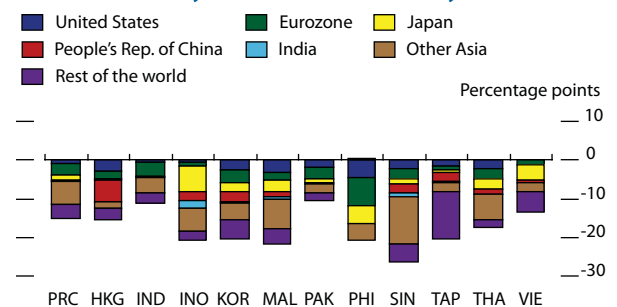
Notes: Africa: Composed of 50 countries: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Democratic Republic of Congo, Côte d'Ivoire, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, United Republic of Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe.

Middle East: Composed of 14 countries: Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, and Republic of Yemen.

Western Hemisphere: Composed of 32 countries: Antigua and Barbuda, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

Sources: ADB estimates based on data from International Monetary Fund. 2009. *World Economic Outlook*. October; World Development Indicators online database; *Asian Development Outlook* database (accessed 6 April 2010).

1.3.2 Contributions to export contraction in selected Asian economies, January–October 2008 vs. January–October 2009



PRC = People's Rep. of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; KOR = Rep. of Korea; MAL = Malaysia; PAK = Pakistan; PHI = Philippines; SIN = Singapore; TAP = Taipei, China; THA = Thailand; VIE = Viet Nam.

Note: Data for Taipei, China is for full year 2009.

Source: International Monetary Fund. Direction of Trade Statistics (accessed 13 March 2010).



(Figure 1.3.4). Large fiscal stimulus packages and generally upbeat business sentiment supported their corporate sectors. Consumption, too, was notably steady in these three economies throughout the year. Strong private consumption was also seen in the Philippines, though investment contracted. These four economies managed not only to avoid large fluctuations in GDP growth but also posted no single quarter of contraction.

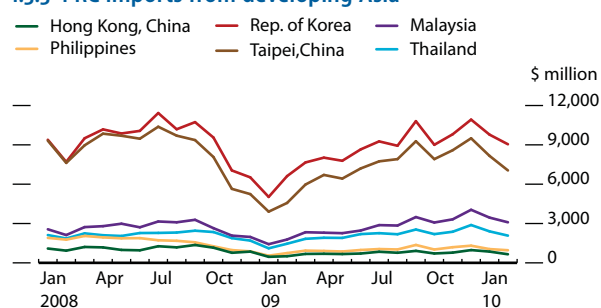
Developing Asia's exports to the major industrial countries are strengthening (Figure 1.3.5). Yet with recoveries of these economies expected to be weak, developing Asia's engine of growth has to come from domestic sources or from trade with other regions. Box 1.3.1, focusing on the economies where export sectors were badly hit, shows how the pickup in domestic demand helped create services sector jobs while manufacturing (catering mainly to the export sector) was still weak.

Improving domestic demand appears to be the major driver in the region's recovery so far. At the same time, US households are beginning to save more. Do these trends foreshadow an unwinding of the global current account imbalances?

Early evidence suggested a move toward reduced imbalance. On the deficit side, the US current account narrowed significantly from its depth in 2005. In world GDP terms, it contracted from 1.65% in 2005 to 0.64% in 2009. This decline was matched by the adjustment in surplus countries, namely in Japan, the Middle East, and the Russian Federation in 2009 (Figure 1.3.6). The sharp decline in US import demand as well as lower oil and commodity prices are reflected in the shrinking current account surplus in these economies.

US households are expected to remain cautious in their spending while they adjust their balance sheets, moderating consumption growth—and hence import demand from developing Asia—in the coming quarters. As such, the narrowing of developing Asia's trade surplus is expected to continue in the next 2 years. The large fiscal and monetary stimulus packages quickly rolled out by governments across the region were

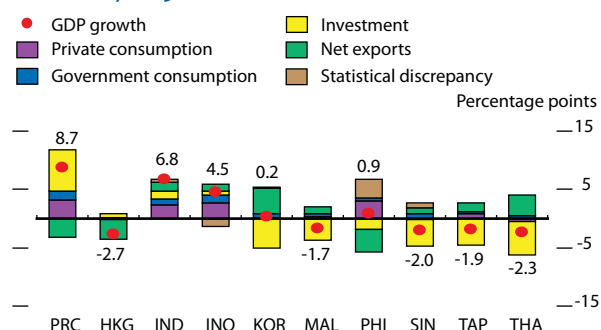
### 1.3.3 PRC imports from developing Asia



Note: Data for Hong Kong, China includes re-exports.

Source: CEIC Data Company (accessed 3 April 2010).

### 1.3.4 Contributions to growth (demand), selected Asian economies, 2009

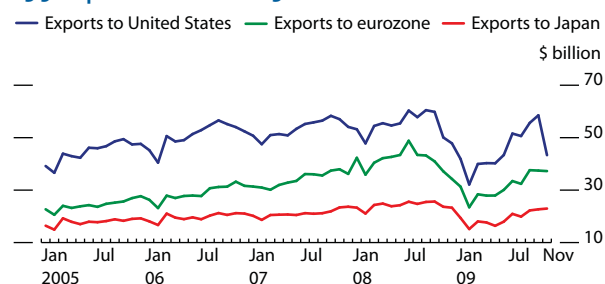


PRC = People's Rep. of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; KOR = Rep. of Korea; MAL = Malaysia; PHI = Philippines; SIN = Singapore; TAP = Taipei, China; THA = Thailand; VIE = Viet Nam.

Note: India is based on advanced estimates of GDP at constant market prices.

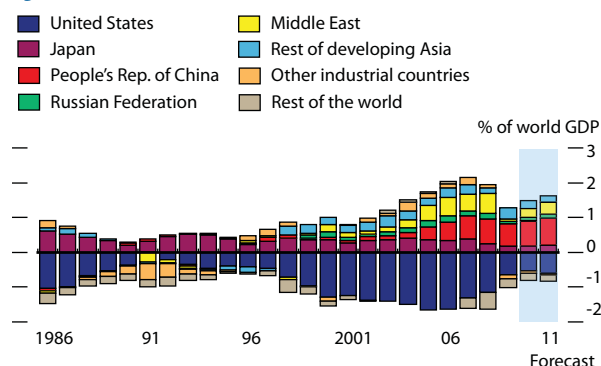
Source: Asian Development Outlook database.

### 1.3.5 Exports of DMCs to G3 economies



Sources: International Monetary Fund. Direction of Trade Statistics. <http://www.imfstatistics.org/dot>; CEIC Data Company (both accessed 8 April 2010).

### 1.3.6 World current account balance



Sources: International Monetary Fund. 2009. World Economic Outlook database. October. [www.imf.org](http://www.imf.org) (accessed 7 April 2010); Asian Development Outlook database.

basically an attempt to boost domestic demand to compensate for collapsing external demand.

It appears that the collapse of global trade during the crisis and developing Asia's policy responses have helped kick start the rebalancing process. Yet it is far from certain that the region's greater reliance on domestic demand will be maintained. Sustaining a more balanced growth model also means addressing several internal structural issues, as argued in *ADO 2009*. Developing Asia's contribution to the global imbalances—its persistent high current account surpluses—have been driven mainly by excess saving. Resolving this problem means removing the policy bias toward specific sectors and interest rate distortions that induce excess corporate saving. Strengthening domestic financial systems and underdeveloped social safety nets will reduce households' need to accumulate precautionary savings.

The region also needs to wean itself from excessive dependence on exports to countries outside the region and rely to a greater extent on domestic demand. As discussed in *ADO 2009 Update*, expansion of intraregional trade among Asian countries, especially in final goods, will provide the region with an additional source of resilience against external shocks. Further progress in regional free trade agreements (FTAs) would play an important role to support sophistication of production network in the region (Box 1.3.2).

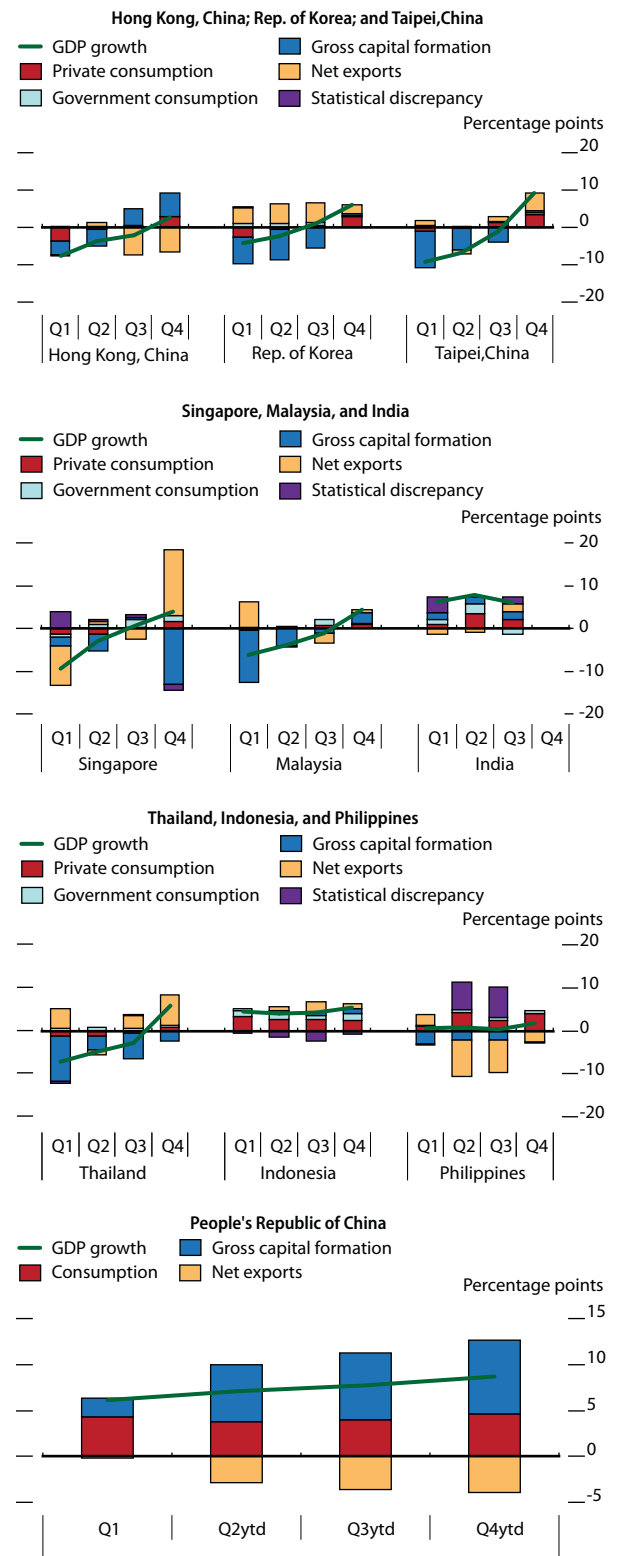
It remains to be seen how well Asian governments can manage the transition from the unbalanced precrisis economic structure to a more balanced postcrisis structure. In the medium term, unwinding of global imbalances requires higher savings and lower consumption in the US. Even in the short term, it may take some time for the industrial economies' appetites for imports to fully recover making greater reliance on strong domestic demand and intra-Asian trade a matter of necessity rather than choice.

As the global crisis recedes and Asian countries begin to exit from their fiscal and monetary expansion, rebalancing based on public spending will diminish. But in the end, the main thrust of the stimulus policy was immediate crisis response, rather than resolving a medium-term development issue. Aside from the temporary boost to a more balanced growth model, how effective was policy support in keeping developing Asia afloat?

## Policy actions

Substantial (and often unprecedented) fiscal measures provided a direct boost to consumption and investment. In a selected group of economies, which together constitute more than 90% of developing Asia's GDP, the contribution of government consumption to growth was significant (Figure 1.3.7). The fiscal measures were supported by an extremely accommodative

1.3.7 Contributions to growth (demand), selected Asian DMCs, 2009



Notes: For the People's Republic of China, contributions to growth are in terms of year-to-date figures. Consumption combines private consumption and government consumption.

Sources: National Bureau of Statistics. <http://www.stats.gov.cn>; Bank of Korea. Economics Statistics System. <http://ecos.bok.or.kr>; CEIC Data Company (all accessed 22 March 2010).

### 1.3.1 Trading Asia: Uneven job recovery

As recovery took hold in the open trading economies of developing Asia, jobs were created much faster than in industrial economies. However, progress varied across sectors: the increase was more significant in services; in manufacturing it was sluggish, or the position even worsened (Box table).

#### Official unemployment rates in selected Asian economies

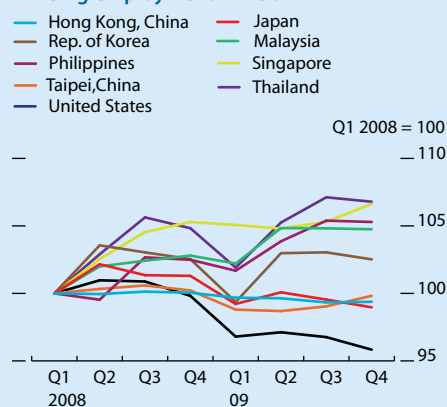
	2008			2009			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4
China, People's Rep. of	-	4.0	4.2	-	4.3	-	4.3
Hong Kong, China	3.3	3.7	3.9	5.1	5.5	5.6	4.7
Indonesia	-	8.4	-	8.1	-	7.1	-
Korea, Rep. of	3.1	3.1	3.1	3.8	3.8	3.6	3.3
Malaysia	3.5	3.1	3.1	4.0	3.6	3.6	3.5
Philippines	8.0	7.4	6.8	7.7	7.5	7.6	7.1
Singapore	2.8	1.9	2.4	3.0	4.1	2.9	2.1
Taipei, China	4.0	4.3	5.0	5.8	5.9	6.0	5.7
Thailand	1.4	1.2	1.3	2.1	1.7	1.2	1.0

Note: Data for Indonesia refer to February for Q1 2008/09 and August for Q3 09; for Philippines, data refer to quarterly data collected on January, April, July, and October of each year; for Taipei, China data refer to March for Q1, June for Q2, September for Q3, and December for Q4; for PRC, data refer to official urban unemployment rate.

Sources: CEIC Data Company; Singapore Ministry of Manpower. <http://www.mom.gov.sg>; websites of national statistical agencies concerned (all accessed 26 March 2010).

Even if higher than in 2008, the unemployment rate in most of the economies in the table is on a declining trend, and the number of employed has started to increase. Total jobs in some Asian economies, led by Thailand, have recovered to or exceed precrisis levels

#### 1 Rising employment in Asia



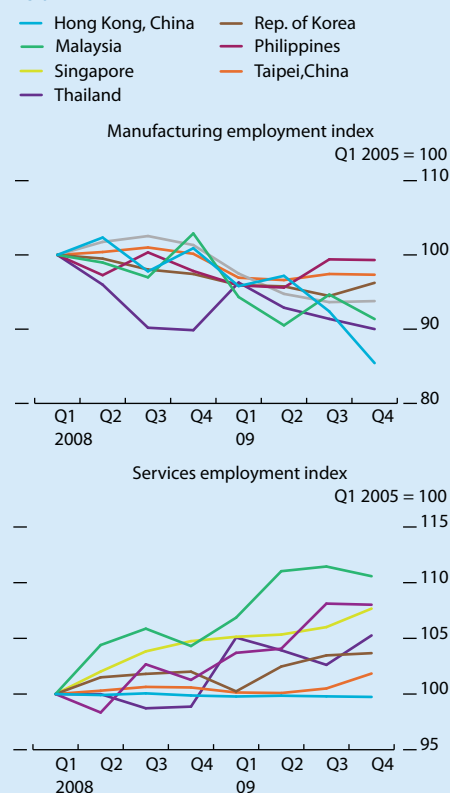
Sources: CEIC Data Company; Singapore Ministry of Manpower. <http://www.mom.gov.sg>; Websites of national statistical agencies concerned (all accessed 26 March 2010).

(Box figure 1), in sharp contrast to industrial countries. But the rebound in employment appears anemic in Hong Kong, China; and in Taipei, China.

Naturally, it matters which types of jobs are lost, and which created. For many of Asia's more open economies, the initial brunt of the global financial crisis was seen in a swift export decline, hitting Asian enterprises and manufacturing employment. The latter impact came about because exports of manufactured goods constitute a large component of total exports among the sample economies—above 70% for Korea, Malaysia, the Philippines, and Singapore.

Despite growth in total employment, jobs in manufacturing have yet to recover to precrisis levels, though the number of services jobs has kept growing (Box figure 2). Notably, by the third quarter of 2009, total jobs in services had grown by more than 10% in Malaysia from early 2008, and more than 5% in the Philippines and Singapore. In

#### 2 Manufacturing vs services employment in Asia



Sources: CEIC Data Company; Singapore Ministry of Manpower. <http://www.mom.gov.sg>; Websites of national statistical agencies concerned (all accessed 26 March 2010).



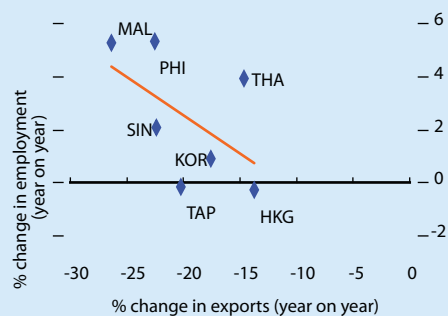
### 1.3.1 Trading Asia: Uneven job recovery (continued)

Malaysia, the expansion of services jobs was across the board, including higher value-added services.

Although it is too early to ascertain the driver behind this growth in services jobs, recovering domestic demand is certainly helping. However, this upward trend is in line with the long-run shift toward services in many developing Asian economies, which occurs as incomes rise.

The relationship between changes in export growth and in employment is not straightforward (Box figure 3). Within the sample economies, those experiencing the greatest drop in exports curiously saw the biggest increase in total employment. As seen in Box figure 2 earlier, this could be due to a shift from manufacturing into services jobs. Or it could be due to transitory factors like the fiscal policy measures deployed to combat the crisis. These measures boosted private consumption, lifting retail sales in many economies.

**3 Changes in exports and employment, Q3 2009 vs Q3 2008**



HKG = Hong Kong, China; KOR = Rep. of Korea; MAL = Malaysia; PHI = Philippines; SIN = Singapore; TAP = Taipei, China; THA = Thailand.

Sources: CEIC Data Company; Singapore Ministry of Manpower. <http://www.mom.gov.sg>; websites of national statistical agencies concerned (all accessed 26 March 2010).

So how can it be seen if this shift to domestic sectors is sustainable? One way is to ascertain whether the domestic sectors are in fact productive and offering competitive wages, and serving as an engine of growth. If services jobs are lower paid than manufacturing's, then, as soon as manufacturing resumes hiring, a swift reversal of trend is likely.

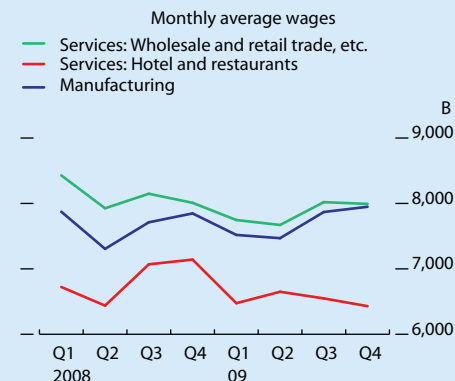
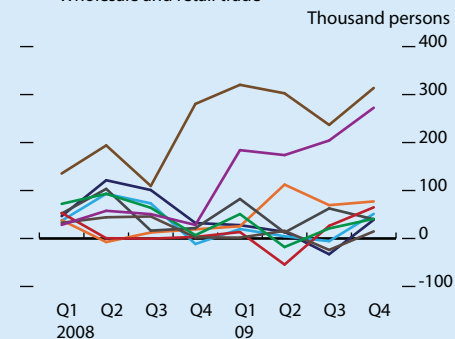
In Thailand, where total employment has grown the most since early 2008, the jobs lost in manufacturing are being replaced by services jobs. However, not all these new jobs are worse paid than manufacturing jobs. On the

contrary, the services sector that has grown the most—wholesale and retail trade—has higher average wages than manufacturing (Box figure 4).

### 4 Changes in employment and average wages in Thailand

Change in service sector employment, year on year

- Other community and personal activity
- Health and social work
- Education
- Public administration and defence
- Real estate, renting and business activities
- Financial intermediation
- Transport, storage and communication
- Hotel and restaurants
- Wholesale and retail trade



Source: Thailand National Statistical Office. <http://www.web.nso.go.th> (accessed 26 March 2010).

If the structural transformation in Thailand follows a path similar to that in Malaysia and Singapore, this shift may well continue and services jobs may form the majority of total employment.

### Reference

Niny Khor and Iva Sebastian. 2009. Exports and the Global Crisis: Still Alive, though Not Quite Kicking Yet. *ADB Economics Working Paper Series* No. 190. Asian Development Bank, Manila.

### 1.3.2 Business impacts and the Asian “noodle bowl” of free trade agreements

Amid the stalled Doha Round trade talks, free trade agreements (FTAs) offer a means to liberalize trade and sustain economic recovery in East and Southeast Asia—ASEAN-10; People’s Republic of China (PRC); Hong Kong, China; the Republic of Korea (Korea), and Taipei, China—plus Japan. FTA numbers have grown rapidly within this group—from three to 44 over the last decade—and another 85 agreements are at various stages of preparation.

The FTA surge is due to dissatisfaction with slow progress in global trade talks, the need to support sophisticated production networks through continued trade and investment liberalization, and a defensive response to the spread of FTAs elsewhere in the world.

The benefits and costs of these trade deals are the subject of polarizing debate in the region (for example, Baldwin 2006 and Bhagwati 2008). Advocates point out that such agreements strengthen the policies that underpin regional trade integration, laying the building blocks of multilateral liberalization.

Critics, though, worry that this wave of agreements is undermining the multilateral process and is fostering an alarming “noodle bowl” of overlapping rules of origin requirements, which may be costly to business. The lack of empirical evidence on business impacts of FTAs had previously made it difficult to resolve this debate and explore the policy implications.

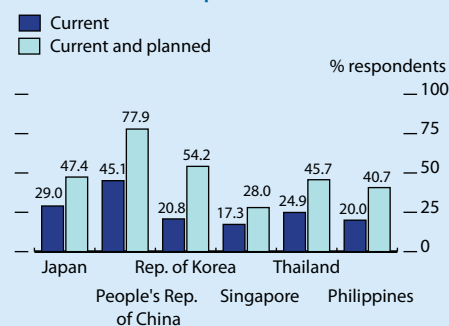
During 2007–2008, export-oriented manufacturing firms in PRC, Japan, Korea, the Philippines, Singapore, and Thailand, were surveyed to canvass the views of those most affected by FTAs (Kawai and Wignaraja forthcoming). The surveys yielded a dataset of opinions from 841 firms, offering insights into several key questions.

#### Do firms use FTA preferences?

East and Southeast Asian exporting firms tend to use FTA preferences more than conventionally thought and may even increase their use in the future. In the sample, around 28% (237 firms) of the 835 firms responding to this question use FTA preferences. When those which plan to use FTA preferences are added (that is, capturing future intent as well as current use), the number nearly doubles to 53% (Box figure 1).

By country, the high level of FTA use among firms in the PRC can be attributed to the aggressive buildup of new and

1 Utilization of FTA preferences



Source: Kawai and Wignaraja (forthcoming).

expanding production networks that required channeling resources across the region. In Japan, FTA use rates may be explained by giant manufacturing firms that are anchors for regional production networks, as well as by the many networks of private sector industry associations and public trade support institutions that provide services to help businesses adapt to FTA guidelines.

Thailand’s relatively high use of FTAs is likely the result of the country’s emergence as a regional production hub (automotive, for example), high rates of export-oriented foreign direct investment, and the government’s reliance on FTAs as a tool of trade policy.

Even though current use is higher than expected, the majority of the East and Southeast Asian firms still do not take advantage of FTA preferences, facing many barriers to use. As the Box table shows, non-use of FTA preferences in the overall sample is explained by several factors.

#### What impedes firms from using FTAs?

Impediments to FTA use vary by country. In the PRC for instance, more than 45% of responding firms (102 firms) indicated lack of information on FTAs as the biggest impediment, followed by low margins of preference (14%). In Korea, low margins of preference (36%) and lack of information (34%) were the major reasons (delays and administrative costs linked to rules of origin and nontariff measures seemed less important there). In the Philippines, lack of information was overwhelmingly the most important impediment (70%), followed by delays and administrative costs, and rules of origin (31%).

monetary stance. Various monetary measures were employed to provide the supportive environment for the recovery process. Policy rates were slashed by 234 basis points on average to reach the historic low for these 10 economies, which injected ample liquidity.

### 1.3.2 Business impacts and the Asian “noodle bowl” of free trade agreements

#### Impediments to using free trade agreements

Impediment to use	Share of responses (%)
Lack of information	35.2
Small margin of preference	16.5
Delays and administration cost <sup>a</sup>	15.1
Use of EPZ schemes/ITAs	8.0
Confidentiality of information required <sup>a</sup>	7.3
NTMs in FTA partners	6.3
Rent seeking	6.1
Too many exclusions	5.6

<sup>a</sup> Rules of origin requirement.

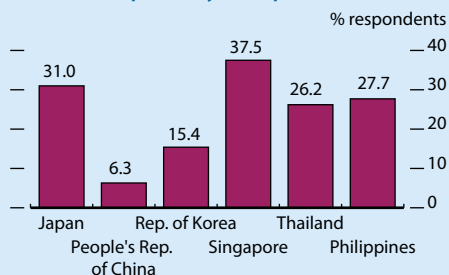
EPZ = export processing zone; ITA = information technology agreement; NTM = nontariff measure.

Source: Kawai and Wignaraja (forthcoming).

#### Do multiple rules of origin impose a significant cost on business?

Only 20% of respondents reported that multiple rules of origin significantly added to business costs (Box figure 2). Singaporean firms had the most negative perceptions (38%) while PRC firms had the least negative (6.3%).

#### 2 Burden imposed by multiple ROOs



Source: Kawai and Wignaraja (forthcoming).

Though only a limited burden in the survey, more broadly, multiple rules of origin are potentially the most challenging aspect of FTAs (since they determine which goods enjoy preferential tariffs to prevent trade deflection among FTA members). Some studies on FTAs argue that complex rules of origin raise transaction costs for firms, while restrictive rules of origin deter the use of FTA preferences.

According to the survey, East and Southeast Asian firms seem to view FTAs as a benefit rather than a burden, and are currently using them to expand trade to a far greater degree than had been thought. A large majority of exporters did not view rules of origin as a significant hindrance to business activity.

Still, as more FTAs under negotiation begin to take effect and the complexity of the Asian noodle bowl intensifies, the negative business impact may be felt more.

In the medium term, therefore, consolidating overlapping bilateral FTAs into a simpler, regionwide FTA is important. That would offer a more efficient means to coordinate trade liberalization than the bilateral route while mitigating the risk of a noodle bowl.

One practical way forward might be to take the best features from each East and Southeast Asian FTA and design a “boilerplate regional agreement” that is both comprehensive in scope and consistent with WTO rules. Three regionwide FTA proposals are under discussion—an East Asian FTA (or ASEAN+3 FTA), a Comprehensive Economic Partnership Agreement (or ASEAN+6 FTA), and a Transpacific Strategic Economic Partnership Agreement (spanning APEC economies including the US)—but it is not clear which will emerge, or when.

The formation of such a regionwide FTA may make it easier to achieve a deep Doha trade deal, if concessions on agriculture and industrial goods are already incorporated into the regionwide agreement. It would also spur the growth of Asian trade and investment through a larger regional market, the realization of economies of scale, and technology transfer. Further, it would insure against any rise in global protectionism, which would put Asia’s trade and sustainable economic recovery at risk.

#### References

- Baldwin, R. 2006. Multilateralizing Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade. *The World Economy* 29(11): 1451–1518.
- Bhagwati, J. N. 2008. *Termites in the Trading System: How Preferential Agreements Undermine Free Trade*. Oxford: Oxford University Press.
- Kawai, M. and G. Wignaraja. (Ed.) Forthcoming. *Asia’s Free Trade Agreements: Is Business Responding?* Cheltenham (UK): Edward Elgar.

#### Effectiveness of fiscal policy

Plunging external demand, compounded by weak domestic private demand, left the government as the consumer of last resort throughout developing Asia. In striking contrast to the Asian crisis a decade earlier, the region was unable to export its way out of the recession. Governments

responded decisively with sizable fiscal stimulus packages (Figure 1.3.8). Indeed, the forceful and synchronized fiscal policy response was uncharacteristic for a region in which the use of countercyclical fiscal policy is uncommon. Developing Asia's macroeconomic focus has been more on keeping budget deficits under control rather than using spending and taxes to smoothen the business cycle.

But did developing Asia's "fiscal experiment," as it might be called, play a key role in maintaining regional resilience? The answer (discussed in detail in Part 2), would seem to be "yes." In particular, higher government spending had a positive effect on GDP during the worst of the slowdown. At a minimum, the fiscal stimulus is likely to have had a major positive effect on plunging business and household confidence by signaling the resolute commitment of regional governments to prevent an economic meltdown.

### Effectiveness of monetary policy

The prudent policies and behavior of Asian monetary authorities and financial institutions certainly contributed to avoiding crisis, but luck may have played a role too, since Asian central banks had not been challenged by hard choices, unlike the advanced economies' central banks (or their own, prior to the Asian currency crisis).

Concurrent with the fiscal expansion, monetary policies were loosened to maintain adequate liquidity for the economy. Most central banks went beyond the usual operating channel of cutting the level of their policy rate by pumping additional liquidity to the economy through either pursuing direct injection of liquidity or creating demands for domestic assets. Policy interest rates were cut sequentially from the last quarter of 2008 and, in most economies, have been kept at a decade low since.

This drop of policy rates initiated expansion in financial depth (measured by M2/GDP). Between the fourth quarter of 2008 and fourth quarter of 2009, on average, financial depth grew by about 38% in a sample of 11 developing Asian economies (PRC; Hong Kong, China; India; Indonesia; Korea; Malaysia; Philippines; Singapore; Taipei, China; Thailand; and Viet Nam). Attributing this all to a change in policy rates would be misleading since that would suggest a percentage point decrease in the policy rate corresponds to an 18% growth in the ratio of M2 to GDP. Therefore, liquidity operations must have played a considerable role in promoting financial depth.

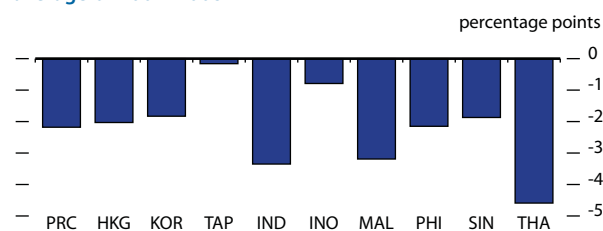
These monetary operations provided more comfortable room for the large fiscal expansion to play its role in cushioning the impact of the slowdown and promoting the region's strong recovery.

Both fiscal and monetary policies worked. Yet, as Asia's recovery picks up, policy makers are facing a new challenge—how to normalize the policy stance while continuing to support the recovery process and avoid creating new problems.

### Beyond the crisis

While additional fiscal measures are unlikely to be implemented this year, the monetary measures are expected to continue to support the recovery process by maintaining an expansionary stance. Nonetheless, this stance throughout the region cannot be kept for too long and needs to be

1.3.8 Change in fiscal balance over GDP ratio, 2009 vs. average of 2004–2008



PRC = People's Rep. of China; HKG = Hong Kong, China; KOR = Rep. of Korea; TAP = Taipei, China; IND = India; INO = Indonesia; MAL = Malaysia; PHI = Philippines; SIN = Singapore; THA = Thailand.

Source: Asian Development Outlook database

unwound once economies recover and are back to normal operations. Early indication of a pickup in inflation is emerging, most notably in India where wholesale price index inflation is reaching close to 10%.

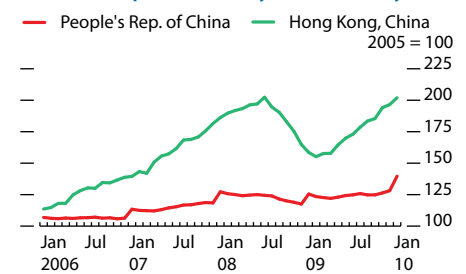
On the back of the expectations for robust economic recoveries, asset prices, particularly of real estate, are also showing a surge, especially in the PRC and Hong Kong, China (Figure 1.3.9). In fact, initial unwinding, though not necessarily through an increase in the main policy rate, has already begun, or has been discussed in many economies (Table 1.3.1). Central banks in the region need to closely watch how macroeconomic indicators develop and put more discipline in leaning against any threat of destabilizing aggregate domestic price levels and expectations, as soon as strong indications appear.

Additionally, surging capital inflows into several economies—especially those that have rebounded firmly and attracted investors with a rising risk appetite—are complicating macroeconomic management. In addition, the continued low policy rates in the major industrial countries and greater market liquidity have prompted speculative flows due to large interest-rate differentials and a resumption of some carry trades.

Economies faced with such surges have several options, including better coordination with industrial countries, from which much of these flows may originate in the search for better yields. The response need not be an immediate monetary tightening. In economies where recovery is firm, pursuing some fiscal tightening can ease pressures on rising interest rates. For others, accumulation of international reserves or allowing greater exchange rate flexibility may be more appropriate.

There is also room for applying macro-prudential polices, to deter the formation of asset and price bubbles or for financial institutions to accumulate buffers. Where institutional capabilities are well established, temporary use of carefully designed capital controls are one possible approach to deter disruptive short-term flows (Box 1.3.3).

1.3.9 House prices, January 2006–January 2010



Source: CEIC Data Company (accessed 5 April 2010).

Table 1.3.1 Unwinding loose monetary policy

Economy	Actions taken by monetary authorities	Effective date
China, People's Rep. of	Cash-reserve ratio was increased by 50 basis points to 16.5%	25 February 2010
	3-month bill yield was increased by 4.04 basis points	21 January 2010
	1-year bill yield was increased by 8.3 basis points	19 January 2010
	Cash-reserve ratio was increased by 50 basis points to 16%	18 January 2010
	1-year bill yield was increased by 8.29 basis points	12 January 2010
	3-month bill yield was increased by 4.04 basis points	7 January 2010
India	Repurchase rate was raised by 25 basis points to 5.0% and the reverse repurchase rate by 25 basis points to 3.5%	19 March 2010
	Cash-reserve ratio was increased by 50 basis points from 5.0% to 5.5%	13 February 2010
	Cash-reserve ratio was increased by 25 basis points from 5.5% to 5.75%	27 February 2010
	Statutory liquidity ratio was increased by 100 basis points	October 2009
Malaysia	Overnight policy rate was raised to 2.25%	4 March 2010
Philippines	Peso rediscounting window was reduced from P60 billion to P40 billion	15 March 2010
	Loan value of eligible rediscounting papers was restored to 80% from 90%	15 March 2010
	Nonperforming loan ratio requirement of 2 percentage points above the industry average (from 10 percentage points) was restored for banks using the rediscounting facility	15 March 2010
	Peso rediscount rate was increased by 50 basis points to 4.0%	1 February 2010
Viet Nam	Interest rate cap on medium-term and long-term loans was removed	February 2010
	Key rate was raised from 7% to 8%	1 December 2009

Sources: National Bureau of Statistics of China. <http://www.stats.gov.cn/english/>; Reserve Bank of India. <http://www.rbi.org.in>; Bank Negara Malaysia. <http://www.bnm.gov.my>; Bangko Sentral ng Pilipinas. <http://www.bsp.gov.ph>; State Bank of Viet Nam. <http://sbv.gov.vn>.

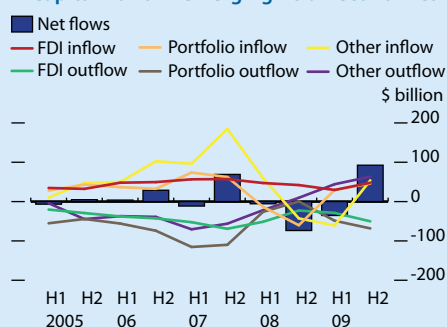


### 1.3.3 Responding to surging capital flows

Developing Asia's vigorous recovery, alongside low interest rates in most industrial countries, has sucked in huge capital inflows. If these inflows had been driven by fundamental factors (and countries had the absorptive capacity), policy makers' concerns would be limited.

However, they were not driven in this way: Box figure 1 shows that the rebound after first quarter 2009 was carried by portfolio and other types of flows such as investment by banks. Portfolio inflows resumed in second quarter 2009 followed by the other types of flows in the second half of last year. On the back of the improving economic conditions, the portfolio inflows were significant in economies such as Korea; Hong Kong, China; Taipei, China, reaching a total of about US\$46 billion in the second half of 2009.

1 Capital flows in emerging Asian economies



Source: ADB estimates based on data from CEIC Data Company; and on International Monetary Fund. International Financial Statistics (accessed 31 March 2010).

Expectation of currency revaluations and interest rate differentials triggered the speculative capital flows. As both these factors may well remain at play for some time, such inflows, too, will likely persist.

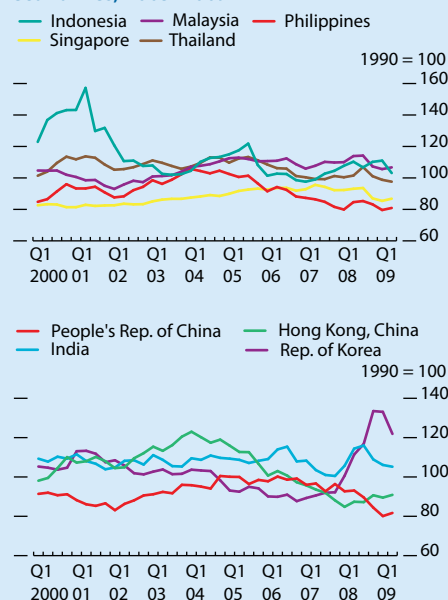
Abrupt surges in short-term capital inflows (a dominant feature of speculative capital) pose substantial risks to an economy, including excessive liquidity, economic overheating, asset price bubbles, and overall financial fragility. Yet if the central bank attempts to head off these risks, usually by sterilizing the inflows, this eventually induces significant real exchange rate overvaluation.

The surges in capital inflows have already lifted asset prices, both property and stocks, in some economies. In just over a year's time as of January 2010, property prices had grown sharply in some of the coastal cities in the PRC—around 50% in Haikou and Sanya—and 28% in Hong Kong, China. Stock prices recovered, as measured by the MSCI Asia Pacific index, which climbed 78% from the trough on 9 March 2009 to end-March 2010.

The appreciation of the real exchange rate has become evident in some countries, including India, Indonesia, Korea, and Thailand (Box figure 2). However, because of significant

intervention in foreign exchange markets, the degree of real exchange rate appreciation in the region has been limited.

2 Real exchange rate in emerging Asian economies, 2005–2009



Source: ADB estimates based on data from CEIC Data Company; and on International Monetary Fund. International Financial Statistics (accessed 31 March 2010).

Given recent developments, additional capital restrictions appear likely. The PRC recently introduced additional capital control measures to block speculative inflows, and regulators there have greater power to investigate currency payments. They can also levy fines of 30% on unauthorized transfers of foreign currency. Other central banks are closely monitoring capital inflows.

Two policy issues relate to the buildup of capital inflows in the region—exchange rate management and capital controls. Too much foreign exchange intervention could lead to serious repercussions of macroeconomic management in the region, especially risks emerging from exchange rate misalignments. Policy makers in some economies may need to reappraise their exchange rate policy, including considering stronger moves toward regional cooperation in exchange rate and reserves management.

Past experience shows that capital controls can be effective in the short run, but they tend to lead to deterioration in business sentiment if retained too long. In the medium to longer term, central banks should free up the exchange rate to play its role as a shock absorber.

Also over the longer term, countries should progressively build their absorptive capacity to productively and efficiently use their capital inflows, especially in terms of financial sector reform and foreign exchange market development.

## A case for monetary and fiscal activism?

Developing Asia quickly and strongly bounced back from the recent crisis. In fact, it led the world out of recession. This marks a complete reversal from the Asian crisis of 1997–98 when the region exported its way out of trouble.

What is all the more remarkable is that the region's turnaround has taken place against the backdrop of sluggish recovery in industrial countries. How did developing Asia manage to bounce back so quickly while its main export markets have yet to fully recover?

First, due to limited exposure to subprime assets, the region's banks and financial systems continued to function normally even during the depth of the crisis. The region is largely free from the structural problems, such as the high household debt plaguing the US.

Second, and far more important, was the large fiscal and monetary stimulus.

Still, Asian policy makers should be extremely cautious about reading too much into the apparent effectiveness of the fiscal stimulus during the global crisis, in particular, drawing lessons for normal noncrisis periods. For one, Asia's unprecedented fiscal expansion represented an extraordinary response to an extraordinary shock. As noted earlier, fiscal stimulus can have an enormous confidence-boosting effect during a severe shock. This benefit is much less important during a regular business cycle downturn.

Furthermore, it was precisely because Asia had ample fiscal space, the consequence of years of sustained fiscal prudence, that it was able to quickly unleash huge fiscal stimulus packages. More fundamentally, fiscal discipline laid the foundation for macroeconomic discipline and sustained growth in the past.

Part 2 explores this issue further—should Asia pursue fiscal and monetary activism after the crisis, or is it better served by a return to its basic macroeconomic framework of monetary and fiscal prudence?





# 2

## Macroeconomic management beyond the crisis





# Macroeconomic management beyond the crisis

## Introduction

The recent global financial and economic crisis has had severe repercussions for developing Asia's economic performance. The preceding high growth came to a halt as the crisis spread from the financial systems of the industrial countries to their real economies, dulling their appetite for imports.

As a result, in striking contrast to the 1997–98 Asian crisis, Asia was unable to export its way out of trouble this time. On the contrary, the collapse in world trade and exports brought the global crisis home to the export-dependent region. In effect, plummeting external demand, compounded by feeble private domestic demand, made expansionary monetary and fiscal policy the default policy option.

Despite the pronounced initial impact on output, most evident in the fourth quarter of 2008 and first quarter of 2009, the region has staged a spectacular V-shaped recovery that is reminiscent of its rebound from the Asian crisis. Developing Asia as a whole is estimated to have grown by 5.2% in 2009 and is projected to grow by 7.5% in 2010. Remarkably, the region's robust revival has taken place despite the fragile state of the major industrial economies—the United States (US), the European Union, and Japan. The natural question is how export-dependent Asia has managed to recover so fast and so strongly when its supposed primary engine of growth has sputtered so badly.

One plausible explanation has to do with the large monetary and fiscal stimulus packages that the region's governments rolled out in the wake of the global crisis. Facing enormous political pressures to prevent an economic meltdown, Asian governments aggressively slashed interest

rates, increased spending, and cut taxes, all in an effort to boost demand and growth.

Although the contribution of the monetary and fiscal stimulus to Asia's recovery remains somewhat uncertain, the widespread perception is that the downturn could have been far worse. The direct impact of interest rate cuts on consumption and investment in the face of depressed business and consumer confidence may be debatable. However, easy monetary policies with direct liquidity injections are likely to have contributed to the recovery indirectly by helping to stave off a credit crunch and financial disintermediation.

The fiscal stimulus probably more directly impacted the real economy. The region's stimulus programs were tilted toward heightened public spending, particularly infrastructure investments, rather than tax cuts, thereby creating direct additional demand for goods and services and counterbalancing the weakness of private demand. What enabled Asian governments to serve as the consumer of last resort was their healthy financial position.

Asia's decisive monetary and fiscal response was entirely appropriate and necessary. The decisive response trumpeted the commitment of governments to do everything within their power to prevent economic collapse and sent critical confidence-boosting signals at a time of extreme crisis, when confidence was at rock bottom.

In historical terms, however, Asia's unprecedented easing of monetary and fiscal policies marked a sharp break from the region's long-standing tradition of macroeconomic prudence. Traditionally, both monetary and fiscal policies have been geared toward promoting macroeconomic stability—that is, low and stable inflation and manageable government budget deficits. Over the long term, central banks gave high priority to price stability, and governments balanced their books. Of course, the state of the economy affects Asian monetary policy, and Asian government budgets tend to expand during downturns. Nevertheless, the use of monetary and fiscal policy for countercyclical output stabilization has been relatively limited. Asia's conservative approach to macroeconomic policy has therefore served the region well. Specifically, it has created a stable macroeconomic environment for firms and households, laying the foundation for the region's sustained rapid growth.

Yet even if Asia reverts to its traditional precrisis monetary and fiscal conservatism after it unwinds its anticrisis fiscal stimulus, the global crisis is already a game changer for macroeconomic policy in the region. Never has the region experienced such a forceful and synchronized monetary and fiscal response to an economic downturn. Certainly, Asia's comeback highlights the potentially valuable role of macroeconomic policy in reducing the adverse impacts of large external shocks. More generally, it serves as a powerful reminder of the possibly large benefits of using macroeconomic policy for short-term output stabilization, in addition to promoting long-term price stability and output growth.

The widespread perception that the unprecedented stimulus contributed substantially to the region's unexpectedly quick and strong recovery may foster political pressures for greater monetary and fiscal activism. At a minimum, such perceptions will lead to more active debate about the pros and cons of countercyclical macroeconomic policy.

In that debate, a central consideration is that Asia's decisive monetary and fiscal policy stimulus represented an exceptional response to an exceptional shock, and therefore drawing policy lessons from the global crisis and applying them to the normal noncrisis period, to which the world economy is gradually returning, would be dangerous.

Using an extraordinary monetary and fiscal stimulus to stave off a severe negative shock originating from the world's largest economy is one thing. Fine-tuning the economy by influencing the routine ups and downs of a normal business cycle is something else altogether. Even in industrial economies, equipped with strong institutions, effective governance, and stable policy environments, the evidence is at best mixed that governments are capable of reducing short-term output volatility with their monetary and fiscal policy. As is evident in industrial economies, political-economy considerations make it much easier for governments to pursue expansionary policies during recessions than to pursue contractionary policies during booms.

In developing countries, a truly countercyclical policy that responds symmetrically to both downturns and upturns is even less possible. Yet an asymmetric countercyclical policy that responds only to downturns is likely to jeopardize macroeconomic stability by creating inflation expectations and impairing fiscal sustainability.

## Monetary, exchange rate and fiscal policy in postcrisis Asia

The global crisis raises a number of more specific questions about the conduct of monetary, exchange rate, and fiscal policy in Asia in the postcrisis period.

With respect to monetary policy, an important issue is whether to incorporate asset price inflation, and if so, how. The immediate cause of the crisis was the bursting of the US housing market bubble, which had been inflated by complex financial innovation that encouraged financial institutions to take excessive risk and overinvest in housing for subprime buyers.

Even though the impact on Asia's financial stability was limited, the origins of the crisis are relevant for the region. For one, because Asia is recovering more quickly and strongly than other parts of the world, the risk of an asset price bubble is higher than elsewhere. Indeed, even though there are no concrete signs of a bubble so far, some major economies have experienced a surge of equity and property prices. The US housing and financial market failure resulted from a combination of inadequate financial regulation and excessively lax monetary policy. Therefore, a key challenge for Asian policy makers is how to strengthen financial regulation and to effectively coordinate it with monetary policy, so as to prevent such bubbles.

In the context of exchange rate policy, the big question is about the desirability and feasibility of relatively rigid exchange rates, and they are, in turn, intimately tied to the issues of export-led growth and managing capital flows. Certainly the types of exchange rate regimes and the degrees of flexibility are far from uniform across Asia. However,

governments have kept a close watch on exchange rates out of fear of losing export competitiveness. Now, the unwinding of global imbalances implies that the region's postcrisis growth will be less dependent on exports. The consequent decline in the relative importance of exports may encourage Asian economies to become more open to flexible exchange rate regimes. At the same time, greater exchange rate flexibility will help wean the region from its disproportionate dependence on exports.

Managing volatile capital flows is a related and major issue. As a result of its robust recovery, the region is already experiencing a resurgence of capital inflows, which may lead to sharp currency appreciation. This strengthens the case for selective, well-designed capital restrictions, which would facilitate the region's transition to greater exchange rate flexibility.

With regard to fiscal policy, a fundamental question in the postcrisis period is whether to pursue heightened fiscal activism, particularly in the use of fiscal policy for countercyclical purposes. Industrial economies have a long history of using government spending and taxes in an effort to influence short-run economic conditions. Asian economies, though, have relatively limited experience in using fiscal policy for countercyclical output stabilization. By and large, Asian governments have kept their spending within their means to create a macroeconomic environment conducive to long-run growth.

Thus the broader issue linked to a more activist fiscal policy is the appropriate role and size of government. However, the countercyclical use of fiscal policy does not necessarily require a quantitative expansion of government. In particular, strengthening the region's automatic fiscal stabilizers (which currently remain underdeveloped) can, in principle, enhance Asia's capacity to use public spending and taxes to reduce short-run output volatility without impairing its fiscal sustainability.

## **Return to prudence but adjustments needed**

In the wake of the global crisis, Asia clearly needs to rethink and redesign the three main components of its macroeconomic policy: monetary, exchange rate, and fiscal. The region can draw valuable lessons from the crisis (even though it originated elsewhere) for improving and strengthening its own macroeconomic policy. Equally clearly, the region should adapt its monetary, exchange rate, and fiscal policies to the realities of the postcrisis world. However, although relevant lessons must be learned, nothing in the global crisis calls for altering the region's monetary and fiscal prudence. This tradition has been the cornerstone of the region's macroeconomic stability, which underpinned its sustained growth.

The positive contribution of monetary and fiscal stimulus to the region's V-shaped recovery only strengthens the case for maintaining rather than abandoning that approach. The ample fiscal space that was the consequence of sustained fiscal prudence enabled the region to unleash its massive stimulus. The global crisis highlights a vital but underappreciated benefit of sound and responsible monetary and fiscal policy: the capacity to support the economy when such support is desperately needed.

Returning to the basic macroeconomic tradition of monetary and fiscal prudence will be challenging for Asia in the postcrisis world. One



consideration is that the benign global economic environment of precrisis times may no longer prevail. To a large extent, the region's very rapid growth immediately before the crisis was the result of strong exports to the major industrial economies and to the US in particular. As the global imbalances unwind, however, the US will have to make adjustments that are likely to cause Asia to experience a slowdown of exports.

The resulting reduction is more desirable than the breakneck precrisis growth driven by unsustainable exports to the US. However, it has adverse implications for fiscal sustainability because, other things remaining equal, lower output growth will increase the public debt-to-GDP ratio, and, as mentioned earlier, political pressures may be at work for greater countercyclical fiscal activism in the postcrisis period. For example, central banks may come under pressure to give heightened priority to growth over price stability.

The unprecedented monetary and fiscal expansion rolled out by governments around the world has stimulated the debate about the pros and cons of countercyclical macroeconomic policy. Although the debate is welcome and relevant for industrial and developing economies alike, there is a misguided and dangerous tendency to frame the discussion from the perspective of industrial countries.

For developing countries, the overriding policy objective remains the achievement of high but sustainable output growth—historically the most effective means of reducing widespread poverty. Asia has made enormous strides in growth and poverty reduction precisely because its monetary and fiscal policy has been focused on macroeconomic stability. This is not to deny the importance of short-term output stabilization—and, in fact, short-term output stability is supportive of and conducive for long-term growth. However, what really matters is not so much the tradeoff between short-term stability and long-term growth, but the need for Asian governments to guard against excessive intervention, activism, and discretion in the postcrisis period. This could impair the region's long-term policy discipline.

The central message of the need for Asia to return to its roots of sound and responsible monetary and fiscal policies does not rule out a stepped-up role for postcrisis macroeconomic policy. Although the postcrisis economic environment will influence the evolution of Asia's macroeconomic policy, policy can also influence that new environment. Given the region's medium-term need to encourage more domestic demand and to depend less on exports to the US, both fiscal policy and exchange rate policy can make substantial contributions to that rebalancing process. Also, governments may be able to do more for short-term output stabilization, such as with automatic fiscal stabilizers, without putting fiscal sustainability at risk. In the long run, the key challenge for Asia is to adapt monetary, exchange rate, and fiscal policies to the postcrisis world without compromising the macroeconomic prudence that has benefited it so much in the past.

# Monetary policy

## Monetary policy frameworks and performance since the Asian crisis

After the Asian financial crisis in 1997–98, countries in the region started to get their growth momentum back. In the 2000s, developing Asian economies have generally been growing at varying but relatively high rates which, compared to the 1990s, have been in a relatively lower and more stable inflation environment (Figure 2.2.1).

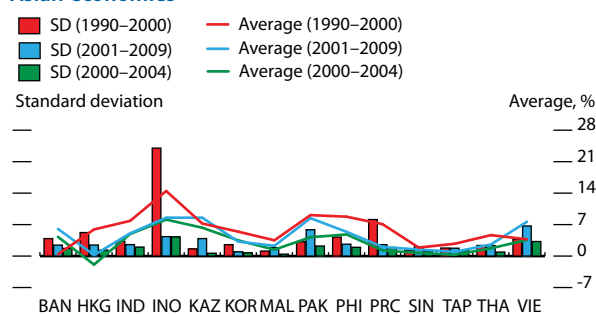
This environment is largely consistent with the present general consensus that high and volatile inflation tends to be detrimental to economic growth. Arguably, the region's relatively low and stable inflation environment may have been influenced by the trend of “great moderation” in the industrial economies, where economic growth was steady and coupled with stable inflation. However, the economics profession has also acknowledged that good macroeconomic policies also contributed to this great moderation in which Asia shared.<sup>1</sup>

Consequently, economies have sought an appropriate framework for monetary policy aimed at lowering inflation and maintaining its stability, and inflation targeting, as a framework for monetary policy, gains currency for its empirical ability to deliver such results.<sup>2</sup> In this framework, a monetary authority publicly announces a medium-term inflation target and makes an institutional commitment for achieving the target. The authority needs to be transparent about its monetary policy plans and objectives, communicating them to the public and the market makers. In addition, the authority must increase its accountability by attaining its inflation objectives.

In practice, most central banks tend to adopt a relatively flexible inflation-targeting framework; the resultant monetary policy is designed to stabilize not only inflation around its target but also the activities of the real economy. This type of framework enables a country to focus on dealing with particular shocks hitting the economy and hence its domestic interests. It also provides a firm nominal anchor for countries that are forced to abandon fixed exchange rate regimes. Therefore, the framework appears to be suitable for adoption even by emerging market economies (Mishkin 2000).

Following the Asian financial crisis 1997–98, many developing Asian countries were forced to abandon their pegged currency regime, and some, in response, adopted the inflation targeting framework (Table 2.2.1). The Republic of Korea (hereafter Korea) adopted the inflation-targeting framework in the middle of the currency crisis and implemented it in April 1998. Indonesia and Thailand adopted it in January 2000 and April

2.2.1 Average and standard deviation of inflation, selected Asian economies



SD = standard deviation.

BAN = Bangladesh; PRC = People's Rep. of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KOR = Rep. of Korea; MAL = Malaysia; PAK = Pakistan; PHI = Philippines; SIN = Singapore; TAP = Taipei, China; THA = Thailand; VIE = Viet Nam.

Note: Calculation is based on monthly year-on-year inflation figures for each economy.

Sources: ADB calculations based on data from CEIC Data Company (accessed 1 March 2010).

### 2.2.1 Monetary policy framework of selected DMCs

Exchange rate anchor	Inflation targeting	Monetary aggregate target	Other
Bangladesh	Indonesia	None	India
Hong Kong, China	Korea	None	Malaysia
Kazakhstan	Philippines	None	Pakistan
People's Rep. of China	Thailand	None	Singapore
Viet Nam		None	Taipei, China

Note: "Other" applies to countries that have no explicit statement on nominal anchor, but rather monitors various indicators in conducting monetary policy.

Source: Based on De Facto Classification of Exchange Rate Regimes and Monetary Policy Frameworks as of 31 April 2008. International Monetary Fund. <http://www.imf.org/external/np/mfd/er/index.asp>; and relevant central bank websites.

2000, respectively. In these countries, losing the de facto anchor of a US dollar peg in the crisis was the motivation for taking on the inflation-targeting framework as a new anchor. The Philippines adopted inflation targeting in January 2002 (Ito 2010).

Although only four economies in the region are formally adopting flexible inflation targeting as their framework for monetary policy, many others are implicitly implementing similar regimes. Malaysia and India, for example, are not announcing an explicit nominal anchor. Instead, they monitor various indicators in conducting monetary policy with the objective of maintaining domestic currency stability. Both countries also formally manage the short-term interest rate, their instrument for conducting monetary policy. Singapore is also aiming to promote price stability by managing its dollar exchange rate against an undisclosed trade-weighted basket of currencies of its major trading partners and competitors.

Figure 2.2.1 suggests that, within the last decade, the average level of inflation in the region has been brought down with improved stability, regardless of the framework of monetary policy adopted. Exceptions to this observation are Bangladesh, Kazakhstan, and Viet Nam. Apart from Bangladesh, however, this exception might be disregarded if the economies' inflation rate is compared to its average rate in the first half of the 2000s, when commodity prices in the international market were not volatile. This decade of relatively low and stable inflation rates in most of the region's economies, even after considering the period of high international commodity prices in the 2000s, suggests that good policy had to have contributed to the outcome.

Does inflation targeting matter in emerging economies? A study by Goncalves and Salles (2008), analyzing 36 emerging economies including 10 Asian developing member economies,<sup>3</sup> suggests that it does: Economies that adopt a (flexible) inflation-targeting framework tend to experience lower inflation and greater reduction in growth volatility compared to those that do not. On this analysis, claims that an inflation targeting framework tends to deter economic growth seem unjustified empirically.

Inflation performances for the economies depicted in Figure 2.2.1 largely support the findings of Goncalves and Salles (2008). Table 2.2.2 provides figures on the relative gains in the mean and volatility of inflation for these economies in the last decade. The gains are measured as the ratio between the 2000s average figures and their 1990s

### 2.2.2 Relative gains in average inflation and its volatility in 2000s

	Level gain	Deviation gain
Bangladesh	15.5	0.6
Hong Kong, China	0.0	0.5
India	0.6	0.8
Indonesia	0.6	0.2
Kazakhstan	1.2	2.5
Korea, Rep. of	0.6	0.4
Malaysia	0.6	1.7
Pakistan	0.9	1.8
Philippines	0.6	0.6
China, People's Rep. of	0.3	0.3
Singapore	0.8	1.6
Taipei, China	0.3	1.0
Thailand	0.6	1.0
Viet Nam	2.0	1.8

Note: Smaller figures indicate better performance in both level and volatility. Figures below 1 indicate improvement in the inflation development, and vice versa.

Source: ADB calculations based on data from CEIC Data Company (accessed 1 March 2010).

counterparts. In that table, the four explicit inflation-targeting countries (Indonesia, Korea, Philippines, and Thailand) show relatively larger gains in both level and volatility compared to most of the others.<sup>4</sup> However, some notable exceptions beg for further discussion.

The first is Thailand, where the gain in inflation stability is relatively lower than in the other explicit inflation targeters. Thailand's rather wide range of inflation target (0%–3.5%) provides room for more fluctuations without increasing the pressure for the monetary authority to respond too actively. However, because the country started off with a relatively low inflation rate, the wide band does not seem to create big problems in terms of lowering the average level of inflation.

Another notable exception is the case of nonexplicit inflation-targeting economies—for example, Hong Kong, China, and the PRC—that adopt exchange rate anchors in managing their monetary policy. These economies seem to be demonstrating performance, in terms of improvements in the level of average inflation and its stability, that is comparable to, if not better than, that of the explicit inflation targeters in the region.

With these two exceptions, the region's experience suggests that flexible inflation targeting frameworks generally deliver better outcomes than other monetary policy regimes.

The overall picture highlights a few points regarding the conduct of monetary policy in the region. A flexible inflation-targeting framework provides one promising approach to stabilize the price environment, thereby supporting the pursuit of stable economic growth. However, alternative monetary policy regimes in the region could be as effective in providing a stable price environment. Therefore, at this stage, implementing a sound and consistent policy that credibly focuses on stabilizing the fluctuation in aggregate domestic price levels and on managing inflation expectations seems to be the key consideration for the region.

The credibility of the executing monetary authority plays an important role in assuring the success of a flexible inflation targeting framework. Credibility turns on two issues: (1) The central bank's ability to commit to its monetary policy and communicate its objectives to the public; (2) maintaining the central bank's independence in pursuing policies to achieve its target. Once the central bank gains a sufficient level of credibility, its task of managing inflation expectation becomes easier. Only then can a central bank work effectively in responding to economic shocks and in enhancing a stable environment for economic growth to take place. However, credibility seems to be something that most of the central banks in the region need to improve (Box 2.2.1).

Ito and Hayashi (2004) provide an early survey of Asian inflation-targeting experiences. They marked high Korea and Thailand for keeping the inflation rate on average within the targeted range and for communicating their intentions well to the public. In Thailand, the central bank targets not headline inflation, but the core rate, with a rather wide range (0%–3.5%). The wide band gives the central bank more room to keep actual inflation within the target range, and this objective is perceived as preferable in terms of acquiring credibility.

The track records of Indonesia and the Philippines in keeping

inflation in the range was not so good. The target range is fairly narrow, and the inflation rate was more volatile than in other economies; hence the target was missed from time to time. In Indonesia, the narrow band is not only changed from year to year but also highly influenced by the budget assumptions set by the Ministry of Finance.

The lesson to learn, from the successful flexible inflation targeters, is that the target range should be set for the medium term. Doing so gives the central bank a more stable inflation target and hence induces inflation expectations to converge, in addition to maximizing the probability of hitting the target, thereby gaining credibility for the central bank.

## Monetary policy in Asia during the global downturn

Most Asian economies suffered a sharp decline in real activities during the global downturn, but the nature of suffering differed from that of countries in other regions. Asian countries did not suffer a collapse of the finance sectors and/or a currency crisis. However, Asian exports fell sharply. Countries that relied on exports to the US and Europe, such as Korea, suffered the most, whereas countries with large domestic economies, such as the PRC, India, and Indonesia, managed to escape from the worst of output decline. Yet, mainly through the trade channel, real economic activities in Asian countries were badly affected, creating a widening output gap for the region.

### Policy responses to the global crisis

Monetary and fiscal policies in the region responded fairly well to the crisis impact. In coordination with expansionary fiscal policy designed to bolster the weakening private sector, monetary policy in the region sought to maintain the availability of adequate liquidity flows in the economy. The traditional monetary policy stance was relaxed dramatically, as indicated by decreases in the policy interest rate, and liquidity was pumped into the economy, as reflected in the large increase of money and credit in most economies (Figure 2.2.2).

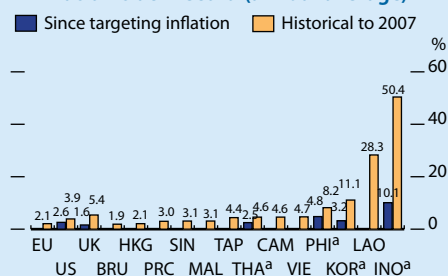
Figure 2.2.2 plots the rate of relative changes in financial depth (measured in terms of M2 to GDP and total credit to GDP) and the quarterly changes in policy rates for 11 Asian economies. On average, sharp falls in policy rates (even if not fully passed on to borrowers) took place after the fourth quarter of 2008.<sup>5</sup> The economies cut their policy rates sequentially to ease the way to the cut that was perceived as needed to stimulate their domestic finance sectors. This measure provided the domestic financial institutions with adequate liquidity to expand, as indicated by the growth of both of the measures of financial depth displayed in Figure 2.2.2. Using the short-term interest rate as a means toward this end seems to have worked well in the countries observed. The action was supplemented by greatly expanded liquidity operations, which were needed to make a sufficient amount of liquidity available for the financial market to function. Table 2.2.3 lists the additional measures taken to ensure liquidity.

Such expansionary monetary policy measures have served well in

### 2.2.1 Central bank credibility: A revisit

Credibility is a key to keeping inflation expectations well anchored, and central banks must be seen “walking the talk.” However, most Asian central banks are no epitomes of credibility. In general, their inflation track records are not in the same league as those of the advanced economies. In addition, even after adopting an inflation-targeting regime, the region’s inflation targeters have not yet effected inflation levels comparable to those of non-inflation targeters. Besides the historical comparison, the inflation targeters’ records after the adoption of inflation targeting are not consistently lower (despite the much more moderate inflationary environment of recent years) than non-inflation targeters, such as Hong Kong, China; Malaysia; and Singapore (Box figure).

#### 1 Inflation track record (annual average)



<sup>a</sup> inflation targeters.

EU = European Union; US = United States;  
 UK = United Kingdom; BRU = Brunei Darussalam;  
 HKG = Hong Kong, China; PRC = People's Rep. of China;  
 SIN = Singapore; MAL = Malaysia; TAP = Taipei, China;  
 THA = Thailand; CAM = Cambodia; VIE = Viet Nam;  
 PHI = Philippines; KOR = Rep. of Korea; LAO = Lao People's  
 Dem. Rep.; INO = Indonesia.

Source: Based on Table 3 of Tang (2008).

Given the environment of questionable credibility, it was no surprise that inflation expectations during the 2007–2008 commodity price spike were easily unmoored, though less so in Taipei, China; the PRC; Hong Kong, China; and Korea (see the percentage point changes in the box figure). Further evidence was found in the upward shifts in the term structure of interest rates over time, rising core inflation rates as early as the second half of 2007, and increased minimum wages in some countries.

Given such signs, more forceful actions would have seemed appropriate. Instead, when commodity prices took off, most notably in the second half of 2007, the region’s monetary policy was still in either an expansionary or accommodative mode. In Thailand, monetary policy was loosened as late as July 2007; in Indonesia, in December 2007; and in the Philippines, in January 2008. In addition, for a long period, some central banks chose not to raise rates, claiming that the causes of the commodity price hikes were external supply shocks that were beyond their influence. The actuality was that a confluence of factors—whether cyclical or structural, domestic or global, supply or demand—were all reinforcing each other, pressuring the prices of all commodities upward.

Disappointingly, the central banks did not see this and failed to note that what matters is not the cause but rather the effects of the out-of-control price-wage-setting behavior of market agents. Most central banks, nonetheless, did eventually raise interest rates, but not by any significant amount. They were not only behind the curve, but also the monetary conditions they operated in were ill suited to combating high inflation. From the end of June 2007 to the end of August 2008, all the region’s economies, except the PRC, had negative real interest rates, whereas Indonesia, Korea, Thailand, and Viet Nam recorded nominal depreciations against the US dollar

helping the region mitigate the impact of the global downturn. Policy rates have been brought down to their lowest levels (according to the countries’ standards) in a decade. Also, most of the economies are now operating with huge amounts of liquidity, which has served fairly well.

However, when the reason for saturating the economy with liquidity weakens, leaving such huge amounts in the economy will increase the pressure for inflation. Measures to quantitatively ease expansion need to be put in place only temporarily, and they have to be unwound immediately after serving their purpose. Although not yet serious, early signs for increasing inflation in Asia have started to appear in the PRC, India, and most ASEAN countries (Figure 2.2.3). To deal with this, a sound conduct of monetary policy is needed.



### 2.2.1 Central bank credibility: A revisit (*continued*)

(Malaysia; the Philippines; Singapore; and Taipei, China showed small appreciations).

The failure of many regional central banks to demonstrate credibility puts them at risk of repeating the mistake made by the US Federal Reserve in the early 1970s' oil price shock. In that case, the US Federal Reserve, more fearful that high oil prices would adversely affect output than the consequences of rising inflation expectations, stimulated the economy, eventually spurring an unexpected wage-price spiral and a prolonged period of high inflation. More important, Paul Volcker, the then chairman of the Reserve, had to raise interest rates to close to 20%, resulting in two back-to-back recessions and the highest unemployment rate since the Great Depression. Similar occurrences took place in other countries with well-regarded central banks, like the UK, Australia, and New Zealand, to name a few.

Central bank autonomy, fiscal discipline, openness, and transparency are key prerequisites for credibility. Without autonomy from political interference, central banks can be held ransom by politically tinged agendas. Without fiscal discipline and autonomy, central banks are easily forced to fund government deficit. Playing this role over an extended period is a sure recipe for economic calamity.

Credibility is a virtue that is difficult to earn and easily lost. Institutional microstructure therefore has to be developed to nurture and enhance credibility. Maintaining openness and transparency helps central banks be more accountable and autonomous, and it improves monetary policy effectiveness. The more clearly the central bank spells out and acts on its policy objectives and strategies, the better understanding and higher confidence the public has in its workings, and the better inflation expectations can be anchored.

Dincer and Eichengreen (2007) examined the level

of transparency (information disclosure) of 100 central banks throughout the world from 1998 to 2005 and found an evolution of a larger number of central banks toward greater transparency and openness. As expected, the requirements of an inflation-targeting framework put the inflation targeters ahead of the group.

A selected ranking of some Asian economies and their scores (in parentheses) in 2005 are as follows: the Philippines (10); Korea (8.5); Indonesia (8); Thailand (8), Hong Kong, China (7); Sri Lanka (7); Singapore (6.5); Malaysia (5); the PRC (4.5); India (2). The analysis also lends broad if relatively weak support to the notion that transparency reduces inflation and output variability. Compared to the transparency champions of New Zealand (13.5) and Sweden (13), all Asian central banks have much room for improvement, regardless whether they are inflation targeters or nontargeters, or who has a better inflation track record.

The close coordination of monetary (including financial) and fiscal policies is key to sound macroeconomic management. The central banks in developing economies are often the main financial advisors to the government, and, in most instances, they are also the chief economic advisors. In these capacities, central banks are best placed to influence the directions and goals of macroeconomic management. Not surprisingly, the key success factor in the impressive track records of the more credible Asian economies is the very close coordination of these policies, all working in sync to produce the desired outcomes.

#### Source

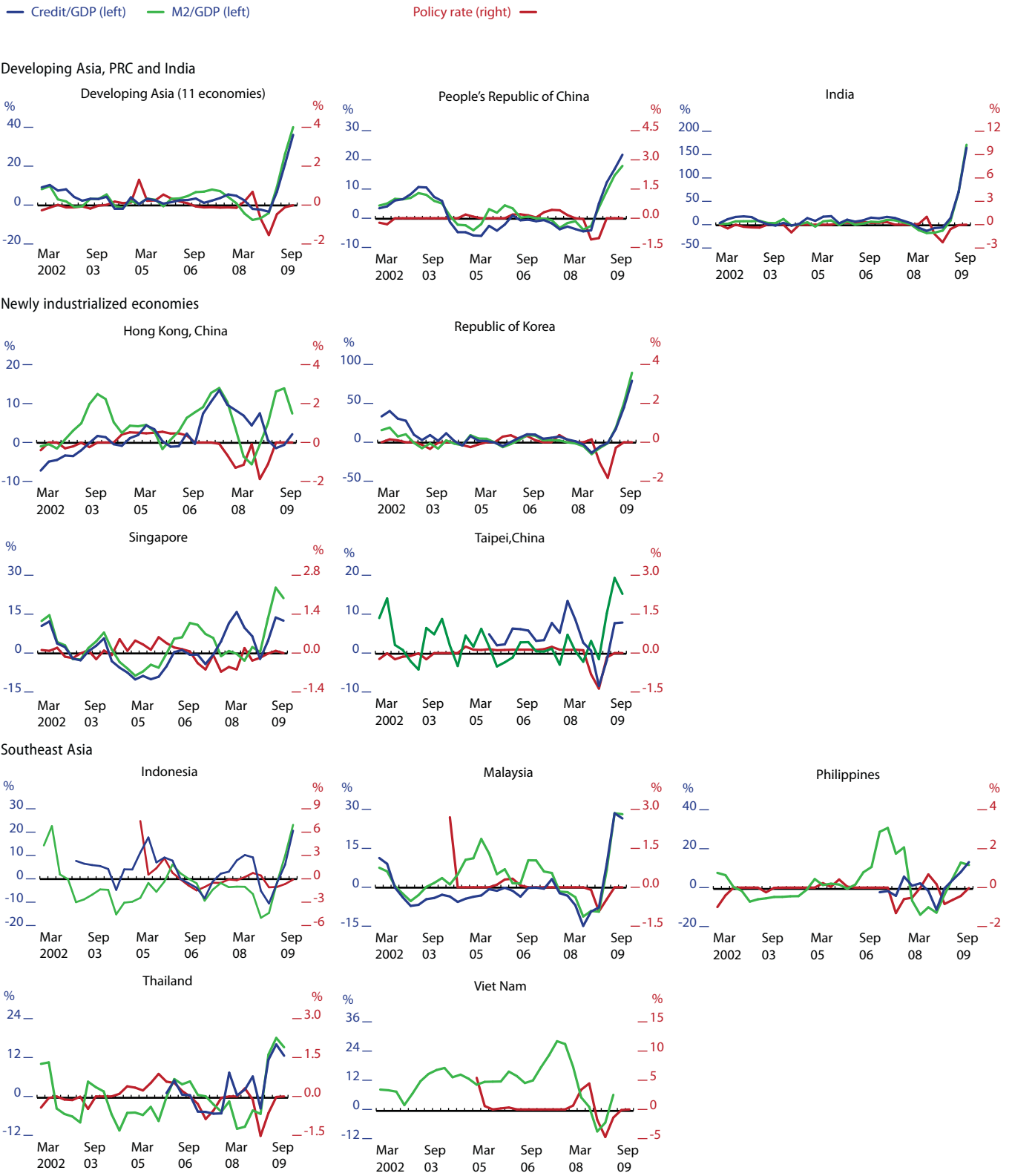
Drawn from H. C. Tang. 2008. *Commodity Prices and Monetary Policy in Emerging East Asia*. ADB Working Paper Series on Regional Economic Integration No. 23. December. Asian Development Bank, Manila.

### Conduct of monetary policy at the onset of the recent crisis

How was monetary policy conducted in the region during the onset of the global financial crisis, relative to its behavior when regional economies managed to maintain fairly stable domestic inflation rates? To answer this question, the actual policy rate can be compared with a suggested rate derived from an approximation of past monetary policy.

The conduct of monetary policy can be approximated by means of predetermined rules that explain the behavior of the policy. The so-called Taylor rule has become very popular in this regard. It states that the setting of the policy rate by a central bank can be approximated by three factors: the natural interest rate; the difference in the current inflation rate from the target inflation rate; and the GDP gap. In its empirical application, a modified version of the rule is often estimated against past data to gain insights over how monetary policy has been behaving. The

2.2.2 Developments in liquidity positions and policy rates in 11 Asian economies



Note: Developing Asia is taken to be the 11 economies shown on this page.

For Singapore, domestic interbank interest rate is used.

Source: CEIC Data Company (accessed 1 March 2010).

## 2.2.3 Summary of monetary policy actions in selected DMCs

	PRC	HKG	IND	INO	KOR	MAL	PHI	SIN	THA
Ease monetary policy	√	√	√	√	√	√	√	√	√
Liquidity assistance in local currency		√	√	√	√		√		
Lend foreign exchange			√	√	√		√	√	
Expand deposit insurance		√		√	√	√	√	√	√
Guarantee non-deposit liabilities					√				
Prepare bank capital injection	√	√	√		√				√
Create demand for assets	√		√	√	√	√			
Impose short sale restrictions		√		√	√			√	
Relax mark to market rules				√	√	√	√		

PRC = People's Rep. of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; KOR = Rep. of Korea; MAL = Malaysia; SIN = Singapore; THA = Thailand.

Note: The policy actions have been proposed but not necessarily implemented.

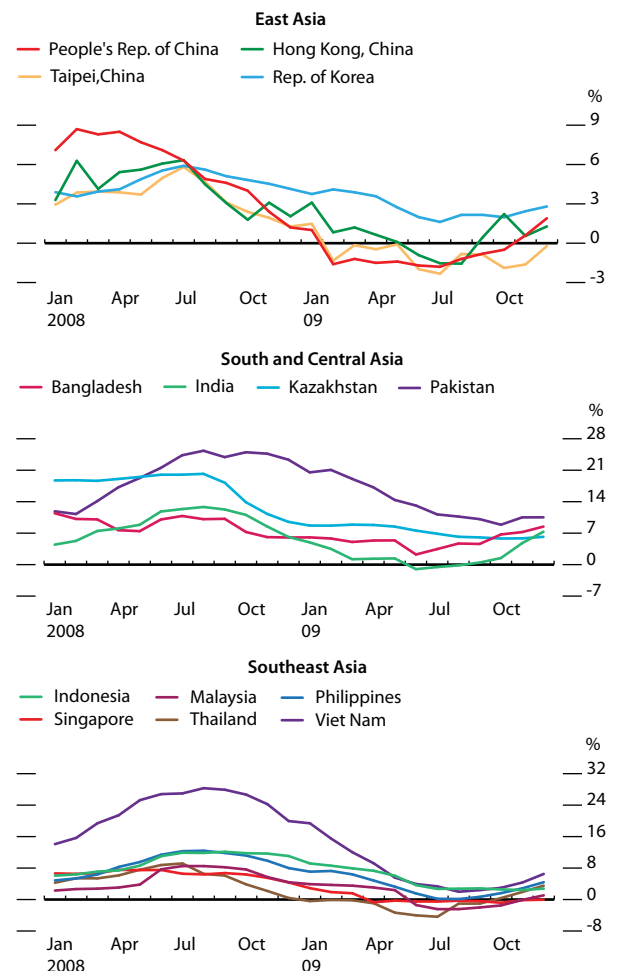
Source: Based on Table I.1 of The International Financial Crisis: Timeline, impact and Policy Responses in Asia and the Pacific. BIS Representative Office for Asia and the Pacific, Bank for International Settlements, August 2009.

estimation often includes a lagged policy rate to capture the degree of persistence in conducting monetary policy. In this sense, the Taylor type of rule relates to a past policy reaction of a central bank.

Using the approximation of past monetary policy behavior in Box 2.2.2, the counterfactual policy rates for each country under consideration are derived. To do this, the series reported in the two studies referred to in the box are extended up to the latest available data, and the implied policy rates are calculated based on the characterization of monetary policy reaction function reported in the box. The lead inflation figures are used to represent inflation expectations, while the output gap is roughly calculated by log differencing the actual output to its extended Hodrick-Prescott filtered trend. The counterfactual policy rate series provides the reference rates for the countries under consideration. These reference rates, however, should not be taken as the desirable path as in Taylor (2009). The rules that derive the reference series in this case are not necessarily the optimal ones; rather, they are just representations of past monetary policy that deliver relative tranquility in inflation behavior.

Figure 2.2.4 displays the difference between the actual policy rate and its reference based on the rule, normalized to a standard deviation of the estimates.<sup>6</sup> A value that is smaller than  $-1$  or greater than  $1$  indicates a too lax or too tight monetary policy, respectively. The figure suggests that monetary policy in most of the countries has generally been consistent up to the first quarter of 2007. The fact that the policy rate difference lies within the band of  $-1$  to  $1$  suggests that there is no statistically significant difference between the actual

## 2.2.3 Inflation trends



Source: CEIC Data Company (accessed 1 March 2010).

## 2.2.2 Approximation of past monetary policy

De Brouwer et al. (2006) and Ramayandi (2007) provided estimates of the Taylor type of rule for the period up to 2004 for some economies in the region: Indonesia; Korea; Malaysia; the Philippines; Taipei,China; and Thailand. They estimated the following monetary policy reaction function:

$$i_t = (1-\rho)\alpha + (1-\rho)\beta E_t \pi_{t+n} + (1-\rho)\gamma x_t + \rho i_{t-1} + \varepsilon_t$$

where,  $i_t$  is the short-term nominal interest rate (the proxy for target policy variable) at time  $t$ ;  $E_t \pi_{t+n}$  is the time  $t$  expectation of inflation at time  $t+n$ ;  $x_t$  is the log of output gap; and  $\varepsilon_t$  is the unsystematic monetary policy shock.

The log of output gap is defined as a log difference between actual output and its Hodrick- Prescott filtered trends. Expected inflation is not observed in practice and is approximated using observed instrumental variables.<sup>1</sup> Therefore, the parameters  $[\alpha, \beta, \gamma, \rho]$  are estimated using a generalized method of moments technique following Clarida et al. (1998), by utilizing the instrumental variables as the underlying information for representing the unobserved expected inflation. The summary of their estimated parameters is presented in the box table.

The estimation period for the above parameters is relevant for two reasons. First, it covers a time when inflation was the most stable for the countries under consideration (Figure 2.2.1 in the text). Second, it excludes the period when commodity prices in the international market behaved erratically, a condition that tends to induce higher volatility in domestic price inflation and that should not be the object of monetary policy aimed at stabilizing inflation.

Parameters for the policy reaction function

Economy	$\alpha$	$\beta$	$\gamma$	$\rho$
Indonesia	-2.73	1.78	1.04	0.52
Korea, Rep. of	-7.51	3.59	0.02	0.89
Malaysia	0.56	1.66	0.19	0.69
Philippines	0.04	0.72	1.22	0.56
Taipei,China	0.79	1.49	1.00	0.92
Thailand	-3.59	2.65	0.09	0.70

Source: De Brouwer et al. (2006) and Ramayandi (2007).

<sup>1</sup> For the instruments, De Brouwer et al. (2006) and Ramayandi (2007) use the lagged value of short-term nominal interest rate, inflation, output gap, and relative changes in the exchange rate of the respective economies.

policy rate and what the rule suggested. In 2005, Indonesia's policy rate indicates huge deviations where monetary policy was suggested to be too lax. The deviations, however, were justified because massive cuts in the domestic oil price subsidy pushed up inflation and required an increase in the reference rate at that time. The central bank of Indonesia made a right decision not to overreact to the event because the cause of the price increase was not monetary.

Starting in late 2007, however, the monetary policy stances of most of the economies (except Korea) tended to become too loose, leading to an unchecked increase in inflation in all these countries. It may be argued that the passive response was also proper because the inflation was not core but rather due to rising commodity prices in the international market. This argument, however, does not seem to be justified due to a very high correlation between these countries' core inflation and commodity prices during that period (Filardo and Genberg 2009 discuss this). In other words, their central banks should have responded more actively to contain inflation in that period.

As the impact of the global financial crisis hit Asia, economies in the sample reacted by reducing their policy rates, sending them to record lows for the decade (according to each country's standard) and keeping them low since then. The current level of interest rates for economies like Korea, the Philippines, and Thailand are seen as consistent with the suggested rates from the monetary policy rule. For Indonesia; Malaysia; and Taipei,China, the current rates seem to be still higher than what

the rule suggested. This observation has implications on how a country deals with the trend of inflation in the short run if the trend starts putting pressure on the economy. Countries like Korea, the Philippines, and Thailand may be compelled to deal with such a pressure by increasing the interest rate. On the other hand, economies like Indonesia, Malaysia, and Taipei,China seem to still be able to handle the inflation pressure without having to increase the interest rate. These economies may be able to tame the immediate inflation pressure by selectively unwinding the quantity measures they put in place to deal with the global downturn.

## Monetary policy and the asset bubble

### Monetary policy and asset prices

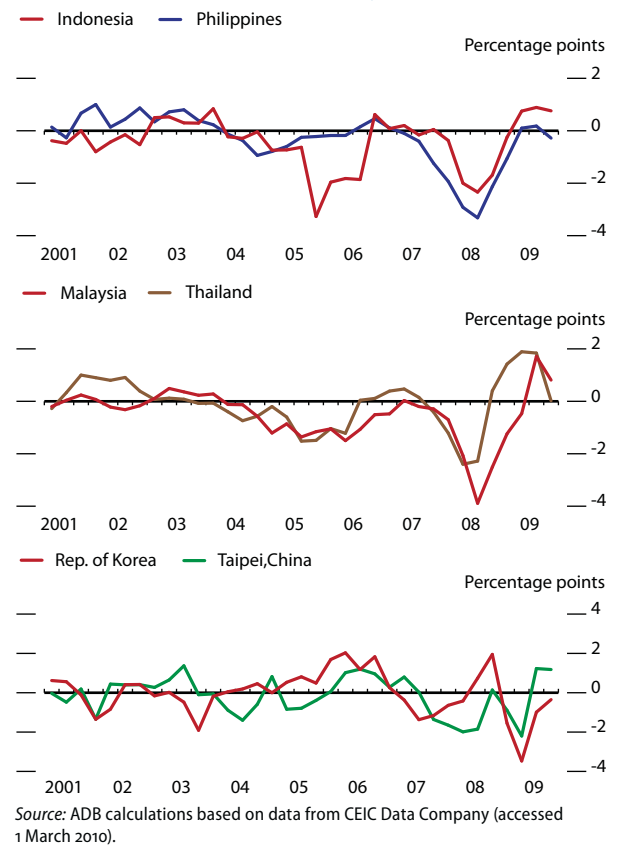
The bubble burst that initiated the global financial crisis has taught a huge lesson with respect to monetary policy: It seems that the element of financial stability can no longer be considered an external part of managing macroeconomic fluctuations, particularly when it has the potential to wreak such catastrophic damage on the aggregate economy, as witnessed in the recent crisis. This lesson has pushed the relationship between asset prices and monetary policy back to the forefront of the monetary policy debate.

Asia must also be wary of threats from asset market failures to the well-being of their aggregate economies. Gochoco-Bautista (2008) examines the risk of extreme outcomes on real output and price levels, given booms in asset markets, for eight East and Southeast Asian economies: Hong Kong, China; Indonesia; Japan; Korea; Malaysia; the Philippines; Singapore; and Thailand. Her findings suggest that booms in asset prices significantly increased the probability that these economies could experience bad extreme outcomes in the form of heavy losses in both real output and prices. Conversely, given such booms, the probability of good extreme outcomes is less likely. Consequently, booms in assets market have to be monitored closely in order to mitigate the risk of the economy's being caught in a slump. Therefore, Asia may not ignore the question about how monetary policy should be best conducted in facilitating financial stability, at the same time maintaining a low and stable inflation environment.

Ito (2010) discusses two opposing views with regard to this issue.

**Benign neglect.** Monetary policy could neglect developments in asset prices. The main goal of monetary policy should be limited to maintaining stability in prices and output. Monetary policy makers should leave the prevention of a banking and financial crisis to financial supervision policy, a tool that has been entirely separated from monetary policy. To prevent a hard landing by the banking system, the regulatory authority can introduce prudential measures, such as a higher (and variable) capital standard, introducing and/or tightening regulation on the loan-to-value ratio and the loan-to-income ratio ceilings, and an examination of the internal risk assessment of banks' portfolios.

### 2.2.4 Normalized difference of policy rates



*Leaning against the wind.* In addition to maintaining aggregate price stability, monetary policy needs to pay more attention to asset prices and react to developments in them. Because the bursting of the assets bubble most likely induces financial instability, precautionary monetary tightening is recommended to contain the bubble from growing. A low interest rate is bound to encourage risk-taking activities—reckless rather than normal—and the financial supervision policy cannot perfectly prevent risk concentration in some sectors of the economy. Asset prices should be either included in a set of target variables or treated as a special variable that should be watched carefully, along with aggregate price inflation.

Recent experience in the crisis signals that the benign neglect argument has certain limitations. The argument rests its case on having strong, effective, and reliable regulatory oversight of the country's financial market mechanisms. Yet the crisis has just demonstrated that this type of oversight may actually be missing in most cases.

### **Incorporating asset prices in monetary policy decisions**

So should monetary policy incorporate developments in asset prices directly into its current policy setting? If so, how effective could this approach be?

The literature suggests limitations on monetary policy's ability to be generally effective when directly responding to asset prices. Cecchetti et al. (2000) strongly argue that the design of monetary policy to achieve an inflation target and to manage its expectation could show superior performance if policy instruments adjusted not only to inflation and the output gap, but also to asset prices. By leaning against unsustainable developments in the asset market, monetary policy could help keep a bubble from growing.

This argument makes much sense. However, asset prices often behave erratically and with relatively high volatility. Adjusting the policy instrument directly to asset prices will only tend to transfer their erratic behavior to the instrument. Although this effect could be justifiable when asset prices development is unsustainable and on the way to an unwanted bubble, the automatic adjustment would tend to induce more variability in the monetary instrument during normal times when asset prices development was, in fact, sustainable. More variability in a policy instrument could further penalize the economy by increasing variability in both output and inflation, making the management of inflation expectation all the more difficult for a central bank.

Studies that lend support to the leaning against the wind view typically find marginal improvements in the stability of output and inflation. These improvements are achieved through relatively very minimal reaction in the policy instrument to changes in asset prices.<sup>7</sup> De Grauwe (2008) added that the effectiveness of this type of policy reaction depends strongly on the degree of credibility of the central bank. The more credible central banks are potentially more effective. The small range of the optimal proportion policy instrument reaction to movements in asset prices partly reflects the fact that the main policy instrument should not be continuously reacting to developments in asset prices. The policy may need to react more strongly when a bubble materializes,



but not otherwise. In addition, with regard to Asia, the issue of central bank credibility could be another hurdle to be overcome (Box 2.2.1) before countries in the region may reap the full benefit from this kind of monetary policy setup.

To more effectively maintain macroeconomic stability, monetary policy may need to react to asset prices only when needed, that is, when a bubble is forming.<sup>8</sup> Otherwise, a central bank may want to keep its hands off asset markets. Unfortunately, in most cases, central banks are not equipped with an *ex ante* capability of determining whether movements in asset prices are fundamental, for at least two reasons: the problem of asymmetric information between a central bank and market players; and the relatively poor quality of information available to monitor unfavorable developments in asset markets (primarily property).

Given the informational constraint, a central bank may limit its reaction to asset prices by assigning a threshold in asset prices, over which it should start responding. The threshold could be designed so as to allow the policy instrument to react to changes in asset prices whenever the latter crosses the assigned threshold. Haugh (2008), for example, argues that setting a relatively high threshold (a three-standard deviation threshold rule in his case), rather than completely ignoring asset prices when designing monetary policy, may provide better outcomes in terms of providing macroeconomic stability. Although improving the approach for monetary policy to deal with unwanted bubbles in asset markets, the approach still tends to be heuristic in nature. Determining the right threshold would still be a tricky part, particularly given the problem of limited *ex ante* information available in assessing developments in asset markets.

The bursting of the bubble that set off the global crisis offers lessons in the possible preventive role of monetary policy. The lax monetary policy in industrial countries before the crisis has been considered one of the contributing factors in creating the asset price bubble. The hands-off stance was thought to be justified by the relatively low and stable inflation environment at that time, which was not exerting any pressure to tighten monetary policy. Low interest rates and a stable economic condition created a comfortable environment for people to systematically underestimate risks and put low-risk premiums in the financial market.

But, is a traditional monetary policy reaction function like the Taylor rule really silent about such bubbles? It would seem not. Taylor (2007) suggested that the interest rate in the US after the “dot com” bubble in 2001 was kept lower than what the Taylor rule prescribed (although the rule does not explicitly take asset prices into account). The prescribed interest rate, based on the simple Taylor rule, was higher than the actual rate, suggesting that the arguments driving the rate prescribed by the Taylor rule somewhat captured the sign of a bubble buildup in the asset markets.<sup>9</sup> The lower actual interest rate certainly leaves room for the bubble to flourish. Although arguably an increase in the actual rate may not have fully contained the growing bubble in asset prices, it would definitely have put a check on the supportive conditions.

The resultant policy failure is not limited to the US. Similar indications appear elsewhere.<sup>10</sup> In Asia, for example, a low policy rate had been accompanied by a very high growth in credit in Indonesia and

to some extent in Thailand (Figures 2.2.2 and 2.2.4 and Box 2.2.1). As demonstrated by the recent crisis, this type of policy failure may lead to a dire outcome.

Thus the need should be clear for greater discipline in conducting monetary policy for purposes of achieving its target to keep inflation and its expectation stable. In other words, resisting change in the monetary policy stance for the sake of any other reason than managing inflation and its expectation is a mistake. A failure to shift the policy instrument in a timely fashion may send false signals to the economy, create incentives for people to undervalue their risks, and plunge the economy into trouble.

Although more such discipline may not be sufficient to completely contain financial shocks when they occur, designing rules for monetary policy in direct response to changes in asset prices at all times may introduce additional volatility when financial shocks are absent, hence imputing potential costs to the aggregate economy. Analysis of the issue suggests that rules that enable monetary policy to react directly to developments in asset prices perform better than a simple Taylor rule only when the shocks come from finance sectors. When the shocks emanate from other than finance sectors, a simple Taylor rule tends to outperform the augmented rules in terms of delivering more stable output and inflation.<sup>11</sup>

### **Improving monetary policy**

There is no one, single approach to improving monetary policy for all countries. The recent global financial crisis signaled that financial market stability can no longer be considered beyond the realm of monetary policy. Even though the structuring may differ from country to country, certain requirements are clear.

For one thing, conducting sound monetary policy has to involve a commitment to maintaining financial market stability. However, a single policy instrument like the short-run interest rate is a rather blunt tool for dealing with both the buildup and aftermath of financial crisis. A combination of the traditional monetary policy objective with a commitment to maintaining stability in the asset markets is necessary. This additional objective may be best attained by complementing the traditional monetary policy framework with additional policy measures that deal specifically with undesirable developments in the asset markets.

Also, instruments to restrain asset prices, in the form of micro instruments such as capital ratios, loan-to-valuation ratios, a capital gains tax, or even credit growth limits, could prove to be a better approach. The execution of these micro instruments can be given over to a separate regulatory authority, which has the explicit task of using the instruments to restrain asset prices. Another important element is a mechanism to take over large, systemically important institutions if their capital drops below a certain critical level, thereby avoiding a moral hazard while maintaining systemic stability.

Making all this work requires a financial authority to supervise and regulate the finance sector. The main responsibility of this authority would be to make the call on a bubble early and introduce prudential policy measures when necessary. With this type of enhanced supervision and regulation, monetary policy is freed from the difficulty of pursuing

too many targets with a limited number (often just one) of strong policy instruments.

Accomplishing all this with resources either within the central bank or outside it depends on the availability of experts. Often human resources are limited in emerging market economies, so supervision is most efficiently done within the central bank. In that case, however, the potential conflict of interest with monetary policy objective has to be controlled. Maintaining policy independence for the two authorities is important in order to provide enough room for both to pursue their designated objectives. Nevertheless, in as much as the objectives for both authorities are related, a smooth and effective coordination between the two is critical. Micro prudential policy should also be strengthened with a politically independent body outside or inside the central bank, so that financial stability can be maintained with day-to-day regulation and measurement. Preventing the bubble to get bigger with ongoing measures is the first line of defense.

Given the informational constraint mentioned previously, to enable monetary and financial authorities to make appropriate policy judgments and take timely action, developing and improving the indicators and their relevant measurement methodologies are crucial. Creating reliable databases for these indicators is also necessary. The information should be relevant for indicating whether speculative activities are increasing and whether they pose financial risk to the agents involved. Intercountry cooperation and coordination in exchanging such information would also be beneficial to monitoring regional trends and avoiding contagion from one country to another.

When large or systemically important financial institutions are deemed insolvent, an effective legal structure is needed to take them over. A legal framework is important to avoid panics in the financial market, which could cause turmoil in the finance sector, thereby acting as a backstop for financial stability. It also sidesteps the potential for moral hazards by assuring that both management and shareholders bear the brunt of failure. An intrusive supervision—as part of the answer—calls for crisis management protocols covering the liquidation or nationalization of failing institutions.

When these measures are exhausted or ineffective, the monetary policy can be modified so that the interest rate is hiked to ensure that the bubble does not get so large as to threaten financial stability. This measure may cause output declines and deflationary pressure, but the sacrifice may be needed to avoid even bigger sacrifices later. This approach, however, is the second best. The weaker supervision regime obliges the central bank to deviate from its regular monetary policy framework.

# Exchange rate and capital account liberalization

## De jure and de facto exchange rate regimes

After the 1997–98 Asian financial crisis, almost all the crisis-affected countries, except Malaysia, chose to abandon a conventional pegged exchange rate regime to implement de jure floating exchange rate regimes (Table 2.3.1), but with varying degrees of flexibility. Whereas Korea and the Philippines are implementing independently floating regimes, other countries adopted managed floating regimes with no predetermined path for the exchange rate. Malaysia implemented a conventional pegged arrangement until 2005 and a managed floating exchange rate regime since. As mentioned in the monetary section, Indonesia, Korea, the Philippines, and Thailand initiated flexible inflation targeting with a floating exchange rate regime. In Malaysia, the central bank monitors several key indicators, including inflation and output stability, in conducting monetary policy.

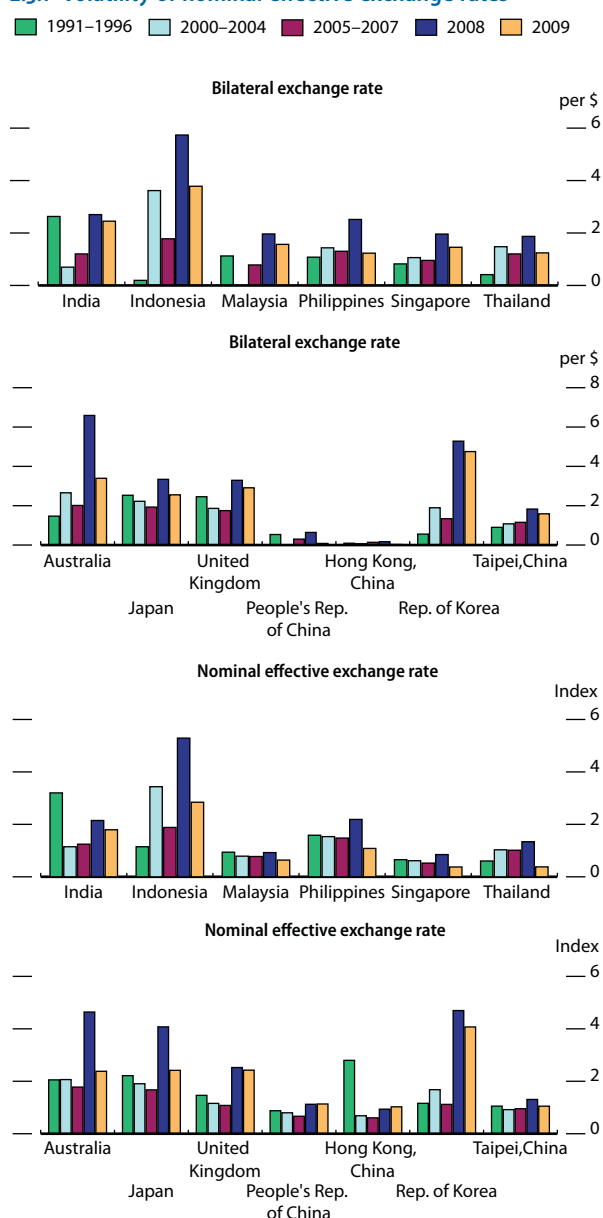
For those economies not affected by the Asian crisis, the exchange rate regime spans a wide spectrum but, except in Hong Kong, China, it tends to move toward a more flexible exchange rate arrangement. For example, in the PRC, the de jure exchange rate regime changed from a conventional pegged arrangement in 1999–2005 to a managed floating exchange rate regime with reference to a currency basket. This is the same de jure exchange rate regime announced in Singapore.

Hong Kong, China, over the last few decades has had a hard-pegged exchange rate regime in terms of a currency board arrangement. In the PRC; Hong Kong, China; and Singapore, the exchange rate is still used as an anchor in conducting monetary policy, whereas in Taipei, China, the central bank monitors various macroeconomic indicators, including inflation and output stability.

Although de jure exchange rate regimes have been edging toward increased flexibility, the volatility of exchange rates, against both the US dollar and a trade-weighted basket of currencies, remained low in the region after the Asian crisis. This has led to doubts about the inconsistency between de jure and de facto regimes, especially fear of a resurrected dollar-pegged arrangement. Between 2000 and just before the global financial crisis intensified in late 2008, exchange rate volatility in many countries was relatively limited or declining (Figure 2.3.1).

The far lower exchange rate volatility than that in a

2.3.1 Volatility of nominal effective exchange rates



Note: Volatility is measured by the standard deviation of changes in monthly nominal exchange rates.

Sources: ADB estimates, based on data from IMF, IFS online database; CEIC Data Company (accessed 22 February 2010).

### 2.3.1 Evolution of de jure exchange rate regimes in selected emerging Asian economies

Countries	Period	Exchange rate Regime
China, People's Rep. of	1990–1998	Managed floating
	1999–June 2005	Conventional pegged arrangement
	July 2005–present	Managed floating exchange rates with reference to a currency basket
Hong Kong, China	1983–present	Currency board arrangement
India	1990–present	Managed floating with no predetermined path for the exchange rate
Indonesia	1990–July 1997	Managed floating
	Aug 1997–June 2001	Independently floating
	July 2001–present	Managed floating with no predetermined path for the exchange rate
Korea, Rep. of	1990–1997	Managed floating
	1998–present	Independent floating
Malaysia	1991–August 1998	Managed floating
	Sep 1998–2005	Conventional pegged arrangement
	2006–present	Managed floating with no predetermined path for the exchange rate
Philippines	1990–present	Independent floating
Singapore	1990–present	Managed floating exchange rates with reference to a currency basket
Taipei, China	1990–present	Independent floating
Thailand	1990–June 1997	Pegged to a composite of currencies
	July 1997–2001	Managed floating with no predetermined path for the exchange rate

Sources: 1975 to 1998: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions, various years until 1998; 1998 to present: central bank websites.

country with an independent floating regime, such as Australia, Japan, or the United Kingdom, has shown the high degree of foreign exchange intervention in the region. In particular, the level of volatility in many countries does not match well with the announced de jure exchange rate regime (Figure 2.3.1). For example, the degree of volatility in the Philippines and Thailand was roughly the same after the crisis, but the exchange rate regime in the Philippines is classified by the International Monetary Fund (IMF) as independently floating whereas Thailand's is classified as managed floating.

Along with fear of a resurrected dollar-pegged exchange rate regime, a significant buildup of foreign exchange reserves has been evident in the region since 1998. In contrast to before the Asian crisis, the accumulation of foreign reserves afterward has come mainly from current account surpluses, instead of net capital inflows. Particularly in the PRC, changes in the stock of foreign exchange reserves of around US\$330 billion a year during 2004–2009 stemmed from a current account surplus of US\$261 billion and net capital inflows of only US\$58.5 billion. Regardless of the source of reserve accretions, most studies (at least prior to the recent crisis), show that Asia holds more than enough precautionary reserves.

The reserves stock declined in all developing Asian countries during the crisis, with significant drops in India and Korea, because of the need to limit exchange rate depreciation resulting from the reversal of capital inflows (Figure 2.3.2).<sup>12</sup> However, after the first quarter of 2009, the

accumulation of foreign exchange reserves in all developing Asia resumed an upward path, and the regional stock of foreign reserves has become even higher than before the crisis. (In the PRC, reserve stocks reached a new high of US\$2.4 trillion in December 2009.) This trend suggests a high degree of exchange rate management in the region.

To provide concrete evidence of the degree of such management, a framework proposed by Frankel and Wei (2007), which examines the degree of influence of the dollar, euro, and yen, is applied (Box 2.3.1).

The estimation results show that, except for Indonesia, the dollar still has the greatest degree of influence on the local currency (Table 2.3.2). The PRC case is the most clear cut, with the weight associated with the dollar close to 1. For the Philippines and Malaysia, the dollar weights are large (0.87 and 0.79, respectively), suggesting that both currencies still manage their currencies against the dollar. The result in the case of the Philippines is in sharp contrast to the de jure exchange rate regime, which is defined by the IMF as an independently floating regime. In India, Singapore, and Thailand, the influence of the dollar was lower than in the preceding three countries, but there is an indication of management against the dollar. In Indonesia, the statistical insignificance of the three currencies reflects more reliance on market-driven exchange rate movements.

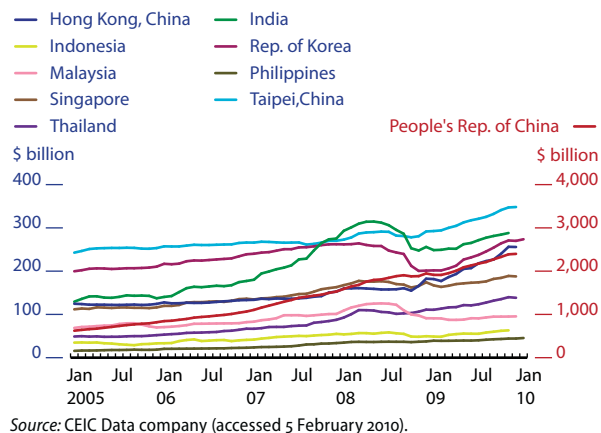
In Korea before the recent crisis, systematic intervention was found, with statistically significant coefficients associated with the dollar and yen. This finding implies that the central bank had managed the Korean won against a basket of currencies before the crisis. However, when the crisis period is included, no systematic influential pattern emerged from either currency. The results are consistent with the recursive estimations for the dollar weight shown in Figure 2.3.3. The weight of the dollar fell sharply in Korea during the recent crisis, whereas it dropped only slightly in Singapore and Taipei,China. A distinct decline in the dollar weight is also found in India and Indonesia after the crisis because the central bank allowed the currencies to depreciate in response to capital reversals. By contrast, in the PRC the weight of the dollar is relatively stable over the estimation periods.

## Three key reasons for intervention in the foreign exchange market

The foregoing analysis makes apparent that most developing Asian currencies remain fairly heavily managed, either against the US dollar or a basket of currencies, and that the intervention did not occur only during the crisis. A de jure exchange rate regime exaggerates the degree of de facto exchange rate flexibility. The empirical literature has suggested three main reasons for intervening in the foreign exchange market and building up foreign exchange reserves.

**Insurance.** Authorities build up reserves as insurance against crisis. Although the debate on how much is “too much” will go on, the buildup

### 2.3.2 Foreign exchange reserves in selected Asian economies



### 2.3.1 Model for measuring de facto exchange rate flexibility

The model is based on the Frankel and Wei framework (2007), as shown in the equation.

$$\Delta e_t = \alpha_0 + \alpha_1 \Delta US_t + \alpha_2 \Delta JP_t + \alpha_3 \Delta EU_t + \mu_t$$

where  $e$  is defined as the local currency per special drawing rights. The extent of fixity is captured by  $\alpha$  coefficients, measuring the influences of the dollar, euro, and yen.

The model is estimated for nine developing Asian countries (the PRC; India; Indonesia; Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand) during 1999M2–2009M9. For India, Indonesia, and Korea, where exchange rates depreciated notably during the recent crisis, another model is estimated by excluding the recent crisis period.

Excluding the crisis period, the data are covered for 1999M2–2007M12. The crisis period is excluded to appropriately measure the de facto exchange rate flexibility of these three countries during normal times.



## 2.3.2 Degree of de facto exchange rate flexibility in selected emerging Asian economies

	PRC	Indonesia		India		Korea		Malaysia	Philippines	Singapore	Taipei,China	Thailand
		(1)	(2)	(1)	(2)	(1)	(2)					
Const	-0.06 (0.004)*	0.11 (0.78)	0.08 (0.85)	0.11 (0.37)	-0.02 (0.79)	0.07 (0.71)	-0.17 (0.26)	-0.03 (0.68)	0.13 (0.31)	-0.06 (0.42)	0.04 (1.64)	0.01 (0.94)
Dollar	0.95 (0.00)*	0.34 (0.39)	0.76 (0.14)	0.61 (0.00)*	0.86 (0.00)*	-0.23 (0.38)	0.42 (0.02)*	0.79 (0.00)*	0.87 (0.00)*	0.38 (0.00)*	0.44 (0.00)*	0.43 (0.01)*
Yen	-0.002 (0.88)	-0.3 (0.15)	-0.07 (0.83)	-0.1 (0.22)	0.03 (0.71)	-0.19 (0.32)	0.33 (0.01)*	-0.04 (0.25)	0.01 (0.9)	0.03 (0.51)	0.05 (0.27)	0.09 (0.19)
Euro	0.001 (0.98)	0.29 (0.5)	0.32 (0.6)	-0.06 (0.59)	0.05 (0.54)	-0.33 (0.06)	-0.15 (0.37)	0.09 (0.17)	0.1 (0.4)	0.1 (0.18)	-0.03 (0.65)	0.04 (0.75)
Adj R <sup>2</sup>	0.95	0.04	0.02	0.31	0.53	0.13	0.26	0.63	0.34	0.17	0.32	0.22
DW	2.37	1.9	1.85	1.93	2.01	1.91	1.72	1.84	1.97	1.94	1.83	1.84
Sample	01M3: 09M9	99M2: 09M9	99M2: 07M12	99M2: 09M9	99M2: 07M12	99M2: 09M9	99M2: 07M12	99M2: 09M9	99M2: 09M9	99M2: 09M9	99M3: 09M9	99M2: 09M9

## Notes:

Figures in parentheses are p-values and \* reflects those parameters significant at 10%–15% or better.

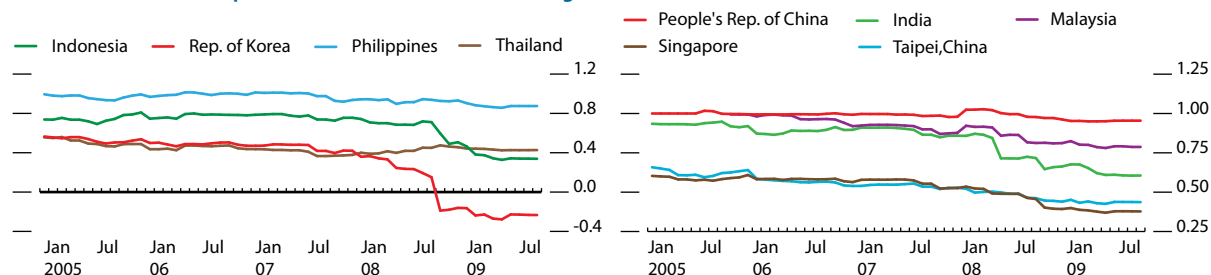
A 1-month lag dependent variable is included in all regressions and a 1-month lag term for the US dollar per SDR is included for the PRC, India, Malaysia, the Philippines, and Thailand if its inclusion helps to reduce serial correlation.

Source: R. Rajan. 2010. The Evolution and Impact of Asian Exchange Rate Regimes. Background paper prepared for *Asian Development Outlook 2010*, Asian Development Bank, Manila.

of reserves has proved helpful in redressing the adverse effects of the recent crisis, particularly in containing the significant depreciation of real exchange rates.

**Stimulating exports and growth.** During normal periods, central banks intervene in the foreign exchange market to stimulate exports and growth (i.e., for mercantile purposes). Central banks' behavior and the bias of their intervention can be used as evidence for this reason. (Box 2.3.2 explains how to estimate central bank behavior and the bias of their intervention.) In most developing Asian countries, the estimation results show asymmetric intervention in the foreign exchange market with a strong bias toward preventing appreciation rather than depreciation (Table 2.3.3).<sup>13</sup> The degree of the bias, however, varies depending on the preferences of central banks. Singapore and Thailand appear to react against exchange rate appreciation more than

## 2.3.3 Recursive least squares estimates for US dollar weight



Note: Countries in the left panel have flexible inflation-targeting regimes; economies in the right panel have adopted other monetary regimes but have inflation as the de facto target.

Sources: R. Rajan. Forthcoming. The Evolution and Impact of Asian Exchange Rate Regimes. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

### 2.3.2 Central bank intervention reaction function

This box shows the empirical model for estimating the preference of central banks in intervening in the foreign exchange market. The model assumes that the central bank intervenes in the foreign exchange market to minimize the following intertemporal criterion.

$$\min_{(r_t)} E_{t-1} \sum_{t=0}^{\infty} d^t L_{t+t} \quad (1)$$

where  $d$  is the discount factor and  $L_t$  is the period loss function.

The loss function is specified as the deviations of international reserves ( $r$ ) and of exchange rate ( $e$ ) from their targets, as shown in equation (2) :

$$L_t = 1/2 (r_t - r^*)^2 + \lambda/2 \{ (e_t - e^*)^2 + \gamma/3 (e_t - e^*)^3 \} \quad (2)$$

where  $\lambda (> 0)$  is the relative weight;  $\gamma$  is the asymmetric preference parameter on exchange rate stabilization;  $e_t$  denotes the percentage change in the exchange rate (the nominal effective exchange rate);  $r^*$  is the optimal level of reserves; and  $e^*$  is the central bank's target exchange rate, which is assumed to be 0 in this case. If  $\gamma < 0$ , deviations of the same size but opposite sign yield different losses, and thus the rate of appreciation is weighted more heavily than the rate of depreciation:

$$\partial L_t / \partial (e_t) = \lambda [e_t + (\gamma/2) (e_t)^2] < 0, \text{ for } e_t < 0$$

Minimizing equation (1) by choosing  $r_t$  subject to the constraint,  $e_t - e^* = a_0 + a_1 r_t + \varepsilon_t$ , leads to the following intervention reaction function of the central bank:

$$r_t = r^* + \lambda a_1 E_{t-1} \{ e_t + \gamma/2 (e_t)^2 \} \quad (3)$$

Replacing expected values with actual values, the empirical version of the intervention reaction function can be simplified:

$$r_t = c + \alpha e_t + \beta (e_t)^2 + v_t \quad (4)$$

$$\text{where } \alpha = \lambda a_1, \beta = \lambda a_1 \gamma/2$$

Equation (4) is estimated based on monthly data for the sample period between 2000M1 and 2009M7, for six emerging Asian economies: India, Korea, the Philippines, Singapore, Thailand, and Indonesia.

The reduced-form parameters ( $\alpha, \beta$ ) allow identification of the asymmetric preference on exchange rate stabilization,  $\gamma$ . It can be shown that the asymmetric preference parameter is  $\gamma = 2\beta/\alpha$ .

This parameter is the main concern of the empirical analysis. The positive and statistical significance of  $\gamma$  implies that the central banks do not intervene asymmetrically: they intervene to guard against appreciation of the exchange rate but do not intervene when the rate shows a depreciation trend.

other countries (i.e., for mercantile purposes), whereas Indonesia and the Philippines exhibit more symmetric intervention (i.e., low  $\gamma$ ).

Central banks may intervene against exchange rate appreciation because the exchange rate still plays a role in influencing trade. However, with production and trade moving toward a global sharing structure in developing Asia—that is, the division of the production process into vertically separated stages that are carried out in different countries—central banks have more room to let the exchange rate appreciate, with less concern for export loss.

Given such global production sharing, trading in parts and components accounts for a notable share of total trade in the region.<sup>14</sup> The PRC has been established as a key assembly point, importing most parts and components from other Asian countries and producing finished products to mostly developed countries. The quantitative analysis presented in Table 2.3.4 shows that parts and components trade is remarkably less sensitive to changes in real exchange rates than finished products trade. The effect of the real exchange rate on machinery and transportation exports, which contain a high proportion of parts and components trade, is less than that on other export components.

### 2.3.3 Intervention reaction function and policy preference estimates: 2000M1–2009M7

Country	$\zeta$	$\alpha$	$\beta$	$\gamma = 2\beta/\alpha$	J-test
India	1.202*** (0.089)	-0.432*** (0.102)	-0.148*** (0.035)	0.687*** (0.123)	16.25
Korea, Rep. of	0.568*** (0.086)	-0.131*** (0.032)	-0.019** (0.007)	0.291* (0.155)	14.58
Philippines	1.328*** (0.138)	-1.014*** (0.093)	-0.132** (0.054)	0.259*** (0.103)	14.05
Singapore	0.991*** (0.144)	-0.923*** (0.302)	-0.716*** (0.236)	1.551*** (0.529)	12.66
Thailand	0.506*** (0.084)	-0.437*** (0.086)	-0.997*** (0.078)	4.567*** (0.647)	13.69
Indonesia	1.621*** (0.151)	-0.722*** (0.104)	-0.041*** (0.012)	0.113*** (0.022)	16.62

*Notes:*

\*\*\*, \*\*, and \* denote rejection of the null hypothesis that the true coefficient is zero at the 1%, 5%, and 10% significance levels. The standard errors of  $\gamma$  are obtained using the delta method.

Standard errors using a four-lag Newey-West covariance matrix are reported in parentheses.  $e_t$  is measured using the nominal effective exchange rate (NEER). J-test refers to the Hansen's test of over-identifying restrictions, which is distributed as a  $\chi^2(m)$  under the null hypothesis of valid over-identifying restrictions. A constant, lagged values (1 to 10, 12, and 15 months) of  $r_t$ ,  $e_t$  as well as current and lagged values (1 to 4, 8, and 15 months) of the US Federal Fund Rate.

Source: V. Pontines and R.S. Rajan. 2009. Foreign Exchange Market Intervention and Reserve Accumulation in Emerging Asia: Is there Evidence of "Fear of Appreciation"? December.

Particularly, in the longer term, the effect of the exchange rate is found to be statistically significant only in Indonesia and Malaysia. This result implies that the sensitivity of aggregate trade flows to relative price changes diminishes as the share of parts and components trade increases.

**Exchange rate volatility.** Central banks often use the impact of exchange rate volatility to justify intervening in the foreign exchange market. Aside from the issue of the exchange rate level or trend, countries with flexible exchange rate regimes evidently may experience more nominal exchange rate volatility than a country adopting a relatively fixed exchange rate regime. Given relative price rigidities, this implies

### 2.3.4 RER coefficients in eight East and Southeast Asian economies

	Short-run coefficient			Long-run coefficient		
	Total merchandise (TE)	Manufacturing (ME)	M&T	Total merchandise (TE)	Manufacturing (ME)	M&T
China, People's Rep. of	0.60*	0.69*	0.61*	0.50**	0.50**	-
Indonesia	1.17*	1.44**	0.72*	4.52*	2.15*	0.97*
Malaysia	0.64*	0.65*	0.48*	1.48*	1.37*	1.06*
Philippines	0.20**	-	-	-	-	-
Korea, Rep. of	1.12*	-	-	1.17*	0.14***	-
Singapore	-	0.89(-2)***	0.53 (-2)**	-	-	-
Thailand	0.34*	0.18*	0.14*	0.70*	0.39***	-
Taipei,China	0.38 (-3)**	0.33 (-3)***	-	-	-	-

M&T = machinery and transportation.

Note: The values in the parentheses show the lag period of the significance. \* Significant at the 5% level; \*\* Significant at the 10% level; and \*\*\* Significant at 15% level.

Source: J. Jongwanich. Forthcoming. Capital Flows and Real Exchange Rates in Emerging Asian Countries. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

a corresponding fluctuation in the real exchange rate, and it would be of less concern if the exchange rate volatility is in line with underlying macroeconomic fundamentals. However, high-frequency exchange rate movements can be driven by “speculative” elements, especially speculative (short-term) capital flows, rather than by underlying macroeconomic fundamentals. This circumstance would cause not only excessive volatility of the exchange rate but also a significant misalignment of the rate from its equilibrium or fundamental level.

However, the impacts of exchange rate volatility on key variables, especially in developing and emerging market economies, are still inconclusive, and mixed results are found in the recent empirical literature.<sup>15</sup> Although further analysis of the nexus of exchange rate volatility and other key economic variables is still needed, the excessive volatility of exchange rates that emerged from speculative elements is definitely undesirable. Price signals become distorted, and the exchange rate can diverge from its equilibrium level, leading to a destabilized situation in an economy.

## Regional concerns on exchange rate management after the crisis

The analysis of exchange rate management in developing Asia shows that most countries have implemented de facto “middle-ground” exchange rate regimes involving extensive intervention in the foreign exchange market. The recent crisis has provided positive support for middle-ground exchange rate management and has highlighted the possible flaws in implementing either hard-pegged or freely floating regimes (the so-called corner solution). The IMF has begun to change its views from the corner solution to the middle-ground regime (Ghosh and Ostry 2009).

However, as mentioned in Part 1, extensive postcrisis intervention in the foreign exchange market could have serious implications for macroeconomic management. The quick and strong economic recovery in developing Asia, together with low interest rates in most developed countries, began to bring huge short-term capital inflows into the region. Given extensive intervention combined with excessive liquidity, real exchange rate appreciation and economic overheating could follow. In particular, the sudden reversal of short-term capital flows could endanger financial and economic stability and bring about a currency and financial crisis.

## Exchange rate management

To redress the risks associated with middle-ground exchange rate regimes, central banks in the region should allow the exchange rate to adjust and fall into line with its so-called equilibrium or fundamental level.<sup>16</sup> The equilibrium exchange rate is defined as the exchange rate that simultaneously attains internal and external balances. Internal balance is reached when the economy is at full employment output and operating in a low-inflation environment. External balance is characterized as a sustainable balance-of-payments position over the medium term, ensuring desired net flows of resources and external debt

sustainability. Allowing the exchange rate to adjust and fall into line with the equilibrium level has several benefits: it provides a mechanism for absorbing shocks; exchange rate misalignment can be limited; and allocations of resources can become more efficient. Given capital inflows, it can also help reduce real returns so that incentives to bring in further capital inflows are subdued.

Intervention in the foreign exchange market is still plausible to dampen excessive swings (i.e., volatility) in the exchange rate, which an uncertain and imperfect market can deliver. However, the intervention should be done to mimic the equilibrium exchange rate of a well-functioning market, not override it to produce a nonequilibrium exchange rate.

On a practical basis, defining the equilibrium exchange rate is not straightforward because it is unobservable in the real world. To arrive at the equilibrium level, several issues need to be taken into account, including model specifications and quantitative techniques.<sup>17</sup> One analysis uses an internal and external balance approach to determine the appropriate level of the current account balance and then applies a macroeconomic model to produce the equilibrium exchange rate (Williamson 1994). In another analysis, the concept of uncovered interest rate parity is applied to build an equilibrium exchange rate model (Clark and MacDonald 1998).

Even though establishing a unique level of equilibrium exchange rate seems difficult, it is possible to identify a so-called rational-beliefs range, or band, that is wide enough to encompass the uncertainties of the model and yet sufficiently narrow to have policy implications. International institutions such as the IMF, World Bank, and regional banks could play a role in arriving at such a range and provide policy advice to the governments in the region.

Recent analysis from Cline and Williamson (2010) shows the estimation of the equilibrium exchange rate in 2009 (Table 2.3.5). Compared to the actual exchange rate, the misalignment in the form of undervalued currencies is evident in many developing Asian economies, reflecting significant intervention in the foreign exchange market.

Five economies where undervaluation against the US dollar in December 2009 was significant and more than 20% are the PRC (40.7%); Hong Kong, China (32.3%); Malaysia (30.5%); Taipei, China (28.5%); and Singapore (24.7%). In the Philippines and Thailand, the undervaluation against the US dollar was around 10%. In only three countries (Indonesia, Korea, and India) do exchange rates exhibit a slight overvaluation in response to rapid increases in capital inflows. In terms of a trade-weight average basis, however, Cline and Williamson (2010) show that only four economies do the currencies exhibit noticeable undervaluation, namely the PRC (21.2%); Malaysia (17.7%); Taipei, China (13.6%); and Singapore (10.3%).

Other studies also find exchange rates in the region, especially the yuan, to be undervalued, but the extent of undervaluation varies.

### 2.3.5 Actual and fundamental equilibrium exchange rates, per US dollar

	Against the US dollar		Against a trade-weighted basis	
	FEER	Actual	% change to reach FEER	% change to reach FEER
China, People's Rep. of	4.9	6.8	40.7	21.2
Hong Kong, China	5.9	7.8	32.3	-0.3
India	47	47	-1.5	-5.2
Indonesia	9,884	9,395	-5	-0.6
Korea, Rep. of	1,201	1,164	-3	-0.5
Thailand	29.7	33.3	12.4	-0.4
Malaysia	2.62	3.42	30.5	17.7
Singapore	1.13	1.4	24.7	10.3
Philippines	40	46	14.8	-0.4
Taipei, China	24.9	32	28.5	13.6

Source: W. R. Cline and J. Williamson. 2010. Notes on Equilibrium Exchange Rates. Peterson Institute Policy Brief 10-2. January.

Bergsten (2010) argues that the yuan is undervalued by almost 25% on a trade-weight average basis and by about 40% against the dollar. Ferguson and Schularich (2009) point to an undervaluation of the yuan relative to the dollar of about 30%–50%. Reison (2009) suggests that the yuan is undervalued by 12%.

## Regional cooperation for exchange rate policy and reserve management

Regional cooperation could play a crucial role in ensuring a well functioning middle-ground exchange rate regime. As mentioned, one of the key reasons for extensive intervention in the foreign exchange market is the fear of losing competitiveness. In particular, when the PRC insists on maintaining its limited flexibility of exchange rate, other Asian countries are unlikely to allow the exchange rate to strengthen in response to their balance of payment surplus. To resolve the dilemma, policy coordination among developing Asian countries should be initiated.

Certainly, coordination does not imply putting all the countries in the region in a common exchange rate straight jacket. Indeed, this approach would be inadvisable at this point, given the different stages of development and unlikelihood that all countries would give up their independent monetary policies. However, some sort of loose coordination among these countries could still be possible. Given an equilibrium exchange rate guideline, these countries could agree on a *gradual* adjustment of their exchange rates toward the equilibrium level.

The coordination of exchange rates could also help redress the global imbalance issue that could reemerge in the aftermath of the global crisis. Thorbecke and Smith (2010) show that the adjustment of the PRC currency alone would have very limited effect on trade adjustment in the region but that an across-the-board appreciation of East and Southeast Asian currencies could have more powerful effect in reducing the distortion, especially for the PRC. They use a panel dataset, including the PRC's exports to 33 countries, and find that a 10% yuan appreciation would reduce ordinary (mostly labor-intensive) exports from the PRC by 12% and processed exports (sophisticated, capital-intensive goods) by less than 4%. But a 10% appreciation of all East and Southeast Asian currencies would reduce processed exports from the PRC by 10%.

However, exchange rate adjustments should be viewed as a facilitator for the global imbalance issue only. To solve the imbalance problem, policy measures need to be implemented to reduce precautionary saving in Asian countries and improve the quantity and quality of investment, since the economic fundamentals—saving and investment—in surplus and deficit countries are the key determinants of the imbalance problem (ADB 2009a).

Regional cooperation can also play an important role in reserve management. The recent crisis provided strong evidence for the usefulness of holding foreign exchange reserves to weather financial stress. So it is plausible for developing Asian countries to hold a certain level of foreign exchange reserves to absorb shocks in addition to using



the exchange rate channel. However, holding too many foreign exchange reserves, currently evident in the region, can come with significant costs.

Several initiatives have been introduced, including reserve pooling of US\$120 billion through the multilateralized Chiang Mai Agreement (CMI), but the effective drawings on this initiative are very limited. In fact, the region came through the current global crisis with no drawings on the CMI, but with some use of the Federal Reserve's swap facility, suggesting a need to promote a stronger sense of solidarity and the opportunities available in the region.

The Asian Bond Funds and Asian Bond Market Initiative need to be further developed to link the financial systems of the region more closely, but closer coordination will require more dynamism and drive than recently shown. Although the ultimate aim of these initiatives is to develop a deep and dynamic commercial bond market, their basic building block is a strong government bond market, with enough depth to absorb change in foreign demand and to ensure participants sufficient liquidity. Strengthening regional cooperation in these matters could result not only in the better use of foreign reserves but also in the indirect and gradual reduction of foreign reserve holdings for individual countries, allowing the exchange rate to adjust and be in line with its equilibrium level.

## Capital account liberalization

Capital and financial liberalization has been implemented in most developing Asian countries since the late 1980s. Restrictions have been gradually phased out with an aim of enhancing a country's capacity to garner the benefits of capital flows. Fundamentally, capital flows should provide benefits to a receiving country because they allow that country to allocate resources more efficiently, to enhance domestic saving, and to transfer technological and managerial know-how. Economies with greater financial openness should also be able to stabilize themselves through risk sharing and portfolio diversification (Ito et al. 2009). However, evidence over the past two decades has led to questions on the costs and benefits of capital and financial liberalization, and over the past decade, it has been blamed as a key factor in the boom-and-bust cycle in many developing countries, including the sudden reversal of capital inflows in the Mexican crisis of the early 1990s and the Asian financial later in the decade.

Blaming capital and financial account liberalization policy for inducing economic instability is, however, inappropriate. Such policy takes place in context with the other two macroeconomic policies (monetary and exchange rate), in the so-called Impossible Trinity or Trilemma hypothesis. The hypothesis states that a country may simultaneously choose any two, but not all, of the following three goals: monetary independence, exchange rate stability, and financial and capital account openness. Policy makers must decide within the constraints of choosing two out of the three policy goals.

As discussed in previous sections, after the 1997 Asian financial crisis, many countries still wanted to preserve their monetary autonomy with extensive intervention in the foreign exchange market. To guard against a possible adverse effect from a significant buildup of capital inflows in the early 2000s, capital restrictions were reintroduced in many developing

countries. For example, in response to the turn in bank flows, the PRC authorities restricted the borrowing of dollars by foreign bank branches in that country in September 2006. Such a restriction was also introduced in Korea in April 2007 and in India in August 2007. In Thailand, the unremunerated reserve requirement on fixed income flows was initiated in September 2006 after measures taken in 2003 to limit the buildup in nonresident holdings of baht accounts had proved unsuccessful.

The index of de jure financial openness constructed by Chinn and Ito (2008)<sup>18</sup> confirms that, after the Asian financial crisis, restrictions on capital accounts were introduced more often in many Asian economies, including Indonesia, Malaysia, and Thailand (Figure 2.3.4). For the rest of developing Asia, de jure financial openness was relatively stable or slightly increasing (i.e., had higher de jure financial index values).

In fact, concerns over capital liberalization and the rapid increase in capital inflows would be limited if:

- A country allows the exchange rate to act as another channel in absorbing shocks.
- The flows are driven by fundamental factors.
- Countries have the absorptive capacity, especially the financial institutions, to deal with such inflows.

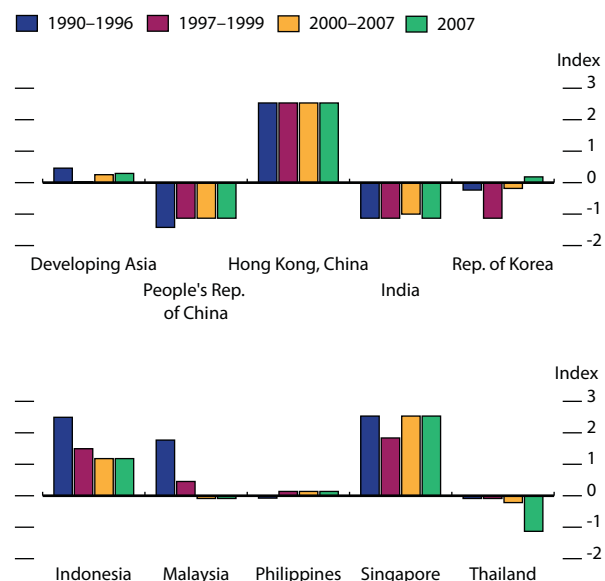
In that case, countries should accept the inevitability of a pickup in international inflows and their consequence, especially on real exchange rate appreciation. However, these conditions, especially allowing the exchange rate to be a channel in absorbing shocks, are not met in most of developing Asia. In such situations, a capital account restriction is needed and viewed as a useful tool to guard against economic instability as well as to preserve monetary autonomy.

A number of empirical studies<sup>19</sup> have found the ability of capital controls to restrict capital movements doubtful. The controls could come with significant costs, especially when they lead to deterioration in the business environment; also, they could lose their effectiveness when they become more permanent, because in time economic agents find ways of evading them. Thus capital restrictions should not be viewed as a long-term tactic.

In the medium to longer term, central banks should allow the exchange rate to adjust and act as a channel in absorbing external shocks, while economies should build their absorptive capacity for dealing with capital flows, especially in the form of finance sector reform and foreign exchange market development (Ito et al. 2009; ADB 2009b). If banks are well capitalized and diversified, they are more resilient to volatile capital flows and exogenous shocks. More developed equity and bond markets could promote greater risk diversification, helping to minimize the financial stability risks associated with capital flows. Hedging instruments, as well as a deep and liquid foreign exchange market, should be gradually developed to reduce excessive swings in exchange rates without the need for much intervention in the foreign exchange market.

Still, using these measures does not preclude implementation of capital restrictions and controls as part of policy instruments that are

2.3.4 De jure measure of financial openness, selected economies



Notes: The index ranges from -2.5 to 2.6. Higher values indicate higher degrees of financial and capital openness.

Developing Asia is taken to be the nine economies in this chart.

Source: M. Chinn and H. Ito. 2008. A New Measure of Financial Openness. *Journal of Comparative Policy Analysis* 10(3), pp. 309–322.

intended to deal with surging capital flows in the short run, even if a market-driven exchange rate regime is implemented.<sup>20</sup> The justification for imposing some control measures is based on the fact that capital flows are sometimes driven not by fundamental factors but by speculative aims, which are very volatile and disruptive. They tend to produce excessive swings in exchange rates, and a sudden reversal of capital flows can lead to significant misalignments of the exchange rate and endanger financial and economic stability. Instead of either allowing the exchange rate to adjust or implementing a sterilized foreign exchange intervention at the risk of overheating the economy, introducing capital controls could be useful in tackling the problem at its source. In any case, capital restrictions and controls should be well designed and initiated with caution because restrictions could lead to a serious deterioration in market sentiment.

### Types of capital account restrictions

Capital controls can be introduced to restrict both capital inflows and capital outflows, but the justifications for their use are slightly different. Although controls on capital inflows are introduced typically during a boom to restrict excessive and volatile capital, restrictions on outflows are normally imposed during a bust to limit downward pressure on a domestic currency and the depletion of foreign exchange reserves. In normal times, restrictions on capital outflows are mainly made to preserve saving for domestic investment, but liberalizing such outflows may act as a safety valve for speculative capital inflows (Box 2.3.3).

Regardless of purpose, capital controls can take two broad forms: administrative and market-based.<sup>21</sup> Administrative control measures restrict capital through outright prohibitions, an approval procedure that is either rule-based or discretionary, and explicit quantitative restrictions. Most administrative control measures seek to directly affect the volume of cross-border financial transactions. This type of control was introduced in many developing countries during the boom periods to restrict capital inflows. For example, in the early 1990s, Malaysia prohibited nonresidents to purchase money market securities and in September 2006, the PRC authorities restricted the borrowing of dollars by foreign bank branches in the PRC.

Market-based controls restrict capital by introducing additional costs associated with cross-border financial transactions. They include:

- Explicit taxes on cross-border financial flows (e.g., the Tobin tax).
- Implicit taxes in the form of non-interest-bearing compulsory reserve requirement (e.g., unremunerated reserve requirements).
- Dual (two-tier) or multiple exchange rate system or other indirect prudential controls (e.g., reporting requirements for specific transactions).

Market-based controls could affect only the price of capital or both the price and volume in cross-border transactions.

Explicit taxation involves the imposition of taxes on external financial transactions or on income resulting from the holding of foreign (or domestic) assets by nonresidents (or residents). Tax rates can be differentiated among the components of capital flows to discourage

### 2.3.3 Capital outflows liberalization

Easing restrictions on capital outflows is another option to redress the adverse impact of speculative capital inflows. This type of policy allows residents to diversify their risks and mitigates economic overheating, especially when the real exchange rate appreciates as the result of excessive capital inflows. Jongwanich (forthcoming) shows that, after the Asian financial crisis, capital outflows, including both FDI and other forms of capital flows, such as portfolio investment and bank loans, tend to have a greater impact on real exchange rate movements than capital inflows. Among all types of capital flows, portfolio outflows generally have the greatest impact on real exchange rate depreciation.

Recently, India and Thailand initiated a liberalization policy to encourage capital outflows. In 2005, firms in India were allowed to invest up to 200% of their net worth, with an upper limit of \$100 million a year, without approval from the Reserve Bank of India, and they were permitted to transfer funds through any authorized foreign exchange dealer (Athukorala 2009). In August 2009, the central bank of Thailand relaxed its rule on capital outflows by letting Thai companies with minimum assets of \$150 million invest directly in foreign securities without

going through mutual or private funds.

Expanding intraregional capital flows is another means to encourage capital outflows, and it should be of particular interest to countries in the region. Recent data show that such flows have been limited: intraregional flows of portfolio investment were only 17% of total portfolio flows in 2007, though up from 9% in 2001. However, stimulating intraregional capital flows would take time because the administrative infrastructure required, particularly in finance sectors throughout the region, would have to be set up.

In addition, the effectiveness of this measure depends on having sufficient pent-up demand for foreign assets. Without it, easing capital outflow controls can lead to repatriation of funds and even to additional net capital inflows. In addition, a key concern for encouraging capital outflows from developing Asia at this stage is that it may support the recycling of excessive saving without a structural adjustment in economic fundamentals. To improve both the quantity and quality of investment in the region, countries would be better off liberalizing capital outflows while redressing the problems both of excessive saving and the inefficient use of saving.

certain types and maturities. However, many problems can arise. The policy measure can be evaded easily through derivative instruments, and how such a tax should be managed is unclear—inefficient management could lead to considerable administrative costs, overwhelming the benefits of the controls.

In contrast to an explicit tax, implicit taxation in the form of unremunerated reserve requirements (URRs) requires banks and nonbanks to deposit a certain share of cross-border transactions at zero interest rate with the central bank for a given time. This measure implicitly reduces effective investor returns and discourages cross-border transactions. The control may be placed on a particular type of capital to discourage a certain maturity of capital transactions.

However, the effectiveness of URRs remains inconclusive because they are sensitive to choice of methodology, including the coverage of flows and the degree of reserve requirements. Le Fort and Lehman (2003) found that URRs reduced the volume of capital flows in the short run but lost effectiveness over time; also that the adverse impacts fell harder on small and medium-sized firms than on large firms with access to a wider range of financing instruments. Edwards (1999) argues that URRs may have protected the financial market in Chile from small shocks but they could not prevent the economy from large shocks (as in the recent crisis). Kawai and Takagi (2008) reviewed evidence of other countries implementing URRs and found the ability of URRs to affect volume and composition of private capital flows doubtful. Implementation of URRs in Thailand in

2006 also showed that the market reaction against the URRs was strong enough to make the authorities reverse policy.

In a dual (two-tier) exchange rate system, a central bank attempts to split the foreign exchange market between residents and nonresidents by either requesting or instructing domestic financial institutions not to lend to borrowers engaged in speculative activity. The two-tier market approach attempts to increase costs for speculators in domestic credit, who need to establish a net short domestic currency position, while allowing nonspeculative domestic credit demand to satisfy normal market exchange rates (Ariyoshi et al. 2000). This measure generally needs to be implemented in tandem with administrative control measures to directly restrict financial institutions from lending to speculative borrowers. In the late 1990s, this measure was implemented in Thailand, with the goals of segmenting the onshore and offshore markets and of limiting the reversal of capital inflows. Thai banks were required to suspend all transactions with nonresidents who could facilitate a buildup of baht positions in the offshore market. However, because of serious macroeconomic imbalances in the country, the central bank could not defend the position, and the baht leaked out from the onshore market. Eventually, the central bank abandoned the two-tier policy.

### Creating effective controls

Designing capital control measures is not an easy task for central banks, and no one control measure is effective across all countries at all times. However, past experience suggests that, to enhance the effectiveness of capital control measures, administrative capacity, including the competence of the bureaucratic system, is extremely important, and in many developing Asian countries, it should be improved. The ease with which restrictions are circumvented is mitigated somewhat when a country has a strong monitoring and enforcing system. Johnston and Ryan (1994) show that capital controls implemented in industrial countries were more effective than in developing countries since they could adjust their control measures better in response to the adaptation of speculative investors.

In addition, capital control measures can be more effective if they are imposed on investor-based controls, instead of transaction-based controls. Investor-based control can enable central banks to easily track who is investing in the country and how flows are coming in (Kawai and Takagi 2008). The qualified foreign investor scheme implemented in the PRC and the foreign institution investor classification applied in India are examples of investor-based controls that restrict short-term capital movements. Kimball and Xiao (2005) and Shah and Patnaik (2005) provide evidence of effectiveness of investor-based controls in managing capital accounts in the PRC and India. They also show that the volatility of capital flows in these countries is far lower than in other countries, even in India where a rapid expansion of capital flows has been evident.

Grenville (2010) argues that a normal withholding tax on interest income could become more effective in controlling speculative capital flows if it is levied by the source of investment income, instead of by the investor's country. Finally, the capital control policy could become even more effective if there is cooperation among regional and global bodies.

Such cooperation could endorse actions in principle and determine when their use is appropriate.



# Fiscal policy

## Introduction

In contrast to industrial countries, developing Asia has only limited experience in using government spending and tax changes to smooth the business cycle. Nevertheless, the recent crisis has awakened the region's interest in countercyclical fiscal policy. In fact, countries throughout developing Asia quickly adopted huge fiscal stimulus packages to cushion the impact of the crisis. The stimulus is widely believed to have contributed to the region's surprisingly speedy and robust recovery. What made such a decisive fiscal response possible was the region's healthy state of public finances, the result of a long history of fiscal prudence and discipline. The key challenge now facing the region's fiscal policy is how to contribute meaningfully to sustainable growth in the postcrisis period without compromising its valuable tradition of fiscal sustainability.

Asia's uncharacteristic and unprecedented fiscal activism brings a number of important issues to the fore. First, this section looks at the fiscal stimulus programs implemented by Asian governments. The next logical question is how much the fiscal stimulus in fact contributed to the region's recovery. A related issue is the potential of government spending and tax cuts to contribute to output stability in the postcrisis period. Given the enabling effect of Asia's fiscal space, evident in its relatively low public debt-to-GDP ratio, it would be desirable to empirically validate the conventional wisdom that Asia's public finances are in good shape as a result of responsible fiscal behavior in the past.<sup>22</sup> Two related, forward-looking issues are the implications of the stimulus on the region's medium-term fiscal sustainability; and the role of fiscal policy in addressing Asia's postcrisis medium-term structural challenges, particularly rebalancing growth toward domestic sources.

## Size and structure of developing Asia's fiscal stimulus packages

The collapse in exports, coupled with the weakness of private consumption and investment, galvanized Asian governments to introduce fiscal stimulus packages, that is, the discretionary loosening of a government's fiscal stance. This section presents a broad overview of the size and structure of the region's fiscal stimulus.

Measuring the size of the stimulus is complex because of an inherent tendency for the fiscal balance to deteriorate during recessions, as tax revenues fall and government spending rises. With this qualification in mind, taking a look at the fiscal stimulus is still worthwhile. Although the PRC grabbed the headlines with its massive CNY4 trillion (\$585 billion) package, which amounted to a huge 13% of GDP, many other Asian countries rolled out large fiscal stimulus programs of their own

(Figure 2.4.1). In fact, the average stimulus size in 15 developing Asian economies was equal to 7.5% of GDP, almost three times the level of 2.8% for the G7 nations. Many countries have since injected additional stimulus. According to Khatiwada (2009), for 2009, the economic stimulus announced by 32 countries (including all the G20 countries) amounted to 1.4% of global GDP, with almost 90% of it coming from G20.

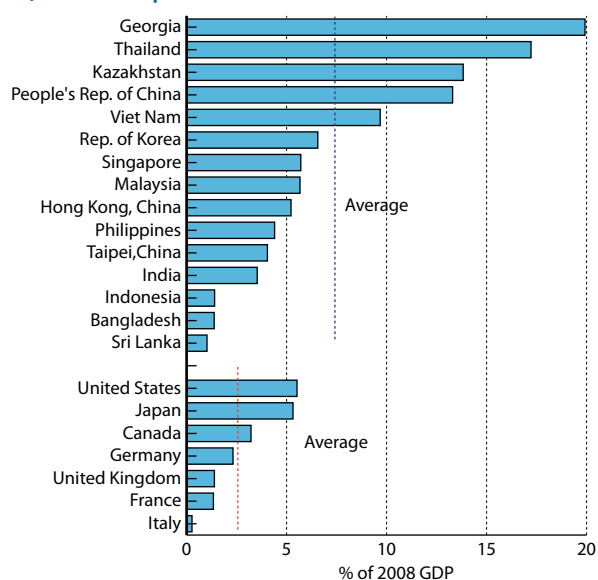
Tax cuts account for more than a third of the stimulus plans of industrial economies, while infrastructure projects make up about half of the packages in “developing and emerging” economies. The share of infrastructure spending in the total fiscal package is three times as high in these economies as in industrial countries (Figure 2.4.2). Developing Asia’s fiscal stimulus packages are consistent with this pattern.

Among the G20 countries, implementation rates appear to be higher for revenue measures and social transfers than for infrastructure projects (IMF 2009b). The implementation of capital expenditures usually takes a longer time as the government pronouncement needs to be followed by the allocation of budget, the transfer of resources to different levels of government, the choice of contractors, procurement, and funds disbursement.

Hur, Jha, Park, and Quising (forthcoming) offer a detailed description of the fiscal stimulus programs implemented by 12 major Asian economies. The general picture that emerges is one of heightened fiscal activism during the global crisis. By and large, the evidence supports the view that the developing Asian governments boldly used countercyclical fiscal policy to offset the slowdown of economic activity. The structures of the stimulus packages may differ across countries; for example, the PRC has given high priority to promoting small and medium-sized enterprises, whereas Korea is pushing fiscal measures that will contribute to a cleaner environment. Whatever the makeup of the package, the countries across the region have aggressively boosted public spending and cut taxes to support demand and growth.

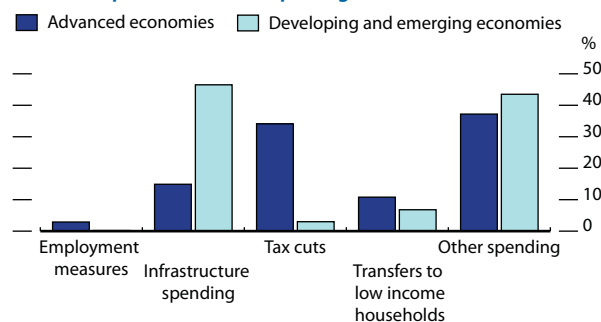
On balance, the region’s stimulus packages are tilted toward higher spending, particularly on infrastructure investments. Government spending dominates tax cuts as the main component of the fiscal stimulus package, although there are exceptions, such as in Indonesia. This tendency is consistent with the region’s long-standing progrowth orientation; more and better infrastructure will benefit growth well beyond the short run. Even given delays in some cases (as in Indonesia, for example), Asian governments have generally rolled out the stimulus measures quickly and decisively. Although the magnitudes of the stimulus packages differ across the countries, the general regional trend was toward stimuli sizable enough to have an effect. Overall, an examination of the fiscal stimulus packages confirms that Asia has in fact proactively used fiscal tools for countercyclical purposes during the global crisis. Such activism marks a sharp departure from the region’s traditional fiscal conservatism.

#### 2.4.1 Stimulus plans of selected economies



Source: Y. Zhang, N. Thelen, and A. Rao. 2009. Social Protection in Fiscal Stimulus Packages: Some Evidence. UNDP/ODS Working Paper. [http://www.undp.org/developmentstudies/docs/socialprotection\\_fiscalstimulus\\_march2010.pdf](http://www.undp.org/developmentstudies/docs/socialprotection_fiscalstimulus_march2010.pdf)

#### 2.4.2 Composition of fiscal packages



Source: S. Khatiwada. 2009. Stimulus Packages to Counter Global Economic Crisis: A Review. International Institute for Labour Studies Discussion Paper 196/2009. <http://www.ilo.org/public/english/bureau/inst/publications/discussion/dp19609.pdf>, p. 19.

## Has Asia's fiscal stimulus contributed to its recovery?

### Empirical framework

This subsection provides a broad overview of the methodology and data used for empirical analysis.<sup>23</sup> The sample consists of 18 of the G20 economies, including the PRC, India, Indonesia, and Korea, plus six other developing Asian countries: Hong Kong, China; Malaysia; Philippines; Singapore; Taipei, China; and Thailand. The total sample of 24 countries thus includes eight major industrial countries, six non-Asian developing countries, and 10 developing Asian countries. The data set is an unbalanced panel of quarterly data where the length of each country's data is determined by availability.

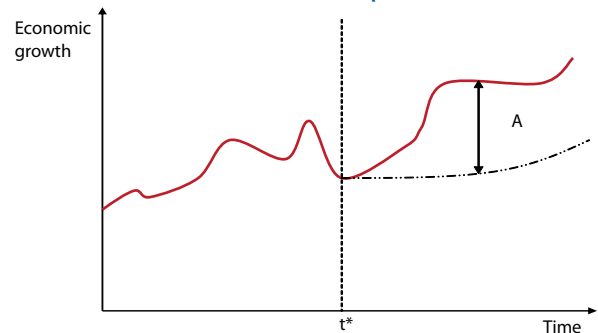
Broadly speaking, the empirical framework consists of two stages. The first stage involves using an econometric model to generate dynamic GDP forecasts of each sample country during the global crisis: the fourth quarter of 2008, and the first and second quarters of 2009. This sample period was selected because, during this period and especially the fourth quarter of 2008 and the first quarter of 2009, Asia's crisis-induced downturn reached its peak as a result of collapsing exports and weak private demand. By the second quarter of 2009, some Asian countries already began to recover, and by the third quarter recovery was under way in many more.

The second stage involves a cross-country regression in which the gap between the actual GDP and forecast GDP is regressed on a number of explanatory variables. Using panel data from the 24 sample countries, the analysis seeks to answer the following question: Which variables help explain why actual GDP growth exceeded forecast GDP during the crisis period?

In Figure 2.4.3,  $t^*$  represents the time the global crisis broke out—the third quarter of 2008. The solid line represents the actual output path, and the dotted line represents the forecast output path. The distance  $A$  thus represents the gap between the forecast and actual output paths during the crisis. The explanatory variables include lagged domestic GDP growth, global GDP growth, government revenue, government expenditure, the policy interest rate, the term spread, and the real effective exchange rate. Of particular interest is the impact of the two fiscal variables—government revenues and expenditures—on  $A$ . The expected effect of expenditures is positive, whereas that of revenues is negative. The expected effect of both lagged domestic GDP growth and global GDP is positive. Lower policy interest rates and smaller term spreads are proxies for expansionary monetary policy. Finally, the depreciation of the real effective exchange rate should boost exports and output.

In addition to these explanatory variables, three interaction variables for government expenditures and revenues are included. Of these, the most important is the dummy for developing Asia, which captures the output impact of fiscal policy for the developing Asian subsample. A second variable captures the impact of fiscal soundness, and a third

2.4.3 Path of forecast and actual output



Note: The solid line represents the path of actual output, the dotted line the path of forecast output, and  $t^*$  the time the global financial crisis broke out, i.e., the third quarter of 2008.

Source: S. K. Hur, S. Jha, D. Park, and P. Quising. Forthcoming. Did Fiscal Stimulus Lift Developing Asia Out of the Global Crisis? A Preliminary Empirical Investigation. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

variable captures the effect of economic openness on the output impact of fiscal policy.

### Empirical results

Table 2.4.1 reports only the statistically significant results of the empirical analysis. For the whole sample of 24 countries, monetary policy variables—policy interest rate and term spread—have a negative and significant effect. Lagged domestic GDP growth has a positive and significant effect. In terms of insignificant results, which are not reported in the table, neither fiscal policy variable—government expenditures and revenues—has a significant effect on the gap between actual and forecast GDP. Global GDP growth and real depreciation are also insignificant. However, interestingly, the interaction term between government expenditures and the dummy variable for developing Asia is positive and significant at the 5% level. Therefore, although government expenditures are insignificant for the whole sample, they are positive and significant for the developing Asian subsample. On the other hand, government revenues are insignificant for the Asian subsample, as they are for the whole sample.

**2.4.1 Regression results: Dependent variable is gap between actual output and forecast output**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged GDP growth	0.750*** (0.11)	0.777*** (0.10)	0.670*** (0.11)	0.703*** (0.10)	0.657*** (0.12)	0.705*** (0.11)	0.640*** (0.13)	0.695*** (0.13)
Term spread		-0.715* (0.37)		-0.774** (0.37)		-0.738* (0.38)		-0.721* (0.39)
Policy interest rate	-1.198** (0.48)	-1.278*** (0.47)	-1.058** (0.47)	-1.121** (0.45)	-1.147** (0.5)	-1.189** (0.49)	-1.088** (0.54)	-1.157** (0.53)
Government expenditure for Asian countries			0.283** (0.13)	0.286** (0.12)	0.331** (0.14)	0.318** (0.13)	0.339** (0.14)	0.326** (0.14)
Observations	60	60	60	60	57	57	57	57
R-squared	0.56	0.57	0.61	0.62	0.63	0.64	0.63	0.64

Notes: Standard errors are in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Source: S. K. Hur, S. Jha, D. Park, and P. Quising. Forthcoming. Did Fiscal Stimulus Lift Developing Asia Out of the Global Crisis? A Preliminary Empirical Investigation. *ADB Economics Working Paper Series*.

Overall, the empirical results lend support to the popular belief that the fiscal stimulus boosted aggregate demand and output in developing Asia during the global crisis. In particular, government spending appears to have had a positive effect on output. The above results suggest that the fiscal stimulus may have been more effective in developing Asia than elsewhere. This is consistent with the widespread belief that the region's fiscal response was more decisive—that is, quicker and bigger—than in other parts of the world. At a more fundamental level, however, a great deal of caution is needed in interpreting the results, given the narrow time window of the sample period.<sup>24</sup> At best, the empirical analysis marks a preliminary first step toward better understanding the actual contribution of Asia's fiscal stimulus to its remarkable V-shaped rebound. Much more research needs to be done for a more definitive assessment.

## Can countercyclical fiscal policy stabilize output as Asia returns to normalcy?

The evidence of the preceding section supports the belief that developing Asia's unprecedented fiscal stimulus has contributed to the region's recovery. However, there is a risk that policy makers may make unwarranted conclusions about the desirability of countercyclical fiscal policy in the postcrisis period from its apparent effectiveness during the crisis period. To guide them as the region returns to normalcy, this section empirically investigates whether countercyclical fiscal policy helped stabilize output in the precrisis normal times. The section also explores the status of automatic stabilizers in Asia as well as policy directions for improving their effectiveness.

### Effectiveness of countercyclical fiscal policy in Asia: Evidence from historical time-series data

The effectiveness of countercyclical fiscal policy depends on the relative importance of tax cuts versus government spending. Intuitively, government spending can be seen as having a higher influence on output because it has a more immediate and direct impact on aggregate demand through government's direct purchase of goods and services (e.g., public works and infrastructure). On the other hand, tax cuts have a smaller impact on aggregate demand because households and firms may save the additional income resulting from tax cuts. Since tax cuts and government spending may have differential effects on output, the composition of fiscal policy matters.

Using historical time-series data from 10 developing Asian economies, Jha et al. (forthcoming) estimate the dynamic effects of unanticipated fiscal shocks. In contrast to the empirical analysis of the preceding section, which examines panel data from a group of countries during the global crisis, the analysis of this section looks at data from individual countries over a much longer time span. Table 2.4.2 shows the short- and long-run impacts of a revenue shock on output. If the discussion is limited to statistically significant effects, a tax cut has a positive short-run effect in Indonesia, Malaysia, and the Philippines and a positive long-run effect in the Philippines. A tax cut has a *negative* effect on Singapore's output in both the short and the long run and on Taipei,China's long-run output. This surprising result may arise from a high propensity to save among households or from leakages through trade and remittances. Table 2.4.3 shows the short- and long-run impacts of positive expenditure shocks on output. If the discussion is limited to statistically significant results, higher government spending has a positive short-run effect in the Philippines and Singapore and a negative long-run effect in Hong Kong, China and Thailand.

Overall, the historical time-series evidence provides at best only limited support for the countercyclical effectiveness of policy in developing Asia, particularly in the South-East Asian economies. In both the short and long run, government spending and tax cuts have a positive effect on output in many countries, but most of the effects are insignificant. This finding strengthens the case for caution

### 2.4.2 Impacts of positive revenue shocks – i.e. higher taxes – on real GDP (%)

Shocks on	Impacts in	Real GDP
China, People's Rep. of	SR	0.0171
	LR	0.003
Hong Kong, China	SR	-0.0023
	LR	-0.0178
India	SR	-0.0017
	LR	-0.0185
Indonesia	SR	-0.0064*
	LR	-0.0038
Korea, Rep. of	SR	0.0006
	LR	-0.0076
Malaysia	SR	-0.0070*
	LR	-0.0087
Philippines	SR	-0.0119*
	LR	-0.0309*
Singapore	SR	0.0063*
	LR	0.0529*
Taipei,China	SR	0.0003
	LR	0.3959*
Thailand	SR	0.0035
	LR	0.0076

LR = long run; SR = short run

Source: S. Jha, S. Mallick, D. Park, and P. Quising. Forthcoming. Whither Tax Cuts or Government Spending? Some Evidence from Developing Asia. *ADB Economics Working Paper Series*.

### 2.4.3 Impacts of positive expenditure shocks on real GDP (%)

Shocks on	Impacts in	Real GDP
PRC	SR	0.0065
	LR	-0.01
Hong Kong, China	SR	-0.0015
	LR	-0.0174*
India	SR	0.0027
	LR	-0.0526
Indonesia	SR	-0.0004
	LR	0.0018
Korea	SR	0.0086
	LR	-0.0083
Malaysia	SR	0.0023
	LR	0.0098
Philippines	SR	0.0053*
	LR	-0.0113
Singapore	SR	0.0057*
	LR	0.023
Taipei,China	SR	-0.0021
	LR	0.1073
Thailand	SR	-0.0017
	LR	-0.0577*

LR = long run; SR = short run.

Source: S. Jha, S. Mallick, D. Park, and P. Quising. Forthcoming. Whither Tax Cuts or Government Spending? Some Evidence from Developing Asia. *ADB Economics Working Paper Series*.



### 2.4.1 Automatic stabilizers in developing Asia

#### What are they?

Automatic stabilizers are taxes and transfers that change automatically to dampen economic cycles without requiring any explicit action by the government. Such countercyclical stabilizers are triggered by built-in tax codes or spending rules that increase net government expenditure in a downswing and reduce it in a boom. For example, public spending on food stamps or employment programs automatically goes up as more people apply for benefits.

#### Why are they useful?

Instituting automatic stabilizers for countercyclical stabilization has several advantages. Above all, they are not only endogenous and predictable but also timely, targeted, and temporary, thereby promoting economic stability and social protection without jeopardizing fiscal sustainability.

Once designed and established, automatic stabilizers have the advantage of being outside the political process and thus free from political interference. This is an especially important feature for developing countries where discretionary fiscal policy may be inefficient and inequitable due to weak institutions, governance, and policy environment. In addition, automatic stabilizers have a strong element of social protection and social safety nets.

However, allocating benefits on the basis of need rather than political economy factors requires good design, implementation, and governance.

#### Industrial versus developing economies

Industrial economies typically support automatic stabilizers such as progressive and well-administered

income taxes, corporate taxes, indirect taxes, and committed social spending, all of which are rule-based (and so they automatically adjust during economic swings and contain a pro-poor element). The larger governments of Europe have built strong automatic stabilizers.

In contrast, most poor countries have very small governments and weak automatic stabilizers. Their income taxes and transfer programs are thus too limited to have a sizable impact (Box table).

Moreover, in low-income countries, automatic stabilizers are procyclical due to institutional failures and a lack of access to finance during economic downturns (Kraay and Servén 2008). Developing economies usually rely on discretionary fiscal policies that are often not designed to stabilize the economy. Empirical evidence from the past 30 years suggests limited success of these countries in using discretionary fiscal policy to stabilize output fluctuations (Kraay and Servén 2008).

#### Selected fiscal indicators of different income groups of countries

Country group	Total spending/ GDP (%)	Direct taxes (+ social security contributions)/ total revenue (%)	Transfers/ GDP (%)
Low income	19.5	26	6.5
Middle income	27.8	35.6	11.1
High income	32.9	53.6	18.4

Source: Luis Servén. 2009. Comments on Antonio Fatás, Workshop on fiscal policy. IMF. June. <http://www.imf.org/external/np/seminars/eng/2009/fispol/pdf/serven.ppt>

against interpreting the apparent usefulness of the anticrisis fiscal stimulus as a mandate for pursuing greater fiscal activism beyond the crisis. The limited evidence in favor of countercyclical fiscal policy is perhaps unsurprising given the relative absence of countercyclical fiscal policy in the region. For example, in comparison to the industrial countries, automatic stabilizers remain underdeveloped in developing Asia. Therefore, one policy option for improving the countercyclical effectiveness of fiscal policy in the region is to strengthen automatic stabilizers (Box 2.4.1).

## State of fiscal health in Asian countries

What enabled Asian governments to quickly unleash big stimulus packages was ample fiscal space built up over years of sustained fiscal prudence. Fiscal space will also help the region's governments cope with large shocks in the future. This section assesses the state of fiscal health in developing Asia by examining the evolution of fiscal balances and public



### 2.4.1 Automatic stabilizers in developing Asia (continued)

Overall, conventional stabilizers are weak on the revenue side, and very few exist on the expenditure side. Income taxes are not necessarily progressive, and they are often poorly administered and riddled with evasion. Weak fiscal institutions and poor enforcement result in low tax revenue. Another reason for weak stabilizers in developing economies is inefficient delivery mechanisms for social spending, such as employment guarantees.

Among Asia's social protection policies, social insurance and social assistance and welfare programs account for most of the automatic stabilizers.<sup>1</sup> Yet, in as many as 15 of 32 Asian economies, these programs account for barely 2% or less of GDP. Hence, such spending is largely ineffective from an economic perspective.

#### Designing effective automatic stabilizers

A major problem with discretionary welfare programs is the political difficulty in withdrawing them once economic conditions improve. The effectiveness of such spending will increase if it is based on a set of well-defined criteria and is not discretionary.

To provide insurance against recessions, automatic stabilizers must be countercyclical. This can be done, for example, by making expenditure decisions automatic through legislatively-mandated increases if food price inflation exceeds a certain prespecified level.

To be cost effective, social programs must also be designed to be pro-poor. For example, food and fuel subsidies distort prices, do not target the poor well, and can be replaced by cash transfers. Moreover, identification of the target group eligible for social programs should be made dynamic so that the list of beneficiaries

automatically adjusts in tandem with changing economic conditions. Although the administrative costs of identifying beneficiaries can be high, the costs can be offset by more efficient delivery mechanisms.

Making spending on social insurance and social assistance pro-poor boosts their impact on demand as well because the poor tend to spend more out of additional income. Introducing incentives can also create a pro-poor stabilization effect in social programs (Ravallion 2009). For example, fixing wages in employment guarantee programs at suitable levels enhances self-selection of the poor to the programs.

As developing Asia emerges from the crisis, it is time to build automatic stabilizers with desirable characteristics to better prepare the region for future shocks. One big advantage of well-designed stabilizers is that they do not threaten fiscal sustainability.

At the same time, the capacity to design and implement effective and efficient stabilizers depends critically on the level of institutions and governance. In countries where these are inadequate, strengthening the overall fiscal policy environment must precede the establishment of stabilizers.

<sup>1</sup> Social insurance programs cover the risks associated with unemployment, sickness, maternity, disability, industrial injury, and old age. Social assistance and welfare programs include programs targeted at the disabled, the indigent, those affected by disasters, and other vulnerable groups, cash in-kind transfers, and temporary subsidies for utilities, housing, and other needs.

debt across the region and over time. It also explores the response of the ratios of primary fiscal balances to public debt in order to assess whether Asian governments have made the necessary adjustments to deteriorating debt positions. Primary fiscal balance (the overall fiscal balance minus interest payments on public debt) is especially important because it provides an indication of current fiscal effort. Interest payments are predetermined by the size of budget deficits in the past.

### Fiscal balances and public debt in developing Asia

Fiscal sustainability refers to whether the government budget can be smoothly financed without generating explosive increases in public debt (or money supply) over time. When this condition is met, the budget is said to be sustainable; when it is not, it is unsustainable. Even though fiscal sustainability is very important, there is no universal agreement about how best to assess it. However, a descriptive analysis of the evolution of debt ratios and fiscal balances over time, combined with

2.4.4 Fiscal indicators, percentage of GDP							
Subregion	Period	Public debt	Primary surplus	Fiscal surplus	Government expenditure	Government revenue	Interest payments
Central Asia	1990–1997	35.1	-4.7	-7	21	14	1.3
	1998–1999	68.7	-3.5	-5.5	20.2	14.7	1.4
	2000–2008	34.5	1	0.2	25	25.2	0.8
	All years	38	0.3	-0.7	24.3	23.6	0.9
East Asia	1990–1997	17.3	-0.8	-1.4	18.2	16.7	1
	1998–1999	35.2	-3.5	-3.7	23.8	19	1.7
	2000–2008	32.2	0.9	0.2	21.8	22	1
	All years	27	-0.2	-0.8	20.7	19.7	1.1
Southeast Asia	1990–1997	48.3	4.8	2.4	19.4	21.8	2.8
	1998–1999	57.6	-1	-2.8	21.4	18.7	2.1
	2000–2008	56.7	0.3	-1.7	20.7	19.1	2.2
	All years	53.9	1.7	-0.4	20.3	20	2.4
South Asia	1990–1997	63.6	-2.6	-6	27.5	21.6	3.3
	1998–1999	62	-1.9	-5	24	19.1	3.1
	2000–2008	65.1	-2.1	-5.1	25.5	20.5	2.9
	All years	64.2	-2.3	-5.4	26.1	20.8	3.1
The Pacific	1990–97	39	1.9	-0.2	38.7	38.5	2.4
	1998–99	36.7	-0.5	-2.1	36.4	34.3	2.2
	2000–2008	40.2	-1.7	-2.4	42.7	40.1	1.5
	All years	39.5	-0.4	-1.7	40.7	38.9	1.8

Source: As Figure 2.4.5.

estimates of fiscal policy reactions—how governments have traditionally responded to rising debt levels—can be useful tools in assessing the prospects for fiscal sustainability.

Table 2.4.4 and Figures 2.4.5 and 2.4.6 display key fiscal indicators for the region for 1990–2008 as a whole and over three subperiods. To highlight relevant shifts in the indicators, the three subperiods chosen are the years leading up to, during, and after the Asian crisis of 1997–98. In line with ADB classifications, the region is broken down into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific. Both overall and primary fiscal balances in Table 2.4.4 are measured as the difference between receipts and spending so that a positive sign implies a fiscal surplus and a negative sign, a deficit.

Several descriptive observations can be made on the basis of the fiscal indicators shown:

- For the period as a whole and across the region, fiscal balances are narrowly dispersed.<sup>25</sup> Fiscal balances are in small deficits over the entire 1990–2008 period, but the deficits are somewhat higher in the Pacific and especially in South Asia (at over 5% of GDP). With the exception of Central and South Asia, which were not hit hard by the Asian crisis,<sup>26</sup> other subregions saw their fiscal deficits increase in the late 1990s, but the deficits were then generally pared back.
- Across the entire period, the experiences with primary fiscal balances range widely, with some subregions averaging surpluses and others averaging deficits. Southeast Asia, however, is the only subregion running a large primary surplus, whereas subregions such as South Asia have on average been running relatively large and persistent primary deficits.

- With the exception of the Pacific grouping, where government spending and revenues are close to or above 40% of GDP, the average levels of government spending and revenues across the region are relatively low and clustered mainly at the low end of the 20%–25% of GDP range. These ratios are well below the averages in many other parts of the world, particularly in developed Europe.
- Public debt ratios in the region display considerable heterogeneity and variation over time. Across much of the region, public debt ratios have on average been relatively low (below 40%–50% of GDP), with the notable exceptions of Southeast and South Asia. In Southeast Asia, the ratio has been in the range of 50%–60% of GDP in the period since the Asian crisis. In South Asia, on the other hand, the ratio has been persistently above 60%. Public debt rose sharply in Central Asia in the late 1990s but then was brought down by means of a number of fiscal adjustment and debt restructuring programs.
- Across the region, interest payments on the public debt have been around 1%–3% of GDP and show no clear tendency to increase over time. Generally, subregions with the highest debt-to-GDP ratios also have the highest levels of interest payments relative to GDP. However, the relationship between interest payment and debt is not always very close since it is influenced by funding costs, including access to concessionary funding.

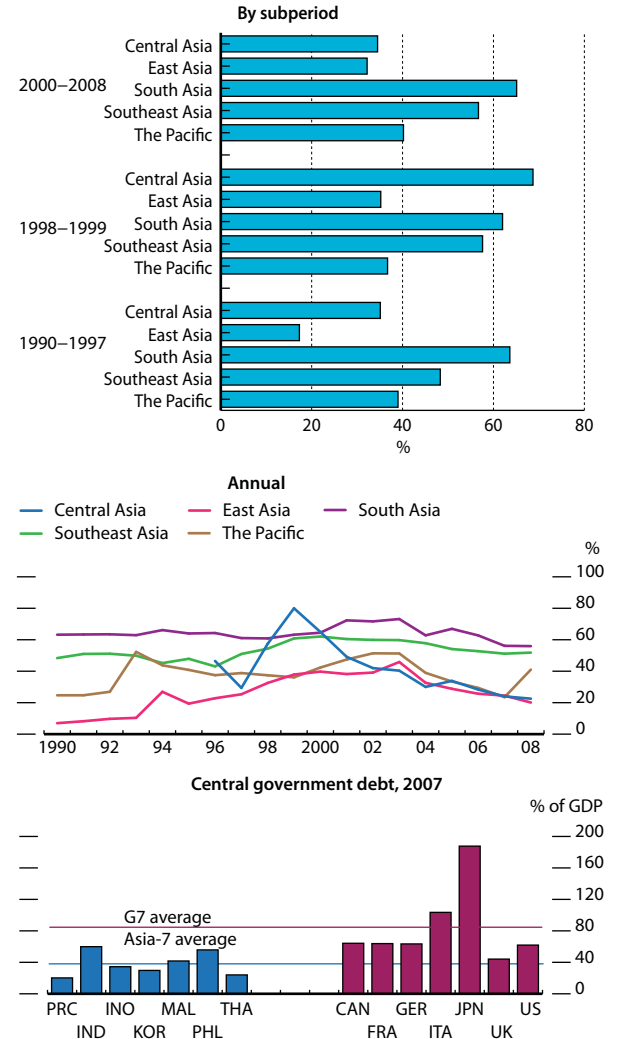
The balance of evidence from the evolution of fiscal balances and public debt across developing Asia over time indicates that the region is in relatively good fiscal shape.

**Asia’s tradition of fiscal responsibility: Fiscal reaction functions**

Fiscal reaction functions are a powerful tool in assessing debt sustainability because they involve so-called decision rules for primary fiscal balances, particularly for how primary balances respond to change in public debt and other variables. Intuitively, the basic assumption is that primary surpluses tend to increase as public debt increases over time, thus supporting sustainability. The intensity with which primary surpluses adjusts to rising public debt is a good measure of fiscal adjustment efforts in the past. Ultimately, it gives some indication of Asian governments’ capacity to deal responsibly with both current and future debt pressures (even though of course the past is a less than perfect guide to future).

The fiscal reaction tests, based on broad and representative samples of countries over the period 1990–2008, point to a significant degree of responsibility in managing public debt. The empirical framework is based on Mendoza and Ostry (2007). The first four columns of Table 2.4.5 report the estimation results from a number of regression models based on data from an unbalanced panel of the whole sample of 33 developing

**2.4.5 Debt-to-GDP ratios**



PRC = People’s Rep. of China; IND = India; INO = Indonesia; KOR = Rep. of Korea; MAL = Malaysia; PHI = Philippines; THA = Thailand; CAN = Canada; FRA = France; GER = Germany; ITA = Italy; JPN = Japan; UK = United Kingdom; US = United States.

Notes: Asia-7 comprises the People’s Republic of China, India, Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand. Central Asia excludes Turkmenistan; Southeast Asia excludes Brunei Darussalam and Myanmar; the Pacific excludes Kiribati, Micronesia, Nauru, Timor-Leste, Tonga, and Tuvalu.

Sources: ADB estimates based on data from: Asian Development Bank. Various issues. *Asia Economic Monitor*. <http://aric.adb.org/asia-economic-monitor>; *Asian Development Outlook* database; *Key Indicators* database; CEIC Data Company (accessed 15 March 2010); International Monetary Fund. Article IV Staff Reports. <http://www.imf.org> and World Economic Outlook online database, October 2008; D. Jaimovich and P. Ugo. 2006. Public Debt Around the World: A New Dataset of Central Government Debt. Inter-American Development Bank Working Paper No. 561. <http://ssrn.com/abstract=894119>; World Bank. World Development Indicators online database and Government Financial Statistics online database (both accessed 1 December 2010); Indonesia Debt Management Office. <http://www.dmo.or.id> (accessed 15 March 2010).

## 2.4.5 Primary surplus: Econometric estimation results, 1990–2008

Regressors	Large sample (33 developing Asian economies)				Small sample (7 developing Asian economies)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	FGLS (linear)	OLS FE (linear)	SGMM (linear)	FGLS (quadratic)	FGLS (linear)	OLS FE (linear)	SGMM (linear)	FGLS (quadratic)
L.debt <sup>1</sup>	0.0578***	0.12445***	0.1279	0.1651***	0.04973***	0.06253***	0.0733***	-0.0637*
L.debt <sup>2</sup>				-0.0009***				0.0011***
GDP Gap <sup>3</sup>	0.0987***	0.1503	0.1733*	0.1096***	.08141***	0.05428*	0.1408***	0.08147***
GEXP Gap <sup>4</sup>	-0.1333***	-0.1263***	-0.1575***	-0.1421***	-0.1648***	-0.16143***	-0.1843***	-0.1614***
Observations	417	384	384	417	126	119	119	126

Notes:

FGLS = feasible generalized least squares; OLS FE = ordinary least squares within-estimator, allowing for fixed (country) effects; SGMM = system general method of moments.

For a description of the regression models, see C. Adams, B. Ferrarini, and D. Park. Forthcoming. Fiscal Sustainability in Developing Asia. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

The regression uses two-tailed Wald tests of zero coefficients (\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%).

Figure 2.4.7 is based on the coefficients estimated by model (4) and Figure 2.4.8 is based on model (8).

Notes on regressors:

1 Debt/GDP ratio: lagged one year, this ratio enters regressions at two-year averages for the case of regressions involving the sample of all economies.

2 Squared Debt/GDP ratio: lagged one year, this ratio enters regressions at two-year averages for the case of regressions involving the sample of all economies.

3 GDP deviation from Hodrick-Prescott trend, in percent.

4 Total government expenditure deviation from Hodrick-Prescott trend, in percent.

Economies included:

Large sample (33): Afghanistan; Armenia; Azerbaijan; Bangladesh; Bhutan; Cambodia; People's Rep. of China; Fiji Islands; Georgia; Hong, Kong, China; India; Indonesia; Kazakhstan; Rep. of Korea; Kyrgyz Rep.; Lao People's Dem. Rep.; Malaysia; Maldives; Marshall Islands; Mongolia; Nepal; Pakistan; Palau; Papua New Guinea; Philippines; Solomon Islands; Sri Lanka; Taipei, China; Tajikistan; Thailand; Uzbekistan; Vanuatu; and Viet Nam.

Small sample (7): People's Rep. of China, India, Rep. of Korea, Indonesia, Philippines, Malaysia, and Thailand.

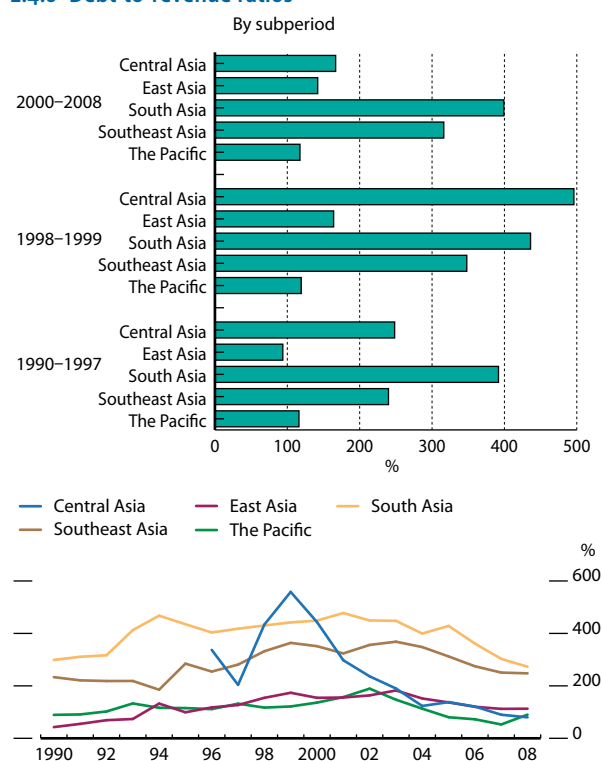
Source: As Figure 2.4.5.

Asian countries. The last four columns do the same for a balanced panel of seven regional countries. In all the estimation equations, the dependent variable is the primary fiscal surplus and the key independent variable is the lagged value of the debt ratio. Additional variables include the square of lagged debt, which captures nonlinear fiscal response to debt, and two control variables—primary government spending relative to trend and output gap—which capture temporary influences on fiscal policy.

The central result from the regressions for both the whole sample and the subsample is that lagged public debt has a significant and positive effect on primary fiscal balance, where both variables are defined as shares of GDP. The implication is that countries tighten their fiscal stance in response to a deterioration of the debt position. The estimated coefficients for lagged debt are also broadly in line with other studies (such as IMF 2003; Mendoza and Ostry 2007). The estimated coefficients for the two control variables have the expected sign and are significant. All in all, the results are consistent across different regression models and thus lend fairly robust support to the hypothesis of a fiscally responsible Asia.

The basic thrust of the estimation results is best grasped visually. Figures 2.4.7 and 2.4.8 show the estimated relationship between primary fiscal surpluses and the previous period's

## 2.4.6 Debt-to-revenue ratios



Notes: Central Asia excludes Turkmenistan. Southeast Asia excludes Brunei Darussalam and Myanmar. Pacific excludes Kiribati, Micronesia, Nauru, Timor-Leste, Tonga, and Tuvalu.

Sources: As Figure 2.4.5.

public debt, each as a share of GDP. Figure 2.4.7 is derived from the whole sample; Figure 2.4.8, from the subsample of seven countries. A prevalence of responsible fiscal policies would entail upward-sloping fiscal reaction functions, that is, Asian governments on average expand primary surpluses in reaction to heightened public debt. Both figures depict an upward-sloping reaction function, but they take different shapes, reflecting the different underlying samples of countries.

Countries obviously differ sharply in terms of both the average level and the variability of fiscal balances and public debt, as well as in their capacity to react to increasing debt pressures. Although the results hide country-specific factors and are not representative of all the sample countries, they do suggest that, on average, primary fiscal balances in the region respond in a stabilizing manner to increases in debt ratios.

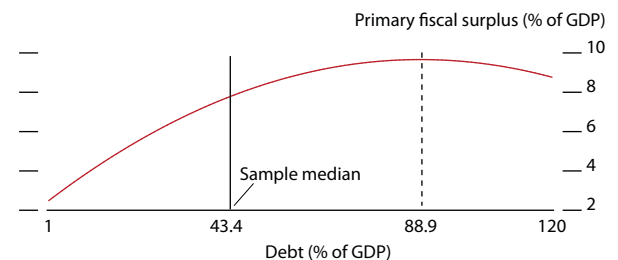
Moreover, the nonlinear shape of the fiscal reaction functions provides some evidence of differential effects whereby the primary balance function either has a U shape or an N shape. In a U-shaped function, fiscal adjustment first moderates as debt ratios increase but then strengthens when a certain critical debt ratio is reached—a wake-up call effect. In an N-shaped function, fiscal response initially strengthens but falters when debt levels reach very high levels—a fatigue effect. Importantly, Figures 2.4.7 and 2.4.8 show that in the U-shaped function the turning point lies well below the median debt ratio, whereas in the N-shaped function the turning point lies well above it. In other words, most countries fall within the upward-sloping section of the estimated reaction functions, suggesting that the region as a whole has been fiscally responsible.

Based on these results, two broad conclusions can be drawn:

- Across the region, the evidence is consistent with a statistically significant positive response of the primary surplus-to-debt ratios, that is, consistent with stabilizing behavior. Reflecting considerable heterogeneity across countries and over time, however, the average fiscal behavior in the region is not easily captured by a single one-size-fits-all specification of the linkage between primary fiscal balances and debt ratios.
- The evidence is consistent with nonlinear responses of the primary balance-to-debt ratios and with the existence of debt tipping points. These may be of either the U- or the N-shape kind, with different implications for the effects of fiscal slippages on the adjustment effort.

Overall, the evidence in this section confirms the view that developing Asia enjoyed healthy public finances as it entered the crisis. The fiscal space that allowed the region to implement an unprecedented fiscal stimulus during the crisis was the result of a tradition of fiscal prudence. This tradition includes making necessary fiscal adjustments in response to rising debt ratios. Maintaining fiscal prudence will be pivotal to securing the fiscal space the region will need to tackle future shocks, but the evidence of this section provides grounds for optimism about the region's capacity to do so.

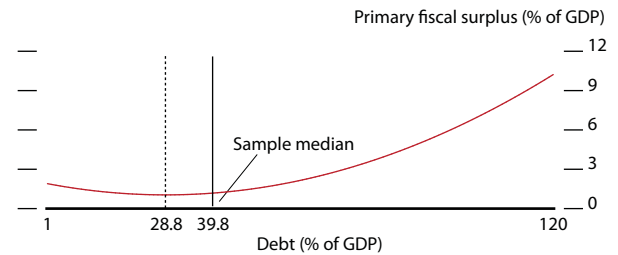
**2.4.7 N-shaped primary balance response function**



Notes: Based on feasible generalized least squares regression on the whole sample. Debt data are 2-year averages, with 1-year lag.

Source: As Figure 2.4.5.

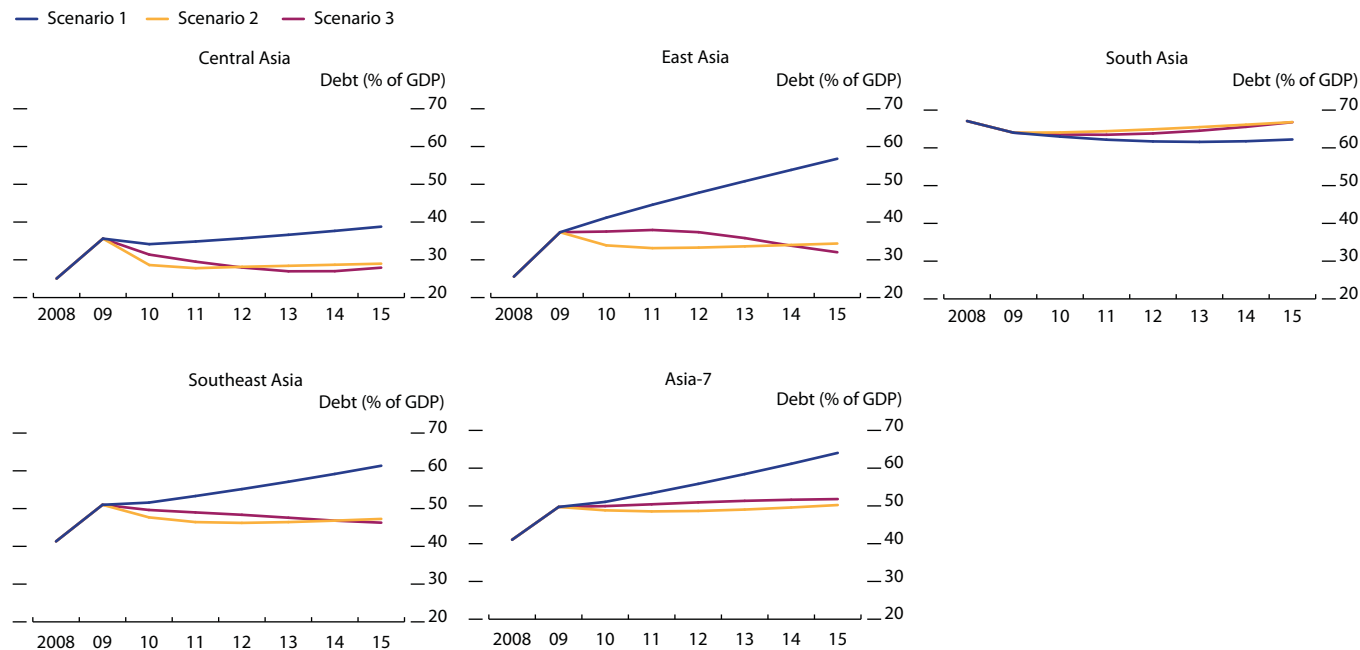
**2.4.8 U-shaped primary balance response function**



Notes: Based on feasible generalized least squares regression on a sample of seven countries: People's Republic of China, India, Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand. Debt data are lagged 1 year.

Source: As Figure 2.4.5.

### 2.4.9 Fiscal stimulus unwinding scenarios



Notes:

Scenario 1: Fiscal stimuli constant at 2009/2010 level. Scenario 2: Forceful adjustment of the primary balance ( $\rho=0.08$ ). Scenario 3: Modest adjustment of the primary balance ( $\rho=0.04$ ). Asia-7 comprises the People's Republic of China, India, Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand. Central Asia excludes Turkmenistan. East Asia excludes Hong Kong, China; Mongolia; and Taipei, China. Southeast Asia excludes Brunei Darussalam, Cambodia, and Singapore. South Asia excludes Afghanistan, Bhutan, Maldives, and Nepal.

Source: As Figure 2.4.5.

## Fiscal sustainability in the postcrisis period and fiscal policy for rebalancing

The preceding section confirmed that developing Asia entered the global crisis in good fiscal shape. However, as the crisis recedes, concerns are growing about the impact of the region's anticrisis fiscal stimulus on its fiscal sustainability. The first subsection projects the postcrisis evolution of the region's debt position under three assumptions about the normalization of fiscal policy. As examined extensively in ADB (2009a), the single biggest structural challenge facing developing Asia in the postcrisis period is its rebalancing in the direction of domestic demand. In this context, the second subsection examines the potential contribution of fiscal policy to this rebalancing in four regional countries.

### Effect of anticrisis fiscal stimulus on Asia's debt sustainability

This section analyzes the implication of the region's anticrisis fiscal stimulus on its debt sustainability. Three alternative scenarios about the unwinding of the stimulus are applied to a group of countries for whom detailed projection data are available.

The first scenario—Scenario 1—holds fiscal stimuli constant at their 2009–10 levels and projects the implications for debt ratios on the basis of projected nominal GDP in *Asian Development Outlook*. A further assumption is that interest rates will rise gradually from their current low levels in the context of monetary policy normalization.



Scenarios 2 and 3 are based on the fiscal policy reaction functions estimated in the previous section and allow for the fiscal stimulus to be unwound on the basis of historical adjustment patterns. To incorporate regional heterogeneity into these scenarios, the projections use the upper and lower bounds for the 95% confidence intervals(s) for the average value of the fiscal adjustment to debt ratios.<sup>27</sup> An upper bound of 0.08 is used to capture very forceful fiscal adjustment—Scenario 2—and the lower bound of 0.04 is used to capture much slower fiscal adjustment—Scenario 3.

The baselines for the last two scenarios incorporate estimates of the fiscal balances for the selected group of countries in 2009 and 2010. As indicated in Figure 2.4.9, a failure to unwind the stimulus after 2010 would generally lead to elevated public debt ratios and, in some instances, a sharp escalation above current levels. The key exception to this pattern is in South Asia, where rapid GDP growth in relation to interest rates contributes to a steady decline in the debt ratio.

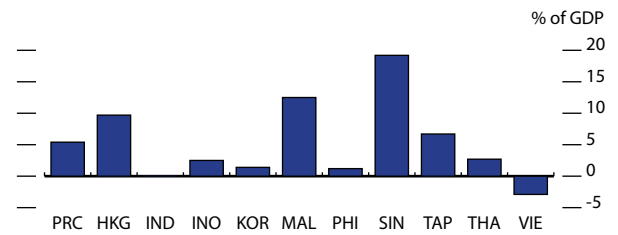
Therefore, generally, delaying the removal of the stimulus for too long is undesirable, especially for countries with borderline fiscal sustainability that cannot afford sharp rises in debt ratios. As expected, forceful fiscal adjustment generally brings about sharper declines in debt ratios than does moderate fiscal adjustment. However, the dynamics of the model, along with the narrowing of the gap between growth rates and interest rates over the projection period, imply that the difference between these adjustment paths is not always very large. Intuitively, in the near term, the combination of rapid cyclical recovery and low interest rates means that continued large fiscal deficits does not necessarily lead to large increases in debt-to-GDP ratios. Over time, however, as the gap between growth rates and interest rates tends to narrow, pressure on public debt ratios start to increase if fiscal deficits remain large.

Based on the scenario results, the need to unwind fiscal stimulus packages differs across countries and regions. Countries with currently high debt need to unwind at a faster pace than in the past, especially in circumstances where the gap between growth rates and interest rates may be narrowing. On the other hand, it may be possible for countries with more fiscal space to maintain their fiscal stimulus for somewhat longer. Even in those cases, however, it is vital that the governments put in place an effective and credible medium-term plan for fiscal normalization. Overall, the scenario results indicate that all countries must guard against a deterioration of fiscal sustainability due to the fiscal stimulus, especially in the medium term.

### The role of fiscal policy in developing Asia's rebalancing process

By definition, the fiscal stimulus programs rolled out by Asian governments during the global crisis contribute to rebalancing

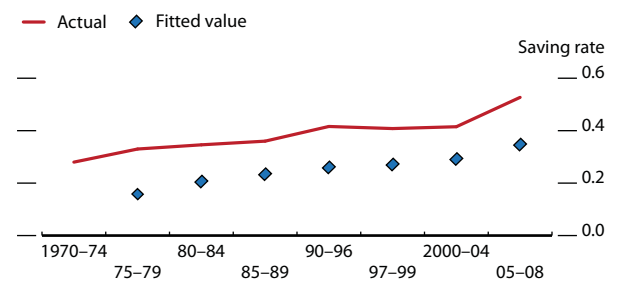
2.4.10 Average current account balance for 2000–2008, selected Asian economies



PRC = People's Rep. of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; KOR = Rep. of Korea; MAL = Malaysia; PHI = Philippines; SIN = Singapore; TAP = Taipei, China; THA = Thailand; VIE = Viet Nam.

Source: Asian Development Outlook database.

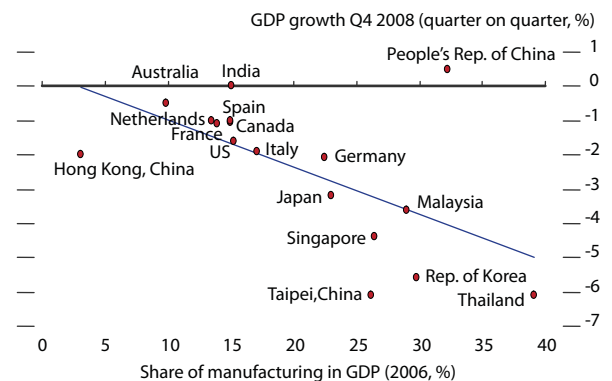
2.4.11 Actual and fitted value of saving rate, People's Republic of China



Note: Note: The model that generated the fitted values is that of Park and Shin (2009) and includes standard explanatory variables used in much of the literature, including GDP growth rate, level of per capita GDP and demographic variables.

Sources: Estimates of Park and Shin (2009) based on data from A. Heston, R. Summers, and B. Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006; Bosworth, B., and G. Chodorow-Reich. 2007. Saving and Demographic Change: The Global Dimension. <http://ssrn.com/abstract=1299702>; International Monetary Fund, International Financial Statistics online database (accessed 8 January 2009); World Bank. Various issues. World Development Indicators. Washington D.C.: World Bank.

2.4.12 Growth rates in Q4 2008 and share of manufacturing



Source: D. Cho. 2009. The Republic of Korea's Economy in the Swirl of Global Crisis. ADBI Working Paper Series 147. Asian Development Bank Institute, Tokyo. p. 5.

because they strengthen domestic demand. However, rebalancing based on public spending is at best a short-term solution to the region's quest for balanced, sustainable growth in the postcrisis world. Beyond the crisis, sustainable rebalancing that weans the region from its excessive dependence on exports requires robust private consumption and investment. The key to strengthening Asia's private consumption and investment in the medium and long term is to remove the structural impediments and distortions that has constrained domestic demand and favored the production of exportable goods. Fiscal policy can play a useful role in removing such impediments and distortions, but the specific role of fiscal policy in the rebalancing process will differ from country to country.<sup>28</sup>

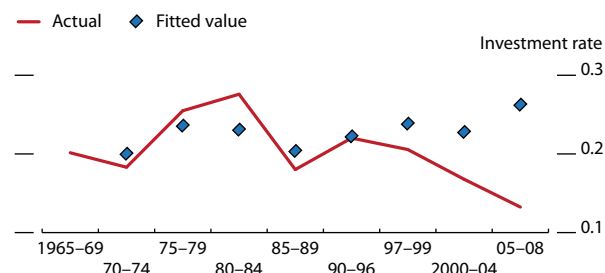
The great deal of heterogeneity in the region's current account positions (Figure 2.4.10) implies that the rebalancing process will necessarily differ across countries. For example, some countries are already more or less balanced; so their need for rebalancing demand is limited. In some countries, the current account surplus may be the result of oversaving, but in others it may reflect underinvestment. The appropriate remedy for rebalancing will differ according to the source of the imbalance. Countries suffering from oversaving will need to create an environment that encourages households to consume more. Countries suffering from underinvestment will need to create a better investment climate to induce firms to invest more. As different Asian economies thus face different challenges in terms of rebalancing their economies, the role of fiscal policy in the rebalancing process is likely to vary.

In the case of the PRC, the balance of evidence indicates that the external surplus is overwhelmingly driven by oversaving (Figure 2.4.11). Therefore, in the PRC, the role of fiscal policy in the rebalancing process should be to boost domestic consumption. Specifically, reallocating public spending from investment to health care, education, pensions, social protection, and social safety nets would mitigate the risk and uncertainty confronting PRC households and encourage them to spend more. Increased social spending is preferable to tax cuts as a means of promoting consumption. Given the small number of income tax payers in the PRC, tax cuts will have only a limited effect on overall consumption and domestic demand.

Among specific consumption goods, housing deserves particular attention because it is the major driver of private consumption in the PRC. In this context, fiscal policy can play a key role in both the supply and the demand side of housing. A wide range of fiscal subsidies and incentives could be introduced to attract the participation of the private sector in low-income housing. Consumers would benefit from tax exemptions, cash subsidies, or housing allowances and capital grants.

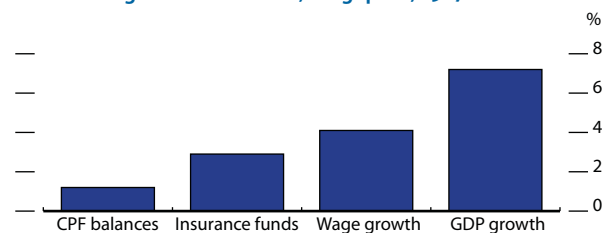
In contrast to the PRC, Korea's current account position has been more or less balanced, averaging 1.4% during 2000–2008. Therefore, rebalancing primarily by shifting aggregate demand from exports to

#### 2.4.13 Actual and fitted value of investment rate, Philippines



Source: Estimates of Park and Shin (2009) based on data from A. Heston, R. Summers, and B. Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006; B. Bosworth and G. Chodorow-Reich, 2007. Saving and Demographic Change: The Global Dimension. <http://ssrn.com/abstract=1299702>; International Monetary Fund, International Financial Statistics online database (accessed 8 January 2009); World Bank. Various issues. *World Development Indicators*. Washington, DC: World Bank.

#### 2.4.14 Annual returns on CPF balances and insurance funds versus real growth indicators, Singapore, 1987–2008



CPF = Central Provident Fund.

Note: Figures for CPF balances and insurance funds refer to real rates of return. Source: ADB estimates based on data from Central Provident Fund Board. Various issues. *Annual Report*. [http://mycpf.cpf.gov.sg/CPF/About-Us/Ann-Rpt/Ann\\_Report.htm](http://mycpf.cpf.gov.sg/CPF/About-Us/Ann-Rpt/Ann_Report.htm); CEIC Data Company (accessed 1 March 2010).

domestic demand is not relevant for Korea. The severe impact of the global crisis on Korea can be explained by the disproportionate role of manufacturing in the economy (Figure 2.4.12). Therefore, rebalancing requires instead a supply-side shift in the composition of output from manufacturing to services (Ha, Lee, and Sumulong 2010). Given the need for rebalancing and the central role of a vibrant services sector in that process, Korea might be well advised to consider proactive fiscal measures for enhancing productivity in the services sector: tax breaks for R&D in services industries and/or fiscal incentives to boost the services sector.

In the case of the Philippines, consumption already plays a big role in demand and growth, and underconsumption has never been a policy concern. If the purpose of rebalancing is to achieve a more dynamic and robust domestic economy, then rebalancing in the Philippines means strengthening investment. Yet the country's investment rate has recently fallen below the levels predicted by fundamental economic determinants of investment (Figure 2.4.13), and a chronically poor investment climate accounts for the weak investment.

Appropriate fiscal measures can help in a number of ways to create a more conducive business for both domestic and foreign investors. In particular, given that poor infrastructure is a major deterrent to private investment in the Philippines, more public spending in that area can ease infrastructure bottlenecks and attract investment. However, the relative lack of fiscal space seriously limits the government's capacity to allocate additional resources for this purpose.

Singapore has large and persistent current account surpluses, driven by extraordinarily high saving rates. In Singapore, the need for rebalancing is driven by rapid population aging due to a low fertility rate. Rapid population aging requires that society set aside more resources for the elderly. Singaporeans rely on a mandatory saving scheme, administered by the Central Provident Fund (CPF), to finance their retirement.

A key quasifiscal measure that has been widely suggested for improving the ability of CPF to deliver adequate old age income support is to end the implicit tax on CPF wealth. The real rate of return credited to CPF members was a meager 1.2% during 1987–2008 (Figure 2.4.14). A second major way for fiscal policy to contribute to the rebalancing process is expanding social sector expenditures, including social pensions. Given its exceptionally strong fiscal position, the government seems uniquely well positioned to take this route.

In summary, developing Asian countries can adopt a wide range of fiscal measures to balance their economic structures. However, the appropriate fiscal measures will differ across countries because the need for and definition of rebalancing are far from uniform.

## Concluding observations

Developing Asia's large and decisive fiscal response to the economic slowdown resulting from the global financial crisis represents an exceptional response to an exceptional shock. The preliminary empirical analysis in this section yields evidence affirming the widespread belief that developing Asia's fiscal stimulus contributed to the region's recovery

from the crisis. However, drawing policy implications about normal, noncrisis periods from the crisis experience would take a big leap of faith. Further evidence in this section indicates the need to be extremely cautious about maintaining heightened countercyclical fiscal activism once the crisis recedes and normalcy returns.

The main positive lesson from developing Asia's experience during the crisis is that the healthy public finances that the region enjoyed as it entered the crisis served the region well. For the region as a whole, the evidence points to sufficient fiscal space accumulated as a result of sustained fiscal prudence. By and large, Asian governments have been fiscally responsible and, when fiscal sustainability was at risk, made the necessary adjustments.

Once the crisis recedes, Asia should revert to its basic tradition of fiscal prudence. Strengthening medium-term fiscal policy frameworks will be helpful in this context. However, the return to fiscal responsibility still allows for fiscal policy to contribute meaningfully to sustainable growth in the postcrisis period. For example, institutional improvements such as well designed automatic stabilizers can help Asia cope better with output volatility at minimal fiscal cost. Fiscal policy can also facilitate the region's medium-term transition to a more balanced economic structure. The key challenge for Asian fiscal policy now is to adapt itself to the postcrisis world so that it can contribute to sustainable growth without compromising the fiscal sustainability that has served the region so well.

## Key policy messages

Developing Asia's tradition of sound and responsible monetary and fiscal policy served it well during the global crisis. Ample monetary and fiscal space had been built up from a history of fiscal conservatism that kept public spending within budgets and monetary policies that gave top priority to price stability. The result was that the region had the resources and the credibility to quickly roll out a massive stimulus that contributed to the region's V-shaped recovery.

The overarching message emerging from the analysis in this chapter is this: Once the crisis recedes, the region should return to its long-standing tradition of macroeconomic prudence, one that fosters macroeconomic stability and long-run growth.

The global crisis has changed the region's monetary and fiscal landscape in many respects, including a newfound recognition that monetary and fiscal tools can be useful for coping with large shocks. However, the global crisis has done nothing to change the central importance of long-run growth for still-poor Asia or the proven need for prudent monetary and fiscal policies. The hundreds of millions of Asians lifted above poverty lines by sustained growth are proof of the risks of tinkering with a macroeconomic policy philosophy that has consistently delivered.

Within the broad framework of returning to the region's sound and responsible monetary and fiscal roots, however, there is plenty of scope for enhancing the capacity of monetary, exchange rate, and fiscal policies to contribute to the region's sustainable growth in the postcrisis period. For example, well-designed and well-implemented automatic fiscal stabilizers can contribute to greater output stability at no cost to fiscal sustainability. A pivotal postcrisis challenge for central banks across the region will be to better coordinate financial regulation and monetary policy so that the two can jointly prevent asset price bubbles, which can have devastating consequences, as highlighted by the global crisis. Against the backdrop of global rebalancing and the declining role of exports as a growth engine, the region also needs to fundamentally rethink its precrisis exchange rate philosophy, which gave undue weight to export competitiveness. Capital controls against volatile short-term inflows can facilitate the transition to less rigid regimes.

At an even more fundamental level, given the potentially more challenging postcrisis global environment and political pressures for greater activism, the region should further strengthen the institutions, governance, and overall policy environment that will be indispensable for sound and responsible policy.

Macroeconomic policies can also make a substantial contribution to shaping the postcrisis global environment in a manner that will benefit the region's sustainable growth. Macroeconomic policies can contribute to the region's pursuit of a more balanced economic structure. Governments in the region can promote rebalancing by using fiscal policy to remove the structural distortions that constrain demand from households and

firms. The role of fiscal policy is to provide an environment conducive to private consumption and investment.

This shift requires, among other things, strengthening health, education, pensions, and social protection to reduce household uncertainty and thus boost private consumption. Greater exchange rate flexibility will also be needed as part of the package of policies to achieve more balanced growth. On the demand side, more flexible exchange rates will increase domestic demand by reducing the price of importables and thus boosting purchasing power. On the supply side, greater exchange rate flexibility will speed up the development of the nontradable sector.

A mutually supportive constellation of monetary, exchange rate, and fiscal policies will be required to deliver sustainable growth for the region in the postcrisis period.

### **Monetary policy and financial regulation**

The global crisis underlines the huge risks of unsound monetary policy and inadequate financial regulation. A key challenge for Asia is to better monitor and prevent asset price bubbles while maintaining the primary focus on goods price inflation. The overall objective of monetary policy, which is identical to that of the precrisis period, must be to provide a stable macroeconomic environment for firms and households.

- *The main focus for monetary policy should be geared toward stabilizing the fluctuation in the aggregate domestic price level and managing its expectation.* A flexible inflation-targeting framework is still viable for monetary policy. Empirical observation suggests that this monetary policy framework, which usually works through the operational target of interest rates, has been able to deliver relatively low and stable inflation. However, the operating target should not be seen as a one-size-fits-all for every country in the region. Other types of operational targets, such as a quantity or exchange rate, could just as well deliver similar outcomes. What matters is that monetary policy be conducted in a disciplined manner to deliver low and stable inflation with sustained economic growth. Policy independence from external interference is conducive for monetary discipline and favorable inflation outcomes.
- *Financial supervision and regulation need to be strengthened and better coordinated with monetary policy to prevent asset boom and bust cycles.* The global financial crisis has shown that a narrow focus on managing aggregate inflation may lead to asset bubbles. Therefore, in addition to addressing its traditional objectives, monetary policy should also aim to maintain asset market stability. This additional objective is best served by complementing the traditional flexible inflation-targeting framework with additional policy measures that deal specifically with asset markets. Setting up a financial authority to supervise and regulate the finance sector, whether within or outside the central bank, is crucial to monitor and detect bubbles, and to introduce prudential policy measures. As with monetary policy, financial regulation would benefit from policy independence. Collection and analysis of high-frequency macroeconomic and financial indicators would provide valuable information for both monetary and financial authorities.



### Exchange rate policy and capital controls

Clearly, the transition to a more balanced economic structure in the postcrisis period will benefit substantially from more flexible exchange rate regimes. Exchange rate policy must therefore shift away from an excessive focus on export competitiveness. However, volatile short-term capital inflows may cause excessive appreciation and complicate the transition to more flexible exchange rates, and capital controls may ease the transition.

- *Exchange rates should be allowed to adjust and reflect the fundamentals-driven rate, and intra-Asian coordination on exchange rate policy and reserve management needs to be strengthened.* “Too much” intervention in the foreign exchange market could lead to exchange rate misalignment, with adverse implications for macroeconomic management. More flexible exchange rates driven by fundamentals provide a mechanism to absorb shocks, result in a more efficient allocation of resources, and promote the region’s rebalancing process. Intra-Asian coordination on exchange rate policy will mitigate the fear of losing export competitiveness vis-à-vis neighboring economies, which has been a major barrier against greater exchange rate flexibility for the region as a whole. Cooperation on reserve management can also contribute to flexibility by reducing the need for Asian countries to individually build up excessive levels of reserves.
- *Capital controls against volatile short-term inflows can safeguard macroeconomic stability and facilitate the transition to more flexible exchange rates.* In contrast to long-term capital inflows such as FDI, short-term capital flows are often volatile and disruptive. They can cause overheating pressures and their sudden reversal can wreak financial havoc. Short-term inflows can also lead to sharp currency appreciation, thereby eroding a country’s competitiveness. Such episodes can decelerate the momentum toward greater exchange rate flexibility. However, capital controls should be selective, and targeted toward potentially more destabilizing types of inflows. In light of the well-known distortions and efficiency costs that they introduce, capital controls should be gradually withdrawn as a country reaches higher levels of financial development. Easing restrictions on capital outflows could be another option to redress the adverse impact of speculative capital inflows.

### Fiscal policy

Ample fiscal space, the consequence of a history of responsible fiscal behavior, served Asia well during the global crisis, a fact strongly suggesting the need to maintain fiscal discipline in the postcrisis period, in preparation for large future shocks. Although the region should return to its tradition of sound fiscal policy, fiscal policy can nevertheless help the region adapt better to the postcrisis world. In particular, fiscal policy can speed up the rebalancing process.

- *Asian countries should continue to maintain their fiscal discipline, and strengthen their medium-term fiscal policy frameworks.* Years of sustained fiscal prudence gave the region ample fiscal space, which allowed it to unleash an unprecedented fiscal stimulus during the crisis. The stimulus has contributed to the region’s recovery from the

global crisis. This finding highlights an important additional benefit of fiscal discipline: adequate fiscal space to cope with large shocks. In the postcrisis period, the region would do well to revert to its basic tradition of fiscal prudence. However, given the potentially more challenging global environment, securing adequate fiscal space for future shocks requires strong and credible medium-term fiscal policy frameworks. In principle, fiscal rules are more consistent than discretion as frameworks for strong, medium-term fiscal policy but more fundamentally, responsible fiscal behavior ultimately requires sound institutions, governance, and overall policy environment.

- *Asian governments can tap into a wide range of fiscal measures to facilitate sustainable and more balanced growth in the postcrisis period.* Although the overall policy direction must be the recovery of fiscal discipline, there is still plenty of scope for fiscal policy to help Asia meet the difficult macroeconomic and structural challenges of the postcrisis period. For example, strengthening automatic stabilizers through better design and implementation can contribute to output stability and social protection without impairing fiscal sustainability. Fiscal policy can make substantial contributions in terms of addressing Asia's paramount postcrisis structural challenge of rebalancing, and country-specific fiscal measures can mitigate the structural distortions that stand in the way of more vibrant domestic demand. In countries that perform poorly in key areas, such as revenue mobilization, the priority must be improving institutional capacity.

### Overall policy messages

Asia's unprecedented monetary and fiscal response to the unprecedented global financial crisis, and its contribution to the region's V-shaped recovery, will open up a debate on the appropriate role of fiscal, exchange rate, and monetary policies in the postcrisis period. The debate is timely and welcome but should not lose sight of the huge benefits of the region's long-standing tradition of monetary and fiscal discipline. The debate should also consider the relationship *between* the three sets of policies.

- *As the global crisis recedes, Asia should gradually return to its basic macroeconomic framework of monetary and fiscal prudence.* This framework has delivered enormous benefits for the region, in the form of macroeconomic stability and sustained growth, and will continue to do so. Monetary policy that is geared toward low and stable inflation and fiscal policy that keeps public spending within government budgets create the best environment for households and firms to plan rationally and for the economy to grow. However, a broader return to monetary and fiscal policy discipline does not rule out significant contributions of macroeconomic policy to sustainable growth. From rebalancing to preventing asset bubbles to enhancing social protection, macroeconomic policy can play an important role. However, playing that role should not come at the expense of compromising the macroeconomic stability that has paved the way for the region's remarkable success in the past.
- *More systematic coordination between different macroeconomic policies will enhance their effectiveness.* During the global crisis, Asian governments, like those elsewhere, jointly pursued monetary and fiscal

expansions. Higher public spending and tax cuts, accommodated by lower interest rates, helped lift the region out of recession. By the same token, closer coordination between different policies will magnify their impact in the postcrisis period. For example, disciplined monetary policy must go hand in hand with adequate financial regulation to prevent asset bubbles. Regardless of the specific institutional arrangements, there must be better coordination between the two. Rebalancing would benefit substantially if the wide range of fiscal measures to remove structural impediments against domestic demand were accompanied by more flexible exchange rates. In fact, pursuing one without the other may do very little to move the region toward more balanced economies.

### Concluding observations

One of the hallmarks of the Asian development model has been sound and responsible monetary and fiscal policy. This conservative approach to macroeconomic policy has delivered huge benefits to the region in the form of macroeconomic stability and sustained growth. The Asian governments' decisive monetary and fiscal expansion during the global crisis highlights an additional important but underappreciated benefit of macroeconomic prudence: the resources and credibility required to address large negative shocks.

Therefore, the broad direction of Asia's postcrisis macroeconomic policy must be a return to its roots and to its precrisis tradition of keeping inflation low and public spending within the government's means. Nonetheless, there is significant scope for improving the capacity of monetary, fiscal, and exchange rate policies to contribute to sustainable growth in the postcrisis period.

Finally, as illustrated in the joint role of exchange rate and fiscal policy in the rebalancing process, the different components of macroeconomic policy must be mutually consistent and supportive. Within a stronger and better macroeconomic policy framework, there is every chance that the region's remarkable economic success will continue into the more challenging postcrisis world.

### Endnotes

- 1 See, for example, the discussion in Goodfriend (2007).
- 2 See, among others, Bernanke et al. (1999).
- 3 Namely, the PRC; India; Indonesia; Korea; Malaysia; Pakistan; Philippines; Singapore; Taipei, China; and Thailand.
- 4 Note, however, that this higher gain does not necessarily imply that their average levels of inflation are lower than other countries in the group (Box 2.2.1).
- 5 Both Hong Kong, China and Singapore appear as exceptions, where the interest rate dropped as early as in 2007. These two economies anchor their monetary policy to an exchange rate. As a result, the trend in the interest rate tends to move with the trend of the interest rate in the reference country's currency.
- 6 This particular representation allows for a direct comparison among series of different countries under consideration
- 7 See, for example, Cecchetti et al. (2000) and De Grauwe (2008) for a more recent study.
- 8 See, among others, the discussion in Gruen et al. (2005).

- 9 To put balance on the assessment, however, it also has to be remembered that the output gap (one of the arguments in the standard Taylor rule equation) is not observable in practice. Consequently, it also faces similar informational constraints, as in the measures for deviation between asset prices and their fundamental values.
- 10 Ahrend et al. (2008) discuss the eurozone.
- 11 Discussed in IMF (2009a).
- 12 In the recent crisis, depreciation in emerging Asian countries (except Korea at 40%, Indonesia at 30%, and India at 20%), was less than 10%, compared to an average of 70% during the Asian crisis.
- 13 During the Asian crisis and its immediate aftermath, there was much discussion of the problems associated with a weak currency. Particularly, the worry over was that the depreciation of the exchange rate would pass through into inflation. Intervention during those periods was against depreciation. However, some recent empirical studies such as those by Ghosh and Rajan (2007) and Jongwanich and Park (2009) show a decline of exchange rate pass-through into domestic prices in Asian countries.
- 14 In developing Asia, parts and components exports increased from 13% of the total to 32%, and imports from 22% of the total to 30%, from 1992 to 2007.
- 15 For example, Tenreyro (2003) and Broda and Romalis (2003) find a small impact of exchange rate volatility on trade, whereas McKenzie (1999), Frankel and Rose (2000), and Glick and Rose (2002) show a statistically significant and negative relationship between volatility and trade.
- 16 The analysis so far does not rule out the country in implementing a hard-pegged exchange rate regime as in Hong Kong, China, but the pegged rate should be consistent with economic fundamentals.
- 17 See for example, Williamson (1994), who introduced the fundamental equilibrium exchange rate. Under this model, the equilibrium exchange rate is the rate that allows the economy to simultaneously attain internal and external balances. Internal balance is reached when the economy is at full employment output and operating in a low inflation environment. External balance is characterized as a sustainable balance of payments position over the medium term, ensuring the desired net flows of resources and external debt sustainability. Clark and MacDonald (1998) underpin the equilibrium real exchange rate on the basic concept of uncovered interest parity (UIP) and use econometric analysis to build up an equilibrium rate called the behavior equilibrium exchange rate (BEER). Edwards (1989) and Baffes et al. (1999) also use the concept of internal and external balance approach to reveal the equilibrium exchange rate, but, instead of explicitly assuming the level of sustained current account balance, they use econometrics, like Clark and MacDonald, to reveal the equilibrium level.
- 18 The de jure measures attempt to measure regulatory restrictions on capital account transactions using the information about regulatory restrictions on cross-border capital flows reported in the Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), published by the IMF (Chinn and Ito 2008; Kose et al. 2006).
- 19 See for example, Edwards (1999), Le Fort and Lehman (2003), and Kawai and Takagi (2008).
- 20 The IMF has substantially rethought its position on the use of capital controls in emerging economies and concluded that capital controls are sometimes justified as a part of policy instruments in dealing with surging capital inflows (Ghosh and Ostry 2009).
- 21 Capital controls can be classified as direct and indirect controls (Ariyoshi et al. 2000) or in some studies (Neely 1999), the control measures are classified as quantity and price measures. These classifications seem to be comparable since because most of administrative controls are direct and quantity-based controls while, whereas market-based measures are mostly indirect and price-based measures.

- 22 Ample fiscal space, in particular a low public debt-to-GDP ratio, is conducive for counter-cyclical fiscal policy in at least two ways. First, it enables governments to run up large fiscal deficits at less cost to fiscal sustainability. Second, fiscal stimulus is likely to be less effective if it is implemented by highly indebted governments.
- 23 Hur, Jha, Park, and Quising (forthcoming) present a comprehensive description of the empirical framework and results.
- 24 Indeed, some of our results change when we rerun the regressions by extending the data up to the third quarter of 2009. For example, government spending has a positive and significant effect for the whole sample, suggesting that it took longer for fiscal policy to have an impact for the whole sample than for the developing Asian subsample. However, the central result—the positive and significant effect of government spending on Asian output—remains.
- 25 All balances are measured as the difference between revenues and expenditures. A positive sign denotes a surplus and a negative sign a deficit.
- 26 Fiscal developments in Central Asia during the 1990s were heavily influenced by the international treatment of the debts of the former Soviet Union.
- 27 For simplicity, the control variables in these equations are held constant.
- 28 Park (forthcoming) provides an in-depth analysis of the role of fiscal policy in Asia's rebalancing. In a related paper, Hur, Mallick, and Park (forthcoming) empirically examine the impact of Asian fiscal policy on Asia's private consumption and investment.

## Background papers

### Monetary Policy

- Grenville, S. 2010. The Evolving Post-crisis World. Background paper for Asian Development Outlook 2010. Asian Development Bank, Manila.
- Ito, T. 2010. Monetary Policy and Financial Stability: Is Inflation Targeting Passé? Background paper for Asian Development Outlook 2010. Asian Development Bank, Manila.

### Exchange Rate and Capital Controls

- Grenville, S. 2010. The Evolving Post-crisis World. Background paper for Asian Development Outlook 2010. Asian Development Bank, Manila.
- Rajan, R. 2010. The Evolution and Impact of Asian Exchange Rate Regimes. Background paper prepared for Asian Development Outlook 2010, Asian Development Bank, Manila.

### Fiscal Policy

- Adams, C., B. Ferrarini and D. Park. Forthcoming. Fiscal Sustainability in Developing Asia. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.
- Hur, S. K., S. Jha, D. Park and P. Quising. Forthcoming. Did Fiscal Stimulus Lift Developing Asia Out of the Global Crisis? A Preliminary Empirical Investigation. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.
- Hur, S.K., S. Mallick, and D. Park. Forthcoming. Fiscal Policy and Crowding Out in Developing Asia. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

- Jha, S., S. Mallick, D. Park, and P. Quising. Forthcoming. Counter-cyclical Effectiveness of Fiscal Policy: Time-Series Evidence from Developing Asia. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.
- Park, D. 2010. Forthcoming. The Role of Fiscal Policy in Rebalancing Developing Asia's Growth, *ADB Economics Working Paper Series*.

## References

- Asian Development Bank (ADB). 2009a. *Asian Development Outlook 2009*. Manila.
- \_\_\_\_\_. 2009b. *Asian Development Outlook 2009 Update*. Manila.
- Ahrend, R., B. Cournede and R. Price. 2008. Monetary Policy, Market Excesses and Financial Turmoil. *OECD Economics Department Working Paper* No. 597. Organisation for Economic Co-operation and Development, Paris.
- Aizenman, J. and N. Marion. 2003. The High Demand for International Reserves in the Far East: What's Going On? *Journal of Japanese and International Economics*. 17 (3). pp. 370–400.
- Andersen, P. and D. Gruen. 1995. Macroeconomic Policies and Growth. *RBA Research Discussion Papers*. 9507. Reserve Bank of Australia, Sydney.
- Ariyoshi, A., et al. 2000. Capital Controls: Country Experiences with Their Use and Liberalization. *IMF Occasional Paper* No. 190. International Monetary Fund, Washington, DC.
- Arndt, S. W. and A. Huemer. 2004. Trade, Production Networks and the Exchange Rate. *Working Paper Series*. Lowe Institute of Political Economy, Claremont McKenna College, Claremont.
- Athukorala, P. 2009. Outward Foreign Direct Investment from India. *Asian Development Review* 26 (2). pp. 125–153.
- Athukorala, P. and J. Menon. 2010. Global Production Sharing, Trade Patterns, and Determinants of Trade Flows in East Asia. *ADB Working Paper Series on Regional Economic Integration* No. 41. Asian Development Bank, Manila.
- Baffes, J., I. A. Elbadawi and S. A. O'Connell. 1999. Single-Equation Estimation of the Equilibrium Real Exchange Rate. In L. E. Hinkle and P. J. Montiel, eds. *Exchange Rate Misalignment: Concept and Measurement for Developing Countries*. Oxford: Oxford University Press.
- Ball, L. and N. Sheridan. 2005. Does inflation targeting matter? In B. S. Bernanke and M. Woodford, eds. *The Inflation Targeting Debate*. Chicago: University of Chicago Press.
- Barro, R. J. 1995. Inflation and Economic Growth. *NBER Working Paper* 5326, National Bureau of Economic Research, Cambridge.
- Bergsten, C.F. 2010. Correcting the Chinese Exchange Rate: An Action Plan. Testimony before the Committee on Ways and Means, US House of Representatives. March 24. <http://www.iie.com/publications/papers/paper.cfm?ResearchID=1523>.
- Bernanke, B., T. Laubach, F. Mishkin, and A. Posen. 1999. *Inflation Targeting: Lessons from the International Experience*. Princeton, NJ: Princeton University Press.
- Bird, G. and R. Rajan. 2003. Adequacy of Reserves in the Aftermath of Crises. *The World Economy*. 26 (6). pp. 873–891.



- Broda, C. and J. Romalis. 2003. Identifying the Effect of Exchange Rate Volatility on Trade. FRBNY and Chicago GSB. Unpublished.
- Burdekin, R. C., et al. 2004. When does Inflation Hurt Economic Growth? Different Nonlinearities for Different Economies. *Journal of Macroeconomics*. 26 (3). pp. 519–532.
- Cecchetti, S. G., H. Genberg, J. Lipsky and S. Wadhvani. 2000. Asset Prices and Central Bank Policy. *Geneva Reports on the World Economy*. 2. Geneva: International Center for Monetary and Banking Studies, Geneva.
- Chalk, N. A. and R. Hemming. 2000. Assessing Fiscal Sustainability in Theory and Practice. *IMF Working Paper* No. 00/81. International Monetary Fund, Washington, DC.
- Chinn, M. D., and H. Ito. 2008. A New Measure of Financial Openness. *Journal of Comparative Policy Analysis* 10 (3). pp. 309–322.
- Clarida, R., J. Gali, and M. Gertler. 1998. Monetary Policy Rules in Practice: Some International Evidence. *European Economic Review*. 42 (6). pp. 1033–1067.
- Clark, P. B. and R. MacDonald. 1998. Exchange Rates and Economic Fundamentals: A Methodological Comparison of BEERs and FEERs. *IMF Working Paper* WP/98/67. International Monetary Fund, Washington, DC.
- Cline, W. R. and J. Williamson. 2010. Notes on Equilibrium Exchange Rates. *Peterson Institute Policy Brief*. 10 (2). Peterson Institute of International Economics, Washington, DC.
- De Brouwer, G. J., A. Ramayandi and D. Turvey. 2006. Macroeconomic Linkages and Regional Monetary Cooperation: Steps Ahead. *Asian Economic Policy Review* 1(2) pp. 284–301.
- De Grauwe, P. 2008. Stock Prices and Monetary Policy. *CEPS Working Document*. 304. <http://www.ceps.be/system/files/book/1713.pdf>
- Dincer, N. and B. Eichengreen. 2007. Central Bank Transparency: Where, Why and With What Effects? *NBER Working Paper* 13003. National Bureau of Economic Research, Cambridge.
- Edwards, S. 1989. *Real Exchange Rates, Devaluation and Adjustment: Exchange Rate Policy in Developing Countries*. Cambridge, MA: MIT Press.
- \_\_\_\_\_. 1999. How Effective Are Capital Controls? *Journal of Economic Perspective*. 13 (4). pp. 65–84.
- Eichengreen, B. 2009. Lessons of the Crisis for Emerging Markets. *ADB Working Paper Series* No. 179. Asian Development Bank Institute, Tokyo.
- Fatás, A. and I. Mihov. 2009. The Euro and Fiscal Policy. *NBER Working Paper* 14722. <http://www.nber.org/papers/w14722>
- Ferguson, N and M. Schularick. 2009. The End of Chimerica. *Harvard Business School Working Paper* 10-037.
- Filardo, A. and H. Genberg. 2009. Targeting Inflation in Asia and the Pacific: Lessons from the Recent Past. BIS Representative Office for Asia and the Pacific, Hong Kong, China.
- Fischer, S. 1993. *The Role of Macroeconomic Factors in Growth*. *Journal of Monetary Economics*. 32 (3). pp. 485–512.
- Frankel, J. and A. K. Rose. 2000. Estimating the Effect of Currency Unions on Trade and Output. *NBER Working Paper* 7857. National Bureau of Economic Research, Cambridge.
- Frankel, J. and S. J. Wei. 2007. Estimation of De Facto Exchange Rate Regimes: Synthesis of The Techniques for Inferring Flexibility and Basket Weights. Paper presented at the IMF Annual Research Conference. International Monetary Fund. Washington, DC. 16 November.

- Ghosh, A. and R. S. Rajan. 2007. A Survey of Exchange Rate Pass-through in Asia: What does the Literature Tell us? *Asia Pacific Economic Literature*. 21 (2). pp. 13–28.
- Ghosh, A. and J. Ostry. 2009. Choosing an exchange rate regime. *Finance and Development*. 46 (4). December.
- Glick, R. and A. Rose. 2002. Does a Currency Union Affect Trade? The Time Series Evidence. *European Economic Review*. 46 (6). pp. 1125–1151.
- Gochoco-Bautista, M. S. 2008. Asset Booms and Fat Tails in East Asia: Symmetric or Asymmetric Risks? *Journal of Macroeconomics*. 30 (4). pp. 1617–1640.
- Goncalves, C. E. and J. M. Salles. 2008. Inflation Targeting in Emerging Economies: What Do the Data Say? *Journal of Development Economics*. 85 (1–2). pp. 312–318.
- Goodfriend, M. 2007. How the World Achieved Consensus on Monetary Policy. *NBER Working Paper 13580*. National Bureau of Economic Research, Cambridge.
- Greenspan, A. 1999. Currency Reserves and Debt. Remarks before the World Bank Conference on Recent Trends in Reserves Management. Washington, DC. 29 April.
- Gruen, D., M. Plumb and A. Stone. 2005. How Should Monetary Policy Respond to Asset-Price Bubbles? *International Journal of Central Banking*. 1 (3). pp. 1–32.
- Gylfason, T. and T. T. Herbertsson. 2001. Does Inflation Matter for Growth? *Japan and the World Economy*. 13 (4). pp. 405–428.
- Ha, Joonkyung, Jong-Wha Lee, and Lea Sumulong. 2010. “Rebalancing Growth in the Republic of Korea.” Paper prepared for the Asian Development Bank Institute’s Conference on Trans-Pacific Rebalancing. Tokyo, 3–4 March.
- Haugh, D. 2008. Monetary Policy Under Uncertainty About the Nature of Asset-Price Shocks. *International Journal of Central Banking*. 4 (4). pp. 39–83.
- International Monetary Fund. 2003. *World Economic Outlook*. Washington, DC.
- \_\_\_\_\_. 2009a. Lessons for Monetary Policy from Asset Price Fluctuations. *World Economic Outlook 2009*. Washington, DC. pp. 93–120.
- \_\_\_\_\_. 2009b. *The State of Public Finances Cross-Country Fiscal Monitor: November*. *IMF Staff Position Note 09/25*. <http://www.imf.org/external/pubs/ft/spn/2009/spn0925.pdf>
- \_\_\_\_\_. Various years. *Annual Report on Exchange Arrangements and Exchange Restrictions*. Washington, DC.
- Ito, H., J. Jongwanich, A. Terada-Hagiwara. 2009. What Makes Developing Asia Resilient in a Financially Globalized World? *ADB Economics Working Paper Series No. 181*. Asian Development Bank, Manila.
- Ito, T. and T. Hayashi. 2004. Inflation Targeting in Asia. *HKIMR Occasional Paper 1*. Hong Kong Institute for Monetary Research, Hong Kong, China.
- Johnston, R. B. and C. Ryan. 1994. The Impact of Control on Capital Movements on the Private Capital Accounts of Countries’ Balance of Payments: Empirical Estimates and Policy Implications. *IMF Working Paper No. 94/78*. International Monetary Fund, Washington, DC.
- Jones, R. W. and H. Kierzkowski. 2001. A Framework for Fragmentation. In S. W. Arndt and H. Kierzkowski, eds. *Fragmentation: New Production Patterns in the World Economy*. New York: Oxford University Press. pp. 17–34.
- Jongwanich, J. Forthcoming. Capital Flows and Real Exchange Rates in Emerging Asian Countries. *ADB Economics Working Paper Series*. Asian Development Bank, Manila.

- Jongwanich, J. and D. Park. 2009. Inflation in Developing Asia: Demand Pull or Cost Push, *Journal of Asian Economics*. 20 (5). pp. 507–518.
- Kawai, M. and J-W Lee (eds). Forthcoming. Rebalancing for Sustainable Growth: Asia's Post-crisis Challenge. Manila: Asian Development Bank and Tokyo: Asian Development Bank Institute.
- Kawai, M. and S. Takagi. 2008. A Survey of the Literature on Managing Capital Inflows. *ADB Institute Discussion Paper* No. 100. Asian Development Bank Institute, Tokyo.
- Khatriwada, S. 2009. Stimulus Packages to Counter Global Economic Crisis: A Review. *International Institute for Labour Studies Discussion Paper* 196/2009. <http://www.ilo.org/public/english/bureau/inst/publications/discussion/dp19609.pdf>
- Kimball, D. and F. Xiao. 2005. Effectiveness and Effects of China's Capital Controls. *China & World Economy*. 13 (July/August). pp. 58–69.
- Kose, M. A., E. Prasad, E. Rogoff, and K. Wei. 2006. Financial Globalization: A Reappraisal. *IMF Working Paper*. 6 (189). International Monetary Fund, Washington, DC.
- Kraay, A. and L. Servén. 2008. Fiscal Policy Responses to the Current Financial Crisis: Issues for Developing Countries. *Research Brief*. 10 December. <http://go.worldbank.org/NME0S66FQ0>
- Le Fort, G. and S. Lehmann. 2003. The Unremunerated Reserve Requirement and net Capital Flows: Chile in the 1990s. *CEPAL Review* No. 81. United Nations Economic Commission for Latin America and the Caribbean, Santiago.
- McKenzie, M. D. 1999. The Impact of Exchange Rate Volatility on International Trade Flows. *Journal of Economic Surveys*. 13 (1). pp. 71–106.
- Mendoza, E. G. and J. D. Ostry. 2007. International evidence on fiscal solvency: Is fiscal policy “responsible”? *Journal of Monetary Economics*. 55 (6). pp. 1081–1093.
- Mishkin, F. S. 1999. International Experiences with Different Monetary Policy Regimes. *Journal of Monetary Economics*. 43 (3). pp. 579–605.
- \_\_\_\_\_. 2000. Inflation Targeting in Emerging Market Countries. *American Economic Review*. 90 (2). pp. 105–109.
- Neely, C. 1999. An Introduction to Capital Controls. *Review Paper*. November/December. Federal Reserve Bank of St. Louis, St. Louis.
- Posen, A. 2009. Finding the Right Tool for Dealing with Asset Price Booms. Speech at the MPR Monetary Policy and Markets Conference. London. 1 December. <http://www.iie.com/publications/papers/posen1209.pdf>
- Ramachandran, M. and N. Srinivasan. 2007. Asymmetric Exchange Rate Intervention and International Reserve Accumulation in India. *Economics Letters*. 94 (2). pp. 259–265.
- Ramayandi, A. 2007. Approximating Monetary Policy: Case Study for the ASEAN-5. *Working Papers in Economics and Development Studies (WoPEDS)* 200707. <http://www.equitablepolicy.org/wpaper/200707.pdf>
- Ravallion, M. 2009. Pro-poor stimulus: Lessons from the Developing World. *Pathways*. Spring 2009. [https://www.stanford.edu/group/scspi/pdfs/pathways/spring\\_2009/spring\\_2009.pdf](https://www.stanford.edu/group/scspi/pdfs/pathways/spring_2009/spring_2009.pdf)
- Reison, H. 2009. On the Renminbi and Economic Convergence. VOX Research-based policy analysis and commentary from Leading Economist. December 17. <http://www.voxeu.org/index.php?q=node/4397>.
- Scholz, W., F. Bonnet and E. Ehmke. 2009. Income Support in Times of Global Crisis: An Assessment of the Role of Unemployment Insurance and Options for Coverage Extension in Asia. *Working Paper*. International Labour Office, Geneva.





# 3

## Economic trends and prospects in developing Asia



# Central Asia

Armenia

Azerbaijan

Georgia

Kazakhstan

Kyrgyz Republic

Tajikistan

Turkmenistan

Uzbekistan



# Armenia

The global and regional recessions severely battered exports, workers' remittances, and private capital flows, forcing the country into its worst recession since just after independence. To counter the downdraft, the government implemented a wide-ranging anticrisis program. Its measures have maintained financial and external stability, kept inflation in check, and cushioned the adverse impact on the population. With momentum established, the outlook is for recovery with modest but strengthening growth. The medium-term challenges include broadening the production base, strengthening the fiscal position, and improving governance.

## Economic performance

The global recession, as well as continued tension between Georgia and the Russian Federation (which disrupted trade routes), stopped the economy dead in its tracks in late 2008 and in 2009 after several years of strong performance.

Fortunately, due to previous significant reforms and prudent macroeconomic policies, the country entered last year with strong economic fundamentals—a small fiscal deficit, moderate inflation, and low external debt—allowing the authorities to respond with a comprehensive anticrisis plan. But GDP still contracted by 14.4%, its worst outturn in 16 years.

The blast of recession was felt from the start of the year, with GDP on a monthly basis hitting double-digit declines by May and bottoming in July. This trend eased throughout the rest of the year (Figure 3.1.1).

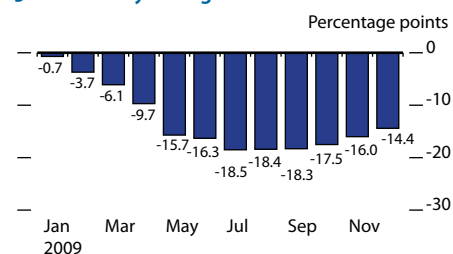
The economic downturn was experienced in all sectors of the economy (Figure 3.1.2). Construction, which had been the main driver of the economy, hemorrhaged with a 42.3% loss of output. The energy sector (electricity and natural gas) ebbed by 14.3%.

Other important industry activities, such as chemical products, building materials, mining and metallurgy, and the diamond-processing trade, all slumped. Agriculture saw no growth: lower animal output was offset by better crops. The services sector grew by a mere 0.7% due to reduced activity in finance, tourism, communications, and transport.

From the demand side, private investment tumbled by 25% as net inflows of remittances, which had driven the housing boom, sank by one-third (Figure 3.1.3) and net foreign direct investment declined by about one-fourth to about \$700 million. Private consumption also withered due to the reduced remittance inflows and the economic downturn. Public consumption and investment, however, were bolstered by the anticrisis program.

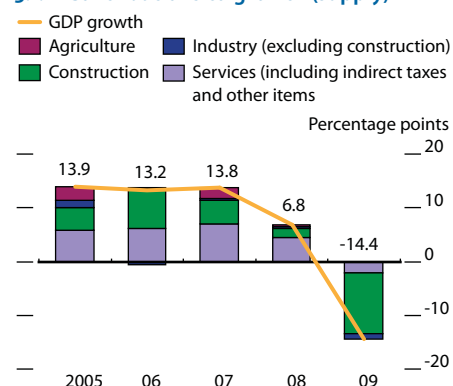
To stimulate mortgage lending, a National Mortgage Company was

3.1.1 Monthly GDP growth



Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 3 March 2010).

3.1.2 Contributions to growth (supply)



Sources: National Statistical Service of the Republic of Armenia. <http://www.armstat.am>; Central Bank of Armenia. <http://www.cba.am> (both accessed 3 March 2010).

established by the Central Bank of Armenia in July 2009. The new body began shoring up the construction sector by providing more-affordable resources to participating banks and lending organizations.

The earlier, strong inflation pressures had dissipated by the early months of 2009 (Figure 3.1.4). However, the devaluation of the dram by 22% in March and a 40% increase in imported natural gas prices in April, along with rising international prices for oil, commodities, and basic foodstuffs in the second half, sent inflation back upward. Headline inflation hit 6.5% in December, beyond the upper limit of the central bank's inflation target band. In 2009, sugar, fuel, medicine, and household utilities, in that order, recorded the highest price increases (ranging from 34% to 20%). Despite the hike of inflation in the fourth quarter, average inflation was 3.4% for the year.

Monetary policy is underpinned by an inflation targeting framework. The target of 4% +/-1.5% for 2009 was difficult to sustain due to the March devaluation and increased utility tariffs in April. Nonetheless, the devaluation and the subsequent program with the International Monetary Fund (IMF) served the economy well by restoring business confidence, reducing concerns about financial stability, and increasing competitiveness of exports.

By February 2009, gross official reserves fell to \$1.1 billion or 3.9 months of imports, the lowest level since May 2007. Given the rapidly worsening economic situation, the government formulated an economic recovery program that was supported by an IMF standby arrangement that took effect in early March. From June, reserves started to accumulate as economic activity bottomed, climbing to \$2.0 billion (6.6 months of imports) at year-end (Figure 3.1.5).

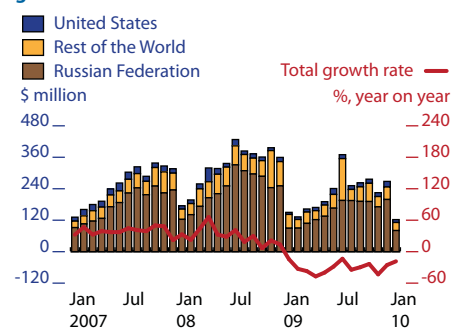
Real and nominal effective exchange rates depreciated throughout 2009. Due to the fear of further dram depreciation, dollarization accelerated: the share of deposits held in foreign currency doubled and that of loans climbed by half, relative to 2008. In such conditions, total lending volumes increased by 17.5% in 2009. The share of nonperforming loans edged down to 4.2% from 4.4% in 2008. Since banks are generally well capitalized, this marginal increase presents no serious concerns.

To stimulate economic activity, the central bank implemented an expansionary monetary policy through quantitative easing and reduction of the refinancing interest rate, which it gradually cut from 7.75% in March to 5.0% at year-end. Money supply grew by 15.1%, reflecting increases in net foreign assets and credit to the economy (Figure 3.1.6).

In a deteriorating economic situation, fiscal policy was relaxed to boost aggregate demand. Public spending on pensions and public servants' salaries were increased by 16.3%, and other social outlays were largely maintained. Tax receipts fell with lower economic activity, helping push out the fiscal deficit to 4.7% of GDP from 0.7% in 2008 (Figure 3.1.7). External resources more than financed the deficit, and even permitted a buildup of government deposits in the banking system.

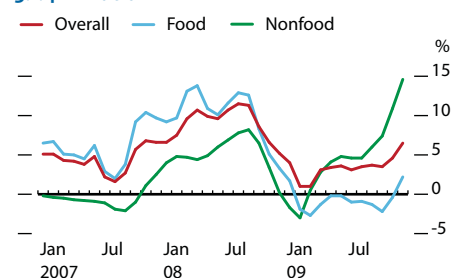
With budgetary and balance-of-payments financial support from development partners, external debt nearly doubled during 2009 to \$3 billion by end-December 2009 (Figure 3.1.8). The public sector debt-to-GDP ratio hit 40.1%, with foreign currency-denominated debt at 34.0%. IMF debt projections indicate that the debt ratio may peak

### 3.1.3 Remittance inflows, sources and growth



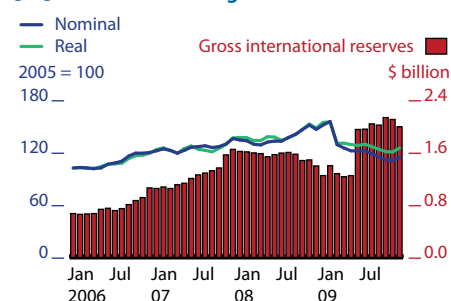
Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 3 March 2010).

### 3.1.4 Inflation



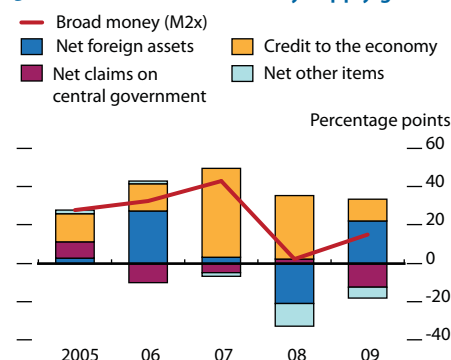
Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 3 March 2010).

### 3.1.5 Effective exchange rates and reserves



Sources: International Monetary Fund. International Financial Statistics online database. <http://www.imfstatistics.org/imf>; Central Bank of Armenia. <http://www.cba.am> (both accessed 3 March 2010).

### 3.1.6 Contributions to money supply growth



Source: Central Bank of Armenia. <http://www.cba.am> (accessed 3 March 2010).

at 46.6% in 2011 before falling to under 40% by 2013. While both the government and the IMF regard the debt dynamics as sustainable, these are subject to risks such as the projected improvement in the fiscal position or in economic growth failing to materialize.

Weak external demand for the main exports and slower than expected benefits of the dram's devaluation resulted in exports falling by 35.0% in 2009. This decline in value terms nevertheless was outweighed by a 25.4% fall in imports due to weak domestic demand that stemmed from lower remittances. Imports suffered in all major categories. For example, precious metals and diamonds (both items for export processing) collapsed by two-thirds and cars and other transport equipment by nearly three-fifths. As a result, the trade deficit narrowed to \$2.1 billion in 2009 from \$2.7 billion in 2008.

Due to lower remittance inflows and transfers, the current account deficit narrowed slightly to \$1.3 billion from \$1.4 billion, though it widened in relation to the shrunken GDP, to 15.4% from 11.6% in 2008 (Figure 3.1.9).

In support of its anticrisis program, the government received budgetary support from international financial institutions of nearly \$300 million. In addition, it has been using a \$500 million loan from the Russian Federation for earthquake zone reconstruction, as well as for support to the banking sector, large commercial firms, and small and medium-sized enterprises. These anticrisis measures stimulated the real sector, and output will further strengthen this year.

## Economic prospects

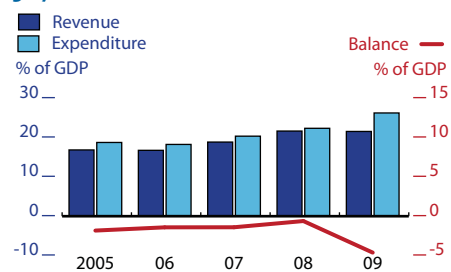
Economic recovery in large part depends on the assumed rebound in the Russian Federation, as resumed remittance inflows from the many Armenian workers there will be necessary for economic expansion. This pickup in remittances, improved external demand, and an increase in capital inflows are the ingredients to bring GDP growth to 1.5% then to 3.0% in the forecast period.

Fiscal policy will be gradually tightened in 2010 due to rising concerns on debt servicing. The fiscal position is expected to remain weak, and the recovery of tax revenue will be gradual. Yet excessive tightening in 2010 would slow the pace of the economic recovery. Still, through budgetary support from development partners as well as external borrowing, the public sector will remain one of the main economic buttresses in 2010–2011.

Inflation will be largely contained to a range of 4.5%–5.0% despite a 17% increase in the import price for natural gas that will push up utility tariffs and be generally passed on in higher transportation and consumer goods prices. Continuing weak demand and monetary policy, directed by the central bank's well-developed inflation-targeting procedures, should be able to keep inflation in check.

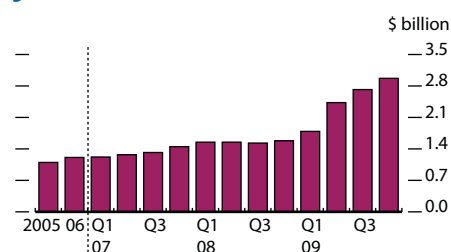
Remittance inflows and transfers are projected to grow by around 10%–15% in the forecast period, though they are not expected to recover to precrisis levels. Exports are seen rising by 5.2% in 2010 and then stepping up to 11.8% growth, supported by gradual strengthening in the diamond-processing, chemical, and metallurgy sectors. Import growth

### 3.1.7 Fiscal balance



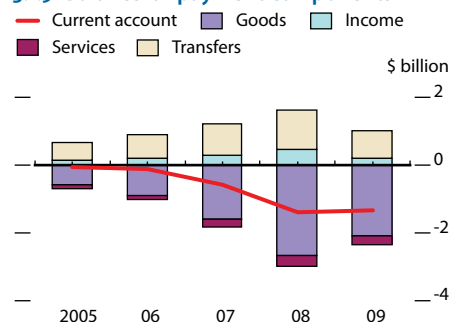
Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 3 March 2010).

### 3.1.8 External debt



Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 3 March 2010).

### 3.1.9 Balance-of-payment components



Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 8 March 2010).

### 3.1.1 Selected economic indicators (%)

	2010	2011
GDP growth	1.5	3.0
Inflation	4.5	5.0
Current account balance (share of GDP)	-12.0	-10.5

Source: ADB estimates.

is projected to be moderate at 4.7% and then climb to 5.1%, on the net effect of a slow recovery in consumer spending but a faster pickup in investment goods. The current account deficit is expected to moderate to 12.0% of GDP in 2010 and to 10.5% in 2011 (Figure 3.1.10).

Exports of agricultural products will benefit from the early March reopening of the Upper Lars checkpoint at the Russian–Georgian border, which is Armenia’s sole overland route to the Russian Federation and thence to Europe.

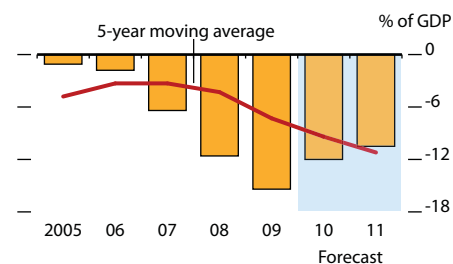
## Development challenges

Over the last few years, the economy has generally benefited from greater openness to trade and investment, although the global recession took a heavy toll (Figure 3.1.11). The immediate to medium-term challenges include tightening the fiscal stance, limiting the rising external debt, broadening the production base, and adding trade partners. Establishing stronger trade relationships with European countries, while maintaining ties with traditional trade partners, is a hard juggling act.

The authorities acknowledge the need for a faster pace of reforms in the areas of tax policy and administration, and a more competitive business environment. An action plan with clear milestones will be necessary to implement reforms to improve governance, form an effective incentive structure for fair distribution of resources, and strengthen the antimonopoly policy.

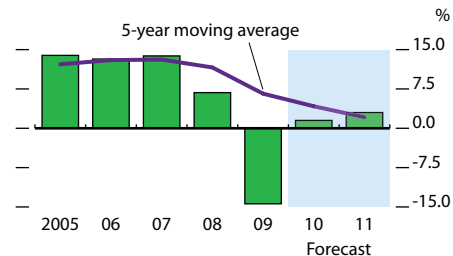
The government recognizes the existence of oligopolies in key sectors of the economy that have strong links with entrenched elites. To reduce such conflicts of interest and to improve the business environment, it will continue its efforts to reduce corruption, modernize public expenditure management, and strengthen the civil service and judiciary.

### 3.1.10 Current account balance



Sources: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 8 March 2010); ADB estimates.

### 3.1.11 GDP growth



Source: National Statistical Service of the Republic of Armenia. <http://www.armstat.am> (accessed 8 March 2010); ADB estimates.

# Azerbaijan

Strong performance in the oil and gas sector, despite lower international prices, and a countercyclical policy helped sustain buoyant growth in 2009. Transfers from the State Oil Fund propped up public investment, while the authorities eased monetary policy aggressively. High growth is expected to be maintained in 2010 as oil prices climb and as public investment expands. Over the long term, the economy is challenged by its excessive dependence on oil and its low level of diversification. Measures are needed to transform the industry sector and to boost productivity in agriculture.

## Economic performance

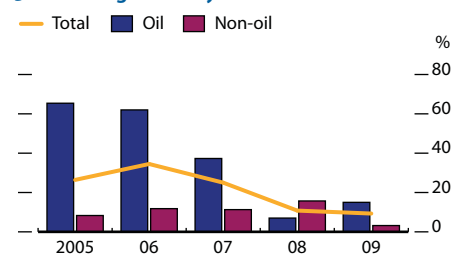
Despite the global financial crisis and fall in international oil prices from their 2008 highs, growth slipped only a little to 9.3% in 2009, from 10.8% in 2008. Helped by higher oil prices in the second half of 2009 and by increased production of hydrocarbons from the Caspian Sea, the oil and gas sector (constituting 55% of GDP and 95% of total export revenue) remained the major driver of growth (Figure 3.2.1). At 370 million barrels, oil production was higher than in 2008, as technical difficulties in a major oil field were overcome (Figure 3.2.2). Accommodative fiscal and monetary policies also worked to counter the impact of the global slowdown.

Construction, though helped by higher public investment, decelerated from 2008 as private demand for housing was damped by uncertain market conditions and lack of confidence in real estate. Mainly due to the slowdown of trade and transport, services growth declined (from 14.0%) but was still a robust 9.1% in 2009. Dynamism in information technology-related services, though still a relatively small area, helped sustain growth in services.

Agricultural growth fell by half to 3.5% in 2009 on account of expensive inputs, low credit availability, and water shortages in rainfed agriculture areas—most farmers continued to focus on subsistence wheat production. Overall, non-oil GDP growth at 3.2% of GDP in 2009 was much lower than its 15.7% growth in 2008, as activity was depressed by an uncertain economic outlook that restrained domestic demand and curtailed exports.

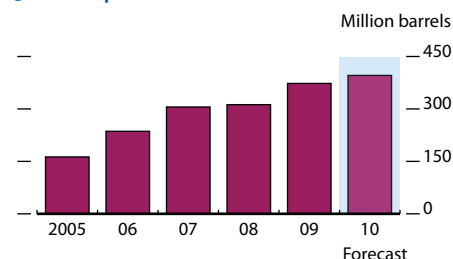
On the demand side, higher public investment, which rose to 21% of GDP in 2009, supported growth, reflecting government moves to counter the impact of the global crisis. That impact was, however, seen in falling private sector investment, which came down to only 6% of GDP in 2009. Lower prices constrained investment in the oil sector, which consequently accounted for a smaller proportion of total investment in 2009 than it did in 2008.

3.2.1 GDP growth by sector



Sources: Central Bank of Azerbaijan. 2009. *Statistical Bulletin*. No. 119. January; State Statistical Committee of the Republic of Azerbaijan. <http://www.azstat.org>

3.2.2 Oil production



Sources: State Statistical Committee of the Republic of Azerbaijan. <http://www.azstat.org> (accessed 22 March 2010); ADB estimates.



Higher public investment was partly financed by the State Oil Fund (SOFAZ), to which a large part of the government's oil receipts are channeled. SOFAZ has become an important source of financing for important socioeconomic and investment projects. It focuses on financing contractual agreements with production-sharing companies and with the State Oil Company of Azerbaijan for operating and developing oil and gas basins. The overall aim is to reduce year-to-year variation in oil revenues and act as a wealth fund that supports long-term economic growth. SOFAZ's assets climbed by 32.8% in 2009 and stood at \$14.9 billion (Figure 3.2.3).

Transfers from SOFAZ constituted 47.6% of total state revenue in 2009, up from 35.3% in 2008, as the government used them to finance its accommodative fiscal policy. The share of such transfers in total revenue has been growing since 2006. The budget deficit amounted to AZN242 million (0.7% of GDP). However, excluding SOFAZ transfers, the government ran a fiscal deficit of AZN5.1 billion in 2009 (14.8% of GDP), compared to an AZN3.8 billion (9.5% of GDP) deficit in 2008.

This dependence on SOFAZ points clearly to the need for generating more tax and nontax revenue. The tax-to-GDP ratio of around 15% is low and can be further scaled up. The budget deficit in these circumstances is currently being heavily financed by SOFAZ transfers, although the government intends also to use proceeds of privatization of state assets and domestic borrowing to finance part of the deficit in 2010.

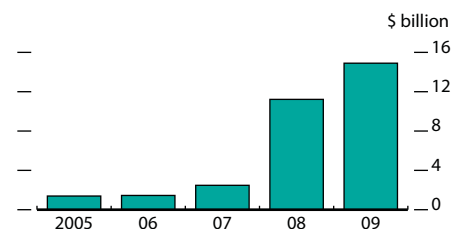
With falling international commodity prices, the consumer price index rose by only 1.5% in 2009, versus 20.8% in 2008 (Figure 3.2.4). The Central Bank of Azerbaijan's heavy market intervention maintained a stable exchange rate to the dollar in 2009 (at AZN0.8/\$1), preventing a depreciation that would have caused inflation pressure and raised debt-servicing costs for businesses that have sizable foreign-currency loans. Stable civil service salaries and economic uncertainty helped bring down inflation pressure from the demand side.

Falling inflation allowed the central bank to relax monetary policy through phased but steep reductions in the refinancing rate, which ultimately fell to only 2% in 2009 from a high of 15% in 2008. In addition, the central bank markedly lowered banking sector reserve requirements to 0.5% in March 2009 from 12%. With greater liquidity, commercial banks' ability to lend was strengthened and they reduced lending rates. The central bank received new authority to provide long-term loans in different currencies, as well as subordinated loans. It also provided additional special financing support to banks and private companies.

These measures, as well as new tools employed by the central bank, such as swap operations and repurchase of mortgage notes, helped create additional liquidity and were an important countercyclical response from the monetary side. Domestic assets consequently increased by about 23% in 2009 though the broad money supply stagnated as net foreign assets fell (Figure 3.2.5).

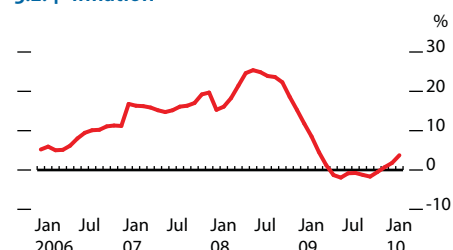
Banking sector resilience grew as a result of monetary policy measures of the central bank. Despite slow growth, banks maintained strong loan portfolios, and the proportion of overdue loans was kept in check, at 4.5% of the total.

### 3.2.3 SOFAZ assets



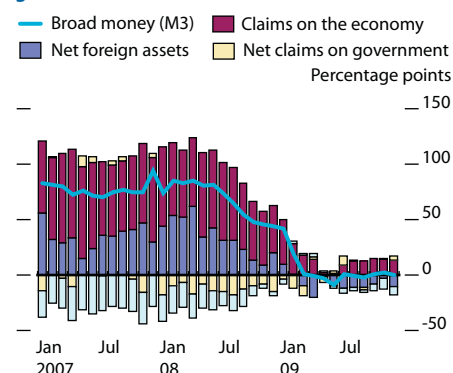
Source: State Oil Fund of the Republic of Azerbaijan. Annual Report. Various issues. <http://www.oilfund.az>

### 3.2.4 Inflation



Source: International Monetary Fund. International Financial Statistics online database (accessed 22 March 2010).

### 3.2.5 Contributions to money supply (M3) growth



Source: International Monetary Fund. International Financial Statistics online database (accessed 29 March 2010).

### 3.2.1 Selected economic indicators (%)

	2010	2011
GDP growth	9.5	9.7
Inflation	5.8	6.0
Current account balance (share of GDP)	23.0	21.7

Source: ADB estimates.



As oil export income fell due to sliding international prices, the trade account is estimated to have posted a surplus of only \$14.6 billion, down from \$23.0 billion in 2008. This drop was mitigated by an estimated \$1.1 billion fall in imports, largely because of lower food prices and a decline in oil companies' demand for investment machinery.

The lower trade surplus was offset to an extent by a sharp fall in net oil and gas factor income payments, helping reduce estimated net payments for services, income, and transfers by about one-third to \$4.4 billion. Still, the current account surplus at \$10.2 billion was much less than the \$16.5 billion earned in 2008, falling as a share of GDP to 23.6% from 33.7%.

Gross international reserves contracted by \$1.1 billion to \$5.4 billion at end-December 2009. This decline, in a context of a current account surplus, reflected a buildup in SOFAZ investment assets abroad.

External debt rose slightly to \$3.4 billion (8.8% of GDP) in 2009 from \$3.0 billion a year earlier. Azerbaijan's debt at these levels remains low and there are no major risks to debt servicing in view of the \$14.9 billion SOFAZ sovereign fund and the \$5.4 billion in foreign reserves.

## Economic prospects

Growth prospects hinge on oil. As oil prices rise in 2010 and as production levels increase, GDP is projected to accelerate a shade to 9.5%. Higher oil revenue through increased SOFAZ transfers in 2010 (for a total of AZN4.9 billion, or \$6.1 billion) will also enable greater public investment that will sustain growth at this higher level. At the same time, cuts in corporate profit and personal income taxes should help boost domestic demand. Ample liquidity and a likely continued expansionary monetary policy will permit commercial banks to expand their lending and lower lending rates to the private sector.

Agriculture is expected to be more robust as various public investment projects are completed. Communication and transport sectors will also continue to contribute to growth. With oil prices set to rise further next year, GDP growth will edge up to 9.7%.

The focus of monetary policy in 2010 remains on keeping inflation low. The central bank currently projects inflation at 3%. However, rising commodity and food prices and higher public investment and demand fueled by oil revenue, along with the current relatively liberal monetary policy environment, suggest that estimates of 5.8% (and about 6.0% in 2011) mark a more likely outcome. However, the likely appreciation of the local currency on higher oil revenues this year could complicate monetary policy if the central bank needs to intervene in the market to keep a lid on appreciation.

The external account is expected to remain strong on higher oil export receipts with the current account surplus projected at 23.0% of GDP before easing to 21.7% next year (as stronger GDP growth sucks in imports). The recovery of the global economy will boost non-oil exports, too, while the upturn in the Russian economy will support higher workers' remittances. The larger current account surplus, along with larger transfers from SOFAZ, will preclude the need for net foreign borrowing. External debt is projected to fall over the forecast period.

### 3.2.1 Development challenges

Excessive dependence on oil is the Achilles' heel of this economy. Forceful moves to diversify are required for strengthening services and the non-oil industry subsector, for raising agricultural productivity (building on the budgetary allocations for irrigation), and for developing fisheries and livestock.

The fact that the country ranks number two among the Central Asian republics and 38 among 138 countries worldwide on the World Bank's *Doing Business 2010* report suggests that the relatively sound business environment offers a springboard from which to catalyze growth and innovation in the non-oil economy.

A linked challenge is to diversify sources of government income to provide for stable public spending during downturns in international oil prices. To a degree, SOFAZ receipts help the government smoothen public spending over oil-price peaks and troughs, but more widely, revenues need to be boosted and the tax-to-GDP ratio raised to provide for sustainable public finances. An already planned measure in this regard, which needs to be fully implemented, includes the online submission of value-added tax invoices.

Finally, electricity supply has to be improved and expanded. Greater investment in the sector is critically needed.

# Georgia

The economy fell into recession in the wake of the 2008 conflict with the Russian Federation and the global downturn. But aided by a strong fiscal response and sizable external inflows, the contraction bottomed in June and recovery is, apparently, under way. The outlook is for modest but gradually strengthening growth on the assumption that exports, foreign investment, and credit to the private sector continue to pick up. Reducing the fiscal stimulus is the immediate priority, but efforts to diversify production and trade are needed for the longer term.

## Economic performance

The several years of high growth rates from 2005 through the first half of 2008 were underpinned by general macroeconomic stability, strong revenue performance, and a liberal business environment that attracted large inflows of foreign direct investment (FDI). But the armed conflict with the Russian Federation in August 2008 pummeled the economy, leading the authorities to seek an International Monetary Fund (IMF) standby arrangement the following month and emergency financing from donors. The September global financial crisis and subsequent recession then made a dire situation worse.

GDP contracted by 3.9% in 2009, well below the truncated 2.3% outturn in 2008 and far away from the 12.3% expansion in 2007 (Figure 3.3.1). The shrinkage reflected a 50% decline in FDI, which had provided real impetus to private investment and growth; a huge drop in demand for exports; and the conflict's dislocation of normal economic activity.

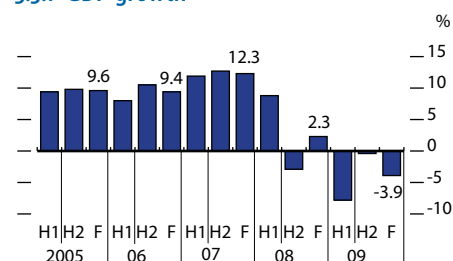
For the year, nearly all sectors of the economy were hit. Wholesale and retail trade saw double-digit declines while manufacturing and agriculture fell by more than 5%.

Large fiscal spending, however, put a floor on the decline in economic activity, and the downdraft appears to have bottomed in the second half of 2009, with a slight pickup in activity in the fourth quarter as investor and consumer confidence strengthened.

Inflation pressures were contained due to weak domestic demand and a drop in prices for major import items. Inflation, which had peaked at 12.7% in August 2008, steadily declined to 3.0% by December 2009 (Figure 3.3.2). It picked up somewhat in February 2010, mainly reflecting a seasonal increase in food prices. Average inflation dropped to 1.7% in 2009 from 10.0% in 2008.

In other measures to help stabilize the economy, the National Bank of Georgia, the central bank, shifted policy to monetary easing. It cut its key refinancing rate from 12% before August 2008 to 5% in November (where it stays). Moreover, it launched foreign exchange swaps and expanded

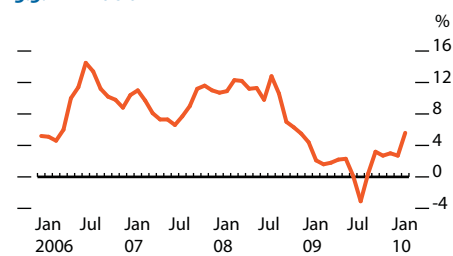
3.3.1 GDP growth



F = full year.

Source: National Statistics Office of Georgia. <http://www.geostat.ge> (accessed 31 March 2010).

3.3.2 Inflation



Source: National Bank of Georgia. <http://www.nbg.gov.ge> (accessed 31 March 2010).

uncollateralized loans to commercial banks as part of emergency lending. These changes had little impact on bank lending rates and on bank credit to the private sector, which dropped by nearly 12% in 2009. Still, the decline in private credit appeared to stabilize in the fourth quarter. New lending picked up in early 2010, though credit remained well below year-earlier levels.

Broad money contracted by around 14% in the first half of 2009 from a year earlier, though it rebounded to grow by around 8% by year-end (Figure 3.3.3).

Even though the banking sector continued to face difficulties, commercial banks began to show signs of improvement by a return to profitability in the third quarter of 2009. The share of nonperforming loans has increased since 2008 in part due to high levels of unhedged foreign borrowing. However, the nonperforming loan ratio at 6.8% in January 2010 was fully provisioned. “Dollarization” of deposits increased by about 10 percentage points in the last quarter of 2008 to 75.8%, but eased to 73.4% by end-2009, indicating strengthening public confidence.

The authorities’ proactive policy response to the crisis helped the economy weather the contagion effects of the global crisis, and was the main stabilizing force in the domestic economy. As part of the fiscal stimulus package, the government reduced income tax (from 25% to 20%) and dividend tax (from 20% to 15%). Tax collection declined by 7.7% in 2009. The decline in overall budget revenue, however, was larger, at 10.1%, attributed to a steep fall in grant assistance as the large grants—for those displaced by the conflict and for emergency infrastructure repairs—slowed.

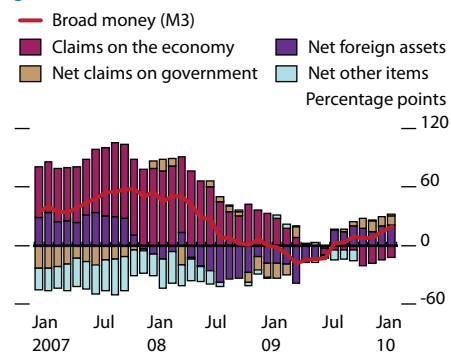
Current expenditure was essentially maintained at the 2008 level, though social welfare spending was significantly increased and defense outlays reduced. Total expenditure fell by 2.1% on a reduction in capital outlays (of about 8%). The fiscal deficit reached 9.2% of GDP in 2009, in line with the government’s plan and the program with the IMF (Figure 3.3.4). Public external debt rose to \$3.4 billion (or 31.8% of GDP) at year-end.

In light of lower than expected privatization revenue, weaker tax collection, and (to a lesser extent) a gap in external financing, sales of treasury bills were reintroduced in August 2009 and net issuance funded about 16% of the fiscal deficit in 2009. The bills were well received and will be used in financing the 2010 budget.

The current account deficit narrowed sharply to 11.9% of GDP (\$1.3 billion) in 2009, from 22.8% in 2008 (Figure 3.3.5). The improvement was mainly due to a 31% drop in imports. The fall reflected weak domestic demand (in good part owing to a marked decline in investment), lower commodity prices, and devaluation of the lari, the domestic currency. Exports fell by 22% on slumping demand. Net invisible receipts increased by 22% to \$1.1 billion, as remittance inflows (equaling \$0.95 billion or around 9% of GDP) stayed strong.

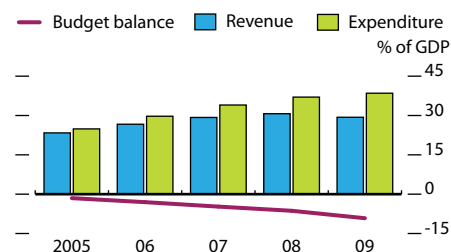
The authorities devalued the lari by around 17% against the dollar in November 2008 after sustaining reserve losses after August. By February 2009, downward pressure on the lari had eased and from May 2009 interventions were conducted only through foreign exchange auctions, in effect adopting a market-determined exchange rate. The rate was relatively

### 3.3.3 Contributions to money supply (M3) growth



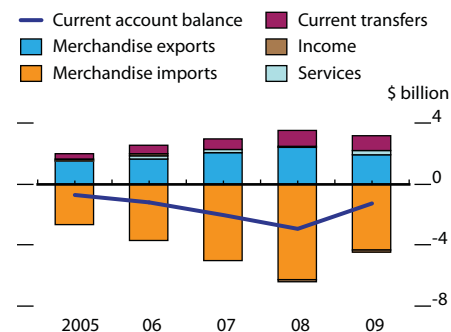
Source: International Monetary Fund. International Financial Statistics online database (accessed 31 March 2010).

### 3.3.4 Fiscal indicators



Sources: International Monetary Fund. 2008. *Request for Stand-By Arrangement—Staff Report*. October, 2009. *Third Review Under the Stand-By Arrangement*. August, 2009. *Fourth Review Under the Stand-By Arrangement*. December. <http://www.imf.org>; Ministry of Finance of Georgia. <http://www.mof.ge/en> (accessed 31 March 2010).

### 3.3.5 Current account components



Source: National Bank of Georgia. <http://www.nbg.gov.ge> (accessed 31 March 2010).

stable in 2009, varying little around the average of GEL1.68/\$, though this was about 11% weaker than 2008's average.

Gross international reserves increased to \$2.1 billion by end-2009 from the prior year-end low level of \$1.5 billion. About one-third of the increase was due to an allocation of special drawing rights by the IMF.

## Economic prospects

The economic outlook remains challenging. As a small, open economy at the cross-roads of Europe and Asia, trade and economic growth heavily depend on developments in neighboring countries and major trade partners. Given the projected global and regional economic recovery and the return of investor confidence, as evidenced by strengthening momentum in the domestic economy in the final months of 2009, GDP growth is projected to increase to 2.0% in 2010 and 4.0% in 2011.

While government expenditure will remain the mainstay of the economy, private investment is expected to pick up owing to a mild strengthening of FDI and improved domestic financing conditions as confidence in the recovery reasserts itself. A revival in trade and commodity prices is seen bringing export activity up sharply. Consumer expenditure should improve, if only slightly, on some gain in remittances and a return to domestic growth.

During the last few months of 2009 tax revenue, remittances, and trade turnover began to perk up, and will likely continue doing so in the forecast period. The 2010 budget plans to ease spending from 38.5% in 2009 to 36.5% of forecast GDP, but it would still underpin much economic activity. Notably, there would be a shift toward domestic expenditure and donor-financed postconflict rehabilitation spending away from import-oriented defense spending at 8% of GDP in 2008 to 4% of 2010's forecast GDP.

In addition, the budget envisages no increase in social spending relative to 2009, while other public expenditure will be brought down across the board. While revenue as a share of GDP will be little changed, expenditure policy is expected to lower the budget deficit to 7.4% of GDP. The government's medium-term fiscal plan targets are to reduce the budget deficit to 2%–3% of GDP by 2013 to ensure debt sustainability.

Monetary policy will continue to be geared to expanding lending to the private sector. Although domestic demand will be subdued, increases in international prices will likely push inflation higher to around 6% in 2010–2011. The central bank will continue to let the exchange rate adjust to market conditions.

The current account deficit is projected to widen to about 14% of GDP. This mainly reflects an increased import bill, in part on higher commodity prices, both for hydrocarbons and food. The revival in economic activity and global price developments is projected to push imports higher by about 12% in 2010. Given the expected growth in major trade partners, exports are forecast to strengthen by about 12% in 2010 and 14% in 2011. These factors will push the trade deficit higher, and with relatively little foreseen improvement in workers' remittances and other invisible receipts, the current account deficit will rise.

### 3.3.1 Selected economic indicators (%)

	2010	2011
GDP growth	2.0	4.0
Inflation	6.0	6.0
Current account balance (share of GDP)	-14.0	-14.0

Source: ADB estimates.

### 3.3.1 Development challenges

To achieve a sustainable fiscal and external balance, the government will need to modernize and diversify the export structure, then promote exports more. (The list of leading Georgian exports of a decade ago is remarkably similar to now.)

Traditionally, the share of FDI in manufacturing and agriculture has not exceeded one-quarter of total FDI, even though these two sectors have large potential for growth. Tourism and transportation sectors could be attractive for foreign investors as the country has a potential to become a major commercial and logistical hub in the Caucasus via the Poti and Batumi ports. Moreover, the country's sizable hydropower potential should be better tapped.

To rebalance growth toward export-led strategy it is important to create a conducive environment for attracting FDI to the tradable sector. Additional measures and incentives are needed to channel funds into the above promising sectors.

# Kazakhstan

The economic contraction bottomed in the middle of 2009 and the economy marked positive, albeit modest, growth for the year, bolstered by a rally in international oil prices in the second half. An expansionary fiscal policy directed through an anticrisis program, an accommodative monetary policy, and banking sector stabilization constituted the main policy focus. Weak domestic demand and limited access to credit curbed inflation pressures. The outlook is for modest growth with moderate inflation and a current account surplus, though the banking sector still faces difficulties and domestic demand will remain weak.

## Economic performance

In the second half of 2008, the oil-driven boom of previous years was put into a tailspin by the onset of the global financial crisis (because domestic banks had overborrowed from abroad) and then by the downdraft in oil prices. In 2009, GDP contracted by 2.2% in the first 3 quarters, but managed a marked rebound to post growth of 1.2% for the year (Figure 3.4.1) on the impetus of strengthening oil and commodity prices.

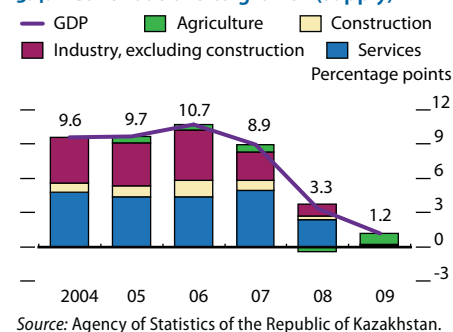
On the supply side, industry (excluding construction) grew by 1.8%, with output on the rise over much of the year (Figure 3.4.2). A fillip to growth came from a 13.8% expansion in agriculture as good weather produced a record grain harvest. Services output shrank marginally, and construction dropped by about 5%.

While data on the expenditure side are not yet available, private consumption and (non-oil) investment likely contracted or stagnated. One of the most significant impacts of a local banking crisis, which has wracked the country since end-2007 and essentially froze lending, has been a sharp slowdown in domestic demand.

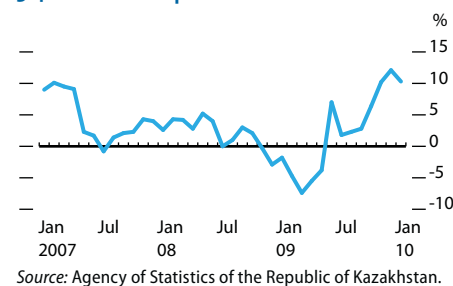
In prior years, local banks had relied on external borrowing to finance large increases in construction, real estate, and personal lending. When international capital dried up (from late 2007), the banks faced an increasingly serious liquidity crisis that in effect ended new lending, deflating the property boom and leaving many projects unfinished (Figure 3.4.3). Moreover, many consumers found themselves overindebted as the economy slowed. In response, the government adopted an anticrisis program (Box 3.4.1).

Annual average inflation fell to a low of 7.3% in 2009, from 17.3% in 2008, due to weak domestic demand and low international commodity prices, particularly at the start of the year. Even February's currency devaluation (adding upward price pressure to imports) could not outweigh the inertia of weak private consumption. Year-on-year inflation at end-December was 6.2% (Figure 3.4.4). By main component, food was

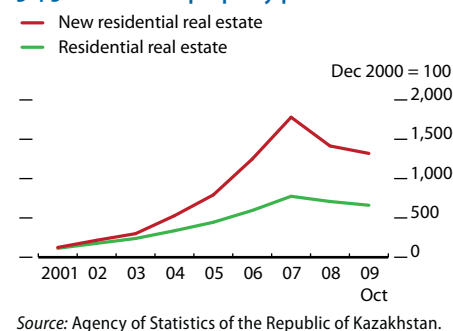
3.4.1 Contributions to growth (supply)



3.4.2 Industrial production



3.4.3 Residential property prices





### 3.4.1 Dealing with domestic crisis

In response to banking and real-sector woes, the government launched an anticrisis plan in late 2008. A total of \$10 billion or 9.5% of GDP, largely from the National Fund of the Republic of Kazakhstan—the national oil fund—was pledged.

The plan focused on the following: capital injections in four major banks (made through Samruk Kazyna, the government holding company for state-owned assets that also provides development finance); support for construction and the real estate market; assistance to small and medium-sized enterprises and agriculture; and public investment in industry. The initiative has stabilized the economy but a strong revival in the non-oil sectors does not appear at hand.

To deal with the banking crisis, the government early in

2009 effectively nationalized two of the largest banks and provided two other banks with relatively smaller amounts of capital. In the course of 2009, however, four financial institutions defaulted on external debt obligations and all are now in negotiation with their creditors to restructure a total of about \$20 billion in debt.

To strengthen confidence in banks, the authorities enhanced the existing deposit guarantee for individuals from T700,000 to T5 million. To back up this move, they also increased the capital base of the deposit insurance fund to T100 billion.

In addition, a distressed asset fund was established in October 2009. The government provided most of its resources, though the fund is relatively small. It has purchased real estate loans and financed industrial credits.

up only 3.0% from a year earlier while nonfood items and services were about 8.5% higher.

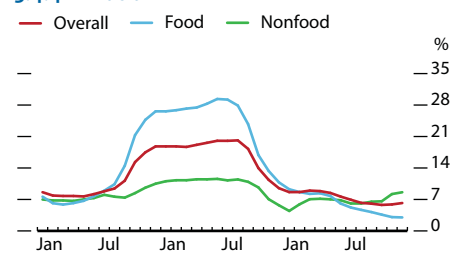
On the monetary front, inflation's tumble created space for monetary easing. The National Bank of Kazakhstan (NBK), the central bank, cut the refinancing rate (the main policy rate) seven times in 2009 from 10.5% at the start of the year to 7.0% by September. It also lowered reserve requirements from 2.0% to 1.5% for domestic obligations and from 3.0% to 2.5% on foreign borrowing to boost banks' liquidity. Broad money grew by 17.9% during 2009, mainly reflecting an increase in net foreign assets. Even though bank credit to the economy marked a 5.8% increase in 2009, growth came from the change in valuation of foreign currency loans due to the devaluation (Figure 3.4.5).

The exchange rate came under increasing downward strain toward the end of 2008, as oil and commodity prices fell, and as pressure on the foreign reserves mounted. The NBK devalued the tenge, the local currency, by about 20% from T120/\$1 to T150/\$1 (with a 3% band) on 4 February 2009 (Figure 3.4.6). This step essentially matched an adjustment in the Russian ruble in late January.

The devaluation proved a success on the whole, because speculative pressures against the currency dissipated, the rate remained relatively stable against the dollar, and the foreign exchange reserve position strengthened over the rest of the year. However, the rate adjustment entailed costs of higher debt service on foreign borrowing and ate into the benefit that falling global commodity prices had for inflation. Subsequently, on upwardly mobile hydrocarbon prices and the nascent global economic recovery, the NBK widened the trading band to T127.5–165/\$1 from 5 February 2010.

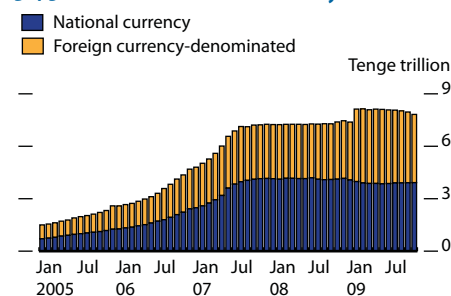
Reflecting the slow economic activity as well as tax-easing measures that underpinned the anticrisis program, current revenue (comprising tax and nontax revenue and capital receipts) contracted by 18.9% in 2009. In moves to support domestic demand and to mitigate the downturn's impact on vulnerable groups, the government pushed up its social outlays,

#### 3.4.4 Inflation



Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 9 March 2010).

#### 3.4.5 Bank loans to the economy



Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 9 March 2010).



including a 25% increase in public servants' salaries and pensions. Current expenditure rose by an estimated 10.4%. Taking account of smaller capital expenditure and transfers from the National Fund of the Republic of Kazakhstan (NFRK), the general government budget deficit widened to 3.1% of GDP in 2009 from 2.1% a year earlier (Figure 3.4.7).

Export revenue is estimated to have declined by 38.9% year on year in 2009 (mainly on lower oil prices), and imports by 25.2%, primarily due to weak domestic demand, slimming the trade surplus by more than half to \$15.2 billion. Both exports and imports strengthened in the second half, and nearly three-fourths of the annual trade surplus was earned in this period.

The stronger second-half performance stemmed from increased exports on the back of better oil prices. Imports stayed anemic, reflecting what was only a slight improvement in economic activity in this period. A sharp fall in the large income payments made to foreign investors in the oil industry offset around two-fifths of the drop in the trade surplus (Figure 3.4.8). As a result, the current account was held to a deficit estimated at \$3.4 billion (3.2% of GDP) in 2009 following the \$6.3 billion surplus in 2008 when oil prices were much higher.

Capital inflows more than covered the current account deficit, generating an estimated overall balance-of-payments surplus of \$2.5 billion and bringing the NBK's international reserves to \$23.2 billion at end-2009 (Figure 3.4.9). Assets of the NFRK were \$24.4 billion at this time. Assets of both the NBK and the NFRK grew in the first 2 months of 2010.

In 2009, the government committed \$10 billion from the NFRK to support the anticrisis plan. After that drawdown, the NFRK stood at around \$27 billion–\$28 billion, of which the foreign currency reserve accounted for \$23 billion, and a bond to Samruk Kazyna for \$5 billion (denominated in tenge).

Private sector external debt (excluding intracompany debt, which is mainly related to oil and gas corporations) grew rapidly over the years through end-2007 to \$95.3 billion (78% of GDP), when bank debt peaked at \$46 billion. Subsequently, there was only a moderate increase in private debt to \$108.5 billion at end-2009 and bank debt declined to \$30.1 billion (Figure 3.4.10).

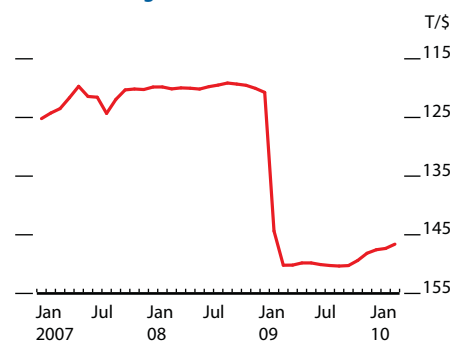
## Economic prospects

GDP is projected to grow modestly by 2.5% in 2010 and 3.5% in 2011, as the global recovery consolidates. Oil prices are expected to move up to average \$82 a barrel in 2010 and \$86 in 2011, and oil production is expected to increase by 4.6% or to 80 million tons in 2010, which will continue to grow by 5.0% or to 84 million tons in 2011. Construction will likely face difficulties still, as the property market adjusts, though it should post moderate growth as infrastructure and oil sector investment expand.

Agricultural growth over the forecast period will likely be modest due to the base-year effect of 2009's large gain. Foreign direct investment in oil and gas projects will continue at a relatively high level.

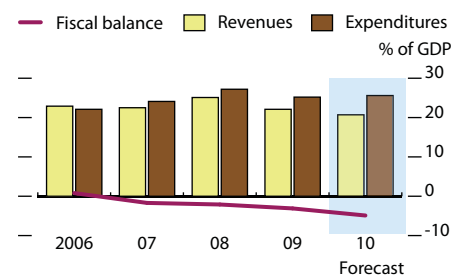
Public expenditure will continue exceeding non-oil sector private

### 3.4.6 Exchange rate



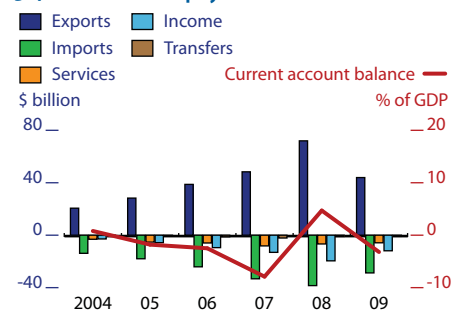
Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 31 March 2010).

### 3.4.7 Fiscal indicators



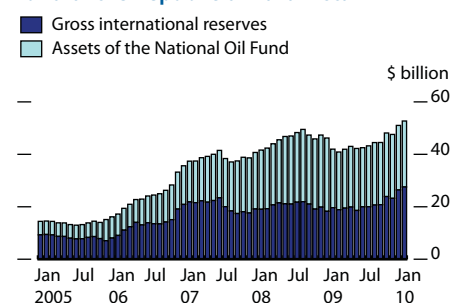
Sources: Ministry of Finance; ADB estimates.

### 3.4.8 Balance-of-payments indicators



Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 31 March 2010).

### 3.4.9 Reserves and assets of the National Fund of the Republic of Kazakhstan



Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 9 March 2010).

investment over the forecast period. Even though fiscal space will stay tight in 2010, the government will persist in its expansionary policy to maintain a high level of social outlays and investments in infrastructure. Total expenditure and net lending together are expected to grow by 4.6%. At the same time, total revenue and grants are expected to contract by 3.6% in view of tax concessions and continued slow growth. The budget envisages a fiscal deficit of 4.9% of GDP in 2010. The budget will continue to be boosted by a transfer of T1.2 trillion from the NFRK.

Inflation is forecast at 6.8% in 2010 and 6.5% in 2011 on the assumption that domestic demand remains weak, and access to credit stays tight due to the time needed to resolve the domestic banking problems. Even though global commodity prices will edge up, moderate appreciation in the exchange rate will help offset external price pressures.

The current account is forecast to be in surplus in 2010 and 2011. Exports are expected to increase by 30% in 2010, due to higher prevailing oil prices, and then advance by about 13% in 2011 on about a 5% strengthening in both oil prices and export volumes in conjunction with some further gains in non-oil exports as the global recovery strengthens further. Since domestic demand will gradually come back throughout the forecast period, imports will increase moderately.

These estimates point to a substantial trade surplus, though a pickup in income payments on direct investment in the oil sector will likely hold the current account surplus to about \$2.8 billion in 2010 and \$4.6 billion in 2011 (2.3% and 3.3% of GDP, respectively).

The main downside risk to the forecast is in weaker oil prices. In addition, it is important that ongoing negotiations on foreign debt restructuring by the defaulting banks be concluded soon so that more normal financing conditions for investment and consumption can reassert themselves. If economic recovery in the Russian Federation is slower than expected, export demand will be crimped.

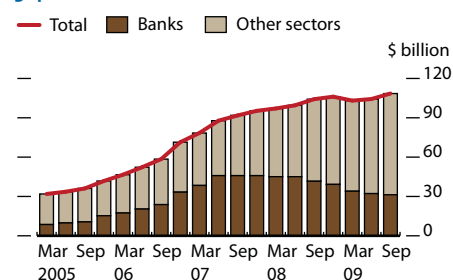
## Development challenges

The economy is still narrowly based, with economic activity and investment concentrated in the hydrocarbon and mining sectors. The current crisis has underlined the need to accelerate policies to diversify the production base beyond these sectors and their immediate feed-in industries.

In this context, under the state program for advanced industrial development and industrialization, the government plans to implement 162 projects totaling T6.5 trillion (about \$45 billion) in investments during 2010–2014.

For its part, the thin financial market requires deepening through improvements to the capital market's infrastructure and through revamps to the banking system. Moreover, it is critical to strengthen bank supervision to monitor risk-management and asset-valuation practices, if another round of asset boom and bust is to be avoided.

### 3.4.10 Private external debt



Source: National Bank of Kazakhstan. <http://www.nationalbank.kz> (accessed 31 March 2010).

### 3.4.1 Selected economic indicators (%)

	2010	2011
GDP growth	2.5	3.5
Inflation	6.8	6.5
Current account balance (share of GDP)	2.3	3.3

Source: ADB estimates.

# Kyrgyz Republic

Despite the global and regional downturns and power supply issues, the economy showed modest growth in 2009 on the back of a fiscal stimulus and strong performance in agriculture. Inflation fell sharply and the external position improved. The outlook is for accelerating, though moderate, growth given the expected recovery in major economic partners and the construction of new power generation capacity. The authorities are pursuing reforms to render the public sector more efficient and to create favorable conditions for private sector development.

## Economic performance

Economic downturns in Kazakhstan and the Russian Federation (the major economic partners) and the country's power shortfalls took economic performance in 2009 down to 2.3% from 8.4% in 2008 (Figure 3.5.1). Their difficulties hit the economy through reductions in three channels: remittances from migrant workers (which constituted around 20% of GDP in 2008); inflows of foreign direct investment; and demand for exports.

GDP growth was driven mainly by a robust performance of agriculture (due to favorable weather conditions), which grew by 7.3%. Construction increased by 6.3%, after a 10.8% contraction the prior year, a rebound primarily due to activity in the hydropower generation and mining subsectors, rehabilitation and construction of roads, and residential building. However, industry overall declined by 3.4 because of reduced output in the textile and sewing industry, transport equipment, electric energy, and gas and water distribution. Gold production also declined.

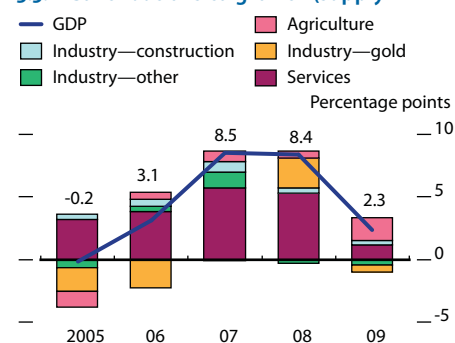
The traditionally high-performing services sectors grew only moderately (2.4%) as the downdraft in workers' remittances crimped consumer expenditure.

Reduced demand, together with sliding world food and energy prices, slashed average consumer price inflation from 24.5% in 2008 to 6.9% in 2009. The rate fell steadily during the year and by December was zero (Figure 3.5.2). The good domestic harvest also helped lower food prices, to 7.4% below December 2009 levels.

Services sector prices also tumbled. Nonfood goods inflation stayed relatively high as depreciation has worked against the decline in global prices of imported commodities and consumer goods.

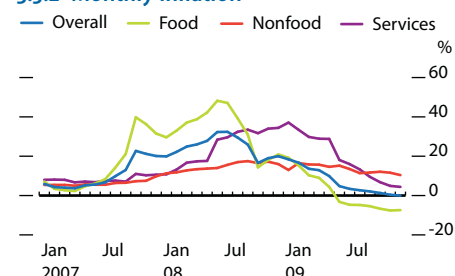
Boosting expenditure on social safety net programs and infrastructure projects, the government took a strong countercyclical fiscal stance: it propelled budget expenditure by 35% (to nearly 38% of GDP). Financial assistance from the Russian Federation, in the form of a \$150 million

3.5.1 Contributions to growth (supply)



Source: National Statistics Committee of the Kyrgyz Republic. <http://www.stat.kg> (accessed 3 March 2010).

3.5.2 Monthly inflation



Source: National Statistics Committee of the Kyrgyz Republic. <http://www.stat.kg> (accessed 3 March 2010).

grant and a \$300 million concessional loan, enabled such a boost. This increase in official transfers—they shot up to seven times the 2008 level—lifted total budget revenue by 25.8%. It also was instrumental in holding the deficit to only 1.8% of GDP in 2009 (Figure 3.5.3) from the original budget plan of 4.6%. The government intends to use the loan to finance infrastructure projects and support small and medium-sized enterprises.

Tax revenue declined by 17.8% in 2009, mainly on a reduction of the average value-added tax (VAT) rate from 20% to 12%, and abolition of some levies such as road and emergency taxes. Customs collection also declined, by around 11%, reflecting weaker trade.

The government forecasts its budget deficit at 5.1% of GDP in 2010. The widening deficit is a result of the increased budgetary allocations for the development budget (mainly infrastructure projects), monetization of benefits, higher pensions, and increased compensation to vulnerable groups (to offset an increase in electricity and heating tariffs).

The National Bank of the Kyrgyz Republic (NBKR) followed an expansionary monetary policy. It reduced banks' reserve requirement from 10% at the start of the year to 9.5% from June; and lowered the discount rate from 14.4% in January to a record low 0.9% at year-end. Although the commercial banks' lending rate remained almost unchanged (at about 20%), credit to the private sector surged by 46.5%. For the year, money supply rose by 20.4%, carried by increased net foreign assets (reflecting the budget assistance) and the expanded credit to the private sector.

The NBKR continued its managed floating exchange rate regime. Following a sharp depreciation of the Russian ruble and Kazakh tenge in early 2009, the NBKR opted for a smooth depreciation of the national currency, the som. Given the large import content of consumption, the NBKR had to sell foreign currency extensively to prevent rapid depreciation of the som in the first quarter. Over the year, the som depreciated by around 15% against the United States dollar (Figure 3.5.4).

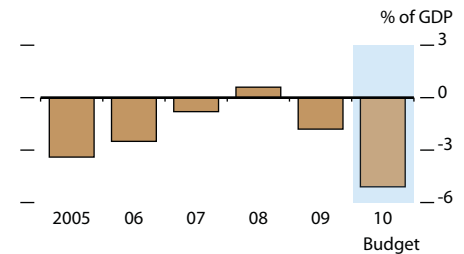
The economic downturn in the country's main partners cut their demand for products from both the Kyrgyz Republic and the People's Republic of China (PRC), the latter product reexported to neighboring countries. Preliminary data indicate that exports fell by 11.3% in 2009, mainly due to weaker demand for domestic textile exports and the PRC's reexports.

At the same time, imports decreased by 24.3% owing to the slowdown in the economy and the drop in imports for reexport. As a result, the trade deficit decreased by about 37% to \$1,203 million and the current account deficit to an estimated 10% of GDP from around 12% (Figure 3.5.5). A capital account surplus more than fully financed the deficit, and reserves increased by about \$364 million to \$1.6 billion at end-2009.

A new tax code, in effect from 1 January, cut the number of taxes (as well as reducing the VAT rate). To offset the revenue losses, the authorities introduced new taxes on owners of automobiles and property. Overall, many of these changes were welcomed by large businesses. The authorities also introduced a new "tax contract" scheme under which businesses pay a fixed amount indicated in the contract and are not subject to further tax inspections.

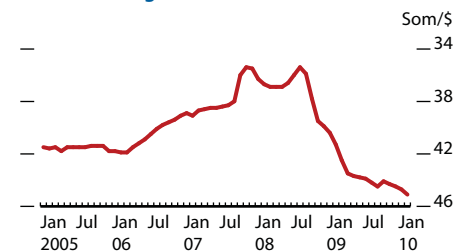
Among financial reforms, a deposit insurance scheme was launched

### 3.5.3 Budget balance



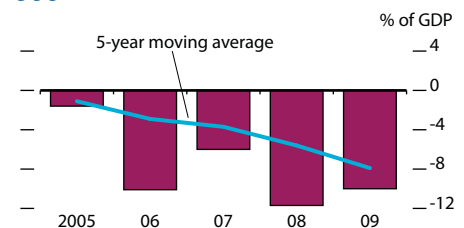
Sources: International Monetary Fund, 2008. *Exogenous Shocks Facility-Staff Report*. December, 2009. Article IV Consultation. July. <http://www.imf.org>; Ministry of Finance.

### 3.5.4 Exchange rate



Source: International Monetary Fund. International Financial Statistics online database (accessed 22 March 2010).

### 3.5.5 Current account balance



Source: National Bank of the Kyrgyz Republic. *Balance of Payments of the Kyrgyz Republic*. Various issues. <http://www.nbkr.kg>

in April 2009, covering deposits up to Som100,000 (\$2,290). All banks are required to participate. A new law under which agricultural land can be used as collateral for loan receipts was adopted on 29 June 2009.

In the energy sector, the government believes that the new tariff will bring the sector to cost-recovery levels and attract private investment. It has no plans for any further tariff increases this year.

The PRC made a preliminary agreement to grant a \$342 million loan for a power transmission line, which would help the country ensure energy security. Construction is expected to start in 2011 and finish 2 years later.

In October 2009, the country embarked on a government sector reform under which the number of ministries and agencies has been reduced. The reform also envisages cutting the number of government employees by 30% and aims to streamline the work of government and cut other costs.

## Economic prospects

GDP is projected to grow at 5.5% and 6.0% in 2010 and 2011, respectively. The expansion is mainly due to the expected recovery of Kazakhstan and the Russian Federation, boosting demand for exports, foreign direct investment inflows, and migrants' remittances—the last of which will directly bolster private consumption. Foreign-financed hydropower projects should carry on underpinning strong construction growth, but until all those projects are brought into commission (the first is scheduled for May), power shortfalls will continue to hamper manufacturing.

The government will also provide impetus to growth as it is planning to raise spending on wages and pensions and on infrastructure, the latter with financing assistance from development partners.

The expected increase in global food and oil prices will exert upward pressure on prices, though the contracted import price for natural gas will fall by about 10%, as will stronger workers' remittances. These forces will push up inflation in 2010 and 2011, to 8.5% and 9.0%, respectively.

Given the large import share in the consumer basket, the NBKR will use the exchange rate to mitigate inflation. Credit growth will remain subject to the bottlenecks that face Kazakh banks (which account for half the banking sector) in supplying capital to their subsidiaries in this country. However, increased foreign exchange inflows may allow the NBKR to adopt an accommodative credit policy.

The expected regional economic revival is expected to increase demand for Kyrgyz exports by about 10% in the forecast period, while workers' remittances will increase, though not dramatically. The expected recovery of the Kyrgyz economy and continued project implementation will increase demand for imports by an estimated 15%. The current account deficit is projected at 12% in 2010 and 2011.

### 3.5.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.5	6.0
Inflation	8.5	9.0
Current account balance (share of GDP)	-12.0	-12.0

Source: ADB estimates.

### 3.5.1 Development challenges

The government recognizes that in order to achieve a sustainable growth path it has to push through institutional reforms and changes in key areas such as energy, trade facilitation, and customs administration. It has undertaken major administrative and government reforms to make public-sector decision making more efficient. In addition, it is revising its long-term development strategy with a key focus on the business investment environment.

Complementing these moves, it has to design and implement mechanisms to substantially raise the level of private domestic saving and investment. Success is essential both to lay the foundation for sustainable, inclusive, private sector-driven growth and to strengthen the country's ability to resist external shocks.



# Tajikistan

Falling remittance inflows, which hit welfare in rural areas, as well as weak external demand for export commodities slowed growth in 2009 and took down foreign exchange reserves. Aluminum and cotton production, in particular, were pummeled. The government launched an ambitious reform program for private sector development. With improvement in its major trade partners, the outlook is for higher, though still moderate, growth. Successful implementation of an ongoing reform program is critical for developing the private sector and broadening the production base, which is needed to underpin long-term growth.

## Economic performance

A sharp reduction in workers' remittances (mainly due to economic difficulties in Kazakhstan and the Russian Federation) and weak demand for Tajikistan's main export commodities (aluminum and cotton) were the main factors in slowing GDP growth by more than half in 2009 (to 3.4% versus 7.9%—Figure 3.6.1). Some improvement in prices in the second half of the year for these commodities, together with healthy yields of the noncotton agriculture subsectors, helped buttress growth. Continued work on externally financed large infrastructure projects (including the Sangtuda-1 hydroelectricity plant, the South–North transmission line, and various roads and tunnels) also underpinned expansion.

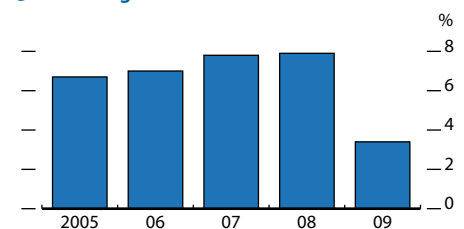
Industrial production, making up about 30% of GDP, contracted by 6.3% during the year, largely due to lower aluminum production, though it strengthened in the fourth quarter. Power shortages at the start of the year also mauled the sector. Despite the 16% fall in cotton output, agriculture grew by 10.5% in 2009, as noncotton agriculture recorded substantially higher output. This performance reflects more land allocated from cotton to food crops and new land plot distributions, which became part of the government's anticrisis employment program.

Remittance inflows in 2009 were \$1.8 billion (about 37% of GDP), a nearly one-third drop from those in 2008 (Figure 3.6.2). This wracked private consumption, import demand, and house construction, especially in rural areas, where many households depend on remittances. The International Monetary Fund estimated that the poverty rate rose by 5 percentage points during the year.

Inflation came down to average 6.5% from 20.4% in 2008, largely on declines in energy (notably oil and natural gas) and food, of which Tajikistan is a net importer. On a year-on-year basis, monthly inflation fell steadily after mid-2008 to 4.9% (Figure 3.6.3) in December 2009.

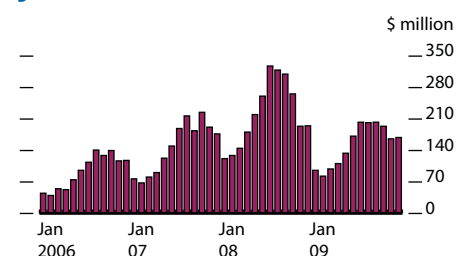
Slowing inflation provided the central bank, the National Bank of Tajikistan, with space to ease monetary policy. However, the underdeveloped nature of the financial market meant that its moves—it

3.6.1 GDP growth



Sources: State Statistical Committee of the Republic of Tajikistan; ADB estimates.

3.6.2 Remittance inflows



Source: International Monetary Fund, Resident Representative Office in Tajikistan.

cut the refinancing rate four times during 2009 from 13.5% to 8.0% in an attempt to stimulate domestic demand and alleviate the debt-servicing obligations of state-owned enterprises—had little impact on the economy. It is more influenced by remittance inflows and commodity prices. (Broad money growth in 2009 was 10.9%.)

Banks' lack of access to capital inflows is, in addition to slumping remittances and commodity prices, another reason for the tight liquidity since end-2008. Traditionally, most Tajik banks raised capital from Kazakhstan's banks, but this source largely dried up because of that country's own banking liquidity issues.

The local currency, the somoni, depreciated sharply by about 22% against the US dollar in the first half of 2009 due to a large drop in foreign exchange receipts from remittances and exports (Figure 3.6.4). In the second half the exchange rate was broadly stable. Foreign reserves at end-2009 were low—only \$125.3 million, or 0.6 months of imports.

Due to the first-half depreciation, the share of deposits held in foreign currencies has accelerated (the majority of remittance receipts are in Russian rubles and US dollars). However, most demand came from people looking for local currency loans. Due to the perceived risks of further somoni depreciation and the increased foreign exchange-denominated deposit base, banks preferred to grant loans in foreign currencies. Hence, with the currency mismatch, they only gave loans to a small portion of clients, such as traders.

The government launched an anti-global-crisis fiscal plan in April 2009. Similar to those in other countries, it aimed to stabilize the macroeconomy; bolster growth, jobs, and private sector development; and sustain social programs. In support, in April 2009 the International Monetary Fund approved a \$120 million loan to run over 2009–2011. Subsequently, the 2009 budget prioritized social sector spending (over capital expenditure), also to help protect the most vulnerable social groups.

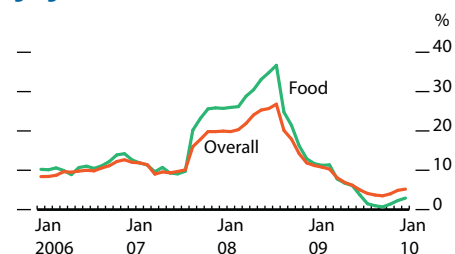
Even though budget revenue was 15% less than planned, the 2009 budget, excluding the largely foreign-financed public investment program, recorded a deficit equivalent to only 0.5% of GDP (Figure 3.6.5). Including the program, the deficit was 7.0% of GDP.

Due to the global recession, a significant price reduction for major export items, particularly aluminum and cotton, as well as weaker internal demand lowered trade turnover by 23% in 2009. Exports fell, and imports shrank by about 23% to \$2.2 billion, slightly narrowing the trade deficit to \$1.8 billion (some 33% of GDP). Accounting for service payments and a lower level of remittances, the current account deficit increased to 9.7% of GDP (Figure 3.6.6).

The government is pursuing a structural reform agenda aimed to lay the foundations for sustained economic growth. Tajikistan ranked among the top 10 reformers in the World Bank's *Doing Business 2010* report which assessed the business environment in 181 countries.

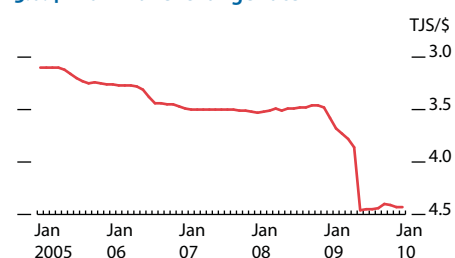
Actions taken by the government include a 2-year inspections moratorium for small and medium enterprises, which considerably reduces the regulatory burden on business enterprises. In July, a program was launched that aims to streamline administrative procedures and make doing business less costly for entrepreneurs. It includes 24 reform

### 3.6.3 Inflation



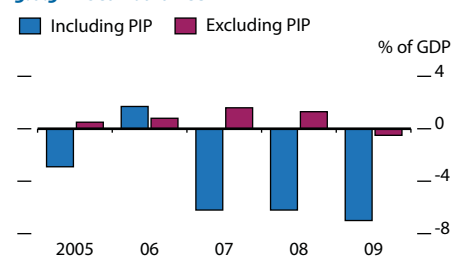
Source: State Statistical Committee of the Republic of Tajikistan. <http://www.stat.tj> (accessed 25 February 2010).

### 3.6.4 Nominal exchange rate



Sources: International Monetary Fund. International Financial Statistics online database; National Bank of Tajikistan. <http://www.nbt.tj> (both accessed 12 March 2010).

### 3.6.5 Fiscal balance



PIP = public investment program.

Sources: International Monetary Fund. 2008. *Financial System Stability Assessment*. December, 2009. Article IV Consultation. June. <http://www.imf.org>

items covering areas such as implementing one-stop-shop business registration, licensing and permit reform, improving the tax regime, protecting minority shareholders, and simplifying foreign trade operations.

## Economic prospects

The major determinants of economic growth include the economic trajectories of Kazakhstan and the Russian Federation, and export prices for aluminum and cotton. Fortunately, both countries are expected to come back firmly from the recession, posting moderate growth in the next 2 years, while cotton and aluminum prices are also likely to continue firming up. It is also expected that noncotton agriculture will experience healthy growth. In view of these projections, economic growth is put at 4.0% in 2010 and 5.0% in 2011.

In the short run, fiscal policy will need to maintain the social outlays in order to arrest further deterioration in the welfare conditions of lower-income households. Also, additional external support on concessional terms will be necessary to develop infrastructure, particularly in the energy sector, which is needed to underpin sustainable GDP growth.

Increased import prices for food and energy as well as a revival of domestic demand due to rising remittances are the main factors behind growing inflation pressures, which are likely to take the rate to 10.8% and 9.5% in the next 2 years.

Recovering remittances over the next 2 years will also boost domestic demand for imports, which will grow faster than exports. In turn, exports are expected to rise on the back of the global recovery and stronger commodity prices, widening the trade deficit. With larger remittances the current account deficit is forecast to trim to 8.3% of GDP in 2010 and 7.1% in 2011.

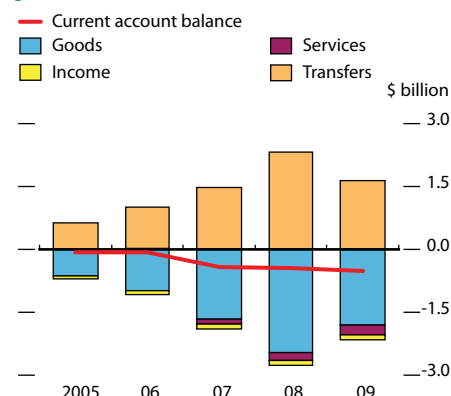
## Development challenges

The trajectory of the economy essentially turns on remittance inflows, exports of a few commodities, and public expenditure on large investment projects, since the production and resource base is narrow. However, the country possesses huge hydropower potential, though this may not be fully realized in the foreseeable future for several reasons.

Weak capacity of public institutions, governance, and accountability in policy reforms is the first item on the development agenda, followed immediately by successful implementation of the current reform initiatives. Although the government has started to improve the business and investment environment, infrastructure bottlenecks, including chronic wintertime electricity shortages, remain a major challenge.

The government is therefore seeking funding to complete the Roghun hydroelectric power station, a project essential to tackling economic problems resulting from power outages. But it has to take into account the economic, welfare, and environmental implications of the project and work in cooperation with all interested parties, both at home and abroad.

### 3.6.6 Current account balance



Sources: International Monetary Fund, 2008. *Financial System Stability Assessment*. December; 2009. *Article IV Consultation*. June. <http://www.imf.org>; ADB estimates.

### 3.6.1 Selected economic indicators (%)

	2010	2011
GDP growth	4.0	5.0
Inflation	10.8	9.5
Current account balance (share of GDP)	-8.3	-7.1

Source: ADB estimates.

# Turkmenistan

Relying heavily on gas, the economy slowed in 2009 because its major gas export pipeline was shut for most of the year, though increases in public and foreign direct investment helped underpin a moderate GDP expansion. Inflation sharply decelerated on lower import prices and tight monetary policy. With new gas pipelines now operating, the outlook is for a return to high GDP growth. A challenge for the government is to diversify its production base.

## Economic performance

The impact of the global recession was limited because the economy is at the very early stages of integrating itself into world markets. In April 2009, however, a technical accident in the main gas pipeline to the Russian Federation, as well as lower energy demand, suppressed gas exports. Even though the gas pipeline was reportedly restored by September, shipments of gas to the Russian Federation—a mainstay of production and exports—did not resume until January 2010. Reportedly, total forgone gas export revenue amounted to about \$7 billion–\$10 billion.

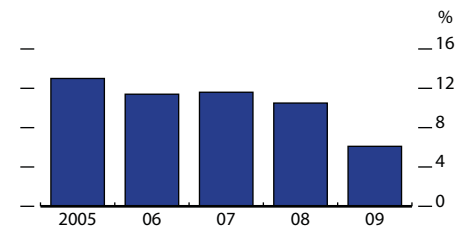
Still, GDP growth in 2009 came in at 6.1%, on robust growth in construction, services, and agriculture (Figure 3.7.1). The main driver of growth was public investment, which amounted to 25 billion Turkmen manat (TMM) (or \$8.8 billion), or 1.6 times the 2008 level. A general increase in investment was supported by a state program to support small and medium-sized enterprises. In addition, there was a surge of externally financed infrastructure projects.

Official statistics indicate that consumer price inflation sharply decelerated in 2009 to an average of 0.1%, down from 14.5% in 2008. High inflation in 2008 reflected both the unification of the informal and the (substantially appreciated) formal exchange rates in May, and commodity price pressures, while the drop in 2009 was mainly due to the sharp fall in global non-oil commodity prices (the country imports much machinery and food) (Figure 3.7.2).

The Turkmen manat was redenominated on 1 January 2009 with 5,000 of the old denomination made equivalent to one of the new. The exchange rate, set at TMM2.85/\$1, was stable throughout 2009. According to the International Monetary Fund, broad money is estimated to have contracted by 4.4% in 2009, reflecting a tight monetary policy. To maintain low inflation as well as to stabilize the nominal exchange rate, cash circulation was tightly controlled.

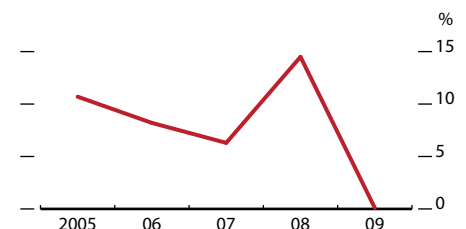
The government ran an accommodative fiscal policy in 2009, with the budget surplus estimated to have fallen to 3.0% of GDP in 2009, down from 11.3% in 2008 (Figure 3.7.3). Rapid expenditure growth was

3.7.1 GDP growth



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October. <http://www.imf.org>; ADB estimates.

3.7.2 Inflation



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October. <http://www.imf.org>; ADB estimates.

maintained while the nonhydrocarbon tax base was broadened, mainly due to high growth of construction activity. The fall in the surplus was largely a reflection of less buoyant receipts from the oil and gas sector, the source of about 75% of fiscal revenue. State budget surpluses are accumulated in the Stabilization Fund of Turkmenistan, which was created in October 2008.

In December 2009, the government announced a 10% across-the-board increase in salaries for public sector employees. Pensions and other social benefits were also raised. As a result, the average salary for these employees increased to TMM598 (\$210) per month.

Despite the gas pipeline shutdown for most of the year, hydrocarbon sector exports, which accounted for more than 80% of total exports, continued to underpin the 2009 outturn. Export revenue managed to increase by 8.0% (in US dollars) in 2009 though performance was well less than the 27% gain a year earlier. At the same time, due to substantial increases in major capital investment projects and construction, imports increased by 19.2%. As a result, trade surplus shrank to 21.0% of GDP in 2009 from 23.4% in 2008 and the current account surplus decreased to 17.8% of GDP, down from 18.7% in 2008 (Figure 3.7.4).

December 2009 saw the opening of a natural gas pipeline connecting the People's Republic of China and Turkmenistan via Uzbekistan and Kazakhstan, thereby helping loosen the stranglehold that the Russian Federation had on Turkmenistan's natural gas exports. The pipeline is capable of delivering 40 billion cubic meters a year of gas at full capacity in 2012. A second pipeline to Iran came into operation in January 2010 with capacity of 12.5 billion cubic meters a year.

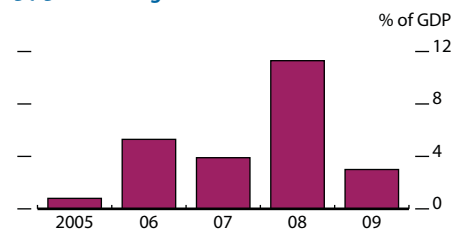
## Economic prospects

Growth of the economy will continue to be robust, supported by buoyant hydrocarbon and investment activity. GDP is projected to grow in 2010 and 2011 by 6.5% and 11.0%, respectively. By 2011, hydrocarbon exports will be back to the level of the pre-accident period as the phase-in of newly constructed pipelines will be able to handle gas at about full production capacity.

The government is likely to stick to its accommodative fiscal policy. Due to the expected strengthening of nonhydrocarbon commodity prices, inflation is projected to accelerate to 3.5% in 2010 and to 5.0% in 2011. Since large current-account and overall balance-of-payments surpluses are expected these years, the central bank will need to carry out sizable sterilization operations to keep the large foreign exchange inflows from boosting the money supply and creating sharply higher price pressures.

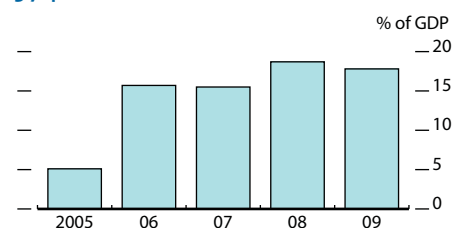
Despite the expected increases in imports owing to a step-up in investment and increased commodity prices, it is likely that the current account surplus will grow substantially in 2010–2011, mainly due to a surge in gas exports (reflecting the completion of gas pipeline construction). The current account surplus is forecast to reach 30% of GDP.

### 3.7.3 General government fiscal balance



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October; Ministry of Finance; ADB estimates.

### 3.7.4 Current account balance



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October. <http://www.imf.org>; ADB estimates.

### 3.7.1 Selected economic indicators (%)

	2010	2011
GDP growth	6.5	11.0
Inflation	3.5	5.0
Current account balance (share of GDP)	30.0	30.0

Source: ADB estimates.



# Uzbekistan

The government responded to the recent global financial and economic crisis with a well structured and timed anticrisis program. The program substantially increased domestic investment to create employment opportunities that offset the impact of the crisis on exports. The government has strengthened its efforts to diversify the economy through the private sector. Further acceleration of sector modernization will help greater private sector mobilization. The recovery of the global economy will improve external demand, providing an opportunity to accelerate reforms.

## Economic performance

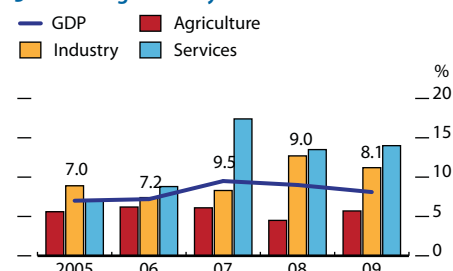
Despite the global recession and economic contraction among its major trading partners, Uzbekistan continued its strong economic performance in 2009 with GDP growth of 8.1% (Figure 3.8.1). The economy was affected by the recession through weaker external demand and lower remittance inflows.

The government responded to the recession early with a large-scale anticrisis program for 2009–2012, which was adopted at end-2008. Measures included substantial public infrastructure investment, tax preferences to exporting industries and small and medium-sized enterprises, increases in public sector wages, and recapitalization of commercial banks. The program was financed through the government budget, state-owned enterprises (SOEs), and the Fund for Reconstruction and Development (FRD), a sovereign wealth management fund established in 2006. Healthy budget revenues and good export performance of gold and natural gas supported the program's implementation. As a result, GDP growth was sustained by output gains in industry, including construction (11.2%) and services (14.0%).

Nonconstruction industrial growth is attributable to increased production of hydrocarbons, machinery, and chemicals, which together accounted for 42% of total industrial production. These three subsectors combined posted growth of 13.1%. The performance of other industrial subsectors was more modest, with the output of nonferrous metallurgy (mainly gold, silver, and copper) growing by 2.6%.

Within industry, construction shot up by 33.1%. This gain was driven primarily by an increase in fixed capital investment. According to official data, such investment rose by 24.8% in 2009. Construction output was lifted by public infrastructure development projects in rural areas. Notable sources of construction demand were large SOEs under government-led sector modernization and renovation programs (primarily manufacturing and mining). The share of fixed capital investment in GDP increased from 23.0% in 2008 to an estimated 26.1% in 2009.

3.8.1 GDP growth by sector



Sources: International Monetary Fund, 2008, *Article IV Consultation*, July, <http://www.imf.org>; State Statistics Committee of Uzbekistan; ADB estimates.

Rapidly growing telecommunications and financial markets were one of the major contributors to growth in services: mobile subscriber numbers have increased 10-fold in less than 4 years. The financial services market is growing fast in areas of microfinancing and bank debit card processing. In response to rising demand for credit from microenterprises, especially in rural areas, the volume of microfinance lending reached \$200 million in 2009.

Agriculture posted growth of 5.7%. Although difficult climatic conditions impacted the cotton harvests, increased production of cereal crops and vegetables supported sector growth.

The government reported that foreign direct investment in 2009 increased by 80% from 2008. The bulk of the increase came from expansion of activities in the hydrocarbons and communications sectors. In December 2008, the government established the first free industrial-economic zone in the Navoi region (FIEZ Navoi), which provides tax and customs preferential facilities for foreign investors. By end-2009, the government had signed 37 investment agreements with various foreign investors for FIEZ Navoi amounting to more than \$500 million. The first investment outlays are expected this year.

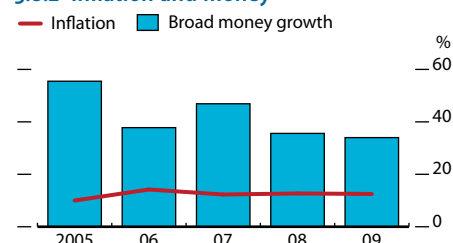
Inflation has been falling since 2008 despite inflation pressures stemming from a nominal depreciation of the exchange rate against the US dollar (of around 10% in 2009) and public sector wage increases. Such pressures were balanced by lower global commodity prices, coupled with administrative price caps on energy and utilities. The government reported end-period consumer price inflation of 7.4% for 2009. The latest estimate of the year-average consumer price index by the International Monetary Fund is 12.5%. Broad money growth is estimated at 34.0% in 2009 (Figure 3.8.2).

The depreciation of the local currency supported exports. Sharp falls in the Kazakhstan tenge and Russian ruble against their respective major trade partners added downward pressure on the nominal exchange rate.

The main elements of the anticrisis program implemented through fiscal policy were recapitalization of commercial banks to support lending; increased public infrastructure development to support job creation; and tax exemptions to support exporting industries and small and medium-sized enterprises. The government also increased public sector wages by 40% on average in 2009. These expenditures were offset by strong revenue receipts stemming from high export prices (especially for gold and gas) and tax reforms. The general government budget is estimated to have posted a surplus of 0.2% of GDP in 2009 (Figure 3.8.3). Including the FRD, the consolidated budget surplus is estimated at 4.4% of GDP.

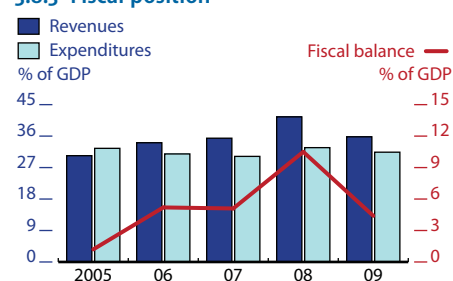
The crisis had impacts on exports and remittances. Exports to Uzbekistan's main markets, namely Kazakhstan, the Russian Federation, and Ukraine, and remittances from Kazakhstan and the Russian Federation, were heavily affected. Nonhydrocarbon exports contracted by 11% in 2009. Machinery (with a 61% decrease to \$341 million) and cotton (a 6% drop to \$1.0 billion) were among the worst hit, but their lower export revenues were offset by strong global demand for gold and income from natural gas sales to the Russian Federation (the largest customer). Hydrocarbon exports increased by 41% to \$4.0 billion. With the gold and gas prices hitting records, export revenue increased by about 2.0% relative to 2008.

### 3.8.2 Inflation and money



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October. <http://www.imf.org>; ADB estimates.

### 3.8.3 Fiscal position



Sources: International Monetary Fund. 2009. *Regional Economic Outlook, Middle East and Central Asia*. October. <http://www.imf.org>; ADB estimates.

The growth of imports is estimated at 25.8% in 2009. As in past years, machinery and equipment were the largest import items, reflecting infrastructure development. The sharp fall in export growth, increased imports, and lower remittances cut the current account surplus to an estimated 12.0% of GDP at end-2009, down from 16.7% in 2008 (Figure 3.8.4).

In the framework of its anticrisis program for 2009–2012, the government will continue its infrastructure development initiatives as well as sector modernization programs. This implies significant investment commitments, most of which will be financed by domestic banks, the FRD, and SOEs. Domestic investments by SOEs will be geared toward the hydrocarbon, energy, chemical, and transport sectors. Foreign direct investment will also provide important financing for investment. The government's investment program envisages a \$2.4 billion inflow of foreign direct investment in 2010, out of which \$2.0 billion will be directed to hydrocarbons. In April 2009, the national oil and gas company, *Uzbekneftgaz*, established a \$2.5 billion international joint venture to produce gas-to-liquid synthetic fuel.

Due to the active industrial policy, foreign investments are expected to increase steadily in the near future. At FIEZ Navoi, 16 investment projects for a total amount of \$200 million are forecast to start in 2010. A major part of the foreign investment is expected to be from Asia and the Middle East. The government plans to attract about \$1.0 billion of investment into FIEZ Navoi in the medium term. It has supported the private sector through reductions in rates of unified and fixed taxes, as well as value-added tax refunds and soft loans through commercial banks for exporters.

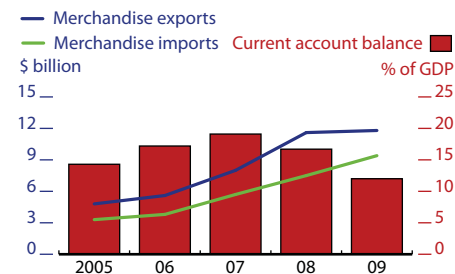
## Economic prospects

Due to the economic recovery of the major trading partners as well as the government's active industrial policies, improved export performance and higher investment inflows are expected to be major drivers of growth in the forecast period (at 8.5% and 9.0%). International prices for Uzbekistan's major export commodities look favorable in 2010 and 2011 (Figure 3.8.5).

The downside risks to these forecasts lie in external factors related to the situations in the main trading partners, as well as persistent fundamental imbalances in industrial countries. On the domestic side, timely implementation of the investment program and continued efforts on sector modernization would ensure intended outcomes of the government's anticrisis program. Well-designed public and private investment, including commercial bank lending, will benefit a broader population through improved access to credit and increased employment opportunities.

The government will continue increasing its social and infrastructure expenditures while broadening the tax base and reducing tax rates. The 2010 budget, approved by Parliament at end-December 2009, envisages increasing these expenditures to 13.5% of GDP in 2010, up from an estimated 11.5% in 2009. The rates of both corporate and personal income taxes will be decreased to stimulate business investment and

### 3.8.4 External sector



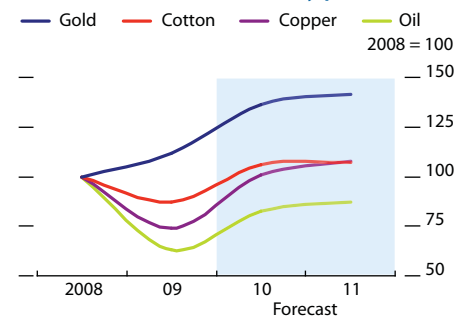
Sources: International Monetary Fund, 2008. *Article IV Consultation*. July. <http://www.imf.org>; ADB estimates.

### 3.8.1 Selected economic indicators (%)

	2010	2011
GDP growth	8.5	9.0
Inflation	9.3	9.0
Current account balance (share of GDP)	13.0	14.0

Source: ADB estimates.

### 3.8.5 International commodity prices



Note: Prices of commodities are based on US\$ prices.

Sources: World Bank, 2010. *Global Commodity Markets*. [www.worldbank.org/globaloutlook](http://www.worldbank.org/globaloutlook); Bloomberg (accessed 8 March 2010); Economic Intelligence Unit, 2010. *Global Outlook*. March; ADB estimates.

private consumption. The corporate and personal income tax rates fall by 1 percentage point to bring rates to 9% for corporations, 8% for small businesses, and 11% for individuals. The revenue will be sustained by the recovery in international commodity prices for certain exports that weakened in 2009, counterbalancing the increasing expenditures. The consolidated budget, including the FRD, is seen posting a surplus of 5.5% of GDP in 2010 and 6.5% of GDP in 2011.

Investment will also be boosted by increased bank lending and FRD resources. The banking sector increased its lending to small businesses by 50% in 2009, and this trend is expected to continue in 2010 and 2011 in light of significant demand for small and micro-lending. A new direction in the investment activities will be residential construction. The rural residential housing construction program for 2010 plans to allocate up to SUM588.7 billion (\$390 million) for this purpose. A large portion of funding will come from the new Rural Construction Bank, established in 2009, in which the government is the majority shareholder.

Strong external demand and rising exports will stimulate growth in net foreign assets and the money supply, creating inflation pressures that will be boosted by the large increases in public sector wages. It is expected that nominal depreciation of the sum will be gradual. Thus, fully sterilizing the excess liquidity from the large foreign exchange inflows may be a challenge. As a result of these factors, the government forecasts inflation in the range of 9% in 2010–2011.

The gradual recovery of the global economy and expected growth of world trade will underpin the current account surplus. The country will benefit from the international prices of its main export commodities, which will stay high on rebound.

Export gains will be partly offset by rising imports. Import growth will be determined mainly by demand for inputs into modernization of manufacturing and public infrastructure development, and by higher global commodity prices. The current account surplus is forecast at 13.0% in 2010 and 14.0% in 2011.

## Development challenges

The immediate challenge is to mitigate emerging inflation pressures from rising exports and continued fiscal expansion. A close coordination of monetary, fiscal, and industrial policies will be useful in ensuring price relative stability and continued economic development. For the longer term, the major challenge is to diversify the economy. Currently, it is resource-based, making it susceptible to the fluctuations of the global commodity prices. The sources of export income need to be more widely spread.

In order to achieve broad-based inclusive growth, private sector development, industrial diversification and trade liberalization are essential. Accelerating ongoing reforms in these areas, along with the continued efforts to streamline public administration, would help sustain economic growth and broaden improvements in living standards. The recent economic achievements of the country provide a sound opportunity for speeding up the transition to a sustainable and competitive economy.



# East Asia

People's Republic of China

Hong Kong, China

Republic of Korea

Mongolia

Taipei, China





# People's Republic of China

A V-shaped economic recovery in 2009 was underpinned by very expansionary fiscal and monetary policies. Strong investment and, to a lesser extent, growth in consumption largely offset the impact of shrinking external demand. Allowing for some adjustments, expansionary policies will continue this year. Coupled with a stronger global economy, GDP growth is forecast to accelerate. Inflation will rise from low rates. A new five-year plan provides an opportunity to revamp the structure of growth, in particular to encourage increases in private consumption.

## Economic performance

Aggressive fiscal and monetary stimulus in the People's Republic of China (PRC) in 2009 offset much of the impact of the global recession. After a weak first quarter, the economy picked up pace over the rest of the year (Figure 3.9.1), spurred by the stimulus measures and a recovery in exports, to record growth of 8.7%. That outturn compares with double-digit expansion in the 2003–2007 period and with 9.6% in 2008.

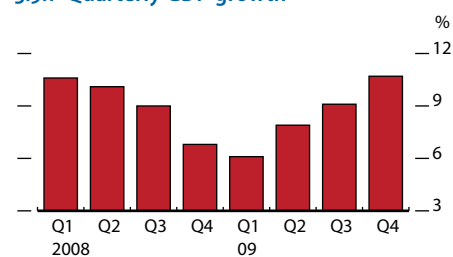
A slowdown in industry, which produces nearly three-fifths of GDP, was the main cause of last year's slower GDP growth on the output side. Growth in industry decelerated to 9.5% in 2009, although it still contributed most to the total expansion of GDP (5.5 percentage points—Figure 3.9.2). Industry picked up as the year progressed (Figure 3.9.3) as a result of a stimulus-led investment boom and some improvement in exports. Growth eased in services to a still robust 8.9%, and in agriculture to 4.2%, owing to a drought in the south.

The V-shaped recovery was driven mainly by domestic demand, especially public investment that benefited from the stimulus policies. Total investment contributed 8 percentage points, or a record 92%, of total GDP growth on the demand side. The investment-to-GDP ratio rose to nearly 46% (Figure 3.9.4), the highest level in at least three decades. Consumption contributed 4.6 percentage points of total growth. In contrast, a fall in net exports subtracted 3.9 percentage points from GDP growth.

Fixed asset investment accelerated by just over 30% in nominal terms in 2009, from 26% in 2008. Reflecting the priorities of the government's stimulus plan, investment in agriculture soared by nearly half and investment in services (mainly transport such as railways and urban public systems) jumped by 33.0%. Investment in industry also surged (by about 27%), while a 17.2% rise in property investment was a little slower than in 2008.

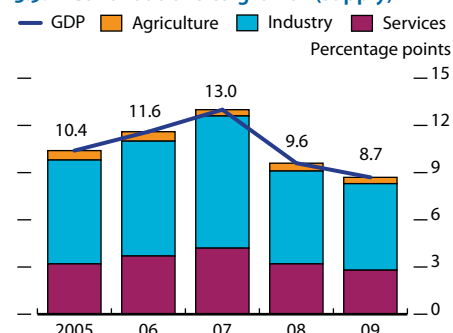
Consumption, both private and government, played a role in 2009's recovery, although not the leading role taken by investment. The volume

3.9.1 Quarterly GDP growth



Source: CEIC Data Company (accessed 15 March 2010).

3.9.2 Contributions to growth (supply)



Sources: National Bureau of Statistics of China. <http://www.stats.gov.cn> (accessed 15 March 2010); ADB estimates.

of retail sales, a proxy for consumption, took a hit early in the year amid widespread layoffs of migrant workers and a fall in consumer confidence, but it then strengthened (Figure 3.9.5) to be up by 16.2% in real terms for the year. Government incentives to buy cars propelled automobile sales to 13.6 million (when the PRC became the world's biggest car producer). Consumption was also supported by rising real incomes—by 9.8% in urban areas and by 8.5% in rural areas.

The slump in exports caused by the global recession bottomed during the first half of 2009 (Figure 3.9.6), and export growth was back in positive territory by December. For the year though, merchandise exports in US dollar terms fell by 16.1%. Merchandise imports, too, shot up late in 2009, reflecting robust domestic demand and recovering exports—but again, for the year they fell by 11.2%. As this was a smaller contraction than exports', the trade surplus narrowed by \$111 billion. With a widening deficit in services trade, the current account surplus was trimmed by about 33%, to \$284.1 billion (5.8% of GDP).

Reflecting the global financial crisis, foreign direct investment (FDI) fell for the first 7 months of 2009, then started to rebound. FDI for the year was down by about 17%, at a still substantial \$90 billion.

The trade surplus, FDI, and other capital inflows boosted foreign exchange reserves to \$2.4 trillion. However, the stepup in capital inflows also raised some concerns about speculation in booming property and stock markets.

A key element of the stimulus program was to flood the economy with credit from state-owned banks, mainly for fixed asset investment. Bank lending surged by CNY9.6 trillion, more than double the amount in 2008 and equivalent to about 29% of GDP. About a quarter of the credit went on infrastructure, such as airports, railways, and city transportation networks, and 15% on housing. State-owned enterprises received the majority.

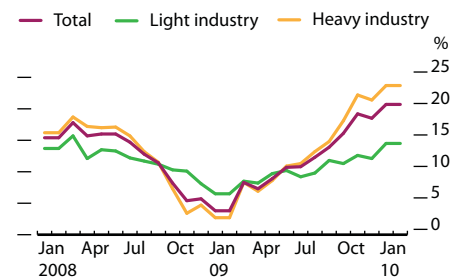
After the first half's huge surge in credit, the authorities started to check it in the second (Figure 3.9.7), concerned that it could fuel asset bubbles and inflation, and erode the quality of bank loan portfolios. Broad money supply (M2) climbed by 27.7% over the year, exceeding the target of 17%.

The yuan was kept steady against the US dollar in 2009, part of the stimulus program to support exports. Against a basket of currencies, though, it depreciated by 5.0% in real effective terms, according to the Bank for International Settlements.

Inflation dissipated in 2009, owing to lower global oil prices, another bumper harvest at home, and overcapacity in several manufacturing subsectors. The consumer price index fell for most of the year, recording year-on-year increases only in November and December (Figure 3.9.8), when food and housing costs rose. The flood of bank lending fed into rising asset prices—the Shanghai A-share stock market index gained 80% last year and property prices rose after midyear (Figure 3.9.9) to be up nearly 6% year on year in the fourth quarter. Local governments rely on land sales for much of their revenue, so have an incentive to promote real estate development. Their income from land sales, according to the central government, climbed by 60% to \$233 billion in 2009.

Fiscal stimulus measures designed to counteract the impact of the global recession focused on infrastructure and, to a smaller extent,

### 3.9.3 Growth in industrial value added



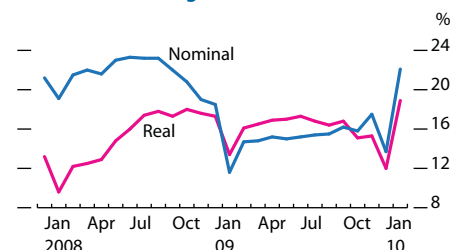
Source: CEIC Data Company (accessed 15 March 2010).

### 3.9.4 Total investment



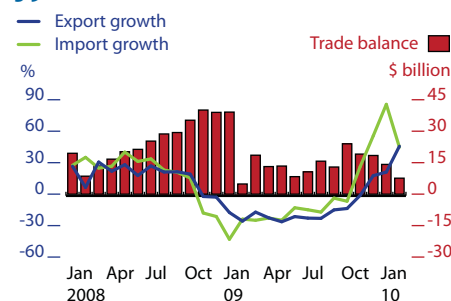
Sources: National Bureau of Statistics of China. <http://www.stats.gov.cn> (accessed 15 March 2010); ADB estimates.

### 3.9.5 Retail sales growth



Source: CEIC Data Company (accessed 15 March 2010).

### 3.9.6 Trade indicators



Source: CEIC Data Company (accessed 15 March 2010).

affordable housing, rural development, and social spending. The fiscal package involves expenditure of CNY4 trillion over 2 years from November 2008 (equivalent to 12.7% of 2008 GDP). The allocation for infrastructure was reduced in March 2009 from 45% to 38% of the total, and funds for social projects (such as health care and education) were raised from 1% to about 4%.

Given relatively low levels of central government debt (about 30% of GDP including domestic and foreign debt) and small budget deficits, the debt-funded package is manageable. The government will issue bonds to cover 25% of the fiscal stimulus, with the rest provided by local governments and low-interest loans from state banks. About half the fiscal stimulus was disbursed in late 2008 and during 2009, leaving the rest for this year.

Total fiscal expenditure, including that for the fiscal stimulus, rose by just over 21% in 2009. Revenue increased by nearly 12%. The fiscal deficit came in at just 2.8% of GDP (Figure 3.9.10).

An estimated 20 million migrant workers had lost their jobs by early 2009 as demand for manufactured exports dived. The labor market started to improve in the second quarter, on the back of improving industrial production and construction. By year-end, some employers in eastern provinces reported labor shortages, a result of strengthening export orders and moves by unemployed migrant workers to other regions that were benefiting from stimulus-funded infrastructure projects. The government said that 11 million new jobs were generated last year, above its target, but fewer than the average 24 million new job seekers who enter the labor market every year.

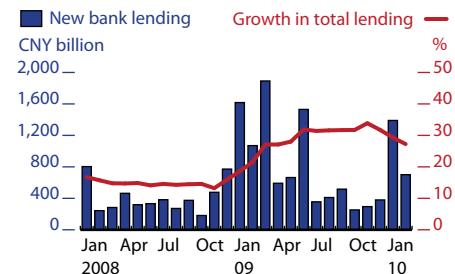
## Economic prospects

Fiscal policy is expected to remain expansionary in 2010. There will likely be adjustments as the government acts to avoid potential problems caused by the flood of investment. For example, the authorities have indicated that they will make efforts to contain investment that results in excess industrial capacity, and will curb rising indebtedness of local governments brought about by their extensive investment projects. The fiscal deficit is projected to remain around 2.8% of GDP in 2010 but slightly fall to 2.6% of GDP in 2011.

Some moderation is expected in the highly stimulatory monetary policy, in light of the strengthening of economic activity and rising inflation and asset prices. Policy fine tuning was seen from July last year. A more potent adjustment was made in January and February 2010 when the People's Bank of China (the central bank) raised the reserve-requirement ratio for banks twice, to 16.5%. This ratio may well be raised further this year, and banks may be required to put aside larger provisions for bad debts. Interest rates will probably be raised as the year progresses.

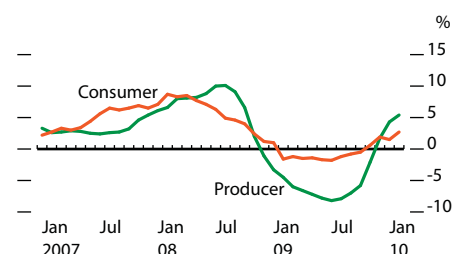
The government's target for M2 money supply growth in 2010 is 17% (as in 2009). The exceptional rate of increase in new bank lending seen in 2009 is to be pared back, but the 2010 target of CNY7.5 trillion is still more than 70% higher than the 2007–2008 average. The monetary authorities will probably shift from a relatively easy monetary policy in 2010 to a tighter stance in 2011.

### 3.9.7 Bank lending



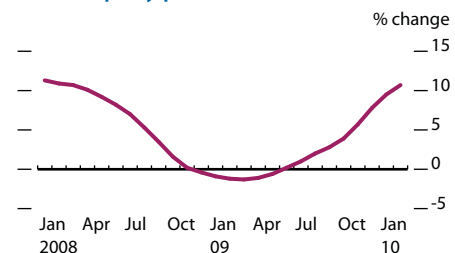
Sources: CEIC Data Company (accessed 15 March 2010); ADB estimates.

### 3.9.8 Inflation



Source: CEIC Data Company (accessed 15 March 2010).

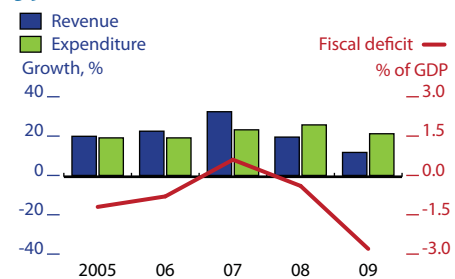
### 3.9.9 Property prices



Note: Data cover both residential and nonresidential buildings.

Source: CEIC Data Company (accessed 15 March 2010).

### 3.9.10 Fiscal indicators



Source: CEIC Data Company (accessed 15 March 2010).



Forecasts assume the authorities may well tolerate some slight appreciation of the yuan this year, and more in 2011, in the context of sustained economic growth, a revival of inflation, and a rising current account surplus. They also assume there will be no significant natural disasters or serious epidemic diseases in the forecast period.

Investment in fixed assets is projected to grow by 25% in nominal terms, underpinned by the huge stimulus funding yet to be disbursed and by an expected increase in private investment now that global financial flows are accelerating. Still, investment will slow from 2009's hectic pace because of the firmer stance on bank lending. As the fiscal stimulus phases out, growth in fixed asset investment in 2011 is projected to moderate to 18%.

Private consumption growth in nominal terms is forecast to speed up to 12% in 2010, from 9.0% in 2009, responding to rising incomes and improving consumer confidence (Figure 3.9.11). Planned increases in government spending on health care, education, and pensions will support consumption. Furthermore, the government is considering changes to the *hukou* (household registration) system, which divides the population into rural and urban residents and limits migrant workers' access to subsidized education, health care, housing, and pensions when they move to work in cities. The system hampers the mobility of labor, reduces disposable incomes of migrant workers, and widens the income gap between rural and urban areas. The authorities late last year marginally eased the *hukou* system but only for some small and medium-sized cities.

The modest recovery in world trade envisaged in *ADO 2010* will prompt a rebound in PRC merchandise exports in 2010, forecast at nearly 13.0% in 2010 and 13.5% in 2011. A free-trade agreement between the PRC and members of the Association of Southeast Asian Nations, effective 1 January this year, will contribute to growth in trade. Imports are forecast to increase by 13.5% in 2010 and 15.0% in 2011, owing to robust domestic demand and higher global prices for oil and other commodities. The increase in the trade surplus and the income account will be more moderate than in domestic demand, and the current account surplus is forecast to narrow a little as a share of GDP.

In contrast to 2009, net exports in real terms will probably rise this year and contribute slightly to GDP growth. Net exports will rise further next year, but not to levels seen prior to the global recession, given the modest recovery expected for industrial countries.

Based on the above considerations, GDP is forecast to grow by 9.6% in 2010 (Figure 3.9.12). Growth will be stronger in the first half of 2010 owing to the relatively lower base in the prior-year period than the second half. Taking into account the phasing out of the stimulus policies, growth is forecast at 9.1% in 2011. The declining contribution to GDP growth from investment will be partly offset by a larger contribution from consumption and net exports.

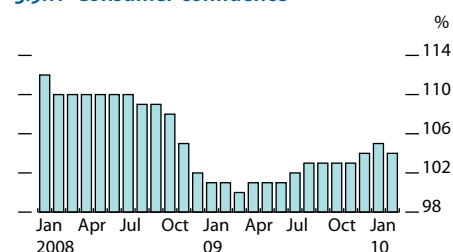
Growth data for the first 2 months showed a solid start to 2010, although some of this was a low-base effect—the prior-year period was the weakest part of 2009. In year-on-year nominal terms, fixed asset investment climbed by nearly 27%, retail sales by about 18%, and exports by 31% in January–February 2010 from a year earlier. Industrial value added grew by about 21% in real terms. M2 money supply growth of

### 3.9.1 Selected economic indicators (%)

	2010	2011
GDP growth	9.6	9.1
Inflation	3.6	3.2
Current account balance (share of GDP)	5.7	5.3

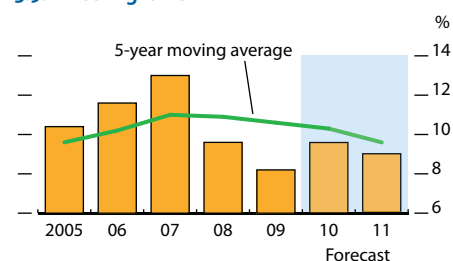
Source: ADB estimates.

### 3.9.11 Consumer confidence



Source: CEIC Data Company (accessed 15 March 2010).

### 3.9.12 GDP growth



Sources: National Bureau of Statistics. <http://www.stats.gov.cn> (accessed 15 March 2010); ADB estimates.



25.5% in February was well above the 2010 target, and new bank lending in the first 2 months totaled CNY2.1 trillion, or already 28% of the full-year target.

Higher prices for oil and commodities, coupled with a narrowing of the economy's output gap, will put upward pressure on prices, offset to some extent by the expected firmer stance in monetary policy. Consumer price inflation is forecast at 3.6% in 2010 and 3.2% in 2011 (Figure 3.9.13), still below the 2007–2008 levels of about 5%–6%. For the first 2 months of 2010, it averaged 2.1%. Residential property prices jumped by 13.0% year on year in February, even though the growth rate of housing sales eased.

Downside risks to the growth forecasts are a weaker than expected global recovery and an intensification of trade-related disputes. On the upside, a continuation of highly stimulatory monetary policy (without the expected adjustments) would likely produce higher rates of GDP growth, but could overheat the economy so that a spike in inflation and increased speculation in stocks and property trigger a more severe monetary tightening later. Rapid rates of lending, if maintained for too long, also raise the risk that local governments, in particular, pursue imprudent investment projects that erode bank asset quality, leading to higher levels of nonperforming loans that weaken the banking system.

## Development challenges

The global recession and expected modest recovery in industrial countries have reduced the potential for exports to be a major driver of growth. While massive fiscal and monetary stimulus has acted as a substitute in the short term, there is a limit to public investment and monetary expansion. Sustaining economic growth in the medium and long term is likely to require a revamp of the structure of growth.

From the supply side, services have great potential to generate growth and employment. They accounted only for about 42% of GDP and 35% of employment in 2008, much less than in other countries with similar per capita incomes (Figure 3.9.14). However, unlocking the potential of services requires comprehensive reforms (Box 3.9.1).

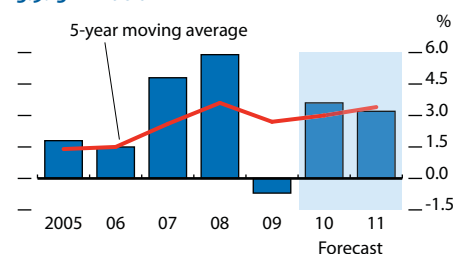
On the demand side, a greater emphasis on private consumption would promote economic growth and raise living standards. Under the current investment-driven economic growth model, the share of private consumption in expenditure-based GDP has fallen by 15.8 percentage points in the past 20 years (Figure 3.9.15).

The stress on investment has also led to overcapacity in some industries and unsustainable use of natural resources. Expanding investment is relatively easy in a system where state-owned enterprises are fed with substantial amounts of public investment that they promptly channel into expansion. Increasing private consumption, in contrast, requires raising purchasing power and changing saving habits across the population.

Growth in consumption is limited by household income's declining share of total income. The share of household income in total national disposable income shrank from about 66% in 1997 to 58% in 2007, while the share of government income increased from about 17% to 20% and that of enterprises from 17% to 22% (Figure 3.9.16).

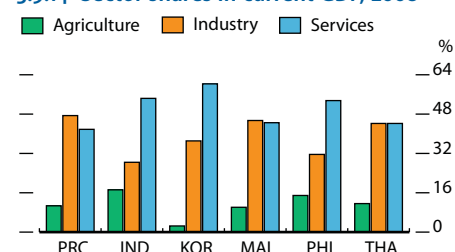
Furthermore, households are concerned about saving for education,

3.9.13 Inflation



Sources: National Bureau of Statistics. <http://www.stats.gov.cn> (accessed 15 March 2010); ADB estimates.

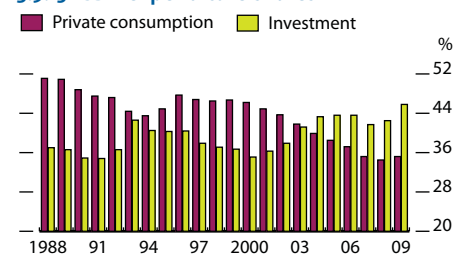
3.9.14 Sector shares in current GDP, 2008



PRC = People's Rep. of China; IND = India; KOR = Rep. of Korea; MAL = Malaysia; PHI = Philippines; THA = Thailand.

Source: Asian Development Outlook database.

3.9.15 GDP expenditure shares



Source: CEIC Data Company (accessed 15 March 2010).

health care, and old age, in the context of inadequate social services. Urban and rural incomes in nominal terms rose by an annual average of 12.4% and 9.7%, respectively, in 2000–2008. Savings of all households rose faster than incomes, by 16.5%. Against this backdrop, a significant increase in consumption is likely to require a strengthening of the social safety net, and provision of well-targeted public goods, such as education, health care, and affordable housing, as well as higher incomes.

High GDP growth rates in the past three decades have not been accompanied by the expected increases in employment generation. On the contrary, the relationship between GDP growth and employment has weakened, given the capital-intensive nature of growth in the past few years. This has led to large labor surpluses, mainly in rural areas, compounded by rigidities in the labor market, including the non-portability of benefits and restricted labor mobility owing to the cumbersome *hukou* system.

To address these issues, a profound reform in the labor market is warranted. The main targets should include labor mobility through the relaxation of the *hukou* system, improved social security provision for all workers (including migrants), and greater portability of acquired benefits of potentially mobile workers. Enhanced mobility will help both lift rural incomes and narrow urban-rural and regional income disparities. This process would greatly benefit from development of labor-intensive services and from further urbanization, the latter entailing great potential for future growth.

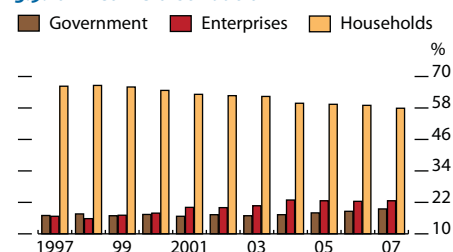
Increased labor mobility and a better educated and trained workforce would also help mitigate the impact on the economy of the aging of the population. Aging is particularly challenging in the PRC, because it is happening at a relatively low level of per capita income.

The sustainability of the current high energy-consuming and environment-unfriendly growth model is doubtful. A more sustainable model would be more reliant on technology, innovation, and skills. That could be achieved by increasing spending on research and development, which at present is below the government's target. Large investments in education and vocational training are also needed.

The government is aware of these challenges—indeed it started planning some restructuring of the economy in the mid-1990s, as reflected in the Ninth five-year plan (1995–2000). By the 11th plan (2006–2010), it had set certain targets, such as raising the shares of services in nominal GDP (from 40.3% to 43.3%), that of services in total employment (from 31.3% to 35.3%), that of research and development expense in GDP (from 1.3% to 2%), and that of urban residents in the total population (from 43% to 47%). However, trends in the past 4 years suggest that it will be difficult to realize these targets by the end of this year.

The 12th five-year plan (2011–2015), which will likely be unveiled in March 2011, provides an opportunity to add momentum to the restructuring efforts by establishing new targets, including one for the share of private consumption in GDP, coupled with policy adjustments to achieve such a target.

### 3.9.16 Income distribution



Source: Shanghai Security News, 2010. The Growth of Household Incomes Should Be Matched with the Growth of the Macroeconomy (translated from Chinese). [http://www.cnstock.com/paper\\_new/html/2010-02/25/content\\_72101965.htm](http://www.cnstock.com/paper_new/html/2010-02/25/content_72101965.htm). 25 February.

### 3.9.1 Developing services

Expanding the services sector would strengthen the domestic engine of growth, generate new sources of employment, and raise living standards. However, unlocking the sector's potential requires policy action on a long list of constraints. They include:

- **Excessive market concentration and entry barriers.** The authorities committed to liberalizing the services sector when it joined the World Trade Organization in 2001; however, implementation and enforcement of the commitments remain weak. As a result, state-owned enterprises dominate services, a fact that restrains competitiveness and obstructs the entry of new players, thus reducing the benefits that greater competition and liberalization would bring. Entry barriers include administrative hurdles; opaque regulations; cumbersome licensing requirements; and restrictions on the geographic range in which businesses can operate, their legal structure, and their access to banking services.
- **Restrictions on direct foreign participation.** With the exception of a few subsectors, such as hotels and some types of banking, services remain largely closed to foreign firms and hence the capital, technology, skills, and competition that they would inject.
- **Incentive bias toward manufacturing.** Fiscal incentives direct investment to the production of goods, and exemptions and rebates favor export of goods, discouraging investment in services.
- **Inefficient allocation of capital.** Large state-owned enterprises, including those in services, receive about two-thirds of total lending. In contrast, private enterprises get only one quarter of the credit available and face much higher interest rates. Despite their significantly smaller capital allocation, private firms generate about half of GDP and are the main generators of employment. The current embryonic stage of capital market development aggravates the difficulties in accessing credit.
- **Incomplete urbanization and labor market rigidities.** Service providers generally thrive in cities, where demand is strong and customers are concentrated in a relatively small area. While there are many cities, about 65% of the population still lives in far-flung rural areas. Urbanization has been slowed by rigidities in the labor market, in particular by the *hukou* system.

- **Underinvestment in education and training.** Not only is expenditure on education relatively low, but the education system is oriented toward rote learning and exam-based performance. Further, there is a decline in the proportion of students in science and engineering, which will hinder development of technology-oriented services and, more broadly, innovation. Employers report shortages of specialized skills. The policy investment bias favors the acquisition of equipment and materials, to the detriment of investment in training.

Wide-ranging policy changes are needed to facilitate the transition to a more services-oriented growth model. These include improving the regulatory framework, changing production incentives, further liberalizing the finance sector, reforming the labor market, and investing more in education and training.

To ease barriers to entry into services, reform should aim at fostering greater private sector participation in services. This could be achieved through enforcement of antitrust legislation, including against all state-owned enterprises, and opening more services to foreign participation. There is significant scope to improve the policy environment for small and medium-sized enterprises and the self-employed, for example, by improving their access to credit. Liberalizing the finance sector and developing capital markets would help to lower the cost of, and improve access to, finance, including in rural areas that often lack basic financial services.

Given that the private sector generally is more productive and innovative than state-owned enterprises, as shown by its contribution to GDP and employment, more efficient capital allocation could increase the rate of GDP growth by several percentage points.

A larger services sector could absorb much of the surplus labor from agriculture and manufacturing, as well as a significant share of new workers entering the labor force. Reforming the *hukou* system would maximize employment gains, as would other policies that speed up the move of the population to cities. To minimize the impact of job losses caused by reducing policy incentives for low-skilled manufacturing, it would be necessary to implement supportive measures, including large investments in education, vocational training, and social safety nets.

# Hong Kong, China

This trade-oriented economy was dealt a heavy blow by the global recession and financial crisis. A gradual recovery from the second quarter accelerated late in 2009, spurred by a pickup in exports, strong growth in the People's Republic of China, and a massive expansion in the monetary base. The economy is forecast to grow in 2010, driven by the better global outlook for trade and financial services. Inflation will rise to moderate levels. A near-term challenge is to prevent speculation in housing from inflating an unsustainable property boom.

## Economic performance

Owing to its heavy reliance on trade-related and financial services, this economy was shaken by the financial crisis and the plunge in global trade that unfolded from 2008 through early 2009. Exports, consumption, and fixed investment contracted sharply.

The first signs of recovery emerged in the second quarter of 2009 (Figure 3.10.1), as the global outlook improved and recovery gathered pace in the People's Republic of China (PRC), driven by its aggressive stimulus programs. Further impetus was provided by targeted fiscal stimulus enacted by the Hong Kong, China authorities, combined with a massive expansion of the monetary base, reflecting the Hong Kong dollar's link with the United States (US) dollar. For the full year, GDP shrank by 2.7% (Figure 3.10.2), compared with average growth of 6.2% over the previous 5 years.

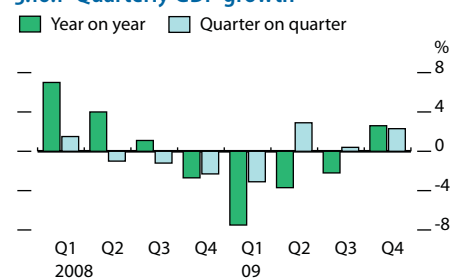
Private consumption fell by 0.3%, depressed in the first half of the year by the slump in trade in goods and services and the related softening of the labor market. Retail sales gradually improved, after a plunge early in the year (Figure 3.10.3).

As companies cut back on investment in equipment and construction, private fixed investment fell by 3.7% in 2009. The rate of contraction slowed in the second half. By contrast, public fixed investment rose by 13.5% in 2009. Public sector construction grew by 10% in the second quarter and 31% in the third, because of increased public spending on infrastructure projects. The government also stepped up its consumption spending to support aggregate demand.

The external sector was a major drag on the economy throughout the year. Goods exports—about 98% of which are reexports—plunged in the first quarter as external demand evaporated, but then improved progressively, thanks to solid growth in the PRC and the better global trade environment toward the end of the year. Nevertheless, goods exports fell by nearly 13% in real terms in 2009.

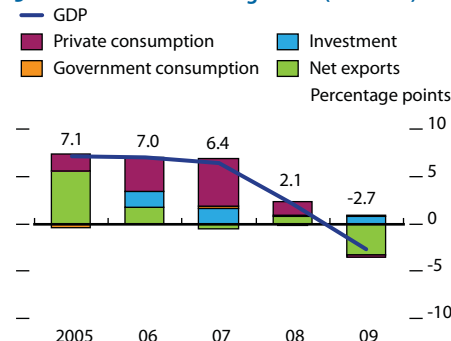
Faring better than goods trade, services exports fell by 0.7% in real terms. Trade and transportation services contracted over the year, but

3.10.1 Quarterly GDP growth



Source: Census and Statistics Department. <http://www.censtatd.gov.hk> (accessed 11 March 2010).

3.10.2 Contributions to growth (demand)



Source: Census and Statistics Department. <http://www.censtatd.gov.hk> (accessed 11 March 2010).

travel and financial and business services staged a strong rebound during the second half, benefiting from a rise in visitor arrivals, coupled with a brightening economic outlook and abundant liquidity in the banking system. Capital raising activity rebounded in the second half, mostly for PRC companies. Initial public offerings of shares raised the equivalent of US\$31.4 billion last year, more than any other financial center. Since services accounts for more than 90% of GDP, this sector's rebound was crucial to the overall pickup. In the fourth quarter, services contributed all the economy's growth.

The current account remained in surplus throughout 2009, though narrowing, and averaged 8.7% over the year. The overall balance of payments registered a huge surplus equal to 33.6% of GDP, reflecting sustained financial capital inflows that more than outweighed the narrowing of the current account surplus.

Employment shrank for the first time since 2003. The jobless rate rose to 5.4% in April–June 2009, in part a result of layoffs in private construction. As recovery took hold in the second half, the unemployment rate declined to 4.9% by year-end. Loan guarantees provided by the government to small and medium-sized firms facing a credit squeeze, together with increased public construction, helped protect jobs. The slack labor market put downward pressure on wages (Figure 3.10.4), which fell by 1.3% in real terms in 2009.

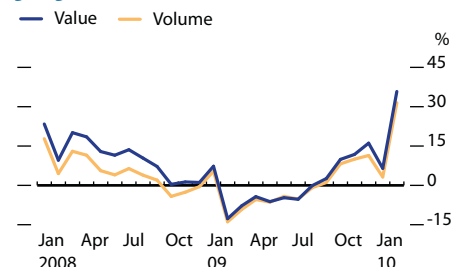
Asset markets slumped, then rebounded. By year-end, the Hang Seng index of share prices had climbed by 87% from its March 2009 low. Similarly, price indexes for residential, office, retail, and factory property turned up (Figure 3.10.5), against the background of substantial inflows of funds and easy monetary conditions that drove interest rates to very low levels.

Sales of residential properties surged, and prices of apartments rose by an average 28% last year. Mortgage loans increased markedly, driven by the ample banking liquidity and low interest rates. Acting to maintain stability in the banking system and limit increases in apartment prices, the Hong Kong Monetary Authority (HKMA) in October 2009 raised the minimum deposit requirement to 40% (from 30%) for residential mortgages valued at HK\$20 million or more, and capped maximum loans at HK\$12 million for properties valued at less than HK\$20 million.

The surge of capital inflows (Figure 3.10.6), driven by expansionary monetary policies in the US, boosted the monetary base (Figure 3.10.7), reflecting the Hong Kong dollar's link to the US dollar through a currency board framework. Inflows early in 2009 reflected firms' repatriation of funds to meet liquidity needs and investors' search for a safe haven.

Later, inflows were driven by investment in the buoyant asset markets and in share offerings. The HKMA undertakes to buy US dollars at HK\$7.75 and sell them at HK\$7.85 (the convertibility band). The inflows pushed the Hong Kong dollar to the strong side of its convertibility band, and the HKMA acted as counterparty to banks selling foreign currency. The monetary authority purchased US\$62 billion in 2009, in doing so it injected HK\$480.8 billion into the banking system. Although this drove interest rates to very low levels, bank credit contracted in 2009 (banks

### 3.10.3 Growth in retail sales



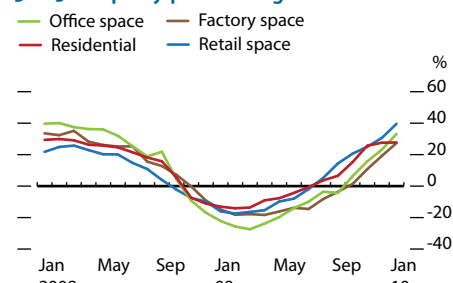
Source: CEIC Data Company (accessed 31 March 2010).

### 3.10.4 Unemployment and wages



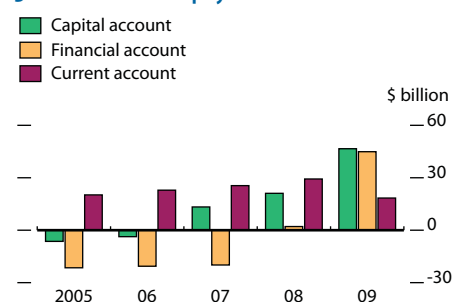
Source: Census and Statistics Department. <http://www.censtatd.gov.hk> (accessed 11 March 2010).

### 3.10.5 Property price changes



Source: CEIC Data Company (accessed 11 March 2010).

### 3.10.6 Balance-of-payments indicators



Sources: Hong Kong Monetary Authority; CEIC Data Company (accessed 11 March 2010).



were cautious to lend and demand for credit was suppressed by the recession), except for mortgage lending, which rose in the second half.

Moderate deflation pressures prevailed during the first 3 quarters of 2009 (Figure 3.10.8), given the slack economy and lower global oil and commodity prices. Inflation picked up in the last quarter, and averaged 0.5% for the year.

High transaction volumes in property markets generated considerable tax revenue, and produced a budget surplus estimated at 0.8% of GDP in FY2009 (ended 31 March 2010).

## Economic prospects

The growth momentum that built in late 2009 is forecast to continue through 2010, lifting GDP by 5.2% this year (Figure 3.10.9). This open economy will benefit from its close links with the PRC (where growth is forecast to accelerate to nearly 10%), from solid growth in much of Asia, and from the expected modest recovery in industrial economies. The low base set in 2009 will contribute to the growth spurt forecast for this year. In 2011, GDP growth is forecast to ease to 4.3%, taking into account that base effect in 2010 and the phasing out of exceptional government stimulus policies in the PRC.

Private consumption is forecast to pick up throughout the year, underpinned by the strengthening labor market. Retail sales rose by just over 17% in volume terms in the first 2 months of 2010 (from a low prior-year base). Private demand will receive a further boost on the investment side, as business confidence continues to improve in light of the improved global economic and financial environment.

Outlays on public works are expected to be at least US\$6.5 billion a year for some time, according to the FY2010 budget. Several large public infrastructure projects that began in late 2009 will continue through 2010 and beyond. The government expects to have a budget deficit equivalent to 1.5% of GDP this fiscal year, compared with the actual surplus last year.

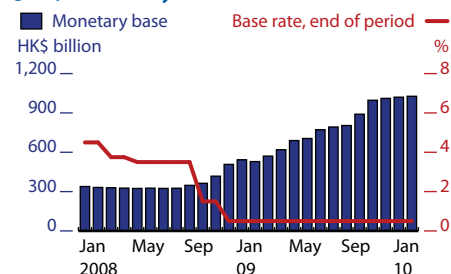
On the supply side, financial services are set to benefit from the capital inflows and corporate fund-raising activity. Fund management and retail sales of mutual funds have picked up considerably since the second quarter of 2009, and insurance has recorded strong gains in premium incomes. Tourism, too, is rising.

Inflation is forecast to pick up moderately, to average 2.2% in 2010 and 2.8% in 2011, a result of the stronger domestic demand, higher prices for imported food and fuel, the end of a subsidy on household electricity bills, and expected increases in residential and commercial rents. In the first 2 months of 2010 inflation averaged 1.9%.

Merchandise exports are expected to rebound by about 13% in US dollars this year. Services exports will rise, too, a result of robust demand for financial services, as well as a rebound in tourism and business travel. Merchandise imports are seen rising by about 11% in 2010. (In the first 2 months of 2010 exports rose by nearly 23% and imports by 31%). (Figure 3.10.10).

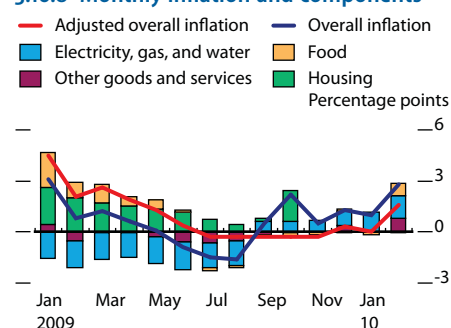
The merchandise trade deficit will be more than offset by a healthy surplus on trade in services. Supported also by sustained earnings from foreign exchange reserves and overseas investments, the current account

### 3.10.7 Monetary indicators



Source: Hong Kong Monetary Authority. <http://www.info.gov.hk> (accessed 31 March 2010).

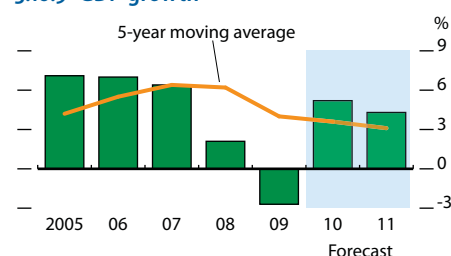
### 3.10.8 Monthly inflation and components



Note: Adjusted overall inflation refers to the rate once the effects of temporary subsidies by the government are removed.

Sources: CEIC Data Company (accessed 31 March 2010); Census and Statistics Department. 2010. *Monthly Report on the Consumer Price Index*. February. <http://www.censtatd.gov.hk>

### 3.10.9 GDP growth



Sources: Census and Statistics Department. <http://www.censtatd.gov.hk> (accessed 11 March 2010); ADB estimates.

### 3.101 Selected economic indicators (%)

	2010	2011
GDP growth	5.2	4.3
Inflation	2.2	2.8
Current account balance (share of GDP)	7.6	7.2

Source: ADB estimates.

is forecast to record comfortable surpluses exceeding 7% of GDP this year and next.

There are a number of risks to the forecasts. Depending on the pace of withdrawal of monetary stimulus in the US and PRC, it is likely that excess liquidity and very low interest rates will prevail in Hong Kong, China, with the associated risk of fueling a credit boom and further upward pressure on asset prices. Conversely, capital flows might reverse and interest rates rebound when the US phases out its monetary stimulus. The Hong Kong dollar exchange rate will likely move to the lower side of its convertibility band and the HKMA will absorb Hong Kong dollar liquidity. These adjustments could cause disruptions in financial markets.

## Development challenges

While the flood of liquidity and low interest rates have fueled speculation in high-end apartments, speculative activity does not appear to have significantly spilled over into the broader residential market at this stage. A housing affordability index rose to 38% of median incomes in the fourth quarter year on year (Figure 3.10.11), still below the historical average and far below the peak in 1997. Similarly, the number of transactions involving a buyer reselling a property before the completion of the original sale, usually for a quick capital gain, is around 2%, also well below the previous peak.

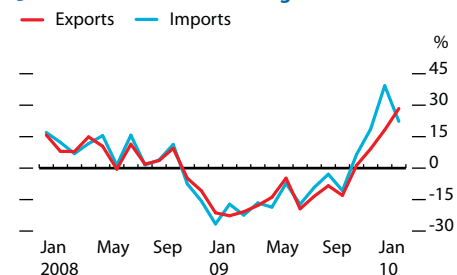
Nevertheless, at a time of low interest rates and rising investor confidence, apartment prices may continue to increase for some time, raising the risk of an overextended market that would eventually peak and then dive, denting consumer and investor sentiment with knock-on effects for economic growth and for the health of the banking sector.

In an effort to prevent such an outcome, the government in February 2010 followed up its tightening of bank prudential regulations for housing loans with moves to check speculation in housing. The FY2010 budget raised the stamp duty tax on high-end housing and indicated that the increase will be extended if speculation takes hold in the broader residential market. To increase supply of apartments, the government plans to speed up the pace of auctioning urban residential sites.

Still, it will take several years for these moves to substantially increase the number of apartments on the market. In the meantime, affordability of private housing is likely to worsen and rents are likely to rise, after a lag of 1 or 2 years.

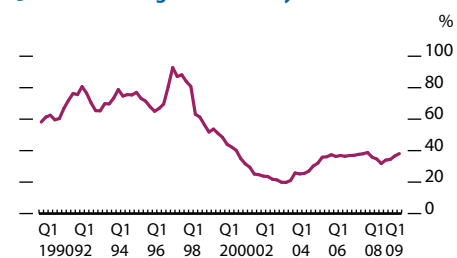
Hong Kong, China is constrained by its linked exchange rate system from raising interest rates to damp a housing boom. Rather, it is tied to US monetary policy, which is unlikely to tighten much this year. Monetary policy also remains expansionary in the PRC, with some spillover impact on the housing market. Further, if the yuan starts to appreciate against the US dollar, the attractiveness of Hong Kong, China's assets to investors from the PRC would increase.

### 3.10.10 Merchandise trade growth



Source: CEIC Data Company (accessed 2 April 2010).

### 3.10.11 Housing affordability index



Note: Data refer to the ratio of mortgage payments (for a 45-square meter apartment) to median income of households (excluding those living in public housing).

Source: Economic Analysis and Business Facilitation Unit, Financial Secretary's Office.

# Republic of Korea

Growth surprised on the upside in 2009 as the economy avoided an expected contraction. Fiscal stimulus and better than expected export performance fueled recovery from the impact of the global recession. A sharp rebound in growth is forecast for 2010 as domestic demand picks up and the export recovery broadens. Medium-term policy challenges are to encourage the employment of women and accelerate the transition to economic growth that is based on productivity improvements.

## Economic performance

After hitting bottom in the fourth quarter of 2008, when output contracted by 4.5% (quarter on quarter), the Republic of Korea (hereafter Korea) staged a strong recovery in 2009. GDP grew by 0.2% in the year, a much better outcome than expected, although far below the 5-year average of 4.2% in 2004–2008. Figure 3.11.1 shows the year-on-year and quarter-on-quarter trajectory of GDP growth in 2008 and 2009.

Despite weakness of external demand, net exports were the primary driver of growth in 2009 (Figure 3.11.2), helping offset weakness in domestic private demand. Mirroring the impact of a sizable fiscal stimulus, government consumption also contributed substantially to growth. However, private investment dragged down growth throughout 2009. Interestingly, although Korea's slowdown started as a collapse of exports, net exports helped the economy get back on its feet, while the negative impact of domestic demand on growth persisted.

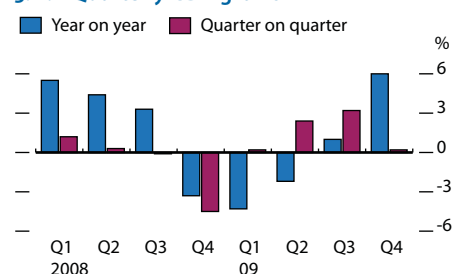
Merchandise exports plunged in late 2008 and early 2009, then bounced back (Figure 3.11.3), to be flat for the year. Two factors account for the resilience of exports in the face of weakness in industrial economies.

First, exports benefited from continued robust appetite for imports from the People's Republic of China (PRC). Also, the PRC's fiscal stimulus had positive spillover effects. In particular, subsidies for rural households to buy household appliances benefited Korean electronics exporters. Exports to other developing economies also held up relatively well. An underlying driver of exports in 2009 was an average 12.7% depreciation of the won relative to 2008 (Figure 3.11.4).

Second, manufacturing diversification over the past 20 years has reduced the former export dependence on a few product groups. Since the impact of the global crisis differed across product groups, this contributed to export resilience.

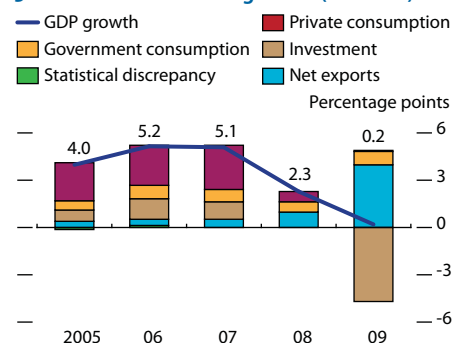
Private consumption was weak in early 2009 before picking up (Figure 3.11.5), to be little changed for the full year. The turnaround was most evident in durables and services. Consumer sentiment improved during the year, and, with an appreciating won, buoyant stock market, and rising housing prices, supported consumption, as did lower interest rates and tax cuts.

3.11.1 Quarterly GDP growth



Source: Bank of Korea. Economics Statistics System. <http://ecos.bok.or.kr> (accessed 26 March 2010).

3.11.2 Contributions to growth (demand)



Source: Bank of Korea. Economics Statistics System. <http://ecos.bok.or.kr> (accessed 26 March 2010).

Hit by the gloomy global economic outlook early in 2009, total fixed investment fell by 0.2% for the year, mainly because equipment investment dropped by 9.1%. As the year progressed, business confidence improved and average manufacturing capacity utilization rose (Figure 3.11.6). Construction investment grew by 4.4% in 2009 after a contraction of 2.8% in 2008. The turnaround was based on public works projects in the fiscal stimulus.

Aggressive monetary and fiscal easing, adopted as the global recession intensified, helped prop aggregate demand. The Bank of Korea cut its key policy interest rate six times from the beginning of October 2008 through February 2009 (Figure 3.11.7). In addition, the government provided liquidity support to the financial system.

The government brought forward a large part of its 2009 budget to the first half of the year. It also quickly adopted a sizable fiscal stimulus package. The 3-year (2008–2010) package amounts to around 6.5% of 2008 GDP, and contains a mix of tax cuts and additional spending. Tax cuts consist of both specific, temporary measures (such as tax incentives for replacing old automobiles, which had a big effect on automobile purchases and overall private consumption from the second quarter of 2009) as well as longer-term cuts in personal and corporate income taxes. Key areas for spending are public infrastructure, assistance for low-income groups, and job-creation initiatives. A 5.0% increase in government consumption and additional public works also supported domestic demand. The overall budget deficit widened from 2.0% in 2008 to 3.9% in 2009 as a result of fiscal easing.

Inflation slowed to 2.8% in 2009 from 4.7% in 2008, reflecting weak private demand and lower global oil and commodity prices. The impact of low economic growth was felt in the labor market, where the number of employed persons fell last year, though only by 71,000. While the labor market remained soft, the unemployment rate rose only modestly, from 3.2% to 3.6%, helped by the job-creation programs and women workers dropping out of the workforce.

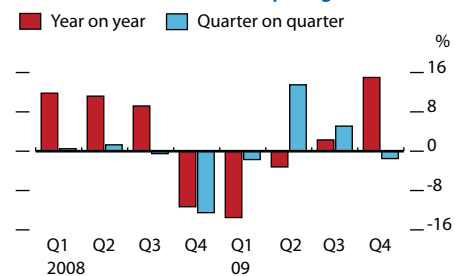
A much steeper fall in the United States (US) dollar value of merchandise imports (25.7%) than in the value of merchandise exports (13.7%) produced a huge trade surplus, and led to a current account surplus equivalent to 5.1% of GDP.

## Economic prospects

Strengthening domestic demand and a brightening global outlook point to the Korean recovery gathering momentum this year. Private consumption and investment are set to replace government spending and public works as the primary engines of domestic demand growth. Improving external conditions will also contribute significantly. In particular, the consolidation of recovery in industrial economies will broaden the scope of export recovery.

Korean manufactured exports such as automobiles, electronics, and capital goods tend to be highly sensitive to the global business cycle. Hence, after their earlier plunge, exports to industrial countries began to recover in the second half of 2009, a trend set to continue through 2010. Elsewhere, given projected acceleration of PRC growth and strong

### 3.11.3 Merchandise real export growth



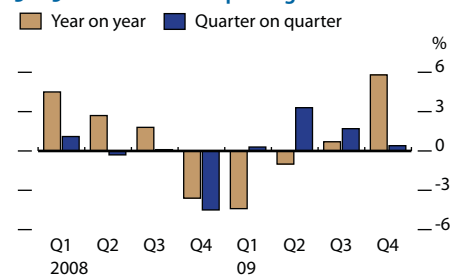
Source: Bank of Korea. Economics Statistics System. <http://ecos.bok.or.kr> (accessed 26 March 2010).

### 3.11.4 Exchange rate



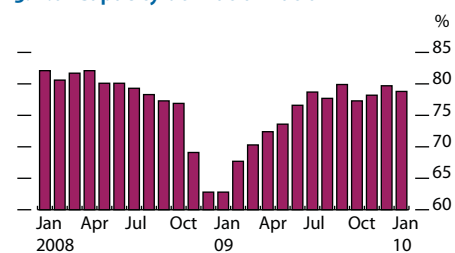
Source: CEIC Data Company (accessed 26 March 2010).

### 3.11.5 Private consumption growth



Source: Bank of Korea. Economics Statistics System. <http://ecos.bok.or.kr> (accessed 26 March 2010).

### 3.11.6 Capacity utilization ratio



Source: CEIC Data Company (accessed 15 March 2010).

recovery in many other developing countries, exports to developing countries as a whole will remain robust.

In terms of export industries, the information technology (IT) product group—primarily semiconductors, liquid crystal displays, and mobile phones—will continue to play a leading role, underpinned by global demand recovery and competitive advantage in supply capacity and product innovation. Global demand for automobiles is projected to bounce back, fueled by demand expanding in the PRC and recovering in the US. Still, the outlook for petrochemical exports is clouded by the prospect of global supply outpacing global demand as a result of Middle Eastern production capacity coming online in mid-2010, while difficulties at global shipping companies are leading to delays and cancellations of orders, affecting Korean shipbuilders' prospects. An expected increase in export unit prices brought about by higher prices for refined petroleum products and some IT products will have a positive effect.

On the downside, the won is projected to average around W1,100/\$1 in 2010, which would be an appreciation of about 15% from 2009. The stronger won will hurt price competitiveness in global markets, but past experience suggests that the impact will be limited. Net exports will add to GDP growth in 2010, although by less than in 2009.

Private consumption is expected to increase by about 5%, with stronger growth in the first half reflecting the base effect from a sharp compression of consumption in the first half of 2009. The biggest impetus will come from strong growth in incomes as a result of expected large bonuses by corporations. Robust growth of gross national income, which adjusts GDP for terms of trade and so better reflects purchasing power, will also support consumption. Gross national income began to grow faster than GDP in the second quarter of 2009, owing to rising export unit prices of IT and some other products, and this is likely to persist to the end of 2010.

In light of favorable overall conditions, buoyant consumer confidence (Figure 3.11.8) is likely to persist this year. The won's appreciation will boost household purchasing power by helping contain inflation. Against this, the tax incentives for replacing old automobiles ended in mid-2009, which will somewhat slow the momentum of consumption.

Total fixed investment is expected to grow by close to 10% in the first half of 2010 and by about 5% in the second. The primary cause will likely be a rebound in equipment investment. Growing by as much as 15% (again with a stronger first half, partly due to a low-base effect), this surge is underpinned by a rapid improvement in business confidence (Figure 3.11.8). Increased capacity utilization in manufacturing and rapid growth of industrial production will prompt companies to expand investment. Furthermore, the corporate sector is in good financial shape, due to improving profitability, and this is most evident in the IT sector, which accounts for about 30% of total investment.

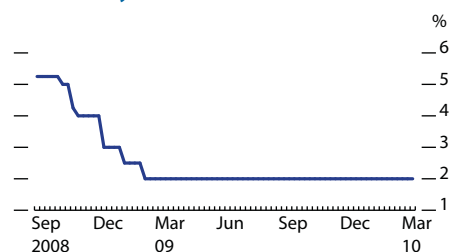
At a broader level, the slowdown of global growth (relative to before the global recession) and persistent global overcapacity will constrain investment. Construction investment is projected to rise by 3% this year, a little weaker than in 2009. Public works will slow as the government unwinds its fiscal stimulus, but housing construction will pick up because

### 3.11.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.2	4.6
Inflation	3.0	3.0
Current account balance (share of GDP)	1.5	1.0

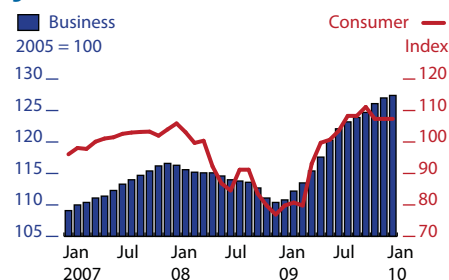
Source: ADB estimates.

### 3.11.7 Policy rate



Source: Bank of Korea Base Rate. <http://eng.bok.or.kr> (accessed 15 March 2010).

### 3.11.8 Confidence indicators



Notes: Data for consumer confidence from January 2005–August 2008 refer to the Consumer Expectations Index, while values after that were derived using the Composite Consumer Sentiment Index. Business confidence refers to the Leading Composite Index.

Source: Bank of Korea, Economics Statistics System. <http://ecos.bok.or.kr> (accessed 15 March 2010).



the government has eased some constraints on private housing supply and plans to continue to increase the supply of public housing.

The labor market picture is less benign. Government job-creation programs will be scaled back, while private sector hiring will be sluggish in light of the usual lag between growth and employment. A further constraint is weakness in the self-employed sector, which shed more than 300,000 workers in the third quarter of 2009. The number of employed persons is projected to rise by about 150,000, but unemployment will remain an area of concern.

The speed and scale of the exit from the monetary and fiscal stimulus will impinge on the recovery process, but are not expected to act as a serious drag on growth. The conducive environment for keeping inflation under control suggests that increases in the policy interest rate are likely to be small. The fiscal stimulus, which amounted to ₩38.8 trillion or 3.6% of GDP in 2009, will be scaled back to ₩17.2 trillion, or 1.7% of GDP, in 2010. As a result, the fiscal deficit is expected to narrow from 3.9% in 2009 to about 3% in 2010.

Taking all these factors into account, GDP growth for 2010 is projected to climb to 5.2% (Figure 3.11.9). This above-trend performance, largely driven by the low-base effect of 2008 and 2009, will mostly close the wide output gap that opened when growth slumped in those years. GDP growth is forecast to ease to a still-high 4.6% in 2011, as the pace of equipment investment slows from this year's exceptionally high rate.

Inflation is projected to hover around 3.0% in the forecast period, within the central bank's 2%–4% target band. The stronger won will help contain import prices, and an output gap persists in the economy. These factors are likely to offset the inflation impact of higher oil prices.

In the external accounts, merchandise exports in US dollar terms are projected to grow by about 12% this year, whereas merchandise imports, driven by stronger domestic demand and higher oil and commodity prices, will grow by about 20%. The current account surplus will shrink from its record high in 2009 to the equivalent of about 1.5% of GDP and then to 1.0% in 2011.

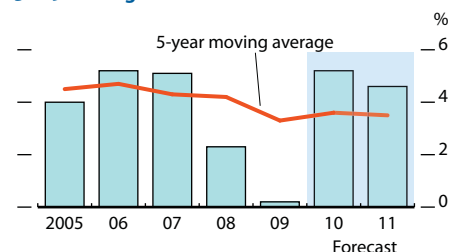
Slower and weaker than expected recovery among industrial countries is the main downside risk to the forecasts, given Korea's openness to trade and financial flows. The primary domestic downside risk is the structural problem of high household debt. The ratio of personal debt to personal disposable income has reached about 150%, and is much higher among low-income households. However, various mortgage-related risk-management measures imposed on banks and nonbank financial institutions should retard the growth of mortgage-dominated household loans.

Overall, the positives outweigh the negatives, and growth may surprise on the upside again, as hinted at by recent trends in a key leading indicator (producers' shipments to inventories—Figure 3.11.10).

## Development challenges

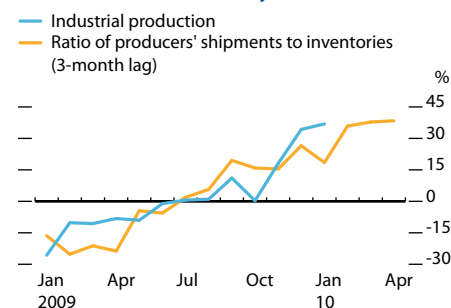
Creating a better working environment for women and accelerating the transition to an economy based on productivity improvements (Box 3.11.1) are two medium-term policy challenges.

3.11.9 GDP growth



Sources: Bank of Korea, Economics Statistics System. <http://ecos.bok.or.kr> (accessed 26 March 2010); ADB estimates.

3.11.10 Growth in industry indicators

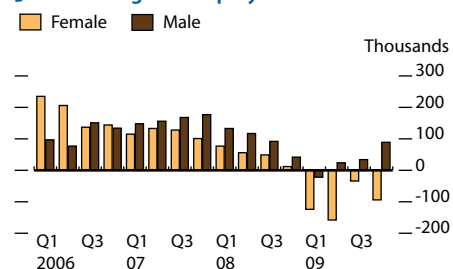


Sources: CEIC Data Company (accessed 15 March 2010); ADB estimates.

Improving the working environment for women has become more pressing in light of prospective labor shortages due to rapid population aging and low fertility in Korea. The global recession highlighted this point: its impact on the Korean labor market was much more pronounced for women than men (Figure 3.11.11). Women tend to land less stable first jobs than men, including a large share of nonwage and temporary-contract wage jobs, so were more vulnerable when the economy turned down. Finally, of women who left their employment, among the core working-age groups—the 30s–50s—a large majority dropped out of the labor force altogether, with child raising and household work the dominant reasons.

As well as leaving the workforce, too many women do not join it. For example in 2007, the employment rate among female university graduates was nearly 20 percentage points below the average of countries in the Organisation for Economic Co-operation and Development. Using the female workforce more efficiently could bring significant benefits for the economy and the women involved. Indeed, rapid population aging and the consequent prospective reduction of the labor force make full use of female workers, especially highly skilled ones, even more important.

3.11.11 Change in employment

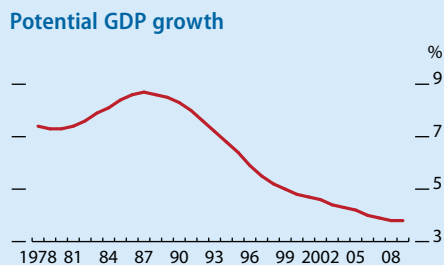


Source: Korea National Statistical Office. <http://www.kosis.kr/eng/index.html> (accessed 15 March 2010).

### 3.11.1 Raising Korea's potential growth rate

As the global recession recedes, an issue that will come back to center stage is: What is Korea's longer-term potential growth rate—the economy's aggregate supply capacity—and what are policy options to boost it?

Korea's GDP growth has slowed since the early 1970s, from an average of 10.3% in 1971–1979 to 4.9% in 2000–2008. Potential GDP growth has also declined (Box figure).



Note: Potential GDP growth was estimated using the Hodrick-Prescott filter, a smoothing method to remove cyclical components of a time series.

Source: ADB estimates.

Broadly, the deceleration of potential growth reflects a slowing in the accumulation of capital and in the growth of the labor force. The growth of the working-age population fell sharply from 2.4% in 1980–1989 to 1.2% in 1998–2008. The growth of equipment investment slowed from

8.7% in 1991–1997 to 4.8% in 1998–2008. Technological progress and other productivity improvements have been insufficient to significantly offset the decline in growth due to slower factor accumulation. Research and development (R&D) expenditures have risen rapidly, but their size is not enough (3.5% of GNP in 2007) to have a notable positive effect on economywide efficiency.

In the coming years, rapid population aging, lack of competitiveness in knowledge-based industries, and the catch-up of latecomers, such as the PRC, in Korea's main industries all point to clear limits to growth.

Still, Korean policy makers have a range of options to accelerate the transition from a growth model based on factor accumulation to one based on productivity improvements. Here, the broad thrust should be to promote the acquisition of capital goods that embody new technology and the accumulation of highly skilled human capital for high-tech industries and knowledge-based service industries.

For example, the government could consider providing fiscal incentives for hiring older and female workers to lessen the impact of the decline in the working-age population and expanding its R&D support to communications, finance, and other service industries. Services, which lag manufacturing in productivity, would benefit from an easing of regulations that constrain the entry of new competitors. Such measures would help raise potential growth.

# Mongolia

After contracting for the first 3 quarters of 2009, the economy started to recover late in the year as global commodity prices picked up and the government adopted an extensive policy reform program. The economy is forecast to return to solid growth this year and next, spurred by development of a large copper and gold mining project. Inflation faded in 2009 but will accelerate this year. Domestic risks to the outlook center on weaknesses in the banking system and possible fiscal pressures.

## Economic performance

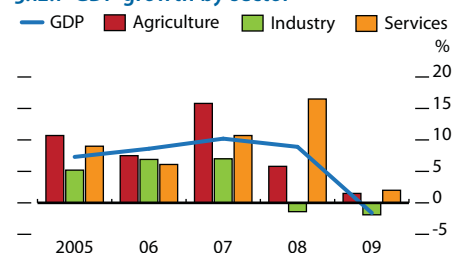
Despite a rebound in the fourth quarter, the economy contracted by 1.6% in 2009 (Figure 3.12.1), hit hard by the impact of the global recession, notably the fall in prices of Mongolia's commodity exports. The contraction in GDP followed robust average growth of 9% during 2004–2008, when world commodity prices were rising. GDP contracted in each of the first 3 quarters of 2009. The slump was mainly a result of a plunge in world copper prices in late 2008 and reduced inflows of foreign direct investment (FDI) into the country's mining and construction industries as global investment flows dwindled.

These external shocks knocked the economy at a particularly vulnerable time: macroeconomic policy had been overly expansionary during the commodity boom years, resulting in high inflation (peaking at 34.2% in August 2008), deteriorating external and fiscal balances, and serious strains in the banking system. Consequently, in early 2009 the government had to rein in spending and hike the policy interest rate, further suppressing consumption and investment.

Mongolia turned to the International Monetary Fund, agreeing in March 2009 to borrow \$224 million under an 18-month standby arrangement, and received additional funding from other development institutions and governments. In return, the government pledged to follow fiscal policies that would repair the budget and monetary policies to safeguard dwindling international reserves. The authorities also agreed to allow greater exchange rate flexibility, to strengthen the fragile banking system, and to improve the targeting of social spending. The funding and policy actions stabilized the economy, positioning it to resume growth as the price of copper and other minerals recovered (Figure 3.12.2).

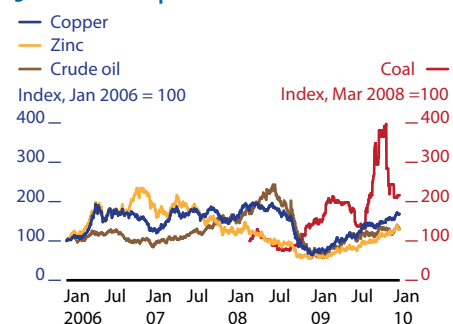
Still, for the full year industrial production fell by 1.9%, hurt by weakness in world markets for the major exports copper, coal, and zinc. Investment in mining was hampered by the global tightening of credit and by continued delays in reaching agreements between the government and international companies to develop new mines, especially the large Oyu Tolgoi copper and gold resource.

3.12.1 GDP growth by sector



Source: National Statistical Office of Mongolia, 2009. *Monthly Statistical Bulletin*, December. <http://www.nso.mn>

3.12.2 Mineral prices



Source: Bloomberg (accessed 18 January 2010).

Construction activity fell abruptly in 2009 as both the public and private sectors cut back capital investment and banks tightened lending.

Agriculture, which supports about 40% of the population, grew by just 1.5% in 2009. The sector suffered from lower prices for cashmere and other livestock-related products. Further, a summer drought, followed by heavy snow and lower than usual temperatures in late 2009, reduced feed available for livestock, worsening a problem caused by years of overgrazing, when the herd expanded to about 44 million (mainly goats, sheep, and cattle). Livestock losses from the bad weather were estimated in early 2010 at more than 5 million.

Growth in the services sector slowed sharply to 2.0% in 2009, in part reflecting a weak labor market and reduced government outlays that hurt consumer spending. Continued banking stresses hampered growth in financial services.

A Labor Force Survey put the unemployment rate in September 2009 at 10.5%, taking into account both those registered and not registered as unemployed. The loss of jobs and falling real wages in the informal sector aggravated poverty (35.2% of the population lived below the national poverty line in 2008).

Merchandise exports in US dollar terms fell by about 25% in 2009, largely a result of lower prices rather than lower volumes. Imports fell even more sharply, by about 35%, reflecting lower costs for imported oil and food, weaker consumption and investment, and a 36% depreciation of the togrog against the US dollar in the first quarter. As a result, the trade deficit narrowed. With earnings from tourism and remittances from Mongolian workers abroad taking a hit from the global recession, the current account remained in deficit, equivalent to 9.1% of GDP (Figure 3.12.3).

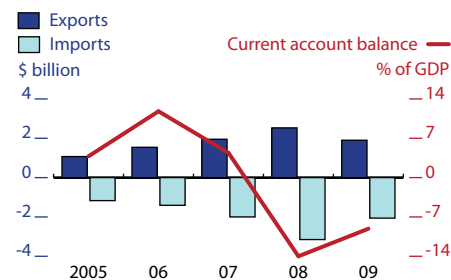
The current account gap was primarily financed by donor disbursements and FDI. International reserves, after plunging by half to about \$500 million, climbed to \$1.2 billion (about 7 months of import cover) by end-2009.

Inflation slowed sharply from 22.0% year on year at end-2008 to 4.2% by end-2009 (Figure 3.12.4), reflecting the slump in domestic demand, lower prices for imported commodities, and an increase in the policy interest rate in March. With inflation subsiding and the exchange rate recovering, the Bank of Mongolia lowered its policy interest rate in three steps starting from May 2009. Growth in the money supply (M2) picked up early in the year and posted an increase of 26.9% for all 2009.

Strains in the banking sector in 2008 persisted in 2009. The economic slump and rising real interest rates (as inflation slowed) caused a near doubling of nonperforming loans to 18.3% of total loans by end-2009 from a year earlier. Construction firms had the highest rate of bad debts. Commercial banks reported aggregate losses in 2009 (as they did in 2008), and capital-adequacy ratios fell in 2009. Poor governance and weak internal controls deepened the problems in the banking subsector.

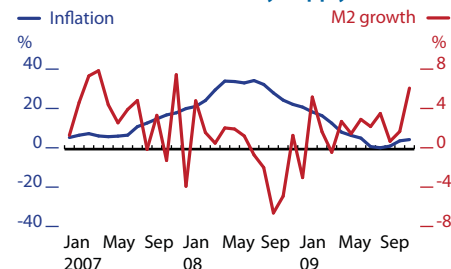
After Anod Bank foundered and was taken over by the government in December 2008, the authorities tightened bank prudential ratios, raised capital requirements, and strengthened banking laws. The central bank provided liquidity to the banking system and introduced a blanket deposit guarantee. Nevertheless, Zoos Bank failed in November 2009 and

### 3.12.3 External sector



Source: Bank of Mongolia. 2009. *Balance of Payment Report*. December. <http://www.mongolbank.mn>

### 3.12.4 Inflation and money supply



Source: Bank of Mongolia. 2009. *Statistical Bulletin*. December. <http://www.mongolbank.mn>

was put into receivership. The banks' difficulties, coupled with concerns about the financial soundness of borrowers, caused banks to cut lending in 2009, by 26.2%.

Reductions in government spending brought down total public expenditure and net lending to the equivalent of 38.3% of GDP (from 41.0% in 2008). In particular, the government slashed spending on construction and subsidies, partly offset by a higher wages bill. Revenue also fell, eroded by weak copper prices early in the year and the impact of the recession on tax collections. Total revenue and grants fell to 32.9% of GDP, from 36.1%. The overall fiscal deficit widened to 5.4% of GDP (Figure 3.12.5).

## Economic prospects

The outlook depends heavily on the global price of copper, the development of new mines, and the continued implementation of policies that maintain macroeconomic stability.

As for copper, the price is projected to remain at high levels during the forecast period, which will stimulate production. Prospects for development of new mines brightened considerably in October 2009, when the government signed an agreement with an international mining company to exploit the Oyu Tolgoi copper and gold deposit. Investment in this project is expected to total \$5 billion, with about \$760 million to be spent this year and \$1.5 billion next. Production is projected to start in 2013.

The long-awaited Oyu Tolgoi agreement and subsequent construction will raise investor confidence and have knock-on effects on other parts of the economy. Moreover, the government is considering proposals to mine the large Tavan Tolgoi coal deposit. FDI inflows into mining are expected to rise significantly over the forecast period.

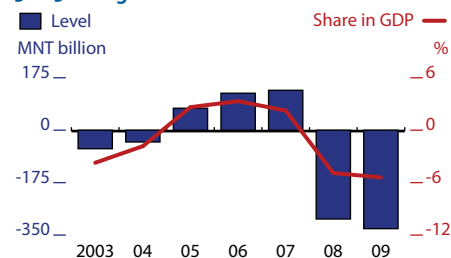
Severe winter early in 2010 will curtail agricultural production. Livestock losses are likely to reduce incomes of herders, who constitute about 30% of the population. As for the services sector, transport and communications staged a strong rebound in late 2009 and other services will join in the recovery this year. However, the banking sector's problems damp its prospects for growth.

The need to strengthen public finances will limit budgetary stimulus to the economy in the forecast period. The government aims to narrow its budget deficit to 5.0% of GDP in 2010. Higher mineral prices should benefit revenue, but the scheduled ending of a windfall profit tax on mining in 2011 will erode total revenue by the equivalent of about 2% of GDP. Furthermore, donor budgetary support is expected to be phased down from 2011. On the monetary policy front, projected faster inflation limits further interest rate cuts.

Investment is expected to rebound, driven by Oyu Tolgoi. The outlook for growth in bank lending is clouded by the high level of bad loans, weak bank balance sheets, and high real interest rates. Consumption will benefit from an expected pickup in employment, offset by the impact of lower incomes in agriculture. Taken all together, the economy is forecast to grow by about 7.0% in 2010 (Figure 3.12.6).

Growth is seen slowing a bit to 6.5% in 2011, mainly a result of the impact on government revenue and spending of the end of the windfall

### 3.12.5 Budget balance



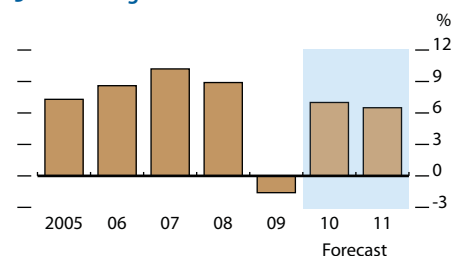
Source: National Statistical Office of Mongolia, 2009. *Monthly Statistical Bulletin*, December. <http://www.nso.mn>

### 3.12.1 Selected economic indicators (%)

	2010	2011
GDP growth	7.0	6.5
Inflation	7.9	6.0
Current account balance (share of GDP)	-16.1	-21.2

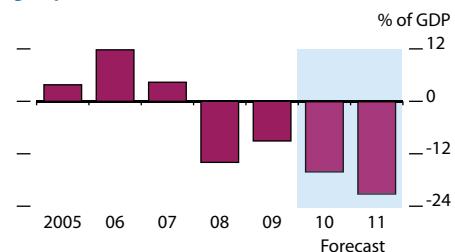
Source: ADB estimates.

### 3.12.6 GDP growth



Sources: National Statistical Office of Mongolia, 2009. *Monthly Statistical Bulletin*, December. <http://www.nso.mn>; ADB estimates.

### 3.12.7 Current account balance



Sources: Bank of Mongolia, 2009. *Balance of Payment Report*, December. <http://www.mongolbank.mn>; ADB estimates.



profit tax and reduced donor budgetary financing. Implementation of a proposed fiscal responsibility law would also impose limits on government spending. On the upside, growth could be faster if agreements are reached to mine several large mineral deposits.

In the medium term, GDP growth is expected to spurt to double-digit levels once production ramps up from the Oyu Tolgoi project.

Inflation is forecast to accelerate to an average of nearly 8% in 2010 from 6.3% last year, reflecting the rebound in domestic demand, increase in oil prices, and likely higher meat prices for at least part of the year due to the bad weather. Inflation is expected to ease in 2011 as fiscal consolidation efforts strengthen.

Policy reforms planned for 2010, if followed through, will improve the economy's prospects for sustained growth. The proposed fiscal responsibility law will promote budget discipline by effectively placing ceilings on spending growth, the fiscal deficit, and public debt. The law will require mandatory cost estimates for government spending proposals to ensure that spending is consistent with a medium-term fiscal framework. More broadly, the idea behind the law is to help insulate the budget, and the economy generally, from swings in the price of copper.

In other reforms, the government plans to replace some universal social transfer programs with better targeted transfers that focus on the very poor. It also proposes to strengthen the central bank's powers to supervise the banking system and to intervene when banks strike financial trouble.

Merchandise exports are expected to rise in line with commodity prices and improved external demand. Buoyant GDP growth in the People's Republic of China (forecast at 9.6% in 2010) will underpin exports, since that market takes most of Mongolia's exports. Merchandise imports will likely increase at an even faster rate than exports, reflecting the need for machinery and equipment for Oyu Tolgoi and the pickup in consumption. The current account deficit is forecast to widen sharply to about 16% of GDP in 2010 and to 21% in 2011 (Figure 3.12.7). FDI should finance much of the gap.

Domestic risks to the economic forecasts center on the weaknesses in the banking system and possible renewed fiscal pressures. More bank failures would hurt confidence and further restrict credit, and could deal a blow to the budget (as a result of the deposit guarantee). Fiscal pressures would also arise if the government hikes spending before significant extra revenue starts flowing from mining in about 2015. However, the authorities have so far demonstrated the will to undertake agreed fiscal reforms and to improve the economic policy framework. Volatile commodity prices are a perennial risk.

### 3.12.1 Development challenges

Expansion of mining will bring important benefits—new investment, jobs, export income, and a surge in government revenue that could fund social and development spending, so as to increase the productive capacity of the economy and reduce poverty.

However, the flood of new investment and revenue into this small, narrowly based economy may also aggravate problems. For a start, increased demand for labor and materials, plus higher incomes and public spending, could easily spur inflation to double-digit rates. Wages in mining and in the public service are likely to rise. The boost in export earnings will put upward pressure on the real exchange rate.

Such developments would hurt the competitiveness of manufacturing and other nonmineral industries, including tourism. Nonmineral industries trying to export, or exposed to competition from imports, might well contract.

At the least, the higher costs would make it more difficult to diversify the economy away from mining. Indeed, an increase in mining's role would likely amplify the economy's vulnerability to swings in global copper prices. (Mongolia experienced some of these problems during the copper boom from 2005 to early 2008 and, when copper prices crashed, it suffered recession.)

Managing windfall revenue and smoothing public expenditure will be critical to avoiding such boom and bust cycles. The government has proposed structures to address these issues, in particular the fiscal responsibility law. The challenge now is to adopt the law and adhere to its rules. It has also put forward a stabilization fund to manage revenue, but it will be several years before the fund is large enough to help buffer the economy from another copper slump.

While steps have been taken to strengthen the central bank's role in maintaining price and banking system stability, more needs to be done, including changes to make inflation its main policy goal.

# Taipei, China

The collapse in global trade reverberated through this economy, knocking manufacturing output and depressing private investment. Recovery started in the second quarter of 2009 and then accelerated, so that the contraction in GDP was milder than earlier anticipated. Supported by the strengthening world trade performance, GDP is forecast to expand this year and next. Inflation has returned (after consumer prices fell last year), but is forecast to be low this year and next.

## Economic performance

An economy that relies heavily on trade (merchandise imports and exports together equal nearly 100% of GDP), Taipei, China suffered a sharp recession when global trade collapsed in 2008. During the slump, exports of goods in value terms plunged by about 30% year on year for several quarters. GDP contracted from the second quarter of 2008 for 4 quarters on a sequential basis (Figure 3.13.1), or by nearly 10% over that period.

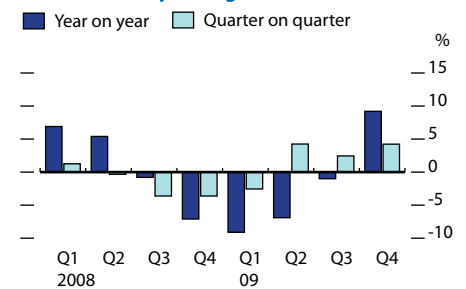
Still, the economic contraction in 2009 was not as severe as earlier anticipated. Exports picked up as the year progressed. So did private consumption and public investment, supported by fiscal and monetary stimulus. These developments contained the decline in 2009 GDP to 1.9% (Figure 3.13.2). (GDP was flat in 2008 and grew by 5.2% on average over the previous 5 years.)

Private consumption eased in the first half of 2009, owing to a weak labor market and decline in consumer confidence. It firmed in the second half, partly a result of government stimulus measures, to be up by 1.5% for the year. Layoffs, mainly in manufacturing and construction, pushed the unemployment rate up to 6.1% in August, before employment started to pick up again. Average monthly earnings in nominal terms fell for 8 consecutive months through October

Government consumption grew by 3.6% in 2009, in part a result of its fiscal stimulus measures. Net exports were also positive—the fall in exports of goods and services from 2008 was outpaced by an even steeper drop in imports.

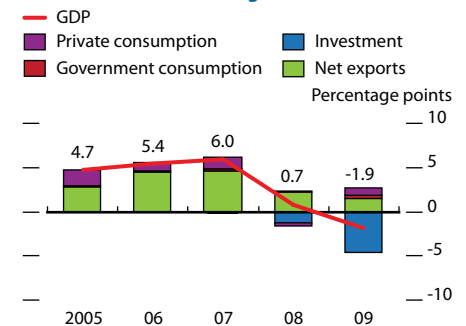
However, these positive factors were more than offset by a fall in private investment. Fixed capital investment, which is strongly correlated with the performance of merchandise exports, dropped by 29.4% in the first quarter, a deeper dive than seen after the global information technology bubble deflated in 2001. For the full year, fixed investment fell by 11.8%. Investment was particularly weak in machinery and equipment (down by 21.0%). The fall in fixed investment would have been worse if the government had not pumped up its capital works as part of the fiscal stimulus.

3.13.1 Quarterly GDP growth



Source: Directorate General of Budget, Accounting and Statistics. <http://eng.dgbas.gov.tw> (accessed 8 March 2010).

3.13.2 Contributions to growth (demand)



Sources: Directorate General of Budget, Accounting and Statistics. <http://eng.dgbas.gov.tw> (accessed 8 March 2010); ADB estimates.

Manufacturing production (27% of GDP) slumped early in 2009 as export orders dwindled, and was down by 4.6% for the year. The pace of contraction later slowed, and manufacturing rebounded in the fourth quarter (Figure 3.13.3) along with exports.

Construction activity contracted by 6.7%. The services sector was virtually flat in 2009, with trade-oriented and transportation activities slack. Agriculture, too, put in a poor performance—production fell by 3.1% owing to bad weather. Typhoon Morakot, which hit the island in August 2009, left more than 700 people dead or missing and inflicted damage to agriculture and infrastructure.

The fall in merchandise exports, at just over 20% in US dollar terms for the full year, was the sharpest in more than 2 decades. External demand slumped for a wide range of exports—chemicals, electronics, machinery, optical products, plastics, and others.

Imports fell even more steeply, by 27%, reflecting the slide in exports (which use a high proportion of imported materials), slack demand for imported capital equipment, and lower prices for imported oil and commodities. By the fourth quarter of 2009, exports were growing again year on year, driven by a 46% surge in shipments to the People's Republic of China (PRC), whose expansion was benefiting from an aggressive fiscal and monetary stimulus.

The current account surplus rose to the equivalent of 11.2% of GDP, buttressed by a larger surplus in goods trade (as imports plunged), an uncommon surplus in services trade (freight payments for imports fell), and a surplus in the income account (including repatriated profits and dividends).

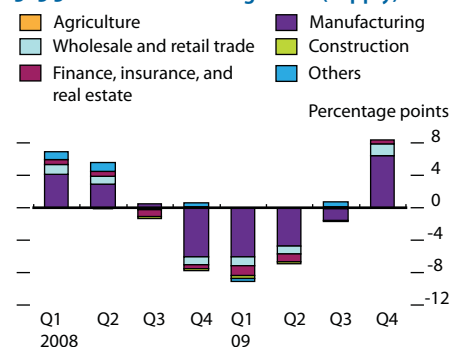
Inbound portfolio investment surged, to an extent that the monetary authorities expressed concerns about the speculative nature of these inflows. Residents' portfolio investment abroad was also substantial. Large net inflows totaling US\$14 billion in the financial account (after 3 years of net outflows) were mainly attributable to an increase in withdrawals of overseas deposits by the private sector. The overall balance of payments recorded a very large surplus of US\$54.1 billion, and gross international reserves grew to US\$348.2 billion, to nearly three times as high as in 2001.

Consumer prices fell in 2009, owing to a large output gap and lower global oil and commodity prices. The consumer price index declined by 0.9% on a year-average basis. The pace of decline eased late in the year (Figure 3.13.4) owing to rising oil and commodity prices.

During the depths of the slump, the monetary authorities lowered the policy interest rate by a total of 238 basis points, to 1.25%, between September 2008 and February 2009. Broad money supply (M2) grew by 7.0% on average in 2009, but demand for credit contracted from March through December (Figure 3.13.5).

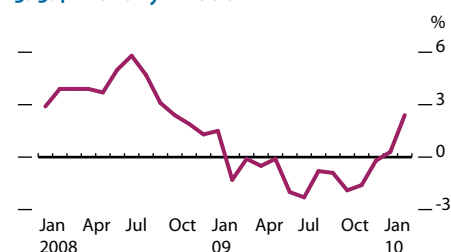
Fiscal stimulus measures deployed to combat the weakness in domestic demand included shopping vouchers for all citizens, cash transfers to low-income families, subsidies for car purchases, tax breaks, and a public infrastructure program to cost about US\$16 billion over 4 years. Higher spending and weakness in revenue led to a budget deficit equal to 1.1% of GDP.

### 3.13.3 Contributions to growth (supply)



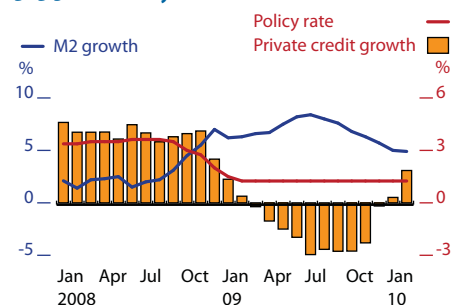
Sources: Directorate General of Budget, Accounting and Statistics. <http://eng.dgbas.gov.tw> (accessed 8 March 2010); ADB estimates.

### 3.13.4 Monthly inflation



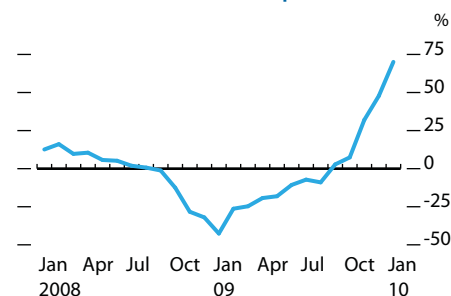
Source: CEIC Data Company (accessed 1 April 2010).

### 3.13.5 Monetary indicators



Source: CEIC Data Company (accessed 1 April 2010).

### 3.13.6 Growth in industrial production



Source: CEIC Data Company (accessed 1 April 2010).

## Economic prospects

Just as the slump in global trade sent reverberations through this economy in 2008 and 2009, the trade upturn that is expected to continue over the next 2 years will have positive spillover effects economywide, buoying consumption and investment.

Rising export orders propelled both industrial production and exports early in 2010 (Figures 3.16.6 and 3.13.7), though from a low base in the prior-year period. Strengthening global markets and the launch of new electronic products are expected to support export growth this year. So will improving economic links with the PRC (whose GDP is forecast to expand by nearly 10%). The PRC and Hong Kong, China together account for about 40% of Taipei,China's exports. Furthermore, economic growth in Southeast Asia, which accounts for 15% of exports, is forecast to accelerate sharply this year, and that subregion's overall imports are projected to jump by 20%.

The public infrastructure program will also support economic growth. About US\$5 billion of the program's funds are allocated for this year. In addition, reconstruction work for areas hit by Typhoon Morakot in 2009 will add about NT\$50 billion (US\$1.5 billion) to public investment this year. Fiscal measures to stimulate consumption largely expired in 2009, though. A fiscal deficit equal to 1.4% is projected for 2010.

Leading indicators of the economy have been broadly trending up. Domestic inventories of manufactured products bottomed in August 2009 and both export orders and permits for construction rose from early last year (Figure 3.13.8). Exporters are expected to ramp up fixed investment provided the rebound in export orders is sustained. Private fixed investment is projected to be a key driver of growth in 2010

Consumer confidence, too, strengthened headed into 2010 (Figure 3.13.9), assisted the pickup in the labor market and generally improved outlook for the economy. Gains in asset markets have contributed to the more positive outlook—stock prices rallied by 86% from the 2009 low point through March 2010, and Taipei city house prices rose by 20% year on year in February 2010. Private consumption is expected to grow this year but only moderately, constrained by relatively high unemployment and slight growth in wages.

Taking these influences into account, GDP is projected to increase by 4.9% this year (Figure 3.13.10) and by 4.0% in 2011 (as the low-base effect ends and the PRC's growth moderates).

Higher prices for imported oil and commodities, coupled with strengthening domestic demand and a firmer labor market, will revive inflation this year and next, but to low rates of about 1.5% (Figure 3.13.11). The consumer price index rose by an average of 1.3% in the first 2 months of 2010. As economic growth gathers pace and inflation edges up, the expansionary monetary stance adopted during the global financial crisis is expected to be withdrawn gradually. As a step in this direction, the monetary authorities increased issuance of certificates of deposit in the first quarter of 2010 to absorb excess liquidity from the financial system.

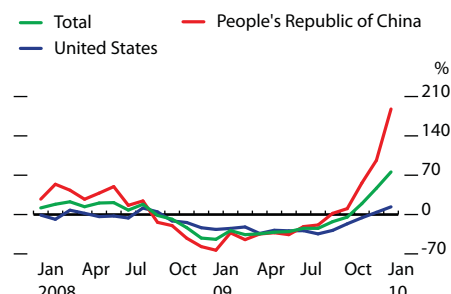
Merchandise exports in US dollar terms are forecast to increase by nearly 20% this year. Imports will rise faster than that, by a forecast 26.5%, driven by the rebound in export industries and their investment,

### 3.13.1 Selected economic indicators (%)

	2010	2011
GDP growth	4.9	4.0
Inflation	1.5	1.6
Current account balance (share of GDP)	8.2	6.7

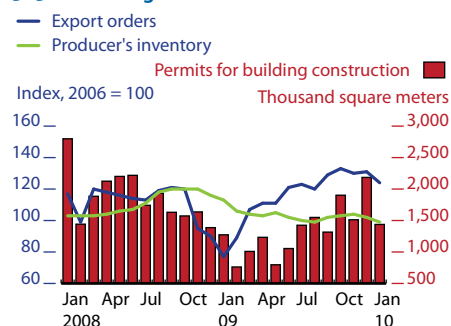
Source: ADB estimates.

### 3.13.7 Merchandise export growth, by destination



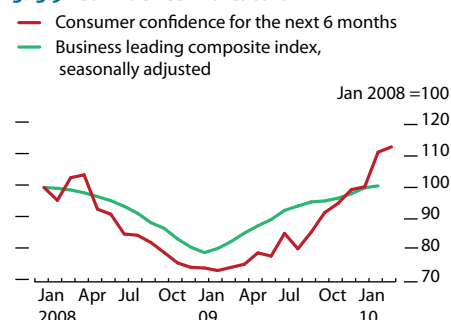
Source: CEIC Data Company (accessed 1 April 2010).

### 3.13.8 Leading indicators



Source: CEIC Data Company (accessed 1 April 2010).

### 3.13.9 Confidence indicators



Source: CEIC Data Company (accessed 1 April 2010).

as well as higher oil and commodity prices. The current account surplus is seen at a touch over 8% of GDP in 2010, declining to a little under 7% next year.

## Development challenges

Closer trade and investment links have been forged with the PRC in recent years. Annual trade between the two economies has increased to about US\$100 billion, and the PRC's share of Taipei,China's exports rose from less than 3% in 2000 to 26% in 2008, or 40% taking Hong Kong, China into account. (The share of exports going to Europe, Japan, and the United States declined in this time.)

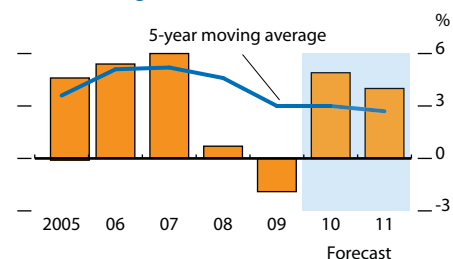
Companies from Taipei,China have invested at least US\$80 billion in the PRC over the past couple of decades (some estimates are substantially higher), relocating production of electronic components, computers, and optical products to take advantage of lower costs in the PRC.

The challenge now is to broaden and deepen the economic ties. Cross-strait negotiators have reached several agreements in the past 2 years, covering areas such as financial cooperation and transport. However, the direct economic impact of these agreements has been limited so far.

Negotiators from both sides are now working on an Economic Cooperation Framework Agreement. This pact could include reductions in tariffs (on selected items to start) and in other trade barriers, investment protection measures, protection of intellectual property rights, and a mechanism for dispute mediation. Cooperation has been proposed in industries including solar energy and automobiles.

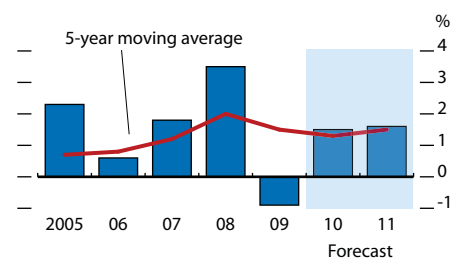
Successful conclusion of the agreement would facilitate trade and investment between the two economies and could pave the way for Taipei,China to be able to negotiate trade pacts with other economies. Taipei,China is likely to face heightened competition in the PRC market unless it gains some trade concessions there, since a free trade agreement between the Association of Southeast Asian Nations and the PRC came into force on 1 January this year.

3.13.10 GDP growth



Sources: Directorate General of Budget, Accounting and Statistics. <http://eng.dgbas.gov.tw> (accessed 8 March 2010); ADB estimates.

3.13.11 Inflation



Sources: Directorate General of Budget, Accounting and Statistics. <http://eng.dgbas.gov.tw> (accessed 8 March 2010); ADB estimates.



# South Asia

Islamic Republic of Afghanistan

Bangladesh

Bhutan

India

Maldives

Nepal

Pakistan

Sri Lanka





# Islamic Republic of Afghanistan

The economy grew robustly on a recovery in agriculture in FY2009, and inflation declined sharply. More widely, the politico-economic environment was characterized by a significant worsening in security, as well as corruption and uncertainty. Steady economic growth and development in the medium term require continued moves toward the following: strengthening security, building critical infrastructure, substantially raising government institutional capacity while improving governance, creating a pro-growth business regulatory environment, fostering social inclusion and equity, and expanding access to social services.

## Economic performance

In FY2009 (ending 20 March 2010), GDP growth is estimated to have rebounded to 15.1%, driven by a recovery in agriculture after severe drought a year earlier (Figure 3.14.1). The sector recorded the largest harvest in 32 years. The continued inflow of external assistance and increased security spending benefited other sectors.

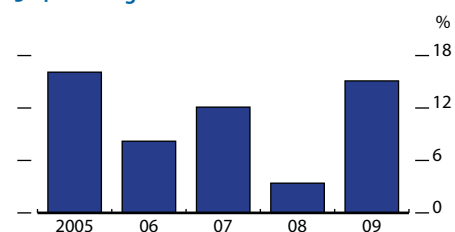
The opium economy, which is equivalent to about 20%–25% of legal GDP, saw an estimated 10% decline in FY2009 owing to increased suppression efforts, lower prices, and expanded efforts to support legal crops. Nevertheless, it remains a major source of income for many farmers and especially rewards those involved in trafficking, which in turn boosts domestic demand in the legal economy.

Inflation (in Kabul) has been on a marked downward trend (Figure 3.14.2), reflecting lower global food prices and the recovery in domestic crop production (food has a 61% weight in the consumer price index). The 12-month rate in November 2009 was minus 13%, plummeting from a peak of 43% in May 2008, as the food index moved into negative territory. For FY2009, consumer prices are expected to be 10% lower on average than a year earlier.

The Da Afghanistan Bank, the central bank, continued to focus on controlling inflation while seeking to smooth exchange rate volatility. It responded to the fall in inflation and eased monetary policy, raising its target for growth in circulation of currency in FY2009 to 22% from the original 16%. This policy is consistent with the 12-month end-March 2010 inflation target of about 6%. To attain its monetary targets, the central bank is increasing the use of its 28-day capital notes as well as purchase and sale of foreign exchange with market dealers. It continues to promote a secondary market for these notes to develop a basis for controlling reserve money and monetary policy through open-market operations.

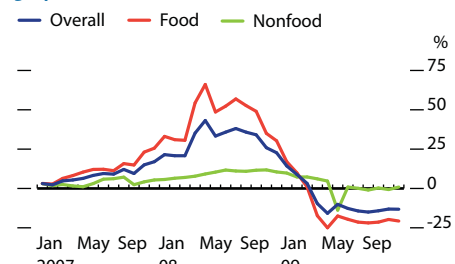
Afghanistan maintains a managed floating exchange rate system. The rate for the afghani strengthened slightly in FY2009 to around AF49/\$1 (Figure 3.14.3), and close to its 5-year average in real effective terms. Large inflows of funds from external donors, remittances, and narcotics-related

3.14.1 GDP growth



Source: International Monetary Fund. 2010. *Country Report* No. 10/22. January. <http://www.imf.org>.

3.14.2 Kabul inflation



Source: Ministry of Agriculture, Irrigation & Livestock. *Agricultural Commodity Price Bulletin*. Various issues. <http://mail.gov.af>.

activities continue to create upward pressure on the real exchange rate, and this could deteriorate Afghanistan's external competitiveness.

The government made further progress in terms of revenue collection, by controlling expenditure, by adopting a programmatic and sustainable medium-term fiscal framework, and by aligning the budget with the objectives of the Afghanistan National Development Strategy (ANDS) to achieve macroeconomic stability and sustainable growth. It has focused on controlling non-security spending while incorporating increases in security spending financed with additional grants.

Over the past few years, even though the government has increased collection of domestic revenue, it is insufficient to meet operating budget spending; development expenditure in the government budget is almost fully donor funded. Moreover, a large part of donor activity is undertaken outside the government budget and accounts for more than half total public spending. This reduces the effectiveness of the government's development agenda in terms of priorities, resource allocation, fiscal policy, and in monitoring progress against desired outcomes according to the ANDS.

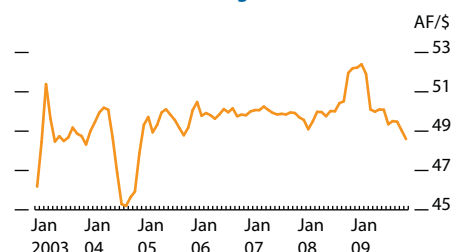
The fiscal position strengthened in FY2009 with domestic revenue estimated to have risen by almost 32%, bringing it to 8.1% of GDP after several years of little improvement (Figure 3.14.4). This increase was achieved by greater tax collection from large and medium taxpayers, stronger customs revenue via tighter controls on fuel imports, and legal amendments that subjected imports to a business tax.

With the decline in security, the government lifted operating budget spending to 14.4% of GDP in FY2009, with much of the increase due to an increase the size of the police and army (by about 23% to 205,800). The operating budget (excluding grants) is expected to worsen by 1.6% of GDP, though including grants it will remain unchanged as nearly all the additional spending will be financed by grants (more than 80% of security expenditure is met from external sources). As the need for much higher levels of security spending has become evident, the government's target of being able to fully finance its operating budget through domestic revenue, originally slated for FY2015, will likely slip to FY2023, according to a January 2010 report from the International Monetary Fund (IMF).

The current account deficit (Figure 3.14.5), excluding grants, is estimated to have widened from \$6.4 billion to \$7.0 billion, or about 53.7% of GDP (but still lower as a share of GDP from 54.5% a year earlier). Including grants, the current account deficit was only \$462 million (about 3.6% of GDP), and was more than fully financed by official loans (\$392 million) and foreign direct investment (\$185 million). Imports, the bulk of which are associated with donor-financed activities, increased by 3.5%. Domestic exports fell by 2.4%. Gross international reserves rose during the year and at an estimated \$3.8 billion in March 2010 could finance about 13 months of domestic (non-donor) imports.

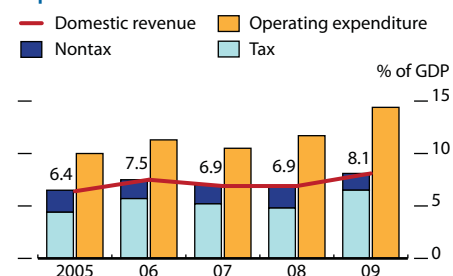
The IMF's sixth review of the Poverty Reduction and Growth Facility, completed in January 2010, noted the successful implementation of the FY2009 economic program and the series of steps that qualified the country for \$1.6 billion debt relief from multilateral, bilateral, and private creditors, equivalent to a 96% reduction in the country's external debt as it had reached the completion point under the heavily indebted poor country

### 3.14.3 Nominal exchange rate



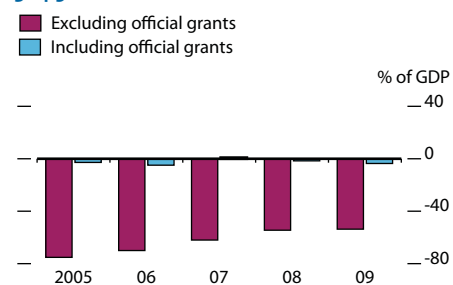
Source: International Monetary Fund. International Financial Statistics online database. <http://www.imfstatistics.org/imf/> (accessed 16 March 2010).

### 3.14.4 Domestic revenue and operating expenditure



Source: International Monetary Fund. 2010. *Country Report* No. 10/22. January. <http://www.imf.org>.

### 3.14.5 Current account balance



Source: International Monetary Fund. 2010. *Country Report* No. 10/22. January. <http://www.imf.org>.

initiative. As part of this process, the Paris Club of 19 creditor countries met in March 2010 and canceled Afghanistan's debt owed to its members.

While the debt relief will reduce debt burden indicators to sustainable levels, the economy will remain at high risk. Given its reliance on foreign grants, it is vulnerable if grant support decreases. A sensitivity analysis carried out by the IMF in January emphasized that the external position is particularly exposed to slower growth and to greater reliance on debt rather than grant financing.

## Economic prospects

GDP growth in FY2010 is forecast to moderate to 7.6% and to a little under 7.0% the following year. This forecast is based on a number of key assumptions: a gradual improvement in security, continuation of the large development partner funding for projects, sustained agricultural production, continued growth of business enterprises catering to growing consumer demand, improved revenue administration and public enterprise reform, financial sector development, and growing foreign direct investment, especially that aimed at development of the country's substantial mineral resources (such as copper and iron ore).

Monetary policy is expected to contain inflation to 8.4% and 4.5% in the forecast period, barring unexpected developments in global commodity prices or domestic crop failures. The current account deficit (including grants) is projected to improve slightly to about 2% of GDP, mainly owing to an improvement in export performance.

The medium-term growth forecast is subject to several key risks in terms of the domestic security situation; political stability; and the government's ability to combat corruption and to address the infrastructure constraints in power, transport, and irrigation. Inability to achieve steady implementation in structural reforms that will facilitate private sector investment is a further risk underscored in the World Bank's *Doing Business 2010* report.

## Development challenges

It is important that the government continue with strengthening and developing its range of macroeconomic policy instruments, with advancing fiscal reform, and with increasing domestic revenue collection. It will also need to tightly manage and control budget expenditure, as well as improve the budget formulation process and capacity to execute projects among line ministries. Improved budget expenditure alignment with the ANDS priorities is also necessary.

Achieving greater aid effectiveness through stronger alignment of the donor activities (done outside the government budget) with the national development priorities and the government budget is another priority. Associated with these measures are improvements in structural policies and the business and regulatory environment, the building of core government institutional capacity for efficient service delivery, and improvements in social inclusion, equity, and access to social services.

3.14.1 Selected economic indicators (%)

	2010	2011
GDP growth	7.6	6.8
Inflation	8.4	4.5
Current account balance (share of GDP)	-1.8	-2.1

Source: ADB estimates.



# Bangladesh

The global recession's late-unfolding effects will, this year, slightly slow growth, but it will likely improve next year as the worldwide recovery strengthens. Macroeconomic stability has been maintained, but liquidity pressures in banking have emerged and will need to be dealt with decisively. Power and natural gas shortages will have to be tackled through large and quick investments, and policy and institutional reforms accelerated, to raise medium-term growth. Therefore, greater implementation capacity is needed for government development projects and infrastructure investments under the new public-private partnership scheme.

## Economic performance

This economy has performed better than many others in Asia due in part to its lack of integration with global financial markets as well as the nature of its garment and labor exports, which are targeted mainly at the low end of the market (a segment that was less affected during the early stages of the crisis).

Official sources estimate that GDP growth declined slightly to 5.9% in FY2009 (ended June 2009) from 6.2% in the previous year largely because of industry's decelerating growth (Figure 3.15.1), as export production slowed during the global recession. Industry's growth was also constrained by power and natural gas shortages and by a weakening in construction activity.

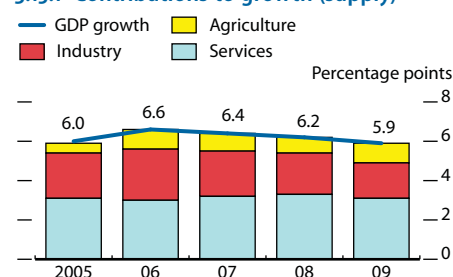
Agriculture performed well, aided by favorable weather and government support to farmers that improved their access to inputs and credit. Expansion in services decelerated as the slowdown in industry crimped trade and transport activity.

On the demand side, private consumption remained the major driver of growth (Figure 3.15.2), fueled by a healthy expansion in workers' remittances from abroad. Total fixed investment, at 24.2% of GDP in FY2009, was unchanged as the marginal rise in private investment was offset by a decline in public investment due to continued sluggish implementation of the government's annual development program (ADP). The contribution to growth of net exports of goods and services was negative.

Foreign direct investment (FDI) has stagnated at the meager level of less than \$1 billion annually over the past 5 years. In an attempt to boost FDI into gas, the government invited bids for offshore gas exploration and awarded contracts for three offshore blocks. To attract potential investors into the power sector, it relaxed the cap on producers' gas sales prices to bring them close to international levels.

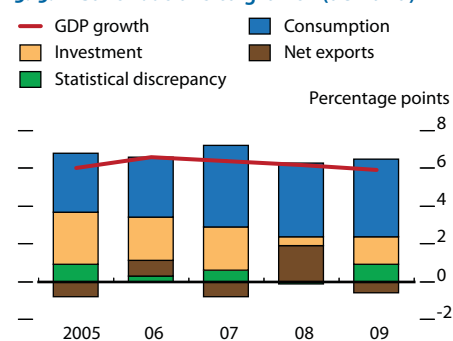
Average inflation dropped to 6.7% in FY2009 from 9.9% the year before, with the fall in food prices steeper than that in nonfood prices. The steep decline in petroleum and food import prices and an uptick in domestic agricultural performance were the main factors contributing to easing price pressures. However, after falling to a 90-month low of 2.3%

3.15.1 Contributions to growth (supply)



Source: Bangladesh Bureau of Statistics. 2009. *National Accounts Statistics*. May.

3.15.2 Contributions to growth (demand)



Source: Bangladesh Bureau of Statistics. 2009. *National Accounts Statistics*. May.

year on year in June 2009 (Figure 3.15.3), inflation accelerated to 9.0% in January 2010, with food and nonfood prices rising sharply. This upturn reflected the impact of unfavorable weather on domestic crop production and the strengthening of global prices of rice and other commodities.

Growth in broad money was strong throughout FY2009, advancing 19.4% year on year in June 2009, compared with the 17.5% program target of Bangladesh Bank, the central bank (Figure 3.15.4). This buoyancy largely reflected unexpected strength both in the banking system's net foreign assets and in the balance-of-payments outturn. Expansion in private sector credit fell to 14.6% year on year in June 2009 (against a target of 18.5%), as slower domestic economic activity and business uncertainty curtailed demand.

Bangladesh Bank cut its policy rates (repo and reverse repo) by 25 basis points in March 2009 in an effort to bolster economic activity. Moreover, its operations in the foreign exchange market substantially raised commercial banks' excess reserves and lending capacity. Reflecting these factors, the average interbank call money rate dropped sharply to 1.8% in June 2009, from 8.3% in March 2009. However, commercial banks' weighted average lending rate declined only marginally to 11.9% in June 2009 and credit flows did not strengthen perceptibly. In October, the central bank cut the two policy rates by 400 basis points in an effort to encourage banks to reduce lending rates and to stimulate credit demand. After that move, credit to the private sector climbed strongly.

The taka-dollar exchange rate remained stable at about Tk69/\$1 in FY2009, as Bangladesh Bank intervened heavily in the interbank market, purchasing \$1.5 billion during the year (up from only \$0.2 billion in FY2008) to prevent that rate from appreciating. However, the real effective exchange rate appreciated by 7.2% over the year due to higher domestic inflation than in its major trading partners, implying erosion in export competitiveness.

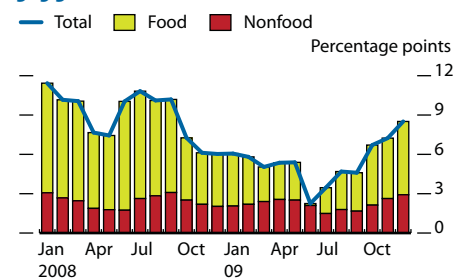
Revenue collection rose slightly to 11.2% of GDP in FY2009, but fell well short of the FY2009 budget target, mainly because of the slower growth in imports. Total spending at 15.3% of GDP was also lower than target. Lower international prices of food, fuel, and fertilizer contained current spending on subsidies, and the ADP was also substantially underspent due to continuing human resources constraints in key line agencies. The overall budget deficit was therefore only 4.1% of GDP, well below the target of 5.0%.

Export growth decelerated to 10.1% in FY2009 from 17.4% in FY2008, with essentially stagnant year-on-year export gains after the September 2008 global financial meltdown (Figure 3.15.5). Readymade garments posted a still-healthy growth of 15.4%, which helped raise their share in total exports to 79.3% from 75.8% the previous year, as other products' exports declined by 5.7% on weak demand and lower prices.

Contracting in the second half from year-earlier levels, imports plummeted to only 4.2% growth in FY2009 from 25.6% (Figure 3.15.6). A good domestic crop and a combination of falling global commodity prices and weaker imports of capital machinery and raw materials were the major factors.

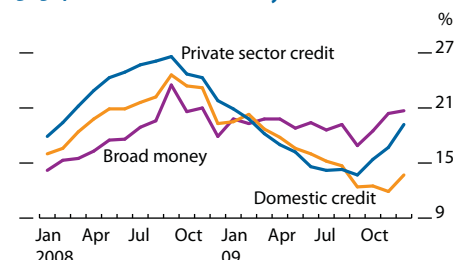
The improved trade deficit, together with 22.4% growth in workers' remittances, lifted the current account surplus to \$2.5 billion (2.8% of

3.15.3 Contributions to inflation



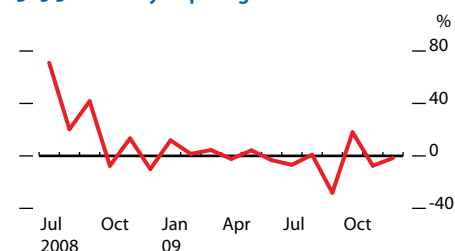
Sources: Bangladesh Bureau of Statistics. <http://www.bbs.gov.bd> (accessed 7 March 2010); ADB estimates.

3.15.4 Growth of monetary indicators



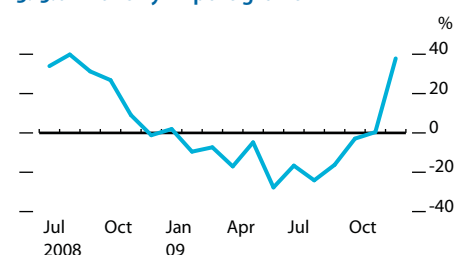
Source: Bangladesh Bank. <http://www.bangladesh-bank.org> (accessed 1 February 2010).

3.15.5 Monthly export growth



Source: Export Promotion Bureau. <http://www.epb.gov.bd> (accessed 8 March 2010).

3.15.6 Monthly import growth



Source: Bangladesh Bank. <http://www.bangladesh-bank.org> (accessed 1 February 2010).

GDP) from \$702 million (0.9% of GDP) in FY2008 (Figure 3.15.7). A small deficit in the capital and financial account resulted in a surplus of \$2.1 billion in the overall balance of payments in FY2009, dwarfing the prior-year's \$331 million surplus. Foreign exchange reserves rose to \$7.5 billion (3.8 months of imports) at end-June 2009, and surged to \$10.6 billion at end-February 2010, nearly twice the level of a year earlier, and equivalent to over 5 months of imports (Figure 3.15.8).

## Economic prospects

Economic forecasts for FY2010 and FY2011 assume continued prudence in macroeconomic management and steady progress in governance reforms. Commissioning of new power generation capacity should moderately reduce supply shortages.

GDP growth in FY2010 is forecast at 5.5%, somewhat lower than in FY2009 due in part to the lagged effects of depressed external demand on Bangladesh's mainly low-end garment exports. In FY2011, growth is expected to rise to 6.3%, underpinned by the global recovery and strengthened business confidence and investment.

Despite continued policy support, agricultural growth is seen moderating in FY2010 to a still-high 4.1% from 4.6%, as the *aus* (summer) crop has been affected by drought and the *aman* (monsoon) crop by inadequate rainfall. The high base of the previous year and less remunerative farmgate prices are also factors. Sector growth is projected to nudge up to 4.3% in FY2011 on an expected return to normal weather.

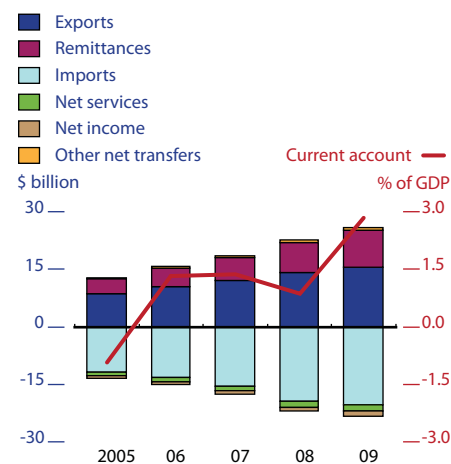
Industrial growth is seen decelerating to 5.6%, reflecting subdued domestic and external demand in the first half of FY2010. Several indicators suggest that industry will remain sluggish throughout the year. Export performance was dismal in the first half, declining by 6.2% (Figure 3.15.9), with most items (including garments) contracting due to weak retail sales in industrial countries. In addition, domestic investor sentiment has not fully revived following the initial uncertainty over the extent and depth of the impact of the global recession on Bangladesh. Moreover, decelerating remittance growth will limit growth in consumer demand. Still, industrial performance is expected to strengthen in the second half of FY2010 as exports return to a positive growth path on recovering global momentum.

In FY2011, industry is likely to grow more robustly at 7.5% with further recovery in global demand and improved domestic business confidence that will raise construction activity and investment. Other domestic factors, such as financial support to small and medium-sized enterprises spearheaded by the central bank, should also help boost industrial output.

Services growth in FY2010 is forecast to slow to 5.9% from 6.3%, reflecting weaker performance in agriculture and industry. Trade and transport activity are especially affected. Growth is projected to rebound to 6.5% in FY2011.

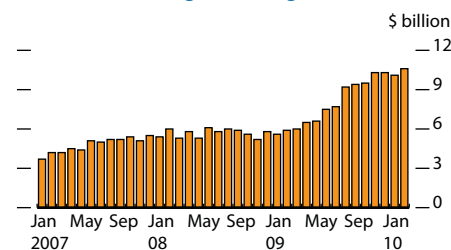
With the rise in year-on-year inflation, the 12-month average has also picked up. In FY2010, average inflation is forecast to climb to 7.5% and then to 7.8% the following year. The excess liquidity in banks and international commodity price pressures are expected to stoke inflation.

### 3.15.7 Components of the current account balance



Source: Bangladesh Bank. 2010. *Annual Report 2008–09*. <http://www.bangladesh-bank.org>.

### 3.15.8 Gross foreign exchange reserves



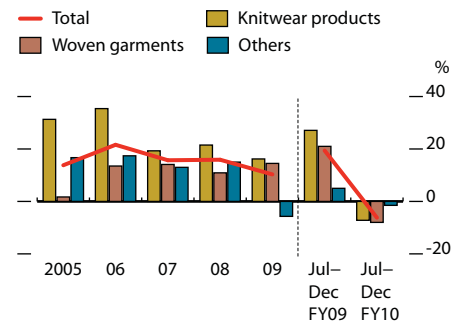
Source: Bangladesh Bank. <http://www.bangladesh-bank.org> (accessed 8 March 2010).

### 3.15.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.5	6.3
Inflation	7.5	7.8
Current account balance (share of GDP)	1.8	0.5

Source: ADB estimates.

### 3.15.9 Growth in exports and components



Source: Bangladesh Bank. 2010. *Annual Report 2008–09*. <http://www.bangladesh-bank.org>.

The Monetary Policy Statement announced in January 2010 continues the accommodative stance. The statement seeks to maintain supportive monetary conditions to help exports recover and investment pick up. It also anticipates that the boost to production from improved credit availability and the November 2009 cut in fertilizer prices will help contain FY2010 inflation. The year-on-year growth in broad money (20.7%) in December 2009 was higher than the central bank's annual program target of 15.5%, while growth in private sector credit at 19.2% was also above its program target of 16.7%.

Remittances reached a peak of \$1.1 billion in November 2009, before falling to \$844.1 million in February 2010. Remittance growth dropped to 19.2% in the first 8 months of FY2010 from 27.0% in the year-earlier period. Job placements abroad also tumbled (42.2%) in this period (Figure 3.15.10) and many workers came home. Reflecting a decelerating rise in the number of new migrants and an increasing number of returnees, remittance growth is expected to slow further, to 16.5% in FY2010 and to 12.5% in FY2011.

Based on orders received, exports are set to perform better in the second half but, because they declined in the first half, full-year FY2010 growth is projected at only 5.0%. The first-half decline also suggests a more pronounced impact of the global recession in FY2010 than a year earlier. The government announced a Tk10 billion (\$145 million) package in November 2009 to boost exports' performance. With continued global recovery, growth is projected to rise to 11.0% in FY2011.

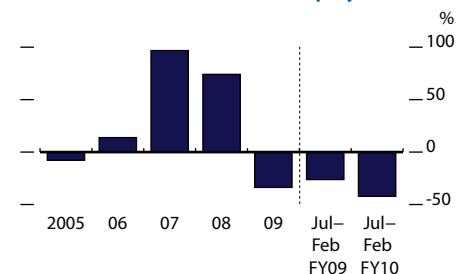
Imports declined sharply by 5.7% in the first half of FY2010 but are likely to pick up in the second half, with overall growth rising to 4.0% in FY2010 and to 14.0% in FY2011, as international fuel and nonfuel commodity prices recover and as domestic demand for imported raw materials and capital machinery grows.

The surplus in the current account is expected to decline to 1.8% of GDP in FY2010 as export and remittance growth slow, although import growth will also decelerate. The surplus will slide further to 0.5% of GDP in FY2011 (Figure 3.15.11), as the trade deficit widens due to a recovery in import growth and a further slowing in remittance growth.

In June 2009, the government set an expansionary fiscal stance in the FY2010 budget. It included sizable spending on a new public-private partnership (PPP) scheme, a much larger ADP, an expanded social safety net program, and a special stimulus package (Box 3.15.1). Although ADP utilization of 35% in the first 7 months of the fiscal year is an improvement over past years, based on its current pace, the ADP allocation is unlikely to be fully spent. The allocation for PPPs is also likely to remain largely unused, as the preparatory work for launching the scheme is taking longer than foreseen. Thus, the FY2010 budget deficit is expected to be contained within the projected level of 5.1% of GDP (Figure 3.15.12).

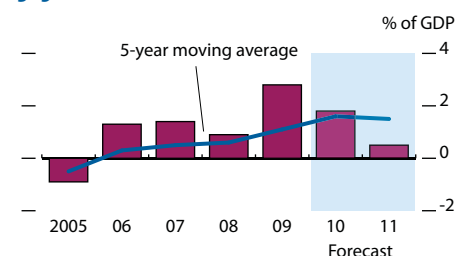
The government has not raised the administered prices of domestic fuels since it lowered prices of diesel and kerosene (together, close to 75% of domestic consumption) in January 2009, despite subsequent increases in international oil prices. The Bangladesh Petroleum Corporation (BPC) is suffering losses from selling these products at below cost. It is making some profit on gasoline (petrol), which accounts for about 15% of consumption; the price was reduced in December 2008. Effective 1 March

3.15.10 Growth in overseas employment



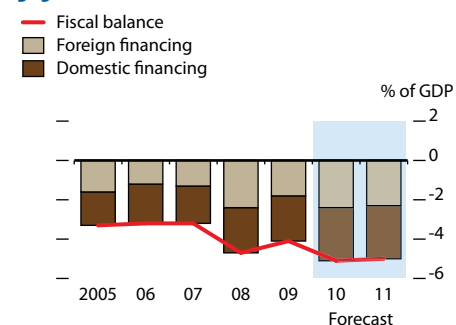
Source: Bangladesh Bank. <http://www.bangladesh-bank.org> (accessed 1 February 2010).

3.15.11 Current account balance



Sources: Bangladesh Bank. 2010. *Annual Report 2008-09*. <http://www.bangladesh-bank.org>; ADB estimates.

3.15.12 Fiscal balance



Sources: Ministry of Finance. 2009. *Budget at a Glance*. <http://www.mof.gov.bd>; ADB estimates.

2010, the Bangladesh Power Development Board (BPDB) increased tariffs by 6%–7%. Without domestic price increases, BPC is likely to incur a sizable deficit. The FY2010 budget earmarked \$370 million for subsidies to BPC and to BPDB to cover their likely losses.

Several downside risks could undermine projections. These include a weaker than expected global economic recovery, failure of planned measures to address growing power and gas shortages, business confidence weakened by a lack of progress in economic and governance reforms, and an unexpected surge in commodity prices or in bank credit pushing inflation much higher. The threat of natural disasters always looms.

## Development challenges

Infrastructure investment needs to be boosted for faster economic growth and poverty reduction. Underinvestment over the years has resulted in acute deficiencies, especially in power and gas, ports, and roads, which are restricting business opportunities and access to public services. Consequently, the government has to substantially raise project implementation capacity in public sector agencies, lift ADP utilization, and carry out PPPs in infrastructure. To launch the PPP scheme, the legal framework for setting the responsibilities of stakeholders, for cost-recovery provisions, and for compensation and redress mechanisms needs to be put in place quickly.

A combination of cheap labor and a supportive policy environment helped Bangladesh emerge as a major exporter of garments over the past two decades. However, overwhelming dependence on the one industry has made the country's export earnings acutely vulnerable to a global slowdown. Recent experience underscores the urgency of diversifying into other promising industries such as ceramics, pharmaceuticals, food processing, leather products, and spare parts for machinery and shipbuilding. An important requirement for such an export transformation is the necessary utility services such as power, gas, and water. Streamlining the export duty drawback system and improving customs and bonded warehouse facilities are also required.

Population pressure is a related concern. It is straining ecosystem services, such as safe water supply and habitat as well as other natural resources, and pressuring the government in terms of providing infrastructure, utilities, and other services. Although Bangladesh has made progress over the past two decades in nearly halving the total fertility rate to slightly above the population replacement rate, further progress is needed—by raising investment in family planning and reproductive health—to push the fertility rate to below the replacement rate. Job opportunities will also need to be created for the large number of youths entering the job market each year.

Climate-induced disasters are endemic in Bangladesh, ruining the lives and livelihoods of millions of people, damaging infrastructure, and harming the physical environment. Climate change multiplies these inherent risks, undermining development prospects and eroding the gains in poverty reduction. Major efforts need to be mounted for mobilizing funds for adaptation measures, putting in place the right policy frameworks, and building institutional capacity.

### 3.15.1 Policy responses to the global recession

The government's first response announced in April 2009 was a Tk34.2 billion (\$500 million) stimulus package for exports, agriculture, power, and social safety net programs. This package provided cash incentives for the more severely affected export items such as jute and jute goods, leather and leather goods, and frozen foods. It offered no assistance to the garment industry as it was still performing reasonably well at the time.

Out of the Tk50 billion earmarked for a second fiscal stimulus package (as part of the FY2010 budget), the government initially allocated Tk18 billion for export subsidies and Tk12 billion for the power sector. From the remaining Tk20 billion, as the effects of global recession on exports became more pronounced, the government allocated Tk10 billion in November 2009 for direct export subsidies and other policy support, including assistance to the garment industry.

The central bank sought to align monetary policy to support the expansionary fiscal stance, and has continued an accommodative monetary policy stance in FY2010. In addition to lowering policy rates to improve the availability of credit, it did not sterilize the higher bank reserves (lending capacity) created by its large market purchases of foreign exchange as it kept the exchange rate stable.



# Bhutan

Economic growth is dominated by the hydropower project cycle. While growth decelerated last year from very high levels as the effect of newly installed power production faded, construction of new power plants will sustain solid expansion over the next few years. Bhutan has a record of relatively strong growth that has cut poverty and advanced social development. It is based on prudent economic management and well-targeted donor support. Anchored by power, the medium-term outlook is bright, though rising unemployment, especially among young people, remains an economic and social concern.

## Economic performance

Bhutan was well insulated from the global meltdown as the economy is driven largely by construction of hydropower stations and the export of electricity to power-hungry India. Electricity is the single largest sector of the economy, with a 22% share of GDP (its exports to India amount to half total exports), followed by construction at 12%, agriculture at 17%, and manufacturing at about 9%. (Services as a group account for around 36%.)

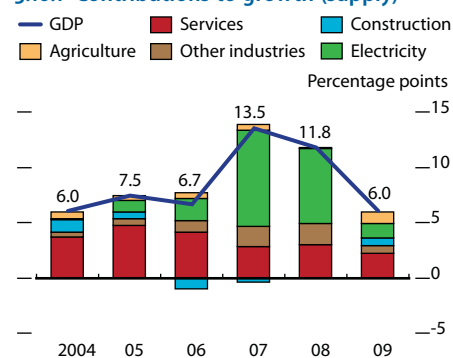
GDP growth in FY2009 (ended 30 June 2009) decelerated to an estimated 6.0% from 11.8% in FY2008 (Figure 3.16.1) reflecting the leveling-off of power output gains after the 2007 commissioning and phase-in of the huge Tala hydropower station (Figure 3.16.2). There were no stimulus measures introduced given the limited impact of the global crisis.

Though its impact was not as severe as elsewhere in the region, the global recession affected tourism and manufacturing. Tourism, though small in relation to GDP, is important for employment creation and is the largest source of hard currency earnings. While it benefited from the one-time centenary and royal coronation celebrations held in June–July 2008, arrivals dropped by 73% in January–June 2009, year on year (Figure 3.16.3). Major manufacturing companies, most of which produce raw materials, saw sales fall by 13.1% in FY2009, reflecting a drop in exports to India. In the labor market, unemployment is estimated to have increased to 4.0% in FY2009 from 3.7% in FY2008.

With strong economic and financial ties to India, and its currency (the Ngultrum) pegged at par with the Indian rupee, Bhutan's inflation is highly influenced by that in India, and averaged 7.1% in FY2009. It decelerated to 3.0% in the fourth quarter of FY2009 from a peak of 8.8% in FY2008, as nonfood price inflation (including transport) tumbled (Figure 3.16.4).

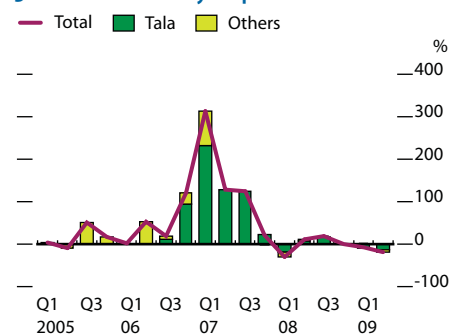
Money supply (M2) rebounded, to 24.6% growth in FY2009 from 2.3% a year earlier, primarily due to growth in net foreign assets. Credit to the private sector grew by 31.1%, reflecting continued significant expansion in

3.16.1 Contributions to growth (supply)



Source: Royal Monetary Authority. 2010. *Annual Report 2008–09*. January. <http://www.rma.org.bt>

3.16.2 Growth of hydropower sales



Note: Sales based on cost in Ngultrum.

Source: Royal Monetary Authority. 2010. *Annual Report 2008–09*. January. <http://www.rma.org.bt>

personal and housing loans and lending to manufacturers. Credit to the private sector has grown rapidly by an average of 35% in the past 3 years despite efforts by the Royal Monetary Authority, the central bank, to rein in banks' excess liquidity.

Credit quality deteriorated in FY2009 as nonperforming loans increased from 13.3% to 18.3% of the total. Such loans in manufacturing more than doubled, largely owing to lower prices and export sales in metal and other processing industries, which benefit from low-cost electricity. While the outlook for manufacturing is positive (largely due to India's rapid recovery), the central bank has raised provisioning requirements of substandard and doubtful loans to 30% and 60%, respectively, to minimize any potential adverse impact on banks.

Otherwise, developments in the finance sector have generally been positive. It is expected that the entry of two commercial banks, one specialized bank, and an insurance company will stimulate greater competition in the sector.

Budget revenue for FY2009 is estimated to be up by 30.6% from FY2008, attributable to increases in personal income tax receipts, business income tax receipts, excise duty, and profit transfer from Tala. Total expenditure rose by 42.5%, reflecting a surge in capital expenditure (50.3%) due primarily to the inclusion of additional budget allocations for agriculture-related infrastructure, rural electrification, and project funds for a cement project. The estimated fiscal deficit of Nu1.6 billion is equivalent to 2.8% of GDP (Figure 3.16.5).

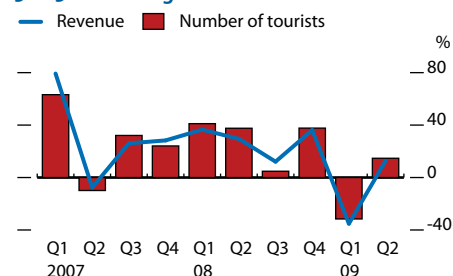
The FY2010 budget plan projects an increase in the deficit to Nu4.8 billion, or about 9.0% of projected GDP. The larger deficit reflects a 10.1% decline in budget revenue, mainly due to a fall in grant receipts, which are volatile from year to year. Domestic revenue declined slightly as weaker profit transfers from Tala are not expected to be offset by continued strong growth in domestic tax revenue. Total outlays are projected at Nu26.3 billion (up 3.1%), with current expenditure rising by about 14% (largely on a 23% increase in salaries and wages), and capital spending falling (after the large increase in FY2009).

The overall trade balance is estimated to have deteriorated to a deficit of 12.1% of GDP in 2009 from 5.0% in 2008 (Figure 3.16.6), attributable to easing commodity exports and increased imports. Manufactured exports, particularly textile- and mineral-based products, contributed to weaker export performance, but their impact was mitigated by moderate growth in hydropower exports. In the other direction, intermediate imports surged on burgeoning construction-related activity.

Despite the much higher current account deficit (9.4% of GDP), the overall balance remained in surplus due to large inflows associated with capital grants received from the Government of India. At end-September 2009, gross international reserves (convertible currency and Indian rupee combined) climbed to \$849 million, equivalent to 17.1 months of import cover.

External debt as a share of GDP was high at 65.0% as of end-FY2009, with loans from India for hydropower development constituting more than half. The government recently started borrowing in rupees from the Indian government's standby credit facility and the State Bank of India's overdraft facility to meet shortfalls in rupees required for

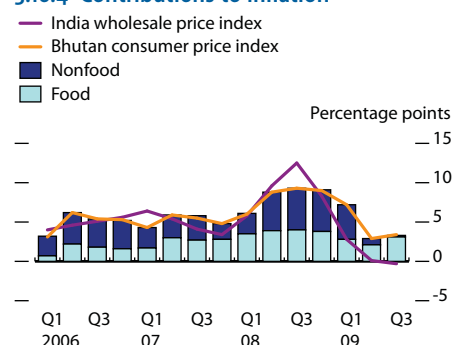
### 3.16.3 Tourism growth



Note: Revenue changes calculated in US dollars.

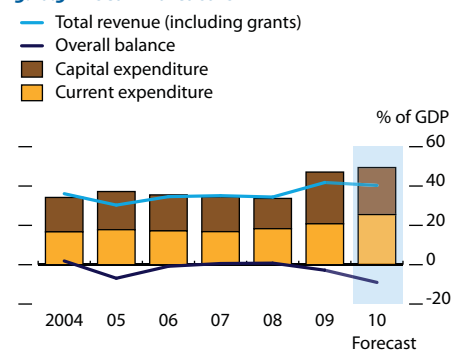
Source: Royal Monetary Authority. 2010. *Annual Report 2008–09*. January. <http://www.rma.org.bt>

### 3.16.4 Contributions to inflation



Sources: Royal Monetary Authority. 2010. *Annual Report 2008–09*. January; 2009. *Monthly Statistical Bulletin*. September. <http://www.rma.org.bt>

### 3.16.5 Fiscal indicators



Sources: Royal Monetary Authority. 2010. *Annual Report 2008–09*. January. <http://www.rma.org.bt>; ADB estimates.

import payments. Still, Bhutan's debt level is largely self-sustaining, as a steady stream of earnings from power exports to India generate the necessary service payments. Convertible currency debt is mostly on highly concessional terms involving modest debt servicing. The external debt service ratio increased to 39.6% in FY2009 from 18.5% a year earlier, reflecting repayments to the State Bank of India (Figure 3.16.7).

## Economic prospects

It is expected that during the 10th five-year plan (FY2009–FY2013), growth will continue to be strong, mainly driven by new hydropower developments including 10 hydropower projects, with three of the projects expected to start this year. Construction of these new power stations will sustain high economic growth.

On these factors, GDP growth is projected to be 6.0% in FY2010 and 6.5% FY2011. With close trade links and the currency peg to the Indian rupee, inflation is projected at 5.0% for FY2010 and FY2011, largely following Indian inflation. While power exports to India will remain stable due to strong demand and long-term contracts, commodity exports will likely improve in view of that country's expected strong expansion in the forecast period.

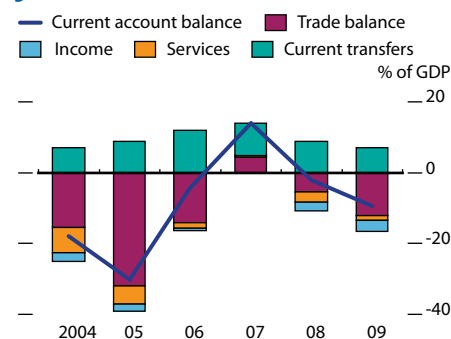
Recovery of service exports (mainly tourism) may take time, reflecting the economic recovery in industrial countries. The assumed relatively stable fuel import prices will, however, help restrain import growth. The current account is projected to be in balance in both FY2010 and FY2011.

## Development challenges

Rising unemployment is a concern, as hydropower-led development employs few people and has small backward linkages. Labor-intensive activities need to be developed. Tourism is one area where the private sector can expand. Depending on the development of tourism infrastructure and new tourism products, a more steady inflow of tourists throughout the year could be better promoted.

Private sector development will be a key focus in diversifying economic activity. Bottlenecks such as lack of skilled labor, difficult access to land, inadequate infrastructure, and limited financial sector outreach need to be addressed to facilitate economic diversification and growth.

### 3.16.6 Current account indicators



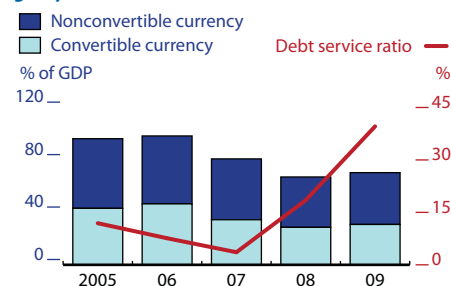
Source: Royal Monetary Authority, 2010. *Annual Report 2008–09*, January. <http://www.rma.org.bt>

### 3.16.1 Selected economic indicators (%)

	2010	2011
GDP growth	6.0	6.5
Inflation	5.0	5.0
Current account balance (share of GDP)	0.0	0.0

Source: ADB estimates.

### 3.16.7 External debt indicators



Source: Royal Monetary Authority, 2010. *Annual Report 2008–09*, January. <http://www.rma.org.bt>

# India

The economy rebounded strongly over the past fiscal year and is among the leaders in exiting the global recession. Prompt and strong fiscal stimulus and monetary easing, an improving global economic environment, a return of risk appetite, and large capital inflows were instrumental in the bounceback. Rising inflation, however, is a concern. Monetary tightening and withdrawal of fiscal stimulus are under way. The outlook is for a return of high growth, though this will require continued apt handling of macroeconomic policies. To sustain long-term growth, addressing infrastructure bottlenecks and reforming agriculture are essential.

## Economic performance

Starting slowly in the first quarter of FY2009 (ending March 2010), economic growth in India came back strongly over the year (Figure 3.17.1), buoyed by monetary and fiscal stimulus and by gradually strengthening consumer and private business confidence. The government's advance estimate for the year put GDP growth at 7.2%, a marked improvement over the 6.7% recorded in FY2008 (Figure 3.17.2).

At the sector level, industry fully accounted for the improvement in growth as manufacturing output spurted (Figure 3.17.3) from the very beginning of the fiscal year to be 8.9% higher than a year earlier. Manufacturing's impressive performance signals that the economy has regained the momentum lost at the onset of the global financial crisis.

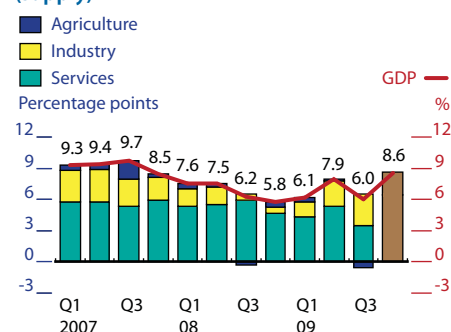
Agriculture played no role in the upturn: output is estimated to have fallen by 0.2% for the year, reflecting the poor summer monsoon. The impact of this output decline was largely felt in the third quarter, and the upward trend in growth faltered temporarily as farm production fell by nearly 3% year on year.

Expansion in services, while a healthy 8.7%, slowed from a year earlier. This reflected a more moderate pace of spending by the government on compensation to employees reflected in slower growth of social services.

On the demand side, preliminary data suggest that robust contributions by private and government consumption continued, but also that investment failed to show any signs of pickup with the fixed investment-to-GDP ratio slipping marginally to 32.3%. Restocking of inventories also added to GDP growth after a large drop a year earlier, helping boost growth in manufacturing output. Civil servants' wage hikes, low interest rates, and rising consumer confidence led to a surge in vehicle sales during the year; production data indicate sales strength of other durable items as well. Net exports also bolstered growth, reflecting a drop in imports.

Indian corporations made the most of lower commodity prices and

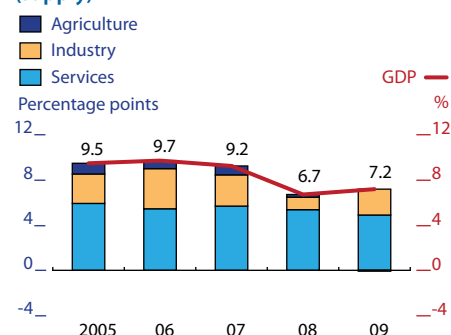
3.17.1 Quarterly contributions to growth (supply)



Note: Q4 2009 sector breakdown not given.

Sources: Ministry of Statistics and Program Implementation. <http://www.mospi.nic.in> (accessed 2 March 2010); ADB estimates.

3.17.2 Annual contributions to growth (supply)



Source: Ministry of Statistics and Program Implementation. <http://www.mospi.nic.in> (accessed 24 March 2010).

the government's cut in excise duty in response to the global crisis. Companies curtailed their expansion plans, reduced marketing expenses, and went slowly on granting pay rises to their staff. These moves, along with falling interest rates, helped them report a 28% rise in after-tax profit in the first half of FY2009.

The outline of the improving economic landscape is, however, blurred by a recent surge in inflation to 10% in January 2010, largely propelled by food inflation that reached 20% in December 2009 (Figure 3.17.4). The very weak summer monsoon in the sowing season, followed by widespread flooding later, has triggered a spurt in food prices. Importantly, escalating prices have not been confined to cereals but include pulses, vegetables, and poultry products, pointing to the government's inability to stabilize prices by the usual buffer-stock operations. With the rise in the second half, inflation is estimated to average 3.6% in FY2009.

Beyond weather, one structural reason for persistent price pressure is that the central government has raised its food procurement prices greatly (the minimum support price for paddy has gone up substantially over the past 3 years).

The government took several supply-side measures to counter the recent surge in prices, including selling wheat and rice from buffer stocks, temporarily suspending duty on sugar imports, and initiating measures against hoarding. While food prices are expected to moderate with the new harvest season, their relentless rise (given their large weight in the price index) has created concerns of spillover to nonfood prices and a ratcheting up of inflation expectations.

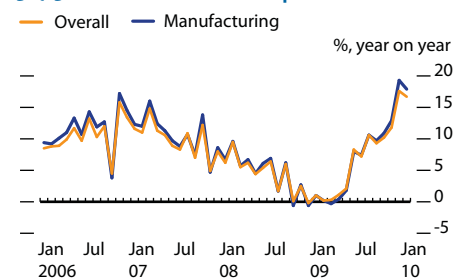
Uncertainties about domestic fuel prices (which again require heavy subsidies as global oil prices climb) are also contributing to inflation expectations. The Parikh committee, which took on the contentious issue of domestic pricing of petroleum products, recommended complete deregulation of petrol (gasoline) and diesel prices, and substantial increases in the prices of cooking gas and kerosene.

This is, indeed, a much-needed reform because of high subsidy costs and harm to the long-term health of the petroleum industry, which bears part of the subsidy costs. Implementation, however, will be challenging at the moment due to accelerating inflation and higher duties imposed on crude oil, petrol, and diesel in February 2010 that were passed on by adjustments in administered sale prices.

The Reserve Bank of India (RBI) signaled the beginning of an exit from its crisis policy stance at its January 2010 policy meeting when it raised banks' cash-reserve ratio from 5.0% to 5.75% (Figure 3.17.5). The move did not represent significant tightening in view of large excess reserves held by the banking system. In March, however, the central bank raised its key lending and borrowing rates by 25 basis points. This action, ahead of its scheduled policy meeting in April, signaled a determination to begin shifting from a crisis mode toward a more neutral stance for monetary policy.

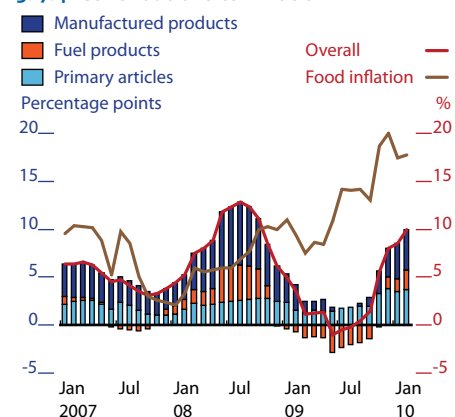
In announcing the change, the RBI cited several developments that prompted the need for a change in policy, including the positive trend in growth (due predominately to domestic factors), a sustained increase in demand for credit, a recent escalation in prices of nonfood manufactured

### 3.17.3 Growth of industrial production



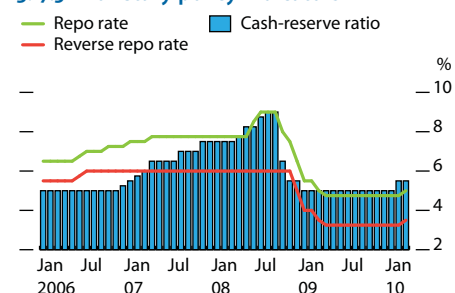
Source: CEIC Data Company (accessed 21 March 2010).

### 3.17.4 Contributions to inflation



Source: Ministry of Industry and Commerce. <http://eaindustry.nic.in> (accessed 15 March 2010).

### 3.17.5 Monetary policy indicators



Source: CEIC Data Company (accessed 25 March 2010).



goods, a need to keep inflation expectations in check, and lags inherent in the impact of monetary policy. While a shift in monetary policy is unlikely to affect food prices, timely policy adjustments in the months ahead can help underpin a return to India's past high growth rates while maintaining relative price stability.

In a sign of rebound, export growth turned positive in November 2009 after 13 months of year-on-year declines (Figure 3.17.6). An outlook survey on exports that was conducted by the Confederation of Indian Industry indicated that nearly half the respondents expected further volume growth in the coming months despite the rising cost of raw materials and stiff international competition.

The central government will continue for a time with the 2% interest subsidy on bank loans to certain sectors that are labor intensive, such as textiles, leather, handicrafts, cotton yarn, jute, minerals, and fruits and vegetables, which were particularly hard hit by the fall in global demand.

Imports moved to positive growth in December after 12 months of year-on-year contraction (Figures 3.17.7 and 3.17.8). Oil and non-oil imports slumped by about 25% and 17%, respectively, from April 2009 to January 2010, relative to the same prior-year period. Non-oil imports rose sharply from \$12.4 billion in March 2009 to \$16.9 billion in January 2010 on the strength of the domestic economic recovery.

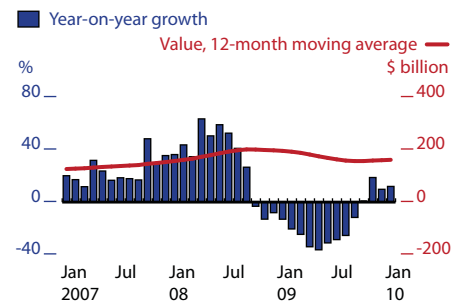
Although official balance-of-payments data for FY2009 are unavailable, various indicators suggest that the adverse effects of the global recession have largely played themselves out. Though reviving in the final months of FY2009, annual exports and imports are estimated to have declined by around 15% and 17%, respectively, yielding a moderate improvement in the trade deficit of about \$25 billion (Figure 3.17.9). Net invisible receipts are estimated to have declined by \$20 billion to around \$70 billion, mainly due to a fall in miscellaneous business receipts. By these estimates, the current account deficit narrowed to 1.9% of GDP from 2.5% a year earlier.

A notable feature of economic revival was the resumption of large capital inflows, led by the turnaround in foreign institutional equity purchases from large net sales a year earlier, and a sustained high level of foreign direct investment. Total net capital inflows are estimated at \$60 billion in FY2009 (up from \$7 billion a year earlier), reflecting a return of risk appetite in global financial markets in conjunction with India's economic resilience as demonstrated over the course of the fiscal year. The capital account surplus more than covered the current account deficit.

Gross international reserves (including valuation adjustment) increased by about \$25 billion to an estimated \$280 billion by the end of FY2009 (Figure 3.17.10). The increase in reserves includes the allocation of SDR3.3 billion (\$5.2 billion) made by the International Monetary Fund in August and September 2009. In November 2009, India purchased 200 tons of gold from that body, and this is reflected in the difference between gross international and foreign exchange reserves in the figure. Reserves are ample, amounting to about 13.1 months of imports of goods and services.

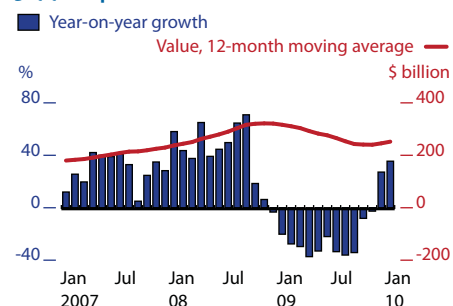
The rupee exchange rate appreciated both against the US dollar and

### 3.17.6 Export indicators



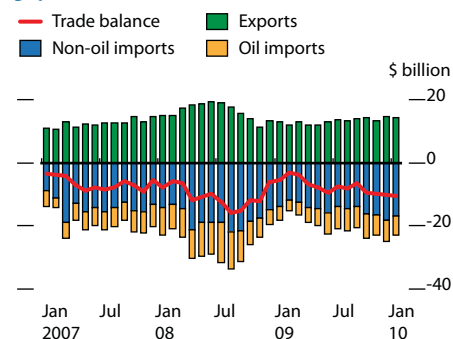
Source: CEIC Data Company (accessed 17 March 2010).

### 3.17.7 Import indicators



Source: CEIC Data Company (accessed 17 March 2010).

### 3.17.8 Trade indicators



Note: Total exports and imports based on customs data.

Source: CEIC Data Company (accessed 17 March 2010).

in real effective terms throughout FY2009 as the economy strengthened. This contrasts with a downward slide in FY2008 as the economy and balance of payments faltered. The real effective exchange rate appreciated by about 11% in FY2009, essentially reversing an equivalent depreciation in FY2008, though it remains about 6% below its mid-2007 high (Figure 3.17.11). The return of a large capital account surplus has required the RBI to resume interventions in the foreign exchange market to moderate abrupt upward pressure on the rupee and to support exports.

But given the rise in inflation and buildup of inflation expectations, the RBI may find it difficult to continue intervening. Among the first wave of economies leading the recovery phase, it may have to contend with managing even much larger capital inflows, which would put upward pressure on the exchange rate, interest rates, and growth of credit, replaying the difficult monetary policy mix of FY2007 when capital inflows surged. Thus, the central bank's effective use of sterilization and other capital control policies at the same time as it accepts some flexibility in the exchange rate will be critical in effectively managing the economy through its recovery phase.

The FY2009 budget of the central government was prepared in the midst of a marked slowdown in the domestic economy. It envisaged a substantial rise in government spending and maintenance of lower excise and service tax rates put in place in the latter part of the previous fiscal year as a main element of countercyclical policy measures. The outturn came very close to plans for both revenue and expenditure with the deficit at 6.7% of GDP (Figure 3.17.12).

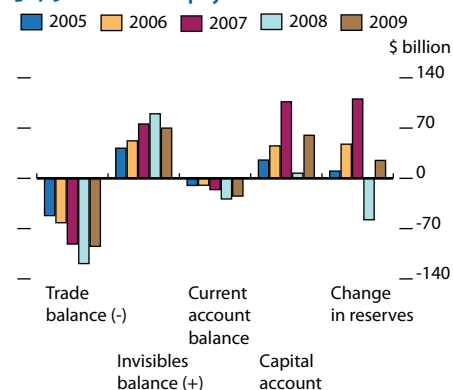
The consolidated general government deficit in FY2009, however, including off-budget liabilities for subsidies and the deficits of state governments, is expected to be about 10%. This, the second year of large deficits owing to the global crisis, had raised concerns over debt sustainability. In announcing the FY2009 budget the government pledged it would reduce the deficit to 5.5% of GDP in FY2010 and 4.0% in FY2011.

The central government budget for FY2010, introduced in February this year, was set against a somewhat more favorable background; the complex challenge of renewing the commitment for fiscal consolidation while sustaining rapid growth momentum. The central government reiterated its commitment to kick-start a well-coordinated exit strategy, and bring the budget deficit to 3.0% by FY2013.

This target was in line with the recommendations of the 13th Finance Commission fiscal road map that also called for the combined deficit of the states to fall to 2.4% of GDP in FY2013 and set a target for general government debt to be reduced to 68% of GDP by FY2014 (from 82% at end-FY2009). The introduction of a new direct tax code and a national goods and services tax effective from the start of FY2011 will underpin this fiscal effort.

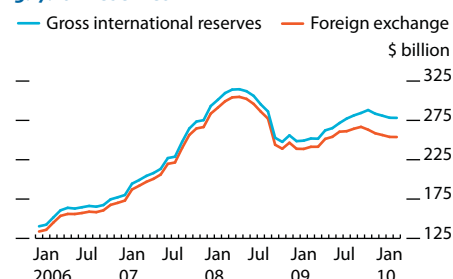
The FY2010 budget deficit is set to decline to 5.5% of GDP, a 1.2 percentage point reduction. About one-half of fiscal consolidation is expected to be achieved through bigger revenue collection mainly due to faster growth, some retracement of the stimulus excise tax rate cut, a widening of the service tax net, divestment of stakes in state-run enterprises, and the sale of spectrum for third-generation telephony. On

### 3.17.9 Balance-of-payments indicators



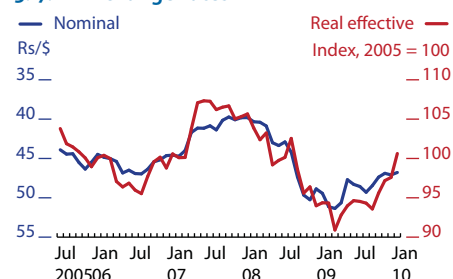
Note: Change in reserves includes valuation adjustments.  
Sources: CEIC Data Company (accessed 23 March 2010); ADB estimates.

### 3.17.10 Reserves



Source: CEIC Data Company (accessed 17 March 2010).

### 3.17.11 Exchange rates



Sources: Reserve Bank of India. <http://www.rbi.org.in>; Bank of International Settlements. <http://www.bis.org> (both accessed 17 March 2010).

the expenditure side, a reduction in the deficit of 0.6% of GDP is driven by a drop in current expenditure in relation to GDP.

The guiding principle of the budget on the expenditure side was to sustain high growth by boosting allocations for infrastructure while elsewhere ensuring that the benefits of high growth are broadly distributed. The budget took several steps in this direction. The allocation for the education and health sectors was raised by 16% and 14%, respectively, from FY2009 levels. The National Rural Employment Guarantee Scheme continued to get top priority with an allocation of Rs401 billion (\$9 billion) in FY2010. The finance minister also reiterated that the government will address key issues in the areas of financial inclusion; rural and urban housing; social security for unorganized sector workers; women and child development; and micro, small, and medium-sized enterprises.

The budget began the exit from fiscal stimulus by partly rolling back the earlier rate reduction of 4 percentage points in central excise duties. It also raised the standard rate on all nonpetroleum products from 8% to 10%. Similarly, the ad valorem component of excise duty on large cars, multi-utility vehicles, and sports-utility vehicles, which was reduced as part of the stimulus package, was increased by 2 percentage points. Other tax proposals included rationalization of the income tax slabs; additional excise duty on petrol and diesel; and restoration of a 5% customs duty on petroleum products, including crude oil.

A landmark reform in the area of government subsidy is the introduction of nutrient-based subsidy for fertilizer. This policy is expected to improve agricultural productivity, contain the subsidy bill over time, and offer environmental benefits. Further, the government will no longer issue special off-budget bonds from FY2010 to finance subsidies for fuel, fertilizer and food; much-reduced programs are now to be supported on the budget.

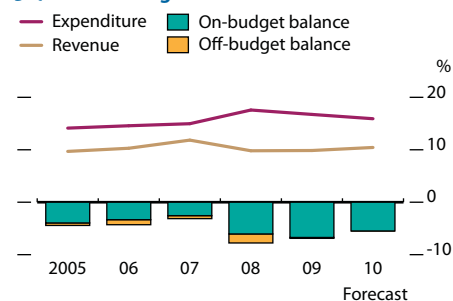
Another major fiscal development is a revived program for disinvestment of state-owned enterprises listed on the stock exchange by reducing ownership stakes (though not majority control). In FY2009, the government raised a record Rs335 billion (about \$7 billion); the FY2010 budget calls for sales of Rs400 billion.

The Sensex, the main index of the Bombay Stock Exchange, witnessed a large runup in FY2009. This recovery, which began in March, was part of the general worldwide boom in stock prices set off by depressed valuations in conjunction with early signs of recovery in the global economy. A notable feature of the rally was the degree to which the increase in the Sensex exceeded a general index of emerging Asian stock markets: in the past, they have mostly moved in tandem (Figure 3.17.13).

## Economic prospects

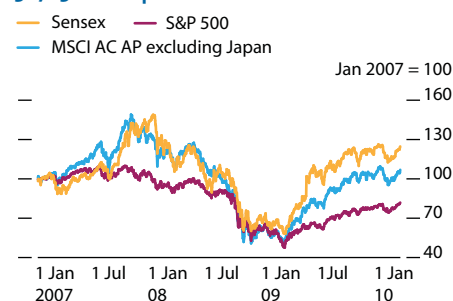
ADO 2010 forecasts for FY2010 and FY2011 are based on six key assumptions: monetary and fiscal stimuli will be withdrawn gradually over the next 2 years; the domestic food supply position will be comfortable because of normal monsoons; international oil prices will average about \$80 per barrel in 2010 and \$85 in 2011; domestic fuel prices will be revised upward; a modest recovery in industrial economies is

### 3.17.12 Central government fiscal indicators



Source: Ministry of Finance. <http://indiabudget.nic.in> (accessed 27 March 2010).

### 3.17.13 Stock price indexes



MSCI AC AP = Morgan Stanley Capital International All Country Asia Pacific.

Source: Bloomberg (accessed 17 March 2010).

### 3.17.1 Selected economic indicators (%)

	2010	2011
GDP growth	8.2	8.7
Inflation	5.0	5.5
Current account balance (share of GDP)	-1.5	-2.0

Source: ADB estimates.

expected in 2010 followed by further acceleration in 2011; and world trade will grow by 7%–8%.

Appropriate adaptations in monetary policy and the fiscal stimulus measures by the authorities and economic recovery in industrial economies will underpin the pace of growth in the forecast period. All recent surveys point to a marked improvement in business confidence. For example, the Dun & Bradstreet Composite Business Optimism Index for the first quarter of 2010 recorded an increase of 43% relative to the first quarter of 2009 (Figure 3.17.14). Moreover, six of seven “optimism subindexes” registered an increase from the previous quarter.

The HSBC Markit Purchasing Managers’ Index for manufacturing for December 2009 recorded its highest level since May that year, suggesting a robust month-on-month improvement in manufacturing. The equivalent index for services also registered significant expansion, suggesting that the services sector, too, is well poised for a strong recovery.

Renewed investor and consumer confidence—the return of the exuberance that marked FY2005–FY2007, the years of 9% or more growth—is expected to fundamentally shape the outlook. Unlike FY2009, the composition of aggregate demand will be driven by strong advances in private consumption and investment in the next 2 years. Government consumption expenditure will cease to be an engine of growth.

The normalization of financial market conditions is expected to support a rebound of private investment, sustaining demand as the fiscal stimulus fades even with some hardening of lending rates. Major capacity enhancement plans in the cement, steel, aluminum, automobile, paper, tire, and electricity sectors are in the works. The return of ready access to global capital by Indian corporations will help bring these plans to fruition. The government’s high priority for developing infrastructure is another factor in an investment-rich mix.

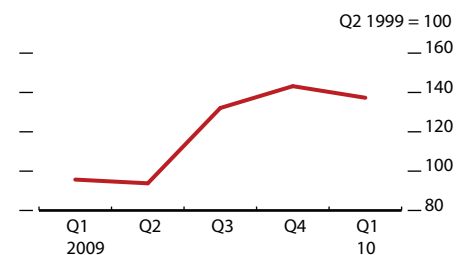
Urban consumption is expected to remain strong as the fear of large-scale job cuts has disappeared, substantial new hiring is under way, and salaries are back on a rising trend. The marked revival in the Sensex is also bolstering consumer and business attitudes. Expected normal rainfall and an enlarged National Rural Employment Guarantee Scheme will foster growth in rural consumption.

From the supply side, manufacturing and services will be the major drivers of expansion. Technology spending is expected to rebound in industrial countries, with their purchases set to post healthy growth, boosting growth in Indian high-tech services. These factors, in conjunction with recovery in the global economy, should lift GDP growth to 8.2% in FY2010 and 8.7% in FY2011 (Figure 3.17.15).

Inflation pressures are expected to ease in early FY2010 after the winter harvest. However, increases in the domestic prices of petrol, diesel, cooking gas, and kerosene are likely during the forecast period following the recommendations of the committee that rules on domestic fuel prices. While demand-pull inflation pressures in manufacturing are on the rise, the RBI has already begun an exit from monetary stimulus and is expected to keep price pressures in check. Thus inflation is forecast at 5.0% in FY2010 and 5.5% in FY2011 as international prices of oil and non-oil commodities edge up (Figure 3.17.16).

Large annual falls in exports and imports were recorded in FY2009,

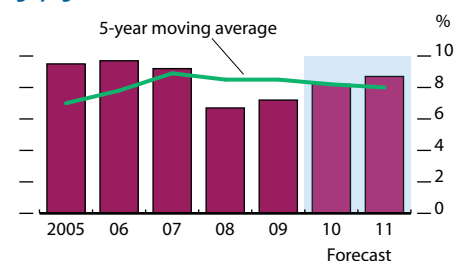
3.17.14 D&B Composite Business Optimism Index



Note: The index is calculated as the ratio of the positive responses for six selected parameters (or “subindexes”) for the period under review to the positive responses in the base period (Q2 1999).

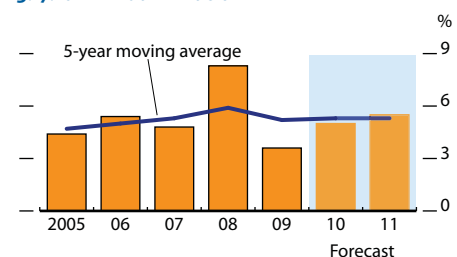
Source: Dun & Bradstreet. 2010. *Business Optimism Index: India*. January. <http://www.dnb.co.in>

3.17.15 Annual GDP



Sources: Asian Development Outlook database.

3.17.16 Annual inflation



Sources: Asian Development Outlook database.

though growth moved into positive territory in the closing months of the year. Trade flows in FY2010 and FY2011 will climb, though at a slower pace than in years prior to the global slowdown. Exports are projected to gain 16.0% in FY2010 and 12.0% in FY2011. This would bring exports in FY2010 to near FY2008 levels and in FY2011 to just over the \$200 billion target set in the government's foreign trade policy. These rates of expansion seem achievable given the expected revival in global trade volumes of 7% and 8% in these 2 years and the demonstrated focus and depth of India's export industries, exports of which grew at an annual average of nearly 24% in the 5 years through FY2008.

As GDP growth is pushed again to high levels and international oil prices firm, imports will expand rapidly, at 20.0% in FY2010 and 18.0% in FY2011. This projected expansion takes imports to 20%–21% of GDP and is in line with experience during FY2005–FY2007. The growing trade deficit is, however, expected to be partly offset by revival of growth in net invisibles from an expansion in the services surplus and an increase in transfers from nonresident Indians. Overall, the current account deficit is expected to widen marginally to 2.0% of GDP by FY2011 (Figure 3.17.17).

## Development challenges

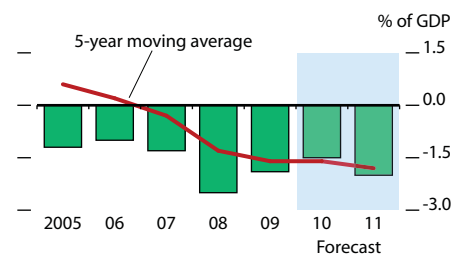
India is currently facing both short- and medium-term policy challenges. In the current situation, with its signs of economic recovery—albeit with uncertainties of how well entrenched growth is—policy makers face a dilemma. Too slow a removal of the fiscal stimulus may lead to a quick uptake of inflation and force them to raise interest rates by more than they would otherwise choose. Alternatively, too rapid a removal of monetary accommodation may lead the economy to stall and prolong the downturn.

Given the repeated occurrence of food price inflation in recent years, one of the major medium-term challenges of the central government is to design and implement a comprehensive plan for augmenting the domestic supply of food products, including vegetables and dairy products. The policy cannot be restricted to measures that enhance agricultural productivity. It needs to encompass many related issues including pricing, distribution, trade, subsidies, infrastructure, and research.

More specifically, one aim is to increase farmgate prices to trigger effective supply-side responses while containing retail prices, in order to mitigate erosion of purchasing power and adverse impacts on the poor. Since nearly half the food produced is lost from field to table, there is ample scope for solutions.

Finally, sustained acceleration in growth requires significant infrastructure building. Although much of the necessary investment will have to be privately funded, the government is tasked with substantially raising its own contribution. This is going to require real dexterity, especially at a time when its priority is to contain the fiscal deficit. It can release additional funding for infrastructure spending by containing subsidies as part of the consolidation of current expenditure and by promoting alternative sources of investment financing, such as public–private partnerships.

3.17.17 Current account balance



Sources: Asian Development Outlook database.



# Maldives

Too rapid fiscal expansion in recent years and a global recession–induced drop in tourism have taken the economy to the brink of crisis. A new government is attempting to correct structural imbalances and restore sustainable growth, including broadening the revenue base, rationalizing expenditure, and retrenching public employment. It also supports privatization as part of a wider shift of the role of government.

## Economic performance

After the December 2004 tsunami disaster, the economy rebounded on the back of large tourism-related investment and substantial increases in government spending. The fiscal expansion was, however, excessive, including as it did large increases in public sector wages and employment as well as subsidies. It pushed budget expenditure to 63% of GDP by 2008 and the overall deficit to 17% of GDP.

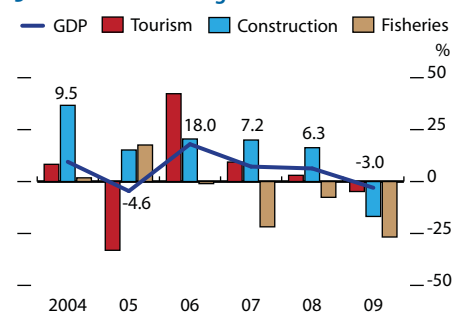
Given high import dependency, this fiscal expansion led to a marked balance-of-payments deterioration. When the country was hit by a drop in tourism after the start of the global crisis in September 2008, the heavy domestic and external imbalances threatened macroeconomic stability.

In these circumstances the economy struggled, with GDP dropping by 3.0% (a 9 percentage point tumble) in 2009, due primarily to contractions in tourism (the current economic mainstay), construction, and fisheries, by 4.8%, 16.8%, and 26.7% respectively (Figure 3.18.1). Tourist arrivals declined by 4.0% in 2009; indeed, the drop would have been even worse had it not been for a surge in arrivals from the People’s Republic of China, which helped offset a 7.1% fall in European visitors, a market usually responsible for around two-thirds of visitors (Figure 3.18.2). Hotel occupancy rates declined to 70% from 78% the previous year. Fishing, the main source of employment, saw a 22% decline in the catch. Total fish and fish product exports fell by 36%, in part reflecting a drop in prices.

Since the country imports the bulk of its goods, domestic price volatility is largely attributable to price pressures in global markets. After consumer inflation peaked at 17.3% year on year in July 2008, the high price hikes quickly moderated, as evidenced by inflation declining to 4.0% by December 2009 (Figure 3.18.3). Inflation averaged 4.0% in 2009, down from 12.3% a year earlier. A drop in food prices—at one-third, the most heavily weighted component in the consumer basket—was the main factor in the decline.

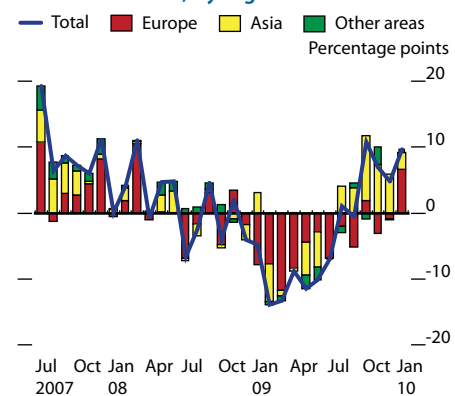
Broad money grew by 12.5% in 2009 (Figure 3.18.4). This expansion was due primarily to a 14% increase in net domestic assets as net foreign liabilities were reduced. The expansion in net domestic assets was entirely due to continued large expansion in net credit to government,

3.18.1 Selected GDP growth indicators



Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

3.18.2 Contributions to year-on-year growth in tourist arrivals, by region



Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

while credit to the private sector fell by 4.1% (in contrast to about a 30% expansion a year earlier) as the government bond issue, which replaced financing by the monetary authority as part of structural reform, crowded out private investment.

Total fiscal revenue, including grants, is estimated to have deteriorated by 20% in 2009 to 31.6% of GDP from 46.2% in 2008 (Figure 3.18.5). All major sources of tax revenue fell, reflecting a 30% drop in imports and the decline in tourism. Total expenditure climbed by about 7%, well below the near 23% increase in 2008, as the government tried to rein in the deficit, including wage cuts for civil servants. Still, the deficit expanded sharply to 26.1% of GDP from 16.9% a year earlier with just over three-quarters financed by the banking system.

The current account deficit surged from 15.7% of GDP in 2004 to 51.4% in 2008 owing to strong domestic demand led by new resort construction, large government expenditure, and soaring food and oil prices after 2007. As international prices stabilized and economic activity fell, the deficit is estimated to have fallen to a still-high 28.5% of GDP in 2009 (Figure 3.18.6).

Capital inflows have in large part financed the large deficit. The main items have been investment inflows for resort development, greater lending by Malé-based branches of two foreign commercial banks, and foreign borrowing by the government. Since the onset of the global crisis, foreign banks in Malé have sharply curtailed their lending, which has led to a shortage of dollars in the domestic market—a particularly acute problem in a dollarized economy. As the monetary authority intervened to maintain the fixed exchange rate with dollar, gross international reserves declined to \$207 million in September 2009 before showing a slight retracement.

In an attempt to restore macroeconomic stability, the current President, who was elected in October 2008, began to implement an emergency economic reform program that includes substantial fiscal reform. On the revenue side, airport passenger service charge has been raised, a business profit tax will be introduced, and the tourism bed tax will be transformed into a tourism goods and service tax, yielding substantially higher revenue.

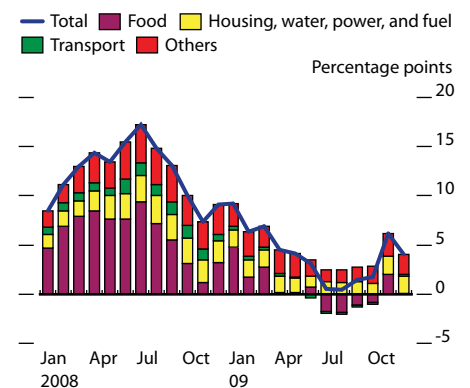
In order to align expenditures with revenues, the government is streamlining administrative machinery by downsizing the civil service, reducing electricity subsidies, and linking power tariff adjustments to cost of inputs twice a year. The government also plans to privatize parts of the extensive network of state-owned enterprises.

To support the government's reform program, the IMF approved in December 2009 a \$79.3 million standby arrangement and \$13.2 million under a program to deal with external shocks.

## Economic prospects

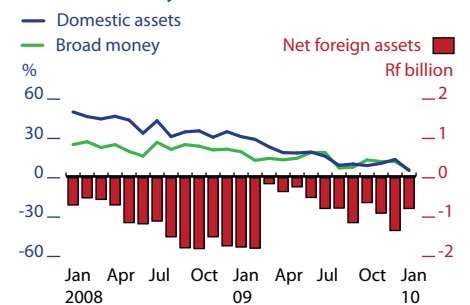
The economic outlook heavily depends on performance of tourism and fisheries, as well as the government's ability to push through its reform measures. Although fisheries constitute a small fraction of GDP growth, they remain vital in the economy as they are the main provider of food and employment in many of the atolls. And, while tourist arrivals have

### 3.18.3 Contributions to inflation



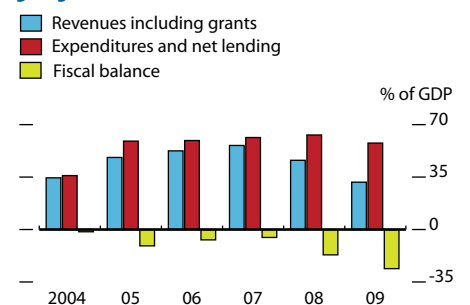
Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

### 3.18.4 Monetary indicators



Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

### 3.18.5 Fiscal indicators



Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

seemingly bounced off the bottom, driven by non-European arrivals, it will no doubt be some time before arrivals from Europe recover to precrisis levels.

With a better than initially expected economic outcome in 2009, the economy is projected to grow at 3.0% for 2010 and 3.5% in 2011. Inflation is put at 4.0% in 2010 and 3.0% in 2011, broadly in line with global commodity price assumptions where oil prices are expected to rise marginally and nonfuel commodity prices to remain stable. It is also assumed that the monetary authority will aim policy to support price stability and not provide financing for the fiscal deficit.

On the external front, lower commodity prices will ease the trade deficit, but receipts from tourism will recover only from next year. The current account deficit is expected to remain flat at 25.0% of GDP in the forecast period.

## Development challenges

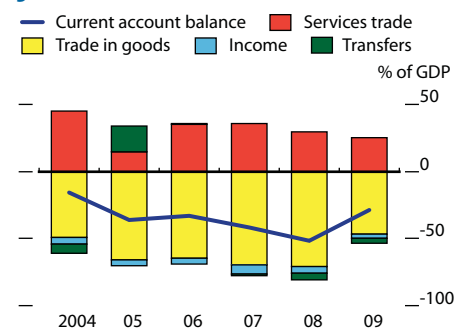
As a tiny, open economy the country is vulnerable to events beyond its control—including geopolitics, global economic developments, and climate change. Within its domain, however, the government needs to correct structural economic imbalances, primarily via fiscal reform and consolidation as well as privatization of state-owned enterprises. In view of the limited role of monetary policy under the currency peg with US dollar, fiscal policy has to play the greater role in demand management and economic stabilization. In addition, weak institutions and human resource deficiencies are major constraints, including the fragmented structure of government.

As the country lacks the natural capacity to expand its economic base beyond tourism and fisheries, increasing value added in those sectors is vital. The government aims, within tourism, to ensure better training of local staff to limit the current heavy reliance on expatriates, and within fisheries, to promote exports.

The significant income disparities between Malé and the atolls are continually widening. The government has an intention to group the atolls into seven provinces and develop regional administration and economic centers. Its hope is to concentrate and thereby improve service delivery, but given that it aims to reduce the cost to itself at the same time, this is a tall order.

Recognizing the country's vulnerability to climate change (none of the islands is more than 1.8 meters above sea level), in the short term, all the government can do is attempt to minimize the disaster impact, and therefore has strengthened mitigation responses for beach erosion. By 2019, the government has committed to switching from oil to 100% renewable energy production to serve as a model for other nations.

### 3.18.6 Current account



Source: Maldives Monetary Authority. 2010. *Monthly Statistics*. February. <http://www.mma.gov.mv>

### 3.18.1 Selected economic indicators (%)

	2010	2011
GDP growth	3.0	3.5
Inflation	4.0	3.0
Current account balance (share of GDP)	-25.0	-25.0

Source: ADB estimates.

# Nepal

The global economic crisis had a limited impact, but despite that, political uncertainties, poor weather, and infrastructure bottlenecks restrained economic growth in FY2009. With the political uncertainties remaining and macroeconomic challenges emerging, GDP growth will be below par in FY2010. But it is likely to pick up in FY2011, on account of continued sound fiscal management, strengthening global economic recovery, and some easing of supply disruptions.

## Economic performance

The continuing peace process—marked by controversies over the rehabilitation of the Maoist combatants and transformation to a federal structure from the current unitary system—led to frequent strikes and transport blockades, which acted as a break on the much anticipated postconflict economic recovery in FY2009 (ended July 2009). Coupled with unfavorable weather, these setbacks slowed GDP growth to 4.7% in FY2009, from 5.3% the year before.

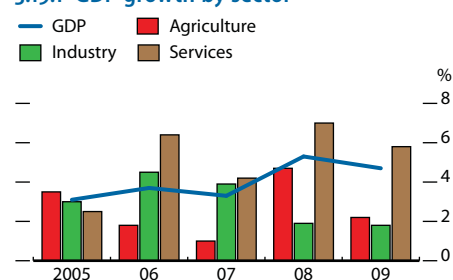
Although the deceleration was broad-based (Figure 3.19.1), services still grew by 5.8%, mainly supported by sturdy remittance-related spending. Agricultural growth fell by more than half to 2.2% due to a delayed monsoon and prolonged winter drought, which reduced both the cultivated area and productivity. Industry remained a sluggish performer, as labor unrest and persistent fuel and power shortages led to a contraction in manufacturing, which was marginally offset by increased activity in the remittance-driven construction industry.

On the demand side, rapid growth in remittances continued to fuel consumption spending and imports, further raising the share of private consumption in GDP from 77.1% in FY2008 to 79.2% in FY2009. The share of private fixed capital formation decreased modestly to 17.1% of GDP from 18.0% over the same period, reflecting uncertainty in the political landscape and limited investment opportunities other than real estate and housing.

Slower agricultural growth and disruptions to transportation produced shortages of foodgrains in several parts of the country, especially remote districts, driving up inflation to an average of 13.2% in FY2009 from 7.7% a year earlier. While food price inflation has been generally trending up in the last few years, the increment in FY2009 was more pronounced (Figure 3.19.2). Inflation was exacerbated by a strong expansion in the broad money supply in FY2008 and FY2009, which reflected larger remittance inflows and the buildup of net foreign assets.

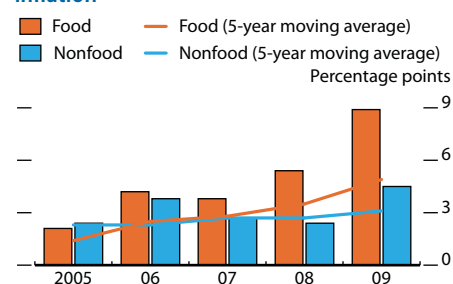
To rein in the rising inflation and to curb the remittance-driven real estate bubble in urban areas, Nepal Rastra Bank (NRB), the central bank, tightened monetary policy by raising the cash-reserve ratio from 5.0%

3.19.1 GDP growth by sector



Source: Ministry of Finance. 2009. *Economic Survey Fiscal Year 2008/09*. July. <http://www.mof.gov.np>

3.19.2 Contribution to consumer price inflation



Source: Nepal Rastra Bank. 2009. *Recent Macroeconomic Situation*. September. <http://www.nrb.org.np>

to 5.5% (effective November 2008) and the policy rate from 6.25% to 6.5% (effective October 2008).

On the fiscal side, the government undertook several reforms on revenue mobilization, including the introduction of an income disclosure scheme and implementation of a performance-based incentive system for tax offices and officers. These reforms widened the tax base substantially and curtailed leakages, resulting in a record 32% growth in domestic revenue mobilization in FY2009 (well above the 3-year trend). For the first time, income tax collection exceeded customs revenue (Figure 3.19.3). External grants also swelled, by 70%, as donors sought to support Nepal during its political transition.

Despite the delayed approval of the budget (due to disagreements among various factions in the Constituent Assembly) and a difficult project implementation environment, capital spending picked up in the latter part of FY2009, increasing by 30% from a year earlier (Figure 3.19.4). Political pressures to raise salaries and wages of civil servants and security forces resulted in 33% growth in recurrent expenditures, contributing to the 32% growth in overall spending (excluding net lending). The resulting deficit, equivalent to 1.9% of GDP, was financed mainly through domestic borrowing.

On the external front, import growth markedly slowed to 8.3% from 24.1% in FY2008, mainly because of a decline in oil imports. (Nepal Oil Corporation, the state-owned and sole supplier of petroleum products, struggled to clear its dues with the Indian Oil Corporation.) Imports of other items continued to grow in line with the historical average. Exports contracted by 4.7% in FY2009, the first decline since FY2003, as some domestic enterprises shut their operations, both because of intense foreign competition in a weak market and domestic labor disruptions, and because of the long-standing structural bottlenecks such as poor infrastructure and skills shortages.

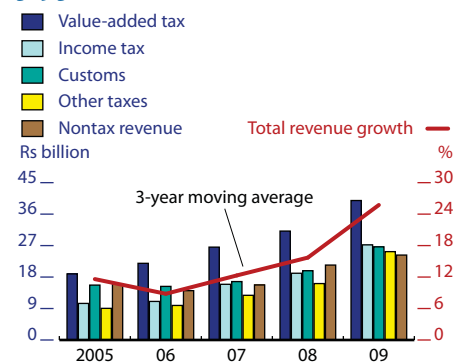
The resulting wider trade deficit (21.8% of GDP after 19.1% in FY2008) was, however, more than offset by remittance inflows, which grew by 24.2% (mainly due to the relatively inelastic demand for the unskilled Nepalese workers) and by a 26.7% increase in tourism receipts (Figure 3.19.5). With a strengthening current account surplus—from 2.9% of GDP in FY2008 to 4.3%—the overall balance-of-payments position became stronger, with over \$2.8 billion in reserves (equivalent to 7.7 months of total imports).

Given the continued peg to the Indian rupee, the Nepalese rupee mirrored the former currency—depreciating rapidly against third country currencies at the onset of the global crisis and appreciating after May 2009. However, the real effective exchange rate has been appreciating since August 2008 (Figure 3.19.6), reflecting relatively high domestic inflation.

## Economic prospects

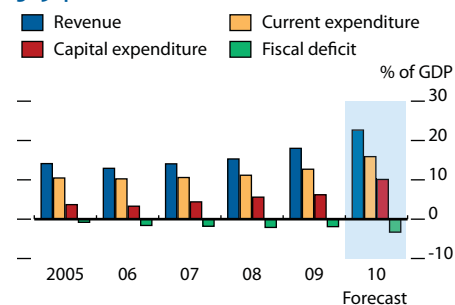
Nepal's medium-term growth and development prospects hinge on progress in the political transition, macroeconomic stability, and the pace of global economic recovery. With a high share of agriculture in GDP, much of which relies on rainfed irrigation, prospects also heavily depend on weather conditions.

### 3.19.3 Revenue indicators



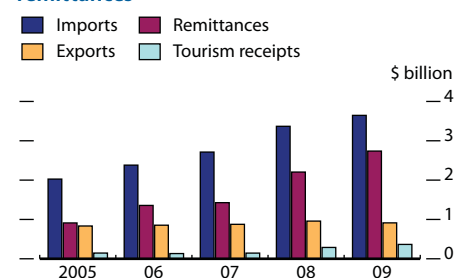
Source: Nepal Rastra Bank. 2009. *Recent Macroeconomic Situation*. September. <http://www.nrb.org.np>

### 3.19.4 Fiscal indicators



Sources: Ministry of Finance. 2009. *Economic Survey Fiscal Year 2008/09*. July. <http://www.mof.gov.np>; ADB estimates.

### 3.19.5 Trade, tourism, and workers' remittances



Source: Nepal Rastra Bank. 2009. *Recent Macroeconomic Situation*. September. <http://www.nrb.org.np>



A range of factors are challenging the sound macroeconomic management seen in previous years (despite the political turmoil then). Notably, the initial resilience seen in remittances and exports faded in the first half of FY2010 and reserves have declined modestly since July 2009 (Figure 3.19.7), raising concerns that a lagged effect of the crisis may still be felt.

Growth in all sectors is expected to decelerate in FY2010 from FY2009 with overall GDP expansion expected to ease to 3.5%, on the assumption that, with the emerging global recovery, remittance inflows and tourism receipts will not decelerate further. The possible delay in writing the new constitution before the 28 May deadline constitutes the key downside risk to the outlook, as political uncertainties can affect the investment climate and the project-implementation environment. Assuming continued recovery in the global economy and a domestic political landscape more conducive to economic activity, growth is expected to pick up to 4.5% in FY2011 (on a par with that in FY2009).

Agriculture is expected to grow by only 1.0% in FY2010, assuming normal winter weather, as the production of paddy and maize, two major summer crops, was severely affected by the delayed and reduced monsoon. Assuming a return to normal weather and no disruptions to the transportation of fertilizers and seeds, the sector is expected to grow by its historical average of 3.0% in FY2011.

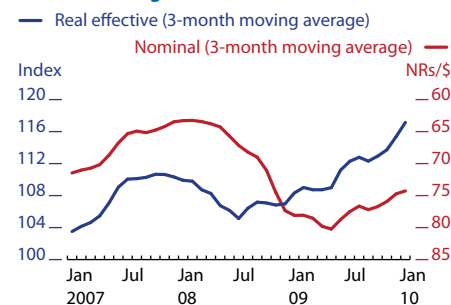
Industry's performance in FY2010 will be checked by fuel and power shortages and sporadic labor tensions, all of which will restrict recovery in manufacturing. Construction activity will also slow due to reduced credit from commercial banks. Consequently, industry is expected to grow by only 1.5% in FY2010. Growth is expected to pick up to 2.5% in FY2011 as power shortages ease somewhat (several micro-hydropower projects are slated for completion in FY2010) and as strikes lessen (the political parties have signed an agreement not to organize any *bandh*—politically inspired economic shutdowns—during Visit Nepal Year 2011).

Services are expected to continue to drive growth, although real estate renting and business activities will be hit by credit limitations that the NRB has placed on commercial banks to counter price pressures. Expansion in services is expected to moderate to 5.5% in FY2010. As performance in agriculture, industry, and tourism is expected to improve in FY2011, growth in services will be pushed up to 6.0%.

While the NRB's tighter monetary policy from FY2009 seems to be working to reduce inflation, the pass-through from the policy rate and cash-reserve ratio to inflation has been slow and small. Consumer price index inflation remained in double-digits in January 2010, suggesting that nonmonetary factors, such as reduced grain production, rising transportation costs, and delays in importing certain items like sugar, may be driving up inflation. Therefore, 10.0% inflation is expected in FY2010, with moderation to 8.0% in FY2011 as supply disruptions lessen.

The current account is expected to move into deficit in FY2010. Rising oil prices will have a significant bearing on imports as oil constitutes 17% of Nepal's total imports. Imports of other items will moderate, adjusting to decelerating remittance inflows, but this moderation is unlikely to fully offset the effect of rising oil prices on overall imports. With reduced competitiveness from the appreciating real exchange rate and domestic

### 3.19.6 Exchange rates



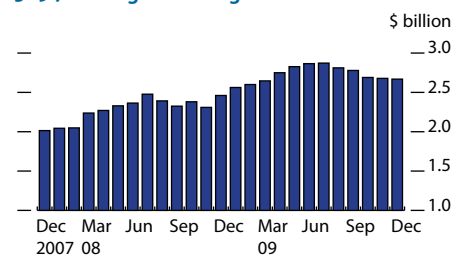
Source: International Monetary Fund.

### 3.19.1 Selected economic indicators (%)

	2010	2011
GDP growth	3.5	4.5
Inflation	10.0	8.0
Current account balance (share of GDP)	-0.5	1.0

Source: ADB estimates.

### 3.19.7 Foreign exchange reserves



Source: Nepal Rastra Bank. 2010. *Recent Macroeconomic Situation*. March. <http://www.nrb.org.np>

structural shortcomings that continue to plague key industries, exports will continue to decline in absolute terms. Remittances and tourism receipts, growing at their current pace, will fail to offset the trade deficit, leading to a current account deficit of approximately 0.5% of GDP.

In FY2011, remittances are expected to strengthen as the majority of Nepalese workers are employed in oil-exporting countries in the Middle East that are seeing a revival in growth. Moreover, improved industrial activity and some moderation in the appreciation of the real exchange rate are expected to support growth in exports. Aided by larger tourism receipts, the current account is expected to recover to a surplus of 1.0% of GDP.

## Development challenges

The infrastructure deficit—particularly in transport infrastructure, power, and irrigation—is a major bottleneck to economic growth and to development prospects. In particular, power shortages could have adverse social and political implications if not addressed expeditiously.

Despite the large hydropower potential of around 80,000 megawatts, half of which is economically viable, Nepal is a net importer of electricity. The electrification rate, at 48% in 2006, is one of the lowest in South Asia, and means that more than 13 million mainly rural people are without access to electricity. In urban areas, current peak demand is more than 720 megawatts, of which only 40% is available, leading to up to 16 hours of daily power cuts. A range of factors have contributed to underinvestment in power generation, including the uncertain investment climate, poor road access, and lack of transmission lines.

The government is preparing a new energy strategy to promote the power sector, but its implementation is likely to remain challenging unless a political consensus is built. Two draft bills—the Nepal electricity bill and the Nepal electricity commission bill—are currently before the Constituent Assembly. In the meantime, the government is focusing on repairing and upgrading existing generation, transmission, and distribution infrastructure. It is also planning to expand existing transmission links to India, and develop new high-capacity cross border lines, to enable imports during dry periods. Recognizing the capital-intensive nature of hydropower projects, the government should develop a policy framework to encourage public–private partnerships, clearly delineating public and private sector roles. The policy should include other modes of power generation including solar, wind, and thermal.

In the restructuring of policies, the government should give to private power producers economically viable market access by clarifying and liberalizing connection and tariff policy, and should provide related infrastructure, such as access roads and distribution lines. A fast-track approval process for hydropower projects needs to be established. Policy efforts should go beyond rural electrification and mitigating power shortages in urban areas, to include a focus on export of electricity to make hydropower a major source of foreign currency earnings.

To facilitate some of these changes, the capacity of the newly created Ministry of Energy should be augmented and the financial health of Nepal Electricity Authority, the key buyer and distributor of electricity, needs to be improved.

# Pakistan

Continued modest growth is expected in fiscal year 2010. Macroeconomic imbalances have narrowed and economic fundamentals have improved, but the security environment and an ongoing power crisis are both burdening the fiscal situation and obstructing a growth revival. That revival will depend on faster implementation of structural reforms to strengthen revenue mobilization, eliminate electricity outages, and transform the industrial and export sectors. Rapid fiscal improvements are also needed to underpin recovery, sustain the public sector development program, and prevent crowding out of the private sector.

## Economic performance

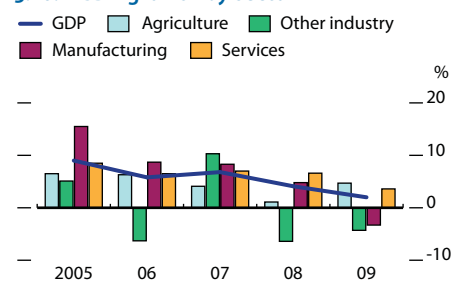
The country's recourse to an International Monetary Fund (IMF) program in November 2008 (see *ADO 2009* and *ADO 2009 Update*) and its need for fiscal and balance-of-payments stabilization coincided with the onslaught of the global recession, precluding any immediate fiscal or monetary policy response. This lack of response, together with the deteriorating security situation and electricity shortages, saw growth slow further to only 2.0% in FY2009 (ended June 2009), from 4.1% in FY2008 (and from an average of over 7% in the 4 years prior to that).

Manufacturing contracted (Figure 3.20.1), and trade and services slowed. Both public and private investment shrank. With economic growth down to near the rate of population growth, per capita incomes stagnated (Figure 3.20.2), affecting poverty rates. In this way, the difficult economic circumstances of FY2008 carried over into FY2009, and revealed how years of seemingly sustainable growth can unravel in a single year because of structural problems in the face of exogenous shocks and delayed policy response to such shocks.

The global downturn, security challenges, and energy shortages, by subduing industrial and export growth, also contributed to underachievement of tax collection targets in a year of expenditure overruns. The tax-to-GDP ratio in FY2009, for taxes collected by the Federal Board of Revenue, fell to a 10-year low of only 8.8%. This ratio indicates a lack of buoyancy in the tax system and calls for urgent reform in tax policy and administration.

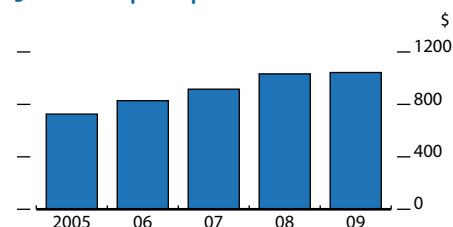
The fiscal deficit was further undermined by the additional defense outlays necessitated by military action against extremists. The fiscal deficit target in FY2009 was, therefore, missed and at 5.2% of GDP, was 0.9 percentage points wider than projected. The target was overshoot even though the government had started cutting subsidies and was reducing the public sector development program (PSDP) as part of its expenditure rationalization program. From 3.8% of GDP in FY2008, it cut subsidies to 1.9% of GDP in FY2009 (Figure 3.20.3), as it allowed domestic fuel prices to float with international prices.

3.20.1 GDP growth by sector



Source: Ministry of Finance. *Pakistan Economic Survey 2008–09*. <http://www.finance.gov.pk>.

3.20.2 GNP per capita



Sources: Ministry of Finance. *Pakistan Economic Survey 2008–09*. <http://www.finance.gov.pk>; State Bank of Pakistan. *Annual Report 2008–09*. <http://www.sbp.org.pk>.

Electricity subsidies, however, stayed very high at 44% of total subsidies in FY2009 and remained a significant budget burden. The government is phasing in a power tariff increase to reduce these subsidies, but since the tariff is expected to reach cost recovery only in the first quarter of FY2011, cash subsidies will continue to be paid over the rest of FY2010.

Despite the increase in costs of production, consumers' electricity tariffs had not been increased for several years before FY2008 when the oil price hike substantially raised generation costs and the need for much higher tariff differential subsidies. The lack, however, of timely subsidy payments created an "intercorporate circular debt" problem—when distribution companies could not pay power producers, who, in turn, could not pay fuel suppliers.

This led to power plants' inability to produce at optimum capacity, thus adding to existing power shortages. Load shedding has continued, with power shortages peaking at 5,000 megawatts in the summer time. To improve operations in the power sector, the government in September 2009 paid off part of its circular debt while paying interest on its outstanding obligations. The circular debt is now being transferred to a debt-holding company for servicing and resolution.

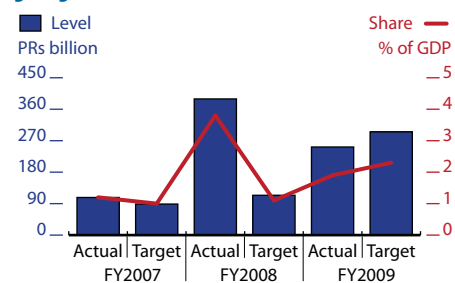
The PSDP, already slashed to 4.4% of GDP in FY2008 (from a targeted 5.1% of GDP), was cut further in FY2009 to 3.0% of GDP as part of the effort to rein in the deficit (Figure 3.20.4). As a result, expenditure on education fell further to 2.1% of GDP in FY2009 from the already low 2.5% of GDP in FY2008, and on health from 0.6% to 0.5% in the same period. Such weak social sector expenditures are difficult to justify in a country whose human development index ranking of 141 places it toward the bottom.

Even with the cuts in subsidies and the PSDP, financing the deficit in FY2009 posed major problems at a time when few foreign resources were available: only 22% of the deficit was financed with external resources compared with 53% in FY2007. More than half the domestic financing was arranged through banks. The higher cut-off yields encouraged banks to invest in Treasury bills when their eagerness to lend to the private sector was dented by a higher concentration of nonperforming loans and a risky business environment.

The government's preemption of banking sector funds in this way resulted in lower availability of credit for the private sector. The private sector's demand for credit had also diminished on account of higher interest rates and other constraining structural factors, such as electricity shortages. As a result, private sector credit nosedived to a negligible net level in FY2009 (Figure 3.20.5).

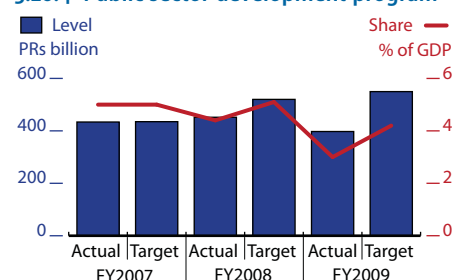
In the high inflation environment of late FY2008 and the first half of FY2009—spawned by higher food and nonfood prices and reduction of oil and energy subsidies—the State Bank of Pakistan (SBP) sharply tightened monetary policy through hikes in the policy discount rate. The policy rate peaked at 15% in October 2008 as year-on-year inflation surged (Figure 3.20.6). The rate was then gradually brought down by 250 basis points from April to November 2009, as there was a trend decline in year-on-year inflation that receded to less than 9% by October 2009. Both food and nonfood consumer price indexes had fallen sharply by then. Despite the private sector's demand for a sharper cut in interest rates, the

### 3.20.3 Subsidies



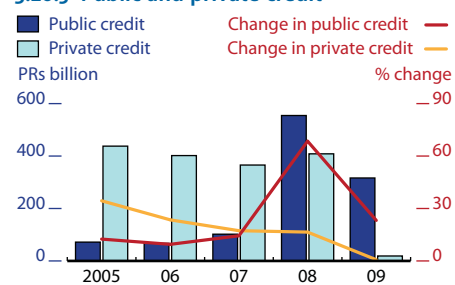
Source: Ministry of Finance. Annual Budget Statements. <http://www.finance.gov.pk>.

### 3.20.4 Public sector development program



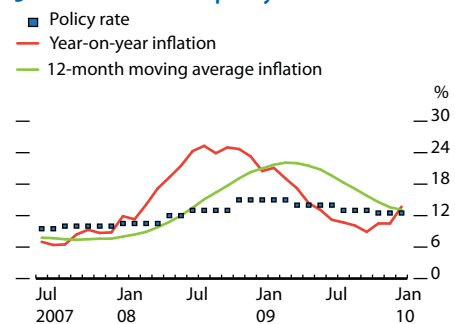
Source: Ministry of Finance. Pakistan Economic Survey 2008–09. <http://www.finance.gov.pk>.

### 3.20.5 Public and private credit



Sources: Ministry of Finance. Pakistan Economic Survey 2008–09. <http://www.finance.gov.pk>; State Bank of Pakistan. <http://www.sbp.org.pk> (accessed 11 March 2010).

### 3.20.6 Inflation and policy discount rate



Source: State Bank of Pakistan. <http://www.sbp.org.pk> (accessed 11 March 2010).

SBP's measured response at that time, mindful of the downside risks to inflation, was nonetheless appropriate. (The sharp resurgence in year-on-year inflation in January 2010 was to prove this later.)

The economic slowdown in FY2009, combined with tighter demand management policies, the fall in international oil prices, and a depreciated currency, led to a sharp fall in imports of over 10% in FY2009 (Figure 3.20.7). As exports fell by more than 6%, because of lower international demand, domestic security challenges, and electricity shortages, the trade deficit narrowed. High double-digit inflation diminished any competitiveness advantage exports might have gained due to a 16.4% depreciation in the average nominal effective exchange rate in FY2009 (Figure 3.20.8). The average real effective exchange rate depreciated by only 0.9%, while the competitiveness of exports remained blocked by structural bottlenecks.

The contraction in the trade deficit was complemented by a steep 48% shrinkage in the services account deficit. That account improved mainly due to receipts for logistical support to the United States in Afghanistan and to a decline in outflows from foreign exchange companies following administrative measures taken by the SBP. The current account deficit in FY2009 fell by a third to 5.6% of GDP (Figure 3.20.9), helped by remittances that continued to defy the global recession, growing by 21%.

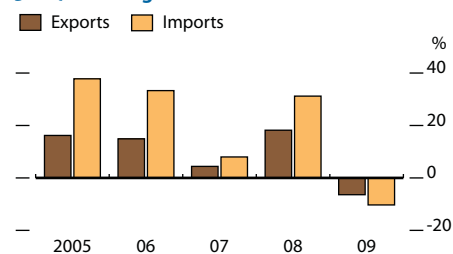
Foreign direct investment (FDI) and net portfolio investment together fell to half the level of the preceding year, on account of the global economic slowdown and the domestic situation (Figure 3.20.10). Approximately 55% of the \$9.3 billion current account deficit was financed by disbursements from multilateral institutions and aid agencies. This implies a high dependence on official borrowings that not only makes current account financing vulnerable but also has adverse implications for the country's external debt profile.

Foreign reserves recovered strongly by end-FY2009 (Figure 3.20.11) with the IMF's support for the balance of payments totaling \$12.4 billion (and further to \$15.1 billion by end-December 2009). But the ratio of reserves to external debt still declined, as higher reserves were offset by new external debt, which shot up by \$6.3 billion in FY2009. This buildup of debt reversed, for the first time in 6 years, the trend decline in the ratio of external debt to GDP, which increased to 30.4% in FY2009 from 27.0% in FY2008. External debt grew by 14.1% in dollar terms, but jumped by 36% in Pakistan rupee terms, over the same period (Figure 3.20.12).

Domestic debt rose by PR\$57 billion to PR\$3.9 trillion in FY2009 (or 29.4% of GDP); almost half the increase was short term. Overall public debt continued to hover around 61% of GDP. Debt-servicing ratios therefore deteriorated, and debt servicing consumed more than half the total tax revenue in FY2009, representing a major drain on fiscal resources.

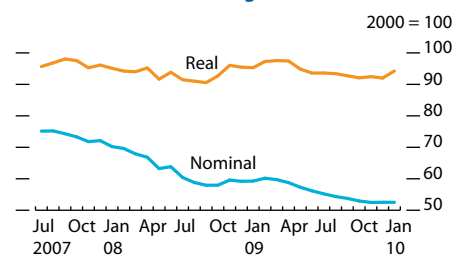
Although the IMF's third review in January 2010 of the ongoing standby arrangement projects that Pakistan's debt-to-GDP ratios will begin to decline from FY2012, it also shows that the external and public debt trajectories from the baseline are vulnerable to shocks, such as those arising from lower growth, higher imbalances, lower FDI, and larger local currency depreciation. Consequently, the fiscal and current account deficits need to be contained and higher non-debt-creating

### 3.20.7 Trade growth



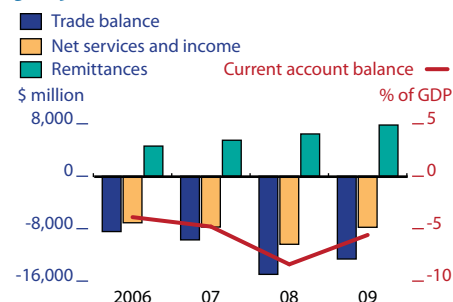
Sources: State Bank of Pakistan, *Annual Report 2008-09*; <http://www.sbp.org.pk> (accessed 11 March 2010).

### 3.20.8 Effective exchange rates



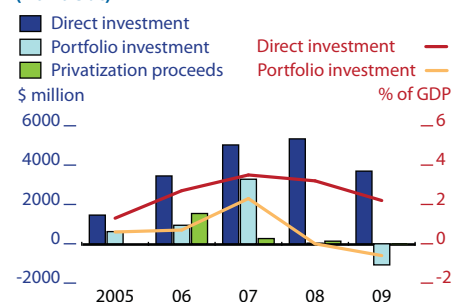
Source: State Bank of Pakistan, 2010, *Statistical Bulletin*, March. <http://www.sbp.org.pk>.

### 3.20.9 Current account indicators



Sources: State Bank of Pakistan, *Annual Report 2008-09*; <http://www.sbp.org.pk> (accessed 11 March 2010).

### 3.20.10 Financial account indicators (nondebt)



Sources: State Bank of Pakistan, *Annual Report 2008-09*; <http://www.sbp.org.pk> (accessed 11 March 2010).



inflows have to be resumed for debt sustainability to be maintained in the near and medium term.

## Economic prospects

Pakistan's economic prospects over the next 2 years are predicated on a successful completion of the current IMF program by end-2010; a gradual improvement in the security situation; a phased reduction in electricity shortages as tariffs are rationalized and new power plants are commissioned; sustained implementation of fiscal reforms, particularly for tax and administration; a gradual economic recovery in the main trading partners; and political stability.

Growth in FY2010 is expected to modestly improve to 3.0%, backed by a slight recovery in manufacturing. This recovery, apparent in the first half of FY2010, reflects (among other factors) higher production for cement products for the local market and stronger domestic demand for automobiles. Textiles manufacturing, however, has continued to contract on account of lower cotton availability, electricity and gas shortages, and poorer relative product competitiveness in international markets.

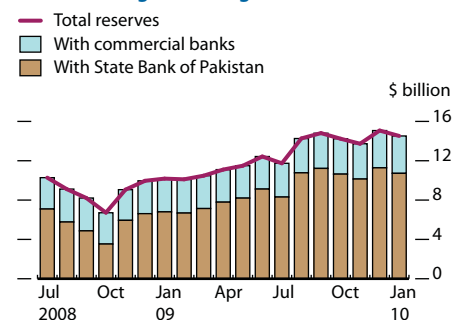
Agricultural growth in FY2010 is set to remain below the government's target owing to lower than targeted production of most major crops, such as sugarcane and cotton. Production of wheat, a winter crop, will be less than the target of 25 million tons due to water and seed shortages, delayed sowing, and higher input costs.

Slower growth in agriculture, only a modest recovery in manufacturing, and continued contraction in imports will all continue to drag down wholesale and retail trade. Following years of strong growth, telecommunications service providers, too, will need to consolidate operations (because of stronger competition and lower margins). Financial services could, however, perform better than in FY2009, as seen in slower growth in nonperforming loans in the first half of FY2010, improving profitability of banks following higher spreads, and banks' good capitalization. The services sector overall will grow only moderately.

GDP growth is expected to reach about 4.0% in FY2011 as private sector investment picks up following gradual improvement in the security situation and fewer electricity shortages, and as public investment accelerates, supported by an improved fiscal situation with value-added tax (VAT) and other administrative tax reforms kicking in from 1 July 2010. Manufacturing growth is also expected to be stronger, as is agriculture's (to a lesser degree) on the back of higher commodity prices. Higher real sector expansion with larger international trade volumes and an improving financial sector should catalyze further growth in services.

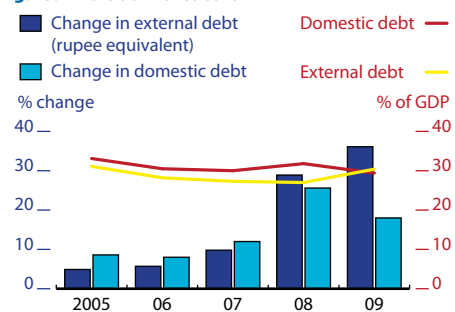
The modest growth projected for FY2010 will make it hard for the Federal Board of Revenue to achieve its revenue target. However, higher oil and electricity prices (by way of larger customs revenues and sales tax receipts) will compensate somewhat for lower direct tax collections. Yet with higher than budgeted defense spending, the fiscal deficit target of 4.9% of GDP for FY2010 will be missed, and the government is now

### 3.20.11 Foreign exchange reserves



Source: State Bank of Pakistan. <http://www.sbp.org.pk> (accessed 3 March 2010).

### 3.20.12 Debt indicators



Sources: State Bank of Pakistan. *Annual Report 2008-09*; <http://www.sbp.org.pk> (accessed 3 March 2010).

### 3.20.1 Selected economic indicators (%)

	2010	2011
GDP growth	3.0	4.0
Inflation	12.0	8.0
Current account balance (share of GDP)	-3.6	-4.2

Source: ADB estimates.

targeting a deficit of 5.1%. But this too could be overshoot in case of further shortfalls in tax and nontax revenues.

Even with this larger fiscal deficit target, PSDP spending, although higher in the first half of FY2010 than in the same period in FY2009, will need to be reduced to accommodate higher defense spending, and will end up being lower than planned under the budget for FY2010. To contain current expenditure, the government in December 2009 announced austerity measures including reducing the number of federal ministries and slashing administrative expenses related to the offices of the President and the Prime Minister. It also set up a cabinet committee to restructure loss-making state-owned enterprises. For 2011, resource pressures will continue to weigh on the central government, owing to restructuring of shared taxes and responsibilities between the central and state governments (Box 3.20.1).

The key issue with the fiscal deficit remains its financing. A much larger than planned recourse to the domestic credit market to finance the deficit was required in FY2009 as external sources of financing dried up. The trend continued in the first half of FY2010. To this end, in the first 8 months of FY2010, the government borrowed PRs191 billion from commercial banks, although it kept borrowings from the central bank in check.

In addition to bank financing, nonbank domestic financing of the deficit mainly through the National Saving Schemes jumped sharply. Such borrowings at end-2009 relative to end-2008 were PRs300 billion higher. Continued high levels of domestic financing from bank and nonbank sources is unsustainable from the standpoint of fiscal stability and not desirable from the perspective of mobilization of deposits by commercial banks, credit availability for the private sector, and growth.

Continued recourse to such sources is partly due to the delays in foreign disbursements projected under the Friends of Democratic Pakistan (FODP) aid group—a part of these unrealized disbursements is being temporarily made up by the IMF's bridge-financing under the stand-by arrangement. The fiscal framework for FY2010 had relied heavily on such external resources for financing. The fiscal deficit target for the year might yet need to be scaled back if the projected FODP disbursements are not realized.

Inflation in FY2010 is expected to fall from its peak of the previous fiscal year due to the base effect, a sharp year-on-year decline in both food and nonfood prices between July and October 2009, and a continued relatively tight monetary policy. But at a forecast 12.0%, it is still high. Looking ahead, domestic oil prices will increase in line with international prices with an automatic pass-through mechanism in place. Phased increases in electricity tariffs will also contribute to maintaining momentum in inflation during the fiscal year. In FY2011, improvement in domestic food supplies and continued fiscal and monetary discipline will help moderate inflation to 8.0%.

With projected double-digit inflation this fiscal year, the SBP will need to carefully calibrate monetary policy to maintain price stability amid strong pressure to cut interest rates further to revive growth. Control of monetary aggregates will be complicated by the government's continued large borrowing requirements from commercial banks.

### 3.20.1 Strengthening fiscal federalism

An agreement in December 2009 on a new National Finance Commission award that distributes resources between the federal and the provincial governments and among provincial governments is important from the point of view of strengthening fiscal federalism.

Under the award, the share of provinces in the total divisible pool of federal taxes has been increased from 47.5% currently to 56% from the next fiscal year (FY2011) and further to 57.5% for the subsequent 4 years.

Consequently, the federal government would need to meet its fiscal obligations (interest payments, defense, large development projects etc) with a smaller share of the divisible pool, though the size of the pool is to be boosted by the new VAT and other revenue-generating measures.

This will require the federal government to rationalize and restructure its expenditure obligations over time and devolve greater expenditure responsibilities to the provinces. Provinces, in turn, will need to upgrade their capacity to effectively spend the additional resources.

The provincial and federal governments will also need to coordinate more closely to maintain fiscal stability and meet the deficit targets.

Exports are predicted to contract once more in FY2010, although only by 1.4%. Inflation will limit depreciation of the real effective exchange rate and block increased export price competitiveness. Imports, too, will decline in FY2010 by about 2.4% from their level in FY2009 because of continued suppressed investment and economic activity. Backed by the still robust remittance inflows (up by 17.7% in the first 8 months), the current account deficit in FY2010 is projected to fall to 3.6% of GDP from 5.6% of GDP a year earlier.

The current account deficit (Figure 3.20.13) is expected to rise in FY2011 to 4.2% of GDP as imports grow by about 7.1% owing to recovery in non-oil imports, on account of stronger economic activity. Higher imports in FY2011 will, however, be offset to an extent by projected 4.2% growth in exports.

With FDI down sharply in the first 8 months of FY2010, financing the current account deficit will continue to depend heavily on debt-creating inflows from multilateral agencies, including FODP commitments. From FY2011, non-debt-creating inflows, such as foreign direct investment and privatization proceeds, could assume a greater share of such financing, but the outlook remains uncertain and debt sustainability remains a major concern.

## Development challenges

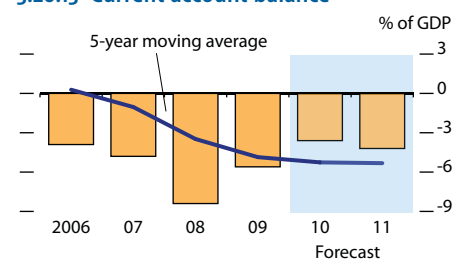
Pakistan faces three interconnected development challenges. The first is its weak fiscal situation, marked by underperformance in government revenue over the years. The second is low growth and the challenge to revive it so as to create jobs and reduce poverty. The third is to improve the competitiveness of the economy so as to expand exports, sustain growth, and avoid balance-of-payments problems in the future.

Pakistan's economic crisis that erupted in FY2008 was essentially fiscal. To strengthen public finances, the government has embarked on an ambitious track of revenue reforms centering on institutionalizing the new VAT, which it estimates will yield an increase in the tax-to-GDP ratio of several percentage points. Tax administration reforms to strengthen compliance, reduce exemptions, and harmonize tax collection and monitoring systems are also under way. These reforms are critical to generate the fiscal space necessary to reinstate public investment and free up banking and nonbanking finance to support private investment.

Likewise, reforms toward a technically and financially sustainable power sector will release fiscal space and reduce the sector's strain on the budget, and, crucially, create an enabling environment for growth, investment, and business development. Medium- and long-term growth depends on sustained political commitment to these structural tax and power reforms.

Part of the competitiveness challenge is to generate a diversified, vibrant, and higher value-adding export base. Such a base will not only lead to a smaller current account deficit and improved debt profile, but will also result in higher growth and greater generation of jobs to absorb the country's growing labor force.

3.20.13 Current account balance



Sources: Asian Development Outlook database.

# Sri Lanka

Chronic large budget deficits and reliance on short-term external borrowing in recent years made the economy vulnerable to a global financial crisis and recession. Heavy losses of foreign exchange reserves and a domestic downturn early in 2009 threatened an economic crisis and required a recovery program supported by financing from the International Monetary Fund. The end of the 30-year internal conflict in May, however, marked a major turning point, and an immediate revival of confidence coinciding with global economic improvement sparked an economic rebound. The outlook is positive, despite large budget deficits weighed down by reconstruction costs.

## Economic performance

The economy grew by an estimated 3.5% in 2009 (Figure 3.21.1). Growth declined to 1.5% in the first quarter, but picked up rapidly after the second quarter supported by optimism over the end of 3 decades of civil war. With a revival of agriculture in Eastern province (which came under government control in 2008), the sector performed well in the first half before shrinking marginally due to drought in the third quarter.

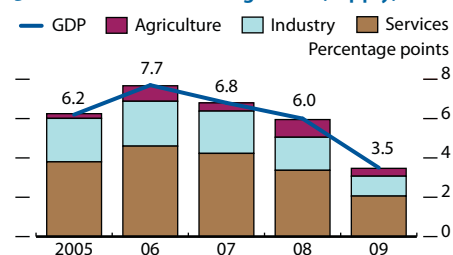
During the second half of 2009, services and manufacturing picked up sharply, driven by an upturn in domestic demand. External trade-related sectors stayed depressed throughout the year. Tourism saw a rebound after May.

Inflation had peaked at 28.2% in June 2008, driven by high global prices for food and fuel, but declines in these prices saw inflation subside to about 1% by mid-2009 (Figure 3.21.2). Prices picked up in the final quarter of the year on short supply of certain agricultural products including rice, vegetables, and coconuts, which have significant weights in the Colombo consumer price index. The annual average rate was 3.5%, down from 22.6% in 2008.

As inflation fell, the central bank eased monetary policy and cut the policy interest rates five times during the year. It also lowered the statutory reserve requirement. But despite the repeated rate cuts, commercial bank lending rates failed to come down significantly, especially in relation to indicative market rates, such as the 3-month Treasury bill rate (Figure 3.21.3). The government, in an attempt to speed up the process, directed the public sector commercial banks to bring down interest rates by 700 basis points (to 8%–12%) in October 2009.

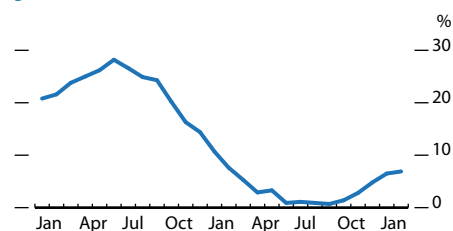
Credit to the private sector remained in the doldrums throughout 2009, due to weak demand and banks' cautious approach to lending (Figure 3.21.4). Nonperforming loans increased, but the banking system as a whole remains well capitalized.

3.21.1 Contributions to growth (supply)



Sources: Central Bank of Sri Lanka. 2008. *Annual Report*. <http://www.cbsl.gov.lk>; ADB estimates.

3.21.2 Inflation



Source: Department of Census and Statistics of Sri Lanka. <http://www.statistics.gov.lk> (accessed 11 March 2010).

Growth in broad money supply was subdued during the first half as the economy faltered, but accelerated in the second half, supported by a significant buildup of net foreign assets at both the central bank and commercial banks, and by an expansion of credit to the public sector. Broad money supply grew by about 19% in 2009 and was within the central bank's target.

An economic stimulus package was introduced in December 2008. It reduced prices of gasoline (petrol), diesel, kerosene, and liquefied petroleum gas; and brought in a subsidy for fertilizer for tea smallholders, and a subsidy for rubber manufacturers. In May 2009, Parliament passed a supplementary SLRs8 billion (about \$70 million) package to support exporters. It included a reward scheme to grant a 5% incentive for exporters that maintained export earnings at levels similar to the year before, kept their current employment levels, and met specific domestic value-added criteria for various sectors.

Weak revenue performance and expenditure pressures pushed the 2009 budget deficit to 10.2% of GDP (excluding grants) according to the government's provisional estimates (Figure 3.21.5), substantially exceeding the planned deficit target under an International Monetary Fund (IMF) \$2.6 billion standby arrangement of July 2009. Due to the slowdown in external trade and domestic economic activity, total revenue in 2009 was SLRs702 billion, well below target; and at 14.6% of GDP, revenue performance was marginally worse than a year earlier.

Expenditure increased to 24.7% of GDP in 2009 (a rise of 2.2 percentage points), accounting for the bulk of the deficit's increase from a year earlier. Expenditure pressures came from larger national security spending, provision of basic needs for internally displaced persons, greater public investment, and double-digit increases in wages and pensions and in interest payments.

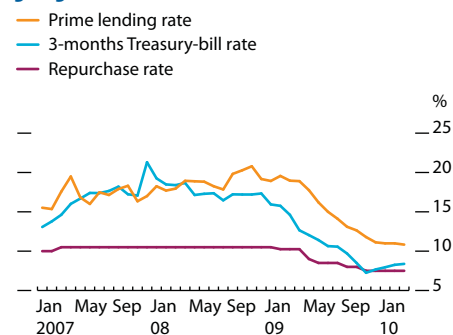
Total government debt increased by 16% in 2009 and the debt-to-GDP ratio rose from 82% to 86%. While this ratio had decreased in recent years through 2008, the structure of the debt became less favorable, with the mix shifting from concessional external borrowing to higher-cost domestic and nonconcessional external borrowing. This has increased rollover risk, while the rise in dollar-denominated domestic debt has added to the exchange rate risk.

The central objective of the IMF standby program is to reduce the fiscal deficit to a sustainable 5.0% of GDP by 2011. The government is expected to introduce reforms to broaden the tax base and reduce tax exemptions in the 2010 budget, which should assist in moving toward this target.

One of the most difficult targets of the fiscal reform effort under the standby arrangement is hitting breakeven in operations at the two loss-making state utilities, the Ceylon Electricity Board and the Ceylon Petroleum Corporation.

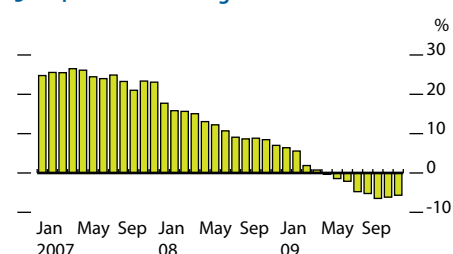
As an initial step, the government established an independent regulator for the power sector in March 2009. It is also moving toward lower-cost electricity generation and has appointed a Joint Review Mechanism committee to monitor the operations of the two enterprises and to recommend improvements. In July 2009, the government raised retail prices of gasoline and diesel by 5%–10%, moving toward

### 3.21.3 Interest rates



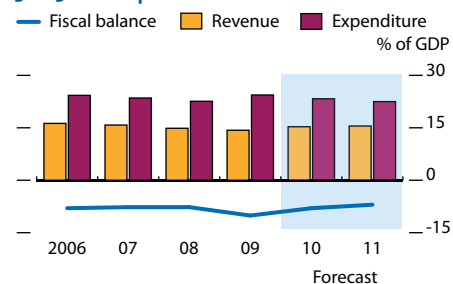
Source: Central Bank of Sri Lanka. <http://www.cbsl.gov.lk> (accessed 12 March 2010).

### 3.21.4 Private credit growth



Source: Central Bank of Sri Lanka. *Weekly Economic Indicators*. Various issues. <http://www.cbsl.gov.lk>.

### 3.21.5 Fiscal performance



Sources: Central Bank of Sri Lanka. 2008. *Annual Report*. <http://www.cbsl.gov.lk>; Ministry of Finance and Planning. 2010. *Pre-Election Budgetary Position Report*. <http://www.treasury.gov.lk>; ADB estimates.



full pass-through of increases in international oil prices. However, it cut gasoline prices by 11% in December 2009, prior to the presidential election in late January.

Falling global demand and prices hit both exports and imports heavily. The largest factor in the 12.9% export drop was a 15.4% decline in industrial products, due mainly to lower exports of textiles and garments, food, beverages and tobacco, machinery, and equipment. The even larger import fall of 29.4% reflected lower demand across all categories.

Remittances held up well, growing by about 14%. The shrinking trade deficit and growth in remittances took the current account into surplus at about 0.3% of GDP in 2009 (Figure 3.21.6).

Tourist arrivals, which fell heavily during the first 5 months, recovered strongly over the rest of the year. Although they grew by only 2.1% for the whole year, it was the largest gain since 2004. The outlook for the industry is for marked upturn in the coming years.

Gross official reserves rebounded from a low of \$1.4 billion (only 1.3 months of imports) in early 2009 (Figure 3.21.7) to \$5.1 billion by end-December 2009 (6.2 months of imports). This gain was underpinned by \$1.2 billion from sales of government short-term securities and by IMF disbursements. The central bank intervened in the foreign exchange market in this period to prevent a substantial appreciation of the Sri Lanka rupee.

The authorities made several policy changes at the beginning of 2010 with the intention of gradually relaxing restrictions on capital account transactions. The changes include allowing Sri Lankans to open accounts with banks abroad and to invest in foreign company shares; and permitting foreigners on tour to open domestic currency accounts in Sri Lanka and to invest in local corporate bonds.

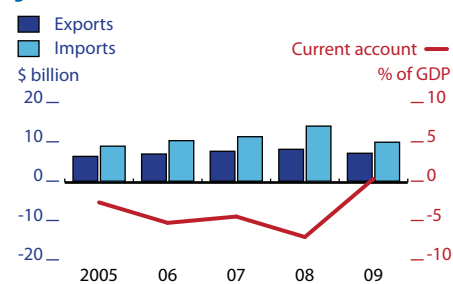
## Economic prospects

The ending of the military conflict in May last year is likely to boost growth and development in the coming years. Investor confidence in Sri Lanka's markets has already shown signs of improvement, as evidenced by a sharp runup in the stock market (Figure 3.21.8) and the country's standing in global capital markets. Substantial government investment in social and economic infrastructure will still be needed, though.

With growth picking up in the second half of 2009, the economy is poised to recover in 2010. The sectors that performed poorly in 2009 were mainly industries and services related to the external sector, such as textiles and garments, import and export trade, and cargo handling. With the global economy in recovery mode and with higher domestic and foreign investment, growth momentum is likely to strengthen and reach 6.0% in 2010 and 7.0% in 2011. These projections assume that the tax reforms and fiscal consolidation will achieve fiscal deficit targets, sustaining investor confidence.

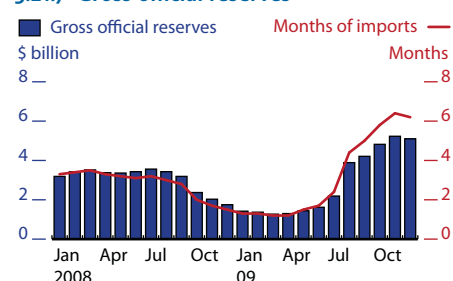
The authorities aim to control inflation through monetary targets, while ensuring adequate credit to the private sector. The central bank plans the growth of both reserve money and broad money supply to accelerate by 14.5% in 2010. Given international price pressures, inflation is expected to remain at around 6.5% in 2010.

### 3.21.6 Current account indicators



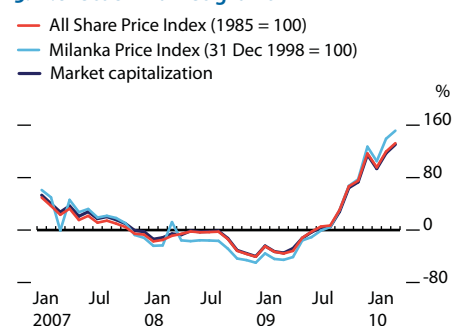
Sources: Central Bank of Sri Lanka. 2008. *Annual Report*; *Weekly Economic Indicators*. Various issues. <http://www.cbsl.gov.lk>.

### 3.21.7 Gross official reserves



Source: Central Bank of Sri Lanka. *Weekly Economic Indicators*. Various issues. <http://www.cbsl.gov.lk>.

### 3.21.8 Stock market growth



Source: Central Bank of Sri Lanka. *Weekly Economic Indicators*. Various issues. <http://www.cbsl.gov.lk>.

### 3.21.1 Selected economic indicators (%)

	2010	2011
GDP growth	6.0	7.0
Inflation	6.5	8.0
Current account balance (share of GDP)	-2.0	-3.0

Source: ADB estimates.

In February 2010, the European Commission withdrew preferential tariffs under the Generalized System of Preferences Plus (GSP Plus) to Sri Lanka's exports on account of weak implementation of human rights conventions. The suspension will take effect in August. The two sides, however, are working on measures that could allow for the preference to be reinstated. The garment sector, which receives about 7% in tariff concessions under the scheme, will be the most affected by the loss of concessions.

External trade is expected to continue gathering momentum as the global economy recovers. At about 5.0% growth, exports will be below potential in 2010 owing to the impending withdrawal of GSP Plus concessions (as well as only a modest improvement in demand for garments).

Imports will advance from their current low base, growing by about 20.0%, reflecting a marked increase in domestic demand and higher oil prices. The trade deficit will widen significantly, but continued improvement in workers' remittances should hold the current account to a deficit of 2.0% of GDP in 2010 (Figure 3.21.9). It is likely to reach 3.0% of GDP in 2011.

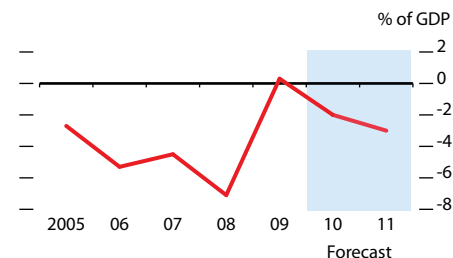
External capital inflows have improved since May and are likely to strengthen further in the forecast period. Sri Lanka floated a \$500 million, 5-year international sovereign bond issue in October 2009, and the offer was oversubscribed, receiving \$680 million and reflecting the increased international confidence in the economy. Moreover, during the second half of 2009, rating agencies raised Sri Lanka's outlook to "stable" from "negative."

Budget expenditure is projected to come down to 23.3% of GDP in 2010 and reach 22.5% in 2011 (Figure 3.21.5 above). Since the 2009 targets were not achieved and some of the additional expenditure items such as humanitarian assistance to Northern province (the locus of the conflict) and expenses relating to stimulus measures introduced in 2009 will spill over to 2010, greater adjustment than this would likely be difficult.

As the economy picks up, revenue collection should improve. However, revenue-enhancement measures that were expected to be implemented in 2010 under the IMF program have been delayed due to the scheduling of the parliamentary election in April and the consequent postponement of the 2010 budget. The latest government estimates envisage revenue to be 15% of GDP this year. A Presidential Tax Commission, set up in 2009, is expected to recommend measures to broaden the tax base. With these recommendations implemented, revenue could reach 15.5% of GDP in 2011.

The government aims to bring down the fiscal deficit to 8.0% this year. In 2011, the deficit should come down to 7.0%, if revenue and expenditure adjustments are made. How the government will actually address fiscal issues this year and beyond will become clear only once the budget is approved by Parliament (likely by midyear).

### 3.21.9 Current account balance



Sources: Central Bank of Sri Lanka. 2008. *Annual Report; Weekly Economic Indicators*. Various issues. <http://www.cbsl.gov.lk>.

### 3.21.1 Development challenges

The 2010–2012 development plan for Northern province aims to spend SLRs295 billion (about \$225 million). While it gives no estimate on how much donors will fund, the government likely needs to raise a significant amount from them. GDP growth of the province is expected to average 13% during the 3 years.

There are manifold challenges in reviving the economy of Northern province (and to a lesser extent, Eastern province). A substantial infrastructure gap with the rest of the country has opened during 30 years of destruction and virtually no investment. The investment that the two provinces need to bridge this gap is enormous.

Yet developing the former conflict regions and normalizing living conditions are key factors in establishing lasting peace and placing Sri Lanka on a higher growth path. Consequently, there is no alternative but to make this investment.



# Southeast Asia

Brunei Darussalam

Cambodia

Indonesia

Lao People's Democratic Republic

Malaysia

Myanmar

Philippines

Singapore

Thailand

Viet Nam

# Brunei Darussalam

Oil and natural gas production is estimated to have declined in 2009, resulting in a moderate contraction in GDP. Inflation remained low and the current account surplus large. A forecast return to modest economic growth in 2010 is based on higher global demand and prices for hydrocarbons, the start of output from a new methanol plant, and a pickup in construction. As oil and gas reserves are depleted, the main development challenge is to diversify into new sources of growth.

## Economic performance

The economy contracted by 1.9% in 2008 as oil and natural gas production, which accounts for 70% of GDP, fell by 6.2% (Figure 3.22.1). The significant contraction in hydrocarbon production, for a second year in a row, reflected the maturity of the country's oil fields and a government decision to use reserves more sparingly to extend the life of energy production. Growth in the nonenergy sector slowed to 2.4%, from 8.5% in 2007, mainly due to the impact of the global downturn on trade, tourism, and manufacturing (predominantly clothing).

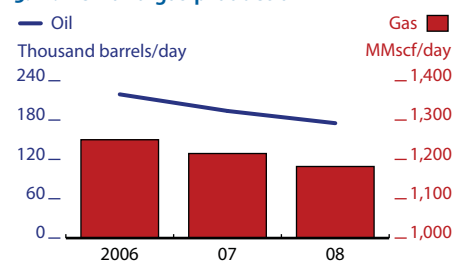
GDP contracted by 2.8% year on year in the first quarter of 2009 (the latest period for which data are available). Oil and gas production fell by a further 6.7%, and growth slowed in the nonenergy sector. For the full year, GDP is projected to have contracted by 1.2% (Figure 3.22.2). The estimated decline in hydrocarbon production was likely offset to some extent by increased government services output associated with efforts to expedite capital spending. Construction activity benefited from the government spending, and services such as retail trading, transportation, and recreational services likely picked up last year as consumer confidence improved in line with the better overall economic outlook.

Inflation moderated to 1.8% in 2009, from 2.7% in 2008, reflecting softer commodity prices and subdued domestic demand. Food, which accounts for 29% of the consumer price basket, was the main contributor, increasing by 2.3% (down from 5.0% in 2008), while transport costs, which account for 23% of the price basket, rose by 2.1% (versus 1.6% in 2008). A broadly stable Brunei dollar, which is linked to the Singapore dollar, helped contain inflation.

Available data indicate that the budget fell into deficit (by \$81.9 million) in the second quarter of FY2009 (ended 31 March 2010) after a \$392.1 million surplus in the first quarter, and a surplus of \$3.9 billion in FY2008. The turnaround in the fiscal position was caused by a slump in revenue from oil and gas (taxes, dividends, and royalties) and an increase in both current and capital expenditure.

High oil prices in recent years have contributed to substantial current account surpluses. The surplus increased to an estimated \$7.2 billion

3.22.1 Oil and gas production



MMscf = million standard cubic foot.

Source: Department of Economic Planning and Development. 2009. *Brunei Darussalam Key Indicators*. <http://www.dep.gov.bn>

3.22.1 Selected economic indicators (%)

	2010	2011
GDP growth	1.1	1.5
Inflation	1.7	1.5
Current account balance (share of GDP)	33.0	31.0

Source: ADB estimates.

3.22.2 GDP growth



Sources: Asian Development Outlook database.



in 2008 (50.4% of GDP) as the value of merchandise exports (almost entirely oil and gas) shot up by 37.5% to \$10.5 billion. Merchandise imports rose by 22.5% to \$2.4 billion. During the first quarter of 2009, the current account surplus narrowed as the value of hydrocarbon exports fell and imports of food and machinery, transport equipment, and other manufactured items rose.

Preliminary trade data for all 2009 indicate that exports (in decreasing share) to Japan, Indonesia, Republic of Korea, and Australia, which accounted for 87% of Brunei's exports, dropped by 45%, while imports (also in decreasing share) from Singapore, Malaysia, Japan, People's Republic of China, and Thailand, which account for 73% of total imports, declined by 1.2%. As a result, the current account surplus is likely to have narrowed to a still comfortable 35.0% of GDP in 2009. International reserves at the end of 2009 amounted to \$1.4 billion.

## Economic prospects

The aging of oil and gas fields, coupled with consequent stoppages in production for maintenance and repairs, suggests that hydrocarbon production will remain subdued in the forecast period. As for the nonenergy sector, recent efforts to diversify the economy will support growth, but the extent of that support depends how fast that projects under the national development plan, Rancangan Kemajuan Negara 2007–2012, are rolled out. Growth projections are based on the assumption that there will be no sharp decline in oil and gas production in the forecast period and no letup in efforts to expedite projects under the plan.

In this context, the economy is forecast to grow by 1.1% in 2010 and 1.5% in 2011, the recovery based on an expected gradual rise in global demand for energy, higher oil and gas prices, and the startup in the first half of 2010 of a large methanol plant under construction for the past 6 years. Construction activity relating to Pulau Muara Besar port and a power transmission line from Sarawak to Brunei, as well as the likely start of construction on some agri-processing projects, will also support growth.

Foreign direct investment is expected to pick up as the recovery in Asian economies strengthens, joining the rise in public investment scheduled under the development plan. Private consumption is likely to increase modestly with improved domestic economic prospects.

Inflation is forecast to edge up to 1.7% in 2010 before moderating to 1.5% in 2011. Its evolution depends largely on movements in global prices of food, most of which is imported. Price pressures will be contained by government subsidies on rice, sugar, and fuel, as well as housing, education, and health services, and by expected stability of the Brunei dollar against the US dollar during the forecast period.

The current account surplus is seen narrowing slightly, but staying at over 30% of GDP, underpinned by exports of hydrocarbons and methanol and likely increases in tourist arrivals and income from foreign assets. Growth in imports is projected to more than offset higher exports, reflecting increases in the machinery and equipment needed to maintain and upgrade hydrocarbon facilities, as well as growth in construction materials for government infrastructure projects.

### 3.22.1 Development challenges

Proven reserves of oil are sufficient for about another 20 years of production, and of gas for about 30 years. The main long-term challenges are therefore to diversify the economy away from dependence on hydrocarbons, while exploring for new oil and gas fields. Some progress on diversification has been achieved, despite the small size of the domestic market, but weaknesses in institutional capacity and the business environment need to be overcome before new industries can become an important source of growth.

While the government has accumulated abundant financial resources to promote diversification, slow progress in implementing government-funded projects points to a need to improve the bureaucracy's capacity.

As for the private sector, the World Economic Forum's Global Competitiveness Index for 2009/10 indicates that while the country's overall ranking is relatively high at 32 out of 133 countries, it ranks poorly on several indicators including number of procedures required to start a business (ranked 126); time required to start a business (126); and financing through local equity markets (117).

To promote private sector development, the government has announced plans to privatize a range of government services and is making efforts to modernize the financial sector. These include developing a modern payment and settlement system, drafting laws relating to capital market development, and introducing laws to vest a future monetary authority with relevant powers to supervise the financial system. Progress in streamlining procedures for businesses is likely to remain important to diversify the economy.



# Cambodia

Declines in clothing exports, tourism receipts, and construction caused by the global recession brought about a contraction in GDP last year. Inflation faded, then turned up by year-end. Despite the adoption of an expansionary fiscal policy to cushion the impact of the slump, poverty incidence likely increased. This demonstrates a need to diversify sources of growth and to better target fiscal policy. The improved global outlook this year paves the way for moderate rates of economic growth during the forecast period.

## Economic performance

After growth that averaged 9.1% from 1998 to 2008, the economy contracted by an estimated 2.0% in 2009 (Figure 3.23.1). The shrinkage reflected output declines in three of the four drivers of growth: garment exports, tourism receipts, and construction, which together account for over one-third of GDP.

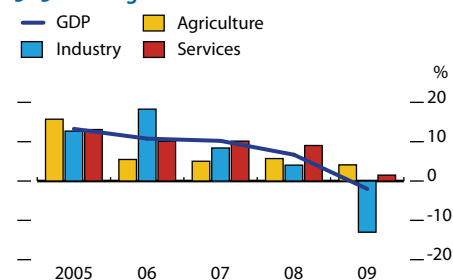
In contrast, the primary sector, the economy's fourth driver producing about 30% of GDP, maintained trend growth and served as a social safety net for many laid-off workers. Agricultural output expanded by an estimated 4%, mainly a result of favorable rains. Fisheries production received a boost from aquaculture and marine fishing to expand by about 9%, while growth in livestock and forestry-related production is estimated to have remained at around trend rates.

Growth in services slowed to about 1.5%, principally a reflection of a decline in tourism receipts as global travel waned, and of border tensions with Thailand, a country through which many tourists transit. Total tourist arrivals rose by 1.7% in 2009 (to 2.2 million), pushed up by increases of about half from neighbors the Lao People's Democratic Republic and Viet Nam. However, the number of higher-spending tourists from the Republic of Korea (hereafter Korea) and Japan fell by 26% and 11%, respectively.

Industrial output last year fell by an estimated 13.0%. Data from the United States (US) Department of Commerce showed that US garment imports from Cambodia plummeted by 20.9% in dollar terms in 2009 (Figure 3.23.2) because of lower overall US demand and a loss of market share to competitors such as Bangladesh. (The US accounts for 70% of Cambodia's garment exports.) Construction is estimated to have contracted by 10%, reflecting a sharp decline in inflows of construction-related foreign direct investment (especially for large projects, including those funded from Korea), and a slowdown in residential construction.

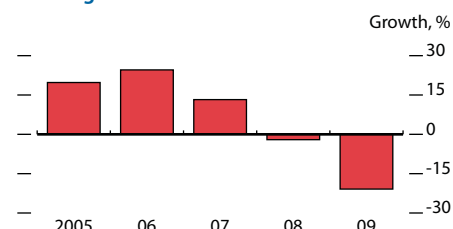
Heading into 2009, inflation decelerated from very high levels, such as 35.6% in May 2008 (Figure 3.23.3), as world oil and food prices fell and domestic monetary policy was tightened in mid-2008. Weakening domestic demand in 2009 further subdued price pressures, so that the consumer

3.23.1 GDP growth



Source: Asian Development Outlook database.

3.23.2 United States imports of textiles and clothing from Cambodia



Source: Office of Textiles and Apparel. <http://otexa.ita.doc.gov> (accessed 1 March 2010).

price index on average in 2009 was 0.7% below prior-year levels. By December, though, year-on-year inflation had returned at a rate of 5.3%. The real effective exchange rate of the riel appreciated by about 2% during 2009.

After clear signs that inflation was dissipating, and in response to the economic slump and very low growth in broad money (3.7% at end-March), the National Bank of Cambodia, the central bank, in early 2009 lowered the minimum reserve requirement on banks' foreign currency deposits and introduced a new method of calculating minimum reserves that, in effect, increased banks' liquidity. As a result, broad money growth accelerated to 36.8% by end-December 2009 (Figure 3.23.4), driven by a buildup in foreign currency deposits (the economy is heavily dollarized).

Private sector credit growth, however, decelerated from 55% at end-2008 to 6.5% at end-2009 (Figure 3.23.5), reflecting subdued economic activity and increasingly risk-averse behavior of banks. The banks grew more cautious as property values declined (most loans are collateralized on property) and their nonperforming loans rose to 4.8% of total loans at end-2009 from 3.7% a year earlier.

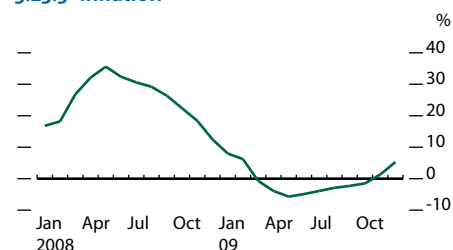
The government took a more expansionary fiscal stance to stimulate the slowing economy. It raised total expenditure to an estimated 17.6% of GDP, above the budgeted allocation of 16.1%. Measures included temporary tax relief for the tourism and garment industries; increases in locally financed spending on rural infrastructure; elimination of tariffs on fertilizers and imports of agricultural machinery; and \$10 million for retraining laid-off garment workers. The government also awarded large increases in wages and allowances to civil servants and military personnel, so that its wage bill jumped from 3.4% of GDP in 2008 to 4.7% in 2009.

Increased public outlays, at a time that revenue was eroded by the economic slump, pushed out the overall budget deficit to an estimated 5.9% of GDP in 2009, double the 2008 gap (Figure 3.23.6). An expansionary fiscal stance was appropriate given the weakness in aggregate demand, though the policy's impact on the economy generally and on poverty reduction specifically was likely hindered by inadequate targeting. Furthermore, in a reversal from recent years, the government drew down its deposits in the banking system to help fund the budget deficit. But this large injection of riel liquidity (equivalent to 1.4% of GDP) risked undermining macroeconomic stability.

In the external accounts, preliminary data show a 17.0% fall in merchandise exports in 2009, mostly stemming from the drop in garment exports to the US. Imports contracted by 16.3%, reflecting lower oil prices and a cooling of consumption. As said, tourism receipts likely declined. The current account deficit (excluding official transfers) narrowed to an estimated 10.7% of GDP (or 5% including official transfers). Foreign direct investment inflows fell by an estimated 27% to \$593 million, reflecting the financial crisis and global recession, but donor inflows remained buoyant, and international reserves increased to around \$2.4 billion, equivalent to more than 4 months of projected imports.

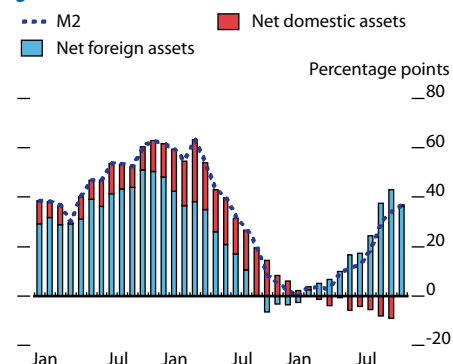
An analysis conducted by multilateral organizations in late 2009 concluded that Cambodia's external public debt remains sustainable and that the risk of debt distress is moderate. Such debt at year-end was estimated at \$3.2 billion (up slightly from end-2008), mostly on concessional terms. Most external private debt is in the form of trade credits.

### 3.23.3 Inflation



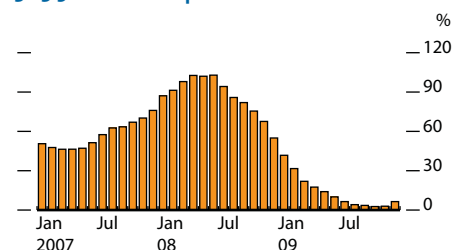
Source: CEIC Data Company (accessed 1 March 2010).

### 3.23.4 Contributions to money supply growth



Source: CEIC Data Company (accessed 1 March 2010).

### 3.23.5 Growth of private sector credit



Source: CEIC Data Company (accessed 1 March 2010).

As a result of surging food prices in 2008 and the economic contraction in 2009, it is likely that the incidence of poverty has risen above the 30% rate recorded in 2007. In addition to the short-term relief measures that it introduced last year, the government began preparations for a social safety net system that will involve the expansion of targeted conditional cash transfers and labor-intensive public works programs.

In other policy areas, some progress was made under the public financial management reform program, most notably in enhancing the credibility of the budget through improved medium-term macroeconomic and expenditure frameworks as well as better budget, cash, and debt management. The authorities are implementing a program to restructure and transfer certain roles and responsibilities to provinces, districts, and communes; and to institute fiscal arrangements at those levels to promote transparent and accountable local development and improved service delivery.

Among efforts to enhance the business climate, the authorities extended the reach of financial services; improved the transparency of the financial system; finalized drafts of new laws on commercial contracts, finance, and insurance; and established a commercial arbitration center. An automated customs-processing system is being extended from the port of Sihanoukville to cross-border points.

## Economic prospects

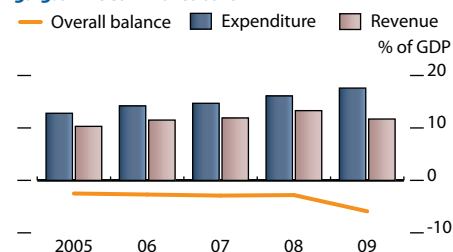
If global economic growth is in line with the *Asian Development Outlook 2010* assumptions and if the weather allows for reasonable crops in Cambodia, GDP is projected to rebound by 4.5% in 2010 (Figure 3.23.7). The assumed lift in US consumer spending will likely result in only a mild recovery in demand for Cambodian garments, however, owing to the industry's loss of competitiveness to other suppliers. The pace of decline in garment exports to the US did ease, though, heading into 2010 (Figure 3.23.8).

Growth in services is projected to resume at around 5% in 2010. Forward bookings suggest fairly weak growth in arrivals of higher-spending tourists, although arrivals of less free-spending tourists are expected to continue to increase. Other services are projected to recover moderately, reflecting a gradual pickup in domestic consumer and business sentiment.

Construction activity will likely grow at a moderate rate of about 4%, as appetite for bank credit gradually recovers and inflows of foreign direct investment, particularly from Korea, resume for some projects. Agricultural output is projected to expand by 4.7%, assisted by efforts to increase irrigation and the greater availability of high-yield seeds.

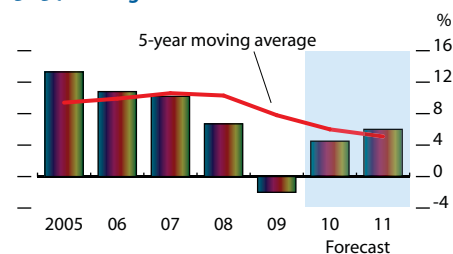
Fiscal policy is expected to be less stimulatory this year than last. The 2010 budget aims to narrow the deficit to 5.2% of GDP, to be achieved by raising tax revenue to 9.7% of GDP (from 9.0% in 2009) and rolling back the public sector wage bill a bit. Assuming a similar proportion of external financing as in 2009, this would enable a reduction in the drawdown of government deposits at banks to 0.6% of GDP. Revenue will get a lift from the strengthening of economic activity and new taxes on luxury vehicles and property.

### 3.23.6 Fiscal indicators



Source: Asian Development Outlook database.

### 3.23.7 GDP growth



Source: Asian Development Outlook database.

#### 3.23.1 Selected economic indicators (%)

	2010	2011
GDP growth	4.5	6.0
Inflation	5.0	5.0
Current account balance (share of GDP)	-16.3	-17.0

Source: ADB estimates.

The planned reduction in fiscal stimulus, coupled with relatively low inflation pressures, is likely to presage an accommodative monetary policy stance, although the monetary authorities have indicated that they will adjust policy if inflation quickens faster than anticipated.

In 2011, a return to higher—though still below trend—growth in garment exports and tourism, together with some expansion of nongarment manufacturing and a pickup in other services subsectors, is projected to raise GDP growth to around 6%. The extent and timing of exploitation of oil and gas reserves discovered offshore are uncertain, but are not expected to have an impact on GDP before 2012 at the earliest.

Inflation of around 5.0% is projected for the forecast period, assuming no renewed surges in oil or food prices or sharper depreciation of the dollar, and assuming a reduction in domestic financing of the budget deficit in 2010. With imports expected to recover faster than exports, the current account deficit is seen widening to around 16% and then 17% of GDP in the next 2 years (Figure 3.23.9). An increase in equipment imports for infrastructure projects will more than offset gradually rising external demand for Cambodian exports. Gross international reserves are expected to remain at over \$2.1 billion by end-2010, equivalent to about 4 months of import cover.

This broadly positive outlook is predicated on the government resuming a path of fiscal consolidation, with a higher revenue effort matched by improved targeting of expenditure, and the maintenance of low inflation. Slippage in these areas would put the forecasts at risk. On the upside, growth prospects would be enhanced if key structural reforms were deepened so as to improve the functioning of public administration, to accelerate trade and transport facilitation with neighboring countries, and to attract more private investment.

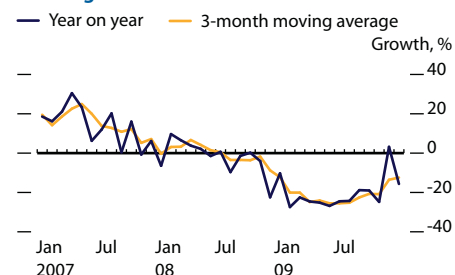
## Development challenges

The hit taken by three of the four drivers of growth and, probably, poverty reduction during the global recession demonstrates the need for Cambodia to accelerate the diversification of its sources of growth and to open more opportunities to participate in such growth, especially in rural areas where most of the poor live. The likely increase in poverty also shows a need to institute a social safety net to better protect the most vulnerable during economic slumps.

Among the key challenges to achieving these objectives are improving the competitiveness of garments and tourism, diversifying crops and increasing crop yields, and improving linkages between farmers and markets. Effective implementation of the agricultural and rural development agenda will require a greater degree of coordination among relevant government agencies, and between these agencies and evolving subnational administrations.

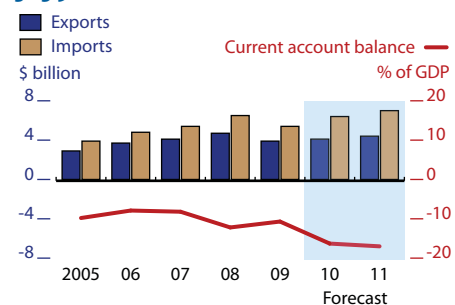
While the legal framework for greater private sector development is, on paper, taking shape, more needs to be done to implement laws and regulations and, more generally, to create an environment to attract higher levels of employment-generating investment.

### 3.23.8 United States imports of textiles and clothing from Cambodia



Source: Office of Textiles and Apparel. <http://otexa.ita.doc.gov> (accessed 15 March 2010).

### 3.23.9 External indicators



Source: Asian Development Outlook database.

# Indonesia

The global recession had only a moderate impact on this large economy: growth was maintained, mainly due to increases in private consumption and government expenditure. Inflation eased to low levels. Economic activity is forecast to quicken this year and return to prerecession levels in 2011, based on strengthening domestic demand and supportive macroeconomic policies. Despite economic achievements over recent years, raising investment in infrastructure and generating enough jobs remain major challenges.

## Economic performance

Growth slowed during the global recession, but not precipitously, reflecting the economy's relatively low dependence on exports (equal to 30% of 2008 nominal GDP) and large domestic market. The slowdown bottomed in the second quarter of 2009, and the economy rebounded in the fourth (Figure 3.24.1), assisted by a pickup in exports and prices of export commodities, as well as by stimulatory fiscal and monetary policies. For the year, GDP increased by 4.5%, only about 1 percentage point below the average expansion in the previous 5 years.

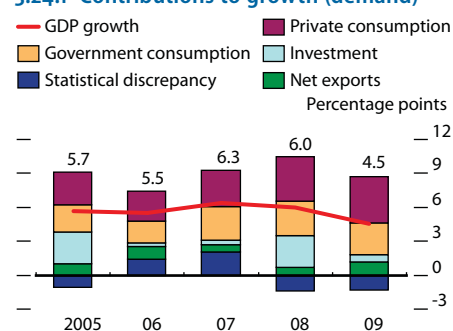
Private consumption grew by 4.9% in 2009, to contribute the majority of GDP growth (2.8 percentage points). It was driven by good harvests (which bolstered rural incomes), low inflation, government cash transfers to poor households early in 2009, election-related spending, and tax cuts (adopted as part of a fiscal stimulus package).

The government boosted its consumption spending by 15.7% (a second consecutive year of double-digit increases), which contributed 1.3 percentage points to GDP growth. Alongside efforts to raise the rate of budget disbursement to stimulate the economy, the fiscal stimulus package was an important factor in higher public spending. Election-related outlays in the first half and pay increases for civil servants also contributed.

Growth in investment slowed in the face of the world financial crisis and poor global outlook. Fixed investment rose by a modest 3.3%, due to increased outlays on buildings and infrastructure. Investment in machinery and equipment slumped by 9.2%, although the pace of its contraction moderated in the fourth quarter (Figure 3.24.2). As for international trade, imports of goods and services contracted faster than exports, generating positive net exports and contributing just over 1 percentage point of GDP growth.

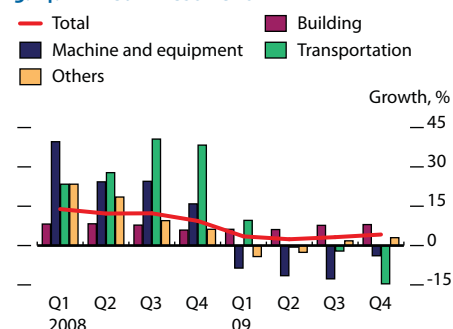
On the supply side, growth of agriculture was solid at 4.1% (though slower than in 2008). Harvests were good, but demand softened for exports of natural rubber and palm oil. Growth in manufacturing production also eased from 2008, to 2.1%. After a drop in late 2008 and early 2009, the manufacturing production index started to edge up

3.24.1 Contributions to growth (demand)



Sources: Asian Development Outlook database; Statistics Indonesia. <http://www.bps.go.id> (accessed 15 March 2010).

3.24.2 Fixed investment



Source: CEIC Data Company (accessed 15 March 2010).



(Figure 3.24.3). Higher production of coal and copper lifted mining output by 4.4% (but crude oil output fell by about 3% to 301 million barrels in 2009). Construction expanded by a solid 7.1%, bolstered by the investment in buildings and by government spending on infrastructure.

Growth in services moderated to 5.7%, but this sector (accounting for about 45% of GDP) still contributed more to total growth than industry and agriculture together. Transport and communications continued to outpace most other services subsectors, expanding at double-digit rates.

Lower prices for export commodities as well as softer demand drove down merchandise exports by 14.4% in United States (US) dollar terms last year. Merchandise imports fell at nearly double the rate (27.7%), reflecting lower prices, weak investment in machinery and equipment, and a fall in exports of manufactures (which require imported inputs). Monthly data show exports and imports turning up in late 2009 as prices and demand recovered (Figure 3.24.4). The sharper slide in imports than exports generated a \$35.2 billion trade surplus, and contributed to a current account surplus equivalent to 2.0% of GDP (the trade surplus outweighing a decline in current transfers and higher income and services deficits).

Net foreign direct investment inflows plunged by about 43% to \$5.3 billion in 2009, but portfolio investment rose strongly in a sign of improved investor confidence. The overall balance of payments recorded a substantial surplus. International reserves, which had declined to \$50.6 billion in October 2008, rebounded to \$66.1 billion by end-2009, representing 6.5 months of imports and government foreign debt payments. The government entered into currency swap agreements totaling more than \$30 billion that it could tap, if needed, to further bolster the external position.

The good harvests, an appreciating rupiah, and lower global food and fuel prices paved the way for inflation to abate to its lowest in almost a decade. Inflation decelerated from 12.1% year on year in September 2008 to 2.8% in December 2009, averaging 5.0% in 2009.

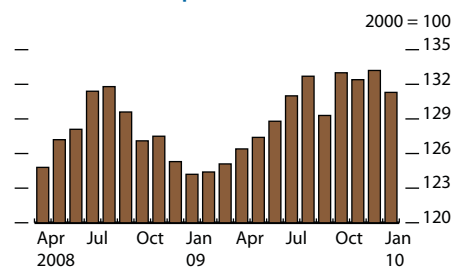
The unemployment rate declined slightly from 8.1% in February 2009 to 7.9% in August 2009, but employment in the formal sector increased by just 0.8%, or 260,000 jobs in this period. Lower (notably food) inflation and government cash payments for poor households in early 2009 contributed to a decline in poverty incidence by about 1 percentage point to 14.1% in the 12 months to March 2009.

As inflation and economic activity slowed, Bank Indonesia, the central bank, lowered its policy interest rate by 300 basis points from November 2008 to August 2009 to 6.5% (Figure 3.24.5). However, because commercial banks lagged in reducing their interest rates, these cuts had little impact on lending. Growth in credit slowed to about 10% in 2009, and growth in broad money supply eased to 12.4% by year-end.

Financial indicators strengthened as the year progressed. The rupiah appreciated against the US dollar by 18.2% in 2009, recovering from a depreciation in late 2008. Capital inflows picked up, along with the economy, from March. Yields on government bonds fell significantly, stock prices climbed, and credit default swaps returned to levels seen before the crisis (Figure 3.24.6).

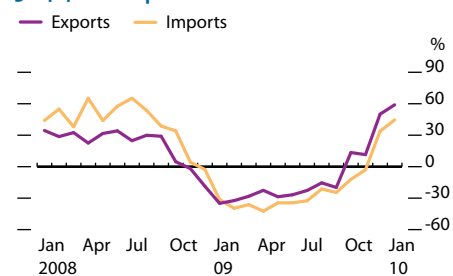
To counter the impact of the global recession, the government

### 3.24.3 Industrial production index



Source: CEIC Data Company (accessed 26 March 2010).

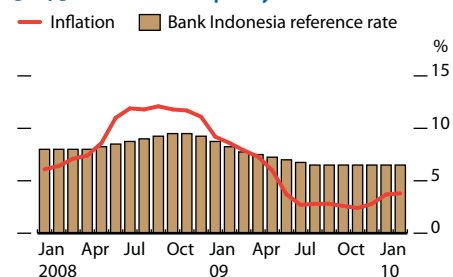
### 3.24.4 Trade performance



Note: Based on customs data.

Source: CEIC Data Company (accessed 5 March 2010).

### 3.24.5 Inflation and policy rate



Sources: Bank Indonesia. <http://www.bi.go.id>; CEIC Data Company (both accessed 5 March 2010).

rolled out a fiscal stimulus package costing Rp73.3 trillion, or about 1.4% of GDP. It consisted of tax breaks and subsidies to support private consumption and businesses (84% of the total stimulus) and labor-intensive infrastructure works. Efforts to raise the budget disbursement rate succeeded in getting much of the package implemented.

At the same time, lower international fuel prices allowed for a reduction in spending on fuel subsidies, so that total spending was less than budgeted. Revenue fell by about 15%, trimmed by lower corporate profits and commodity prices. The budget outcome was a deficit of 1.6%, widening from 0.1% in 2008, but smaller than the budgeted deficit of 2.4%.

Funding for the stimulus package was augmented by unspent budget resources from 2008 and from bond issuance. The government insured itself against a worsening financial climate by securing access to \$5.5 billion through 2010 in contingency financing from development partners, only a small part of which was used in 2009. The contingency agreements helped restore confidence in financial markets, and the government was able to raise about \$13.7 billion from domestic and international debt markets in 2009.

Still, the debt-to-GDP ratio of the national government fell to 28% in 2009, maintaining a decline that has cut the ratio by half in 5 years (Figure 3.24.7). An expanding economy, fiscal consolidation, and lower interest rates have helped bring down the debt burden. Reflecting improvements in the country's public and external positions, Standard & Poor's raised its long-term foreign currency credit rating for Indonesia's sovereign debt to BB from BB- in March 2010. Fitch Ratings upgraded its rating to BB+ from BB (one notch below investment grade) in January this year.

Some progress was made in addressing constraints to growth. A regional tax law finalized last year clarifies and limits new taxes that can be levied by regional governments, and a new export finance agency was established to provide lower-cost export credit to small and medium-sized businesses.

Efforts were stepped up to improve power supplies. Electricity demand is growing by at least 8% a year, and the state power company, which operates 85% of generating capacity and has a monopoly on transmission and sales, has struggled to meet it. A law introduced in 2009 allows private investors and local authorities to generate, transmit, and sell electricity without having to work with the state firm.

## Economic prospects

Forecasts assume that the government will implement the major policies outlined during the 2009 national elections, including following through with the recently formulated National Medium-Term Development Plan 2010–2014. They also assume that monetary policy will be generally accommodative to growth, the rupiah will average about Rp9,400/\$1, and that weather conditions will be normal.

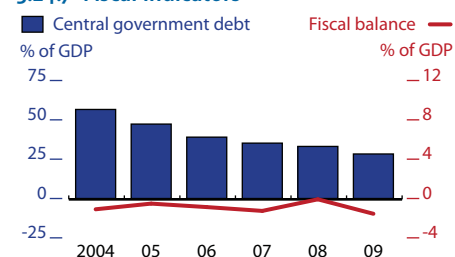
The medium-term plan envisages average annual GDP growth of 6.3%–6.8% over 2010–2014, as well as, by 2014, a reduction in the unemployment rate to 5%–6% and a decline in poverty incidence

### 3.24.6 Credit default swaps



Source: Bloomberg (accessed 16 March 2010).

### 3.24.7 Fiscal indicators



Sources: Directorate General of Debt Management. <http://www.dmo.or.id> (accessed 1 March 2010); *Asian Development Outlook* database.

#### 3.24.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.5	6.0
Inflation	5.6	6.2
Current account balance (share of GDP)	1.4	0.6

Source: ADB estimates.

to 8%–10%. The plan's focus is on ameliorating infrastructure, the bureaucracy, governance, and the investment climate. It calls for a substantial increase in development expenditure, which implies ambitious targets for funding from the private sector and public–private partnerships.

The 2010 budget aims to support the economic recovery, increase outlays on infrastructure, and sustain social spending. In September 2009, Parliament adopted a budget with a deficit target of 1.6% of GDP. However, taking into account rising world oil prices that will lead to a higher allocation for energy subsidies, the government proposed a revised budget with a wider deficit of 2.1% of GDP. This revised budget assumes a 15% rise in electricity charges at midyear, but no increase in administered fuel prices at any point during the year.

Budget revenue will benefit from higher rates of economic activity this year. Offsetting this to some degree will be a reduction in the corporate tax rate from 28% to 25% and tax breaks to encourage companies to list on the stock exchange and to invest in priority sectors, such as oil and natural gas. Unspent funds from 2009 (totaling the equivalent of \$4.1 billion) will contribute to financing this year's budget.

Monetary policy is expected to remain generally accommodative, with inflation projected to stay within Bank Indonesia's 4%–6% target band in 2010. In March 2010, the central bank left the policy rate at 6.5%, for the seventh month in a row. The monetary authorities are also adjusting regulations to spur lending and encourage banks to lower their lending rates, in an effort to stimulate sluggish growth in credit.

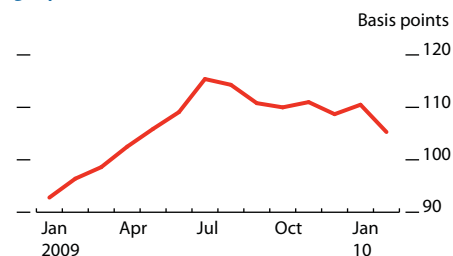
Against this policy background, private consumption is forecast to grow by at least 5.5% this year, benefiting from a stronger labor market, increases in real wages, and relatively high prices for agricultural commodities. Bank Indonesia's consumer confidence index showed a trend increase during 2009, though it subsequently dipped (Figure 3.24.8).

Investment will strengthen in light of better global trade and financial conditions, the country's record of solid growth, and the upgrades in its credit rating. Foreign direct investment is expected to rebound and domestic investment will be encouraged by the quickening pace of economic activity, tax breaks, a better market for raising equity capital, and improved credit availability. Fixed capital investment is forecast to grow by at least 6% in 2010, accelerating to about 9% in 2011. Net exports are expected to make a relatively small contribution to GDP growth in the forecast period, given that higher exports of goods and services will be accompanied by higher imports.

Based on the above factors, GDP growth is forecast to rise to 5.5% in 2010 and about 6.0% in 2011 (Figure 3.24.9). Growth may exceed this if the government can accelerate its rollout of infrastructure investment.

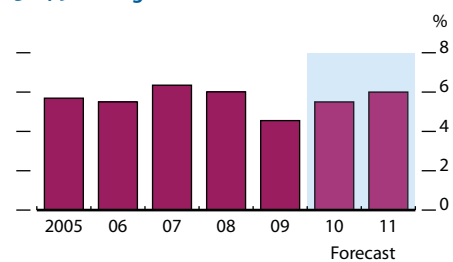
In value terms, merchandise exports in January 2010 soared by 59%, and imports by 45%, from depressed levels in the prior-year month. For the full year, exports are forecast to rise by about 11%, based on the forecast increase in world trade and firm prices for commodity exports. Stronger domestic demand will propel imports by about 16%. Consequently, the trade surplus will narrow (Figure 3.24.10) and the current account surplus is forecast to contract to about 1.4% of GDP in

3.24.8 Consumer confidence index



Source: CEIC Data Company (accessed 26 March 2010).

3.24.9 GDP growth



Source: Asian Development Outlook database.

2010 and 0.6% in 2011. Higher inflows of direct and portfolio investment should keep the overall balance of payments in surplus.

Rising domestic demand and higher global prices for oil and commodities this year will put upward pressure on inflation, countered somewhat by a projected appreciation of the rupiah. Food prices depend heavily on the weather, and in this regard earlier concerns about the impact of an El Niño weather pattern that could reduce food production have been alleviated, in part by increases in food stocks. Inflation in 2010 is forecast at 5.6% (it averaged 3.8% in the first 2 months), accelerating to 6.2% next year.

Domestic risks to the forecasts are headed by oil prices. A significantly higher global oil price than assumed, at a time that the authorities plan to keep fuel prices steady, would propel the cost of government subsidies. This would push out the budget deficit or lead to cuts in other spending, or a bit of both. Policy slippage and natural disasters are also a risk.

## Development challenges

Since 2004, Indonesia has achieved 5.5% average growth, maintained a surplus in its current account, guarded a strong fiscal position, reduced external debt, and nearly doubled international reserves. Inflation, though, has averaged a high 8.5% since 2004, even if it has come down from the double-digit rates of 2005–2006 (Figure 3.24.11).

These solid fundamentals provided good underlying support in the face of the global recession. However, the moderate pace of growth over an extended period has not generated sufficient jobs to absorb the unemployed, underemployed, and new entrants to the labor market.

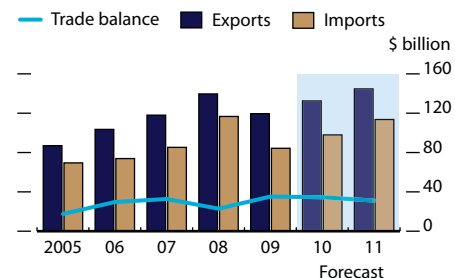
Furthermore, about 70% of those who are employed work in the informal sector, where wages and job security are low. The International Labour Organization estimates that in 2006 there were 52.1 million workers (about 55% of the total employed) earning no more than the equivalent of about \$1 a day, and a further 7.9 million (8.2%) earning no more than \$2 a day. Income inequality, as measured by the Gini coefficient, has increased from 0.32 in 2004 to 0.37 in 2009.

Insufficient job creation is a consequence of lackluster growth in the tradable sector, particularly labor-intensive manufacturing. That, in turn, is largely caused by weaknesses in the business environment (problems include legal and regulatory certainty and governance issues), and deficient infrastructure (such as roads, ports, and electricity supply).

Investment in infrastructure has dropped to the equivalent of about 3.5% of GDP in the past 3 years, from 7% before the Asian crisis, lagging such investment in faster-expanding economies. The government's investment coordinating agency estimates that \$150 billion is needed to build and upgrade infrastructure in 2010–2014, of which the public sector could supply one-third.

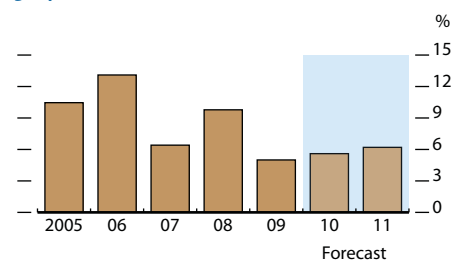
Bridging that gap with private investment will require, among other things, faster progress in developing public–private partnerships, closer alignment of national and local regulations (which are sometimes in conflict), and overcoming hurdles related to acquisition of land for infrastructure projects.

### 3.24.10 Merchandise trade



Source: Asian Development Outlook database.

### 3.24.11 Inflation



Note: 2005 = 100.

Sources: International Monetary Fund. International Financial Statistics online database (accessed 1 February 2010); ADB estimates.

# Lao People's Democratic Republic

Rising production of copper, gold, and silver coupled with stimulative government policies helped the economy maintain solid growth in 2009. Expansion is forecast to step up in both 2010 and 2011, underpinned by expansion in the mining and hydropower industries. Inflation, curtailed in 2009, will pick up this year. Rapid increases in credit have raised macroeconomic and banking system risks. Longer-term challenges involve diversifying sources of growth and generating more employment.

## Economic performance

Given limited financial links with industrial countries and firm demand from neighbors for its main exports, the economy was relatively unscathed by the global slump, posting GDP growth of 6.5% in 2009. This outturn, a little below 7.5% average growth of the previous 5 years, was supported by significant increases in mineral production, a recovery in the price of copper in the second half of the year, and expansionary government policies.

Industrial production surged by about 17% and contributed most of the growth in GDP (Figure 3.25.1). This jump stemmed from mining, construction, hydropower, and, to a lesser degree, the small manufacturing subsector. Several mining and power projects continued the expansion works that had already been planned for the year, although a few others that depended on foreign investment were postponed when global financial flows dried up.

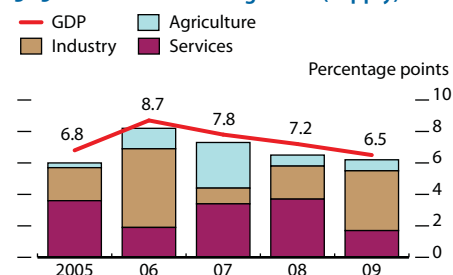
Output of copper from the country's two main mines rose by about 40% to 121,560 tons in 2009 from 2008's level, gold output rose by about 39% to 161,800 ounces, and silver production more than doubled to 496,000 ounces. It was the first full year of production from the Phu Kham copper and gold mine, which started operating in April 2008. The recovery of global copper prices in the second half also stimulated mine production.

Construction was spurred by the building of roads, sports facilities, and hotels for the Southeast Asian Games held in Vientiane in December 2009 and for the 450th anniversary of Vientiane as the capital, which is being celebrated during 2010. Hydropower output rose by 2%.

Agriculture, which accounts for a third of GDP but employs more than 70% of the workforce, expanded by 2.3%, reflecting better crop yields from improved rice varieties, growth in fisheries and livestock, and expansion of plantations (for tree crops such as coffee and natural rubber) and contract farming (especially of corn and cassava).

Growth in the services sector was moderate at 4.4%. The Southeast Asian Games attracted visitors from neighboring countries late in the year, but tourism from industrial economies was damped by recession in Europe, Japan, and the United States. Growth of service industries such as retailing,

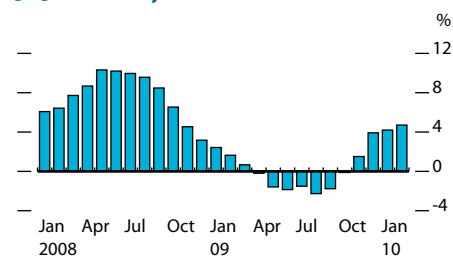
3.25.1 Contributions to growth (supply)



Note: Contributions to growth based on GDP at constant basic prices.

Sources: Asian Development Outlook database.

3.25.2 Monthly inflation



Source: CEIC Data Company (accessed 15 March 2010).



hotels, and restaurants decelerated, although the expansion of banking and finance services continued at a robust pace.

The government stepped up spending in 2009, in part to cushion the economy from the impact of the global recession and partly to build facilities for the Southeast Asian Games. Total spending grew to the equivalent of just over 21% of GDP in FY2009 (ended 30 September 2009). A previously approved hike in public sector wages contributed to the increase. Revenue was dented by the drop in copper prices in the first half of the fiscal year, but recovered in the second half as copper prices turned up. The government moved to offset the loss in copper revenue by raising excise taxes on luxury items, cigarettes, and alcohol. Excluding grants, the budget deficit widened to 5.9% of GDP in 2009 from 5.0% in 2008.

In addition to higher expenditure from the budget, the Bank of the Lao PDR, the central bank, funded significant off-budget direct lending for public infrastructure projects.

Inflation was curtailed by lower global oil and food prices, averaging just 0.04%, compared with 7.3% over the previous 5 years. For 7 months of 2009, the consumer price index fell before turning up in the last 2 months and rising by 3.9% year on year in December (Figure 3.25.2). The kip depreciated by 2.5% against the Thai baht (Thailand is the Lao PDR's biggest trading partner).

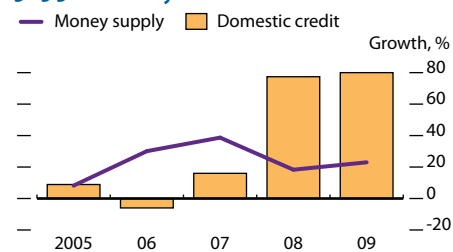
Rapid growth in credit—at a pace of about 80% in both 2008 and 2009 (Figure 3.25.3)—raised concerns that it could fuel inflation and lead to a rise in nonperforming loans at banks. Contributory factors included the central bank's lending for infrastructure projects and increasing monetization of the economy, while during 2009, the central bank lowered its policy interest rate from 7.0% to 4.0%. Growth in money supply (M2) picked up to about 23.0% in 2009.

Lower prices for export commodities, notably copper, coffee, and corn, trimmed the value of total merchandise exports by an estimated 10.0% in dollar terms in 2009. Clothing exports fell by about 13% because of weak demand in industrial countries. Merchandise imports declined by an estimated 13.0%, mainly a result of lower international oil and food prices and a fall in imports of machinery. With imports declining faster than exports, the trade deficit shrank and the current account deficit narrowed to 11.8% of GDP. Gross international reserves edged up to \$644 million (Figure 3.25.4), sufficient for about 4 months of nonresource import cover.

Solid economic growth over an extended period lowered the incidence of poverty from around 33% in 2003 to about 27% 5 years later.

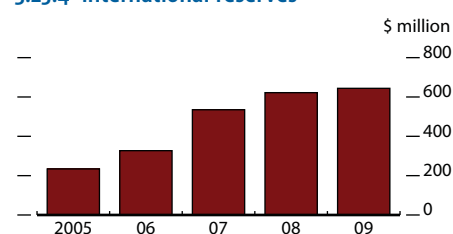
Progress was achieved in some policy reforms in 2009. The recentralization of treasury, customs, and tax functions to the central government from the provinces was completed and other public finance management reforms made advances. Implementation of a value-added tax law promulgated in January 2009 was delayed to this year because of the global recession. In changes that should improve the investment climate, business registration procedures were simplified and the government continued to implement trade-related reforms in its efforts to join the World Trade Organization. The National Assembly approved a new unified investment promotion law that will abolish cumbersome licensing procedures and harmonize investment incentives for domestic and foreign investors. However, implementation of this law, and other reforms, is slow.

### 3.25.3 Monetary indicators



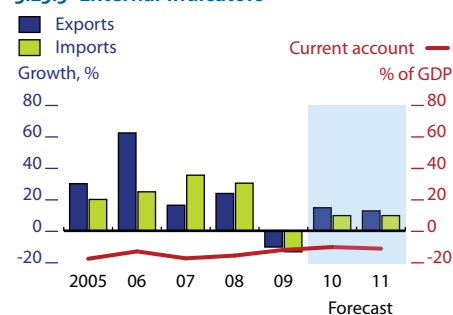
Sources: Asian Development Outlook database.

### 3.25.4 International reserves



Sources: Asian Development Outlook database.

### 3.25.5 External indicators



Sources: Asian Development Outlook database.

#### 3.25.1 Selected economic indicators (%)

	2010	2011
GDP growth	7.0	7.5
Inflation	5.6	6.0
Current account balance (share of GDP)	-10.0	-11.0

Source: ADB estimates.

## Economic prospects

Growth is projected to pick up in the forecast period, underpinned by increases in investment and buoyant prices for export commodities, particularly copper and gold. The two major mining companies plan substantial investment, some hydropower projects delayed last year are being revived, and several other substantial mining and power projects are under consideration.

The country's biggest hydropower project, the 1,088 megawatt Nam Theun 2 plant, ramped up production in March 2010, a move that will more than double the country's power exports to more than \$300 million in 2010. The Lao PDR exports about 80% of its electricity to Thailand. Clothing shipments are expected to recover this year as markets in Europe and the United States pick up.

Growth is forecast to recover somewhat in the services sector, supported by an increase in tourist arrivals as recession recedes in industrial countries and by an expected rise in visitors from neighboring countries as a carryover from the national capital's celebrations. Agriculture is envisaged to record slight growth, with some concerns for 2010 over a lack of rain in the north early in the year.

The government has budgeted a substantial increase in spending in FY2010, much of it directed at capital works. Revenue should rise quite strongly, too, supported by buoyant prices for copper and gold exports, rising income from hydropower exports, and the new value-added tax. The fiscal deficit is forecast to widen.

However, a firmer stance is expected on monetary policy, in the context of a rebound in imported inflation. The central bank aims to curb M2 money supply growth to 10% in 2010 and the government has committed to reining in the rapid growth in credit. Furthermore, the central bank has phased out direct lending for off-budget infrastructure.

On the balance of these factors, GDP growth is forecast to rise to 7.0% in 2010, quickening to 7.5% in 2011 as construction starts on several more power plants.

Inflation is seen accelerating to average about 5.6% in the forecast period, owing to upward pressure from higher global oil and food prices, recent rapid growth in credit, the depreciation of the kip against the baht, and, for 2010, the value-added tax. In the first 2 months of 2010 inflation quickened to average 4.5%.

Merchandise exports are forecast to rise by about 15.0% in 2010 (Figure 3.25.5), underpinned by buoyant copper and gold prices and rising exports of hydropower, in particular from Nam Theun 2. Exports will get a fillip from rebounding growth in the Thai economy, which contracted in 2009. Imports are projected to increase at a slower rate than exports, and the current account deficit should narrow slightly.

External public debt declined to 52% of GDP at end-2008 from 81% at end-2005, but is projected to rise slightly in the medium term as the government borrows to fund its equity stakes in some large projects. Although the stock of debt remains high, debt service is manageable, given that most is on concessional terms.

Aiming to broaden funding sources for the public and private sectors, the government plans to launch a small stock exchange at the end of this year, with assistance from other Asian exchanges.

### 3.25.1 Development challenges

The near-term challenge is to maintain low inflation, a stable exchange rate, and adequate foreign reserves at a time that very high rates of credit growth and generally expansionary policies have raised the level of risk to these achievements.

Now that inflation has turned up again, rapid rates of credit growth would likely fuel price pressures. Expansionary policies, if continued in 2010 as the economy picks up pace, could spur imports to an extent that depletes foreign reserves and jolts the exchange rate.

Excessive growth of credit, or an abrupt credit slowdown, would undermine the quality of bank loan portfolios, particularly as new private banks enter the market. The banking system remains vulnerable: state-owned commercial banks, which have a 60% share of banking assets, need to further strengthen capital positions and improve banking practices, including risk management. Central bank oversight capacity should be reinforced, especially in the context of the increasing number of banks.

Diversifying the economy's sources of growth and generating jobs to absorb the growing labor force remain major longer-term challenges. Mining and hydropower boost growth but offer few jobs. Reliance on mining puts economic growth and public revenue at the mercy of downswings in global metal prices.

Hence it will be important to build a fiscal framework that channels revenue from hydropower and mining into projects that expand the productive capacity of the economy, and into reducing poverty.

The private sector has the potential to generate more employment, if the government steps up efforts to ameliorate the business environment. The Lao PDR has slipped in the World Bank's Doing Business 2010 ranking to 167 of 183 countries, and in Transparency International's 2009 Corruption Perceptions Index to 158 of 180 countries.

# Malaysia

A plunge in exports wounded this trade-sensitive economy in 2009. The impact of weak exports spread to private investment, which fell sharply, and to private consumption, which was nearly flat. Fiscal stimulation packages provided some buffer for aggregate demand. Economic growth will rebound during the forecast period, underpinned by a recovery in exports and rising incomes. Annual inflation is set to pick up from low levels. The government plans renewed efforts to encourage high valued-added industries.

## Economic performance

Heavily reliant on external trade, the economy was slammed by the global recession in 2009. GDP dropped by 6.2% in the first quarter on a year-on-year basis, after which the pace of contraction eased before the economy expanded in the fourth quarter. On a quarter-on-quarter basis, GDP started to grow after the first quarter (Figure 3.26.1). For the full year, GDP contracted by 1.7%, compared with average growth of 5.8% over the previous 5 years.

The downturn was widespread, and declines in exports and investment were accompanied by considerably slower growth in government and private consumption. Exports in volume terms fell by 10.1%, reflecting depressed demand in most major markets. This was offset by a 12.5% contraction in import volumes, as net exports registered growth for the year. Fixed investment fell sharply by 5.5%, with many firms canceling or deferring investment decisions. Investment acted as the major drag on GDP in 2009 (Figure 3.26.2). Growth in private consumption, which accounts for around one-half of GDP, slowed to just 0.8% owing to job losses and reduced rural incomes on the back of depressed agriculture commodity prices.

In terms of supply, agriculture grew by a slight 0.4% as depressed export prices for palm oil and natural rubber damped production. Output from industry fell and caused GDP to decline (Figure 3.26.3). Mining and quarrying output declined by 3.8% in response to lower condensate and crude oil prices. Manufacturing, which is dominated by the export-oriented electrical and electronic subsector, contracted by 9.3% due to the downturn in export markets. Construction, however, increased by 5.7% for the year, supported by government stimulus measures. Growth of services eased to 2.6%, in line with subdued domestic economic activity.

Underpinning the upturn in the fourth quarter was a turnaround in exports and investment as industrial economies replenished depleted inventories and business sentiment improved on the back of a pickup in external demand and a gradual recovery in private consumption.

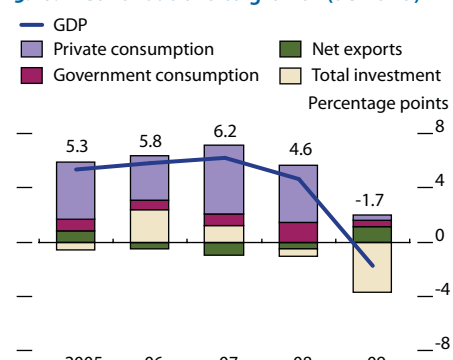
3.26.1 Quarterly GDP growth



saar = seasonally adjusted annualized rate.

Sources: Bank Negara Malaysia. 2010. *Monthly Statistical Bulletin*. January. <http://www.bnm.gov.my>; CEIC Data Company (accessed 23 March 2010).

3.26.2 Contributions to growth (demand)



Sources: Bank Negara Malaysia. 2010. *Monthly Statistical Bulletin*. January. <http://www.bnm.gov.my>; CEIC Data Company (accessed 23 March 2010).

The labor market bottomed in the first quarter, when the unemployment rate peaked at 4.0%. The rate then fell to 3.5% by the fourth quarter. Most layoffs were in manufacturing.

Inflation decelerated to 0.6% in 2009 from 5.4% in 2008. This stemmed from falling global commodity prices, slower domestic demand, and the base effect of an increase in administered fuel prices in June 2008. Consumer prices fell for 6 months of last year (Figure 3.26.4). However, month-on-month inflation was pushed up steadily from August 2009 by the effect of fiscal stimulus measures on domestic demand, a gradual rise in commodity prices, and the low-base effect of the fall in global food and fuel prices late in 2008. After falling sharply, producer prices also picked up later in the year, to 1.8% in December 2009. In the first 2 months of 2010 consumer prices picked up to average 1.3%, while producer prices increased to 4.2% in January 2010.

Malaysia's current account surplus moderated to \$32.0 billion in 2009 (16.7% of GDP) from \$38.9 billion in 2008. This decline was mainly attributable to a reduced trade surplus, which offset higher net receipts on services and lower net income payments. Merchandise exports fell by about 21%. All major categories of exports declined in value relative to 2008, with electrical and electronic exports, which account for 41% of export earnings, recording a decrease of about 11%.

The export decline was only partly offset by a 21% fall in merchandise imports, since the value of exports outweighs those of imports. The decline in imports was mainly due to a sharp contraction in imports of intermediate goods, most of which are used in making electrical and electronic products for exports. Exports and imports picked up during the second half of 2009 (Figure 3.26.5).

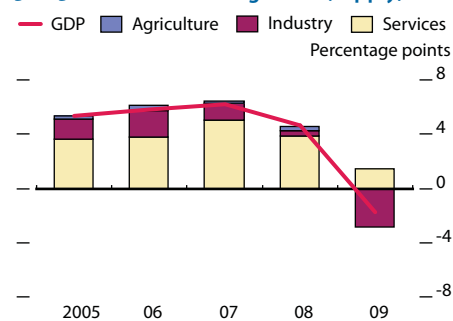
The improvement in the services account was mainly attributable to higher receipts from tourism offsetting marginally higher payments on transportation. The narrower deficit in the income account was mainly due to lower outflows of profits and dividend payments. The lower current account surplus was accompanied by a smaller deficit in the financial account as a turnaround in portfolio investments, from a large outflow to a modest inflow, and a modest decline in direct investment outflows offset significantly higher outflows on account of other investments.

As a result of these developments, the overall balance of payments recorded a surplus of \$3.9 billion in 2009 compared to a deficit of \$5.5 billion in 2008. External reserves at the end of 2009 amounted to \$96.8 billion, or 8 months of retained imports and 4.4 times short-term external debt.

The ringgit, having depreciated by 5.0% against the dollar during the first 3 months of 2009—when increased risk aversion and deleveraging activities by international investors increased the demand for dollars—has since appreciated (Figure 3.26.6). At the end of 2009, the ringgit had appreciated by 1.2% against the dollar on an easing of risk aversion. For the first 2 months of 2010, the ringgit further appreciated by around 1% against the dollar.

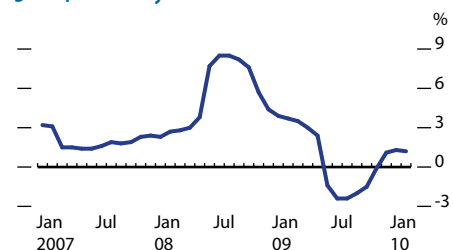
While the recovery in the second half of 2009 was largely attributable to external developments, the economy also benefited from expansionary fiscal and monetary stances. An RM7 billion fiscal stimulus package (1% of GDP) in November 2008 focusing mainly on infrastructure-related projects was followed in March 2009 by a RM60 billion (9% of GDP)

### 3.26.3 Contributions to growth (supply)



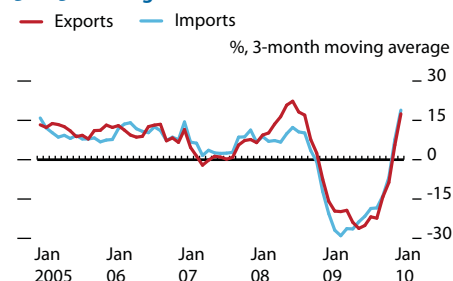
Sources: Bank Negara Malaysia, 2010. Monthly Statistical Bulletin, January. <http://www.bnm.gov.my>; CEIC Data Company (accessed 23 March 2010).

### 3.26.4 Monthly inflation



Sources: Bank Negara Malaysia, 2010. Monthly Statistical Bulletin, January. <http://www.bnm.gov.my>; CEIC Data Company (accessed 23 March 2010).

### 3.26.5 Trade growth



Source: CEIC Data Company (accessed 17 March 2010).



set of measures to be implemented over 2 years. The second package includes additional spending measures (RM15 billion), loan guarantee funds (RM25 billion), equity investments (RM10 billion), public-private partnerships and other off-budget projects (RM7 billion), and tax incentives (RM3 billion). As of January 2010, over 95% of stimulus expenditure under the first package had been spent, and 42% under the second.

The central government fiscal deficit in 2009 widened to an estimated 7.0% of GDP (Figure 3.26.7), the deepest gap since the 1997–98 Asian financial crisis (although the actual deficit in 2009 was smaller than the target of 7.4%). Capital expenditure increased by 15.5% relative to 2008 as the government accelerated project implementation under the stimulus packages and the Ninth Malaysia Plan 2006–2010. Operating outlays also rose, due in part to increased domestic debt service payments, while revenue declined slightly.

As a result of the deeper fiscal deficit, the ratio of central government debt to GDP increased from 41.5% at end-2008 to about 54% a year later. Concerns over the size of the fiscal deficit and an apparent lack of a fiscal consolidation plan led in June 2009 to the first local currency debt downgrade since the 1997–98 crisis. Most of the public debt is domestic—only 3.8% was external debt at end-2009.

Bank Negara Malaysia, the central bank, maintained an accommodative monetary policy stance in the context of low inflation and weak economic activity. It reduced the overnight policy interest rate to 2.0% in February 2009 (Figure 3.26.8) and the bank reserve ratio to 1.0% in March 2009. These actions brought down the average lending rate from 5.9% in December 2008 to 4.8% in December 2009. Notwithstanding lower lending rates, loan growth of the banking system slowed to 7.8% by end-2009, from 12.8% the previous year. Loan indicators rebounded late in 2009 reflecting improved consumer and business sentiment.

Most of Malaysia's banking sector assets are domestic, and banks had limited exposure to troubled foreign financial institutions or toxic assets. As a result, banking soundness indicators remained healthy and net nonperforming loans fell slightly to 1.8% of total loans in December 2009 from 2.2% a year earlier.

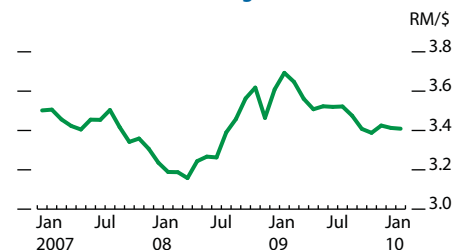
Long-term bond yields (10-year maturity) climbed from 3.1% to 4.3% during 2009, marking investor concerns over the increased supply related to the larger fiscal deficit. The stock market rebounded, along with other markets in Southeast Asia, to end the year up 45%.

## Economic prospects

A considerable amount of the fiscal stimulus funding from 2009 remains to be spent in 2010. Still, fiscal policy will be less stimulatory this year than last as the government begins a much-needed fiscal consolidation process. Subsidies will be reduced, discretionary spending cut, and efforts put into making public services more efficient. The 2010 budget implies a 14% across-the-board cut in operating expenditure and a 4.5% cut in development expenditure, aiming to narrow the fiscal deficit to 5.6% of GDP in 2010.

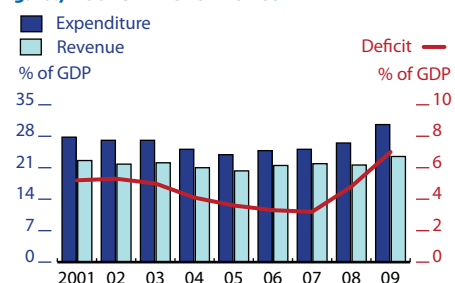
On the monetary front, the authorities in March 2010 raised the policy interest rate to 2.25% in light of the improved domestic economic

### 3.26.6 Nominal exchange rate



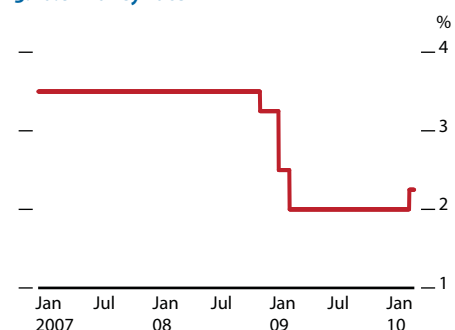
Sources: Bank Negara Malaysia. 2010. *Monthly Statistical Bulletin*. January. <http://www.bnm.gov.my>; CEIC Data Company (accessed 22 March 2010).

### 3.26.7 Government finance



Sources: Bank Negara Malaysia. 2010. *Monthly Statistical Bulletin*. January. <http://www.bnm.gov.my>; ADB estimates.

### 3.26.8 Policy rate



Source: Bloomberg (accessed 25 March 2010).

### 3.26.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.3	5.0
Inflation	2.4	3.0
Current account balance (share of GDP)	14.0	13.6

Source: ADB estimates.



outlook. The increase was aimed at normalizing monetary conditions and preventing risks of financial imbalances from undermining economic recovery. Monetary policy remains accommodative given considerable excess capacity in the economy.

A likely appreciation of the ringgit in the forecast period due to a balance-of-payments surplus should offer the central bank some flexibility to wait until a firmer recovery in credit demand emerges before further raising interest rates. Additionally, the central bank could raise its reserve ratio for banks if it feels a need for policy tightening.

The positive sequential momentum in GDP growth during 2009 sets a solid basis for recovery to continue in 2010 and 2011. GDP growth is forecast to rebound to 5.3% in 2010 before easing to 5.0% in 2011 (Figure 3.26.9). In 2010 the recovery will be underpinned by growth in exports, driven by strong regional demand, particularly from the People's Republic of China, and inventory restocking by industrial countries, as well as the lagged effects of the stimulus packages. Growth will also benefit from the base effect of a sharp contraction in GDP during the first half of 2009. The government's index of leading indicators showed solid gains headed into 2010 (Figure 3.26.10).

The more moderate growth expected in 2011 stems from the factoring out of the base effect of lower growth in the first half of 2009, which will boost growth in 2010, and more moderate growth forecast for next year in some Asian trading partners. The impact of inventory restocking in industrial countries will likely dissipate in 2011, but exports will get support from the forecast stronger global trade recovery. During the forecast period, exports will also benefit from higher commodity prices, particularly for crude oil, palm oil, and rubber.

Higher export growth will, in turn, spur employment and incomes and feed into private consumption. Public consumption and investment are, however, likely to be damped by the reining back of the fiscal deficit, while private investment is expected to rise only gradually due to excess capacity in the economy.

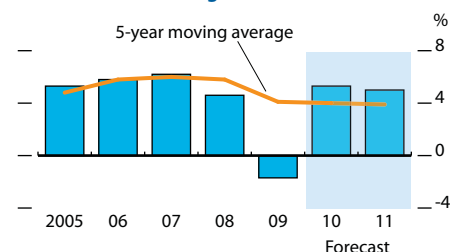
This excess capacity, coupled with the likely appreciation of the ringgit, suggests that inflation pressures will be fairly subdued. Inflation is expected to move up to 2.4% in 2010 and to quicken to 3.0% in 2011 (Figure 3.26.11), on the back of higher domestic demand, a rise in global commodity prices, a rise in some administered prices, and the disappearance from the year-on-year comparison of the high price base in 2008.

The current account surplus is forecast to narrow to about 14% in 2010 and a touch below that in 2011 (Figure 3.26.12). Exports will benefit from higher global commodity prices and a recovering global economy. Imports are likely to outpace exports in the context of Malaysia's dependence on imported inputs for its manufacturing export industries and a pickup in domestic demand.

A lower trade surplus during the forecast period is likely to be reinforced by a further deterioration in the income balance because of increased outflows of profit and dividend payments, while the services account is likely to show a small surplus from a steady increase in tourist arrivals.

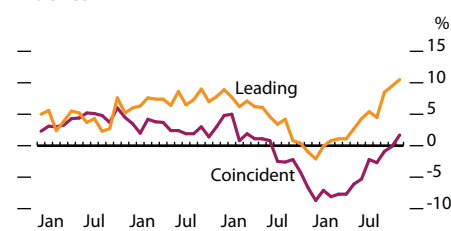
Malaysia's reliance on external markets (both exports and imports of goods and services are equivalent to more than 100% of GDP) implies that the main downside risk to the forecasts is a slower than expected global

### 3.26.9 Annual GDP growth



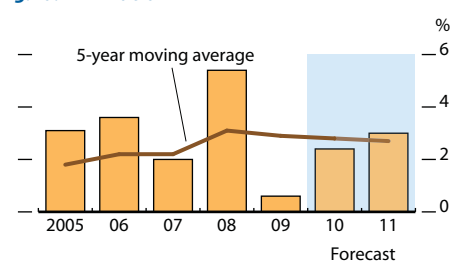
Sources: Asian Development Outlook database.

### 3.26.10 Growth of leading and coincident indexes



Source: CEIC Data Company (accessed 22 February 2010).

### 3.26.11 Inflation



Sources: Asian Development Outlook database.

recovery. The country's high level of international reserves and strong banking sector position it relatively well to deal with any renewed bout of global instability, provided it is short.

On the domestic front, there is a risk that the planned withdrawal of stimulus measures could prove to be premature if the recovery in either domestic private or external demand is not sustained.

## Development challenges

The economic pain caused by the global recession has led to renewed debate on the need to reduce dependence on external markets. However, given the limited size of the domestic market, policy makers seem to accept that Malaysia will need to continue to embrace globalization, alongside perhaps a structural shift in the economy to produce a more diversified range of goods for exports. There is also a growing sense that the economy seems to be caught in a “middle-income trap”: unable to remain competitive as a low-cost producer, but also struggling to move up the value chain as a producer of knowledge-intensive products.

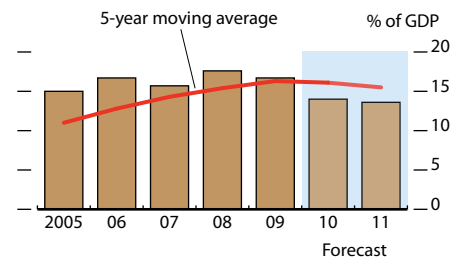
Economic growth, while impressive, has slowed and private investment, averaging about 30% of GDP just before the Asian financial crisis, has fallen to around 9.5% of GDP (Figure 3.26.13). These indicators point to the need to address deficiencies in the investment climate and to reappraise the role of public sector companies that compete with the private sector.

The government is well aware of the need to modernize the economy and in March this year the Prime Minister announced a New Economic Model, which calls for an overhaul of the country's 4-decades-old affirmative action policies, in order to improve the investment climate and build a more competitive economy. To this end, the Prime Minister outlined plans for privatization of state-owned companies, sales of government land, a reassessment of subsidies, a further review of existing restrictions on foreign investment in services, and education reform. The New Economic Model is to provide the foundation for the formulation of the 10th Malaysia Plan (2011–2015), which is expected to be unveiled in June this year.

In April 2009 the government announced a series of measures that relaxed some rules on foreign investment in Malaysian companies and property, on initial public offerings, and on the financial sector. Most notable among these was the relaxation of a 30% *bumiputra* (ethnic Malay) equity requirement for investment in 27 services subsectors, including health and social services, tourism, transport, and business services.

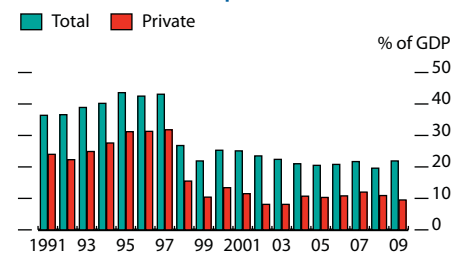
While these are welcome developments, the unfinished agenda is long. The 27 subsectors are generally the relatively less important ones within the sectors. Liberalization of the entire sector is more likely to bring about a significant increase in private investment. Moreover, the services sector is controlled by a licensing system, and relaxing Foreign Investment Committee requirements do not remove the need for obtaining licenses from the relevant ministries, which may stipulate different *bumiputra* ownership limits to those stipulated by the committee. Investment climate surveys in Malaysia have frequently identified anticompetitive practices and the regulatory burden as major constraints on firms' activities and investments.

3.26.12 Current account balance



Sources: Asian Development Outlook database.

3.26.13 Gross fixed capital formation



Sources: Treasury Malaysia, Ministry of Finance. *Economic Report 2009/2010*. <http://www.treasury.gov.my>; CEIC Data Company (accessed 22 March 2010).

# Myanmar

Modest rates of economic growth in recent years reflect policy weaknesses, compounded by some fallout from the global recession in 2009, and cyclone damage to agriculture in May 2008. Growth is forecast to edge higher, supported by a modest increase in private consumption, government spending, and investment in natural gas production. Inflation pulled back in 2009, but is expected to accelerate in the forecast period. While the government has taken some initial steps to liberalize the economy, the list of impediments to development remains long.

## Economic performance

Growth slowed to an estimated 3.6% in the fiscal year ended 31 March 2009 (FY2008) from 5.5% in FY2007 (official GDP growth estimates, which are considerably higher than these nonofficial ones, are inconsistent with variables closely correlated with economic growth, such as energy use and fertilizer applications).

Myanmar was not directly hit by the global recession, given its absence of financial and trade links with industrial countries. However, exports and private consumption were reduced by the combined effect of economic slowdowns in neighboring economies, a collapse in commodity prices, and the impact of Cyclone Nargis, which inflicted severe human loss and considerable damage to agriculture in parts of the Ayeyarwady and Yangon divisions in May 2008.

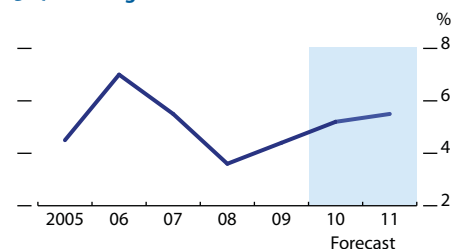
Agriculture (including fisheries, forestry, and livestock) accounted for around two-fifths of GDP, one-fourth of exports, and over one-half of total employment in FY2008. Industry, including export-oriented natural gas production, contributed 23% of GDP, and services the rest. Official data indicate a decline in natural gas production in FY2008, reflecting a slowdown in demand from Thailand.

More recently, economic growth likely picked up to an estimated 4.4% in the fiscal year ended 31 March 2010 (FY2009), in tandem with recovery in demand from neighboring countries and a partial recovery in agricultural production in areas damaged by the cyclone (Figure 3.27.1). Gas production likely rose to meet increased demand from Thailand. Private consumption, however, was subdued because of weakness in remittances from Myanmar workers in recession-hit Malaysia, Singapore, and Thailand, and because of stagnant rural incomes as farmgate prices remained depressed.

Paddy production, the predominant crop, is estimated to have increased by 2.5% in FY2008 and by 2.7% in FY2009. Production in FY2009 was hampered by drought in the central region and by residual soil salinity in cyclone-affected areas.

Inflation pulled back sharply from 29% year on year in March 2008

3.27.1 GDP growth



Sources: Asian Development Outlook database.

to 2.5% in September 2009, largely a result of a sharp drop in food and fuel prices, slower domestic economic activity, and reduced monetization of the fiscal deficit. Higher global commodity prices likely propelled inflation to about 6.5% by March 2010, leaving the FY2009 year-average rate at 7.9% (Figure 3.27.2).

The external current account fell into deficit in FY2008 (estimated at 2.5% of GDP) from a surplus of 0.6% of GDP in FY2007, owing to lower export volumes and declines in export prices of agricultural products. This gap narrowed to about 1.0% in FY2009 (Figure 3.27.3), when a contraction in imports more than offset declines in gas exports (due to lower prices) and in remittances. The fall in imports in part stemmed from the winding down of construction at the new capital city, Naypyidaw. Inflows of foreign direct investment into the energy sector helped lift international reserves to about \$5 billion at end-FY2009 (Figure 3.27.4), equivalent to 8 months of imports.

The consolidated fiscal deficit in FY2009 (covering the central government and state economic enterprises) widened to an estimated 3.7% of GDP from 3.4% in FY2008. Current expenditure was driven up by higher interest payments on domestic debt, spending to repair cyclone damage, and a 35% public sector wage increase in January 2010. Revenue growth was sluggish. The revenue-to-GDP ratio at about 7% is low by international standards, while social spending at around 1% of GDP is extremely low.

In FY2008, the authorities moved away from routinely monetizing the fiscal deficit and financed about one-third of it through issues of Treasury securities. The government issued a new 2-year Treasury bond in January 2010 with a view to increasing the use of domestic saving for deficit financing. This move is expected to go some way to containing the inflation impact of future fiscal deficits. However, the practice of valuing exports of state enterprises at the official exchange rate of MK6/\$1 (as opposed to the market rate of about MK1,000) leads to significant distortions because domestic revenue available for spending is hugely undervalued.

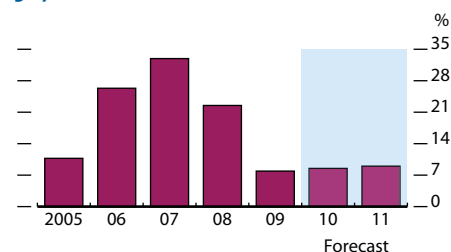
As for monetary policy, administratively determined nominal interest rates remained at their 2006 levels through 2009—17% for lending and 12% for bank deposits—despite the easing of inflation. Consequently, real interest rates in the formal banking sector are among the highest in the world. While this has, to some extent, helped bring back more domestic saving into the formal banking system, it could have significant implications for bank soundness as borrowers' debt-servicing capacity deteriorates.

## Economic prospects

Projections for the economy are based on assumptions of normal weather. They also assume that a national election scheduled for 2010 will, at the very least, bring about a more conducive environment for economic reforms, and that there will be no regression of the limited reforms seen so far.

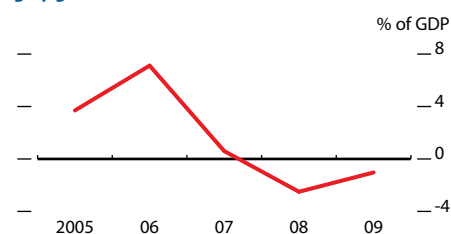
On this basis, GDP growth is expected to edge up to 5.2% and then to 5.5% in the next 2 fiscal years. In FY2010, private consumption will be supported by the public sector wage hike, while public consumption is likely to pick due to expenditure related to the election. In FY2011, a

### 3.27.2 Inflation



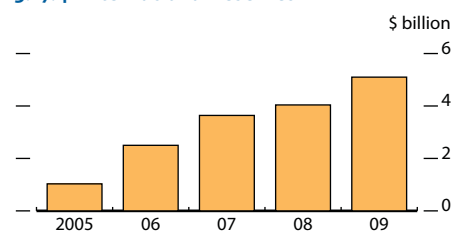
Sources: Asian Development Outlook database.

### 3.27.3 Current account balance



Sources: Asian Development Outlook database.

### 3.27.4 International reserves



Sources: Asian Development Outlook database.

modest increase in rural incomes owing to increased exports and prices of cash crops will underpin private consumption.

Public investment will rise if the government goes ahead with planned increases in expenditure on infrastructure. The authorities have indicated that they will use part of the SDR202 million (\$309 million) allocated in 2009 by the International Monetary Fund for infrastructure. Inflows of foreign private investment are expected for the development of two new gas fields, Shwe and Zawtika, and the construction of an oil and gas pipeline project from Myanmar to the People's Republic of China. Aid disbursements for cyclone victims are scheduled to be stepped up prior to the completion of the humanitarian relief effort in July this year.

From the supply side, agricultural output is likely to gradually pick up. The rebound in neighboring economies is seen increasing demand for gas, which will underpin industrial output.

Inflation is projected to accelerate to 8.5%–9% in the forecast period, reflecting somewhat higher domestic demand and increased world prices for oil and foodstuffs. A modest increase in exports of gas and food crops is likely to be offset by increased imports of capital equipment and construction materials. The current account deficit is projected to widen to about 2%.

### 3.27.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.2	5.5
Inflation	8.5	9.0
Current account balance (share of GDP)	-1.8	-2.1

Source: ADB estimates.

### 3.27.1 Development challenges

In the late 1980s, Myanmar began a process of gradually unwinding state ownership and control of the economy. These changes have improved efficiency and growth in some parts of the economy, but reforms have often been piecemeal, without an apparent strategy to overcome the many structural impediments to realizing the economy's potential. The country has lagged behind its neighbors in living standards (Box figure) and poverty reduction, and the agenda of required reforms remains extensive.

A gradual liberalization of agriculture has prompted more farmers to grow cash crops. However, the sector faces acute shortages of credit. Farmers invariably have to turn to informal sources of finance, at interest rates of 5%–12% a month. The shortage of credit, in turn, leads to a glut of paddy for sale at harvest times, resulting in very low farmgate prices. The credit shortage also means that farmers are unable to afford adequate farm inputs and have reduced the intensity of land cultivation, leading to a reduction in farm yields and fewer rural jobs.

Banking system assets are below levels of a decade ago, and 70% of all private financing requirements are sourced from the informal sector. Broadening access to formal finance requires moving toward market-determined interest rates, relaxing the deposit-to-capital ratio for banks, easing stringent collateral requirements, and lifting administrative controls on the expansion of new bank branches.

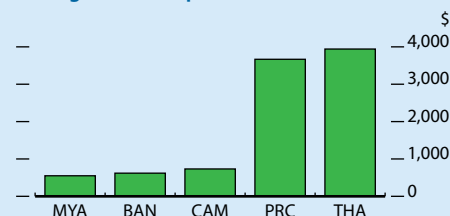
Stimulating competition among banks would improve banking services. In this context, the priorities should be to eliminate regulatory forbearance toward state banks, allow state banks to operate on a commercial basis, and move

away from a segmented system whereby only certain banks can operate in certain sectors.

The government floated proposals to some business groups in early 2010 to sell various state assets, such as the fuel distribution network, some ports and buildings, and the international airline. This has the potential to facilitate development of the private sector. Enterprises that remain in state ownership need to be modernized and allowed to operate on a commercial basis, which would promote competition and increase their contribution to the budget.

Addressing low levels of government revenue generation requires a broadening of the tax base and fewer tax exemptions. Now that capital spending on the capital city has peaked, there should be room for increased outlays on development and social projects. Unification of the multiple exchange rates would create additional fiscal resources and reduce incentives for informal activity.

Box figure Per capita GDP, 2009



BAN = Bangladesh; CAM = Cambodia; PRC = People's Rep. of China; MYA = Myanmar; THA = Thailand.

Notes: Fiscal year for Bangladesh and Myanmar. End-year market rate used for Myanmar.

Sources: Asian Development Outlook database.



# Philippines

Consumption spending, both private and public, offset weakness in investment and net exports last year, enabling modest economic growth. Remittances from overseas workers and expansionary macroeconomic policies supported consumption. Growth is forecast to quicken this year, based on increases in private consumption and a rebound in both exports and investment. After elections in May, one of the challenges for the new administration will be to strengthen the fiscal position and improve the investment climate.

## Economic performance

In the face of the global recession, the economy grew by 0.9% in 2009, compared with average growth of 5.5% over the previous 5 years. (Gross national product, which includes remittances from nearly 9 million Filipinos working abroad, rose by 3.0%.) GDP maintained slight growth throughout 2009 on a year-on-year basis, picking up in the fourth quarter (Figure 3.28.1), as industrial output rebounded from a slump.

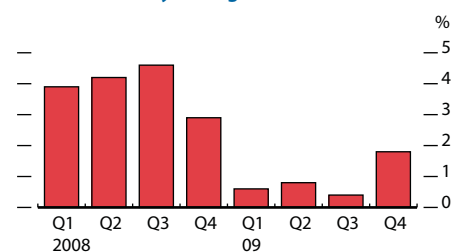
Buoyed by remittances from overseas workers, private consumption grew by 3.8% (compared with 4.7% in 2008) to remain the biggest contributor to GDP growth on the demand side. Remittances rose by 5.6% to \$17.3 billion in 2009, with double-digit increases in November and December when workers sent additional amounts to their families who had been devastated by tropical storms.

Significantly higher government consumption spending (up by 8.5%) and a fiscal stimulus package helped support aggregate demand. The government provided cash transfers and emergency employment programs to vulnerable groups as the economy slowed. It also increased spending on infrastructure to compensate for a slump in private construction.

However, the impact of the global financial crisis and recession depressed investment, in fixed capital by 3.5% and in durable equipment by 11.4% (although the pace of contraction slowed in the second half). The ratio of fixed investment to GDP resumed its decline (Figure 3.28.2), after some improvement in 2007 and 2008. Total investment dragged down GDP growth, as did net exports.

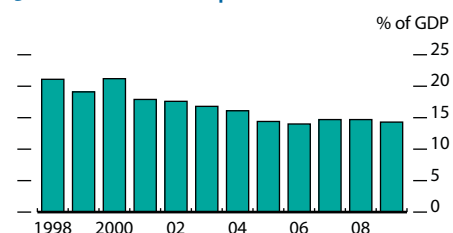
On the supply side, services (accounting for 50% of GDP in 2009) expanded by 3.2% and were the only production sector to contribute to GDP growth (Figure 3.28.3). Retail trading, assisted by the growth in remittances, picked up during the year. So did communications, finance, and business process outsourcing. By contrast, industrial production fell by 2.0%, in its first contraction since 2001. Manufacturing, the biggest industry subsector, shrank by 5.1%, with weaker external demand for

3.28.1 Quarterly GDP growth



Sources: Asian Development Outlook database; National Statistical Coordination Board. <http://www.nscb.gov.ph> (accessed 29 January 2010).

3.28.2 Gross fixed capital formation



Sources: Asian Development Outlook database; National Statistical Coordination Board. <http://www.nscb.gov.ph> (accessed 29 January 2010).

electronic products and clothing a major factor. Public construction increased as the fiscal stimulus was launched, though private construction fell. Production from the fairly small mining industry rose by about 20% in 2009.

Agriculture, representing a declining share of GDP but still accounting for one-third of employment, suffered from severe tropical storms, which reduced rice output by nearly 14% in the fourth quarter from the year-earlier period. Overall, agricultural output was flat for the year.

Employment grew, mainly in services, but fell short of the 1.1 million increase in the labor force, so that the unemployment rate rose to 7.5% in 2009 (the rate of underemployment was 19.1%). Pressure on under- and unemployment was mitigated to some extent by the deployment of about 1.3 million workers overseas in the first 11 months of 2009, 12% higher than the prior-year period.

Lower international prices for oil and commodities, coupled with the soft domestic demand, pulled down consumer prices (Figure 3.28.4), so that inflation averaged 3.2% in 2009. It picked up to 4.4% in December, on the back of rising prices for oil and for food (owing to weather damage to agriculture).

The slump in global trade cut merchandise exports by just over 22% to \$37.5 billion, the lowest value since 2003. Exports of electronic goods and clothing were particularly affected. Merchandise imports fell by about 24% to \$46.4 billion, reflecting the weakness in exports (materials for manufactured exports are imported) and in investment, and lower prices for oil and commodities.

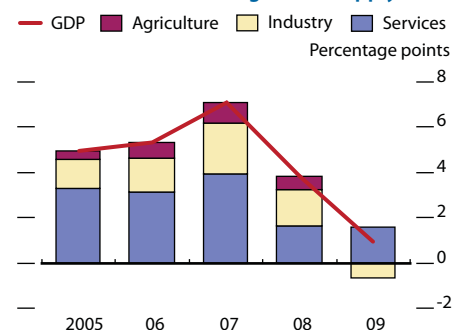
By November, though, trade grew on a year-on-year basis (Figure 3.28.5), from a low base in the prior-year month. In the last 2 months of 2009, the rebound in exports was driven by electronics; that in imports by capital goods, materials for manufactured exports, and higher oil prices. With the fall in the value of merchandise imports outpacing that of exports, the trade deficit shrank.

The current account recorded a large surplus of \$8.6 billion (5.3% of GDP), benefiting from the narrower trade gap, growth in remittances, and an expansion of earnings from business process outsourcing. Portfolio investment recorded an inflow of \$1.4 billion, a reversal from outflows of \$3.8 billion in 2008. Net foreign direct investment remained low by subregional standards. The overall balance of payments recorded a substantial surplus, and the stronger external position contributed to a 2.4% appreciation of the peso against the United States dollar in 2009.

Gross international reserves stood at \$45.7 billion as of February 2010 (Figure 3.28.6), representing a high 9.3 months of import cover and 10.2 times short-term external debt (based on original maturity). Reserves were boosted by higher government borrowings on global financial markets to fund the fiscal stimulus.

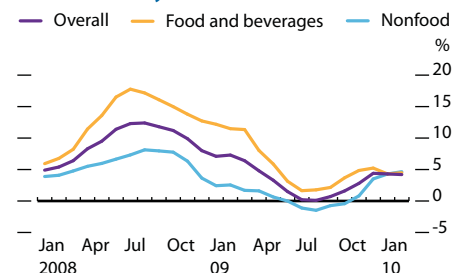
That stimulus focused on extra spending for infrastructure and for social protection measures. Government expenditure, other than for interest payments on the large public debt, rose to 14.9% of GDP from 13.5% in 2008. Concurrently, tax revenue fell by 6.4%, eroded by weaker economic growth and provision of tax exemptions and reductions in 2009 (forgone revenue was estimated at about 0.6% of GDP). Poor investment sentiment stymied planned sales of government assets. In

### 3.28.3 Contributions to growth (supply)



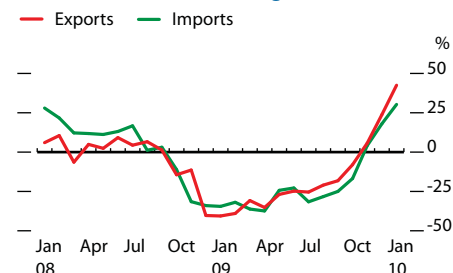
Sources: Asian Development Outlook database; National Statistical Coordination Board. <http://www.nscb.gov.ph> (accessed 29 January 2010).

### 3.28.4 Monthly inflation



Sources: National Statistics Office. <http://www.census.gov.ph>; CEIC Data Company (both accessed 10 March 2010).

### 3.28.5 Merchandise trade growth



Note: Based on customs data.

Sources: National Statistics Office. <http://www.census.gov.ph>; CEIC Data Company (both accessed 11 March 2010).

these circumstances, the fiscal deficit widened to 3.9% of GDP, from 0.9% of GDP in 2008 (Figure 3.28.7).

As the economy sagged and inflation waned, Bangko Sentral ng Pilipinas lowered its policy interest rates in steps by 200 basis points from December 2008 to July 2009, taking the overnight borrowing rate to 4.0%, the lowest in about two decades (Figure 3.28.8). The central bank also supported banking system liquidity and depositor confidence by, among other changes, reducing commercial bank reserve requirements and increasing the ceiling on deposit insurance.

Growth in bank lending slowed in the early part of the year, then picked up as economic conditions improved. Broad money (M3) growth decelerated to 8.3% year on year in December 2009, from nearly double that rate a year earlier.

## Economic prospects

The outlook assumes that there is a smooth political transition in 2010 following presidential and legislative elections scheduled for May, and that the new government pursues credible economic and fiscal programs.

Fiscal policy will likely be less stimulative in 2010, given budget constraints and plans by the current administration to trim the fiscal deficit to 3.5% of GDP. Spending on social services is budgeted to rise (in nominal terms), but the amount set aside for infrastructure is lower than last year. There are risks on the revenue side. More tax exemptions were approved early in 2010, and additional tax breaks are proposed, even though the country's low tax collection is a chronic constraint on the budget.

Monetary policy is expected to support the recovery while the authorities gradually unwind the liquidity-boosting measures put in place during the global financial crisis. The central bank increased the lending rate to banks under a rediscounting facility and reduced the size of its peso rediscounting window in the first quarter of 2010.

Private consumption will likely remain the main driver of growth in the next 2 years, underpinned by remittances (expected by the central bank to rise by about 6% in 2010), a firmer labor market, and stronger consumer confidence. Election-related spending will provide a boost through May. Exports will grow in line with the global recovery and, on a net basis, are expected to contribute modestly to GDP growth.

Investment is forecast to rebound from last year's low levels now that the external and domestic outlooks have improved (businesses might be cautious until the May elections, though). Investment pledges reported by government agencies in the fourth quarter of 2009 nearly trebled from the prior-year period, and the index of business confidence rose to a 2-year high in the first quarter of 2010 (Figure 3.28.9). Property companies have laid out aggressive expansion plans to meet anticipated strong demand for office space, mainly from business process outsourcing firms, and for housing (stimulated by remittances and low interest rates).

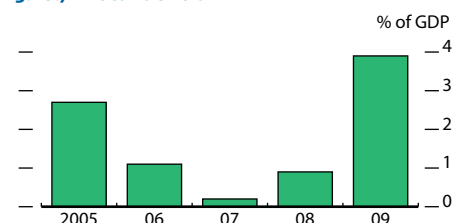
Services will benefit from stronger growth in private consumption as well as election-related spending. Higher levels of external trade will continue, more specifically, to stimulate wholesale trade, storage, and transport. The association representing business process outsourcing

### 3.28.6 Import cover and reserves



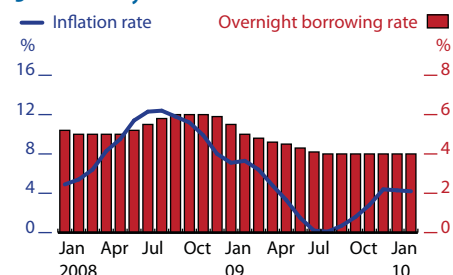
Source: Bangko Sentral ng Pilipinas. <http://www.bsp.gov.ph> (accessed 12 March 2010).

### 3.28.7 Fiscal deficit



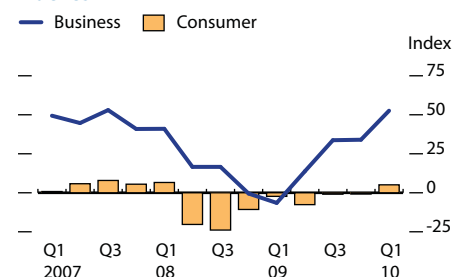
Source: Bureau of the Treasury. <http://www.treasury.gov.ph> (accessed 12 March 2010).

### 3.28.8 Policy and inflation rates



Sources: Bangko Sentral ng Pilipinas. <http://www.bsp.gov.ph>; CEIC Data Company (both accessed 12 March 2010).

### 3.28.9 Business and consumer expectations indexes



Note: Composite consumer expectations index for the next 12 months; business expectations index for the next quarter.

Source: CEIC Data Company (accessed 30 March 2010).

firms expects that growth in the industry's revenue this year will exceed last year's 19% gain. Rapid expansion has raised employment in outsourcing to about 450,000 from about 100,000 over the past 5 years, and some firms are extending into more value-added services fields.

Manufacturing is projected to recover gradually in tandem with the improvement in external demand, particularly for electronic products. Agriculture, still rebuilding after last year's storms, was hit by an El Niño drought in the early months of 2010, which curtailed crop yields in some areas. The government planned rice imports of 2.4 million tons in 2010 (up from 1.8 million tons in 2009), but it might need to raise this target.

The drought has also reduced hydropower output. Electricity supplies for the largest island of Luzon, which accounts for about two-thirds of GDP, were interrupted in the first quarter when a lack of rain for hydropower coincided with maintenance shutdowns and technical problems of other plants. Mindanao, the second-largest island, has been worse hit because hydropower accounts for about 55% of its electricity supplies.

On drawing these strings together, GDP is forecast to increase by 3.8% in 2010 (Figure 3.28.10), still below potential and under the 5.5% recorded in 2004–2008.

Growth is seen accelerating to 4.6% in 2011, when a stronger global recovery is expected to give impetus to exports and remittances. The forecast is subject to more uncertainty than usual, since the new administration's economic and fiscal policies will have an important bearing on the momentum of growth.

Inflation is forecast to rise to 4.7% this year, owing to the impact of the drought, which is putting some upward pressure on food prices, and higher prices for imported oil and commodities. Electricity charges look set to increase as producers seek to cover rising costs, and suppliers turn to more expensive oil-based power generation to compensate for shortfalls in hydropower. Inflation averaged 4.2% in the first 2 months of 2010.

External trade will be considerably stronger this year. Merchandise exports surged by nearly 43% and imports by 30% in January 2010 (both from lows bases in the prior-year month). For the full year, growth of imports will likely outpace exports, widening the trade deficit. Taking into account higher remittances and business process outsourcing income, the current account is expected to record a surplus, although it will moderate from 2009 to around 3.3% of GDP in 2010–2011.

In the context of improved global financial market conditions, the government raised \$2.6 billion from bond issues overseas in the first 2 months of 2010, securing about half its external borrowing target for 2010. The authorities also plan to issue bonds targeted at overseas Filipino workers. Borrowing costs for external debt have broadly declined to levels ruling before the financial crisis. Moody's upgraded its sovereign credit rating for the Philippines in July 2009, from B1 to Ba3, citing the resilience of the financial system and of the external payments position during the global recession.

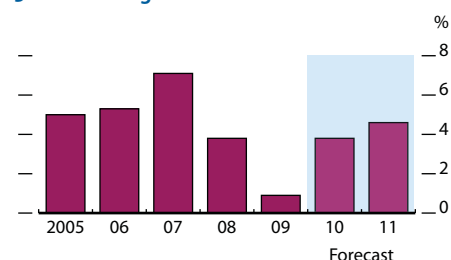
Risks to the forecasts come from the impact on agriculture and food prices of a more severe El Niño, and the impact on trade and growth from slower than projected recovery in the global economy. Significant fiscal slippage could unsettle financial markets and raise the country's

### 3.28.1 Selected economic indicators (%)

	2010	2011
GDP growth	3.8	4.6
Inflation	4.7	4.5
Current account balance (share of GDP)	3.3	3.2

Source: ADB estimates.

3.28.10 GDP growth



Sources: Asian Development Outlook database; National Statistical Coordination Board. <http://www.nscb.gov.ph> (accessed 29 January 2010).

risk premium. It will be important that the new government commit to a medium-term plan to strengthen the fiscal position.

## Development challenges

Although the economy maintained some growth during the global recession, the slowdown in 2009, coming just after the surge in food and fuel prices in 2008, has made the attainment of the Millennium Development Goals more challenging. One-third of the population was poor even before the last 2 difficult years.

Over a long period, the Philippines has invested less in social sectors and infrastructure than most of its neighbors, in large part a result of the tight fiscal situation, high levels of public debt, and a business climate that hampers private investment. Gross domestic investment fell to the equivalent of 14.0% of GDP in 2009, the lowest level on record.

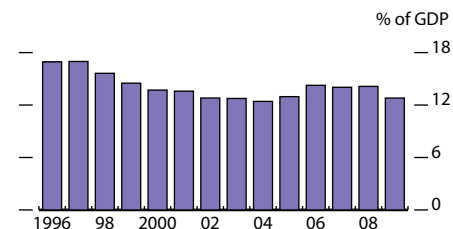
Fiscal resources are severely constrained by weak revenue generation. Tax revenue as a share of GDP, also lower than among most of its neighbors, declined to 12.8% in 2009 (Figure 3.28.11). That decline reflected not only the temporary effect of lower tax collections during the economic slowdown, but also a long-term erosion of the tax base due mainly to tax exemptions. National government debt rose to 57.3% of GDP in 2009 (Figure 3.28.12), and interest payments on the debt absorb about 20% of total budget outlays, crowding out development expenditures.

Reversing the structural erosion of taxes and reducing government debt to release budget funding for development expenditure will require renewed efforts at tax reform by the new administration. That could include rationalization of fiscal and investment incentives (they cause large losses of tax revenue), and indexing excise taxes to inflation. Enhancing tax administration is equally important, including cracking down on tax evaders and enforcing anticorruption programs in tax and customs agencies.

Higher private investment, too, would play a more significant role in upgrading infrastructure and, more generally, the productive capacity of the economy. Saving is not the main constraint (Figure 3.28.13), since national saving has steadily risen, bolstered by remittances.

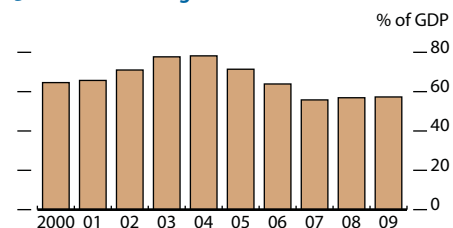
Rather, sluggish private investment reflects infrastructure deficiencies, particularly in power and transport, and weaknesses in governance and the policy climate. According to the World Economic Forum, the global competitiveness ranking of the Philippines in 2009/10 fell to 87 (out of 133 countries) from 71 (out of 134) in 2008/09, putting it below India, Indonesia, and Viet Nam, among others. The report cited corruption, inefficient bureaucracy, policy instability, and inadequate infrastructure as the main reasons for the low ranking.

3.28.11 Tax revenue



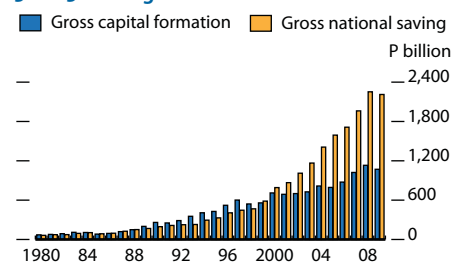
Sources: CEIC Data Company; Bureau of the Treasury. <http://www.treasury.gov.ph> (both accessed 12 March 2010).

3.28.12 National government debt



Sources: CEIC Data Company; Bureau of the Treasury. <http://www.treasury.gov.ph> (both accessed 12 March 2010).

3.28.13 Saving and investment



Source: CEIC Data Company (accessed 30 March 2010).



# Singapore

Global headwinds buffeted this export-oriented economy in 2009. The slump in trade and dwindling capital flows knocked down private consumption and investment. Fiscal and monetary stimulus policies went some way to temper the contraction in GDP. Growth is forecast to rebound strongly this year, as the impact of the pickup in global trade and finance spreads through the economy. Inflation is expected to edge higher. The government, turning its attention to a decline in industrial productivity, will invest in upgrading the economy and its workforce.

## Economic performance

The world financial crisis and slump in global trade had a deep impact on this exceptionally open economy (exports of goods and services represent over 200% of GDP). From the first quarter of 2008 to the first quarter of 2009, GDP fell by 9.5%. By the fourth quarter of 2009, though, the economy was growing again on a year-on-year basis (Figure 3.29.1), the recovery fueled by a rebound in exports. That late lift contained the 2009 full-year GDP contraction to 2.0%, not as severe as had been expected earlier in 2009.

Singapore's total trade in goods and services in volume terms fell by nearly 12% last year, the sharpest fall in at least 3 decades. The slump in trade, which started in 2008, sent shockwaves through the economy, battering most manufacturing and services industries, weakening the labor market, and severely denting consumer and business confidence. Private consumption and investment fell from 2008's levels.

Private consumption declined by 0.5%, undermined by the fall in consumer confidence, job layoffs, and lower incomes. (Per capita gross national income in nominal terms fell by 6.5%.) To counteract the weakness in private consumption, the government ramped up its expenditure, lifting public consumption by 8.3%.

The biggest drag on GDP on the demand side came from investment which, measured as gross fixed capital formation, fell by 3.1% in 2009 (Figure 3.29.2), carried down by a 5.3% drop in private investment. That latter decline more than offset the impact of a 14.4% rise in public sector investment, as the government accelerated infrastructure works, such as mass transit rail lines. While investment in equipment fell by 14.6%, that in construction rose by 13.1%, largely stemming from the public infrastructure spending and the continued building of the large casino-entertainment projects, Resorts World Sentosa and Marina Bay Sands.

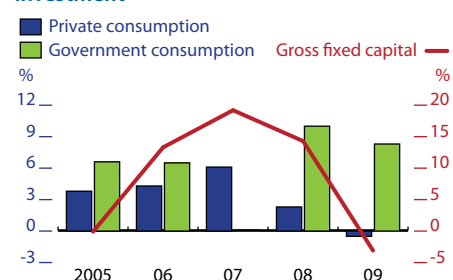
The economic rebound in the fourth quarter, when GDP rose by 4.0% year on year, was spurred by a 4.5% rise in real exports (imports fell by 1.8%). Higher exports and a generally better international environment

3.29.1 GDP and export growth



Source: CEIC Data Company (accessed 11 March 2010).

3.29.2 Growth in consumption and investment



Source: CEIC Data Company (accessed 11 March 2010).

raised consumer and investor sentiment—fixed investment increased by 8.3% and consumption by 6.2% in the October–December period.

On the production side, weakness in domestic demand and a fall in tourist arrivals caused wholesale and retail trading to contract by 9.1%, and transport and storage to fall by 7.0% (Figure 3.29.3). The freezing up of international financial markets and investment flows was reflected in a 1.4% decline in financial services. Manufacturing production, which is heavily export oriented, fell by 4.1%. However, construction expanded by 16.0%, a third consecutive year of double-digit growth. Business services and information and communications grew slightly.

Employment fell by about 14,000 in the first half of 2009, predominantly in manufacturing, raising the seasonally adjusted unemployment rate to 3.3% for the period. When economic activity rebounded in the fourth quarter, employment also started to recover, particularly in services industries such as retailing and hotels. The unemployment rate fell to 2.1% in the fourth quarter.

The weakness in domestic demand, coupled with lower prices for oil and commodities, pulled inflation down to just 0.6% in 2009, from 6.6% in 2008. The consumer price index fell for 7 months, year on year (Figure 3.29.4).

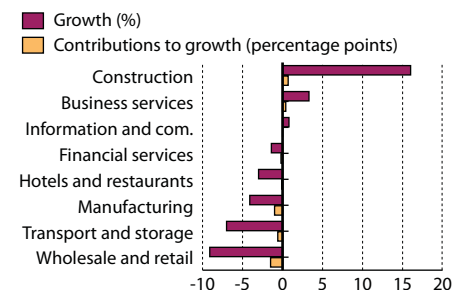
In the context of low inflation and contracting GDP, the Monetary Authority of Singapore maintained the effective loosening of monetary policy that it adopted in October 2008 by allowing a depreciation of the nominal effective exchange rate. The Monetary Authority sets policy by managing the Singapore dollar in a trade-weighted band against a basket of currencies, rather than setting interest rates. In October 2008 it changed a 3-year-old policy of allowing a “modest and gradual” appreciation of the Singapore dollar against the currency basket to a target of zero appreciation, and in April 2009, lowered the center of the trade-weighted band. Liquidity in the economy remained high and broad money (M2) grew by a relatively strong 11.3% in 2009.

An expansionary budget for FY2009 (ended 31 March 2010) included a S\$20.5 billion stimulus package. Notable measures included a Jobs Credit Scheme to curb layoffs by offering employers a temporary wage subsidy, and a Special Risk-Sharing Initiative to assist firms facing a squeeze on credit with access to funds. Other elements of the package were cuts in corporate income taxes and rebates on personal income taxes, and additional assistance for low-income earners. The programs performed fairly well in stimulating the economy.

As it turned out, spending on several stimulus measures fell short of the budgeted amounts, in large part because the economic performance turned up earlier than expected. Similarly, revenue held up better than previously anticipated. The overall fiscal deficit was equivalent to 1.1% of GDP, compared with a small surplus in 2008.

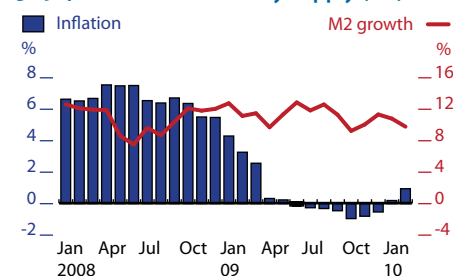
In United States dollar terms, merchandise imports dived by 23.3% last year, outpacing a 20.3% drop in merchandise exports (weak domestic demand cut imports, as did the slump in manufacturing industries, which use mainly imported materials). The decline in trade bottomed in the first quarter of 2009 (Figure 3.29.5). External balances for goods, services, and income remained in surplus, so that the current account surplus was barely changed from 2008, at 19.1% of GDP. International reserves rose by about 8% to US\$187.8 billion, or 7 months of import cover.

### 3.29.3 Contributions to growth (supply), selected sectors, 2009



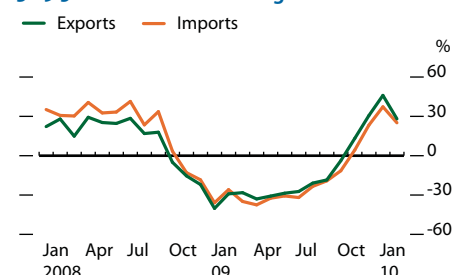
Source: Singapore Ministry of Trade and Industry, 2009. *Economic Survey of Singapore*. <http://www.singstat.gov.sg>

### 3.29.4 Inflation and money supply (M2)



Source: CEIC Data Company (accessed 24 March 2010).

### 3.29.5 Merchandise trade growth



Source: CEIC Data Company (accessed 30 March 2010).

## Economic prospects

The recovery in world trade projected in ADO 2010 and pickup in financial flows bode well for Singapore's outlook. In particular, the economy will benefit from the V-shaped recovery in Asia, a region that accounted for about 60% of Singapore's total exports in 2008 (Figure 3.29.6). The share of exports shipped to industrial economies, including Japan, was about 30%.

Merchandise exports surged by 35% and imports by 31% on a customs basis in the first 2 months of 2010, from a relatively low base in the prior-year period. Stronger external demand for goods and services will have spillover effects throughout the economy. Indeed, manufacturing production rose by just over 29% in the first 2 months of this year.

Fiscal policy has shifted focus from dealing with the recession and the immediate recovery to the medium- and long-term goals of upgrading the economy and reducing dependence on foreign labor. The fiscal stimulus is being gradually removed. The Jobs Credit Scheme will be phased out by the third quarter of 2010 and the program to help firms obtain credit will finish by year-end. The FY2010 budget allocates more for education and research and development programs aimed at raising productivity. The fiscal deficit is expected to be similar to last year's outcome, at 1.1% of GDP. Monetary policy is expected to remain generally accommodative this year.

Investment is forecast to rebound in 2010, stimulated by the better global trade and financial climate and an accommodative monetary environment. Business confidence strengthened in the second half of 2009 (Figure 3.29.7). In particular, investment is expected to strengthen in financial and business services, tourism, and manufacturing. Construction investment will be supported by strong demand for residential property and the infrastructure projects (the casino-entertainment projects were largely completed in early 2010).

Private consumption will recover from last year's weakness, benefiting from growth in employment and incomes and from the income effect of higher equity and property prices. Net exports are expected to contribute to GDP growth in the forecast period.

Taking these factors into account, GDP is forecast to rebound to show 6.3% growth in 2010 (Figure 3.29.8), and to expand by about 5.0% in 2011 (the pace easing because of 2010's higher base). The outcome in both years depends heavily on the global economic recovery.

The expected level of GDP for the next 2 years is below the output trend since 2001 (Figure 3.29.9). Upward pressure on domestic prices from the demand side will therefore remain subdued. Inflation is forecast to speed up a little to 2.3%, on rising international prices for oil and commodities and the low base set in 2009. (In the first 2 months of 2010, the consumer price index rose by an average of 0.6%.) Inflation is forecast to slow to about 2.0% in 2011 as the low-base effect dissipates.

The rebounds in domestic demand and in exports will likely mean slightly stronger growth in merchandise imports (21.0%) than exports (19.5%) this year. This variation will contribute to a narrowing in the current account surplus as a share of GDP, to a still-substantial 18.0%. In 2011, this surplus is likely to rise, to about 21.0% of GDP.

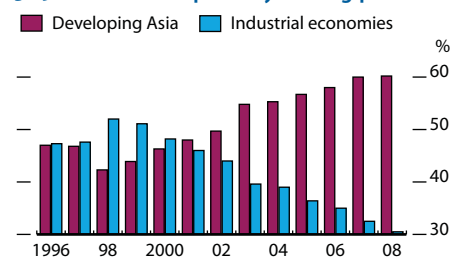
Strong demand for residential property in the second half of 2009,

### 3.29.1 Selected economic indicators (%)

	2010	2011
GDP growth	6.3	5.0
Inflation	2.3	2.0
Current account balance (share of GDP)	18.0	21.0

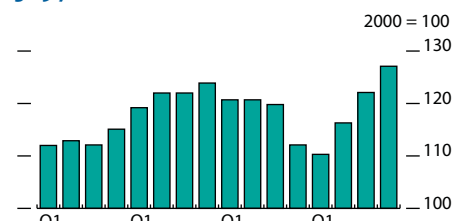
Source: ADB estimates.

### 3.29.6 Share of exports by trading partner



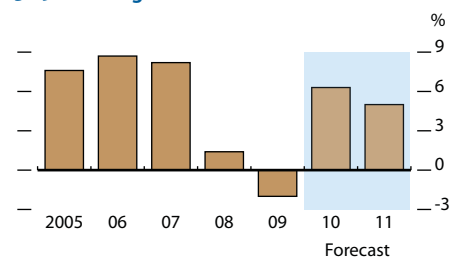
Source: CEIC Data Company (accessed 11 March 2010).

### 3.29.7 Business confidence index



Source: CEIC Data Company (accessed 11 March 2010).

### 3.29.8 GDP growth



Sources: Singapore Department of Statistics. <http://www.singstat.gov.sg> (accessed 11 March 2010); ADB estimates.

accompanied by rising prices (Figure 3.29.10), was driven both by an upturn in market confidence as the domestic outlook brightened, and by inflows of foreign capital. The government moved to contain speculation in housing by imposing new stamp tax on homes sold within 1 year of purchase and by capping housing loans at 80% of a property's value. A significant number of housing projects are in the construction stage, which indicates that supply will pick up next year. This should ease pressure on prices, provided that speculation is contained.

## Development challenges

Labor productivity has declined over recent years in construction, manufacturing, and some services, especially business services, hotels and restaurants, and wholesale and retail trading (Figure 3.29.11).

A government-appointed Economic Strategies Committee noted in a report this year that Singapore's productivity in manufacturing and services, in absolute terms, is 55%–65% that in the United States and Japan. Hong Kong, China's productivity levels rank higher than Singapore's in construction and services.

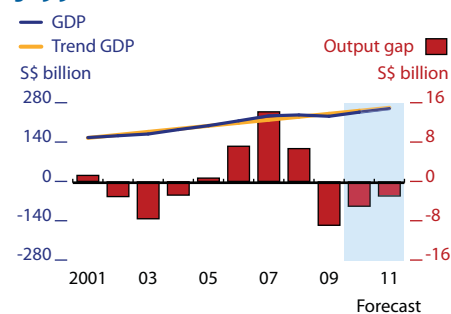
The report observed that a large part of Singapore's average 5% economic growth over the past decade had been achieved through expansion of the labor force, including foreign workers, who now make up almost one-third of the workforce. GDP growth averaged 8% from 2004 to 2007, a period when the increase in foreign workers accelerated. However, average labor productivity tends to decline if industries employ an increasing number of workers, while keeping other factors of production, and levels of innovation, relatively steady. Easy access to low-cost labor from abroad provides little incentive for Singapore's employers to invest in productivity improvements, the report noted. Moreover, there are "physical and social limits" to the number of foreign workers the country can accommodate.

Responding to the report, the government in February this year laid out a strategy to drive growth through a greater focus on productivity, rather than on an increasing labor force. It sets a goal of achieving productivity increases of 2%–3% a year over the next decade, more than double the rate of the past decade. This higher rate, even with slower labor force expansion, would enable the economy to grow by 3%–5% a year and to raise real incomes by one-third in 10 years. The FY2010 budget committed to spend S\$5.5 billion over the next 5 years on training, on tax incentives for companies to upgrade and automate operations, on stimulating research and development, and on encouraging mergers and acquisitions.

At the same time, the government will increase levies on companies that employ low-skilled foreign workers, to encourage them to put more emphasis on productivity improvements by making labor more costly. The levies will be increased gradually over several years, starting in July 2010.

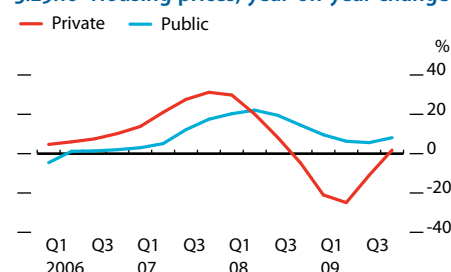
Although the higher levies are to be phased in, there is a risk that this more restrictive approach could increase domestic production costs, given that the labor market is tight. That could put a strain on companies still straining to recover from recession.

3.29.9 Actual versus trend GDP



Sources: Singapore Department of Statistics. <http://www.singstat.gov.sg> (accessed 11 March 2010); ADB estimates.

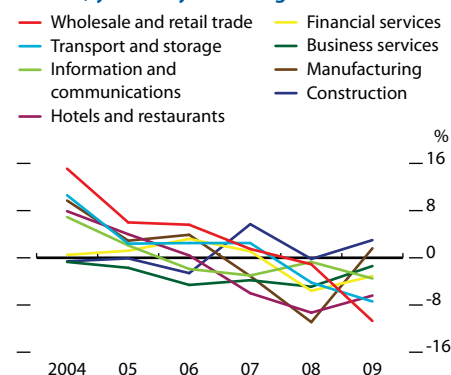
3.29.10 Housing prices, year-on-year change



Note: Public refers to resale price index of housing administered by the Housing Development Board.

Source: CEIC Data Company (accessed 11 March 2010).

3.29.11 Labor productivity in selected sectors, year-on-year change



Sources: Singapore Department of Statistics. 2009. *Yearbook of Statistics of Singapore*; 2010. *Monthly Digest of Statistics*. February. <http://www.singstat.gov.sg>

# Thailand

Fractious politics aggravated the impact of the global recession on this economy, which contracted steeply in 2009 despite expansionary fiscal and monetary stances. Consumer prices fell over the year. The pace of recovery is expected to be moderate in 2010, in light of political tensions that will likely cause some delays in a government infrastructure program. Inflation will quicken and the current account is likely to record a surplus. Economic growth is forecast to pick up in 2011, based on stronger exports and investment.

## Economic performance

The impact of the global recession, coupled with a fractious domestic political setting, caused this economy to contract by 2.3% in 2009, the deepest decline in Southeast Asia last year. A steep slide in exports led to cutbacks in manufacturing and in investment. Then, antigovernment street protests in April, coming after a long period of rising political tensions, eroded consumer sentiment and aggravated a decline in tourism prompted by recession in industrial countries. GDP contracted for 4 consecutive quarters year on year, then sprang back in the fourth quarter of 2009 (Figure 3.30.1).

Manufacturing production fell by 5.1% in 2009, a result of the slide in export demand. Worst-hit industries were those making capital goods and higher-technology products such as automobiles and electrical appliances. These industries led the recovery in the fourth quarter, when export demand rebounded. Construction activity started to pick up in the second quarter as the government accelerated public works under two fiscal stimulus packages aimed at cushioning the impact of the global forces on the economy. For the full year, though, construction output was flat. Total industrial output fell by 4.3% (Figure 3.30.2).

Weak consumer confidence and declining tourist arrivals contributed to a 0.4% fall in services output last year. Tourist arrivals fell for most of the year, then rebounded in the fourth quarter, but still showed a full-year decline of about 3%. The services subsectors of hotels and restaurants and transport and communications fell particularly sharply from the fourth quarter of 2008 through the third quarter of 2009. Even agriculture had a bad year in 2009, with production down by 0.6% owing, on the one hand, to price declines, notably for paddy, cassava, maize, and natural rubber, and, on the other, to pest infestations.

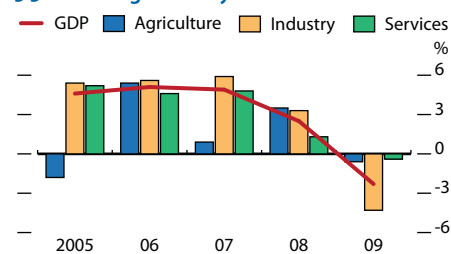
Private consumption contracted by 1.1% in 2009, crimped, particularly in the first half, by the weaker labor market, declines in farm incomes, and the political strife. Consumer sentiment improved in the second half, when the government rolled out fiscal stimulus measures, employment started to pick up, and prices for farm products bottomed. In contrast

3.30.1 Quarterly GDP growth



Source: CEIC Data Company (accessed 23 February 2010).

3.30.2 GDP growth by sector



Source: CEIC Data Company (accessed 23 February 2010).



to private consumption, public consumption spending rose by 5.8% in 2009, as the government ratcheted up its outlays, including the stimulus measures.

Investment was a major drag on GDP in 2009. Fixed capital investment fell by 9.0%, and the private sector segment dropped even more sharply, by nearly 13% (government fixed investment rose by about 3%). Fixed investment in construction was virtually flat, but that in equipment fell by 13.4% as companies cut back on expansion and reequipment plans. The contraction in private fixed investment slowed in the fourth quarter (Figure 3.30.3).

Net exports were positive in 2009 because real imports fell much more sharply than exports. An expansionary fiscal policy played an important role in moderating the recession. The first stimulus package of B116 billion (\$3.4 billion) was implemented from March 2009. It included monthly cash payments of B2,000 a person for about 9 million low-income earners, assistance for the aged, and extra spending on skills training and public health programs. Businesses received tax breaks for small and medium-sized firms and the property and tourism industries, and certain businesses were given access to concessional loans. Altogether, this package was valued at the equivalent of 1.3% of GDP.

A second stimulus package that could cost as much as B1.43 trillion (\$42 billion) is being implemented over 3 fiscal years starting from October 2009. This program, named Thai Khem Kaeng, or Strong Thailand, covers public investment mainly in infrastructure such as transportation, water, and energy, as well as extra funding for health, education, and tourism. The planned outlays represent about 5% of GDP for each of the 3 years.

State enterprises are responsible for driving around one-third of the infrastructure program over the 3 years. Most of the funding for the infrastructure will be off budget, sought from domestic debt markets and public-private partnerships, supplemented by budget funds. However, disbursement of the Thai Khem Kaeng program got off to a slow start in the fourth quarter of 2009.

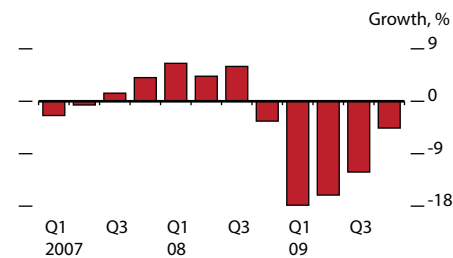
Additional government spending in FY2009, at a time of subdued growth in revenue, widened the budget deficit to the equivalent of 4.3% of GDP, from just 0.4% in FY2008.

Lower prices for imported oil and commodities, and weak domestic demand, brought down inflation in 2009 from high levels in the prior year. Government concessions introduced in 2008 to help those on low incomes (such as free electricity, water supply, and public transportation) contributed to downward pressure on prices. The consumer price index fell for much of the year, then turned up late in the year (Figure 3.30.4) when oil prices rose.

Fading inflation and the weak economy prompted the Bank of Thailand to cut its policy interest rate by 250 basis points, to 1.25%, between early December 2008 and April 2009. Credit growth was sluggish, though—private credit rose by only 3% in 2009, and most of that was for households. The government directed state-owned financial institutions to step up their lending, particularly to small businesses facing a credit squeeze.

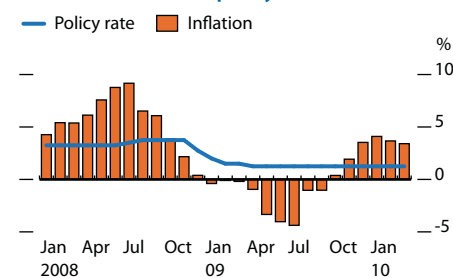
Merchandise exports fell by 13.9% in US dollar terms last year,

### 3.30.3 Private fixed investment



Source: CEIC Data Company (accessed 23 February 2010).

### 3.30.4 Inflation and policy rates



Source: CEIC Data Company (accessed 8 March 2010).

reflecting the slump in external demand (Figure 3.30.5), especially in industrial countries (exports to the People's Republic of China and India were little changed from 2008). Sharp falls were recorded in both manufactured and agricultural exports. The slide hit bottom in the first half, and by November exports had rebounded on a year-on-year basis. Imports tumbled by nearly 25% in 2009, a result of the slump in manufactured exports (which require imported raw materials), weak domestic demand, and lower prices for oil and commodities.

Partly as a consequence of the drop in imports, the trade balance showed a record surplus of \$19.4 billion. With balances in services, income, and transfers close to 2008 levels, the trade surplus pushed up the current account surplus to the equivalent of 7.7% of GDP. Net outflows in the capital account slowed last year from 2008 to \$1.3 billion. By year-end, foreign reserves were up by nearly 25% to \$138.4 billion, or 10.6 months of import cover (Figure 3.30.6).

Large current account surpluses during the year contributed to a 4.1% appreciation of the baht against the US dollar in 2009 (Figure 3.30.7), and a rise of about 0.4% in its nominal effective exchange rate. The Bank of Thailand in August eased regulations on Thai investment in foreign securities to facilitate capital outflows and ease upward pressure on the baht. The Thai stock market hit its nadir in March 2009 and rallied strongly (up by 63% over the year), in line with other Asian markets.

Nevertheless, Standard & Poor's lowered Thailand's local currency debt rating from A to A- in April 2009, while Fitch downgraded the long-term foreign currency rating to BBB that month, on the ground that political uncertainty undermined the ability of the government to implement policies.

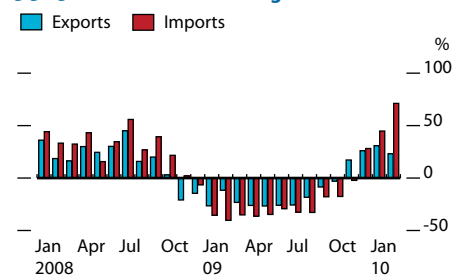
## Economic prospects

The forecasts assume that there will be no severe political disruptions in the next 2 years, and that national elections to be held later in 2010 will go smoothly.

It is also assumed that a serious legal wrangle, which led to the suspension of \$12 billion of projects at the Map Ta Phut industrial estate on Thailand's eastern seaboard, and has created uncertainty about environmental regulations, will be resolved soon. The new Thai constitution that came into effect in 2007 requires that certain industries conduct health impact assessments on new projects. But laws to implement this provision were not put in place and the assessments not done. In a case backed by residents and environmental activists, a Thai court ruling in September 2009 suspended the projects, which are mainly in petrochemicals, steel, and power plants. Some were later allowed to proceed, but most remained suspended in March 2010. The government is working to resolve the problem so the projects can proceed this year, and so new investors face a more certain regulatory environment.

On this basis, the economy is expected to recover this year, but probably at the mild pace of about 4.0% (Figure 3.30.8), even though it comes off a low base (GDP in 2009 was barely above that of 2007). Growth is forecast to pick up to 4.5% in 2011 as exports and investment strengthens.

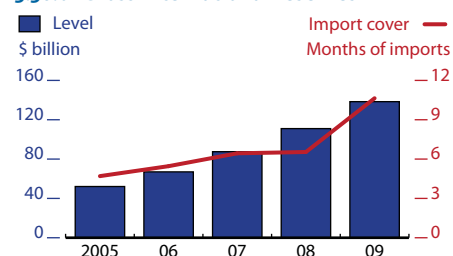
### 3.30.5 Merchandise trade growth



Note: Based on custom's data.

Source: CEIC Data Company (accessed 31 March 2010).

### 3.30.6 Gross international reserves



Sources: Bank of Thailand. <http://www.bot.or.th> (accessed 8 March 2010); *Asian Development Outlook* database.

### 3.30.7 Exchange rate



Source: Bloomberg (accessed 31 March 2010).

### 3.30.1 Selected economic indicators (%)

	2010	2011
GDP growth	4.0	4.5
Inflation	3.5	3.0
Current account balance (share of GDP)	4.0	2.0

Source: ADB estimates.

The rebound in exports that started late last year will accelerate in 2010, boosting manufacturing production, employment, and investment. Industries like electronic products, household appliances, and motor vehicles are benefiting from inventory restocking in industrial economies and strong growth in many Asian countries.

Private consumption is forecast to rise by about 3% this year. It is getting support from growth in employment and wages (minimum wages were raised in January 2010), increases in rural incomes based on higher prices for agricultural products, and rising consumer confidence (Figure 3.30.9). Sales of automobiles soared by just over 60% in January, and motor cycle sales jumped by 24% (from a low base in the prior-year period).

Investment will recover from last year's low levels, and is expected to move up by about 6% in 2010, quickening in 2011. Stronger export demand has led to a rise in industrial capacity utilization (Figure 3.30.10), which, if continued, will pave the way for an expansion of capacity in industries such as food processing, petroleum products, and construction materials.

Interest rates are expected to stay relatively low, and growth in credit is edging up this year. The infrastructure program should stimulate private investment, particularly in construction and buildings materials. The Board of Investment reported a surge in applications for investment incentives late last year, and the index of business confidence has turned up. Nevertheless, the recovery in investment will be constrained for at least part of 2010 by uncertainties over the election and the Map Ta Phut issue.

Political protests in the streets of Bangkok during March and April 2010 set back the recovery in tourism, but arrivals for 2010 are still expected to rise from last year's levels.

Fiscal policy will be expansionary this year, with the extent of the stimulation depending in large part on the ability to disburse budget and infrastructure funds. The government has budgeted for a reduction in spending in FY2010 and an increase in revenue, with a deficit target of 2.7% of GDP. The budget will be supplemented by the off-budget spending on the Thai Khem Kaeng program. Furthermore, the budget proposed for FY2011 (starting in October 2010) includes a significant increase in spending over the FY2010 level.

However, disbursement of the Thai Khem Kaeng program got off to a slow start. Of B486 billion (\$14.5 billion) allocated for FY2010, only about 22% was disbursed in the October 2009–March 2010 fiscal half-year. The government will need to accelerate disbursement of the infrastructure program if it is to meet its target spending for FY2010.

Political tensions have caused delays as meetings on investment projects were postponed. The government is likely to be cautious in approving projects and disbursing funds during periods of disruption. Cases of alleged corruption have delayed disbursement in health and education projects.

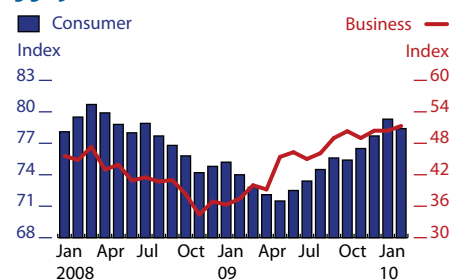
Merchandise exports are forecast to increase by 16.0% in 2010 and merchandise imports by 26.0% from last year's low base. (Customs based exports rose by 27% and imports by 58% in the first 2 months of 2010.) The trade surplus is projected to decline and the current account surplus will fall to a still sizeable 4.0% of GDP this year.

### 3.30.8 GDP growth



Source: Asian Development Outlook database.

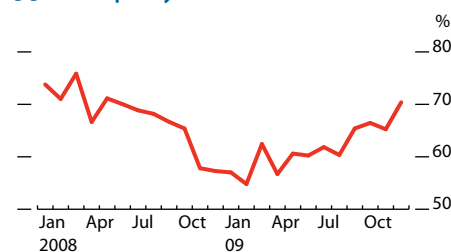
### 3.30.9 Consumer and business attitudes



Note: A reading of less than 100 for consumer confidence and less than 50 for business sentiment denotes a deterioration.

Source: CEIC Data Company (accessed 31 March 2010).

### 3.30.10 Capacity utilization rate



Source: Bank of Thailand. <http://www.bot.or.th> (accessed 5 March 2010).

Inflation is forecast to rise to average about 3.5% in 2010 (Figure 3.30.11), due mainly to higher food and fuel prices. The rate for the first quarter was 3.7%, but core inflation, excluding food and energy prices, remained within the central bank's target range. The government again extended the fee-free electricity, water, and public transportation for low income earners, this time through to June 2010.

The Bank of Thailand is expected to gradually move its policy interest rate up to more normal levels, from the exceptionally low level set in 2009. It also appears likely to favor a moderate appreciation of the baht against the US dollar, in line with other Asian currencies, as a means of keeping inflation in check. In February 2010 the central bank eased foreign-exchange rules on overseas investment and hedging transactions in a move that is expected to facilitate capital outflows and ease upward pressure on the baht.

Downside risks to the forecasts from domestic factors are headed by the political tensions and uncertainty, which, if prolonged could further delay fiscal implementation and hamper policy making in general. More significant disruptions would hurt consumer and investor sentiment, and fiscal revenue. On the other hand, a more settled political situation and resolution of the Map Ta Phut issues would likely spur stronger growth.

## Development challenges

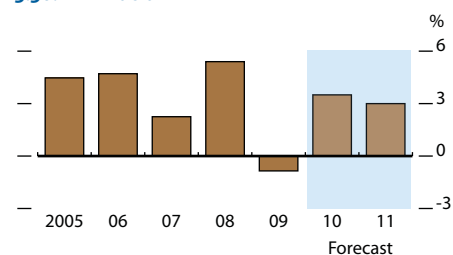
Investment in infrastructure has lagged during the past 4 years, in large part a result of the political turbulence. Thailand's rank in terms of infrastructure in the 2009 IMD World Competitive Yearbook fell to 42 of 55 countries, from 39 in the previous year. A \$40 billion "megaprojects" infrastructure plan prepared in 2005 was only partly implemented. The challenge is to do better with the Thai Khem Kaeng program, which also involves about \$40 billion in projects, although they are mostly smaller and more manageable than the previous plan.

Reforms in the regulatory environment to encourage public-private partnerships would increase the private sector's contribution to infrastructure. The establishment of a high-level committee on public-private partnership issues chaired by the deputy prime minister has been an important step in this direction. What is needed now are clear policy framework guidelines for assessing bankable projects, and transparent regulations and procedure for private sector participation.

The government has the scope to borrow to fund much of its contribution to infrastructure. Public debt is at manageable levels—it rose last year to the equivalent of 43.9% of GDP (90% domestic) and is projected to peak at 58.5% in 2012 (Figure 3.30.12), then decline as economic growth accelerates. Total external debt has declined to about 27% of GDP, from over 70% a decade ago, and foreign reserves have increased by \$100 billion in this period.

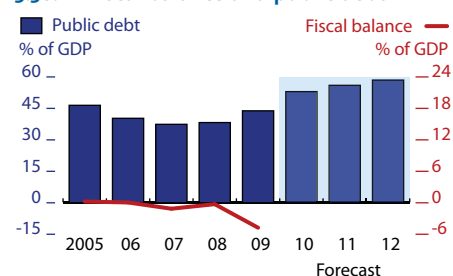
Still, the fiscal deficit and debt need to be reined in when economic growth is stronger and sustained. (At this stage, the government aims to run budget deficits through 2014.) Broadening the tax base would be helpful in this regard.

3.30.11 Inflation



Source: Asian Development Outlook database.

3.30.12 Fiscal balance and public debt



Sources: Bank of Thailand. <http://www.bot.or.th> (accessed 8 March 2010); Asian Development Outlook database.

# Viet Nam

Substantial and timely policy responses helped the economy weather the global recession, allowing for reasonably high economic growth in 2009. GDP growth is projected to accelerate in 2010 and 2011, although not to the rapid rates seen in 2001–2007. Devaluation and inflation pressures built up in late 2009, in part a result of economic stimulus policies. Inflation is forecast to accelerate in 2010. The authorities face a challenge to ratchet up economic growth while safeguarding macroeconomic stability.

## Economic performance

Growth slowed sharply in the first quarter of 2009 as the impact of the global recession intensified. Spurred by a strong fiscal and monetary stimulus, the economy picked up over the rest of the year (Figure 3.31.1), putting full-year growth at 5.3%, the slowest since 1999.

On the demand side, the expansionary fiscal and monetary policies supported both consumption and domestically financed investment. Net exports improved because imports fell more steeply than exports (though the country is still a net importer in real terms). But foreign-financed investment declined owing to a downturn in foreign direct investment (FDI) inflows.

As for the sectors of production, agriculture (including forestry and fisheries) expanded by 1.8%, weaker than its average growth of about 4% in 2004–2008. The main cause was a poor summer–autumn rice harvest, which largely offset an abundant winter–spring harvest.

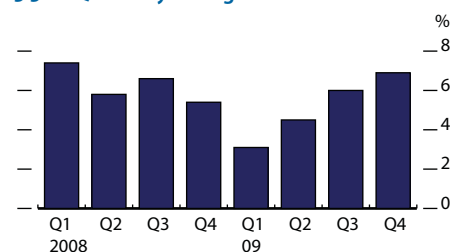
Industry grew by 5.5%, slowing from rates of about 10% in most recent years. Declining demand for exports as a result of the global recession acted as a drag on manufacturing production. However, construction got a boost from the government’s policy stimulus, and output of crude oil rose by 9.8% to 16.4 million metric tons, as new fields came on stream.

Services expanded by 6.6%, the pace easing a little from recent years. The expansionary policies and generally buoyant consumption bolstered financial services and domestic trade. At the same time, declines in foreign trade and tourist arrivals hurt the transport industry as well as tourism-linked services such as hotels.

Businesses shed labor early in 2009 as the economy sagged, then, as many reversed course, employment picked up in the second half. The proportion of people living below the official poverty line declined to an estimated 12.3% in 2009 (from 13.4% in 2008), despite the global recession, suggesting the positive impact of government support programs.

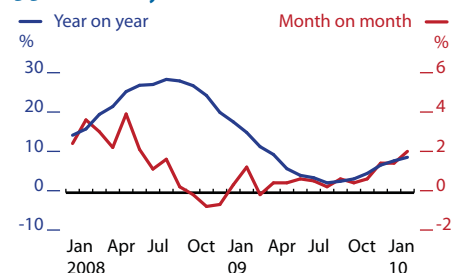
Inflation pulled back abruptly last year, suppressed by the domestic

3.31.1 Quarterly GDP growth



Source: General Statistics Office of Viet Nam. <http://www.gso.gov.vn> (accessed 15 March 2010).

3.31.2 Monthly inflation



Source: General Statistics Office of Viet Nam. <http://www.gso.gov.vn> (accessed 15 March 2010).



economic slowdown and lower world commodity prices. Year-average inflation slowed to 6.9% from 23.0% in 2008 (Figure 3.31.2). Toward the end of 2009, though, rapid growth of money supply and a depreciation of the exchange rate stoked inflation again, and by March 2010 the consumer price index was rising at a year-on-year rate of 9.5%.

When the global recession hit the economy in late 2008, the State Bank of Viet Nam (SBV), the central bank, loosened monetary policy significantly. It slashed the base rate from 14.0% in October 2008 to 7.0% in February 2009 and reduced the reserve-requirement ratio for banks' domestic currency deposits with a less than 1 year maturity from 11.0% in October 2008 to 3.0% in March 2009. Late in 2009, however, the SBV raised the base rate to 8.0% (Figure 3.31.3) in an effort to reduce devaluation pressure on the dong.

Lending interest rates fell to single digits in early 2009. The lower rates, coupled with interest-rate subsidies launched in February 2009 as part of the stimulus package, prompted rapid growth of credit and money supply. Bank credit to the economy expanded by 39.6% and M2 money supply by 29.0% in 2009 (Figure 3.31.4). Many banks started experiencing a shortage of liquidity in late 2009, partly a result of a slowdown in growth of deposits due to expectations of rising inflation. A subsequent tightening of bank credit continued into 2010.

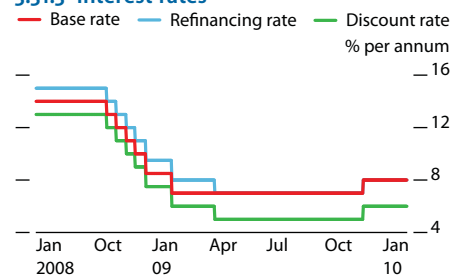
Expansionary fiscal measures adopted in the first half of 2009 included tax reductions and deferrals, additional financial assistance to poor households, a 4 percentage point interest-rate subsidy on short- and medium-term bank loans for certain sectors, and a hike in capital expenditure. The measures, as approved, totaled the equivalent of \$8.5 billion, or 8.8% of GDP. About 70% of these measures were actually implemented, given financing and other constraints. Still, the overall fiscal deficit jumped to an estimated 11.8% of GDP, from 4.1% in 2008 (Figure 3.31.5).

Viet Nam's foreign exchange market remained turbulent in 2009. Declines in exports, tourist arrivals, remittances, and capital inflows reduced the supply of foreign exchange, while rapid growth of credit increased demand for it. The shortage of foreign currency in the formal market that had emerged in late 2008 persisted, despite extensive interventions by the central bank. The SBV widened the dong's trading band against the United States (US) dollar to 5% around its reference rate in March 2009, but kept the rate itself roughly unchanged until November 2009 (Figure 3.31.6).

Sales of foreign exchange by the central bank, as well as a deterioration in the balance of payments, cut into official foreign reserves, raising expectations of a devaluation. Exporters began hoarding foreign currency, and capital flight (mostly in the form of speculative imports and residents shifting their portfolio toward gold and US dollar-denominated assets) intensified. The spread between the black market rate and the SBV's reference rate increased to more than 15% in November 2009.

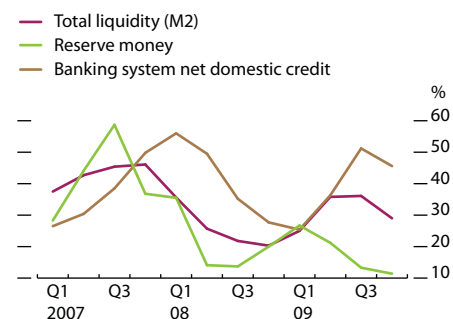
In response, the SBV devalued its reference rate by 5.4% and narrowed the trading band to +/-3.0% in November 2009. In February 2010, it devalued the reference rate by another 3.4%, lowered the reserve-requirement ratio for foreign exchange deposits, and introduced a 1%

### 3.31.3 Interest rates



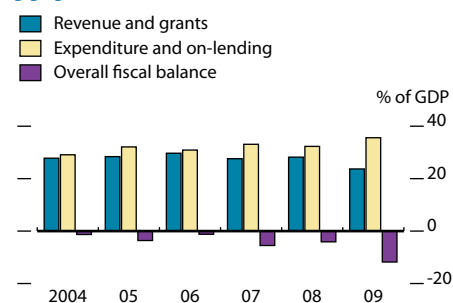
Source: State Bank of Viet Nam.

### 3.31.4 Growth of money and banking indicators



Source: State Bank of Viet Nam.

### 3.31.5 Government finance



Note: Data include expenditure financed by official development assistance and by issuance of sovereign debt but exclude amortization of debt and lending through the Viet Nam Development Bank and Bank for Social Policies.

Source: Ministry of Finance of Viet Nam.

cap on dollar deposit rates for non-individuals. The SBV also ordered that gold-trading floors in Viet Nam and residents' gold trading accounts abroad be closed by 30 March 2010. The government instructed several large state-owned enterprises to sell their foreign exchange (to the government). These measures reduced capital flight and improved the availability of foreign exchange. The spread between the black market rate and the SBV's reference rate decreased to 3.5% in February 2010.

Weaker external demand reduced exports in 2009, particularly for rice, coffee, rubber, and shoes. Total exports fell by 8.9% in US dollar terms, and imports by 13.3%, the latter brought down by weaker economic activity and lower global commodity prices. (The start of domestic oil refining contributed to declines in exports of crude and imports of refined products.)

A sharply narrower trade deficit reined in the current account deficit to 7.4% of GDP in 2009 from 11.8% in 2008 (Figure 3.31.7). The overall balance of payments recorded a deficit, and gross official reserves dropped to an estimated \$15 billion (equivalent to 2.8 months of imports, the lowest since 2004 on this basis) (Figure 3.31.8), from \$23.0 billion a year earlier.

In the business environment, Viet Nam's ranking in the World Bank's *Doing Business 2010* report declined to 93 of 183 countries listed, from 87 in 2008. Aware of shortcomings, the government took steps to improve governance and the business environment in 2009. On the former, it adopted a national anticorruption strategy and consolidated most public debt management in one department within the Ministry of Finance.

On the latter, it strengthened the regulatory framework for small and medium-sized enterprises, simplified procedures for business registration, and eased some restrictions on foreign investment.

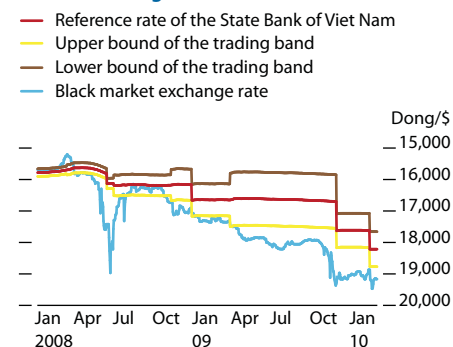
Equitization (partial privatization) of VietinBank was completed in 2009 and equitization plans for Vietnam National Petroleum Company and Vietnam Steel Corporation were approved in early 2010. Government efforts to reduce administrative procedures by about a third should benefit the business climate.

## Economic prospects

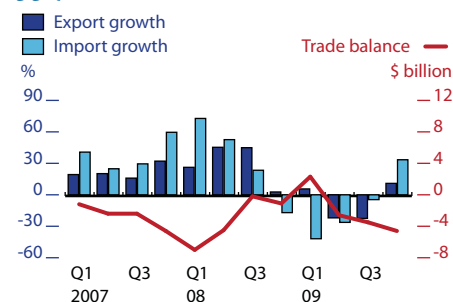
As Viet Nam completes the Socio-Economic Development Plan 2006–2010, aimed at raising the economy to middle-income status (Box 3.15.1), the challenge is to ratchet up economic growth while safeguarding macroeconomic stability.

Fiscal policy has been tightened somewhat: the 2010 budget targets a narrower overall fiscal deficit of 8.3% of GDP. On the monetary side, interest rate subsidies on short-term loans have been ended, but subsidies are maintained for medium-term loans to selected sectors at a reduced level of 2 percentage points. The central bank also removed interest rate caps on medium- and long-term loans in February 2010, enabling banks to raise lending rates. In addition to the increase in the central bank's base interest rate in late 2009, the authorities set a target

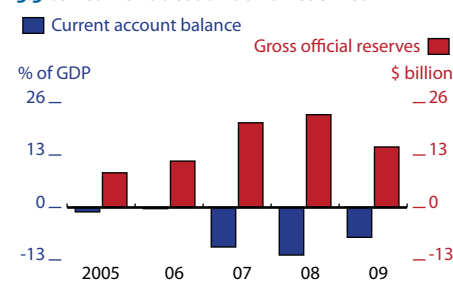
### 3.31.6 Exchange rates



### 3.31.7 Trade indicators



### 3.31.8 Current account and reserves



### 3.15.1 Achieving middle-income status

Under the World Bank's classification, developing countries graduate from "low income" to "lower middle income" when per capita gross national income reaches \$976. In Viet Nam it stood at \$890 in 2008, according to the World Bank.

for credit growth in 2010 at 25%, below the actual growth rate of 39.6% last year.

Forecasts are based on the assumption that the government will do the following: tighten monetary and fiscal policies further during 2010 to limit inflation and devaluation pressures, and keep the policies moderately tight in 2011; not resort to administrative measures to control inflation; and maintain stability of the banking system.

On these assumptions, GDP growth is projected to accelerate to 6.5% in 2010 and to 6.8% in 2011 (Figure 3.31.9). Expected increases in remittance inflows and incomes will speed up growth of private consumption. Improvement and consolidation of global financial conditions will bring about an upturn in FDI inflows and foreign-financed investment. At the same time, growth of public consumption and domestically financed investment will moderate due to the decline in budget spending and tighter bank credit.

The strengthening of external demand is set to spur growth of agriculture and manufacturing in both 2010 and 2011. Oil output will likely stay at about 16.5 million metric tons in 2010 but slip in 2011 as output at old fields declines. Construction will be damped by the weakening of domestically financed investment. The services sector will benefit from the projected expansion of foreign trade and increase in tourist arrivals.

Inflation in 2010 is forecast to accelerate to average about 10.0%, on account of the rapid growth of money supply in 2009, the dong devaluations, and projected pickup in economic activity and world commodity prices in 2010. Inflation rose to 8.5% year on year in the first quarter of 2010. Assuming monetary and fiscal policies are tightened this year, inflation could ease to about 8.0% in 2011 (Figure 3.31.10).

Exports will pick up in 2010 as external demand strengthens. Tourism and remittance flows are projected to rise in line with improvements in the performance of industrial economies. However, imports will rise more than exports because of the projected acceleration of domestic growth and higher import prices.

Trade with the People's Republic of China is expected to expand rapidly now that a free trade agreement between the PRC and the Association of Southeast Asian Nations has come into force from 1 January this year.

On these factors, the current account deficit is forecast to widen slightly to 7.6% of GDP in 2010.

FDI inflows will rebound, as global financial conditions improve. Inflows of portfolio investment will likely remain small and outflows of short-term capital will probably moderate. The capital account is expected to be in surplus and the overall external position to be close to balance—provided that confidence about medium-term macroeconomic stability is restored—leaving official reserves little changed.

In 2011, an expected quickening of growth in exports, tourism, and remittances will pull the current account deficit back to about 5.5% of GDP (Figure 3.31.11). Capital inflows should also pick up as the global recovery gathers momentum. The overall balance of payments is expected to be in surplus in 2011, lifting official reserves.

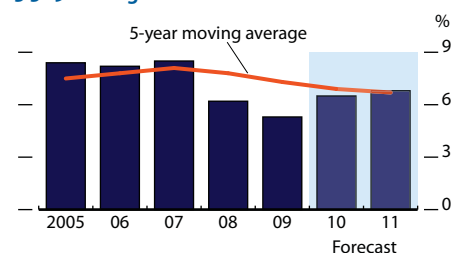
Domestic risks to the outlook are mostly on the downside. If

### 3.31.1 Selected economic indicators (%)

	2010	2011
GDP growth	6.5	6.8
Inflation	10.0	8.0
Current account balance (share of GDP)	-7.6	-5.5

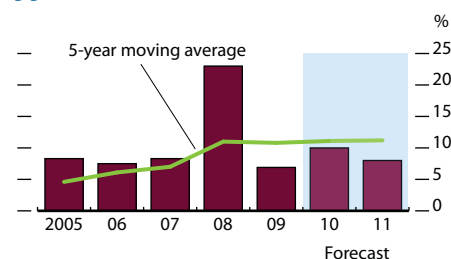
Source: ADB estimates.

#### 3.31.9 GDP growth



Source: Asian Development Outlook database.

#### 3.31.10 Inflation



Source: Asian Development Outlook database.

monetary and fiscal policies are not tightened adequately, inflation could spurt above the forecast rate and the current account deficit would deteriorate (GDP growth in 2010 would likely exceed the forecast). Sharply rising inflation and a worsening external position might well require an abrupt tightening of policies in 2011, pulling GDP growth below the forecast. Inevitably, two episodes of high inflation within 3 years (it averaged 23% in 2008) would erode business and consumer confidence, and hinder poverty reduction.

There have been some official proposals to use administrative measures such as price controls and import restrictions to curb inflation and devaluation pressures. Controls might limit price rises and imports, although they, too, might damage foreign investor confidence (and would likely lead to shortages).

## Development challenges

The end of subsidies on short-term loans and expected tightening of monetary policy will squeeze some borrowers and could lead to a rise in nonperforming loans, which would add to stresses in the banking system. It will be important to manage the slowdown in growth of credit and money supply through an orderly rise in interest rates, rather than a shortage of liquidity in the banking system. In this context, the elimination of caps on interest rates on medium- and long-term loans was a step in the right direction.

Shortages of foreign exchange in the formal market, which undermine confidence in the currency, fuel inflation, and hurt investment, should be addressed through a combination of tighter monetary policy and increased exchange-rate flexibility.

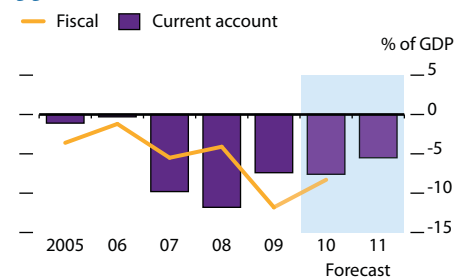
It will be important to improve the legal and institutional framework for monetary policy over the medium term. Maintaining price stability should be the primary goal of monetary policy, and the SBV should be given enough operational autonomy to pursue this goal effectively.

Large strides have been taken to raise the efficiency of the economy and ease supply-side constraints to growth, but more needs to be done. Infrastructure bottlenecks, deficiencies in the legal and regulatory framework for the private sector, and shortages of labor skills remain.

It is estimated that investment in infrastructure over the next 10 years will cost the equivalent of 11% of GDP each year. Only about half could be met from the budget. Clearly it would be helpful to create policy and legal frameworks that encourage private sector participation in infrastructure through public-private partnerships.

Improvements in economywide efficiency also require greater efforts to restructure state-owned enterprises, which employ a substantial proportion of available resources in this economy but do not always use them efficiently.

3.31.11 Fiscal and current account deficits



Source: Asian Development Outlook database.



# The Pacific

Fiji Islands

Papua New Guinea

Democratic Republic of Timor-Leste

Cook Islands

Kiribati

Republic of the Marshall Islands

Federated States of Micronesia

Nauru

Republic of Palau

Samoa

Solomon Islands

Tonga

Tuvalu

Vanuatu



# Fiji Islands

The pace of economic contraction accelerated last year owing to damage done by floods, the impact of the global recession on tourism and exports, and political uncertainties. Production of sugar, a major export, fell for a third year. The outlook remains subdued, with a small contraction in GDP forecast for 2010, but growth may resume at low levels in 2011. Inflation is expected to be moderate in both years. Reforms to encourage investment are a prerequisite for stronger and sustained growth.

## Economic performance

GDP contracted for a third year in a row in 2009, with the pace of contraction accelerating to an estimated 2.5% (Figure 3.32.1). In addition to the impact of the global recession, which hurt tourism and exports, severe flooding in January 2009 did damage to crops and infrastructure that cost around 5.3% of GDP, and further discouraged tourism.

These setbacks hit an economy already facing low investor confidence and a loss of assistance from traditional donors and multilateral agencies, resulting from a military coup in December 2006 that installed an interim government. The extended decline in GDP also reflects longer-term constraints to economic growth arising from problems with access to land, weaknesses in the public sector, and a decline in the important sugar industry.

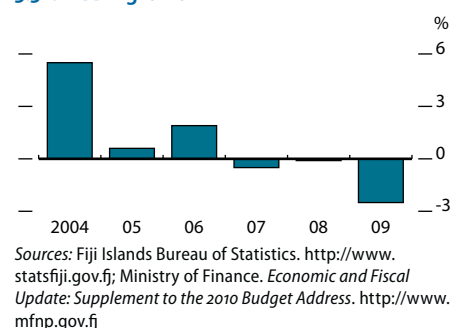
Official estimates show that most sectors contracted in 2009, including wholesale and retail trading by nearly 16%; transport, storage, and communications by just under 9%; agriculture and forestry by about 5%; and even education, public administration, and defense by about 3%.

Sugar production dropped further (Figure 3.32.2), by an estimated 19% in 2009, mainly owing to continuing land tenure issues that have led to a reduction in sugarcane output and technical failures in upgrading sugar mills. The financial viability of the mill upgrades depends on cane throughput of 4.2 million tons, but in 2009 only about 2.2 million tons was crushed.

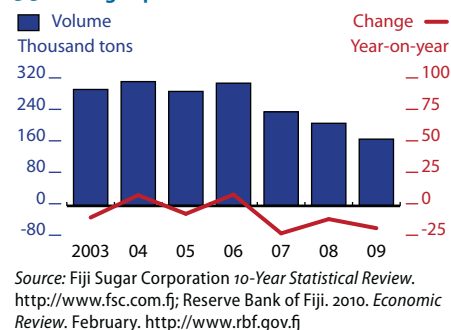
Tourist arrivals fell by about 25% early in 2009, reflecting weakness in global travel, the floods across a third of the country, and increased competition from other Pacific destinations. Full-year arrivals declined by nearly 8%, and tourism revenue fell by an estimated 12% on account of aggressive price discounting.

On the fiscal side, the interim government cut operating expenditure (nearly 80% of total outlays) by 10%, assisted by reductions in civil service jobs. Capital expenditure remained far below target (around half in 2009), due to deficiencies in civil service implementation capacity. While revenue fell by 5.6% due to the fall in economic activity, the aggressive cuts in spending kept the budget deficit to 2.5% of GDP, or below target.

3.32.1 GDP growth



3.32.2 Sugar production



When foreign exchange reserves fell in early 2009 to about US\$300 million, the Reserve Bank of Fiji responded by tightening exchange controls and, to encourage exports of goods and services, devalued the Fiji dollar by 20% in April. The central bank also directed commercial banks to cap lending interest rates at December 2008 levels. However, lending slowed as banks became more cautious in the context of political and economic uncertainties. Later in 2009, the central bank removed the ceilings on lending rates and credit ceilings that had been in place since 2006.

Weak external markets caused a 28% fall in merchandise exports in US dollar terms in 2009. Declines in exports of clothing, sugar, and timber more than outweighed gains in shipments of fish and gold. Merchandise imports dropped even more steeply, by 35%, with falls in most major categories including fuels (due to lower oil prices) and manufactured goods (due to the weak domestic economy).

The trade deficit shrank, contributing to a narrowing in the current account deficit to an estimated 8.7% of GDP. Foreign exchange reserves recovered by year-end to US\$568 million, equivalent to 3.7 months of import cover (Figure 3.32.3). Reserves were bolstered by US\$93 million from the general allocation of special drawing rights last year by the International Monetary Fund, and by a pickup in remittances that was stimulated by the devaluation.

Lower prices for imported food and fuel brought inflation down to an average of 3.7% from 7.7% in 2008. By December, however, year-on-year inflation had increased to 6.8% (Figure 3.32.4), largely a result of the devaluation.

Government debt rose (Figure 3.32.5), to the equivalent of about 52% of GDP. Most is domestic debt owed to the national pension fund. But once contingent liabilities of government-owned enterprises, such as Fiji Sugar Corporation, are included, debt is much higher, at around 70% of GDP.

The Bureau of Statistics last year rebased GDP data for 2006–2008 to reflect structural changes in the economy. It reduced the weighting for agriculture and increased that for communications and manufacturing, leading to revisions in the 2006 growth outcome to 1.9% (from 3.4%), and in the 2007 GDP contraction to 0.5% (from 6.6%).

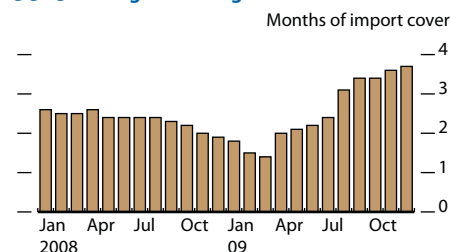
## Economic prospects

Any significant rise in sugar output depends on extensive replanting to improve the quality of the sugarcane, on a substantial increase in the area planted, and on a successful upgrading of the sugar mills. However, land tenure problems for tenant cane-growers have yet to be resolved. The outlook for tourism income is also subdued this year. Furthermore, the interim government's position that elections will not be held until 2014 remains a hurdle for improvement of relations with development partners.

A preliminary assessment of damage inflicted by Cyclone Tomas, which hit northern areas of the country in March 2010, indicated that it had little impact on GDP but put some upward pressure on prices.

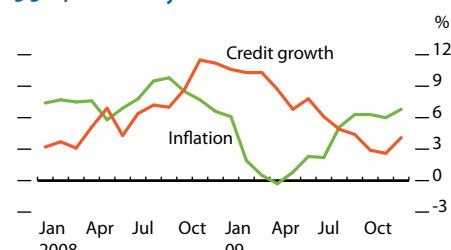
The 2010 budget, which targets a deficit of 3.5% of GDP (Figure 3.32.6), aims to stimulate growth through infrastructure spending and tax breaks to encourage investment, including a value-added tax refund system for tourists as well as investment incentives. Implementation of the budget

### 3.32.3 Foreign exchange reserves



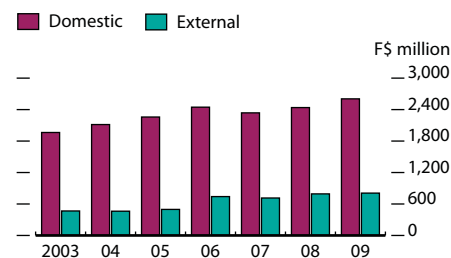
Source: Reserve Bank of Fiji. <http://www.reservebank.gov.fj>

### 3.32.4 Monetary indicators



Source: Reserve Bank of Fiji. <http://www.reservebank.gov.fj>

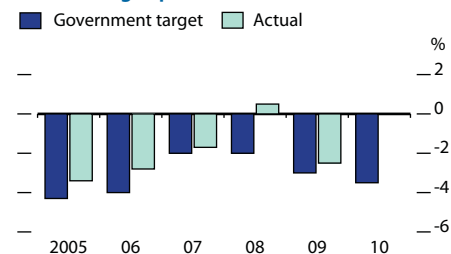
### 3.32.5 Government debt



Note: External debt comprises debts of the government, statutory bodies, and the private sector.

Source: Reserve Bank of Fiji. 2009. *Quarterly Review*. December. <http://www.rbf.gov.fj>

### 3.32.6 Budget position



Note: Excludes loan repayments.

Sources: Ministry of Finance. *Economic and Fiscal Update: Supplement to the 2010 Budget Address*. <http://www.mfnp.gov.fj>; Reserve Bank of Fiji. *Quarterly Review*. Various issues. <http://www.reservebank.gov.fj>

depends heavily on meeting revenue targets (the tax breaks could erode revenue) and on improving civil service capacity to undertake capital projects (given recurring problems in meeting capital spending targets).

Efforts by the interim government to reform the civil service and inefficient public enterprises should benefit the economy over the medium term, but in the short term will likely lead to more job losses.

In view of these factors, GDP is forecast to decline by 0.5% in 2010. Growth could resume at low levels next year (about 0.5%), if the problems in the sugar industry start to be resolved and if global trade and tourism pick up as expected. (Analysis of the prospects, and of policy options, is hampered by restrictions on publicly available data, including budget information.)

The planned removal of price controls on many basic food items during 2010 should benefit the food processing industry, though their removal needs to be offset by targeted assistance to the poor. (Around 40% of the population is now below the income level needed to provide for essential consumption.)

Imports are forecast to grow faster than exports this year (higher prices for imported oil will be a factor), pushing out the trade deficit. This will contribute to a forecast widening in the current account deficit to about 11.0% of GDP in 2010. That gap could narrow to about 8.0% in 2011 as exports of goods and services benefit from the expected acceleration in global trade and tourism.

Inflation will moderate from the end-2009 rate, as the devaluation's impact on prices fades. Weak domestic demand will limit the upward pressure on inflation arising from higher prices for oil and commodities and from the removal of price controls on food. Year-average inflation is forecast at just over 3% in the next 2 years.

## Development challenges

Over recent years, the country has lost its preferential treatment in major export markets for clothing and sugar, owing to the expiration of trade agreements. A major challenge is to attract investment that will broaden the economic base to compensate for declines in those two industries. However, private investment is discouraged by political uncertainty (four coups since May 1987) and deficiencies in the regulatory and legal environments, as well as by a lack of skilled labor. The investment-to-GDP ratio has generally been low, at around 15%.

Foreign investment regulations were revised in February 2010 to allow for 100% foreign ownership of certain businesses. However, it will be important to address the deficiencies in the investment climate to achieve a sustained rise in foreign direct investment.

Increases in investment by the government require not only higher allocations for development outlays, as compared with operating expenses, but also improvements in budget implementation capacity. Capital expenditure needs to be protected at a time that fiscal consolidation efforts are being pursued to ensure macroeconomic stability and to stabilize public debt. In regard to the latter, the International Monetary Fund has urged the authorities to target a reduction in public debt to 45% of GDP by 2014.

### 3.32.1 Selected economic indicators (%)

	2010	2011
GDP growth	-0.5	0.5
Inflation	3.4	3.1
Current account balance (share of GDP)	-11.0	-8.0

Source: ADB estimates.

# Papua New Guinea

Lower global commodity prices trimmed economic growth in 2009. The government provided a large fiscal stimulus and ran down public trust fund savings. Inflation decelerated, but remains relatively high. GDP growth is projected to pick up this year and next, lifted by the planned construction of a large resource project. The surge in revenue from this project in the years ahead heightens the need to put in place systems to smooth government expenditure over time and to provide for transparent and well-designed public programs to reduce poverty.

## Economic performance

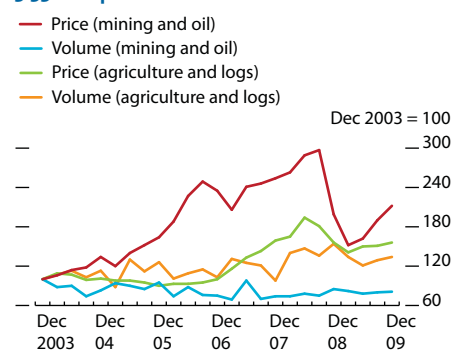
The economy proved fairly resilient to the global recession last year, even though it depends heavily on exports of minerals, crude oil, and agricultural commodities. Several factors cushioned the impact of the global recession: expectations that a \$15 billion liquefied natural gas (LNG) project will in fact go ahead, a recovery in commodity prices in the second half of 2009 from a price plunge that started in late 2008, and a strong fiscal stimulus last year. GDP growth was estimated at 4.5%, marking 8 consecutive years of expansion averaging about 3%. Services grew by an estimated 7.0%, mainly reflecting expansion in the communications and construction subsectors; industry grew by 4.6%, and agriculture by 2.3%.

Private investment was bolstered as planning moved forward for the large LNG project, which will generate business opportunities across the economy. Government expenditure increased by 3.0% in real terms (despite a 20% drop in revenue caused by lower export commodity prices), as the government drew down heavily on savings accumulated in trust funds during the commodity boom years. Private consumption, however, likely softened because lower prices for agricultural commodities dented household incomes.

The decline in prices for export commodities (Figure 3.33.1) reduced the value of merchandise exports in United States (US) dollars by 26% in 2009. Mining (mainly copper and gold) and oil exports together fell by about 25% in value (Figure 3.33.2), despite an increase in export volumes of metals. The value of oil exports dropped by over 50%; the price fell by about 37% and volumes by about 13%. Agricultural exports declined in value by an estimated 30%: palm oil by 34%, coffee by 19%, cocoa by 6%, and copra by 66% (from largest to smallest in terms of 2009's export crop value). Most export commodity prices rallied in the second half of the year.

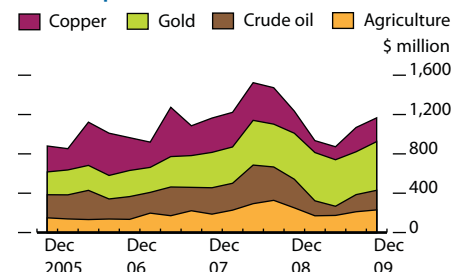
Employment in the private nonmining formal sector increased by 3.7% in the year to September 2009. The services sector saw particularly

3.33.1 Export indexes



Sources: Bank of Papua New Guinea, *Quarterly Economic Bulletin*. Various issues. <http://www.bankpng.gov.pg>; ADB estimates.

3.33.2 Exports



Sources: Bank of Papua New Guinea, *Quarterly Economic Bulletin*. Various issues. <http://www.bankpng.gov.pg>; ADB estimates.

strong jobs growth, and employment in mining also rose. However, this formal sector accounts for only one fifth of the labor force. Many people are farmers who produce mainly for their own consumption, with some cash-crop production.

The government adopted a very expansionary fiscal policy stance in 2009, even with the economy continuing to grow moderately. The deficit likely exceeded 10% of GDP, including off-budget items (Figure 3.33.3). (Excluding off-budget spending from the trust funds, the budget showed a near-balanced outcome.) Gross and external public debt levels were little changed from 2008, at about 32% and 14% of GDP, respectively.

Following a sharp rise in private sector credit during the commodity boom years, credit growth pulled back in 2009, from 40% in November 2008 to about 20% a year later (Figure 3.33.4). Inflation eased to average 7.6% over the year, as the impact of lower global commodity prices slightly offset upward domestic pressure on prices.

After raising its monetary policy indicator interest rate in 2008, the central bank kept it steady until December 2009, when, after inflation eased, it lowered the rate by 1 percentage point to 7.0%. The kina exchange rate depreciated by 15% in 2009 against a trade-weighted basket of currencies.

The drop in the value of exports, coupled with a small rise in the value of imports, cut the trade surplus in 2009, and the current account fell into deficit (estimated at about 5% of GDP), the first external deficit since 2002. Gross foreign exchange reserves at year-end totaled \$2.4 billion, equivalent to about 10 months of imports of goods and services (Figure 3.33.5).

## Economic prospects

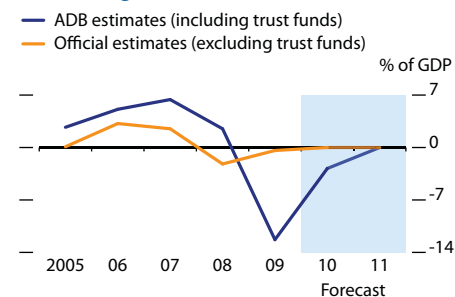
Project financing for the LNG project was secured in March 2010. Tapping natural gas from the Highlands region, the project will have the capacity to produce 6.6 million tons of LNG a year for export, contributing as much as 20% of annual GDP when it starts operation, which could be as early as 2013.

Construction is expected to start this year. During this construction phase, up to 1,500 local workers will be employed, and when the plant starts operating it will directly employ about 850 people, mostly locals. However, given that the project could yet be delayed by landowner compensation issues, the LNG project's contribution to growth this year might well be less than the officially forecast 3.0 percentage points of GDP.

In the construction sector, other projects associated with the LNG project are scheduled to start this year, likely keeping overall construction activity high but growth capped, since many firms are already operating at full capacity.

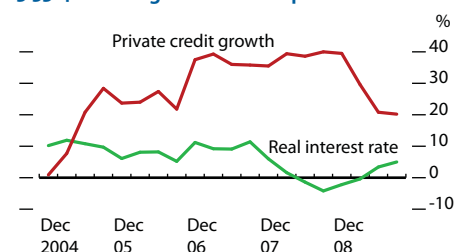
Oil production will continue to decline owing to lower extraction rates from maturing oil fields, but mining output will be boosted midyear by production from a new Ramu nickel-cobalt mine. The Hidden Valley gold mine started operating last year and is expected to increase production, while the existing gold mines of Ok Tedi, Porgera, and Lihir are all expected to raise production this year.

### 3.33.3 Budget balance



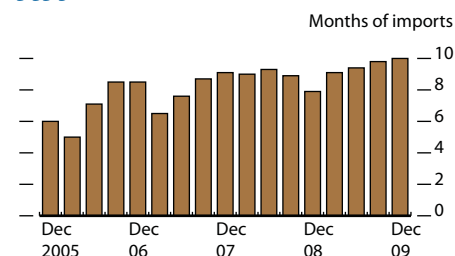
Sources: Department of Treasury. 2010 Budget. Volume 1. <http://www.treasury.gov.pg>; ADB estimates.

### 3.33.4 Credit growth to the private sector



Sources: Bank of Papua New Guinea. Quarterly Economic Bulletin. Various issues. <http://www.bankpng.gov.pg>.

### 3.33.5 Reserves



Note: Imports excluding mining and oil commodities.

Source: Bank of Papua New Guinea. Quarterly Economic Bulletin. Various issues. <http://www.bankpng.gov.pg>.



Higher prices for agricultural commodities should stimulate their production, particularly as last year's cocoa crop was damaged by pod borer and coffee was hit by floods in the Highlands early in 2009.

Business confidence is underpinned by high levels of government expenditure and expectations that the LNG project will push through and generate spillover benefits. In addition, two competing mobile telephone service providers plan further investments to increase network coverage.

Fiscal policy will likely be less stimulatory in 2010. The government is expected to moderate its drawdowns from the trust funds, so that the fiscal deficit, including off-budget spending, is forecast to narrow sharply to just under 3% of GDP. (The government targets a balanced budget, excluding off-budget items.)

On the balance of these factors, GDP growth is forecast to accelerate to 5.5% in 2010 and to 7.7% in 2011, when construction of the LNG project is stepped up (Figure 3.33.6).

Merchandise exports will increase in value terms, as will imports, given high levels of public expenditure and imports of machinery and equipment needed for the LNG project. The current account deficit is projected to widen to 15.0% of GDP in 2010 and then to 30.0% in 2011 (Figure 3.33.7). This gap will be largely financed by foreign direct investment.

Inflation is projected to remain relatively high at 7.1% and 7.7% over the next 2 years (Figure 3.33.8) in the context of higher global commodity prices and rising domestic demand. Shortages of residential and commercial properties in the main urban centers also are causing upward pressure on inflation through significant rent increases. Inflation pressures will constrain further easing of interest rates.

Domestic risks to the 2010 forecasts are largely on the upside: GDP growth could be higher than forecast if landowner compensation disputes for the LNG project are settled quickly and the equipment, materials, and skilled labor are available to ramp up plant construction. There are risks, too, for the 2010 inflation forecast if the momentum from last year's high fiscal expenditures is greater than anticipated.

## Development challenges

Even with 8 consecutive years of economic growth, poverty incidence remains high (at about 50%), much public infrastructure is in poor condition, and human development indicators are low: Papua New Guinea is ranked 148 out of 182 countries in the human development index compiled in 2009 by the United Nations Development Programme.

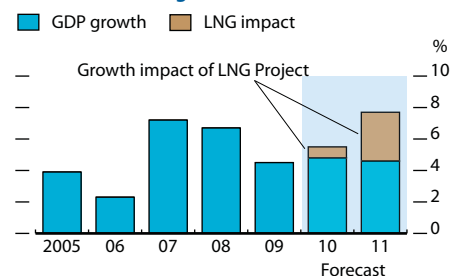
When substantial revenue from the LNG project starts to flow, the government will have an opportunity to fund development projects that improve living standards. Managing the revenue flows prudently and sharing the benefits widely through well-designed public programs will be critical to avoiding the "resource curse" that mining- and energy-exporting countries often bear. This will require a fiscal framework that saves part of the resource revenue so that it can be spent over time, transparently and accountably.

### 3.33.1 Selected economic indicators (%)

	2010	2011
GDP growth	5.5	7.7
Inflation	7.1	7.7
Current account balance (share of GDP)	-15.0	-30.0

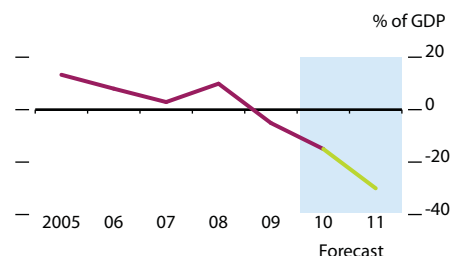
Source: ADB estimates.

### 3.33.6 Real GDP growth



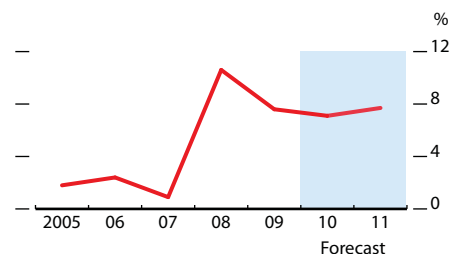
Sources: Department of Treasury, 2010 Budget, Volume 1. <http://www.treasury.gov.pg>; ADB estimates.

### 3.33.7 Current account balance



Sources: Department of Treasury, 2010 Budget, Volume 1. <http://www.treasury.gov.pg>; ADB estimates.

### 3.33.8 Inflation



Sources: Bank of Papua New Guinea, Quarterly Economic Bulletin, Various issues. <http://www.bankpng.gov.pg>; ADB estimates.

Although elements of such a framework are spelled out in existing policy statements and were previously followed, the system broke down in 2009 when large drawdowns were made from trust funds. Stronger governance arrangements and enhanced public financial management systems are now needed (Box 3.33.1).

### 3.33.1 Managing revenue volatility

The 1990s are often referred to as the “lost decade” in Papua New Guinea because the country did not translate significant public mineral revenue into improved living standards for the majority of people. In an effort to manage volatile resource revenue, the government set up a Mineral Revenue Stabilization Fund. But a lack of transparency and accountability caused those savings to be largely wasted.

During the recent commodity boom, disciplined fiscal policies enabled the government to accumulate windfall revenue, which was saved in trust funds earmarked for development purposes and public debt repayment. In 2009, though, this discipline weakened. Drawdowns from trust funds were far above a limit set in the medium-term fiscal strategy and did not appear justified given that the economy was maintaining solid growth.

Net expenditure from trust funds in 2009 equaled about 10% of GDP, and represented almost two-thirds of total trust fund expenditure since 2005. Moreover, spending was channeled outside the national budget and not integrated into the macroeconomic framework. A significant amount of trust fund monies is currently channeled through local administrations, which have limited capacity to implement

development projects. It is unlikely that all the spending went on development priority projects, given the rapid pace of drawdowns and lack of transparency in the spending.

Public revenue to flow from the liquefied natural gas project will provide the country with another chance to increase the productive capacity of the economy and raise living standards. This time, development objectives are more likely to be achieved, and macroeconomic stability maintained, if the rules of the medium-term fiscal strategy are followed strictly, monetary and fiscal policy are closely coordinated, and a sovereign wealth fund is established and then integrated into the policy framework.

The government plans to channel LNG project revenue into three funds: a stabilization fund, an infrastructure fund, and a future fund. These funds should be saved offshore, to help minimize currency appreciation that would hurt domestic producers, including farmers. It is vital for drawdowns from all funds to be channeled through the national budget, strengthening stabilization efforts and helping ensure higher-quality spending aligned with development priorities. The rate of drawdown should also be calibrated on the capacity of the public and private sectors to efficiently and effectively utilize funds.

Improvements to the business climate are required to pave the way for developing the private sector. They include a more secure legal environment for doing business and encouragement of competition throughout the economy. The World Bank’s *Doing Business 2010* ranks Papua New Guinea overall at 102 of 183 countries, down from 89 in 2008.

Inefficient state-owned enterprises hold dominant market positions in many sectors and are a drag on economic growth. Competition in the telecommunications and aviation sectors shows what can be achieved: a new firm in the mobile telephone market led to notable improvements in phone services in rural areas, while a new airline servicing the route between Papua New Guinea and Australia has cut airfares.

However, more needs to be done, particularly with those state-owned enterprises that will see considerable increases in demand from the LNG project. Still, the government’s commitment to implementing a public-private partnership policy is encouraging and could potentially facilitate significant private investment in infrastructure. There is scope for such partnership investments in the utility and transport sectors, both critical to reducing the costs of doing business.

# Democratic Republic of Timor-Leste

High government expenditure, largely funded by revenue from petroleum production, supported moderate but slower growth in 2009. The economy is forecast to pick up in 2010, again driven by government spending. Inflation is likely to rise from last year's low levels. The government plans to borrow, for the first time, to accelerate investment in infrastructure. Sound investment of borrowed funds and prudent management of national savings are central to the achievement of sustainable economic growth.

## Economic performance

Momentum from a buildup in government spending over recent years underpinned economic growth in 2009. GDP, excluding offshore petroleum production, expanded by 5.0% (Figure 3.34.1). That was around half the 10.5% average expansion in the preceding 2 years because the rate of increase in government expenditure slowed.

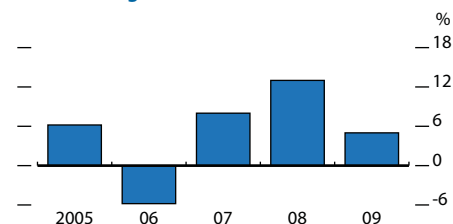
Government spending dominates this economy, with its ratio to nonpetroleum GDP close to 168% (Figure 3.34.2). A large portion of the buildup in public outlays has been in public sector wages, minor capital works, and cash transfers to the elderly, internally displaced persons, ex-combatants, and others. Such expenditure has fed quickly into the economy and generated multiplier effects that have further lifted aggregate demand. Poverty, however, remains widespread.

Up-to-date economic data are limited, though the uptrend in various indicators of demand suggests a significant rise in private consumption in recent years. For example, there was one cell phone subscriber for every 9.3 adults in mid-2007; by end-2009, there was one for every 1.7 adults. Over 11,000 new motor vehicles were registered in 2009, more than double the number in 2008. Private electricity consumption is also on a rising trend (Figure 3.34.3).

While aggregate demand rose on average in 2009 relative to 2008, it softened during the year, as illustrated by a trending down in imports (Figure 3.34.4). By December 2009, their real value was down by 38.1% from the prior-year period. The value of merchandise exports, mainly coffee and excluding petroleum, fell by around a third, as the volume of coffee exports fell sharply. Exports are less than 3% of the value of merchandise imports, leaving a huge trade deficit.

The government allocated \$681 million of its own funds for budget spending in 2009, up 23% from its own-funded spending in 2008. But continuing problems in carrying out budget projects meant that actual spending, of about \$500 million, fell short of the allocation. Including donor-funded activities, total government expenditure is estimated to have declined slightly in 2009 from 2008.

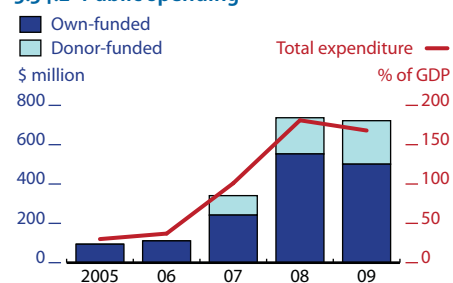
3.34.1 GDP growth



Note: Nonpetroleum, non-United Nations, annual GDP growth.

Source: Ministry of Finance. *General Budget of the State*. Various issues. <http://www.mof.gov.tl>

3.34.2 Public spending



Source: ADB estimates based on Ministry of Finance. 2009. *General Budget of the State and State Plan for 2010*. October. <http://www.mof.gov.tl>

Income to the government from offshore petroleum production of \$1.65 billion in 2009 lifted savings held in the nation's Petroleum Fund to almost \$5.4 billion by year end, equivalent to about nine times annual GDP (excluding petroleum production). The annual sustainable drawdown is estimated at about \$500 million, which is enough to fund 80% of the government's own contribution to the budget. Still, the authorities budgeted to draw down more than the sustainable income in 2009. In the event, the estimate of sustainable income was revised up later in the year as higher energy prices were factored in, to levels close to the 2009 drawdown rate.

Owing to the large inflows of petroleum income, the budget surplus was about 145% of nonpetroleum GDP in 2009, and the external current account recorded a very large surplus equivalent to nearly 300% of GDP.

Lower global oil and food prices suppressed inflation to just 0.1% on average last year, as it decelerated from about 8% in 2008. The consumer price index fell on a year-on-year basis from May through November. The direction of inflation has generally followed that of Indonesia, Timor-Leste's primary trading partner, in the past 2 years (Figure 3.34.5).

Large deposits by international agencies and rising incomes continued to inject liquidity into the banking system. Broad money supply expanded by about 30% in 2009. Bank lending, however, was sluggish and the ratio of nonperforming loans remained high at about 28% of total loans. (Banks hold adequate provisions against the nonperforming loans.)

The climate for development of the private sector remains very difficult. Timor-Leste is one of the weakest performers in the World Bank's *Doing Business 2010* report, with a rank of 164 out of 183 countries in 2010 (a slight improvement from 170 in 2009). Issues concerning land, credit, contracts, and setting up a business are paramount concerns. In one area, tax reform, considerable progress has been made. A reduction in taxes on business boosted the ranking in this indicator from 79 in 2009 to 19 in 2010.

## Economic prospects

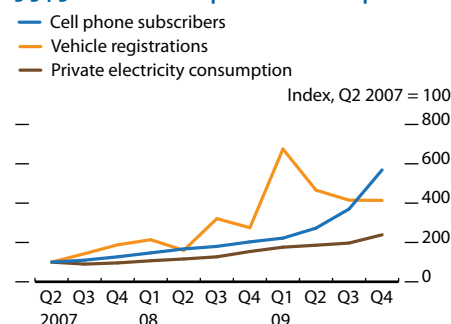
The economic outlook remains highly dependent on the budget. In this context, a budgeted increase of 27.3% in own-funded government expenditure (all funding excluding donor support) in 2010 over actual spending last year (Figure 3.34.6) is expected to more than offset a decline in donor funding, leaving a small overall increase in budgeted expenditure.

As in earlier years, the own-funded part of the budget is unlikely to be fully spent. But the higher level of funding, coupled with gradual improvements in implementation capacity, will likely lead to an increase in spending in 2010. This is forecast to lift economic growth slightly to about 7.0% this year. Capital expenditure by the government is expected to gather momentum in 2011, helping to maintain growth at about 7.0%.

The presence of international police and security forces in Timor-Leste under the auspices of the United Nations has been extended until at least early 2011. This will help safeguard security, and spending by the United Nations forces will support aggregate demand. Next year, though, their presence is scheduled to decline, with a reduction in the number of police personnel from 1,608 to 1,280 by midyear.

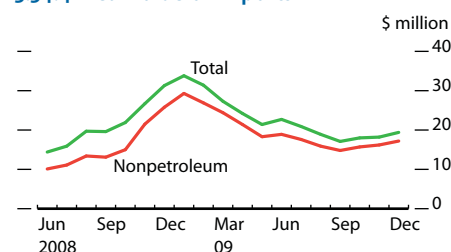
Higher prices of imported commodities are forecast to contribute to a

### 3.34.3 Indicators of private consumption



Source: ADB estimates based on the National Statistics Directorate. *Quarterly Statistical Indicators*. Various issues. <http://dne.mof.gov.tl>

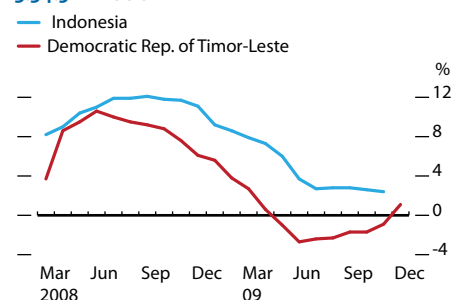
### 3.34.4 Real value of imports



Notes: US\$ million deflated by consumer price index; 3-month moving averages.

Source: ADB estimates based on the National Statistics Directorate. *Quarterly Statistical Indicators*. Various issues. <http://dne.mof.gov.tl>

### 3.34.5 Inflation



Sources: National Statistics Directorate. *Consumer Price Index*. Various issues. <http://dne.mof.gov.tl>; Bank Indonesia. <http://www.bi.go.id> (accessed 17 February 2010).

### 3.34.1 Selected economic indicators (%)

	2010	2011
GDP growth	7.0	7.0
Inflation	3.2	3.8
Current account balance (share of GDP)	271.7	-

Source: ADB estimates.

step up in inflation to 3.2% in 2010 and to 3.8% in 2011. Inflows of petroleum income will produce another large current account surplus in 2010.

Savings in the Petroleum Fund are projected to rise steadily to about \$9 billion by 2013 (Figure 3.34.7), providing substantial funding for the budget in the years ahead. Initial steps were taken last year to increase the return from the Fund by diversifying a small part of its investments from US government bonds into other governments' bonds and into various other currencies.

## Development challenges

The main challenge is to use revenue generated from petroleum production to develop the human and physical capital needed to generate private sector-led growth, which should expand employment and reduce poverty. At the same time, substantial national saving of petroleum revenue need to be preserved for future generations. A national strategic plan being prepared will provide for an integrated approach to development, and will be central to guiding decisions on the use of petroleum revenue.

The latest national poverty survey shows that the share of the population living below the poverty line increased to about 50% in 2007, from 36% in 2001. Most of the population relies on agriculture, but low output, high postharvest losses, and limited alternative sources of income have resulted in rising numbers of poor people in rural areas. High population growth rates of over 3% annually, rapid urbanization, and a small formal sector have resulted in slow rates of job creation in urban areas and have also pushed up poverty rates there.

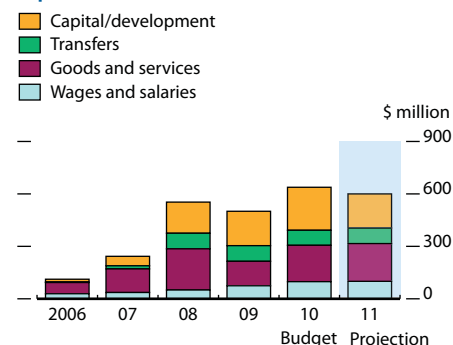
In an effort to bring forward public investment and accelerate the rate of development, the government has initiated plans to secure concessional loans. In September 2009, Parliament approved legislative amendments that enable the government to borrow. (Assets in the Petroleum Fund cannot be used as security, however.)

Also in September, the government agreed to a credit line from the Government of Portugal. The 5-year line will, with parliamentary approval, enable concessional borrowing of up to €100 million a year. The funds will be used for construction and rehabilitation of health care and education facilities and for infrastructure. The 2010 budget foreshadows total borrowing of as much as \$3 billion over the medium to long term.

Projections of petroleum revenue suggest that future budgets will have the capacity to service a prudent level of concessional borrowing. To ensure that the fiscal and debt positions are sustainable, borrowed funds must be used efficiently to raise the productive capacity of the economy, and not for consumption purposes.

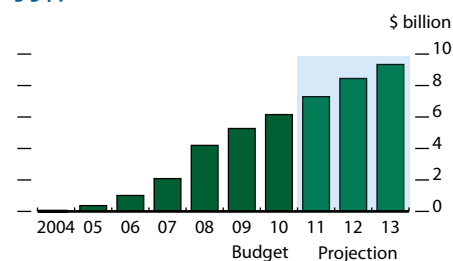
Achieving this outcome will require a sound process for selecting high returning investment projects; an emphasis on investment in human capital and productive physical capital; and efforts that investments pay for themselves through user charges, as much as feasible. The formulation of the national strategic plan provides an opportunity to lock in these three elements of a successful fiscal and debt strategy.

### 3.34.6 Own-funded government expenditure



Source: ADB estimates based on Ministry of Finance, 2009. *General Budget of the State and State Plan for 2010*. October. <http://www.mof.gov.tr>

### 3.34.7 Petroleum Fund balance



Sources: Ministry of Finance, 2009. *General Budget of the State and State Plan for 2010*. October. <http://www.mof.gov.tr>; International Monetary Fund, 2009. *Article IV Consultation*. July. <http://www.imf.org>



## Small Pacific countries

The global recession hurt these 11 small economies by eroding their tourism receipts, remittances, commodity export earnings, and tax revenues. GDP shrank slightly, or was flat, in most of them (and for half of them it was the second year of contraction). Inflation decelerated from 2008's exceptionally high levels, when these import-dependent economies faced surges in global oil and food prices, but still came in above 5% for the majority.

The outlook is brighter for 2010, as a result of better global prospects. Nearly all the countries are forecast to grow this year, although by just 2% or less (except for Vanuatu, which is an outperformer). Encouragingly, in 2011 growth is forecast to quicken. Inflation is seen easing for eight of the countries this year and staying at around these levels in 2011.

For the longer term, the small Pacific countries need to renew their efforts to boost growth by strengthening the environment for private sector development.

### Cook Islands

This economy has contracted over the past 2 years (Figure 3.35.1), signaling the end of a growth dividend from earlier economic reforms. The pace of contraction in GDP slowed to an estimated 0.1% in 2009, from 1.2% in 2008.

Reflecting the decline in GDP, commercial bank lending to business fell by 10% in the third quarter of 2009 from the year-earlier period, and value-added tax receipts in real terms declined by about 8% in the first 3 quarters.

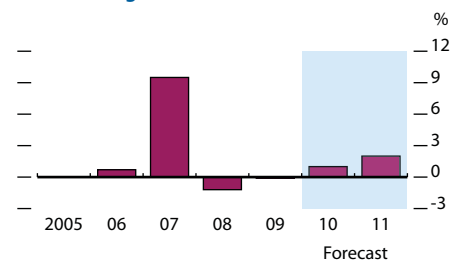
The slightly better performance last year compared with 2008 was partly a result of a 6.7% increase in tourist arrivals (Figure 3.35.2). Tourism was buoyed by some special events held in the country and extra tourism marketing efforts abroad. Arrivals from Australia and New Zealand grew by 7.8%, but those from the northern hemisphere fell by 2.2%. Tourism receipts grew by an estimated 7.9% in 2009.

Lower fuel prices brought down costs of transportation and electricity in the second half. Inflation eased to 6.6%, and is forecast to slow further, to 3.5% in 2010.

Economic growth is projected to resume at 1.0% in 2010, supported by infrastructure construction, which will be financed by development partners. Growth is forecast to pick up to about 2.0% in 2011 as external demand improves and as infrastructure construction gathers pace.

Increased seat capacity on the Rarotonga to Los Angeles air route, and the expected start of a direct air link to Sydney, should assist tourism.

3.35.1 GDP growth, Cook Islands



Sources: Cook Islands Statistics Office; ADB estimates.

These routes, however, rely on government subsidies, and this dependence poses a risk to their long-term sustainability. The need to fund the subsidies also imposes a cost on other parts of the economy.

Increased government capital spending in FY2009 (ended 30 June 2009) resulted in a fiscal deficit estimated at nearly 12% of GDP. A large budget deficit is also planned for FY2010, to be financed by loans that will increase government net debt to 25% of GDP. This funding may add to productive capacity if it is spent on the priority investment set out in the infrastructure master plan.

To provide a lift to the economy, the government adopted an economic recovery support program in October 2009, committing to support infrastructure expenditure, to maintain a responsible fiscal stance, and to take targeted actions so as to support vulnerable groups in society. Nonetheless, it has extended the practice of directly negotiating airline subsidies, instead of adopting an open, competitive process for allocating subsidies which, as advocated by the support program, would offer better prospects for ensuring the best value for public moneys.

## Kiribati

GDP contracted by an estimated 0.7% in 2009, as copra prices fell, demand waned for the country's seafarers due to the global downturn (reducing remittances from them), and returns declined on investments held offshore in the Revenue Equalization Reserve Fund. Subsectors to contract included transport and storage, manufacturing, and hotels and restaurants.

Unsustainable fiscal deficits over several years have required large drawdowns from the reserve fund. Coupled with the global decline in asset values, the fund has dropped below the government's 1996 benchmark level of A\$4,500 in real per capita terms (Figure 3.35.3).

The economy is forecast to pick up a little in 2010, benefiting from higher copra prices, an expected increase in demand for seafarers, and better returns from the offshore investments. GDP growth is forecast at 0.8% this year, accelerating to 1.2% in 2011 as global demand continues to improve and recent reforms in economic management start to show benefits.

A decline in international fuel prices paved the way for inflation to slow to 6.6% in 2009, from double-digit rates in 2008. In 2010, inflation is forecast to subside further, to 5.9%.

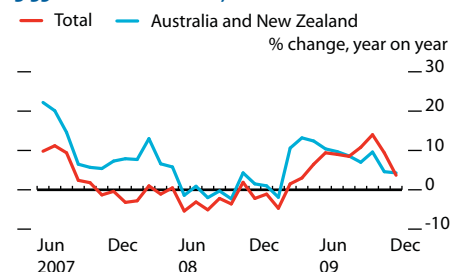
Improving the economic outlook over the medium and longer term will depend in large part on better management of the reserve fund. In this regard, an Australian-funded study will look at ways to improve the fund's governance.

## Republic of the Marshall Islands

After a 2.0% contraction in FY2008 (ended 30 September 2008), GDP was estimated to be flat in FY2009 (Figure 3.35.4). This outcome was partly the result of new construction work, the opening of a fish-joining factory, and some increase in remittances.

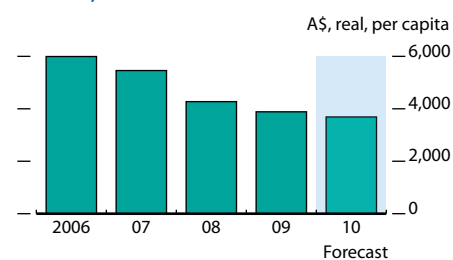
Consumption benefited from a sharp deceleration in inflation, to

### 3.35.2 Visitor arrivals, Cook Islands



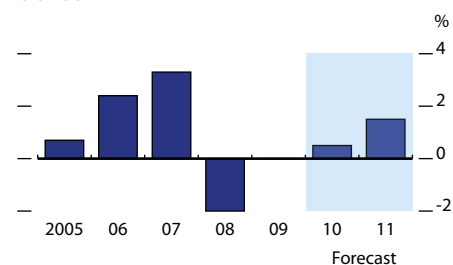
Source: Cook Islands Statistics Office.

### 3.35.3 Revenue Equalization Reserve Fund balance, Kiribati



Source: ADB estimates based on 2010 budget.

### 3.35.4 GDP growth, Republic of the Marshall Islands



Sources: US Department of the Interior Office of Insular Affairs. 2009. Republic of Marshall Islands Fiscal Year 2008 Economic Review. August; ADB estimates.

2.8% in FY2009 from a high 14.8% in the prior year, as prices of imported fuel and food fell. These positives were partly offset by job losses due to a reduction in personnel at the United States (US) military base in Kwajelejn.

In the fiscal accounts, additional grants from donors and higher income from ship registration fees eased pressure on the budget from weak tax collections and a high level of budget assistance provided to state-owned enterprises. The fiscal balance remained in deficit, though, equivalent to 0.3% of GDP.

Grants from the US under the Compact of Free Association, the main source of government revenue, are being phased down ahead of the expiration of the Compact agreement in 2024. Last year, however, the value of assets in both the Compact Trust Fund and the Social Security Fund rose when global financial markets recovered.

The economy is projected to grow slightly this year, by about 0.5%. Underpinning the forecast is an expected further expansion of fish processing and additional government expenditure made possible by grants from Taipei, China and the European Union. The FY2010 budget provides for a 9% increase in spending to US\$137.7 million.

To avert a fiscal crisis when the Compact agreement expires, fiscal surpluses equal to about 5% of GDP are needed during the period 2014–2023 (Figure 3.35.5). This would allow for savings to be accumulated in the Compact Trust Fund, which could then be drawn on to provide a sustainable source of budget financing. Achieving those surpluses will require cuts in operating expenditure and a more efficient tax system. In this area, a large government payroll that absorbs 22% of the budget is a concern.

## Federated States of Micronesia

For a fourth consecutive year, GDP contracted in FY2009 (ended 30 September 2009), by an estimated 1.0% (Figure 3.35.6). The decline primarily reflected delays in the disbursement of infrastructure grants under the Compact of Free Association with the US. High inflation (estimated at 7.4%) damped consumption spending.

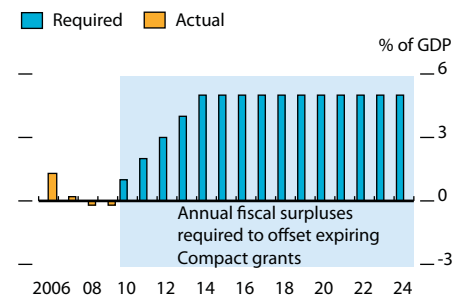
On the positive side, tourist arrivals and remittances rose and a new fish-processing plant generated some jobs in FY2009.

The government contained the fiscal deficit to 1.0% of GDP in FY2009, assisted by tighter controls on spending in the states of Chuuk and Kosrae, increased revenue from fishing licenses, and a new financial management information system.

Still, more needs to be done to secure long-term fiscal sustainability, given that the Compact with the US expires in 2024 and that Compact grants are declining. The budget needs to move into surplus soon, if savings in the Compact Trust Fund are to reach target levels and provide a replacement for US grants when the Compact ends.

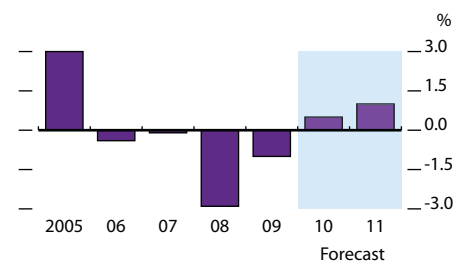
The economy is forecast to grow by about 0.5% in FY2010, supported by donor-funded construction, including extension to the airport runway in Pohnpei, and refurbishment of tuna-processing facilities (with a concessional loan from the People's Republic of China). The airport will assist tourism by enabling larger, charter aircraft from Japan to land. Inflation in FY2010 is forecast to be a moderate 3.5%.

3.35.5 Fiscal balance, Republic of the Marshall Islands



Source: International Monetary Fund.

3.35.6 GDP growth, Federated States of Micronesia



Sources: US Department of the Interior Office of Insular Affairs. 2009. *Federated States of Micronesia Fiscal Year 2008 Economic Review*. August; ADB estimates.

## Nauru

The introduction of a mobile telephone service last year offset a reduction in phosphate exports, leaving GDP flat. Within 2 weeks of the mobile phone starting operations, more than 40% of the almost 10,000 residents had bought a phone. As for phosphate exports, they took a hit from weaker demand and from storm damage at the port.

Economic growth is projected to resume in 2010, at about 2.0%, following an anticipated recovery in phosphate demand and repairs to the port scheduled for May 2010. In 2011, growth is forecast to rise to 4.0%, if planned improvements in the dilapidated infrastructure allow for a further increase in phosphate exports.

Inflation slowed sharply in the second half of 2009, mainly owing to the decline in international fuel prices. The average inflation rate for the year was estimated at 2.2%. Slightly higher inflation is projected for 2010 and 2011, on the back of higher fuel prices.

Although the GDP performance has been weak in recent years (Figure 3.35.7), the economy has potential for growth in the medium term. Primary phosphate reserves are estimated to be enough for 3–4 years of production, and deeper, secondary reserves might last 20 years. An intergenerational trust fund is being established so that income from phosphate mining can be saved for when the reserves are exhausted. However, full exploitation of the phosphate requires considerable investment to refurbish the necessary infrastructure. Improved governance, especially of the state-owned enterprises that dominate the economy, is also needed to encourage the public and private investment required.

## Republic of Palau

Visitor arrivals fell by 10% last year as a result of recession in some of the main markets. Delays in planned private investment in tourism facilities further eroded the contribution from the important tourism industry.

Consumption spending was subdued, as reflected in a declining value of monthly food imports from the US, and government revenue fell by about 10%. A reduction in public infrastructure outlays, from recent high levels, also damped economic activity. Consequently, GDP fell by about 3.0% in 2009, following a 1.0% contraction the previous year. Inflation eased to 2.4% in 2009 as fuel prices declined.

Economic recoveries in Japan and Taipei, China—two important tourist markets for Palau—bode well for 2010. Indeed, arrivals from the latter market rose steadily from September 2009, on a year-on-year basis. As of February 2010, arrivals were close to levels seen prior to the global recession (Figure 3.35.8). This recovery in tourism is expected to support economic growth of 0.5% in 2010. Higher global fuel and commodity prices are expected to lift inflation to 3%–4% in the next 2 years.

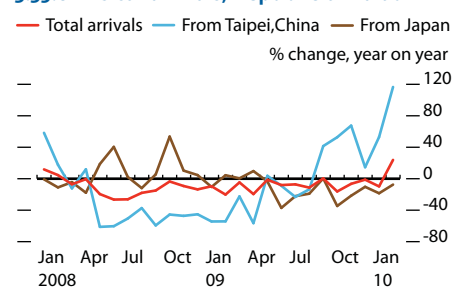
The budget for 2010 proposed a 10% cut in public spending and new revenue measures. Fiscal reforms adopted included actions to reduce operating expenditure, to increase utility rates, and to offer a tax amnesty that would bring errant taxpayers back into the tax base. Temporary relief of the fiscal pressure was subsequently provided by the preparation of an updated financial agreement with the US. The agreement, which would extend grant assistance under the Compact of Free Association

3.35.7 GDP growth, Nauru



Sources: Asian Development Bank. 2007. *Country Economic Report*. August; ADB estimates.

3.35.8 Visitor arrivals, Republic of Palau



Source: Palau Visitors Authority. <http://www.visit-palau.com>.

until 2024, is awaiting US Congressional approval. It would see grants rise in 2010, but then gradually decline. The agreement prompted the government to propose a partial reversal of the 10% spending cut. Given US grants will soon decline, however, it would be prudent to proceed with fiscal reforms as a step toward achieving fiscal sustainability.

## Samoa

A weakening in exports and construction, lowered GDP by an estimated 0.8% in 2009 (Figure 3.35.9).

A tsunami in September 2009 caused 143 deaths and displaced more than 5,000 people, or 1 in 40 of the population, from their homes. The fiscal cost of infrastructure rehabilitation, resettlement, and additional social services was estimated at about 25% of GDP. One of Samoa's most popular tourist destinations bore the full brunt. About 10% of tourist accommodation was damaged and up to 20 kilometers of beach and reef degraded. Tourism is a key economic driver, with tourism receipts often accounting for 20% of GDP.

The government responded to the tsunami with a supplementary budget in December 2009. This provides additional expenditure equivalent to US\$27 million for priority tsunami relief and reconstruction, to be largely funded through additional grants.

Tourist arrivals rose before the tsunami, then fell, to be up 6% for the year. Arrivals are expected to grow by about 4% in 2010. A contributing factor to this slower rate of growth is that many family reunion visits appear to have been brought forward to 2009 in response to the tsunami.

Remittances rose in the last 3 months of 2009 (Figure 3.35.10) in response to the tsunami, but probably at the expense of some remittances this year. National foreign exchange reserves remain at comfortable levels, assisted by US\$9.3 million in balance-of-payments support from the International Monetary Fund (IMF).

GDP is forecast to grow by about 0.5% this year, buttressed by reconstruction spending. Next year should see it rise further on the back of continued reconstruction efforts and a stronger global tourism and trade environment. Inflation is expected to slow to 2.5% in 2010, from 6.6%.

Budget deficits of about 10% of GDP are planned for each of the next 3 fiscal years. These will need to be financed through debt, which will raise public debt above the government's target ceiling of 40% of GDP. While large deficits are necessary to fund reconstruction, the fiscal position will only be sustainable if the deficit is reined in to around 3% of GDP in the medium term.

## Solomon Islands

Declines in exports of logs, copra, and fish caused a sharp economic slowdown in 2009. After several years of economic growth in the 5%–10% range, GDP last year was estimated to be flat.

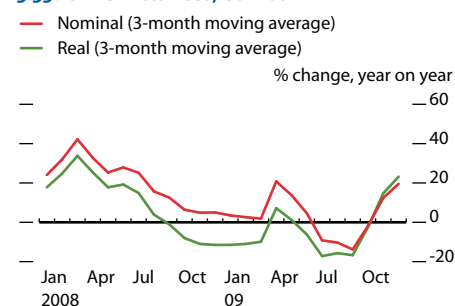
The volume of log exports dropped by 33%, copra by 39%, and fish by 25% in the first 11 months of 2009 from the prior-year period. Palm oil export volumes continued to rise, while cocoa volumes were little changed. The fall in logs reflected both a weakening in external demand

3.35.9 GDP growth, Samoa



Sources: Samoa Bureau of Statistics; Central Bank of Samoa. Selected Economic Indicators. Various issues; ADB estimates.

3.35.10 Remittances, Samoa



Note: Real remittances are nominal remittances deflated by consumer price inflation in Samoa.

Source: Central Bank of Samoa.



and the phasing out of logging in the depleted original forests. Floods early in 2009 inflicted damage in some agricultural areas.

While the government raised its payroll spending by more than 5% in 2009, it sharply cut other spending, including that for infrastructure maintenance and some social services. Overall spending on both the recurrent and development budgets fell in 2009, exacerbating the impact of the economic slowdown. Bank lending to the private sector slowed markedly during the year.

Inflation eased from a peak of 25% year on year in August 2008 (Figure 3.35.11), averaging 8.3% in 2009, a result of lower fuel and food prices and the slack economy. Higher oil prices in 2010 are expected to keep inflation relatively high, at 7.3%.

The current account deficit widened further to an estimated 20% of GDP in 2009, in part a result of weakness in exports. But foreign reserves rose to the equivalent of nearly 5 months of imports, owing to a general allocation of special drawing rights by the IMF last year and a one-time transaction between one of the commercial bank's onshore and offshore operations.

Stronger international commodity markets will underpin growth in exports this year, and the rate of decline in logging is expected to slow from the 2009 rate. A pickup in building approvals points to a likely increase in construction. Government expenditure, too, is expected to rise in real terms, helped by additional support from development partners. These factors will contribute to forecast growth of 2.0% in 2010, rising to 3.0% in 2011 (Figure 3.35.12) as a result of expected increased investment in mining and telecommunications.

Progress has been slow on reopening the Gold Ridge gold mine, such that production is not expected to resume until 2012.

The 2010 budget goes some way to reversing last year's cuts in spending on social services and infrastructure. It gives priority to education, health, and law and order, and to national elections this year. The government's contribution to the development budget also increased substantially.

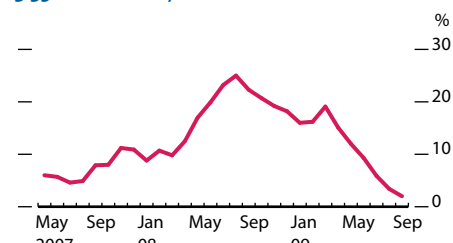
However, there are risks to the budget—the revenue projection is at the upper end of plausible estimates, and there may be pressures ahead of the ballot to raise spending. Some early slippage is evident. The budget provided for a 5.0% general increase in public service wages, but the independent Trade Disputes Panel issued a 7.5% pay raise after the budget was sent to Parliament. Tight expenditure management will be required if such a pay increase is to be absorbed by the budget without compromising service delivery.

## Tonga

Remittances fell by nearly 20% in real terms last year as a result of weak labor markets in source countries, particularly the US and New Zealand, reducing household incomes. Earnings from tourism declined, too, by about 6%, even though visitor arrivals rose by 4%. Moreover, a rise in nonperforming loans in 2008 prompted banks to tighten lending in 2009. These factors contributed to a 0.4% decline in GDP in FY2009 (ended 30 June 2009).

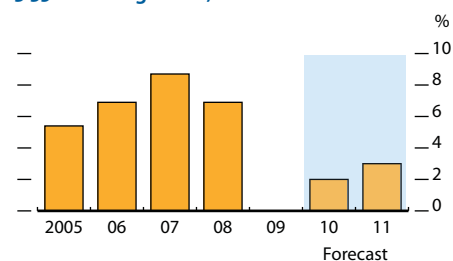
Declines in electricity consumption, new car registrations, and imports (which fell by 10% in the first half of the year) illustrated the overall

3.35.11 Inflation, Solomon Islands



Source: Central Bank of Solomon Islands.

3.35.12 GDP growth, Solomon Islands



Source: International Monetary Fund; ADB estimates.

weakness in the economy. Key subsectors contracted —agriculture (by 1.3%), construction and commerce (7.8%), and restaurants and hotels (4.1%).

Lower food prices helped bring down inflation to 5.0% in FY2009, and then to 0.4% in November 2009. The central bank began to ease monetary policy in June 2009 to facilitate credit to business. However, lending to the private sector remains low (Figure 3.35.13), reflecting the weak economic climate and deterioration in bank loan portfolios.

In the external accounts, the current account deficit widened to 12.9% of GDP in FY2009. Official reserves rose to the equivalent of 5.3 months of imports, in part owing to a US\$10 million general allocation of special drawing rights by the IMF.

A slight rebound of 0.4% of GDP is expected in FY2010 as the injection of budget support from development partners helps to improve domestic demand.

Public debt (estimated at 37% of GDP in February 2010) and other debt indicators are above threshold levels set by the IMF and World Bank, which restricts the government's options for managing the fiscal deficit.

Capacity to service the public debt would be improved if efforts to reform the public sector and public enterprises were pursued vigorously, and if loans secured for the reconstruction of areas damaged during civil unrest in 2006 were to increase the productive capacity of the economy.

## Tuvalu

Economic growth of about 1.5% in 2009 was in line with the historical trend, a worthy performance given the weak global environment. Government spending on administration, construction, and social development more than offset a decline in remittances from the country's seafarers.

Cash reserves in the Consolidated Investment Fund (CIF), accumulated during the years prior to the global crisis, allowed the government a considerable degree of flexibility to manage fiscal shocks. Sustainable CIF drawdown helped financed budget shortfalls in 2008 and 2009, that were kept to high levels by fishing license revenues and donor contributions. Revenue collections for 2010 are forecast at A\$24.9 million and the government's core expenditure program at A\$32.5 million (an increase of 0.6% over the 2009 budget), giving a budget deficit of A\$7.6 million. The estimate of the budget deficit, that factors in A\$4.5 million in financing from the CIF is A\$3.1 million for FY2010.

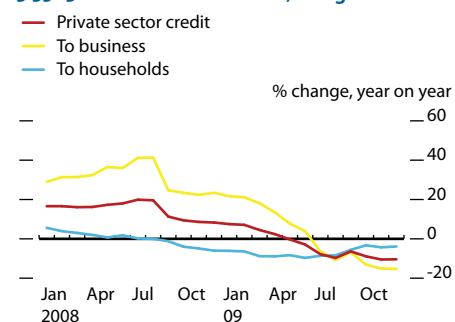
The economy is forecast to grow by 1.6% in 2010, supported by global economic recovery that will increase demand for seafarers (raising remittances) and planned increases in government spending. Inflation is seen at about 3.5% this year, a touch lower than is estimated for 2009.

There are risks to the fiscal position, given the volatility of fishing license income in particular, and, on the spending side, from persistent cost overruns in the government's scholarship and medical insurance programs.

Moreover, the CIF relies in the medium term on distributions from the Tuvalu Trust Fund, which is mainly invested in offshore financial markets. There was no distribution from the fund last year because of low investment valuations and exchange rate fluctuations. Indeed, distributions are unlikely for some years.

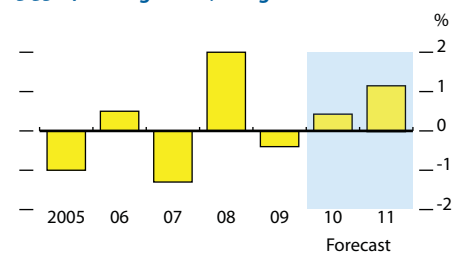
The cumulative impact of projected budget deficits (Figure 3.35.15)

### 3.35.13 Private sector credit, Tonga



Source: National Reserve Bank of Tonga.

### 3.35.14 GDP growth, Tonga



Sources: Ministry of Finance. *Budget Statements: Review of the Tongan Economy and Outlook*. Various issues; ADB estimates.

is likely to completely drain the CIF by 2012. Yet without the financing buffer that this fund provides, the economy will be more vulnerable to even relatively small economic or fiscal shocks.

## Vanuatu

In a seventh consecutive year of growth, the economy expanded by an estimated 3.8% in 2009, driven by tourism and construction. However, agriculture and retailing were soft. The net effect was that the pace of growth was well below the average of 6.5% recorded in the previous 5 years (Figure 3.35.16), driven largely by private sector investment and underpinned by policy reforms that included the opening of the aviation and telecommunications markets.

The number of cruise-ship visitors increased by 43% to 90,920 and air arrivals by 12% to 63,359 in the first 9 months of 2009, compared with the prior-year period. This reflected a relatively buoyant economy in Australia, the main source of tourists, as well as flooding and other problems in the Fiji Islands, which prompted some tourists to vacation instead in Vanuatu.

Construction received a fillip from projects funded by the US Millennium Challenge Corporation, and from refurbishment of tourism facilities. Growth in agriculture, fishing, and forestry slowed to an estimated 1.7%, from over 5% in 2008. Production of copra, coconut oil, coffee, and beef all fell in the first 9 months of 2009. Cocoa and kava increased, encouraged by high prices and strong local demand.

Inflation moderated in the second half of 2009 to average 5.6% for the year. Nevertheless, this was above the Reserve Bank of Vanuatu's target to keep inflation under 4.0%. The current account deficit likely narrowed to 3.7% in 2009, as tourism receipts rose while imports eased.

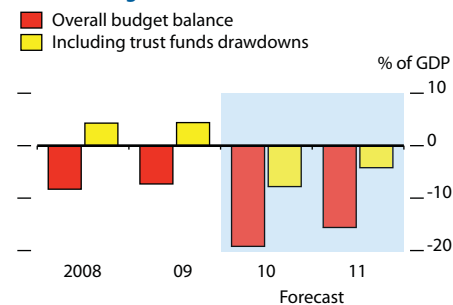
In 2010, growth is forecast to accelerate to 4.6%, based on tourism (bookings are strong) and a pipeline of planned construction projects. Agriculture and retailing are expected to pick up modestly. Emerging capacity constraints in tourism will likely see economic growth ease to about 4.0% in 2011.

Inflation is projected to remain above the central bank's target, held up by higher oil prices. The current account deficit is expected to widen in 2010 and 2011, as the pickup in domestic demand lifts imports.

The government forecasts a near-balanced budget for 2010, after small surpluses in recent years. Total recurrent revenue is expected to increase by more than 12% in real terms. Donor budget support has also increased, allowing for an almost 20% real increase in total spending, including the introduction of fee-free education. Budget papers describe the expenditure and revenue estimates as being at the "limits of the level consistent with fiscal prudence," given targets of balanced or surplus budgets.

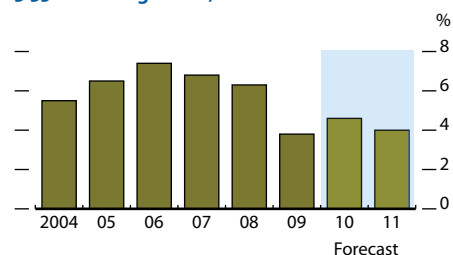
Despite success in raising the pace of growth in recent years, progress toward the Millennium Development Goals has tended to lag. With public debt below 20% of GDP (Figure 3.35.17) and generally favorable economic prospects, the country now has the fiscal capacity to increase borrowing for investment and accelerate progress toward those goals.

3.35.15 Budget balance, Tuvalu



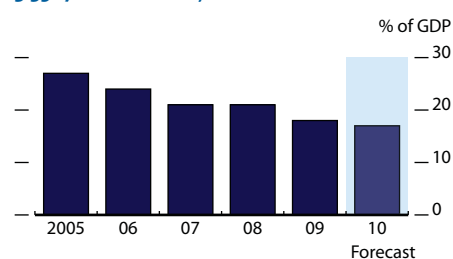
Source: Ministry of Finance and Economic Planning, 2010 Budget Speech.

3.35.16 GDP growth, Vanuatu



Sources: Vanuatu National Statistics Office; Government of the Republic of Vanuatu, 2009, *Budget 2010 Volume 1 Fiscal Strategy Report*, December; ADB estimates.

3.35.17 Public debt, Vanuatu



Source: Vanuatu government budget papers.





# Statistical appendix

# Statistical notes and tables

The statistical appendix presents selected economic indicators for 44 developing member economies of the Asian Development Bank (ADB) and for Brunei Darussalam, an unclassified regional member in a total of 23 tables. The economies are grouped into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific. Most of the tables contain historical data for 2005 to 2009; some have forecasts for 2010 and 2011.

The data were standardized to the degree possible in order to allow comparability over time and across economies, but differences in statistical methodology, definitions, coverage, and practices make full comparability impossible. The national income accounts section is based on the United Nations System of National Accounts, while the balance-of-payments data are based on International Monetary Fund (IMF) accounting standards. Historical data were obtained from official sources, statistical publications and databases, and documents of the ADB, IMF, and World Bank. Projections for 2010 and 2011 are generally staff estimates made on the basis of available quarterly or monthly data, although some projections are from governments.

Most countries report on a calendar-year basis. Some economies record their government finance data on a fiscal year basis, such as: Armenia; Azerbaijan; Hong Kong, China; Cook Islands; Kazakhstan; Kyrgyz Republic; Lao People's Democratic Republic (Lao PDR); Samoa; Singapore; Taipei, China; Tajikistan; Thailand; and Uzbekistan. Federated States of Micronesia; Nauru; Republic of Marshall Islands; and Republic of Palau (hereafter Palau) report government finance and balance-of-payments data on a fiscal year basis. South Asian countries (except for Maldives and Sri Lanka), Myanmar, and Tonga report all variables on a fiscal year basis.

Regional and subregional averages/totals are provided for nine tables (A1, A2, A8, A10, A11, A12, A13, A14, and A15). For tables A1, A2, A8, and A15, the averages are computed using weights derived from levels of gross national income (GNI) in current United States dollars (US\$) following the World Bank Atlas method. The GNI data for 2005–2008 were obtained from the World Bank's World Development Indicators online. Weights for 2008 were carried over through 2011. The GNI data for Cook Islands and Tuvalu were estimated using the Atlas conversion



factor. Myanmar and Nauru have no GNI data. For Tables A10 and A12, the regional and subregional averages were computed on the basis of a consistent sum, which means that if there are missing country data for a given year, the sum of the prior year used for computing the growth rate excludes the corresponding country data. Data for Myanmar and Nauru are excluded from the computation of all subregional averages/totals.

**Tables A1, A2, A3, A4, A5, and A7.** These tables show related data on output growth, production, and demand. Changes to the national income accounts series for some countries have been made owing to a change in source, methodology, and/or base year. The series for Bhutan reflects fiscal rather than calendar year data, while those for Timor-Leste reflects non-oil, non-United Nations GDP. The constant GDP series for India were rebased from 1999/2000 to 2004/05.

**Table A1: Growth rate of GDP (% per year).** The table shows annual growth rates of GDP valued at constant market prices, factor costs, or basic prices. GDP at market prices is the aggregation of the value added of all resident producers at producers' prices including taxes less subsidies on imports plus all nondeductible value-added or similar taxes. Constant factor cost measures differ from market price measures in that they exclude taxes on production and include subsidies. Basic price valuation is the factor cost plus some taxes on production, such as property and payroll taxes, and less some subsidies, such as labor-related subsidies but not product-related subsidies. Most countries use constant market price valuation. Fiji Islands, India, Pakistan, and Sri Lanka use constant factor costs, while Maldives and Nepal use basic prices. The series for Azerbaijan has been revised due to a change in source. The series for Myanmar has been changed to reflect ADB estimates.

**Table A2: Growth rate of per capita GDP (% per year).** The table provides the growth rates of real per capita GDP, which is defined as GDP at constant prices divided by the population. The series for most of the Pacific countries were revised due to a change in source of population data. Data on per capita gross national product in US\$ terms for 2008, sourced from the World Bank, World Development Indicators online, are also shown.

**Table A3: Growth rate of value added in agriculture (% per year).** The table shows the growth rates of value added in agriculture and its corresponding share in 2008. The agriculture sector comprises agricultural crops, livestock, poultry, fisheries, and forestry.

**Table A4: Growth rate of value added in industry (% per year).** The table provides the growth rates of value added in industry and its corresponding share in 2008. This sector comprises manufacturing, mining and quarrying, construction, and utilities. However, construction in Uzbekistan is included in the services sector.

**Table A5: Growth rate of value added in services (% per year).** The table gives the growth rates of value added in services, as well as its corresponding share in 2008. Subsectors generally include trade, banking, finance, real estate, public administration, and other services.

**Table A6: Unemployment rate (%).** The unemployment rate is the percentage of the labor force that actively seeks work but is unable to find work at a given time. The age of the working population ranges from

15 to 65, except for Bangladesh where the labor force covers those aged 10 and above. The unemployment rates of the People's Republic of China (PRC) and Viet Nam refer to unemployment in urban areas only.

**Table A7: Gross domestic investment (% of GDP).** This table provides the ratio of gross domestic investment (GDI) to GDP. GDI is the sum of gross fixed capital formation plus changes in inventories. Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets in a given accounting period. Additions to the value of nonproduced assets, e.g., land, form part of gross fixed capital formation. Inventories are stocks of goods held by institutional units to meet temporary or unexpected fluctuations in production and sales. For India, GDI includes valuables and errors and omissions.

**Table A8: Inflation (% per year).** Data on inflation rates represent period averages. Except for India, which reports the wholesale price index, inflation rates presented are based on consumer price indexes. The consumer price indexes of the following countries are for a given city or group of consumers only: Afghanistan is for Kabul, Cambodia is for Phnom Penh, Marshall Islands is for Majuro, Solomon Islands is for Honiara, and Nepal is for urban consumers.

**Table A9: Growth in money supply (% per year).** This table tracks the annual percentage change in the end-of-period supply of broad money as represented by M2 (for most countries). M2 is defined as the sum of M1 and quasi-money where M1 denotes currency in circulation plus demand deposits and quasi-money consists of time and savings deposits including foreign currency deposits.

**Tables A10, A12, A13, A14, A15, and A16.** Balance of payments. This set of tables shows selected international economic transactions of countries as recorded in the balance of payments (BOP). These items cover annual flows, except for some countries which show data as of a specified period only.

**Tables A10 and A12: Growth rates of merchandise exports and imports (% per year).** The annual growth rates of exports and imports, in terms of merchandise goods only, are shown in these tables. Data are in million US\$, primarily obtained from the balance-of-payments accounts of each country. Exports are reported on a free-on-board (f.o.b.) basis. Import data are generally reported on an f.o.b. basis, except for Afghanistan, Bhutan, Cambodia, India, Lao PDR, Myanmar, Philippines, Samoa, Singapore, Solomon Islands, and Thailand, which value them on a cost, insurance, freight (c.i.f.) basis.

**Table A11: Direction of exports (% of total).** This table shows the exports of developing Asian economies. Data are sourced from IMF, Direction of Trade and Statistics, CD-ROM (January 2010), except for Taipei, China, which were sourced from CEIC Data Company, Ltd. This table shows the percentage share of exports of each economy to other economies in developing Asia excluding the PRC; PRC only; US; Japan; European Union (EU); and others (or rest of the world). Exports to the rest of the world are derived as total exports to the world minus exports among themselves, and to US, Japan, and EU.

**Table A13: Trade balance (US\$ million).** The trade balance is the difference between merchandise exports and merchandise imports.

Figures in this table are based on the exports and imports levels used to generate Tables A10 and A12.

**Table A14: Current account balance (US\$ million).** The current account balance is the sum of the balance of trade for merchandise, net trade in services and factor income, and net transfers. In the case of Cambodia, Lao PDR, and Viet Nam, official transfers are excluded from the current account balance.

**Table A15: Current account balance (% of GDP).** The values reported in Table 14 are divided by GDP at current prices in US\$.

**Table A16: Foreign direct investment (US\$ million).** Foreign direct investment refers to equity capital, reinvested earnings, investment in debt securities, and other capital associated with the transactions of the enterprises, net of repatriations and intercompany loan repayments. For the PRC, foreign direct investment refers to investments of foreign enterprises, economic organizations, and individuals through joint ventures and cooperation; reinvested earnings; and enterprises' borrowings from abroad under approved investment projects. The 2009 data for Kyrgyz Republic cover only the first 3 quarters of the year while that for India refers to data for the first 6 months of the fiscal year. The full year figures for Tajikistan and Turkmenistan are staff estimates.

**Table A17: External debt outstanding (US\$ million).** For most economies, external debt outstanding—public and private—includes medium- and long-term debt, short-term debt, and IMF credit. For Cambodia, Georgia, and Lao PDR, only public external debt is reported. For Azerbaijan; India; Kazakhstan; Kyrgyz Republic; Malaysia, Philippines; and Singapore the figures for 2009 are as of end-September.

**Table A18: Debt service ratio (% of exports of goods and services).** This table generally presents the total debt service payments of each economy, which comprise principal repayments (excluding on short-term debt) and interest payments on outstanding external debt, as a percentage of exports of goods and services. For Cambodia and Lao PDR, debt service refers to external public debt only. For Papua New Guinea, Samoa, and Viet Nam, exports of goods are used as the denominator in the calculation of the ratio; for the Philippines, exports of goods, services, and income are used as the denominator. For Bangladesh, the ratio represents debt service payments on medium- and long-term loans as a percentage of exports of goods, nonfactor services, and workers' remittances; while for Azerbaijan, the ratio represents public and publicly guaranteed external debt service payments as a percentage of exports of goods and nonfactor services.

**Table A19: Exchange rates to the US dollar (annual average).** The annual average exchange rates of each economy are quoted in local currencies per US dollar. The rate for 2009 for India is for the period 1 April 2009–22 January 2009. The Turkmenistan Manat was redenominated on 1 January 2009 from TMM 14,250 to TMM 2.8 per US dollar.

**Table A20: Gross international reserves (US\$ million).** Gross international reserves are defined as the US\$ value of holdings of foreign exchange, special drawing rights (SDR), reserve position in the IMF, and gold at the end of a given period. For Turkmenistan, gold is excluded in the computation. For Marshall Islands; Samoa; Solomon Islands; Taipei, China; Tonga; and Vanuatu, this heading refers to foreign

exchange reserves only. In some countries, the rubric comprises foreign assets and reserves of national monetary authorities and national oil funds, i.e., foreign assets of the Maldives Monetary Authority, net foreign reserves of the State Bank of Pakistan, assets of the National Oil Fund of Azerbaijan, and official external assets of Kiribati. The data for India is as of 12 February 2010 while that for Kyrgyz Republic is as of end-September 2009.

**Tables A21, A22, and A23:** Government finance. This set of tables refers to the revenue and expenditure transactions as well as the fiscal balance of the central government expressed as a percentage of GDP in nominal terms. For Cambodia (since 2006), Georgia, India, Kyrgyz Republic, Mongolia, PRC, Tajikistan, Turkmenistan, and Uzbekistan, transactions are those reported by the general government. For the Republic of Korea, government revenues exclude social security contributions.

**Table A21: Central government expenditures (% of GDP).** Central government expenditures comprise all nonrepayable payments to both current and capital expenses, plus net lending. These amounts are computed as a share of GDP at current prices. For Thailand, expenditures refer to budgetary expenditures excluding externally financed expenditures and corresponding borrowing; while that for Tajikistan includes externally financed public investment programs. One-time expenditures are excluded for Pakistan.

**Table A22: Central government revenues (% of GDP).** Central government revenues comprise all nonrepayable receipts, both current and capital, plus grants. These amounts are computed as a percentage of GDP at current prices. For the Republic of Korea, revenues incorporate the repayment on government-guaranteed debts but exclude social security contributions. For Singapore, revenues refer to receipts credited to the three accounts listed for the previous table, including investment income, capital receipts, and investment adjustments. Grants are excluded in Cambodia, Lao PDR, Malaysia, Singapore, and Thailand; revenues from disinvestment are included for India; only current revenues are included for Bangladesh; and grants and privatization proceeds are excluded for Sri Lanka. For Cambodia, the proceeds of the IMF debt relief program are reflected in their revenues for 2006.

**Table A23: Fiscal balance of central government (% of GDP).** Fiscal balance is the difference between central government revenues and expenditures. The difference is also computed as a share of GDP at current prices. Data variations may arise due to statistical discrepancies, e.g., balancing items for both central and local governments, and differences in the concept used in the individual computations of revenues and expenditures as compared with the calculation of the fiscal balance. For Thailand, the fiscal balance is a cash balance composed of the budgetary and nonbudgetary balances.

Table A1 Growth rate of GDP (% per year)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	11.4	13.3	12.0	6.1	2.7	4.7	5.9
Armenia	13.9	13.2	13.8	6.8	-14.4	1.5	3.0
Azerbaijan	26.4	34.5	25.1	10.8	9.3	9.5	9.7
Georgia	9.6	9.4	12.3	2.3	-3.9	2.0	4.0
Kazakhstan	9.7	10.7	8.9	3.3	1.2	2.5	3.5
Kyrgyz Republic	-0.2	3.1	8.5	8.4	2.3	5.5	6.0
Tajikistan	6.7	7.0	7.8	7.9	3.4	4.0	5.0
Turkmenistan	13.0	11.4	11.6	10.5	6.1	6.5	11.0
Uzbekistan	7.0	7.2	9.5	9.0	8.1	8.5	9.0
<b>East Asia</b>	8.2	9.4	10.4	7.3	5.9	8.3	7.7
China, People's Rep. of	10.4	11.6	13.0	9.6	8.7	9.6	9.1
Hong Kong, China	7.1	7.0	6.4	2.1	-2.7	5.2	4.3
Korea, Rep. of	4.0	5.2	5.1	2.3	0.2	5.2	4.6
Mongolia	7.3	8.6	10.2	8.9	-1.6	7.0	6.5
Taipei, China	4.7	5.4	6.0	0.7	-1.9	4.9	4.0
<b>South Asia</b>	9.1	9.0	8.7	6.4	6.5	7.4	8.0
Afghanistan, Islamic Rep. of	16.1	8.2	12.1	3.4	15.1	7.6	6.8
Bangladesh	6.0	6.6	6.4	6.2	5.9	5.5	6.3
Bhutan	7.5	6.7	13.5	11.8	6.0	6.0	6.5
India	9.5	9.7	9.2	6.7	7.2	8.2	8.7
Maldives	-4.6	18.0	7.2	6.3	-3.0	3.0	3.5
Nepal	3.1	3.7	3.3	5.3	4.7	3.5	4.5
Pakistan	9.0	5.8	6.8	4.1	2.0	3.0	4.0
Sri Lanka	6.2	7.7	6.8	6.0	3.5	6.0	7.0
<b>Southeast Asia</b>	5.8	6.1	6.5	4.3	1.2	5.1	5.3
Brunei Darussalam	0.4	4.4	0.2	-1.9	-1.2	1.1	1.5
Cambodia	13.3	10.8	10.2	6.7	-2.0	4.5	6.0
Indonesia	5.7	5.5	6.3	6.0	4.5	5.5	6.0
Lao People's Dem. Rep.	6.8	8.7	7.8	7.2	6.5	7.0	7.5
Malaysia	5.3	5.8	6.2	4.6	-1.7	5.3	5.0
Myanmar	4.5	7.0	5.5	3.6	4.4	5.2	5.5
Philippines	5.0	5.3	7.1	3.8	0.9	3.8	4.6
Singapore	7.6	8.7	8.2	1.4	-2.0	6.3	5.0
Thailand	4.6	5.1	4.9	2.5	-2.3	4.0	4.5
Viet Nam	8.4	8.2	8.5	6.2	5.3	6.5	6.8
<b>The Pacific</b>	3.1	1.7	5.0	5.4	2.3	3.7	5.0
Cook Islands	0.0	0.7	9.5	-1.2	-0.1	1.0	2.0
Fiji Islands	0.6	1.9	-0.5	-0.1	-2.5	-0.5	0.5
Kiribati	3.9	1.9	0.4	-1.1	-0.7	0.8	1.2
Marshall Islands, Rep. of	0.7	2.4	3.3	-2.0	0.0	0.5	1.5
Micronesia, Fed. States of	3.0	-0.4	-0.1	-2.9	-1.0	0.5	1.0
Nauru	-14.5	6.3	-27.3	1.0	0.0	2.0	4.0
Palau, Rep. of	5.9	4.8	2.1	-1.0	-3.0	0.5	2.0
Papua New Guinea	3.9	2.3	7.2	6.7	4.5	5.5	7.7
Samoa	5.4	0.4	6.8	-3.0	-0.8	0.5	2.0
Solomon Islands	5.4	6.9	8.7	6.9	0.0	2.0	3.0
Timor-Leste, Dem. Rep. of	6.2	-5.8	8.0	13.0	5.0	7.0	7.0
Tonga	-1.0	0.6	-1.4	2.0	-0.4	0.4	1.2
Tuvalu	-4.1	6.6	4.9	1.3	1.5	1.6	1.6
Vanuatu	6.5	7.4	6.8	6.3	3.8	4.6	4.0
<b>Average</b>	8.0	8.9	9.6	6.6	5.2	7.5	7.3

- = not available.



Table A2 Growth rate of per capita GDP (% per year)

	2005	2006	2007	2008	2009	2010	2011	Per capita GNP, US\$, 2008
<b>Central Asia</b>	10.3	11.8	10.8	4.8	1.6	3.9	5.0	
Armenia	13.7	13.1	13.6	6.5	-14.6	1.4	2.9	3,350
Azerbaijan	25.2	31.6	23.6	9.6	8.3	9.3	9.5	3,830
Georgia	9.4	7.4	12.5	2.6	-4.0	2.7	4.7	2,470
Kazakhstan	8.6	9.4	7.7	1.9	0.2	1.4	2.4	6,140
Kyrgyz Republic	-1.1	2.1	7.8	6.8	1.1	4.2	4.8	740
Tajikistan	4.5	5.4	5.5	4.7	1.6	2.2	3.1	600
Turkmenistan	11.2	9.7	9.8	8.8	4.5	5.1	9.8	2,840
Uzbekistan	5.8	6.0	7.9	7.4	6.2	7.3	7.5	910
<b>East Asia</b>	7.6	8.4	9.8	6.7	5.3	7.8	7.2	
China, People's Rep. of	9.6	10.3	12.3	8.9	8.0	9.2	8.5	2,940
Hong Kong, China	6.6	6.3	5.3	1.4	-3.0	4.5	3.6	31,420
Korea, Rep. of	3.7	4.8	4.8	2.0	-0.1	4.9	4.4	21,530
Mongolia	6.0	7.3	8.7	6.2	-3.5	5.3	6.5	1,680
Taipei, China	4.3	5.0	5.5	0.4	-2.2	4.3	3.7	17,930
<b>South Asia</b>	7.5	7.4	7.2	4.8	4.9	6.0	6.4	
Afghanistan, Islamic Rep. of	13.3	5.9	10.3	1.4	-0.4	4.8	4.0	-
Bangladesh	4.6	5.2	5.1	4.8	4.6	4.1	4.9	520
Bhutan	6.1	5.3	11.9	10.2	4.5	-	-	1,900
India	7.8	8.1	7.7	5.2	5.7	6.8	7.2	1,070
Maldives	-6.2	15.3	5.7	4.6	-4.5	1.3	1.8	3,630
Nepal	0.7	2.2	0.9	3.3	1.9	2.1	2.8	400
Pakistan	7.9	3.9	5.3	2.0	0.4	1.3	2.3	980
Sri Lanka	5.1	6.5	6.1	4.9	2.3	5.0	6.0	1,780
<b>Southeast Asia</b>	4.0	4.7	4.7	2.3	-0.4	3.6	3.8	
Brunei Darussalam	-2.4	0.9	-1.6	-3.9	-	-	-	-
Cambodia	11.0	8.2	7.8	5.1	-4.0	4.1	4.3	600
Indonesia	3.4	4.8	5.0	4.7	3.3	5.0	4.9	2,010
Lao People's Dem. Rep.	-	6.0	5.8	5.2	4.4	5.0	5.5	740
Malaysia	3.1	3.8	4.1	2.5	-3.6	3.2	3.5	6,970
Myanmar	-	4.9	3.4	2.3	3.1	3.4	-	-
Philippines	2.9	3.3	5.0	1.8	-1.0	1.8	2.5	1,890
Singapore	5.1	5.3	3.8	-3.9	-4.9	3.1	1.8	34,760
Thailand	4.6	4.9	4.2	1.6	-3.1	2.1	3.9	2,840
Viet Nam	7.0	6.9	7.1	5.0	3.5	5.1	5.4	890
<b>The Pacific</b>	1.2	-0.1	3.3	3.4	0.4	1.9	3.1	
Cook Islands	-5.6	-8.6	23.6	-6.1	-2.8	-1.8	-0.8	-
Fiji Islands	0.2	1.3	-1.4	-0.5	-2.9	-0.9	0.0	3,930
Kiribati	1.5	0.1	-1.4	-2.5	-2.4	-1.0	-0.6	2,000
Marshall Islands, Rep. of	-0.3	1.4	2.3	-3.0	-1.0	-0.2	0.5	3,270
Micronesia, Fed. States of	2.6	-0.8	-0.5	-3.3	-1.4	0.1	-	2,340
Nauru	-12.7	8.6	-28.7	-0.9	-1.9	0.0	1.9	-
Palau, Rep. of	5.0	4.0	1.5	-1.6	-3.6	-0.1	-	8,650
Papua New Guinea	1.6	0.1	4.8	4.4	2.3	3.3	5.4	1,010
Samoa	5.0	0.2	6.3	-3.4	-1.1	0.2	-	2,780
Solomon Islands	2.9	4.3	6.1	4.4	-2.2	-0.4	0.8	1,180
Timor-Leste, Dem. Rep. of	-0.3	-8.8	4.6	9.5	1.8	3.8	-	2,460
Tonga	-1.2	0.2	-1.8	1.6	-0.7	0.1	0.9	2,560
Tuvalu	-6.9	5.1	-1.7	2.2	1.0	1.1	1.1	-
Vanuatu	3.9	4.8	4.2	3.6	1.0	1.8	1.2	2,330
<b>Average</b>	7.0	7.7	8.6	5.7	4.3	6.8	6.5	

- = not available.

Table A3 Growth rate of value added in agriculture (% per year)

	2005	2006	2007	2008	2009	Sector share 2008, %
<b>Central Asia</b>						
Armenia	11.2	0.5	10.4	1.4	-0.1	19.4
Azerbaijan	7.5	0.9	4.0	6.1	3.5	6.7
Georgia	12.0	-11.7	3.3	-4.4	-5.7	11.9
Kazakhstan	6.9	5.9	9.7	-6.1	13.8	7.0
Kyrgyz Republic	-4.2	1.7	1.6	0.9	7.3	28.9
Tajikistan	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	5.6	6.2	6.1	4.5	5.7	32.8
<b>East Asia</b>						
China, People's Rep. of	5.2	5.0	3.7	5.5	4.2	9.3
Hong Kong, China	-1.0	-5.0	-6.4	-18.8	1.1	0.0
Korea, Rep. of	1.3	1.5	4.0	5.6	1.6	3.3
Mongolia	10.7	7.5	15.8	5.8	1.5	25.5
Taipei, China	-4.2	13.8	-2.4	0.6	-3.1	1.5
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	-	-	-	-	-
Bangladesh	2.2	4.9	4.6	3.2	4.6	20.8
Bhutan	1.5	2.5	1.9	0.4	6.0	17.5
India	5.2	3.7	4.7	1.6	-0.2	15.7
Maldives	11.8	-0.3	-14.9	-4.5	-16.4	6.2
Nepal	3.5	1.8	1.0	4.7	2.2	35.7
Pakistan	6.5	6.3	4.1	1.1	4.7	21.3
Sri Lanka	1.8	6.3	3.4	7.5	3.3	12.1
<b>Southeast Asia</b>						
Brunei Darussalam	1.3	-9.9	-4.5	3.8	-	1.1
Cambodia	15.7	5.5	5.0	5.7	4.1	28.4
Indonesia	2.7	3.4	3.5	4.8	4.1	13.7
Lao People's Dem. Rep.	0.7	2.5	8.6	2.0	2.3	34.5
Malaysia	2.6	5.2	1.4	4.0	0.4	7.3
Myanmar	-	-	-	-	-	-
Philippines	2.0	3.8	4.8	3.2	0.1	18.3
Singapore	-1.2	15.5	-3.0	-4.0	-1.0	0.1
Thailand	-1.8	5.4	0.9	3.5	-0.6	8.8
Viet Nam	4.0	3.7	3.8	4.1	1.8	17.6
<b>The Pacific</b>						
Cook Islands	-3.5	-4.6	-11.9	-3.7	-	10.2
Fiji Islands	-11.6	5.0	-5.0	2.1	2.0	14.1
Kiribati	-5.4	7.9	0.2	1.8	1.4	24.8
Marshall Islands, Rep. of	-0.7	11.8	4.2	-2.0	-	10.0
Micronesia, Fed. States of	2.0	0.5	1.8	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	12.6	2.9	2.7	-	-	-
Papua New Guinea	5.6	1.0	4.2	4.3	2.3	35.8
Samoa	5.4	-4.1	6.9	-8.7	-	10.6
Solomon Islands	2.2	6.2	-	-	-	-
Timor-Leste, Dem. Rep. of	6.3	0.3	-5.6	-	-	-
Tonga	-4.8	-0.3	1.7	0.6	-1.3	19.6
Tuvalu	0.9	7.2	3.0	0.4	-	20.6
Vanuatu	-4.4	2.4	2.2	5.0	1.7	16.1

- = not available.

Table A4 Growth rate of value added in industry (% per year)

	2005	2006	2007	2008	2009	Sector share 2008, %
<b>Central Asia</b>						
Armenia	14.8	16.6	11.7	5.4	-31.0	43.7
Azerbaijan	43.4	49.8	32.9	9.7	10.6	70.4
Georgia	12.0	13.5	14.5	-3.9	-4.2	25.9
Kazakhstan	11.3	14.2	9.2	2.7	-0.3	45.1
Kyrgyz Republic	-9.8	-6.9	10.3	14.0	-3.4	20.3
Tajikistan	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	8.9	7.4	8.3	12.7	11.2	37.0
<b>East Asia</b>						
China, People's Rep. of	11.7	13.0	14.7	9.8	9.5	59.2
Hong Kong, China	-1.7	-2.5	-0.5	0.8	-1.5	7.6
Korea, Rep. of	4.8	6.6	6.0	2.0	-0.6	38.2
Mongolia	5.2	6.9	7.0	-1.4	-1.9	30.5
Taipei, China	6.9	7.8	9.0	-0.2	-4.6	32.9
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	-	-	-	-	-
Bangladesh	8.3	9.7	8.4	6.8	5.9	29.7
Bhutan	5.6	5.4	28.1	21.0	6.0	45.5
India	9.3	12.7	9.5	3.9	8.2	28.0
Maldives	2.9	15.8	10.1	8.4	-8.1	17.2
Nepal	3.0	4.5	3.9	1.9	1.8	16.3
Pakistan	12.1	4.1	8.8	1.7	-3.6	25.7
Sri Lanka	8.0	8.1	7.6	5.9	3.6	28.4
<b>Southeast Asia</b>						
Brunei Darussalam	-1.8	2.9	-5.6	-5.4	-	54.8
Cambodia	12.7	18.3	8.4	4.0	-13.0	29.5
Indonesia	4.7	4.5	4.7	3.7	3.5	42.1
Lao People's Dem. Rep.	10.6	14.2	4.4	10.2	17.3	23.3
Malaysia	3.4	4.5	3.0	0.9	-7.1	39.1
Myanmar	-	-	-	-	-	-
Philippines	3.8	4.5	6.8	5.0	-2.0	32.8
Singapore	8.1	10.7	7.1	-1.0	-1.1	30.2
Thailand	5.4	5.6	5.9	3.3	-4.3	48.0
Viet Nam	10.7	10.4	10.2	6.1	5.5	41.6
<b>The Pacific</b>						
Cook Islands	-12.3	1.5	29.6	-0.5	-	10.3
Fiji Islands	-20.0	0.7	-5.2	-1.1	3.5	17.9
Kiribati	-7.7	11.0	12.7	-7.1	-1.6	7.4
Marshall Islands, Rep. of	-0.7	-4.2	4.2	-2.0	-	21.4
Micronesia, Fed. States of	2.0	0.5	-4.2	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	-3.6	12.7	19.8	-	-	-
Papua New Guinea	4.1	1.5	7.3	7.2	4.6	32.7
Samoa	4.7	-2.9	13.3	-10.4	-	28.3
Solomon Islands	2.7	4.2	-	-	-	-
Timor-Leste, Dem. Rep. of	10.6	-18.1	28.7	-	-	-
Tonga	-6.3	-0.9	-2.0	1.7	3.0	18.9
Tuvalu	-18.6	28.3	30.8	-8.2	-	11.4
Vanuatu	7.1	7.0	10.4	13.1	6.9	10.7

- = not available.

Table A5 Growth rate of value added in services (% per year)

	2005	2006	2007	2008	2009	Sector share 2008, %
<b>Central Asia</b>						
Armenia	14.7	15.5	13.8	9.1	0.7	36.9
Azerbaijan	9.6	17.4	12.4	14.0	9.1	22.9
Georgia	8.6	14.5	13.0	7.4	-3.6	62.2
Kazakhstan	9.7	10.1	12.8	4.7	-0.2	48.0
Kyrgyz Republic	8.4	9.0	12.6	11.0	2.4	50.8
Tajikistan	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-
Uzbekistan	7.1	8.8	17.4	13.5	14.0	30.7
<b>East Asia</b>						
China, People's Rep. of	10.5	12.1	13.8	10.0	8.9	31.5
Hong Kong, China	7.5	7.1	7.0	2.5	-2.3	92.4
Korea, Rep. of	3.5	4.4	5.1	2.8	1.0	58.5
Mongolia	9.0	6.1	10.7	16.5	2.0	44.0
Taipei, China	4.0	4.4	4.6	1.2	0.1	65.6
<b>South Asia</b>						
Afghanistan, Islamic Rep. of	-	-	-	-	-	-
Bangladesh	6.4	6.4	6.9	6.5	6.3	49.5
Bhutan	12.7	11.0	6.8	7.8	6.0	37.0
India	11.1	10.2	10.5	9.8	8.7	56.4
Maldives	-8.2	21.3	9.1	6.7	-0.9	76.6
Nepal	2.5	6.4	4.5	7.0	5.8	48.0
Pakistan	8.5	6.5	7.0	6.6	3.6	53.0
Sri Lanka	6.4	7.7	7.1	5.6	3.5	59.5
<b>Southeast Asia</b>						
Brunei Darussalam	4.1	7.4	9.2	2.6	-	44.1
Cambodia	13.1	10.1	10.1	9.0	1.5	42.1
Indonesia	7.9	7.3	9.0	8.7	5.7	44.3
Lao People's Dem. Rep.	9.9	9.7	9.1	9.7	4.4	42.2
Malaysia	7.2	7.4	9.6	7.2	2.6	53.6
Myanmar	-	-	-	-	-	-
Philippines	7.0	6.5	8.1	3.3	3.2	48.9
Singapore	7.2	7.8	8.3	5.2	-2.0	69.7
Thailand	5.2	4.6	4.8	1.3	-0.4	43.2
Viet Nam	8.5	8.3	8.9	7.2	6.6	40.8
<b>The Pacific</b>						
Cook Islands	2.3	1.5	11.2	-0.9	-	79.5
Fiji Islands	12.1	1.5	1.8	-0.3	-5.0	68.0
Kiribati	5.8	0.5	-0.1	2.6	-2.2	67.8
Marshall Islands, Rep. of	1.6	4.6	4.2	-2.0	-	68.6
Micronesia, Fed. States of	2.8	0.5	2.5	-	-	-
Nauru	-	-	-	-	-	-
Palau, Rep. of	7.8	0.8	-1.5	-	-	-
Papua New Guinea	1.6	4.8	10.7	8.9	7.0	31.5
Samoa	5.7	2.9	3.6	2.0	-	62.3
Solomon Islands	8.2	7.9	-	-	-	-
Timor-Leste, Dem. Rep. of	4.9	-5.9	11.9	-	-	-
Tonga	1.7	1.5	-1.9	2.2	-0.7	61.5
Tuvalu	-5.1	4.9	1.0	3.9	-	68.0
Vanuatu	9.5	8.7	7.4	4.3	3.8	73.2

- = not available.

Table A6 Unemployment rate (%)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	8.1	7.4	7.1	6.3	6.7
Azerbaijan	1.4	1.3	1.2	1.0	1.0
Georgia	13.8	13.6	13.3	16.5	-
Kazakhstan	8.1	7.8	7.3	6.6	7.2
Kyrgyz Republic	8.1	8.3	8.2	8.2	-
Tajikistan	2.0	2.3	2.8	4.8	-
Turkmenistan	-	-	-	-	-
Uzbekistan	0.3	-	-	-	-
<b>East Asia</b>					
China, People's Rep. of	4.2	4.1	4.0	4.2	4.3
Hong Kong, China	5.6	4.8	4.0	3.6	5.2
Korea, Rep. of	3.7	3.5	3.2	3.2	3.6
Mongolia	3.3	3.2	3.0	3.0	3.3
Taipei, China	4.1	3.9	3.9	4.1	5.9
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	-	-	-	-	-
Bangladesh	-	4.2	-	-	-
Bhutan	2.5	2.3	3.2	3.7	4.0
India	-	-	-	-	-
Maldives	-	-	-	-	-
Nepal	-	-	-	-	-
Pakistan	7.7	6.2	5.3	5.2	-
Sri Lanka	7.2	6.5	6.0	5.4	5.9
<b>Southeast Asia</b>					
Brunei Darussalam	4.1	4.0	3.4	3.7	-
Cambodia	-	-	-	-	-
Indonesia	11.2	10.3	9.1	8.4	-
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	3.6	3.3	3.2	3.3	3.7
Myanmar	4.0	4.0	4.0	-	-
Philippines	11.5	8.0	7.3	7.4	7.5
Singapore	3.1	2.7	2.1	2.2	3.0
Thailand	1.8	1.5	1.4	1.4	1.5
Viet Nam	5.3	4.8	4.6	4.7	2.9
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	6.6	7.3	-	-	-
Kiribati	6.1	-	-	-	-
Marshall Islands, Rep. of	30.9	30.9	30.9	-	-
Micronesia, Fed. States of	-	-	-	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	4.0	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	-	-	-	-	-
Tuvalu	-	-	-	-	-
Vanuatu	-	-	-	-	-

- = not available.



Table A7 Gross domestic investment (% of GDP)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	30.5	35.9	43.7	40.8	31.8
Azerbaijan	41.5	29.9	21.3	18.7	21.3
Georgia	33.5	30.9	32.1	26.0	12.1
Kazakhstan	31.0	33.9	35.5	27.5	-
Kyrgyz Republic	16.4	24.2	26.6	24.8	-
Tajikistan	13.1	-	-	-	-
Turkmenistan	23.0	23.9	-	-	-
Uzbekistan	23.0	-	-	-	-
<b>East Asia</b>					
China, People's Rep. of	43.6	43.6	41.7	42.5	45.8
Hong Kong, China	20.6	21.7	20.9	20.5	22.5
Korea, Rep. of	29.7	29.9	29.4	31.2	25.9
Mongolia	36.9	35.1	40.3	38.3	39.0
Taipei, China	22.7	22.7	22.1	22.7	17.2
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	44.6	42.0	36.7	32.0	28.2
Bangladesh	24.5	24.7	24.5	24.2	24.2
Bhutan	53.9	48.4	-	-	-
India	34.3	36.0	37.6	35.6	34.5
Maldives	-	-	-	-	-
Nepal	26.5	26.9	28.2	31.8	29.7
Pakistan	19.1	22.1	22.5	22.0	19.7
Sri Lanka	26.8	28.0	28.0	27.5	25.6
<b>Southeast Asia</b>					
Brunei Darussalam	11.4	10.4	13.0	13.7	-
Cambodia	18.5	20.6	20.8	18.5	-
Indonesia	25.1	25.4	24.9	27.8	31.0
Lao People's Dem. Rep.	-	-	-	-	-
Malaysia	20.0	20.5	21.7	19.1	14.0
Myanmar	13.2	-	-	-	-
Philippines	14.6	14.5	15.4	15.2	14.0
Singapore	19.9	20.3	20.7	30.1	27.6
Thailand	31.4	28.3	26.4	28.9	21.9
Viet Nam	35.6	36.8	43.1	41.1	-
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	19.0	-	-	-	-
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	56.9	57.0	-	-	-
Micronesia, Fed. States of	38.0	38.0	73.2	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	-	-	-	-	-
Timor-Leste, Dem. Rep. of	21.9	22.5	32.9	-	-
Tonga	19.9	17.1	16.1	17.2	-
Tuvalu	-	-	-	-	-
Vanuatu	21.5	23.9	25.8	-	-

- = not available.

Table A8 Inflation (% per year)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	8.1	9.0	11.2	16.5	5.9	6.7	6.6
Armenia	0.6	2.9	4.4	9.0	3.4	4.5	5.0
Azerbaijan	9.6	8.3	16.7	20.8	1.5	5.8	6.0
Georgia	8.3	9.2	9.2	10.0	1.7	6.0	6.0
Kazakhstan	7.6	8.6	10.8	17.3	7.3	6.8	6.5
Kyrgyz Republic	4.4	5.6	10.2	24.5	6.9	8.5	9.0
Tajikistan	7.3	10.0	13.2	20.4	6.5	10.8	9.5
Turkmenistan	10.7	8.2	6.3	14.5	0.1	3.5	5.0
Uzbekistan	10.0	14.2	12.3	12.7	12.5	9.3	9.0
<b>East Asia</b>	2.0	1.6	3.9	5.4	0.0	3.3	3.0
China, People's Rep. of	1.8	1.5	4.8	5.9	-0.7	3.6	3.2
Hong Kong, China	1.0	2.0	2.0	4.3	0.5	2.2	2.8
Korea, Rep. of	2.8	2.2	2.5	4.7	2.8	3.0	3.0
Mongolia	9.5	4.5	8.2	26.1	6.3	7.9	6.0
Taipei, China	2.3	0.6	1.8	3.5	-0.9	1.5	1.6
<b>South Asia</b>	5.3	5.9	5.6	9.3	5.6	6.0	6.0
Afghanistan, Islamic Rep. of	12.3	5.1	13.0	26.8	-10.0	8.4	4.5
Bangladesh	6.5	7.2	7.2	9.9	6.7	7.5	7.8
Bhutan	4.8	4.9	5.2	6.4	7.1	5.0	5.0
India	4.4	5.4	4.8	8.3	3.6	5.0	5.5
Maldives	3.3	3.5	7.4	12.3	4.0	4.0	3.0
Nepal	4.5	8.0	6.4	7.7	13.2	10.0	8.0
Pakistan	9.3	7.9	7.8	12.0	20.8	12.0	8.0
Sri Lanka	11.0	10.0	15.8	22.6	3.5	6.5	8.0
<b>Southeast Asia</b>	6.2	7.1	4.1	8.8	2.7	4.5	4.5
Brunei Darussalam	1.2	0.2	0.3	2.7	1.8	1.7	1.5
Cambodia	5.9	6.1	7.7	25.0	-0.7	5.0	5.0
Indonesia	10.5	13.1	6.4	9.8	5.0	5.6	6.2
Lao People's Dem. Rep.	7.2	6.8	4.5	7.6	0.0	5.6	6.0
Malaysia	3.1	3.6	2.0	5.4	0.6	2.4	3.0
Myanmar	10.7	26.3	32.9	22.5	7.9	8.5	9.0
Philippines	7.6	6.2	2.8	9.3	3.2	4.7	4.5
Singapore	0.5	1.0	2.1	6.6	0.6	2.3	2.0
Thailand	4.5	4.7	2.2	5.4	-0.9	3.5	3.0
Viet Nam	8.3	7.5	8.3	23.0	6.9	10.0	8.0
<b>The Pacific</b>	2.5	3.0	3.6	9.5	5.2	5.1	5.4
Cook Islands	2.5	3.4	2.5	7.8	6.6	3.5	4.2
Fiji Islands	2.4	2.5	4.8	7.7	3.7	3.4	3.1
Kiribati	-0.4	-1.5	4.2	11.0	6.6	5.9	4.9
Marshall Islands, Rep. of	3.5	5.3	2.7	14.8	2.8	3.8	4.4
Micronesia, Fed. States of	4.1	4.4	3.6	6.8	7.4	3.5	3.0
Nauru	2.7	3.5	2.3	4.5	2.2	2.3	2.4
Palau, Rep. of	3.9	4.5	3.2	12.0	2.4	3.8	3.4
Papua New Guinea	1.8	2.4	0.9	10.6	7.6	7.1	7.7
Samoa	1.9	3.8	5.5	11.5	6.6	2.5	4.0
Solomon Islands	7.3	8.4	7.6	17.3	8.3	7.3	6.0
Timor-Leste, Dem. Rep. of	1.8	4.0	8.7	7.6	0.1	3.2	3.8
Tonga	10.8	7.0	5.1	9.8	5.0	3.0	3.0
Tuvalu	3.2	3.8	2.2	5.3	3.8	3.5	3.2
Vanuatu	1.2	2.1	4.0	4.8	5.6	5.0	4.2
<b>Average</b>	3.4	3.3	4.4	6.9	1.5	4.0	3.9

- = not available.

Table A9 Change in money supply (% per year)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	27.8	32.9	42.5	2.3	15.1
Azerbaijan	22.3	86.8	71.4	44.0	-0.3
Georgia	26.5	39.7	49.7	6.9	8.2
Kazakhstan	25.2	78.1	25.9	35.4	17.9
Kyrgyz Republic	9.9	51.6	33.3	12.6	20.4
Tajikistan	30.2	63.3	78.8	6.3	10.9
Turkmenistan	27.9	55.9	72.2	62.8	-4.4
Uzbekistan	55.5	37.8	46.9	35.6	34.0
<b>East Asia</b>					
China, People's Rep. of	16.3	17.0	16.7	17.8	27.7
Hong Kong, China	5.1	15.4	20.8	2.7	5.3
Korea, Rep. of	7.0	12.5	10.8	12.0	9.9
Mongolia	26.0	34.8	56.3	-5.5	26.9
Taipei, China	6.6	5.3	0.9	7.0	5.7
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	12.1	22.2	14.4	65.0	7.9
Bangladesh	16.7	19.3	17.1	17.6	19.4
Bhutan	10.7	41.4	8.6	2.3	24.6
India	21.1	21.7	21.4	18.6	12.1
Maldives	10.6	18.9	24.1	21.8	12.5
Nepal	8.3	15.4	14.0	25.2	27.0
Pakistan	19.3	14.9	19.3	15.3	9.6
Sri Lanka	19.1	17.8	16.6	8.5	18.6
<b>Southeast Asia</b>					
Brunei Darussalam	6.8	-3.9	4.6	21.6	-
Cambodia	16.1	38.2	62.9	4.8	36.8
Indonesia	16.3	14.9	19.3	14.9	12.4
Lao People's Dem. Rep.	8.2	30.1	38.7	18.3	23.0
Malaysia	15.6	17.1	9.5	13.4	9.5
Myanmar	25.1	27.1	20.9	23.4	22.3
Philippines	10.3	22.7	10.6	15.6	8.3
Singapore	6.2	19.4	13.4	12.0	11.3
Thailand	6.1	8.2	6.3	9.2	6.5
Viet Nam	29.7	33.6	46.1	20.3	29.0
<b>The Pacific</b>					
Cook Islands	-4.9	22.4	-5.8	4.0	65.9
Fiji Islands	15.0	19.8	10.4	-6.9	5.3
Kiribati	-	-	-	-	-
Marshall Islands, Rep. of	14.9	-	-	-	-
Micronesia, Fed. States of	1.6	-8.5	4.6	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	29.5	38.9	27.8	11.2	7.4
Samoa	15.7	13.7	11.0	5.8	9.1
Solomon Islands	42.4	25.9	23.3	6.1	3.1
Timor-Leste, Dem. Rep. of	26.3	8.6	0.9	29.9	29.6
Tonga	12.1	14.4	14.1	8.3	-1.9
Tuvalu	-	-	-	-	-
Vanuatu	11.6	7.0	21.7	8.0	-0.4

- = not available.

Table A10 Growth rate of merchandise exports (% per year)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	36.1	39.3	34.6	43.1	-28.4	30.2	12.1
Armenia	36.1	2.1	16.7	-7.1	-35.0	5.2	11.8
Azerbaijan	104.4	70.1	63.4	43.8	-31.0	31.8	7.6
Georgia	34.8	13.2	25.3	16.3	-22.0	12.2	14.3
Kazakhstan	37.4	37.0	24.7	48.9	-38.9	29.9	12.8
Kyrgyz Republic	-6.3	31.9	47.7	38.1	-11.3	10.0	10.0
Tajikistan	-68.2	1.2	10.0	-6.8	-1.4	8.8	10.4
Turkmenistan	28.3	44.7	33.8	26.8	8.0	45.6	-
Uzbekistan	11.6	18.0	42.9	44.2	1.7	18.9	18.6
<b>East Asia</b>	19.0	19.7	18.9	13.5	-15.5	13.3	11.5
China, People's Rep. of	28.5	27.2	25.8	17.6	-16.1	12.7	13.5
Hong Kong, China	11.2	9.7	8.9	5.6	-11.9	13.0	6.3
Korea, Rep. of	12.1	14.8	14.2	14.2	-13.7	12.0	11.0
Mongolia	22.2	44.8	26.3	29.9	-24.9	-	-
Taipei, China	8.8	12.8	10.1	3.4	-20.2	19.6	8.5
<b>South Asia</b>	21.0	20.7	24.5	14.1	-12.6	13.1	11.4
Afghanistan, Islamic Rep. of	9.2	0.9	1.3	18.9	-2.4	-	-
Bangladesh	14.0	21.5	15.8	17.4	10.1	5.0	11.0
Bhutan	34.5	47.2	83.7	4.4	-23.8	-	-
India	23.4	22.6	28.9	13.7	-15.0	16.0	12.0
Maldives	-10.7	39.4	1.2	45.2	-50.7	-	-
Nepal	11.4	2.4	2.6	9.3	-4.7	-	-
Pakistan	16.2	14.9	4.4	18.2	-6.4	-1.4	4.2
Sri Lanka	10.2	8.5	11.0	6.5	-12.9	5.0	15.0
<b>Southeast Asia</b>	15.8	17.1	12.2	14.5	-17.0	15.9	14.0
Brunei Darussalam	23.3	22.1	0.5	37.5	-	-	-
Cambodia	12.4	26.9	10.7	15.1	-17.0	5.0	8.0
Indonesia	22.9	19.0	14.0	18.3	-14.4	10.8	9.2
Lao People's Dem. Rep.	30.3	62.6	16.6	24.1	-10.0	15.0	13.0
Malaysia	12.3	12.9	9.6	13.1	-21.1	11.0	8.5
Myanmar	21.7	47.4	23.9	15.5	4.8	9.0	12.0
Philippines	3.8	15.6	6.4	-2.5	-22.3	15.2	12.7
Singapore	17.0	18.0	10.1	13.0	-20.3	19.5	14.0
Thailand	15.2	17.0	18.2	15.9	-13.9	16.0	18.0
Viet Nam	22.5	22.7	21.9	29.1	-8.9	9.0	14.0
<b>The Pacific</b>	19.3	20.0	13.6	-	-	-	-
Cook Islands	14.8	8.1	35.7	-3.7	-	-	-
Fiji Islands	-4.4	-2.6	9.0	20.4	-27.8	-	-
Kiribati	67.8	-39.3	21.9	23.1	-	-	-
Marshall Islands, Rep. of	39.3	-49.0	31.2	21.4	-	-	-
Micronesia, Fed. States of	6.1	0.6	22.2	27.0	-11.4	-	-
Nauru	-81.6	85.6	618.6	-	-	-	-
Palau, Rep. of	128.1	1.3	-25.8	-	-	-	-
Papua New Guinea	26.5	26.8	13.2	21.4	-26.0	-	-
Samoa	0.6	-13.7	33.7	-28.8	-	-	-
Solomon Islands	6.3	9.1	41.2	33.9	-	-	-
Timor-Leste, Dem. Rep. of	-	12.5	-22.2	100.0	-28.6	30.0	-
Tonga	15.9	-6.1	-10.2	-5.8	-55.0	-	-
Tuvalu	-54.0	59.4	-7.0	-	-	-	-
Vanuatu	0.1	-1.1	-21.8	41.6	-	-	-
<b>Average</b>	18.5	19.5	17.8	14.6	-16.2	14.4	12.1

- = not available.

Table A11 Direction of exports (% of total)

From \ To	Developing Asia		China, People's Rep. of		Japan		United States		European Union		Others	
	2000	2008	2000	2008	2000	2008	2000	2008	2000	2008	2000	2008
<b>Central Asia</b>	9.2	9.4	4.1	6.5	0.5	1.0	1.7	6.6	28.1	45.6	56.4	30.9
Armenia	7.8	9.7	0.2	0.2	0.1	0.0	12.6	5.0	36.9	54.2	42.5	30.9
Azerbaijan	7.1	12.6	0.3	1.0	0.0	0.3	0.5	12.5	63.6	56.0	28.6	17.5
Georgia	16.2	26.2	0.3	0.6	0.1	0.0	2.2	6.8	24.0	22.2	57.2	44.3
Kazakhstan	5.4	4.0	6.8	13.4	0.1	1.5	2.1	2.9	23.0	46.0	62.6	32.2
Kyrgyz Republic	29.0	31.1	8.8	2.7	0.1	0.2	0.6	0.3	37.6	11.7	23.9	54.0
Tajikistan	16.5	8.5	0.4	5.6	-	0.0	0.1	0.0	30.1	41.9	52.9	43.9
Turkmenistan	6.4	7.6	0.3	0.3	-	0.0	0.5	1.4	21.5	27.0	71.3	63.8
Uzbekistan	23.6	22.1	0.5	4.3	3.2	4.1	1.5	3.8	26.8	10.4	44.3	55.3
<b>East Asia</b>	25.9	27.4	11.7	13.3	11.4	7.0	21.8	14.9	15.2	17.0	13.9	20.3
China, People's Rep. of	32.9	32.8	-	-	16.3	8.0	20.4	17.3	16.1	20.1	14.3	21.8
Hong Kong, China	10.2	10.7	34.1	48.3	5.5	4.3	23.0	12.7	15.5	13.6	11.8	10.4
Korea, Rep. of	23.8	21.9	10.2	20.8	11.3	6.4	20.9	10.6	13.7	13.3	20.2	27.0
Mongolia	4.0	1.4	49.8	64.5	1.5	1.1	24.3	4.5	7.7	17.1	12.6	11.3
Taipei, China	38.2	30.1	2.9	26.2	11.2	6.9	23.6	12.0	15.2	10.7	8.8	14.1
<b>South Asia</b>	17.3	20.8	1.6	4.8	3.6	1.7	24.2	12.9	26.3	23.5	26.9	36.3
Afghanistan, Islamic Rep. of	46.0	55.1	3.4	0.5	0.3	0.1	1.9	16.5	35.3	12.8	13.1	15.0
Bangladesh	5.4	5.8	0.2	0.7	1.2	0.6	31.7	20.7	40.1	48.1	21.5	24.1
Bhutan	-	-	-	-	-	-	-	-	-	-	-	-
India	19.2	22.2	1.8	5.4	4.1	1.8	21.1	11.6	24.1	21.1	29.8	38.0
Maldives	32.0	48.0	-	0.7	4.1	2.7	44.0	1.9	18.5	42.6	1.4	4.1
Nepal	44.5	66.0	-	0.6	1.4	1.2	27.4	9.6	23.0	13.6	3.7	8.9
Pakistan	18.5	19.4	2.6	4.2	2.6	1.8	24.9	16.0	27.7	22.4	23.6	36.2
Sri Lanka	8.6	10.4	0.1	0.6	4.2	2.2	40.1	22.0	28.2	38.6	18.9	26.1
<b>Southeast Asia</b>	37.4	41.8	3.7	8.8	12.6	10.5	18.2	10.4	14.4	11.5	13.7	17.0
Brunei Darussalam	36.2	44.0	1.8	0.7	40.7	40.4	12.0	1.0	3.6	0.2	5.8	13.6
Cambodia	8.2	10.1	2.1	0.8	0.9	2.6	65.4	54.3	20.5	22.8	2.9	9.4
Indonesia	33.1	38.1	4.2	8.1	22.1	19.2	13.0	9.1	13.7	10.7	13.7	14.9
Lao People's Dem. Rep.	43.4	54.9	1.5	8.4	2.8	1.0	2.2	2.5	26.0	11.2	24.1	22.0
Malaysia	40.3	41.4	2.9	9.2	12.3	10.4	19.5	12.1	13.3	10.9	11.7	16.0
Myanmar	35.2	74.1	5.6	8.7	5.4	4.3	22.0	-	16.4	3.7	15.5	9.1
Philippines	30.5	33.4	1.6	10.6	13.4	15.0	27.3	16.0	16.5	16.6	10.7	8.3
Singapore	44.1	51.7	3.8	9.0	7.3	4.9	16.7	7.0	13.5	10.2	14.7	17.2
Thailand	30.8	34.7	3.9	9.1	14.2	11.2	20.5	11.2	15.7	12.7	15.0	21.2
Viet Nam	25.8	22.6	10.3	7.1	17.2	13.4	4.9	18.6	20.0	16.9	21.9	21.5
<b>The Pacific</b>	11.2	14.3	5.2	5.8	10.3	8.1	5.3	2.6	11.1	9.1	56.9	60.1
Cook Islands	-	-	-	-	-	-	-	-	-	-	-	-
Fiji Islands	14.3	16.4	0.0	0.1	4.1	4.1	21.1	15.2	16.5	12.8	44.0	51.5
Kiribati	-	-	-	-	-	-	-	-	-	-	-	-
Marshall Islands, Rep of	-	-	-	-	-	-	-	-	-	-	-	-
Micronesia, Fed. States of	-	-	-	-	-	-	-	-	-	-	-	-
Nauru	-	-	-	-	-	-	-	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	7.6	9.6	6.5	5.1	11.2	9.2	1.3	1.1	10.2	9.1	63.2	65.9
Samoa	18.1	11.5	0.1	1.4	0.3	0.5	10.6	2.8	3.0	0.3	67.9	83.5
Solomon Islands	42.3	23.4	12.0	48.1	20.7	2.7	0.7	0.4	10.6	9.6	13.6	15.8
Timor-Leste, Dem. Rep. of	-	-	-	-	-	-	-	-	-	-	-	-
Tonga	6.3	30.6	-	0.1	48.5	10.3	30.0	25.4	6.5	5.2	8.7	28.5
Tuvalu	-	-	-	-	-	-	-	-	-	-	-	-
Vanuatu	60.7	88.1	0.4	0.1	18.7	5.9	9.7	0.3	5.7	2.7	4.8	2.9
<b>Developing Asia</b>	29.2	30.2	8.4	11.4	11.3	7.5	20.3	13.3	15.6	16.8	15.1	20.8

- = not available.



Table A12 Growth rate of merchandise imports (% per year)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	20.7	27.4	40.2	24.7	-15.2	31.1	12.4
Armenia	33.1	20.6	45.6	35.0	-25.4	4.7	5.1
Azerbaijan	21.4	21.1	14.7	25.3	-14.0	70.7	10.6
Georgia	33.8	37.2	35.2	25.6	-31.4	11.6	8.5
Kazakhstan	30.1	34.2	37.9	15.6	-25.2	39.7	13.4
Kyrgyz Republic	22.3	62.1	45.8	43.6	-24.3	15.0	12.0
Tajikistan	-21.9	38.0	54.0	37.6	-23.3	4.4	7.4
Turkmenistan	-6.4	-13.2	93.0	55.9	19.2	19.8	-
Uzbekistan	8.1	16.0	49.2	31.0	25.8	16.5	15.5
<b>East Asia</b>	14.4	16.6	15.8	15.8	-15.7	15.4	12.5
China, People's Rep. of	17.6	19.7	20.3	18.7	-11.2	13.5	15.0
Hong Kong, China	10.2	11.6	10.3	6.2	-10.2	11.0	6.2
Korea, Rep. of	16.4	18.6	15.4	21.8	-25.7	20.0	12.0
Mongolia	20.0	20.8	42.3	57.1	-34.5	-	-
Taipei, China	8.5	11.5	8.2	9.4	-27.0	26.5	11.9
<b>South Asia</b>	30.2	21.3	29.6	20.7	-15.1	16.7	16.9
Afghanistan, Islamic Rep. of	20.5	10.0	16.2	12.1	3.5	-	-
Bangladesh	20.6	12.1	16.6	25.6	4.2	4.0	14.0
Bhutan	75.5	-5.6	21.1	27.4	-10.5	-	-
India	32.1	21.4	35.1	19.4	-17.0	20.0	18.0
Maldives	16.1	24.4	18.3	26.6	-30.4	-	-
Nepal	12.5	17.5	13.9	24.1	8.3	-	-
Pakistan	37.8	33.3	8.0	31.2	-10.3	-2.4	7.1
Sri Lanka	10.8	15.7	10.2	24.0	-29.4	20.0	20.0
<b>Southeast Asia</b>	18.4	13.6	13.0	22.1	-22.1	20.4	16.4
Brunei Darussalam	5.6	12.2	25.6	22.5	-	-	-
Cambodia	19.8	21.8	13.8	19.8	-16.3	17.0	10.0
Indonesia	37.2	6.3	15.4	36.9	-27.7	16.1	16.0
Lao People's Dem. Rep.	20.3	25.1	35.7	30.6	-13.0	10.0	10.0
Malaysia	9.2	13.9	12.7	6.5	-21.0	16.5	11.5
Myanmar	0.6	48.0	88.0	25.6	8.4	16.7	13.9
Philippines	8.0	10.9	8.7	5.6	-24.1	16.0	10.6
Singapore	16.4	18.3	10.5	22.9	-23.3	21.0	15.0
Thailand	25.8	7.9	9.1	26.5	-24.9	26.0	22.0
Viet Nam	21.3	22.1	38.5	27.9	-13.3	10.2	10.0
<b>The Pacific</b>	10.2	18.0	17.9	-	-	-	-
Cook Islands	7.9	11.7	45.3	-2.0	-	-	-
Fiji Islands	13.4	12.1	0.3	25.2	-35.4	-	-
Kiribati	29.0	-19.0	10.5	8.7	-	-	-
Marshall Islands, Rep. of	18.3	-3.8	3.6	4.0	-	-	-
Micronesia, Fed. States of	-2.2	2.5	3.4	10.6	8.5	-	-
Nauru	-8.2	17.1	11.1	-	-	-	-
Palau, Rep. of	-2.0	9.6	-20.8	-	-	-	-
Papua New Guinea	4.4	30.6	32.5	18.6	4.2	-	-
Samoa	20.6	16.7	3.7	10.4	-	-	-
Solomon Islands	67.5	45.3	33.7	13.1	-	-	-
Timor-Leste, Dem. Rep. of	-8.2	-9.8	85.0	43.7	9.9	6.6	-
Tonga	27.6	12.9	-8.2	29.9	-5.0	-	-
Tuvalu	13.3	4.4	4.1	-	-	-	-
Vanuatu	16.4	7.4	23.7	39.3	-	-	-
<b>Average</b>	16.9	16.4	16.8	18.1	-17.3	17.1	13.9

- = not available.

Table A13 Trade balance (US\$ million)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	14,222	23,971	29,801	54,166	28,523	36,471	31,596
Armenia	-588	-896	-1,600	-2,664	-2,095	-2,190	-2,250
Azerbaijan	3,299	7,745	15,224	23,012	14,583	16,680	17,600
Georgia	-1,214	-2,019	-2,896	-3,833	-2,400	-2,665	-2,767
Kazakhstan	10,322	14,642	15,091	33,519	15,187	16,900	18,800
Kyrgyz Republic	-419	-886	-1,276	-1,907	-1,203	-1,466	-1,678
Tajikistan	-622	-986	-1,673	-2,472	-1,816	-1,881	-2,009
Turkmenistan	1,997	4,598	4,635	4,441	3,934	8,093	-
Uzbekistan	1,447	1,774	2,296	4,069	2,333	3,000	3,900
<b>East Asia</b>	178,597	255,955	354,243	361,088	309,196	312,346	326,914
China, People's Rep. of	134,189	217,746	315,381	360,682	249,300	273,316	293,978
Hong Kong, China	-7,631	-14,029	-19,699	-23,128	-26,863	-23,381	-24,467
Korea, Rep. of	32,683	27,905	28,168	5,669	56,128	37,500	37,800
Mongolia	-100	136	-52	-613	-157	-	-
Taipei, China	19,456	24,197	30,445	18,478	30,789	24,911	19,602
<b>South Asia</b>	-68,340	-83,656	-116,821	-154,802	-125,368	-141,377	-178,056
Afghanistan, Islamic Rep. of	-4,335	-4,933	-6,002	-6,607	-6,971	-	-
Bangladesh	-3,297	-2,889	-3,458	-5,330	-4,708	-4,740	-5,895
Bhutan	-249	-123	47	-72	-144	-	-
India	-51,904	-61,782	-91,467	-118,651	-94,699	-120,065	-152,858
Maldives	-494	-590	-737	-890	-687	-	-
Nepal	-1,193	-1,528	-1,837	-2,410	-2,733	-	-
Pakistan	-4,352	-8,441	-9,711	-14,970	-12,626	-12,150	-13,625
Sri Lanka	-2,517	-3,370	-3,656	-5,871	-2,799	-4,421	-5,677
<b>Southeast Asia</b>	74,332	107,913	114,334	80,714	105,898	90,962	84,162
Brunei Darussalam	4,834	6,041	5,677	8,104	-	-	-
Cambodia	-1,008	-1,078	-1,343	-1,802	-1,541	-2,272	-2,581
Indonesia	17,532	29,661	32,753	22,916	35,199	34,556	31,136
Lao People's Dem. Rep.	-573	-456	-835	-1,177	-975	-999	-1,048
Malaysia	34,034	37,428	37,141	51,167	40,149	38,126	37,274
Myanmar	1,547	2,266	924	506	284	-269	-468
Philippines	-7,773	-6,732	-8,391	-12,885	-8,878	-10,599	-10,815
Singapore	36,432	42,565	46,065	26,559	30,549	32,878	34,555
Thailand	-8,254	994	12,782	108	19,416	9,376	4,438
Viet Nam	-2,439	-2,776	-10,438	-12,782	-8,306	-9,836	-8,330
<b>The Pacific</b>	215	341	176	350	-213	-429	11
Cook Islands	21	19	13	9	10	10	11
Fiji Islands	-774	-969	-914	-1,179	-695	-	-
Kiribati	-73	-60	-66	-72	-	-	-
Marshall Islands, Rep. of	-63	-72	-71	-71	-	-	-
Micronesia, Fed. States of	-104	-107	-108	-116	-131	-138	-
Nauru	21	25	35	-	-	-	-
Palau, Rep. of	-92	-102	-81	-	-	-	-
Papua New Guinea	1,793	2,216	2,126	2,655	1,018	-	-
Samoa	-175	-208	-213	-241	-	-	-
Solomon Islands	-17	-63	-75	-52	-	-	-
Timor-Leste, Dem. Rep. of	-104	-92	-180	-255	-285	-302	-
Tonga	-89	-104	-96	-129	-129	-	-
Tuvalu	-13	-13	-14	-	-	-	-
Vanuatu	-93	-103	-145	-201	-	-	-
<b>Total</b>	199,027	304,524	381,733	341,516	318,037	297,973	264,627

- = not available.

Table A14 Current account balance (US\$ million)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	1,074	6,345	5,754	25,583	10,439	26,489	31,842
Armenia	-52	-117	-589	-1,382	-1,342	-1,000	-850
Azerbaijan	167	3,708	9,019	16,454	10,173	14,839	16,199
Georgia	-710	-1,174	-2,009	-2,915	-1,274	-1,545	-1,626
Kazakhstan	-1,056	-1,999	-8,322	6,279	-3,405	2,830	4,550
Kyrgyz Republic	-38	-287	-228	-603	-458	-602	-685
Tajikistan	-62	-79	-414	-453	-522	-460	-443
Turkmenistan	875	3,360	4,030	3,553	3,329	7,470	8,436
Uzbekistan	1,949	2,933	4,267	4,650	3,938	4,958	6,262
<b>East Asia</b>	213,644	308,110	436,478	474,247	387,355	390,901	412,018
China, People's Rep. of	160,818	253,268	371,833	426,107	284,100	324,914	353,621
Hong Kong, China	20,180	22,935	25,530	29,297	18,397	17,094	17,344
Korea, Rep. of	14,981	5,385	5,876	-5,776	42,668	15,000	11,000
Mongolia	88	222	265	-503	-382	-263	-
Taipei, China	17,578	26,300	32,975	25,122	42,572	34,156	30,053
<b>South Asia</b>	-13,391	-15,752	-23,365	-45,300	-31,740	-28,146	-43,839
Afghanistan, Islamic Rep. of	-182	-379	83	-192	-462	-	-
Bangladesh	-557	824	936	702	2,536	1,787	551
Bhutan	-235	-38	145	-27	-113	-	-
India	-9,902	-9,565	-15,737	-28,728	-24,699	-22,065	-34,858
Maldives	-273	-302	-438	-647	-420	-404	-
Nepal	161	197	-13	366	541	-	-
Pakistan	-1,753	-4,990	-6,878	-13,874	-9,251	-6,562	-8,070
Sri Lanka	-649	-1,499	-1,464	-2,900	128	-901	-1,461
<b>Southeast Asia</b>	44,794	84,808	106,372	74,140	96,100	81,799	86,078
Brunei Darussalam	4,038	5,232	4,805	7,183	-	-	-
Cambodia	-618	-577	-705	-1,260	-1,051	-1,763	-2,047
Indonesia	277	10,860	10,492	125	10,582	8,930	4,643
Lao People's Dem. Rep.	-526	-452	-723	-815	-660	-586	-688
Malaysia	20,693	26,179	29,210	38,855	31,975	29,914	32,009
Myanmar	444	1,032	112	-697	-272	-630	-758
Philippines	1,984	5,347	7,119	3,633	8,552	5,940	6,240
Singapore	26,704	35,035	47,311	36,189	33,838	36,337	46,365
Thailand	-7,642	2,315	15,682	1,633	20,291	11,406	5,959
Viet Nam	-560	-164	-6,931	-10,706	-7,156	-7,748	-5,644
<b>The Pacific</b>	540	260	742	1,974	292	-309	-
Cook Islands	21	19	13	9	10	10	11
Fiji Islands	-293	-589	-475	-633	-264	-	-
Kiribati	-20	-3	-1	-59	-	-	-
Marshall Islands, Rep. of	1	-2	-8	-8	-19	-	-
Micronesia, Fed. States of	-2	-9	11	2	-36	-49	-
Nauru	-7	-5	-2	-	-	-	-
Palau, Rep. of	-5	-21	10	-	-	-	-
Papua New Guinea	648	443	186	791	-403	-1,312	-3,002
Samoa	-20	-45	-23	-42	-76	-82	-74
Solomon Islands	-12	-25	-76	-120	-135	-133	-
Timor-Leste, Dem. Rep. of	261	539	1,167	2,104	1,272	1,282	-
Tonga	-6	-23	-24	-32	-35	-	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-34	-24	-37	-39	-21	-26	-30
<b>Total</b>	246,661	383,771	525,980	530,645	462,446	470,735	483,005

- = not available.

Table A15 Current account balance (% of GDP)

	2005	2006	2007	2008	2009	2010	2011
<b>Central Asia</b>	1.0	3.4	1.9	9.1	3.4	7.0	7.5
Armenia	-1.1	-1.8	-6.4	-11.6	-15.4	-12.0	-10.5
Azerbaijan	1.3	17.7	27.3	33.7	23.6	23.0	21.7
Georgia	-11.1	-15.2	-19.7	-22.8	-11.9	-14.0	-14.0
Kazakhstan	-1.8	-2.5	-7.9	4.7	-3.2	2.3	3.3
Kyrgyz Republic	-1.6	-10.1	-6.0	-11.7	-10.0	-12.0	-12.0
Tajikistan	-2.7	-2.8	-11.2	-8.8	-9.7	-8.3	-7.1
Turkmenistan	5.1	15.7	15.5	18.7	17.8	30.0	30.0
Uzbekistan	14.3	17.2	19.1	16.7	12.0	13.0	14.0
<b>East Asia</b>	5.9	7.3	8.4	7.4	6.2	5.1	4.7
China, People's Rep. of	7.1	9.3	10.6	9.4	5.8	5.7	5.3
Hong Kong, China	11.4	12.1	12.3	13.6	8.7	7.6	7.2
Korea, Rep. of	1.8	0.6	0.6	-0.6	5.1	1.5	1.0
Mongolia	3.8	11.8	4.4	-14.0	-9.1	-16.1	-21.2
Taipei, China	4.8	7.0	8.4	6.2	11.2	8.2	6.7
<b>South Asia</b>	-1.3	-1.3	-1.6	-3.0	-2.0	-1.5	-2.1
Afghanistan, Islamic Rep. of	-2.8	-4.9	0.9	-1.6	-3.6	-1.8	-2.1
Bangladesh	-0.9	1.3	1.4	0.9	2.8	1.8	0.5
Bhutan	-30.3	-4.4	14.0	-2.0	-9.4	0.0	0.0
India	-1.2	-1.0	-1.3	-2.5	-1.9	-1.5	-2.0
Maldives	-36.4	-33.0	-41.5	-51.4	-28.5	-25.0	-25.0
Nepal	2.0	2.2	-0.1	2.9	4.3	-0.5	1.0
Pakistan	-1.6	-3.9	-4.8	-8.4	-5.6	-3.6	-4.2
Sri Lanka	-2.7	-5.3	-4.5	-7.1	0.3	-2.0	-3.0
<b>Southeast Asia</b>	4.9	8.1	8.3	5.1	7.3	5.7	5.6
Brunei Darussalam	42.4	45.6	39.6	50.4	35.0	33.0	31.0
Cambodia	-9.8	-7.9	-8.2	-12.2	-10.7	-16.3	-17.0
Indonesia	0.1	2.9	2.4	0.0	2.0	1.4	0.6
Lao People's Dem. Rep.	-17.4	-12.8	-17.2	-15.4	-11.8	-10.0	-11.0
Malaysia	15.0	16.7	15.7	17.6	16.7	14.0	13.8
Myanmar	3.7	7.1	0.6	-2.5	-1.0	-1.8	-2.1
Philippines	2.0	4.5	4.9	2.2	5.3	3.3	3.2
Singapore	22.0	24.9	27.6	19.2	19.1	18.0	21.0
Thailand	-4.3	1.1	6.3	0.5	7.7	4.0	2.0
Viet Nam	-1.1	-0.3	-9.8	-11.8	-7.4	-7.6	-5.5
<b>The Pacific</b>	8.0	12.8	40.6	89.9	47.2	39.5	-
Cook Islands	11.5	10.4	6.5	4.7	4.7	4.3	4.3
Fiji Islands	-9.7	-19.0	-14.0	-17.7	-8.7	-11.0	-8.0
Kiribati	-18.5	-2.9	-1.1	-43.6	-	-	-
Marshall Islands, Rep. of	0.8	-1.6	-5.5	-5.3	-12.1	-	-
Micronesia, Fed. States of	-0.7	-3.8	4.2	0.7	-13.2	-17.4	-
Nauru	-25.5	-18.4	-10.3	-	-	-	-
Palau, Rep. of	-3.3	-13.3	6.0	-	-	-	-
Papua New Guinea	13.3	8.0	2.9	9.9	-5.1	-15.0	-30.0
Samoa	-4.5	-9.9	-4.1	-7.7	-14.4	-15.3	-12.9
Solomon Islands	-2.8	-5.5	-14.3	-18.6	-20.0	-18.0	-
Timor-Leste, Dem. Rep. of	83.1	179.0	345.3	516.2	297.0	271.7	-
Tonga	-2.5	-9.3	-9.1	-10.6	-12.9	-	-
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-9.2	-5.7	-7.4	-6.9	-3.7	-4.1	-4.3
<b>Average</b>	4.4	5.8	6.5	5.4	4.9	4.1	3.6

- = not available.

Table A16 Foreign direct investment (US\$ million)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	233	450	701	925	700
Azerbaijan	1,680	-584	-4,749	15	472
Georgia	542	1,186	1,675	1,523	765
Kazakhstan	2,117	6,663	7,966	14,783	9,526
Kyrgyz Republic	43	182	208	232	67
Tajikistan	54	66	160	190	100
Turkmenistan	418	731	804	820	1,355
Uzbekistan	88	195	739	1,000	1,500
<b>East Asia</b>					
China, People's Rep. of	72,406	72,715	83,521	108,312	94,065
Hong Kong, China	33,627	45,058	54,343	59,622	48,453
Korea, Rep. of	6,309	3,586	1,784	3,311	1,506
Mongolia	185	191	360	586	243
Taipei, China	1,625	7,424	7,769	5,432	2,804
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	271	238	243	300	185
Bangladesh	800	743	793	748	941
Bhutan	9	6	73	30	-
India	3,034	28,995	34,729	34,991	20,977
Maldives	10	14	15	12	10
Nepal	2	-6	5	5	24
Pakistan	1,459	3,450	5,026	5,335	3,695
Sri Lanka	234	451	548	691	155
<b>Southeast Asia</b>					
Brunei Darussalam	176	70	260	237	-
Cambodia	375	475	820	815	593
Indonesia	8,337	4,914	6,929	9,318	5,300
Lao People's Dem. Rep.	500	650	770	906	681
Malaysia	4,065	6,060	8,460	7,240	1,607
Myanmar	-	-	-	-	-
Philippines	1,854	2,921	2,916	1,544	1,948
Singapore	15,458	29,055	35,777	10,912	16,346
Thailand	8,048	9,460	11,330	8,570	6,148
Viet Nam	1,430	1,757	6,550	9,279	6,900
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	-	-	-	-	-
Kiribati	1	1	0	0	-
Marshall Islands, Rep. of	3	2	8	5	-
Micronesia, Fed. States of	-	-	-	-	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	-	-	-	-	-
Samoa	-	-	-	-	-
Solomon Islands	18	19	57	112	-
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	-	-	-	-	-
Tuvalu	-	-	-	-	-
Vanuatu	-	-	-	-	-

- = not available.



Table A17 External debt outstanding (US\$ million)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	1,099	1,206	1,449	1,577	2,967
Azerbaijan	1,651	1,852	2,442	3,001	3,423
Georgia	1,735	1,697	1,790	2,691	3,413
Kazakhstan	43,249	74,014	96,893	107,713	111,730
Kyrgyz Republic	2,003	2,213	2,388	2,339	2,919
Tajikistan	897	924	1,247	1,486	1,843
Turkmenistan	907	712	627	-	-
Uzbekistan	4,133	3,853	3,913	3,740	4,325
<b>East Asia</b>					
China, People's Rep. of	283,986	325,260	373,773	378,245	470,000
Hong Kong, China	454,623	516,415	711,103	659,973	659,548
Korea, Rep. of	187,882	260,061	383,152	377,944	401,922
Mongolia	1,312	1,414	1,529	1,610	1,937
Taipei, China	86,732	85,833	94,525	90,361	-
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	11,940	11,971	2,010	2,163	-
Bangladesh	18,416	18,603	19,355	20,266	20,831
Bhutan	596	689	725	780	-
India	134,002	139,114	172,360	224,413	242,822
Maldives	397	575	840	968	-
Nepal	3,104	3,157	3,341	3,197	3,493
Pakistan	34,037	35,889	39,008	44,467	50,759
Sri Lanka	11,354	12,214	14,252	15,077	-
<b>Southeast Asia</b>					
Brunei Darussalam	-	-	-	-	-
Cambodia	2,120	2,254	2,571	2,773	3,170
Indonesia	134,504	132,633	141,180	155,080	172,871
Lao People's Dem. Rep.	2,209	2,471	2,853	2,564	2,903
Malaysia	52,301	52,245	56,690	68,182	68,307
Myanmar	7,038	7,303	7,567	8,103	8,560
Philippines	54,186	53,367	54,938	53,856	53,255
Singapore	233,435	273,807	340,996	420,461	412,504
Thailand	52,162	61,027	61,873	65,225	70,016
Viet Nam	17,322	19,140	23,086	25,205	-
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	285	445	461	449	564
Kiribati	11	13	13	10	10
Marshall Islands, Rep. of	94	112	124	99	90
Micronesia, Fed. States of	65	68	68	68	68
Nauru	-	-	310	-	-
Palau, Rep. of	19	18	23	-	-
Papua New Guinea	1,244	1,189	1,065	1,053	1,063
Samoa	167	161	182	229	216
Solomon Islands	145	155	149	135	134
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	81	82	84	86	-
Tuvalu	-	-	-	-	15
Vanuatu	73	69	71	102	89

- = not available.

Table A18 Debt service ratio (% of exports of goods and services)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	4.4	3.9	2.9	3.1	5.5
Azerbaijan	2.2	1.5	0.6	0.9	1.3
Georgia	5.1	7.8	3.5	3.4	5.8
Kazakhstan	36.2	28.5	49.0	41.6	63.5
Kyrgyz Republic	23.4	11.0	14.0	14.5	9.3
Tajikistan	10.0	9.5	6.5	12.5	13.9
Turkmenistan	5.6	4.6	-	-	-
Uzbekistan	14.1	12.7	8.6	7.2	5.5
<b>East Asia</b>					
China, People's Rep. of	3.3	2.6	2.4	2.2	2.5
Hong Kong, China	-	-	-	-	-
Korea, Rep. of	7.9	7.4	7.5	10.2	11.3
Mongolia	2.8	1.8	2.4	2.4	4.2
Taipei, China	5.4	3.2	1.7	4.3	-
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	5.7	1.6	1.1	1.2	0.9
Bangladesh	4.8	4.1	3.6	3.2	3.1
Bhutan	11.9	7.6	3.6	18.5	39.6
India	10.1	4.7	4.8	4.4	4.9
Maldives	6.4	4.1	4.5	5.1	5.8
Nepal	9.4	9.3	10.1	10.1	8.3
Pakistan	14.9	13.8	12.9	12.2	18.7
Sri Lanka	7.9	12.7	13.0	14.3	-
<b>Southeast Asia</b>					
Brunei Darussalam	-	-	-	-	-
Cambodia	1.3	1.1	0.6	0.8	0.8
Indonesia	17.3	24.8	19.4	18.1	22.7
Lao People's Dem. Rep.	7.4	4.5	4.3	-	-
Malaysia	6.6	7.3	2.6	3.1	6.8
Myanmar	11.8	-	-	-	-
Philippines	13.5	12.0	10.1	9.6	10.6
Singapore	-	-	-	-	-
Thailand	10.8	11.3	11.7	7.0	6.7
Viet Nam	5.3	5.3	5.5	6.5	7.5
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	1.2	1.8	4.1	2.7	-
Kiribati	1.8	1.1	2.9	2.1	-
Marshall Islands, Rep. of	13.6	32.1	65.0	27.6	-
Micronesia, Fed. States of	6.8	8.6	6.3	6.2	6.2
Nauru	-	-	-	-	-
Palau, Rep. of	1.5	1.1	1.0	-	-
Papua New Guinea	2.9	2.9	3.6	3.0	1.4
Samoa	4.0	3.2	3.2	3.6	3.9
Solomon Islands	7.2	4.3	4.3	-	-
Timor-Leste, Dem. Rep. of	-	-	-	-	-
Tonga	8.6	9.3	10.5	8.5	-
Tuvalu	-	-	-	-	-
Vanuatu	1.0	1.7	1.4	-	-

- = not available.

Table A19 Exchange rates to the US dollar (annual average)

	Currency	Symbol	2005	2006	2007	2008	2009
<b>Central Asia</b>							
Armenia	Dram	AMD	457.7	416.0	342.1	306.0	363.3
Azerbaijan	Azerbaijan new manat	AZN	0.9	0.9	0.9	0.8	0.8
Georgia	Lari	GEL	1.8	1.8	1.7	1.5	1.7
Kazakhstan	Tenge	T	132.9	126.1	122.6	120.3	147.5
Kyrgyz Republic	Som	Som	41.0	40.2	37.3	36.6	42.9
Tajikistan	Somoni	TJS	3.1	3.3	3.4	3.4	4.1
Turkmenistan	Turkmen manat	TMM	5,200.0	5,200.0	5,200.0	14,250.0	2.8
Uzbekistan	Sum	SUM	1,112.9	1,218.9	1,263.5	1,319.6	1,465.6
<b>East Asia</b>							
China, People's Rep. of	Yuan	CNY	8.2	8.0	7.6	6.9	6.8
Hong Kong, China	Hong Kong dollar	HK\$	7.8	7.8	7.8	7.8	7.8
Korea, Rep. of	Won	W	1,024.2	955.3	929.4	1,100.1	1,277.2
Mongolia	Togrog	MNT	1,205.3	1,177.4	1,170.4	1,166.1	1,437.5
Taipei, China	NT dollar	NT\$	32.2	32.5	32.8	31.5	33.1
<b>South Asia</b>							
Afghanistan, Islamic Rep. of	Afghani	AF	49.7	49.9	49.8	51.0	49.8
Bangladesh	Taka	Tk	61.4	67.1	69.0	68.6	68.8
Bhutan	Ngultrum	Nu	44.6	44.7	44.2	40.4	47.9
India	Indian rupee/s	Re/Rs	44.3	45.2	40.1	46.5	48.0
Maldives	Rufiyaa	Rf	12.8	12.8	12.8	12.8	12.8
Nepal	Nepalese rupee/s	NRe/NRs	71.9	72.0	70.2	64.7	76.6
Pakistan	Pakistan rupee/s	PRe/PRs	59.4	59.9	60.6	62.5	78.5
Sri Lanka	Sri Lanka rupee/s	SLRe/SLRs	100.5	104.0	110.6	108.3	114.9
<b>Southeast Asia</b>							
Brunei Darussalam	Brunei dollar	B\$	1.7	1.6	1.5	1.4	1.5
Cambodia	Riel	KR	4,097.0	4,107.0	4,060.0	4,068.0	4,144.6
Indonesia	Rupiah	Rp	9,712.0	9,020.0	9,136.2	9,678.3	10,398.6
Lao People's Dem. Rep.	Kip	KN	10,655.2	10,159.9	9,603.2	8,740.0	8,516.0
Malaysia	Ringgit	RM	3.8	3.7	3.4	3.3	3.5
Myanmar	Kyat	MK	5.8	5.8	5.6	5.4	5.5
Philippines	Peso	P	55.1	51.3	46.1	44.5	47.6
Singapore	Singapore dollar	S\$	1.7	1.6	1.5	1.4	1.5
Thailand	Baht	B	40.2	37.9	34.5	33.3	34.3
Viet Nam	Dong	D	15,858.9	15,994.3	16,105.0	16,302.0	17,066.0
<b>The Pacific</b>							
Cook Islands	New Zealand dollar	NZ\$	1.4	1.5	1.4	1.4	1.5
Fiji Islands	Fiji dollar	F\$	1.7	1.7	1.6	1.6	2.0
Kiribati	Australian dollar	A\$	1.3	1.3	1.2	1.2	1.3
Marshall Islands, Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Micronesia, Fed. States of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Nauru	Australian dollar	A\$	1.3	1.3	1.2	1.2	1.3
Palau, Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Papua New Guinea	Kina	K	3.1	3.1	3.0	2.7	2.8
Samoa	Tala	ST	2.7	2.8	2.6	2.6	2.7
Solomon Islands	Sol. Islands dollar	SI\$	7.5	7.6	7.7	7.8	8.0
Timor-Leste, Dem. Rep. of	US dollar	US\$	1.0	1.0	1.0	1.0	1.0
Tonga	Pa'anga	T\$	1.9	2.1	1.9	1.8	-
Tuvalu	Australian dollar	A\$	1.3	1.3	1.2	1.2	1.3
Vanuatu	Vatu	Vt	109.2	110.5	103.2	101.4	-

- = not available.

Table A20 Gross international reserves (US\$ million)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	669	1,072	1,659	1,407	2,003
Azerbaijan	1,178	2,500	4,273	6,467	5,364
Georgia	479	931	1,361	1,480	2,110
Kazakhstan	7,070	19,127	17,629	19,872	23,218
Kyrgyz Republic	612	817	1,177	1,225	1,588
Tajikistan	91	111	107	169	125
Turkmenistan	4,457	8,059	13,222	-	-
Uzbekistan	2,895	4,459	7,413	10,145	11,000
<b>East Asia</b>					
China, People's Rep. of	821,514	1,068,490	1,540,000	1,980,000	2,430,000
Hong Kong, China	124,280	133,210	152,702	182,539	255,816
Korea, Rep. of	210,391	238,956	262,224	201,223	269,995
Mongolia	333	718	972	637	1,251
Taipei, China	253,290	266,148	270,311	291,707	348,198
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	1,700	2,040	2,784	3,462	3,781
Bangladesh	2,930	3,484	5,077	6,149	7,471
Bhutan	367	479	600	646	-
India	145,108	191,924	299,230	251,985	278,193
Maldives	186	232	308	241	261
Nepal	1,493	1,789	1,999	2,477	2,871
Pakistan	9,805	10,765	13,345	8,577	9,118
Sri Lanka	2,735	2,837	3,508	1,753	5,097
<b>Southeast Asia</b>					
Brunei Darussalam	492	514	667	751	1,357
Cambodia	915	1,097	1,616	2,164	2,367
Indonesia	34,724	42,586	56,920	51,639	66,105
Lao People's Dem. Rep.	234	327	535	622	644
Malaysia	70,175	82,237	101,532	91,648	96,756
Myanmar	1,026	2,503	3,638	4,042	5,102
Philippines	18,494	22,967	33,751	37,551	44,243
Singapore	116,173	136,261	162,957	174,196	187,809
Thailand	52,066	66,985	87,455	111,008	138,418
Viet Nam	8,557	11,483	21,000	23,000	15,000
<b>The Pacific</b>					
Cook Islands	-	-	-	-	-
Fiji Islands	520	520	618	431	568
Kiribati	481	531	586	412	414
Marshall Islands, Rep. of	5	5	3	2	-
Micronesia, Fed. States of	50	47	50	45	-
Nauru	-	-	-	-	-
Palau, Rep. of	-	-	-	-	-
Papua New Guinea	763	1,415	2,109	2,093	2,399
Samoa	75	74	88	89	133
Solomon Islands	78	104	118	88	144
Timor-Leste, Dem. Rep. of	524	-70	136	-	-
Tonga	43	40	47	48	68
Tuvalu	-	-	-	-	-
Vanuatu	70	102	110	87	82

- = not available.

Table A21 Central government expenditures (% of GDP)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	18.6	18.1	20.2	22.2	26.1
Azerbaijan	17.1	20.2	21.4	26.8	30.6
Georgia	24.9	29.7	34.0	37.0	38.5
Kazakhstan	27.0	22.1	24.1	27.2	25.2
Kyrgyz Republic	28.1	28.9	31.0	29.2	37.7
Tajikistan	23.0	21.9	27.8	27.5	28.0
Turkmenistan	19.7	14.9	13.4	12.3	-
Uzbekistan	32.5	30.9	30.2	32.7	31.4
<b>East Asia</b>					
China, People's Rep. of	18.3	18.7	18.7	19.9	23.2
Hong Kong, China	16.9	15.5	14.5	18.8	18.0
Korea, Rep. of	21.7	22.7	21.5	23.3	25.1
Mongolia	27.5	33.3	38.0	41.0	38.3
Taipei, China	14.4	13.4	12.8	12.7	14.4
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	16.6	19.6	19.9	19.4	22.1
Bangladesh	13.8	13.9	13.4	15.8	15.3
Bhutan	37.2	35.4	34.4	33.6	44.6
India	25.6	25.9	26.1	29.5	30.2
Maldives	59.0	59.4	61.4	63.1	57.7
Nepal	14.9	14.5	15.9	17.4	20.0
Pakistan	17.2	18.4	20.8	22.1	19.3
Sri Lanka	23.8	24.3	23.5	22.6	24.7
<b>Southeast Asia</b>					
Brunei Darussalam	32.4	31.4	32.6	29.3	-
Cambodia	12.8	14.2	14.7	16.1	17.6
Indonesia	18.4	20.0	19.2	19.9	17.0
Lao People's Dem. Rep.	19.0	18.0	19.1	19.4	21.1
Malaysia	23.9	24.8	25.1	26.5	30.6
Myanmar	10.0	11.9	11.1	10.0	10.4
Philippines	17.7	17.3	17.3	17.1	18.5
Singapore	14.6	15.0	13.6	17.0	18.8
Thailand	17.6	17.6	18.3	17.3	20.4
Viet Nam	32.1	30.9	33.1	32.3	35.6
<b>The Pacific</b>					
Cook Islands	33.0	33.8	38.2	41.9	46.6
Fiji Islands	31.7	31.9	31.4	25.1	26.5
Kiribati	55.1	72.5	66.6	62.5	55.0
Marshall Islands, Rep. of	65.1	64.2	71.4	70.7	68.1
Micronesia, Fed. States of	61.7	62.9	60.8	60.8	56.6
Nauru	56.8	92.8	82.9	125.2	85.8
Palau, Rep. of	52.6	58.4	57.3	49.6	-
Papua New Guinea	35.2	34.2	34.9	34.9	30.9
Samoa	36.3	31.8	35.4	34.4	42.7
Solomon Islands	45.0	46.1	50.1	48.9	47.4
Timor-Leste, Dem. Rep. of	75.1	62.1	100.7	180.8	168.5
Tonga	25.8	38.5	33.3	26.5	32.8
Tuvalu	84.9	107.5	120.7	68.9	87.8
Vanuatu	19.6	21.4	22.9	26.5	25.0

- = not available.



Table A22 Central government revenues (% of GDP)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	16.7	16.6	18.7	21.5	21.4
Azerbaijan	16.4	20.6	21.2	26.8	29.9
Georgia	23.4	26.7	29.3	30.7	29.3
Kazakhstan	27.6	22.9	22.5	25.1	22.1
Kyrgyz Republic	24.7	26.4	30.2	29.8	35.9
Tajikistan	20.1	23.6	21.6	21.3	21.0
Turkmenistan	20.5	20.2	17.3	23.6	-
Uzbekistan	30.4	34.1	35.4	41.5	35.8
<b>East Asia</b>					
China, People's Rep. of	17.1	17.9	19.3	19.5	20.4
Hong Kong, China	17.9	19.5	22.2	18.9	18.9
Korea, Rep. of	19.2	20.1	21.9	21.2	21.2
Mongolia	30.1	36.6	40.9	36.1	32.9
Taipei, China	12.6	12.6	12.7	12.9	13.4
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	17.6	16.8	18.1	15.7	19.9
Bangladesh	10.5	10.7	10.2	11.1	11.2
Bhutan	30.3	34.6	35.1	34.4	41.8
India	19.1	20.5	22.1	21.1	20.6
Maldives	48.1	52.5	56.1	46.2	31.6
Nepal	14.1	12.9	14.1	15.3	18.0
Pakistan	13.8	14.1	15.0	14.6	14.1
Sri Lanka	15.5	16.3	15.8	14.9	14.6
<b>Southeast Asia</b>					
Brunei Darussalam	53.2	50.4	55.1	55.8	-
Cambodia	10.3	11.5	11.9	13.3	11.7
Indonesia	17.9	19.1	17.9	19.8	15.4
Lao People's Dem. Rep.	12.1	12.5	13.6	14.4	15.2
Malaysia	20.3	21.5	21.9	21.6	23.5
Myanmar	6.7	7.7	7.3	6.6	6.7
Philippines	15.0	16.2	17.1	16.2	14.6
Singapore	15.3	15.0	16.5	17.1	17.7
Thailand	17.7	17.4	17.2	16.9	16.0
Viet Nam	28.4	29.7	27.6	28.2	23.7
<b>The Pacific</b>					
Cook Islands	37.0	38.0	40.0	42.8	37.4
Fiji Islands	24.4	25.6	25.6	25.6	24.0
Kiribati	51.2	73.1	70.2	64.3	56.7
Marshall Islands, Rep. of	61.7	65.6	71.7	70.4	67.8
Micronesia, Fed. States of	56.6	57.4	58.2	59.0	56.4
Nauru	28.6	56.6	87.7	125.8	86.2
Palau, Rep. of	51.8	52.5	52.5	44.8	-
Papua New Guinea	35.3	37.4	37.4	32.7	30.5
Samoa	36.1	32.3	36.5	32.8	35.3
Solomon Islands	46.9	47.3	50.6	47.1	47.4
Timor-Leste, Dem. Rep. of	113.1	193.0	355.1	630.1	313.8
Tonga	28.1	33.7	34.9	28.3	36.5
Tuvalu	78.1	91.7	101.7	60.6	80.5
Vanuatu	22.9	21.8	23.1	28.8	25.7

- = not available.

Table A23 Fiscal balance of central government (% of GDP)

	2005	2006	2007	2008	2009
<b>Central Asia</b>					
Armenia	-1.9	-1.5	-1.5	-0.7	-4.7
Azerbaijan	-0.7	0.4	-0.2	0.0	-0.7
Georgia	-1.5	-3.0	-4.7	-6.3	-9.2
Kazakhstan	0.6	0.8	-1.7	-2.1	-3.1
Kyrgyz Republic	-3.4	-2.5	-0.8	0.6	-1.8
Tajikistan	-2.9	1.7	-6.2	-6.2	-7.0
Turkmenistan	0.8	5.3	3.9	11.3	3.0
Uzbekistan	1.2	5.2	5.1	10.5	4.4
<b>East Asia</b>					
China, People's Rep. of	-1.2	-0.8	0.6	-0.4	-2.8
Hong Kong, China	1.0	4.0	7.7	0.1	0.8
Korea, Rep. of	-2.5	-2.6	0.4	-2.0	-3.9
Mongolia	2.6	3.3	2.9	-4.9	-5.4
Taipei, China	-1.7	-0.8	-0.1	0.2	-1.1
<b>South Asia</b>					
Afghanistan, Islamic Rep. of	1.0	-2.9	-1.8	-3.7	-2.1
Bangladesh	-3.3	-3.2	-3.2	-4.7	-4.1
Bhutan	-6.9	-0.8	0.6	0.8	-2.8
India	-6.5	-5.4	-4.0	-8.5	-9.7
Maldives	-10.9	-6.9	-5.3	-16.9	-26.1
Nepal	-0.8	-1.6	-1.8	-2.1	-1.9
Pakistan	-3.3	-4.3	-5.8	-7.6	-5.2
Sri Lanka	-8.4	-8.0	-7.7	-7.7	-10.2
<b>Southeast Asia</b>					
Brunei Darussalam	20.8	19.0	22.5	26.5	-
Cambodia	-2.5	-2.7	-2.9	-2.8	-5.9
Indonesia	-0.5	-0.9	-1.3	-0.1	-1.6
Lao People's Dem. Rep.	-6.9	-5.6	-5.5	-5.0	-5.9
Malaysia	-3.6	-3.3	-3.2	-4.8	-7.0
Myanmar	-3.3	-4.3	-3.8	-3.4	-3.7
Philippines	-2.7	-1.1	-0.2	-0.9	-3.9
Singapore	0.7	0.0	3.0	0.1	-1.1
Thailand	0.2	0.1	-1.1	-0.3	-4.8
Viet Nam	-3.6	-1.2	-5.5	-4.1	-11.8
<b>The Pacific</b>					
Cook Islands	2.6	2.6	0.1	-0.8	-11.7
Fiji Islands	-7.3	-2.8	-5.8	0.5	-2.5
Kiribati	-3.9	0.6	3.6	1.8	1.7
Marshall Islands, Rep. of	-3.4	1.3	0.2	-0.3	-0.3
Micronesia, Fed. States of	-5.3	-6.4	-3.3	-2.0	-1.0
Nauru	-28.3	-36.3	4.8	0.6	0.4
Palau, Rep. of	-0.8	-5.9	-4.9	-4.8	-
Papua New Guinea	0.1	3.2	2.5	-2.2	-0.4
Samoa	0.3	-0.5	1.1	-1.6	-7.5
Solomon Islands	1.9	1.2	0.5	-1.7	0.0
Timor-Leste, Dem. Rep. of	38.0	130.9	254.4	449.3	145.3
Tonga	2.3	-4.8	1.6	1.8	3.7
Tuvalu	-6.8	-15.8	-19.0	-8.3	-7.3
Vanuatu	3.2	0.4	0.3	2.3	0.7

- = not available.