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Outlook 2006

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The annual *Asian Development Outlook* provides a comprehensive economic analysis of 43 economies in developing Asia and the Pacific.

Foreword

Developing Asia and the Pacific will record another good year in 2006. Despite escalating oil prices, soaring costs of commodity imports, and rising interest rates, growth is projected to be 7.7%, up from 7.6% in 2005. This is higher than projected in *Asian Development Outlook 2006* (*ADO 2006*) released in April this year. Acceleration in growth in the People's Republic of China, due to booming investment and exports, has significantly influenced this regional upward revision. Revisions to the growth forecasts of the three larger South Asian economies—Bangladesh, India, and Pakistan—on the back of higher levels of export growth have also fed into the higher 2006 projection.

For 2007, it is expected that growth will stay robust, though with some likely easing as demand slows from industrial countries. The *Update* marginally revises up the growth projection by 0.1 percentage point to 7.1%. Growth is expected to remain strong, but not as brisk as in 2006 as it is anticipated that oil prices will stay high.

The *Update* features an overview of recent trends within the region and sets them in their global context. It also points to risks in the region and suggests appropriate responses to them. In fact, a key message is that, to contain future threats to growth, developing Asia should adjust now while domestic and external conditions remain favorable. The *Update* also reviews recent economic trends and revisits the outlook for selected countries in developing Asia.

The *Update* presents a section on the trade issues that may have implications over the longer term, as well as a theme chapter on developing Asia's rising influence in world commodity markets. This chapter describes recent trends in commodity markets and sets them in a longer historical perspective, looking ahead to the possible effects of continued fast growth in the region.

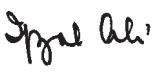
The *Update* was prepared by the staff of the Asian Development Bank from the following departments: Central and West Asia, East Asia, South Asia, Southeast Asia, Pacific, and Economics and Research, as well as the resident missions of the Asian Development Bank. The economists who contributed the country chapters are: Mohammad Zahid Hossain and Rezaul Khan (Bangladesh); Jian Zhuang (People's Republic of China); Aashish Mehta and Hiranya Mukhopadhyay (India); Amanah Abdulkadir and Ramesh Subramaniam (Indonesia); Kevin Chew of the Malaysian Institute of Economic Research (Malaysia); Safdar Parvez and Ghulam Qadir (Pakistan); Sharad Bhandari (Philippines); Jean-Pierre Verbiest and Luxmon Attapich (Thailand); and Dao Viet Dung and Omkar Shrestha (Viet Nam). Subregional summaries were provided by Padmini Desikachar for Central Asia, Toan Quoc Nguyen for South Asia, Sharad Bhandari for Southeast Asia, and Bruce Knapman for the Pacific. The subregional coordinators were Padmini Desikachar for Central and West Asia, Klaus Gerhaeusser for East Asia, Toan Quoc Nguyen for South Asia, Sharad Bhandari for Southeast Asia, and Kiyoshi Taniguchi for the Pacific.

Frank Harrigan, Assistant Chief Economist, Macroeconomics and Finance Research Division, assisted by Edith Laviña, coordinated the overall production of the publication. *Developing Asia and the world* was prepared by Frank Harrigan and Cyn-Young Park. William James of Nathan Associates, Inc. prepared the section *Suspension of Doha talks and emerging trade issues*. Cyn-Young Park and Fan Zhai wrote the theme chapter *Developing Asia's imprint on global commodity markets*. Lea Sumulong contributed a box on oil subsidies while Pilipinas Quising provided an analysis of *ADO*'s forecasting performance.

Technical and research support was provided by Shiela Camingue, Metis Ilagan, Pilipinas Quising, Nedelyn Ramos, Grace Sipin, Lea Sumulong, and Rashiel Velarde.

Richard Niebuhr and Anthony Patrick as the economic editors made substantive contributions to the country chapters, subregional summaries, and other parts of the *Update*. Jonathan Aspin did the style and copy editing. Elizabeth E. Leuterio was responsible for typesetting and data linking, as well as graphics generation in which she was assisted by Maria Susan Torres. Artwork and cover design were rendered by Mike Cortes of /Doubleslash/ Media Inc. Maria Susan Torres, assisted by Zenaida Acacio and Pats Baysa, provided administrative and secretarial support. The publication would not have been possible without the cooperation of the Printing Unit under the supervision of Raveendranath Rajan.

Ann Quon and David Kruger of the Department of External Relations planned and coordinated the dissemination of the *Update*.



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Definitions

The economies discussed in *Asian Development Outlook 2006 Update* are classified by major analytic or geographic groupings. For purposes of the *Update*, the following apply:

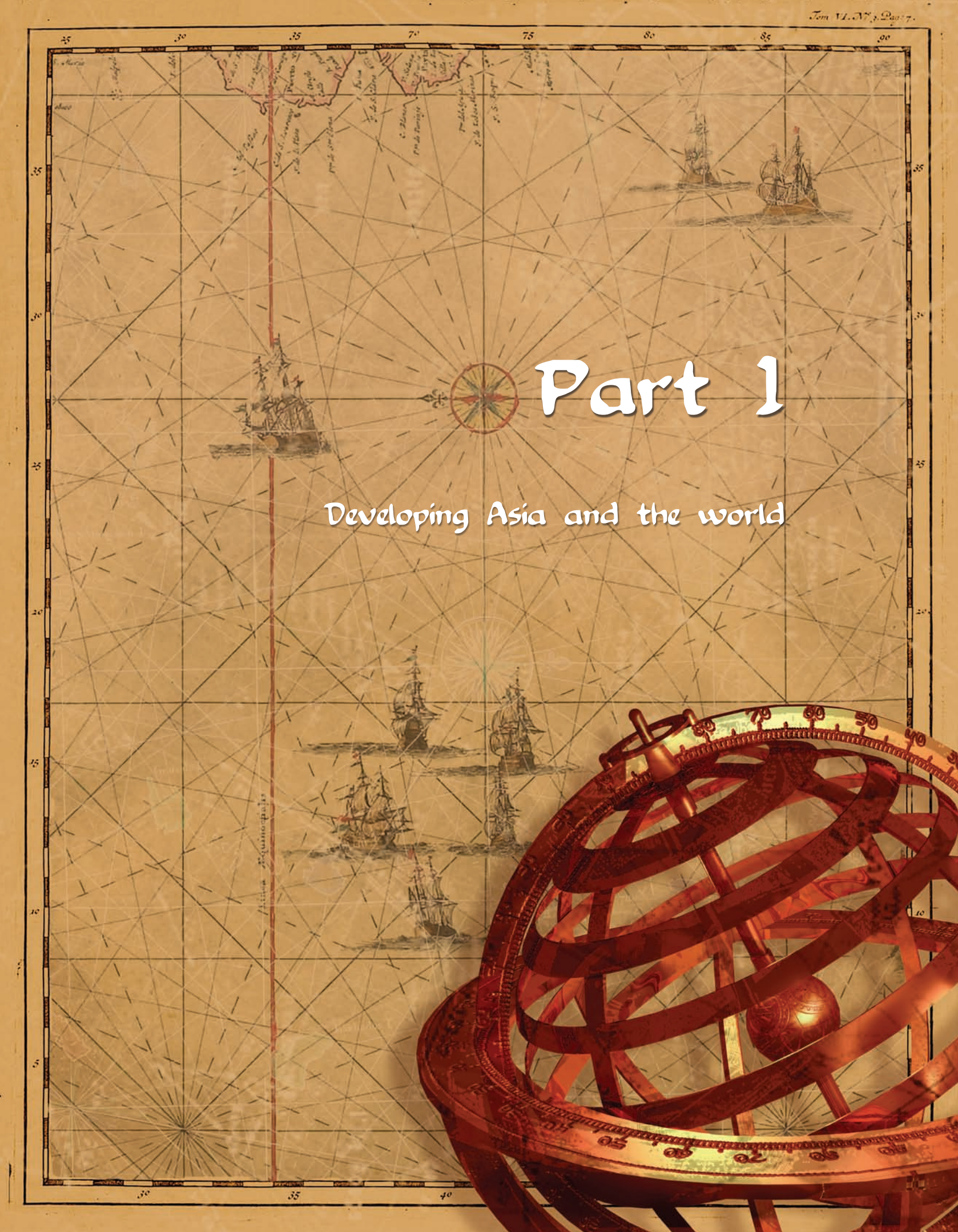
- **Association of Southeast Asian Nations (ASEAN)** comprises Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.
- **Developing Asia** refers to 43 developing member countries of the Asian Development Bank discussed in the *Update*.
- **Central Asia** comprises Armenia, Azerbaijan, 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 Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Southeast Asia** comprises 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.

The *Statistical Notes* give a detailed explanation of how data are derived. It also presents a section on the GDP growth and inflation forecasting performance of *Asian Development Outlook*.

The *Update* is based on data available up to **1 September 2006**.

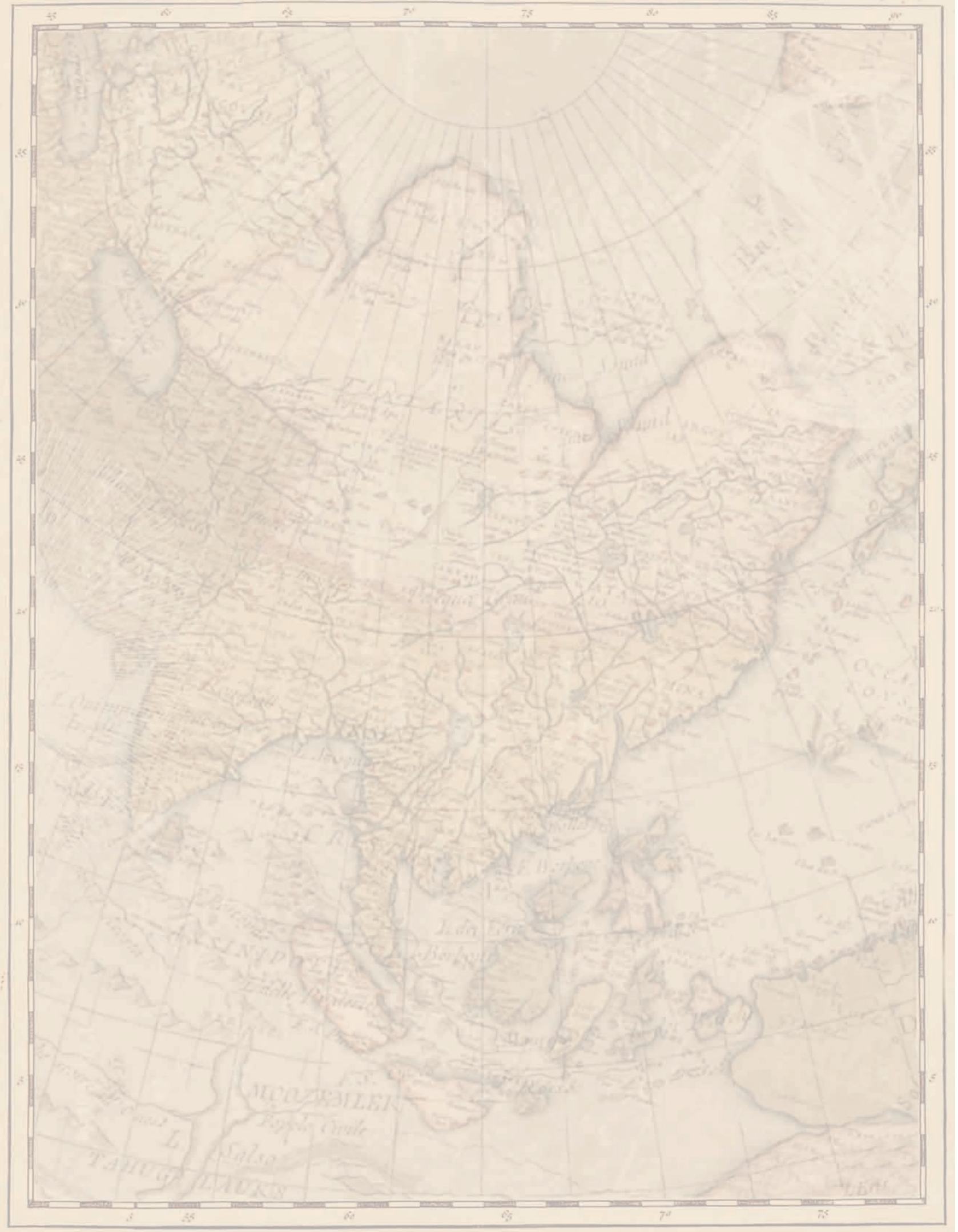
Acronyms and abbreviations

ASEAN	Association of Southeast Asian Nations
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
FY	fiscal year
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GEMAT	General Equilibrium Model of Asian Trade
GNP	gross national product
GSP	Generalized System of Preferences
IMF	International Monetary Fund
Lao PDR	Lao People's Democratic Republic
NAMA	Non-Agricultural Market Access
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PRC	People's Republic of China
US	United States
VAT	value-added tax
WTO	World Trade Organization



Part 1

Developing Asia and the world



Developing Asia and the world

Overview

The year 2006 is set to be another good one for developing Asia and the Pacific. The regional economy is expected to grow by 7.7%, an upward revision of 0.5 percentage points from the *Asian Development Outlook 2006* (*ADO 2006*) forecast in April. Growth is also expected to be robust in 2007, though some easing is likely as demand from industrial countries slows. This *Update* projects growth for 2007 of 7.1%, up marginally from the *ADO 2006* forecast of 7.0% (Figure 1.1.1).

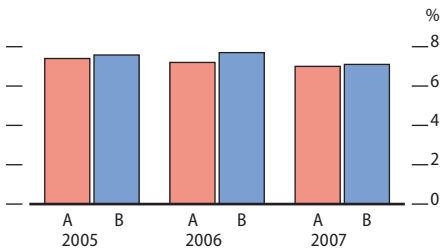
Revisions to developing Asia's growth for 2006 have been significantly influenced by the acceleration in the People's Republic of China (PRC), where booming investment and exports lifted growth in January–June this year to 10.9%. Estimates for growth in South Asia have also been raised, due to better than forecast growth in Bangladesh, India, and Pakistan. But the outlook for Southeast Asia has weakened marginally: downward revisions for Malaysia and Thailand outweigh upgrades for the Philippines and Singapore.

A key message of this *Update* is that to contain future threats to growth, developing Asia should adjust now while domestic and external conditions remain favorable. Delay may require more painful changes later on. The *Update* highlights three general areas: completing the adjustment to high oil prices, picking up the pace of fiscal consolidation, and stimulating investment. Coping more effectively with potential shocks is also likely to require a more flexible approach to exchange rate management.

Adjusting to high oil prices

Developing Asia's growth has proven remarkably resilient to high oil prices so far, cushioned by strong growth in export revenues and capital inflows. Tightening by monetary authorities has helped tame the risk that price increases may seep through to underlying inflation, as has falling oil intensity (i.e., the volume of oil required for each unit of GDP output), albeit from a high base (Figure 1.1.2). But in some countries, the pass-through of higher crude prices to consumers and producers is still far from complete (Box 1.1.1), due to a combination of subsidies to retail prices and offsets through lower taxes and duties. As the likelihood recedes of oil

1.1.1 GDP growth, developing Asia

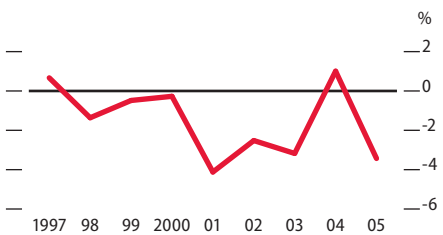


Notes: A = *ADO 2006;* B = *ADO 2006 Update*.

Full-year data for 2005 have led to a small upward revision of growth from 7.4% to 7.6%. The most significant adjustments were for Bangladesh (5.6% to 6.0%), People's Republic of China (9.9% to 10.2%), and India (8.1% to 8.4%).

Sources: Asian Development Outlook database; staff estimates.

1.1.2 Change in oil consumption intensity



Note: Data relate to Bangladesh, People's Republic of China, India, Indonesia, Malaysia, Pakistan, Philippines, and Thailand.

Sources: Energy Information Administration, available: http://www.eia.doe.gov; United Nations Statistics Division Commodity Trade Statistics (COMTRADE), available: http://unstats.un.org/, downloaded 29 August 2006.

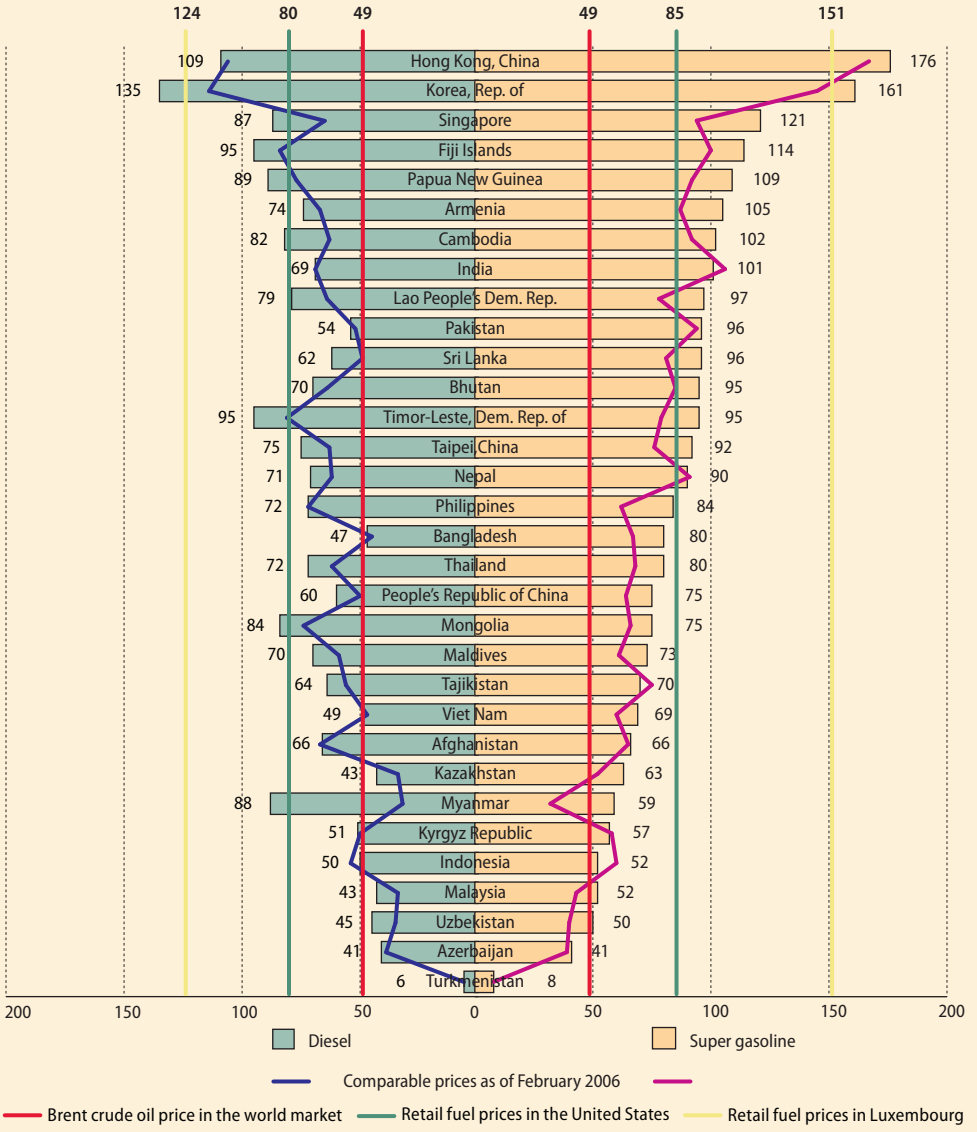
1.1.1 Subsidization of retail fuel prices in Asia

Recent months have seen no letup in crude oil price hikes, as persistent geopolitical concerns have fueled speculative demand amid continuing supply constraints. Since the last week of July 2006, the price of Brent crude has remained at over $70 per barrel, peaking at $78.74 in mid-August. Futures prices indicate that such high levels will continue through the rest of the year and into 2007.

Across many parts of the world, retail fuel price increases have lagged behind those of crude oil. In developing Asia, many governments have adopted measures, either individually or in combination, to limit the pass-through of higher crude oil prices into retail prices, including subsidy provision for certain users or consumers, tax reduction on crude oil and petroleum products, and regulation of pump price increases. These schemes aim to ensure that the burden of rising crude oil prices is shared, albeit unequally, among the government, consumers, and petroleum companies.

Displaying average pump prices per liter in developing Asia over 1–7 August 2006, the box figure shows the impact of these measures. For comparison purposes, it also shows Brent crude oil prices (marked by red vertical lines, 49 US cents); retail fuel prices in the United States (US) (shown by green vertical lines, 80 US cents for diesel and 85 US cents for gasoline); and retail prices in Luxembourg as a proxy for the European Union (EU) (designated by yellow vertical lines, 124 US cents for diesel and 151 US cents for gasoline).

Comparison of retail fuel prices in Asia (as of 1–7 August 2006, in US cents per liter)



Sources: Surveys by ADB resident missions; Datastream; Energy Information Administration, available: www.eia.doe.gov, downloaded 9 August 2006.

1.1.1 Subsidization of retail fuel prices in Asia (*continued*)

Pump prices in the US represent the average cost-covering retail prices including industry margin and taxation of approximately 10 US cents for the two road funds (federal and state). This fuel price, as it has no other specific fuel taxes, may be considered the international minimum benchmark for a market-determined, unsubsidized road transport policy. In lieu of an EU-wide average, retail fuel prices in Luxembourg are used as a standard, as they reflected the minimum standard (including taxation) required by the EU for the 10 new EU accession countries in 2004.

As indicated in *Asian Development Outlook 2006*, only the two economies of Hong Kong, China and the Republic of Korea price their fuels close to the yellow benchmark lines of Luxembourg. The majority of economies charge pump prices that more than cover crude costs, hovering around the US benchmark.

More economies (23) had diesel pump prices below the US benchmark than they did super gasoline (17). Six of the 23—Azerbaijan, Bangladesh, Kazakhstan, Malaysia, Turkmenistan, and Uzbekistan—had diesel retail prices that did not even cover crude oil costs. Two of the six (Azerbaijan and Turkmenistan) also had gasoline retail prices that did not cover crude oil costs. In early 2006, Bangladesh was covering crude costs in its diesel prices, but as its June price rise was limited to 10%, the implicit subsidy for diesel in effect increased. In contrast, Myanmar, which used to charge retail diesel prices lower than crude costs, has raised diesel pump prices enough not only to cover crude oil costs but also to exceed the green benchmark line.

While many Asian governments regulate retail fuel prices, only a few provide direct subsidies—People's Republic of China, Fiji Islands, Malaysia, Sri Lanka, Turkmenistan, and Viet Nam. Other governments offer implicit subsidies in various forms. In cases where publicly owned national oil companies have been constrained from raising retail prices to recover costs, some governments have assumed a portion of oil companies' losses or provided guarantees for their debt.

In Azerbaijan, the state oil company can deduct from its tax payments its collectibles from energy distribution companies. The Government of Bangladesh has provided sovereign guarantees against borrowings of the state-owned Bangladesh Petroleum Corporation and refinanced some of its bank debt to ensure continued petroleum supply in the country. In 2005, the Government of Nepal provided a one-time loan of NRs1 billion to the state-owned Nepal Oil Corporation to settle dues with the Indian Oil Corporation. In Indonesia, the Government compensates Pertamina for its underrecoveries.

Many governments have reduced import taxes and duties to compensate for rising crude oil and oil-product costs. Bangladesh, India, Nepal, Philippines, and Viet Nam have all reduced import duties either on crude oil, on oil products, or both. In July 2005, Bangladesh slashed duties on crude oil to 7.5% and on products to 15%, both from 25%. At the same time, the Government abolished the 15% supplementary duty on products. Nepal cut the duty on diesel by NRe1 per liter in February this year but raised that on gasoline by NRs4 per liter to compensate for the revenue loss. Viet Nam removed its 5% gasoline import tax in April, the Philippines in May trimmed import duties on petroleum products by 1 percentage point to 2%, and in June India lowered the customs duty on gasoline and diesel from 10% to 7.5%.

Taxes on domestic consumption have been lowered in some countries. The levy on gasoline imposed by the Pakistan Government has been reduced to PRs12.50 from PRs17.18 per liter, while those for diesel and kerosene have been scrapped. In Sri Lanka, the value-added tax on diesel was removed in August 2005. Sales taxes for diesel and gasoline were slightly reduced (by Rs0.22 and Rs0.66 per liter, respectively) in New Delhi, India on 16 June 2006. Malaysia, meanwhile, has frozen road toll charges, after raising them in 2005, and reduced road taxes to help consumers cope with rising petroleum product prices.

Most of the subsidies, whether direct or indirect, have generally been concentrated on diesel, kerosene, and cooking gas (LPG), as the poor are presumed to be heavy users of these fuels. But with the unrelenting hikes in oil prices, these subsidies are bound to put a fiscal strain on many of the Asian governments using them, and may squeeze budgets for social and development expenditures.

The problem is more acute for net oil importers, as they do not have oil revenues that can be recycled to finance the provision of subsidies. In Sri Lanka, for instance, subsidy payments reached SLRs26 billion (1.3% of GDP) in 2005, higher than actual expenditures for education of about SLRs20 billion. In addition, the Government there has accumulated SLRs7.2 billion in debt (up to May 2006) to a private fuel retailer for unpaid subsidies. For 2006, subsidy costs are estimated at 0.7% of GDP.

Similarly, as of June 2006, outstanding liabilities of Bangladesh Petroleum Corporation to nationalized commercial banks were Tk105 billion (2.4% of GDP), about the same amount as the Government's total budgeted social sector spending (on education, health, labor, social security, and culture) for the fiscal year. At current retail prices, the Government's annual implicit subsidy is estimated at 1.3% of GDP.

As long as retail prices do not fully reflect crude oil price hikes, considerable risks to the fiscal sustainability of various Asian governments remain.

prices retreating significantly in the short run, governments—especially those with fragile fiscal and external payments positions—need to adjust. Fuel subsidies are costly in terms of possible alternative uses of scarce public resources, threaten macroeconomic stability, misallocate capital, and encourage energy waste. Where there are legitimate social protection concerns, they are better served through direct targeting of the poor rather than through subsidized consumption of energy.

Expediting fiscal consolidation

Yet fiscal challenges in developing Asia transcend the financing requirements of fuel subsidies. Despite notable progress in bringing deficits and debt down (as a proportion of GDP) in recent years, these indicators remain stubbornly high. The fiscal challenges are probably most prominent in South Asia, but many countries elsewhere face difficult tests (Figure 1.1.3). If developing Asia is going to expand and improve its physical and social infrastructure, invest adequately in workers' skills, and provide affordable security and care for the elderly and the needy, substantial further fiscal strengthening will be critical. While a broader tax base and improved collection will help buoy revenues, durable improvements will require rationalization and better management of spending. When growth ultimately slows, disciplined spending policies will be necessary to fend off fiscal risks.

Stimulating investment

Even after adjustments for a high (pre-1997 Asian financial crisis) base effect and a decline in the relative price of capital goods, a variety of indicators suggests that, outside the PRC and Viet Nam, real investment in East Asia and Southeast Asia has been depressed (Figure 1.1.4). And although investment rates have been climbing in South Asia, they need to rise much further if enough jobs are to be created for the millions of new workers who are entering the labor force, and for the millions more who are underemployed. Only the PRC has a problem of over- rather than underinvestment. Elsewhere, greater investment spending would not only broaden the base for current growth, but is probably essential to sustaining growth into the future.

Easing the constraints on investment spending presents different challenges across different countries. In the majority, investor perceptions of governance and public sector performance are weak, and the business climate offers much scope for improvement. Given the poor starting point in many places, steady concrete steps, such as simplified and quicker business licensing and registration procedures, could have big payoffs.

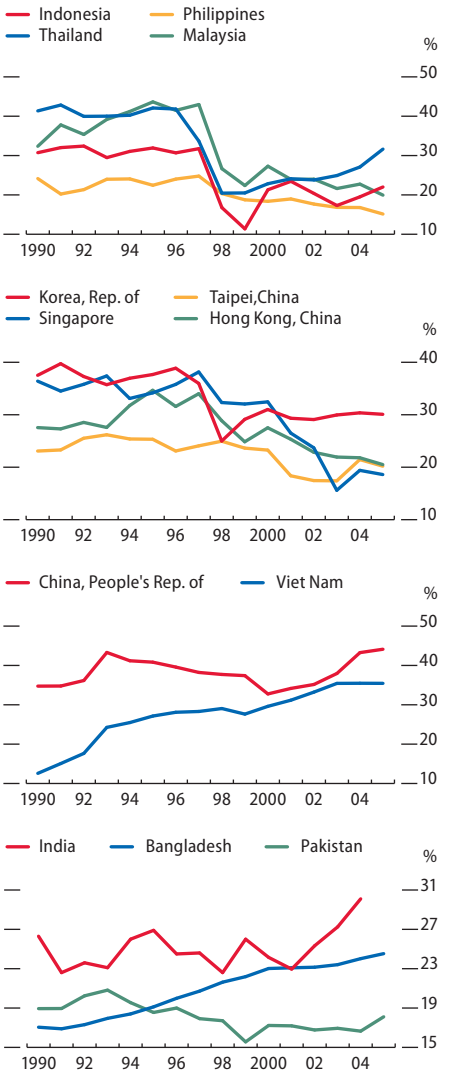
Poor infrastructure, which is endemic in most countries of developing Asia, deters private investment. Prospective returns on private capital are obviously low or at risk if, for example, power outages hit frequently or poor roads make it difficult to get goods from the factory gate to ports. Given the difficulties in raising capital for long-term and risky infrastructure projects, the role of the public sector remains crucial, though private markets will also have to be tapped. Governments therefore have the difficult task of creating (or assuring) the necessary institutional, policy, and organizational conditions to attract the private sector into infrastructure.

1.1.3 Government debt

Note: For Viet Nam, data refer to public and publicly guaranteed debt; 2005 is an International Monetary Fund estimate. For the People's Republic of China, data refer to government debt issuance.

Sources: Various country sources; International Monetary Fund *2005 Article IV Consultation Staff Report*, January 2006.

1.1.4 Investment rates



Source: Asian Development Outlook database.

Managing the exchange rate

Much attention stays focused on the issue of exchange rate management in developing Asia (Figure 1.1.5). But even before the yuan and the ringgit exited their US dollar pegs in July 2005, regional currencies were becoming more flexible. Although some currencies have seen a sizable appreciation against the US dollar, Asian currencies have generally become cheaper when measured in real terms against a wider basket (Figure 1.1.6). Greater flexibility in exchange rates would help economies increase resilience to shocks and would also allow national authorities to diversify sources of growth more widely.

Risks

The balance of risks to a generally benign outlook may be tipping down, but not precipitously so. Consolidation of Japan's recovery has allayed one concern, but other risks are increasing.

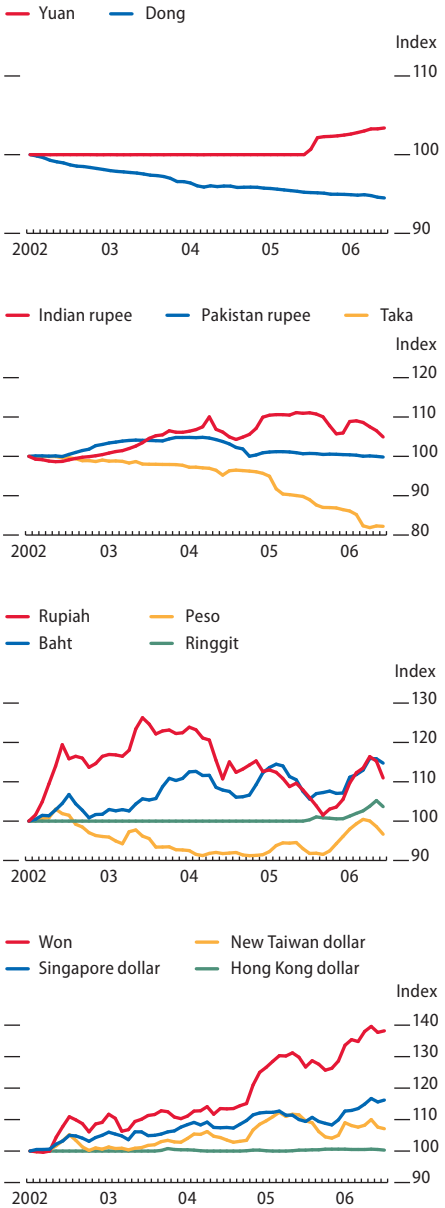
The scenario of greatest anxiety to developing Asia is one in which financial markets force a disruptive resolution of global imbalances. A sudden and sharp drop in demand for US dollar assets would push up long-term interest rates, possibly leading to a painful end to the US (and global) housing boom and sharp corrections in expenditure growth. Box 1.1.2 shows the anatomy of global imbalances and their evolution over the period 1990–2005 and surveys views about their possible significance and implications.

Another worry is that rising inflation rates in both the US and the euro zone are appearing just as evidence is gathering of slower demand growth (see the section, *Prospects for the world economy in 2006 and 2007*, below). This increases the chances that policy errors could inadvertently weaken growth or tolerate an unwelcome inflationary buildup; or that speculative activity could amplify market volatility. This could foreshadow more difficult conditions for developing Asia in international capital markets.

As a net oil importer and a comparatively energy-inefficient region, developing Asia remains vulnerable to the risks stemming from further rises in oil prices. This vulnerability would be magnified if global inflation accelerated and if growth in demand slowed. In such an event, the task of monetary policy would be doubly difficult as increases in policy rates (to prevent rising fuel prices from becoming embedded in inflationary expectations) could further tax growth. The dangers are most pronounced for those countries that have yet to fully pass through earlier price increases and for those with a weak external payments position.

Although burgeoning intraregional trade integration brings benefits, it also concentrates some risks. Tighter trade links would leave many countries exposed if growth in the PRC were to slow. A notable feature of closer integration has been a redirection in export shares from other markets to that country. Many of these exports are in the form of intermediate goods that are processed and assembled in the PRC, before being exported to final markets in industrial countries. But domestic demand in the PRC has also been growing rapidly and helping tighten trade links. Consequently, if the PRC brakes too hard in its efforts to cool growth, or phenomenal investment growth continues unabated

1.1.5 Nominal exchange rates against the US dollar



Notes: January 2002 = 100. A rise in the index denotes an appreciation of the local currency against the US dollar.

Sources: Asia Regional Information Center, available: http://aric.adb.org, downloaded 31 July 2006; Datastream, downloaded 29 August 2006.

1.1.2 Global imbalances: Consensus or dissonance?

Recent trends

The box figure shows current account balances as a percentage of global GDP for selected countries of the world, or country groupings, for 1990–2005. The tendency for divergence over time between consolidated surpluses and deficits is clear.

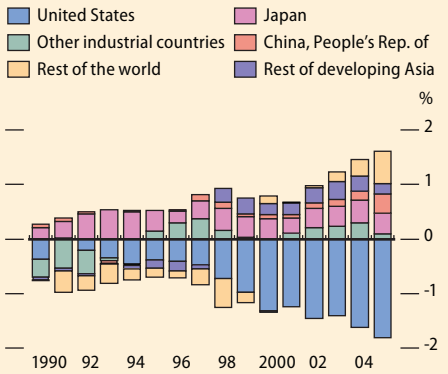
The bottom half of the figure illustrates escalating deficits and borrowing by the United States (US) as a share of global GDP. Since 1990, in one year only has the US not been in deficit. On the other side of the international payments ledger, as shown in the top half, Japan has consistently been a net saver and in surplus, but its surpluses have been broadly stable as a share of global income. For the other industrial countries, the picture is more complicated. As a group (outside Japan) these countries have typically been in surplus, but the surpluses have risen and fallen as a share of global GDP. (The overall balance also masks significant deficits in some industrial countries that are not shown in the figure, such as Australia, Spain, and the United Kingdom.)

At an aggregate level, the current account position for developing Asia—i.e., the People's Republic of China (PRC) and rest of developing Asia, together—is punctuated by the financial crisis of 1997–98. Before that, the region was in deficit, but then it swung sharply into surplus as demand reeled from the impact of financial dislocation and sharp currency depreciations.

But this general picture does not fit all countries. Even prior to 1997, the PRC was in surplus. These surpluses have since risen as net exports have helped propel upward the PRC's share of global income. Other regional economies, such as Singapore and Taipei,China, have also consistently enjoyed external payments surpluses. In contrast, South Asia has generally been in deficit, but had external surpluses in 1997 and in 2001–2003, moving back into deficit in 2004. Central Asia has also generally been in deficit, but high oil prices moved it into surplus in 2005.

The traditional large oil-producing countries of the world (most of which are included in the rest of the world category) have seen a steep growth of their surpluses as oil prices have climbed. In 2003–2005, the increase in their surpluses equaled about half of the widening in the US current account deficit.

Current account balance as share of global GDP



Notes: A positive figure represents surplus, a negative figure deficit. Due to statistical discrepancies, global surpluses and deficits together do not sum to zero.

Source: International Monetary Fund, *World Economic Outlook* database, April 2006.

Contrasting assessments

What is unsustainable must stop. External payments divergence is clearly unsustainable. Deficits that grow more quickly than income imply that debtor countries must eventually borrow just to cover their interest obligations. At some point, therefore, divergence must stop and is likely to reverse. Having said this, there is considerable uncertainty as to how and when corrections will take place and how painful they might be.

How might it stop? The consensus view highlights the risk of asset markets forcing an abrupt and painful correction. This scenario envisages a sudden drop in demand for US dollar assets leading to a sharp dollar depreciation, acting as a flashpoint for a steep rise in long-term US dollar interest rates and a sharp slowdown in the US economy (Roubini and Setser 2004 and 2005, Setser 2006, Bergsten and Williamson 2004). This would have powerful knock-on effects on the global economy, including developing Asia. To head off this risk, many have pointed to the need for coordinated policies to rebalance and transfer global demand. These would allow the US to increase its saving and move resources into the production of traded goods and out of the nontraded goods sector. To sustain global demand, surplus countries would at the same time need to stimulate domestic absorption and shift resources into the nontraded sector. Some estimates suggest that to facilitate such adjustments, the US dollar would need to depreciate by about 30% (e.g., Obstfeld and Rogoff 2005).

Can savings flow uphill? The "Bretton Woods 2" regime of Dooley et al. (2004), in which payments imbalances result from developing Asia's bent for export-led growth, and the US's need for cheap financing of its savings shortfall, suggests that imbalances may be sustained for some time. It is not clear, though, how stable this "regime" actually is as it seems to presume a level of tacit cooperation among the players that strains credibility.

Caballero et al. (2006) develop a model in which institutional asymmetries and divergent economic performance across global regions generate permanent payments imbalances. In their model, weak economic performance in one region (the European Union) and difficulties in establishing secure financial claims against real investments in another (mainly the Asian crisis countries and the PRC) cause these two regions to course part of their savings to an economy where institutions are robust and economic performance is strong (the US). Savings flow from poor (and poorly performing) countries to rich (and strongly performing) ones, drive down interest rates globally, raise consumption in the strong economy, and create sustained current account imbalances.

Does smart money help? It is a matter of record that the US earns more on its foreign assets than it pays on its foreign liabilities. This superior investment performance is akin to the concept of "privilege." Meissner and Taylor (2006) point out that privilege, or its absence, can critically affect the ability of countries to sustain external borrowing, and so influences the dynamics of their net foreign asset position. If total returns on assets (including capital gains) are greater than on liabilities, larger current account deficits can be sustained over a longer period. Even small amounts of privilege can make a

1.1.2 Global imbalances: Consensus or dissonance? (*continued*)

big difference to sustainable payments deficits and eventual net asset positions. Meissner and Taylor's careful analysis points to the conclusion that privilege on asset yields (yield privilege) and capital gains have helped sustain the US current account deficit in recent decades. However, looking ahead, they caution that yield privilege is waning, probably as a consequence of growing competition from other financial centers. Also, as the exact source of historical capital gains on the US net asset position is poorly understood, they argue that it would be reckless to bank on such gains continuing to finance future deficits.

Are the data to be trusted? A related but distinct argument is that the US current account position is incorrectly measured. By adjusting for "unmeasured exports," Hausmann and Sturzennegger (2005) arrive at the conclusion that the US net asset position is positive and has been stable for the past three decades. But not all are persuaded by this argument. Buiter (2006), for example, contends that Hausmann and Sturzennegger's correction for these enriching but unmeasured exports (so-called dark matter) is greatly exaggerated.

What do we really know? The empirical record raises some intriguing questions and poses puzzles about payments imbalances. Backus et al. (2006) argue that, over different time periods, countries' current account deficits have shown no consistent tendency to cause subsequent currency depreciations (nor surpluses to cause appreciations consistently). They point out that exchange rate dynamics are insufficiently well understood to support the prediction that the US deficit will inevitably lead to a US dollar depreciation.

Meissner and Taylor (2006), looking at an earlier epoch of globalization (between 1880 and 1913), conclude that current account deficits then were often persistent and were generally associated with mild exchange rate changes and benign domestic adjustments. Today, such smooth adjustments might seem improbable with greater scope for contagion and capital market spillovers, but market sentiment is still as likely to be tightly linked to fundamentals as it was 100 years ago. Strong fundamentals, as reflected in robust and efficient institutions and fast productivity growth, are precisely what continue to attract capital to the US, according to Backus et al. (2006). Although these advantages may not last, they conclude that there is little cause for panic now.

Policy responses

Payments imbalances present a source of significant uncertainty about the outlook at a global level and for developing Asia. But many policy measures that make good sense anyway would help developing Asia brace against a downdraft, if it arrives. Strengthening both the efficiency and safety of domestic financial systems, bringing down public debt, and enhancing productivity, including through the opening of markets, should remain priorities. In many countries, a rebalancing of growth toward domestic demand would help improve overall efficiency and diversify sources of growth.

Steps toward greater exchange rate flexibility and the prudent opening of the capital account, for example by allowing greater freedom for entities to invest in overseas assets, would also help spread risks. For developing Asia's oil-surplus economies, the windfall gains from high prices need to be managed prudently to provide some cushion against the possibility of more blustery conditions ahead.

Finally, it is apparent that growing interdependence in the global economy and developing Asia's rapidly expanding economic mass mean that the region has to play a more active part, through international financial institutions and other mechanisms, in forging coordinated policy responses to problems and shocks that are global in scope.

References

Backus, David, Espen Henricksen, Frederic Lambert, and Chris Telmer. 2006. "Current Account Fact and Fiction." National Bureau of Economic Research (NBER) Working Paper (WP). New York University. Available: http://pages.stern.nyu.edu/~dbackus/CA/BHLT%20latest.pdf.

Bergsten, Fred and John Williamson (eds.). 2004. "Dollar Adjustment: How Far? Against What?" Special Report 17. International Institute for Economics, Washington, DC.

Buiter, Willem Hendrik. 2006. "Dark Matter or Cold Fusion?" Goldman Sachs Global Economics Paper No. 136. New York. January, pp. 1-16.

Caballero, Ricardo, Emmanuel Farhi, and Pierre Olivier Gourinchas. 2006. "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates." NBER WP No. 11996. Cambridge, Mass. Available: http://www.nber.org/papers/w11996.pdf.

Dooley, Michael, David Folkerts-Landau, and Peter Garber. 2004. "The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management of Interest Rates and Exchange Rates in Center Countries." NBER WP No. 10332. Cambridge, Mass. Available: http://papers.nber.org/papers/w10332.pdf.

Hausmann, Ricardo, and Federico Sturzennegger. 2005. "U.S. and Global Imbalances: Can Dark Matter Prevent a Big Bang?" WP, Center for International Development, Harvard University, Cambridge, Mass. Available: http://www.cid.harvard.edu/cidpublications/darkmatter_051130.pdf.

Meissner, Christopher and Alan Taylor. 2006. "Losing our Marbles in the New Century? The Great Rebalancing in Historical Perspective." Federal Reserve Bank of Boston Conference, Chatham, Massachusetts. June. Available: http://www.bos.frb.org/economic/conf/conf51/presentations/meissner_taylor.pdf.

Miller, Marcus and Lei Zhang. 2006. "Capital Flows, Interest Rates and Precautionary Behaviour: A Model of Global Imbalances." University of Warwick, UK. Available: http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/miller/esrcproffellows/pub/gi.pdf.

Obstfeld, Maurice and Kenneth Rogoff. 2004. "The Unsustainable US Current Account Position Revisited." NBER WP No. 10869. Cambridge, Mass. Available: http://www.frbsf.org/economics/conferences/0502/Obstfeld.pdf.

Roubini, Nouriel and Brad Setser. 2004. "The US as a Net Debtor: The Sustainability of the US External Imbalances." Stern School of Business, New York University. Available: http://pages.stern.nyu.edu/~nroubini/papers/Roubini-Setser-US-External-Imbalances.pdf.

———. 2005. "Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005–2006." Paper presented in the Symposium on the Revived Bretton Woods System: A New Paradigm for Asian Development? Federal Reserve Bank of San Francisco and UC Berkeley, San Francisco, 4 February. Available: http://www.frbsf.org/economics/conferences/0502/Roubini.pdf.

Setser, Brad. 2006. "Bretton Woods 2: Is It Sustainable?" Paper presented at "Global Imbalances and Risk Management: Has the center become the periphery?" Madrid, May.

and eventually leads to a supply glut that causes growth to stumble, the tremors would reverberate across other countries of East Asia and Southeast Asia.

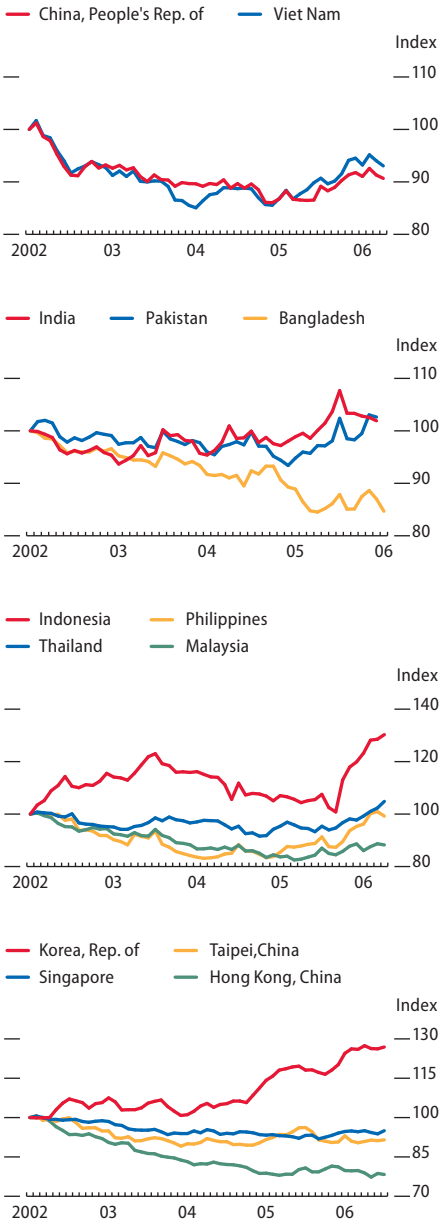
Avian flu presents another source of uncertainty, and one with potentially severe consequences. Indonesia has now reported its 46th human death, among over 140 fatalities worldwide. The major economic impacts of the virus have so far been confined to poultry farmers whose large flocks have been slaughtered and rural households that have seen their small flocks destroyed.

Clearly, the likelihood and potential costs of a human pandemic cannot be predicted with any certainty, although if the virus mutates and becomes a human influenza it will take a heavy human toll (see *ADO 2006*, p. 16). The severe acute respiratory syndrome (SARS) outbreak in 2003 caused a major, albeit short-term, economic shock in affected countries. The economic impact of avian flu would also likely be sharp but not long lasting, and would depend on a range of factors, including a country's economic structure and effectiveness of its contingency plans to ensure continuity of essential public, business, and financial services. On this count, some countries are better prepared than others, and those whose health and other public services are already under stress could face acute difficulties. A pandemic could also seriously undermine fiscal balances where these are already frail.

A retreat from multilateralism, as bilateral and regional free trade agreements (FTAs) seek to fill the void left by the failure of the Doha negotiations, may also blemish prospects, but further out. Margins of preference that are negotiated within FTAs—and that are not extended on a most-favored-nation basis to other third parties—may divert trade away from competitive Asian producers. The complex web of rules and exclusions that characterize FTAs raise trade costs, and are another source of concern. Smaller countries with limited commercial and political muscle are the most at risk, as larger "trading hubs" press for deals that favor their interests. (The outlook for the multilateral trading system is discussed in *Suspension of Doha talks and emerging trade issues*, later in Part 1.)

Finally, international terrorism poses a potential threat to globalization. The costs of intelligence-gathering, security, and insurance are already escalating. If tensions rise to a point where security concerns constrict trade, travel, and international business, they could stymie opportunities for poorer countries seeking to integrate into global markets.

1.1.6 Real effective exchange rates



Notes: January 2002 = 100. A rise in the index denotes an appreciation of the local currency.

Sources: Asia Regional Information Center, available: http://aric.adb.org, downloaded 31 July 2006; Datastream, downloaded 29 August 2006; Bank for International Settlements, available: http://www.bis.org/statistics/eer/index.htm, downloaded 29 August 2006.

After Doha: Where now for Asia's trade?

This *Update* takes up several themes that may have implications over the longer term. The Doha Round of World Trade Organization (WTO) negotiations has been suspended indefinitely and prospects for a restart appear dim. But the countries of developing Asia can do a number of positive things on their own.

First, since the largest benefits from liberalization accrue to those economies that lower barriers to their own markets, governments should go it alone and liberalize on a unilateral basis, lowering tariffs

and other barriers, including those that are "behind the border," such as licensing requirements. Second, the benefits of trade facilitation measures are potentially large and open to all countries, and investments in streamlining customs procedures or improving port infrastructure, for example, help move goods to market more quickly and at less cost. Third, within existing regional and bilateral agreements, frictions to trade can be lowered by paring back exemptions and expanding coverage—not just in manufactures but also in agriculture and services—and by simplifying and rationalizing crisscrossing and often incompatible rules of origin that are both costly to administer and to comply with.

The future for commodity prices

Part 3 of this *Update, Developing Asia's imprint on global commodity markets,* examines developing Asia's rising influence in world commodity markets. Vigorous growth in the region has contributed to the fast run-up in prices of energy, minerals, and soft commodities seen since 2001, and developing Asia's demand is set to increase further. Part 3 describes recent trends in world commodity markets and sets them in a longer historical perspective. It also looks ahead and asks what the implications of continued fast growth in developing Asia, particularly in the PRC and India, might be for commodity prices over the next decade. It finds that commodity prices are likely to come off the high levels of 2006, but are unlikely to revert to the low levels seen at the turn of the millennium. In fact, changing fundamentals, including fast growth in developing Asia, are driving the real prices of energy, minerals, and some agricultural products above their long-term trend.

Prospects for developing Asia in 2006 and 2007

Growth

Developing Asia is expected to grow by 7.7% in 2006, easing to 7.1% in 2007 (Figure 1.2.1 and Table 1.2.1). Fast growth at a regional level is supported by strong performances by the PRC and India, since together these two economies account for over 50% of regional GDP. The remaining economies of developing Asia are expected to grow by more modest averages: 5.5% in 2006 and 5.1% in 2007.

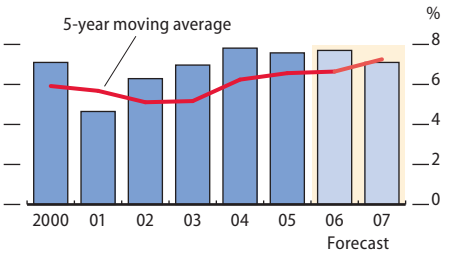
The forecast for growth in 2007 is predicated on generally favorable external conditions, but it factors in tighter global liquidity and softer growth in the industrial countries. The forecast also anticipates oil prices staying high. The impacts on commerce of the recent heightened security alert on international air travel are expected to be short-lived. However, if elevated threats persist over a prolonged period and disrupt international travel this would clearly be a negative factor, especially for those countries, such as the Maldives (and to a lesser extent Thailand), which are highly dependent on tourism.

In the first half of 2006, East Asia grew at a fast tempo. Growth of 8.2% is now expected for the full year (Figure 1.2.2), up from the estimate of 7.7% made in April's *ADO 2006*. The upward revision reflects a faster expansion in the PRC on greater than expected strength of fixed investment and exports. Brisk 11.3% year-on-year growth in the second-quarter of 2006 in the PRC was the fastest since 1994, bringing first-half growth to 10.9%. Even with an interest rate increase in mid-August, adding to earlier monetary and administrative tightening measures, second-half cooling will likely be modest. Growth for full-year 2006 is now estimated at 10.4%.

Fast growth in the PRC helped lift the performance of Hong Kong, China, and with strengthening in domestic demand, projected growth there has been raised from *ADO 2006*'s forecast by 1 percentage point to 6.5%. In the Republic of Korea (hereafter Korea), a softening in consumer spending and in construction activity prevail; nevertheless, growth is still expected to come in at just over 5%. In Taipei,China, consumer spending and private investment are weak, but exports are keeping the economy more or less on track, and it should grow by 4.3%, marginally adjusted down from April's forecast. Mongolia is now expected to grow by 6.8%; the upward revision reflects stronger exports of copper and gold, driven by higher global prices and by increased foreign direct investment (FDI) in mining.

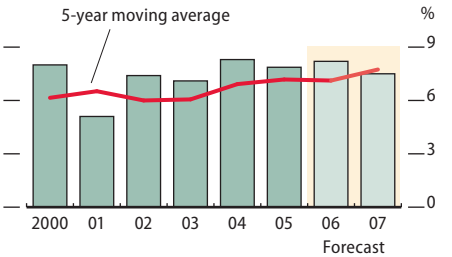
South Asia continues to make strong headway. Growth of 7.5% is now estimated for 2006, slightly higher than April's 7.3% forecast (Figure 1.2.3). Annual income growth in the subregion has averaged 7.7% since 2002, outpacing Southeast Asia by about 2 percentage points and almost

1.2.1 GDP growth, developing Asia



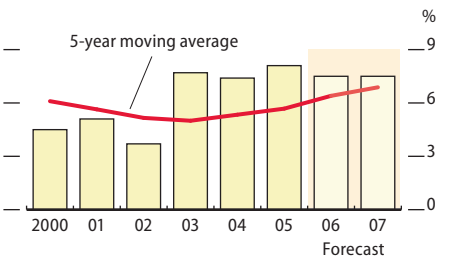
Sources: Asian Development Outlook database; staff estimates.

1.2.2 GDP growth, East Asia



Sources: Asian Development Outlook database; staff estimates.

1.2.3 GDP growth, South Asia



Sources: Asian Development Outlook database; staff estimates.

1.2.1 Selected economic indicators, developing Asia, 2005–2007

	2005	2006		2007	
		ADO 2006	*Update*	*ADO 2006*	*Update*
Gross domestic product (annual % change)					
Developing Asia	7.6	7.2	7.7	7.0	7.1
Central Asia	10.9	10.3	11.3	9.8	10.3
East Asia	7.9	7.7	8.2	7.1	7.5
South Asia	8.1	7.3	7.5	7.5	7.5
Southeast Asia	5.5	5.5	5.4	5.7	5.3
The Pacific	2.3	2.9	3.3	3.0	3.4
Consumer price index (annual % change)					
Developing Asia	3.4	4.0	3.8	3.7	3.3
Central Asia	7.4	7.9	8.5	6.3	6.8
East Asia	2.0	2.4	1.9	2.7	2.1
South Asia[a]	5.2	6.1	6.0	5.4	5.4
Southeast Asia	6.3	7.3	7.5	4.9	5.0
The Pacific	2.4	2.9	3.3	2.8	3.1
Current account balance (% of GDP)					
Developing Asia	4.5	3.9	4.2	3.4	4.0
Central Asia	1.1	2.9	3.6	4.8	7.4
East Asia	6.0	5.5	5.6	4.8	5.2
South Asia	-1.4	-3.0	-2.1	-3.1	-2.1
Southeast Asia	6.0	5.6	6.5	5.2	6.1
The Pacific	0.6	-	-1.2	-	-2.9

- = data not available.

[a] India reports on a wholesale price index basis.

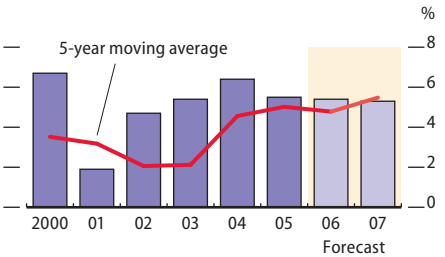
Sources: Asian Development Outlook database; staff estimates.

matching that of East Asia. Recent data provide a basis for modestly upgrading forecasts for Bangladesh, India, and Pakistan as well as for the smaller economies. As noted in the country chapters in Part 2 of *ADO 2006*, manufacturing industries are increasingly vibrant in the three larger economies, pushing export growth to high levels. However, services are still the main driver of growth. On the demand side, investment rates have begun to show a healthy and sustained rise—as has consumer demand, aided to varying degrees by greater availability of consumer and housing credit and by increased inflows of workers' remittances.

Other notable developments in South Asia include an improvement in prospects for Nepal with the restoration of Parliament and a broadened political process that has resulted in the cessation of insurgent hostilities. The growth forecast has been nudged up to 2.3%. Still, Nepal will likely need some time to regain the economic momentum that it saw in the mid-1990s. Elsewhere, Sri Lanka enjoyed broad-based, good growth in the first half of 2006, despite rising violence that threatens the maintenance of the cease-fire agreement. Favorable developments in major crops and rapid expansion in the large services sector (including tourism) provide the basis for lifting the full-year GDP growth forecast from 5.3% to 6.1%.

Southeast Asia has had a mixed year so far. The *Update* slightly downgrades the 2006 estimate for subregional growth to 5.4%, from the earlier 5.5% forecast (Figure 1.2.4). Political uncertainty and the postponement of large infrastructure projects in Thailand are now registering in slower expansion, and so the estimate for 2006 has been revised down by a half percentage point to 4.2%. In Malaysia, a bounce in investment expenditure has supported growth, but domestic consumption

1.2.4 GDP growth, Southeast Asia



Sources: Asian Development Outlook database; staff estimates.

has slowed. The economy is now expected to post slightly slower (than earlier projected) growth of 5.2% in 2006.

More positively elsewhere in Southeast Asia, favorable weather conditions and progress with fiscal consolidation have helped lift confidence and performance in the Philippines, and higher expansion of 5.4% is now expected for 2006. In Singapore, the growth forecast has been lifted to 6.6% for 2006, reflecting buoyant electronics and pharmaceuticals activity. In Indonesia, high inflation and last year's increase in interest rates have, as expected, crimped first half growth, but domestic demand should pick up in the second half as liquidity eases, and so the growth forecast of 5.4% has been maintained. Viet Nam continues to attract significant inflows of FDI and is set to achieve the 7.8% growth forecast for 2006, the fastest rate in the subregion. There is no change in the 2006 growth forecasts for Cambodia and the Lao People's Democratic Republic.

In Central Asia, the *Update* lifts projections for the oil-producing countries of Azerbaijan and Kazakhstan, reflecting their strengthened oil sectors, and for Armenia, mainly because of continued very strong construction activity. These revisions push up the Central Asian aggregate to 11.3%, about 1 percentage point higher than the average pace of the last 5 years.

Faster growth in the Pacific subregion, now put at 3.3% for 2006, reflects upward revisions for the two largest economies of Papua New Guinea (benefiting from high oil prices) and the Fiji Islands.

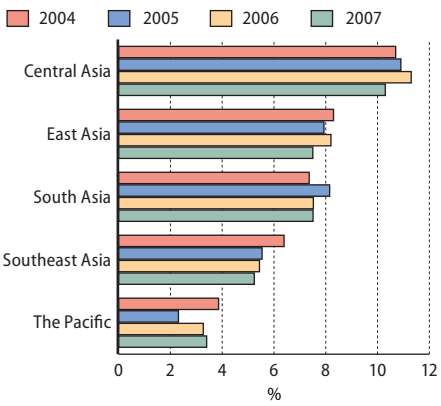
Looking ahead, developing Asia's growth in 2007 is now expected to be 7.1%, up a notch from the 7.0% forecast in *ADO 2006* in April. This minor revision balances a less optimistic outlook for Southeast Asia with a positive reassessment of East Asia's prospects.

In Southeast Asia, growth in Thailand and Malaysia could be prone to weakness next year. Thailand's growth forecast has been reset at 4.0% from 5.5% while Malaysia's is adjusted to 5.0% from 5.8%. In Thailand, since political uncertainty is clouding the near term, investors are likely to defer projects until the direction ahead is clearer. Public sector investment programs may also take a back seat until the new government resolves vexed political issues. If heightened security concerns were to impact on travel and tourism, this would be another negative element for the country.

In Malaysia, an expected softening in global information technology demand and in domestic consumption is likely to hold growth in check. No changes have been made to other countries' forecasts. Viet Nam's anticipated entry into WTO should help support growth at 8.0%. Taken together, these country considerations are expected to deduct about a half percentage point from April's projections from growth in Southeast Asia in 2007, which is now set at 5.3% (Figure 1.2.5).

In East Asia, the *Update* raises projected growth to 7.5% (from 7.1%) on the assumption that both the PRC and Hong Kong, China may grow more quickly than previously anticipated. Growth in the PRC seems unlikely to decelerate significantly ahead of the 2008 Olympics in Beijing, and the Government's own target of 8.0% may well be overshot. However, it is expected that growth in Korea may now be closer to 4.6% than the 4.9% predicted in *ADO 2006*. The revised estimate for Korea

1.2.5 GDP growth by subregion



Sources: Asian Development Outlook database; staff estimates.

reflects both the impact of the won's appreciation on net exports, and the effect of increases in interest rates on domestic investment and consumption demand.

South Asian growth is expected to consolidate at 7.5% in 2007, an unchanged aggregate from 2006 that masks some revisions at country level. In particular, the outlook for Nepal has been upgraded to 4.0%, on the basis of a more stable political environment and an improvement in security. Sri Lanka's forecast, too, is revised up, to 5.8%. Despite underlying inflationary pressures and fiscal difficulties, it is anticipated that momentum in industry and services will be underpinned by an expansive fiscal policy and tsunami-related reconstruction. This outlook is contingent on no further escalation in the conflict between the Government and the Liberation Tigers of Tamil Eelam. In Pakistan, growth is expected to accelerate in 2007 to 7.0% as agriculture picks up. Fiscal policy is also seen remaining supportive of growth, with further increases in development expenditure.

The subregional averages for Central Asia and the Pacific are heavily influenced by the outlook for oil prices, and the baseline forecast assumes a higher level in 2007 than was predicted in *ADO 2006*. For Central Asia, the *Update* revises growth for 2007 up to 10.3% from 9.8% in April, in reflection of an improved outlook for the two major oil producers. In the Pacific, most economies are totally reliant on fuel imports, but Papua New Guinea, with about two fifths of the subregion's GDP, and Timor-Leste are net oil exporters. Upward revisions to their growth projections have lifted the aggregate Pacific outlook.

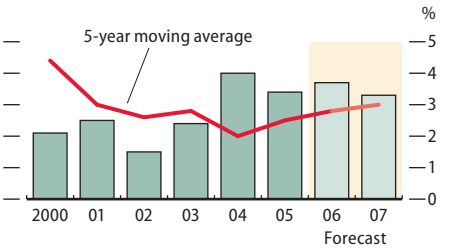
Inflation

A modest headline inflation average disguises a wide variation in outcomes. Average price inflation in developing Asia is expected to increase to 3.8% in 2006 from 3.4% in 2005 (Figure 1.2.6). In some countries, inflation is high but pressures are ebbing; in others, inflation is low but inflationary expectations are rising. Monetary authorities continue to show vigilance and generally lean toward tightening. Policy rates have tracked up in many countries (Figure 1.2.7).

Despite fast growth, the PRC faces few signs of price pressures (with the exception of property assets) and is expected to record inflation of 1.6% in 2006. This reflects the supply-side nature of the current boom and burgeoning growth of capacity, which has helped keep goods prices in check. Inflation has also been helped by a good harvest that has kept food prices low.

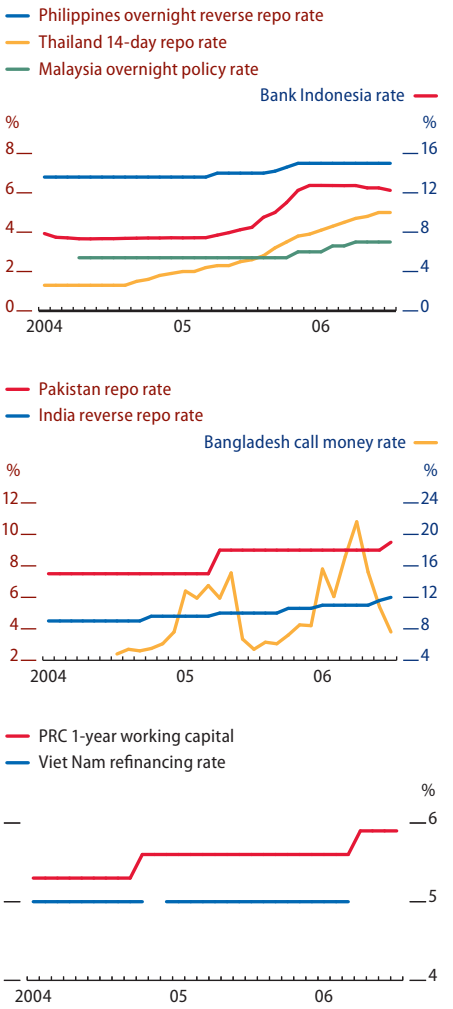
Inflation rates in most countries in South Asia are high and trending up, despite fairly common heavy subsidization to limit domestic fuel price increases (Figure 1.2.8). It is estimated that inflation will average 6.0% in 2006, up from 5.2% in 2005. In Pakistan, inflation climbed steeply in 2005 and, though falling, remained high in 2006. This presents a significant challenge for the authorities. In addition to raising policy interest rates in 2005 and again in July 2006, the central bank has taken several steps to rein in liquidity and credit growth. In India, too, inflation data for the first 6 months of 2006 have shown an uptick, in part reflecting higher food prices and a fuel price increase in June. The authorities

1.2.6 Inflation, developing Asia



Sources: Asian Development Outlook database; staff estimates.

1.2.7 Policy rates



Note: A gap indicates that data are not available.

Sources: CEIC Data Company Ltd.; International Monetary Fund, *International Financial Statistics* online database, available: http://ifs.apdi.net/imf/ifsbrowser.aspx?branch=ROOT, downloaded 1 August 2006.

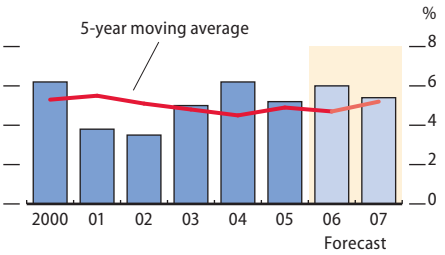
lifted key policy rates in late July, the fifth rise since October 2005, as well as provisioning requirements for personal credit and mortgages. In Bangladesh, a depreciation of the taka and high prices for commodity imports have contributed to inflation. Monetary growth has breached official targets, with borrowing by the public sector, particularly the Bangladesh Petroleum Company, helping feed rapid credit growth.

Southeast Asia's aggregate inflation outcome is lifted by Indonesia (Figure 1.2.9). In 2006, Indonesian inflation is expected to average 14.0%, having been stoked by large rises in retail fuel prices in 2005. To limit knock-on effects, Bank Indonesia aggressively raised its policy rate. This tightening has made itself felt and monthly inflation figures are now heading back toward single digits, which has enabled the central bank to lower its repurchase rate. In the Philippines, too, inflationary pressures are beginning to recede—full-year 2006 inflation is put at 6.7%—and the policy rate has held steady.

In Central Asia, the windfall from high oil prices has spilled over into demand and this has added to inflationary pressures. Monetary authorities have attempted to strengthen policies, but underdeveloped policy tools and cost-push pressures hamper their efforts. It is expected that inflation will pick up to average 8.5% in 2006.

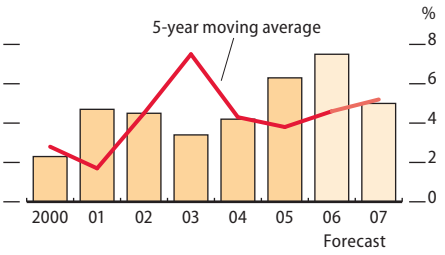
The outlook for 2007 is for inflation in developing Asia to ease to 3.3%. Slower demand growth in the world economy, some respite in commodity price rises, higher interest rates and tighter liquidity domestically, and downward supply pressures on prices of manufactured goods should keep the lid firmly on inflation. If regional currencies were to appreciate this would also help check inflation. Despite robust growth, inflation in the PRC is expected to remain tame at 1.8%, revised down from *ADO 2006*'s April estimate of 3.0%. Rising food production as well as productivity gains and competitive pressures on manufactured goods prices will help contain inflation. Other countries have seen only few and comparatively minor revisions to the earlier forecast. In South Asia, Pakistan is now expected to make better progress in reducing inflation in 2007, as is the Philippines in Southeast Asia.

1.2.8 Inflation, South Asia



Sources: Asian Development Outlook database; staff estimates.

1.2.9 Inflation, Southeast Asia



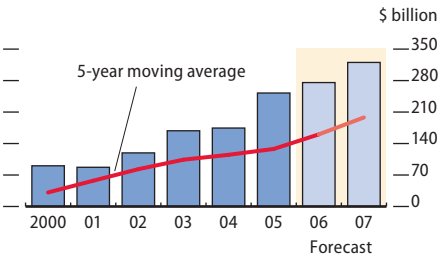
Sources: Asian Development Outlook database; staff estimates.

External payments balances

Partly as a consequence of high oil prices, current account surpluses have narrowed in many countries and in some have now moved into deficit. Nevertheless, for the broader region, the current account surplus is expected to widen (Figure 1.2.10) and a strong balance-of-payments position is confirmed by developments in foreign exchange reserves through June 2006 (Box 1.2.1). Driven by fast export growth, the PRC's current account surplus is still widening, with July's figures setting new monthly records. For the year, the PRC's surplus is estimated at $187 billion, or 7.0% of GDP. Developing Asia for 2006 is expected to run a current account surplus equivalent to 4.2% of GDP (Figure 1.2.11). Taking the PRC out of the aggregate cuts the surplus for developing Asia to 2.6% of GDP.

Southeast Asia generally remains a surplus region, with Malaysia and Singapore's surpluses running into double digits. Indonesia is also expected to remain in surplus. Strong inward remittances from

1.2.10 Current account balance, developing Asia

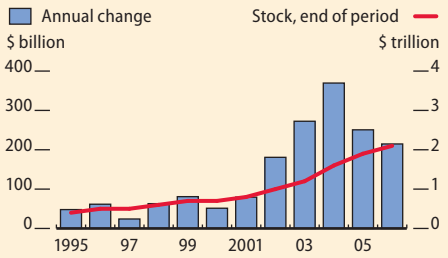


Sources: Asian Development Outlook database; staff estimates.

1.2.1 Developing Asia's foreign exchange reserves and the United States merchandise trade deficit

Developing Asia's foreign exchange reserves rose by about $215 billion over the first half of 2006 to $2.1 trillion, according to preliminary data (box table). Relative to the first half of 2005, this aggregate increase was about 60% larger than the earlier $135 billion advance. It also showed a broader pattern of country gains, with the People's Republic of China (PRC) accounting for about 57% of the rise, down from about 75%, and conversely, with India, Singapore, and Korea recording notably larger increases.

1 Developing Asia's foreign exchange reserves

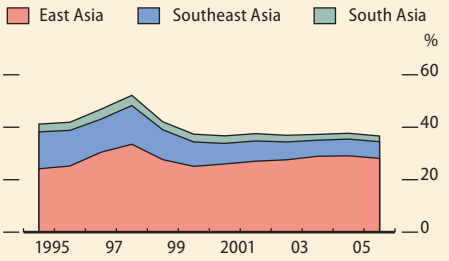


Note: Data for 2006 are through June.

Sources: International Monetary Fund, *International Financial Statistics* online database, available: http://ifs.apdi.net/imf/ifsbrowser.aspx?branch=ROOT; Central Bank of China, available: http://www.cbc.gov.tw; Hong Kong Monetary Authority, available: http://www.info.gov.hk/hkma/, downloaded 15 August 2006.

With $941.1 billion as of end-June 2006, the PRC holds about 45% of developing Asia's foreign exchange reserves. The next five largest holders (in descending order, Taipei,China; Korea; India; Singapore; and Hong Kong, China) together nearly reach an additional 45% of the regional total. The timing and lumpiness of capital flows can influence reserves movements during the course of a year. In 2004 for example, over 60% of the annual gain occurred in the second half of the year. In 2005, however, the second half of the year saw a roughly equivalent reserve gain to the first. Developments to date would suggest that 2006 will perhaps see the largest annual increase in the region's foreign exchange reserves since 2001, when major gains first came on the scene (Box figure 1).

2 Developing Asia's share in US merchandise trade deficit



Note: Data for 2006 are through June.

Source: US Census Bureau, available: http://www.census.gov, downloaded 15 August 2006.

Box figure 2 indicates that developing Asia's share in the United States (US) merchandise trade deficit (census basis, not seasonally adjusted) declined slightly in January–June 2006, though the region's share has remained essentially stable since 2001. This wobble reflects the fact that the bulk of the increase in the US trade deficit in this period was due to increased net petroleum imports by the US, and that developing Asia is a very small supplier of petroleum to the US.

The US trade deficit with the PRC widened by about 11% in January–June 2006 from the prior-year period, to $101.8 billion, accounting for 70.1% of the total US deficit with developing Asia. The PRC has gained share in this deficit over the years, reflecting both its emergence as the lowest-cost producer of many goods, and the growth of intraregional trade, which features exports of components and supplies to the PRC for assembly into goods for export—and many of them to the US.

Developing Asia's foreign exchange reserves ($ billion)

	Stock June 2006	Change in first half of year	
		2006	2005
Central Asia	15.0	6.3	-1.2
Armenia	0.8	0.0	0.1
Azerbaijan	1.6	0.4	0.0
Kazakhstan	11.9	5.8	-1.3
Kyrgyz Republic	0.6	0.0	0.0
Tajikistan	0.2	0.0	0.0
East Asia	1,552.6	145.8	117.4
China, People's Rep. of	941.1	122.2	101.0
Hong Kong, China	126.6	2.4	-1.6
Korea, Rep. of	224.0	14.0	6.0
Mongolia	0.6	0.2	0.1
Taipei,China	260.4	7.1	11.9
South Asia	175.5	27.2	7.9
Bangladesh	3.4	0.6	-0.3
Bhutan	0.5	0.0	0.0
India	156.0	25.0	7.2
Maldives	0.2	0.0	0.0
Nepal	1.6	0.1	0.0
Pakistan	11.3	1.5	0.8
Sri Lanka	2.5	-0.1	0.2
Southeast Asia	330.1	35.3	11.2
Cambodia	1.0	0.1	0.0
Indonesia	38.1	5.3	-2.5
Lao People's Dem. Rep.	0.2	0.0	0.0
Malaysia	78.0	8.6	8.7
Myanmar	0.9	0.1	0.0
Philippines	18.1	2.3	2.0
Singapore	126.8	11.5	3.6
Thailand	56.2	5.7	-1.5
Viet Nam	10.7	1.7	0.8
The Pacific	1.4	0.1	-0.1
Fiji Islands	0.2	-0.1	0.0
Micronesia, Fed. States of	0.0	0.0	0.0
Papua New Guinea	0.9	0.2	-0.1
Samoa	0.1	0.0	0.0
Solomon Islands	0.1	0.0	0.0
Tonga	0.0	0.0	0.0
Vanuatu	0.1	0.0	0.0
Developing Asia	2,074.7	214.8	135.2

Note: Foreign exchange reserves exclude gold, special drawing rights, and the reserve position in the International Monetary Fund.

Sources: International Monetary Fund, *International Financial Statistics* online database, available: http://ifs.apdi.net/imf/ifsbrowser.aspx?branch=ROOT; Central Bank of China, available: http://www.cbc.gov.tw; Hong Kong Monetary Authority, available: http://www.info.gov.hk/hkma/, downloaded 15 August 2006; Asian Development Bank staff estimates.

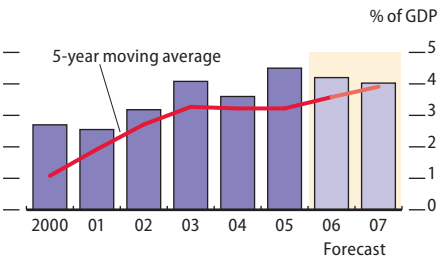
overseas workers more than outweigh a deficit on the trade account in the Philippines. Thailand is expected to stay in deficit in 2006, but with slower growth of domestic demand now anticipated, the estimated deficit has been revised down to just 0.5% of GDP, from 2.5% in April's forecast.

In South Asia, the current account deficit for 2006 is estimated at 2.1% of GDP. As a net importer of oil, South Asia has had to shoulder the costs of high prices. However, the estimated deficit is lower that the *ADO 2006* estimate, largely reflecting a smaller projected deficit for India at 2.1% of GDP, down from the earlier forecast of 3.0%. Faster export growth built on solid growth of the country's export-oriented manufacturing sector is the basis for the revision. Conversely, Pakistan's current account deficit is widening as a consequence of rapid growth in domestic demand and an escalation in the oil import bill. Although the deficit has been easily financed, about one third of the financing comes either from privatization inflows, which are likely to dwindle, or from equity inflows, which are volatile. However, to the extent that investment demand is priming imports, future deficits may come down. Only Bangladesh and Nepal are expected to run a surplus on the current account. The small surplus for Bangladesh reflects strength in exports and workers' remittances as well as credit restraint limiting non-oil imports. Substantial workers' remittances also contribute to Nepal's surplus, but so does weak domestic demand associated with the insurgency.

As a net oil-exporting subregion, high oil prices are expected to improve the current account surplus in 2006 for Central Asia. But net oil importers—Armenia, Tajikistan, and Kyrgyz Republic—will post sizable deficits. A similar pattern of surpluses and deficits is evident in the Pacific. Papua New Guinea's current account surplus is more than offset by deficits in other countries.

Although the outlook for 2007 is still for a small reduction in developing Asia's overall current account surplus to 4.0% (from 4.2% in 2006), the estimated surplus has been revised up since April. The main factor in the upgrade is the jump in the PRC's expected surplus from 5.7% to 6.8% of GDP. Developments to date have also led to revisions in the outlook for several other large economies in developing Asia: a reduction in the projected deficit for India and Thailand, an increase in the surplus for Malaysia and the Philippines, and an increase in the deficit for Pakistan. Viet Nam may move into a current account surplus in 2007 for the first time since 2001, its strengthening external position bolstered by high oil export prices and remittance inflows.

1.2.11 Current account balance, developing Asia



Sources: Asian Development Outlook database; staff estimates.

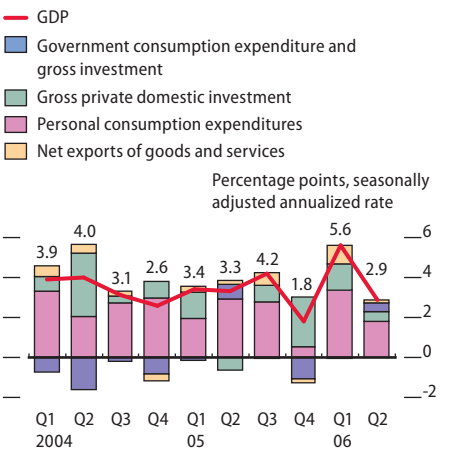
Prospects for the world economy in 2006 and 2007

Table 1.3.1 shows the revised baseline assumptions for the international economy for 2006 and 2007. These provide the basis for the projections made in the country chapters of Part 2, and for the revisions to estimates of growth, inflation, and the current account of the balance of payments for all countries shown in the statistical appendix.

United States

The pace of US economic activity is slowing. Real GDP grew by 2.9% (quarter on quarter, seasonally adjusted annualized rate) in the second quarter, after registering 5.6% growth in the first quarter (Figure 1.3.1). The relatively sharp deceleration in the second quarter primarily reflected in about equal measure a weakening in consumer spending and in fixed investment expenditure, mainly in equipment and software. Monetary tightening over the past 2 years is apparently taking its toll on housing markets. A cooling in house price inflation appears to be damping

1.3.1 Contributions to growth (demand), United States



Source: Bureau of Economic Analysis, available: http://www.bea.gov, downloaded 31 August 2006.

1.3.1 Baseline assumptions for external conditions

	2004 Actual	2005 Actual	2006 *ADO 2006*	2006 *Update*	2007 *ADO 2006*	2007 *Update*
GDP growth (%)						
Industrial countries[a]	3.0	2.5	2.9	2.9	2.6	2.4
United States	3.9	3.2	3.3	3.3	3.1	2.8
Euro zone	2.1	1.3	2.1	2.3	2.0	1.8
Japan	2.3	2.6	2.9	2.8	2.4	2.4
Memorandum items						
US Federal Funds rate (average, %)	1.4	3.2	4.75	5.0	4.75	5.3
Brent crude oil spot prices (annual average, $ per barrel)	38.2	54.8	62.0	69.0	60.0	68.0
Nonfuel commodity prices (% increase)[b]	17.4	13.4	-5.9	20.9	-6.3	-4.6
CPI inflation (OECD, annual average)	2.4	2.6	2.1	2.8	2.0	2.2
World trade volume (% change)	10.2	6.2	7.0	11.0	6.8	8.0

[a] Growth rates for industrial countries are a GDP weighted average for the US, EU, and Japan.

[b] World Bank's non-oil commodity price index.

Sources: US Bureau of Economic Analysis, available: http://www.bea.gov, downloaded 31 August 2006; Datastream, downloaded 11 July 2006; Economic and Social Research Institute of Japan, available: http://www.esri.cao.go.jp/en/sna/menu.html#93sna, downloaded 11 August 2006; Eurostat, available: http://epp.eurostat.cec.eu.int/portal/page?_pageid=1090,30070682,1090_30298591&_dad=portal&_schema=PORTAL, downloaded 1 September 2006; Commodity Price Data, World Bank, available: http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:20268484~menuPK:556802~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html, downloaded 11 July 2006; *Prospects for the Global Economy Forecast Summary*, World Bank, available: http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/EXTGBLPROSPECTSAPRIL/0,,menuPK:659178~pagePK:64218926~piPK:64218953~theSitePK:659149,00.html, downloaded 11 July 2006; OECD main economic indicators, available: http://www.oecd.org/document/15/0,2340,en_2825_495691_1873295_1_1_1_1,00.html#CPI, 7 July 2006; staff estimates.

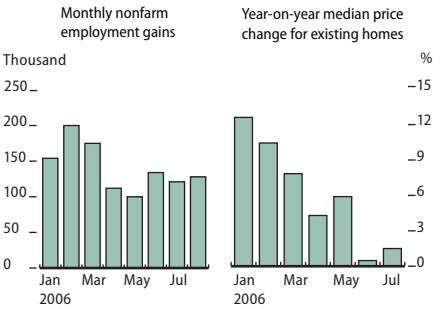
consumer activity and confidence, cutting strong consumer spending that has been supported by the wealth effect of rapidly rising property prices (Figure 1.3.2). The increase in private sector nonfarm employment in August, for the fifth month in a row, continued to be smaller than the 150,000 a month regarded as necessary to absorb entrants to the labor force. Lackluster job growth in recent months may also have affected consumer behavior. The softening in house price rises has been generally moderate and, with the rate of unemployment standing at 4.7% in August (a fairly tight rate historically), another sharp deterioration in the household sector appears unlikely, at least for the remainder of 2006. On the corporate front, though first-quarter vigor of equipment and software investment spending has abated, corporate profits remain healthy, suggesting some strengthening of investment in the second half.

Inflation has clearly edged up, with sustained high oil and commodity prices feeding into both consumer prices and production costs. Headline consumer price inflation accelerated to 4.1% in July, up from 3.4% in December 2005. Core inflation, which excludes food and energy, also moved higher at 2.7%, well above the "comfort zone" of 1–2%. After 17 consecutive rises that brought the policy rate to 5.25% at its late-June meeting, the Federal Reserve in early August took a pause in its 2-year tightening campaign. Even with a slowing economy, strong inflationary pressures remain and it is uncertain whether the Federal Reserve is entirely finished with its rate hikes.

The US trade and fiscal deficits continue to cause concern. The trade deficit in goods and services (seasonally adjusted) in January–June 2006 was up by nearly 13%, running at an annual rate of $768 billion and putting the country on track to recording its fifth straight record deficit. Petroleum accounted for about 85% of the increase in the total deficit in the first half. The fiscal situation, however, has improved with better than expected tax receipts. The fiscal deficit, exclusive of the surplus income on the social security trust fund, is projected to fall to 3.3% of GDP in 2006, down from 4.0% in 2005, despite increased spending in the aftermath of Hurricane Katrina and supplementary defense expenditures. For 2007, the fiscal deficit is forecast to widen to 3.4% of GDP by the Congressional Budget Office.

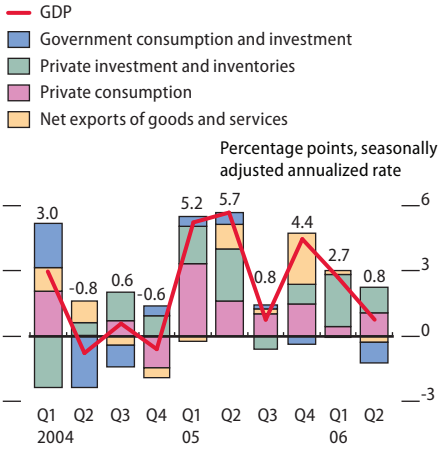
The baseline projection for US real GDP growth is 3.3% for 2006, slowing to 2.8% in 2007. The projected deceleration reflects a rebalancing in demand components as a result of moderating private demand and receding policy accommodation. A softening of increases in housing prices and a related decline in residential investment and construction activity will continue to curb both private consumption and investment. The projection is based on the assumption that the Federal Reserve will raise the policy rate by another 25 basis points before the rate plateaus. Despite the strengthening downside risks, and rising concerns that the housing market could unravel and trigger weaker demand, US growth fundamentals remain generally positive.

1.3.2 Changes in employment and housing prices



Sources: National Association of Home Builders, available: http://www.nahb.org, downloaded 29 August 2006; US Department of Labor, Bureau of Labor Statistics, available: http://www.bls.gov/data, downloaded 1 September 2006.

1.3.3 Contributions to growth (demand), Japan



Source: Economic and Social Research Institute of Japan, available: http://www.esri.cao.go.jp, downloaded 26 July 2006.

Japan

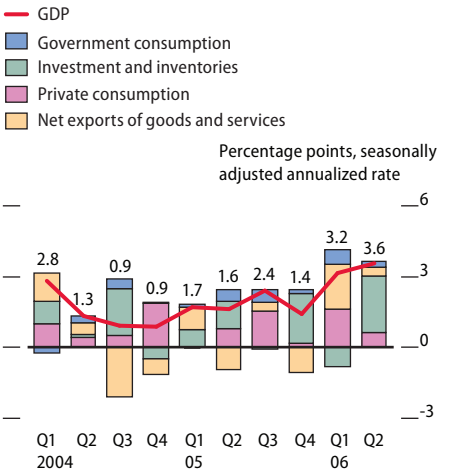
The Japanese economy continues a moderate expansion based on broadening domestic demand. Second-quarter GDP growth came in at 0.8%, after 2.7% in the first (Figure 1.3.3). Although second-quarter

performance was rather flat, this was largely due to a reduction in public spending. Private domestic demand continues to firm up on the back of buoyant business investment and robust consumer spending. Profits are up. Business investment rose by 11.1% in the first half of 2006 from the previous year as the release of demand, pent up since the collapse of the bubble in the late 1990s, continues. Increases in wage income and stronger labor market improvements have boosted consumer confidence. However, improvements in the labor market are relatively less pronounced than gains in corporate profits and business investment, illustrating the corporate sector's cautious approach to hiring during this expansion. While exports grew robustly through the first half of 2006, the contribution of net exports to GDP growth turned negative in the second quarter, reflecting a surge in imports.

With core inflation (i.e., excluding fresh food) reaching 0.6% in June, consumer price inflation settled firmly in positive territory for the second consecutive quarter. And with higher input costs potentially squeezing profits, the corporate sector is likely to pass through some of these costs to final consumers. In witness to improving labor markets, consumers seem more ready to accept higher prices. Against this background, the Bank of Japan made a historic move in July, lifting its "zero rate" policy by 25 basis points. Given the strength of domestic demand, another rate increase appears to be in store before the end of 2006. Inflation will remain modest as consumer spending moderates next year, and as the Bank of Japan takes only very cautious steps in the normalization process.

Japan is set to enjoy a healthy economic expansion over the projection period. Real GDP is expected to grow at 2.8% and 2.4% in 2006 and 2007, respectively. Private domestic demand will continue to drive growth. Although public spending will contract, furthering fiscal consolidation, private domestic demand is sufficiently strong to sustain the growth momentum in 2007. However, a weakening in external demand (some yen strengthening is expected) could spoil this scenario, since the durability of an upswing in business investment without external demand support is yet to be tested.

1.3.4 Contributions to growth (demand), euro zone

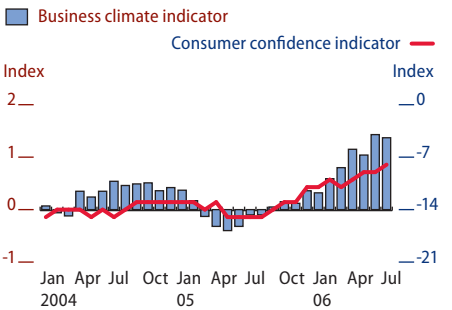


Source: Eurostat, available: http://europa.eu.int, downloaded 1 September 2006.

Euro zone

The euro zone economy grew by 3.6% (quarter on quarter, seasonally adjusted annualized rate) in the second quarter of 2006, up from 3.2% in the first (Figure 1.3.4). Indeed, almost all major euro zone economies but Italy were stronger in the second quarter than the first, indicating a generally harmonious recovery across the zone. The second-quarter acceleration reflected strengthening domestic demand, including a recovery of gross fixed capital formation. Industrial production has accelerated in major euro zone economies since the beginning of 2006. Robust business activity has exerted a positive influence on the labor market, and unemployment rates have trended down, to below 8% by June. Reflecting improving labor market conditions, consumer spending is making slow, steady progress. European Union surveys indicate a marked improvement in the business climate and consumer confidence (Figure 1.3.5). Despite an expected drag from the external sector in the second half of the year, a broadening of domestic demand in the euro

1.3.5 Business climate and consumer confidence indicators, euro zone



Source: European Commission, available: http://ec.europa.eu/economy_finance/indicators/business_consumer_surveys/bcsseries_en.htm, downloaded 21 August 2006.

zone suggests that a moderate expansion will continue for the remainder of this year at least.

With oil prices stubbornly high, the European Central Bank is expected to continue raising its policy rate, and is likely to make further rate increases before year-end. Although prices, especially core inflation, remain under control, production input costs are steadily rising.

GDP growth in the euro zone economy is forecast at 2.3% in 2006. A combination of moderating exports and tightening fiscal policy is expected to bring down growth to 1.8% in 2007. If fully implemented, the planned fiscal consolidation in major euro zone economies will restrain consumption spending. In Germany, a 3 percentage point increase in value-added tax will take effect in January, and the health insurance contribution is to be increased as part of health care reforms. Italy announced a substantial budget cut in 2007 to bring the deficit to below 3% of GDP (which is the ceiling set by the stability and growth pact). France has also proposed a cut in fiscal outlays. With high oil prices, higher interest rates, and the prospect of a stronger euro, growth is unlikely to come from further external support. Aggressive fiscal tightening—though seen necessary to curb perpetual fiscal deficits—could damage the still-fragile economic expansion.

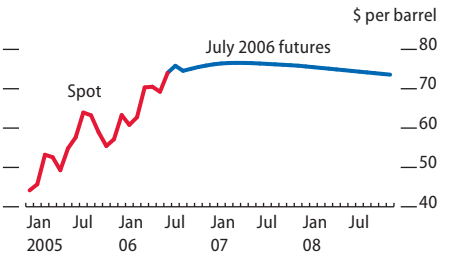
World trade and commodity prices

After the pickup in the second half of last year, the volume of exports grew at an accelerated pace into the first quarter of 2006, pacing vigorous industrial production worldwide. Momentum has eased since, reflecting a moderation of economic activities in major industrial countries; trade expansion is largely sustained by industrial activities in developing regions, particularly Asia. The PRC continues to set new records in industrial production and exports, contributing nearly 2 percentage points to growth in world trade in 2005. Given the strong start to 2006, world trade, measured in terms of the export volume, is projected to grow at about 11% this year, softening to about 8% next year as the pace of global economic expansion slackens a little.

Crude oil prices have risen to yet another record on renewed geopolitical concerns. The price of benchmark Brent crude again tested levels near $80 per barrel in early August, as fighting in the Middle East escalated. The benchmark price averaged $66 for the first half of 2006, which is already considerably higher than the average of $55 for 2005. Oil prices are expected to stay at over $70 on the basis of near-term futures prices (adjusted for the cost of carry) for the remainder of 2006 (Figure 1.3.6). For the year as a whole, Brent crude is projected to average $69 per barrel. The baseline assumes little change relative to 2006 prices for the average oil price in 2007.

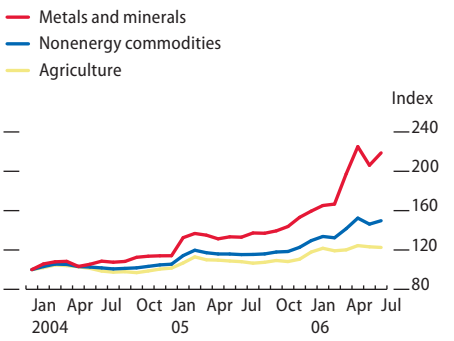
Prices of nonenergy commodities have made an impressive run-up since 2002, based on strong metal prices (Figure 1.3.7). Steady and steep increases in metal prices over the past several years accelerated even further into early 2006, in evidence of strong end-user demand as well as their attractiveness as financial investments. Despite having fallen from the highs reached in May, most metal prices remain elevated compared with their start-of-year levels. Prices of agricultural raw materials and

1.3.6 Brent spot and futures prices



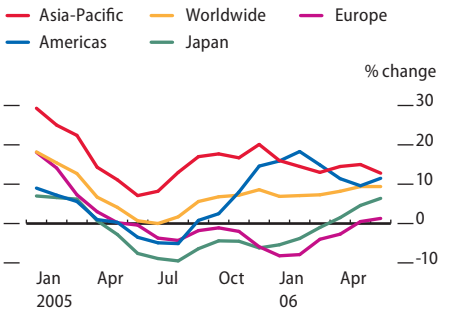
Note: July 2006 futures are monthly average prices.
Source: Datastream, downloaded 23 August 2006.

1.3.7 Commodity prices



Note: January 2004 = 100.
Source: World Bank Commodity Price Data (Pink Sheets), various issues, available: http://web.worldbank.org, downloaded 21 August 2006.

1.3.8 Global semiconductor billings

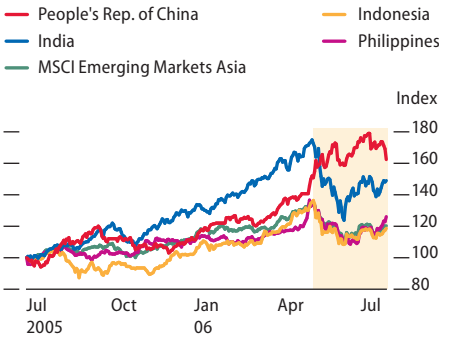


Source: World Bank Commodity Price Data (Pink Sheets), various issues, available: http://web.worldbank.org, downloaded 21 August 2006.

food have also firmed up, buttressed by strong demand and higher energy production costs. For 2006, nonenergy commodity prices are expected to rise on average by about 21% according to World Bank estimates. In 2007, prices are expected to decline moderately (about 5%), because overall supply conditions are improving rapidly.

A modest demand-driven recovery continues in global high-technology industries. Semiconductor sales grew steadily in the first half of 2006 on a gradual recovery in consumer spending in Japan and the euro zone, with still generally healthy growth in the US and Asia (Figure 1.3.8). Despite some slackening, demand prospects for high-technology industries remain favorable for 2006 and into 2007 as global demand for consumer electronics, such as wireless communication devices, digital cameras, and MP3 players continues to support a cyclical upswing. However, global competition is becoming fierce; putting downward pressure on the overall prices of information technology-related products. Supply-side conditions have also eased, adding to this pressure.

1.3.9 Selected stock price indexes



Notes: 1 July 2005 = 100. Morgan Stanley Capital International (MSCI) is a capitalization-weighted index that monitors performance of stocks from Asia-Pacific, excluding Japan.

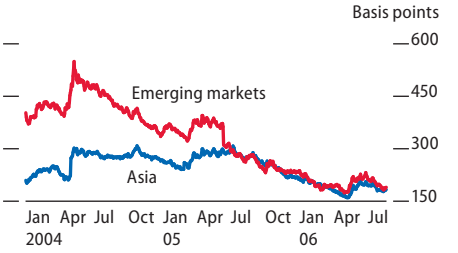
Source: Datastream, downloaded 22 August 2006.

Capital flows and markets

Emerging Asian financial markets have rebounded since the mid-May 2006 correction (or dip) following some adjustment in "risk appetite" and global investors' portfolio positions (Figure 1.3.9). Asian equity markets on average have now regained ground to return to January's levels. The prospect of sustained high earnings and attractive prices has helped make emerging Asian equity markets a top destination for global investors in recent years. According to the Institute of International Finance, Asia accounted for nearly 60% of net portfolio equity flows to emerging markets in 2005. The resilient growth outlook for Asian economies, even in a slowing global context, suggests continued sizable portfolio equity inflows.

External funding conditions for Asian issuers remain broadly favorable, with sovereign credit spreads staying generally compressed, despite a mild pickup during the brief May sell-off (Figure 1.3.10). Taking advantage of relatively favorable funding conditions, total issuance of equities, bonds, and syndicated loans continued to grow robustly into the first quarter of 2006, following a record-breaking year in 2005 (Figure 1.3.11). Total equity issuance by emerging Asian countries rose sharply in 2005, reflecting the ongoing surge in initial public offerings in the PRC. The issuance of bonds and syndicated loans was also active. However, as rising global interest rates continue to put pressure on the cost of external funding, new issuance of debt securities by Asian entities may ebb over the projection period.

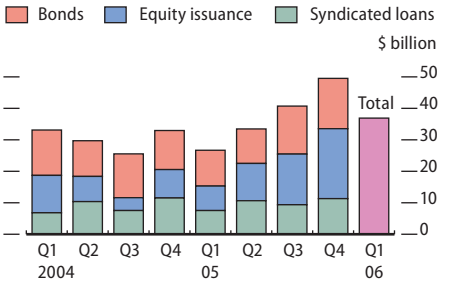
1.3.10 Sovereign credit spreads, emerging markets, including Asia



Notes: Sovereign credit spreads are yield spreads of sovereign bonds over US Treasury bonds. Emerging markets and Asia follow the definitions of J.P. Morgan, available: http://www.utdt.edu/~ely/intro_embig.pdf.

Source: Datastream, downloaded 22 August 2006.

1.3.11 Developing Asia's external financing



Sources: International Monetary Fund, *Global Financial Stability Report* and *Global Financial Update*, available: http://www.imf.org/external/pubs/ft/fmu/eng/index.asp, both downloaded 22 August 2006.

Subregional summaries

Central Asia

Growth in 2006

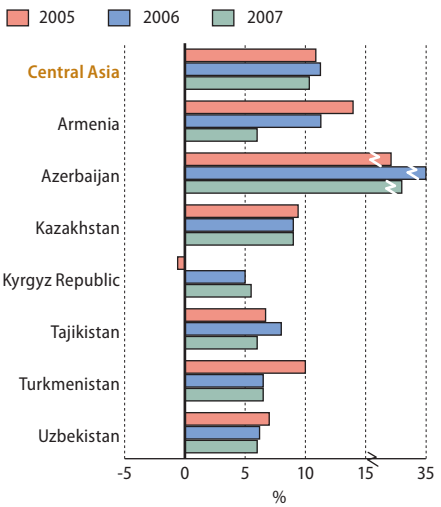
GDP growth in the Central Asian subregion in 2006 has been revised to 11.3%, a full percentage point above the projection made in April this year in *ADO 2006* (Figure 1.4.1). This performance builds on the rapid pace of GDP growth seen in the subregion over the past 5 years, which has averaged just over 10%. Strong growth has been underpinned by the major oil exporters, Azerbaijan and Kazakhstan, which have benefited from substantial FDI, increased oil production, and the recent further escalation in international oil prices. Revised subregional growth projections in 2006 and 2007 mainly reflect greater buoyancy of the hydrocarbon sector in these two countries.

The non-oil exporting economies are also expected to fare well in 2006, in part due to continued substantial workers' remittances—largely from those working in Kazakhstan and the Russian Federation—and in part due to expansion both in traditional exports, mainly cotton and metals as commodity prices stay favorable.

Among the oil-exporting economies, Azerbaijan's GDP continued soaring, by an estimated 36.3% during the first half of 2006 year on year, and Kazakhstan's expanded by 9.3%. Based on strengthened activities, this *Update* raises full-year growth from 30.5% to 35.0% in Azerbaijan and by a half percentage point to 9.0% in Kazakhstan. The extraordinary numbers posted for Azerbaijan reflect the continuing phase-in of production from very large investments in oil and gas fields and in pipelines in a small economy. The upgrade in the outlook for Kazakhstan (which accounts for about one half of Central Asian GDP) takes account of greater momentum in both the oil and non-oil sectors. Strong oil sector growth in these two economies continues to have spillover effects into other parts of the economy, by spurring expansion in activities of enterprises servicing the oil sector and by financing stepped-up government expenditures—both current and development. With incomes on an upswing, private spending on consumer goods and housing investment is increasing rapidly, raising price pressures as well as growth.

Among the economies that are not major oil exporters, Armenia grew at a very brisk 11.9% in the first half of 2006, with a drop in industrial production (mainly owing to a slump in the diamond polishing sector) eclipsed by a continued boom in construction and services. On the demand side, rapid growth was fed by government spending, FDI inflows, and remittances. In line with these developments, the *Update* raises Armenia's projected 2006 growth to 11.3%, only slightly less than the 14.0% expansion of 2005. The Kyrgyz Republic saw a modest resumption in growth (3.1%) in the first half of 2006, after a contraction in 2005. Declining production from the Kumtor gold mine was offset by a 6.5%

1.4.1 GDP growth, Central Asia



Sources: Asian Development Outlook database; staff estimates.

increase in non-gold GDP, reflecting primarily strong expansion in services. Tajikistan saw a 7.1% uptick in growth in January–June, based on stronger aluminum production. Resource-rich but slow-reforming Uzbekistan posted lower first-half growth of 6.6% year on year, as the previous 2 years' above-trend growth rates in agriculture and industry abated. Developments in Kyrgyz Republic, Tajikistan, and Uzbekistan appear consistent with meeting *ADO 2006*'s GDP growth projections.

Inflation in 2006

Central Asia has wrestled with inflationary pressures in recent years, although actual outcomes have generally been moderate (Figure 1.4.2), within a range of 5–10%. Large foreign exchange inflows from exports and remittances, triggering accelerated growth in monetary aggregates, have been the main cause of inflation, since central banks' control mechanisms are relatively underdeveloped. However, large wage hikes (from very low levels) and utility price increases (to eliminate a legacy of heavy subsidization) have also been important factors. A more rapid economic expansion and heightened cost-push pressures have increased the subregional forecast for inflation in 2006 to 8.5% from 7.9%.

Among oil exporters, Azerbaijan's inflation accelerated to 7.9% in June 2006 (year on year), fueled by large public sector wage increases and other government spending, as well as a surge in foreign exchange inflows that boosted the money supply. Although government spending remains on track to increase by about 60% during the year, its impact on prices appears somewhat delayed and this *Update* reduces average inflation expected for the year to 11.0% from 13.0%. The central bank raised its benchmark refinancing rate by 50 basis points to 9.5% in July, but this increase likely will have only a limited impact on monetary conditions and inflation, given the central bank's inability to sterilize the large foreign exchange inflows.

In Kazakhstan, consumer price inflation rose by 8.7%—well above the 5.7–7.6% target range. The authorities there have responded by raising the central bank's refinancing rate and by allowing nominal appreciation of the tenge (of some 10% against the US dollar over the first 6 months of 2006). Full-year inflation is now projected to average 8.5%.

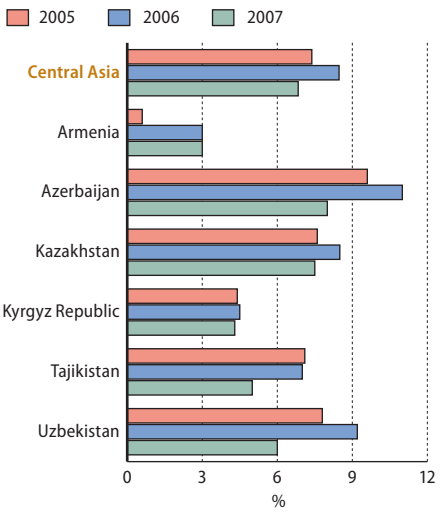
In the rest of Central Asia, inflation rose in Armenia to 3.6%, because of high oil and metal prices, prompting the central bank to warn that the 3.0% inflation target for 2006 is under threat. Prices felt upward pressure in the Kyrgyz Republic from shortfalls in farm output and higher fuel prices; consumer price inflation in the first half of 2006 is estimated at 4.1% relative to the prior-year period.

Inflation in Tajikistan rose by 6.0% during the first 5 months of 2006, with pressure from domestic utility price rises and from spending boosted by larger inward remittances. It is likely to be in the 6–7% range for the whole year. The officially reported inflation estimate in Uzbekistan was 3.5% for the first half of 2006 (although International Monetary Fund inflation estimates are generally higher than official figures, consistent with monetary data and trends in producer prices).

External payments balances in 2006

External sector developments diverged between oil exporters and the rest.

1.4.2 Inflation, Central Asia

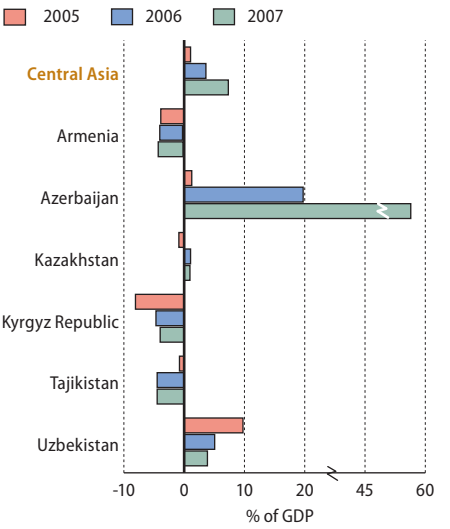


Sources: Asian Development Outlook database; staff estimates.

Kazakhstan's exports during the first quarter of 2006 were 30% higher year on year, but imports grew at a less rapid 20%. As a result, the current account swung from a deficit in the fourth quarter of 2005 to a surplus in the first quarter of 2006. Reflecting the substantial strengthening in the external position, Kazakhstan's official reserves rose by $6.0 billion in the first half of 2006 to $13.1 billion. Azerbaijan, too, saw strong growth in exports—up by about 133% in January–May from the year-earlier period—with surging oil revenues accounting for over 90% of export earnings (according to trade data records). Import growth was lower at 22%. Mainly reflecting much stronger oil exports than foreseen, the *Update* raises Azerbaijan's current account surplus from 15.8% to 19.7% of GDP and lifts that of Kazakhstan by roughly one half percentage point to 1.1% of GDP (Figure 1.4.3).

In marked contrast—but for the same oil-related reasons—Armenia's trade deficit in the first quarter of 2006 was about 40% higher than in the same period of the previous year, and the current account deficit nearly doubled to $101.9 million. In the Kyrgyz Republic during this period, the current account deficit at $92.7 million was markedly wider than in the previous year, as a modest expansion in non-gold exports was overwhelmed by much higher imports. Export performance in Tajikistan improved markedly in the first quarter of 2006 year on year, mainly due to higher shipments of aluminum, which benefited from stronger international prices. Nevertheless, the current account deficit showed little improvement, as higher import and services payments largely offset the export gains. Uzbekistan's export growth decelerated to 4.3% in the first quarter of 2006 while import growth was up by 3.5%, to yield a reported surplus of $387 million, which is slightly higher that in the year-earlier period. Higher international gold and cotton prices aided exports.

1.4.3 Current account balance, Central Asia



Sources: Asian Development Outlook database; staff estimates.

Outlook for 2007

The outlook for the oil exporters appears bright over the near term, as world oil prices are likely to remain high through 2007. GDP growth in Azerbaijan and Kazakhstan is expected to stay strong, upgraded from *ADO 2006* projections to 30% and 9.0%, respectively, while the projections for their current account surpluses have also been raised. High oil prices will leave open the window of opportunity for these two countries to channel high oil revenues into productive investment in the non-oil sectors and into saving in the special funds that have been established to foster future development. The risks that the oil exporters face in the near term are inflationary pressures and domestic overheating. Revised projections of inflation in 2007 for Azerbaijan and Kazakhstan anticipate moderation from 2006 levels; even so rates would remain uncomfortably high.

Uzbekistan, with its abundant natural resources, is also positioned for continued growth, provided that the climate improves for private sector development and for employment generation. For the Kyrgyz Republic and Tajikistan, imparting resilience to growth will depend on diversification away from their traditional heavy dependence on gold and aluminum exports, respectively; on continued inflows of remittances; and on attracting FDI. For Armenia, a strong track record of reforms together with services sector growth is likely to hold growth at still-respectable,

even if somewhat slower, levels, though high oil prices will continue to exert pressure on the country's balance of payments.

East Asia

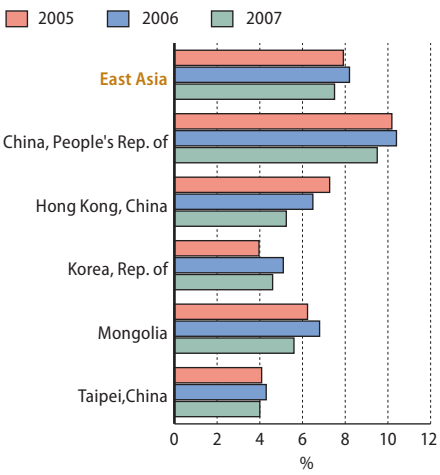
Trends in 2006 and 2007

Growth in East Asia this year will be stronger than projected in *ADO 2006*, mainly because the forecast expansion rate of the PRC is revised up to 10.4%, the fastest since 1995. Korea, the second-biggest economy in the subregion, is set to record growth of 5.1%, unchanged from *ADO 2006* and the best rate since 2002. Overall, the five economies of East Asia are projected to grow by a vigorous aggregate of 8.2% (Figure 1.4.4), upgraded by a half percentage point since April. For 2007, the *Update* raises the PRC's projected growth rate to 9.5%. Forecasts are lifted for both Hong Kong, China and Mongolia, in part influenced by the PRC. Taipei,China's prospects have not changed much over the last few months. However, Korea's 2007 forecast is revised down slightly to 4.6%. Aggregate growth for the subregion next year is forecast at 7.5%, nearly a half percentage point greater than anticipated in April.

Despite accelerating economic growth in the PRC, inflation remains surprisingly low, mainly the result of good grain harvests and overcapacity in some industries. Indeed, the forecasts for consumer inflation this year and next are revised down to 1.6–1.8%. Projections for Korea and Hong Kong, China are adjusted slightly, so that the East Asia forecast now is for inflation of just 1.9% this year, edging up to 2.1% in 2007. Both estimates are revised down from April, and if achieved would maintain East Asia's record as having the lowest inflation in developing Asia.

The *Update* lifts the PRC's projected current account surpluses for 2006–2007, though they are unlikely to match the record 2005 surplus equivalent to 7.2% of GDP. Korea's projected 2006 surplus is lowered and in 2007 it now is expected to have a roughly balanced current account. Putting these revisions together, the subregional current account surplus is now put at 5.6% this year and 5.2% next year, both revised up slightly.

1.4.4 GDP growth, East Asia



Sources: Asian Development Outlook database; staff estimates.

People's Republic of China

The PRC stood out with stronger than expected 10.9% GDP growth in the first half of 2006. Fixed asset investment surged by nearly 30%, despite efforts by the Government to rein in excessive investment in some sectors of the economy, such as real estate and steel. Consumption continued to expand and external trade surged, producing a $61.4 billion trade surplus in the January–June period. Growth is likely to ease in the second half, since the Government has signaled its discomfort with the sizzling pace by taking various tightening steps, including: two 27 basis-point increases in the 1-year benchmark lending interest rate; increases in commercial bank reserve requirements; and restrictions on investment in property. The central bank has also imposed direct controls on lending and adopted measures to absorb bank liquidity. However, the rapid pace of the first half indicates that the economy will expand by 10.4% or so in 2006, revised up from 9.5% in *ADO 2006*.

The current account surplus is also revised up in 2006, to 7.0% of GDP, slightly below the record high reached in 2005. Even as the economy has roared ahead though, consumer price inflation has remained tame, reflecting a rapid expansion of industrial capacity and a good grain harvest. The consumer price index is now projected to rise by just 1.6% in 2006, revised down from April.

Top leaders have hinted at yet further tightening measures. However, the effectiveness of policy tools is complicated by a variety of factors, including incentives at the provincial level that promote investment at the same time as the central authorities try to damp it; underdeveloped capital markets that limit the traction of interest rate changes; and rising foreign reserves and capital inflows that also undermine the impact of higher interest rates. As a result, the actual likely magnitude and timing of the measures' impact are uncertain. New approaches, including greater flexibility in managing the exchange rate and capital outflows, and a variety of structural reforms, are likely to be needed.

Meanwhile, there are forces that could even accelerate growth in the short term, risking more painful adjustments later on. For example, fiscal spending is likely to increase in 2007 ahead of the 17th Communist Party Congress that year and in the lead-up to the 2008 Olympic Games in Beijing. Taking into account these various influences, the *Update* revises up the 2007 forecast for GDP growth to 9.5%. Growth of the trade surplus is projected to moderate next year as export growth slows in a context of somewhat softer conditions in the world economy. Government efforts to slow exports of resource-intensive products should also have an effect. In addition, the opening of more services subsectors, as a result of the Government's commitments to WTO, should stimulate imports. The forecast for the current account surplus in 2007 is adjusted up to 6.8% of GDP, and inflation is now penciled in at just 1.8%.

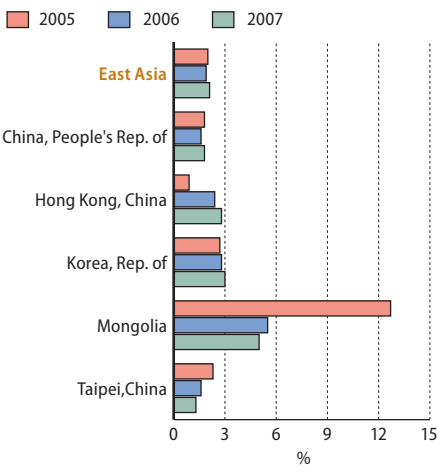
If the investment momentum does not slow, growth in 2007 could again surprise on the upside, raising the possibility of more difficult changes later. Burgeoning excess industrial capacity would increase the probability of a profit crunch, bankruptcies, bad loans, and consumer price deflation. But if the authorities brake too hard, GDP growth could fall by more than wished for, as happened in 1989–1990.

Republic of Korea

Economic growth was a robust 5.7% in the first half of 2006, supported by stronger domestic demand and solid expansion of exports. However, growth decelerated in the second quarter, reflecting a moderation in consumption growth as well as softer construction activity following a series of policy measures to cool the real estate market. Industrial production recorded lower—but still-high—growth, while activity in services eased. The contribution to aggregate growth from net exports is decreasing, as high prices for oil and raw materials push up the import bill.

These trends will continue through the second half of 2006 and into 2007. Also, an expected moderation in US economic growth could hit export demand. The Bank of Korea has raised its overnight call-rate target five times since October 2005, to 4.5% by August 2006, aimed at combating inflation, though this could have the effect of crimping domestic demand as well. The GDP growth forecast for 2006 is

1.4.5 Inflation, East Asia



Sources: Asian Development Outlook database; staff estimates.

maintained at the *ADO 2006* level of 5.1%, but for 2007, as the damping factors have more impact, the forecast is revised to 4.6% from 4.9%. Inflation (Figure 1.4.5) is projected at 2.8% this year and 3.0% in 2007, little changed from April's forecasts. The Korean won/US dollar exchange rate has stabilized, after appreciating sharply until mid-May. The current account is seen in surplus equivalent to 0.6% of GDP in 2006 and in balance in 2007, both revised down from *ADO 2006*.

Taipei,China

The economy grew by 4.7% in the first half of 2006, driven by healthy international demand for information technology products, which boosted manufacturing and exports. However, domestic demand softened. Private investment contracted and growth in private consumption weakened as credit-card issuers tightened lending after a rise in defaults from the second half of 2005. Domestic demand has also been affected by rising prices for fuel and electricity and by higher domestic interest rates (the central bank raised its discount rate in both the first and second quarters of 2006, to 2.5%, bringing to eight the number of consecutive quarterly rate rises so far, from a low level).

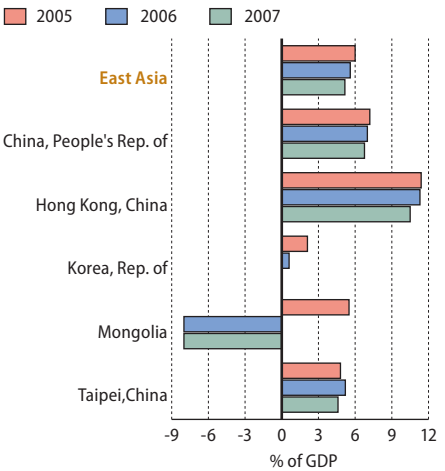
Based on the softer than expected domestic demand, the GDP growth forecast for 2006 is lowered slightly to 4.3% from 4.4% in *ADO 2006*, though this represents a pickup from the actual 2005 outturn. In 2007, growth is still expected to ease to 4.0%, assuming a moderate slowing in world trade. Forecasts for inflation are maintained at 1.6% for this year and 1.3% for 2007. The current account surplus is expected to average about 5% of GDP, with minor adjustments made to projections in both years.

Hong Kong, China

Heavily influenced by trends in the PRC economy, Hong Kong, China recorded vigorous growth of 6.6% in the first half of 2006. A moderation in year-on-year growth in the second quarter from the first was attributed to slower growth in exports, particularly to the US (real exports of goods rose by 6.4% in the second quarter, less than half the rate seen in the first quarter). Private consumption and total investment accelerated in the second quarter. The unemployment rate declined to 4.9% in July, the lowest in nearly 5 years. For all of 2006, GDP growth now is put at 6.5%, revised up by 1 percentage point from *ADO 2006*, in line with the growth forecast for the PRC.

Growth will slow in 2007, reflecting the expected deceleration in the PRC's expansion rate and a maturing of Hong Kong, China's extended domestic rebound from the low-growth period of 2001-2003. The 2007 forecast is for 5.2% growth, upgraded by 0.2 percentage points from April. Higher growth leads to upward revisions in the projections for the current account surplus (Figure 1.4.6). Inflation is put at 2.4% (2006) and 2.8% (2007), adjusted marginally from *ADO 2006*. If the slowdown in the US were to be more significant than is currently expected, trade through Hong Kong, China and hence its GDP growth forecast would be at risk.

1.4.6 Current account balance, East Asia



Sources: Asian Development Outlook database; staff estimates.

Mongolia

Mongolia, the least-developed economy in the subregion, is expected to grow by 6.8% in 2006, higher by 0.8 percentage points than the *ADO 2006*

projection. The main reason for the change is higher than expected international demand and prices for copper and gold, two of the country's main exports, and foreign direct investment in mining. These factors, and the stronger than forecast growth in the PRC, have prompted an upgrade in the 2007 growth forecast to 5.6%, from 5.0%. The current account deficit forecast is narrowed a little from *ADO 2006* because of higher than foreseen export earnings from metals. Inflation is still expected to be around 5.5% this year and 5.0% in 2007, much less than in 2005 but still the highest in East Asia. This narrowly based economy remains vulnerable to the prices of a few export commodities and to weather conditions.

South Asia

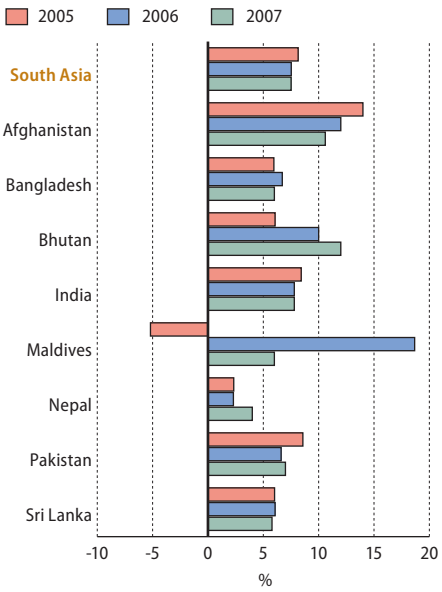
Trends in 2006 and 2007

Aggregate output in South Asia is expected to expand by 7.5% in 2006, marking a continuation of recent impressive economic performance (Figure 1.4.7). This outcome is slightly better than the forecast given in *ADO 2006*, and rests on upward revisions of estimated or projected GDP growth in 2006 for all countries, except Bhutan. Growth is generally driven by services, though industry's contribution to total output is becoming more significant. Strong domestic demand is buoyed by vigorous private consumption and rising investment. South Asia is projected to post 7.5% growth in 2007, due primarily to sustained expansion of the Indian economy and acceleration in Pakistan.

Projections for inflation in this *Update* are generally consistent with those made in April. Inflation is still put at a high 6.0% in 2006, slightly trimmed from the earlier forecast of 6.1%, since anticipated large price increases in Bangladesh and Pakistan have been somewhat less than expected. To control inflation, monetary authorities across the subregion are lifting policy interest rates, with notable progress in limiting the extent of price increases expected by next year. The forecast for subregional inflation in 2007 remains at 5.4%, with each country likely to experience lower inflation than in 2006.

The aggregate current account deficit for 2006 is now projected to be considerably smaller than previously forecast, at 2.1% of GDP, about a percentage point less. This is attributable to stronger than originally projected current account positions for Bangladesh, India, and Pakistan. These developments on balance further translate into a more favorable outlook for 2007, when the subregional current account deficit is now expected to remain at 2006's level as a share of GDP.

1.4.7 GDP growth, South Asia



Sources: Asian Development Outlook database; staff estimates.

India

Forecast growth for South Asia's largest economy remains buoyant with successive annual expansions of 7.8% projected for FY2006 and FY2007. If these projections bear out, India will have achieved rapid growth of at least 7.5% annually for 5 consecutive years by FY2007—a most un-Hindu rate of growth. Services continue to drive growth, as the dominant and most rapidly expanding sector, but industrial production has also been accelerating in recent years, directed toward both domestic and foreign markets. This implies the development of a stronger industrial base to

complement the consistent expansion of services, further improving prospects for long-term growth in output and trade. Against this, fiscal pressures are mounting.

A sharp rise in inflation to 5.5% is projected in FY2006, as surging demand for credit boosts the money supply and as food and fuel prices exert pressures from the supply side. Prices of "primary articles," for example, particularly vegetables, pulses, and wheat, have been rising substantially, not due to poor harvests in FY2005 but rather due to bumps in the process of liberalizing the agroprocessing sector. Rising inflation has already been recorded and it reached 5.4% in the latter half of June. The Reserve Bank of India has responded by raising key short-term interest rates twice, first in early June and then in late July. Higher international oil prices and their limited pass-through to domestic fuel prices are contributing to inflationary expectations, even if high quasi-fiscal fuel subsidies are keeping inflation in check in the short term. India's inflation should moderate to 5.0% in FY2007, with expected improved stock management by food security agencies and slowing international commodity price inflation.

Current developments suggest an improving industrial export position for India, forming the basis for substantial reductions in *ADO 2006*'s current account deficit projection. The *Update* reduces the current account deficit projection for FY2006 to only 2.1% of GDP (from 3.0%). For FY2007, it lowers it to 1.9% of GDP (from 3.3%), primarily because of stabilizing international oil prices and rising domestic fuel prices, which should damp domestic demand and slow the growth of oil imports.

Pakistan

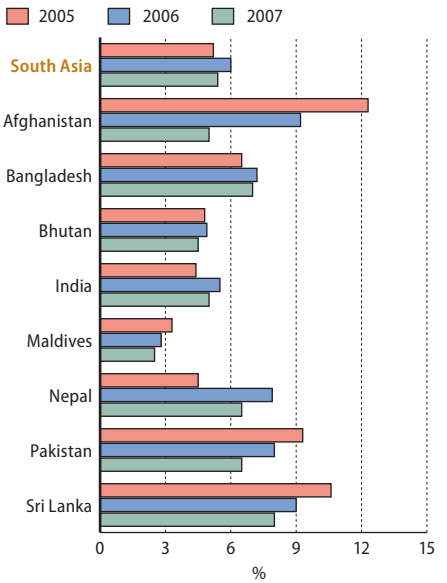
The economy is estimated to have expanded by 6.6% in FY2006, slightly in excess of the projection. Growth is still strong, though at its slowest rate in 3 years due to significantly lower output expansion in agriculture and some deceleration in industry. Services, however, registered record-high growth of 8.8% as financial services, telecommunications, and wholesale and retail trade expanded rapidly.

Projected growth for FY2007 has been lowered to 7.0%, though this still represents significant acceleration relative to FY2006. Increased investment and imports of capital goods and machinery are expected to push growth rates in both agriculture and industry higher in FY2007, while privatization of the Pakistan Telecommunication Company, along with continuing benefits flowing from other reforms, will help maintain robust services sector growth.

Inflation in Pakistan is still among the highest in the subregion at 8.0% in FY2006 (Figure 1.4.8). However, this rate was a half percentage point lower than expected, and shows significant improvement from the 9.3% recorded in FY2005. The State Bank of Pakistan implemented monetary tightening to combat inflation, reducing growth in the money supply to less than that of nominal GDP. Forecast inflation for FY2007 is revised downward to 6.5%, reflecting the State Bank's tighter monetary stance adopted in late July when it increased its policy rate to 9.5% and raised banks' reserve and liquidity requirement ratios.

The current account deficit ballooned to 4.4% of GDP in FY2006, partly due to a sharply rising oil import bill but mainly due to the

1.4.8 Inflation, South Asia



Sources: Asian Development Outlook database; staff estimates.

very rapid expansion in domestic demand that boosted non-oil imports. Worryingly, about a third of this deficit was financed through nonrecurrent privatization proceeds and foreign investment inflows into equities. Although the deficit recorded in FY2006 was lower than the projected level of 4.9%, prospects for the current account position in FY2007 have not improved, and a further deterioration in the deficit to 5.5% of GDP is expected.

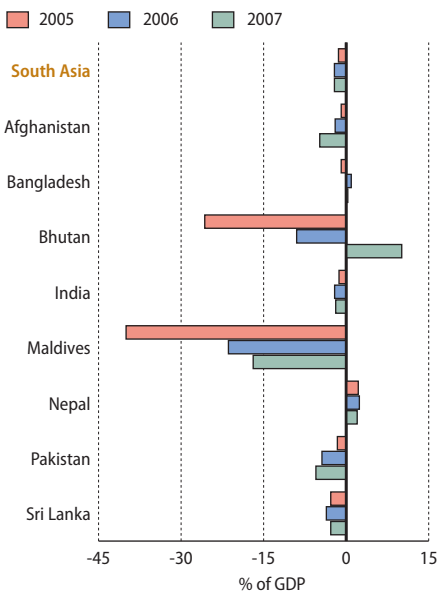
Bangladesh

Growth exceeded expectations in FY2006, with GDP increasing by 6.7%, the highest rate in the past 10 years. Industry was the primary driver, though the manufacturing subsector still underperformed due to recurrent power disruptions. Recovery in agriculture also helped boost growth. Strong private consumption, aided by workers' remittance inflows and rising private investment, were the main demand contributors to growth. Growth is projected to slow to 6.0% in FY2007, reflecting some sluggishness in agriculture.

International commodity price increases—compounded by a depreciating currency—and a rapid rise in the money supply pushed inflation to 7.2% in FY2006. In spite of the tighter monetary policy stance adopted by Bangladesh Bank, which featured policy interest rate hikes and an increased cash-reserve requirement and statutory liquidity ratios, the growth of broad money maintained its rapid pace. Domestic credit also expanded considerably due to high public sector borrowing. Inflation for FY2007 is forecast at 7.0%, as monetary tightening is only expected modestly to offset inflationary pressures from the reduction in fuel subsidies and continued depreciation of the taka.

Instead of the projected deficit of 0.8% of GDP, a current account surplus of 0.9% was actually recorded in FY2006, primarily because of impressive export earnings and a reduction in import growth to a more sustainable rate (Figure 1.4.9). Workers' remittances also played a part in this. Sustained growth of exports and rising remittances should again translate into a small current account surplus in FY2007, projected at around 0.3% of GDP.

1.4.9 Current account balance, South Asia



Sources: Asian Development Outlook database; staff estimates.

Other South Asian economies

Growth forecasts for Sri Lanka have been marked up substantially. Based on its high first-quarter growth performance—due mainly to major crops and the services sector—and on indications that growth momentum is being sustained, the economy is now projected to expand by 6.1% in 2006. With prospects of continued robust growth in industry and a return of services growth to trend, the forecast for 2007 at 5.8% is also significantly higher than in *ADO 2006*. However, further escalation of the conflict between the Government and the Liberation Tigers of Tamil Eelam will likely damage prospects for any sustained rapid economic expansion.

In Nepal, growth in FY2006 is estimated at only 2.3%, reflecting the adverse effects of the conflict and political problems, particularly for manufacturing, transport, and communications. However, this estimate is slightly higher than projected in April, and stems from the restoration of Parliament and prospects of some political progress to break the current logjam. For similar reasons, GDP growth in FY2007 has been upgraded

from 3.4% to 4.0%. Self-evidently, progress in the peace process remains the key factor in realizing growth forecasts.

In Afghanistan, economic expansion in FY2006 is likely to slow to 12.0% from the FY2005 rate because of the drought affecting large portions of the country. Reconstruction efforts and overall political stability have also been adversely affected by renewed problems regarding security, and growth is expected to decline further to 10.6% in FY2007.

The economy of Bhutan is estimated to have expanded by a robust 10.0% in FY2006, and this should accelerate to about 12.0% in FY2007 as the Tala hydropower project reaches full production. Finally, the Maldives is projected to register high GDP growth of 18.7% in 2006, due essentially to the very strong post-tsunami recovery in tourism seen in 2006. The outlook for 2007 is for growth to moderate to a steady and more sustainable rate of 6.0%.

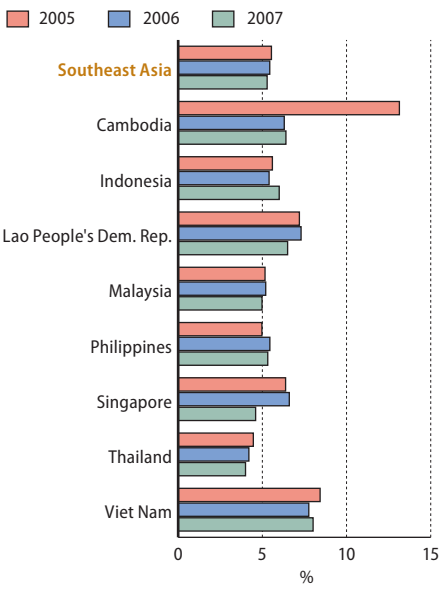
Southeast Asia

Trends in 2006 and 2007

Economic growth for the subregion is projected at a fairly robust 5.4% for 2006 (Figure 1.4.10). The expansion is helped by strong exports, while domestic demand, especially for fixed investment, is soft in several economies, reflecting a need to improve their investment environments. This projected rate of growth is marginally lower than forecast in *ADO 2006* (5.5%) and also a little below actual growth in 2005 (5.5%). Growth forecasts for this year are revised up for two economies—Philippines and Singapore—and adjusted down for two—Malaysia and Thailand.

Next year, Southeast Asia now is seen likely to record aggregate growth of 5.3%, downgraded by nearly a half percentage point from *ADO 2006*, which would put 2007 growth close to this year's pace. The downward revision is caused by the deterioration in the near-term outlook for Malaysia and Thailand, which continues into next year. Though significant economic growth is expected in most economies, in some—particularly Indonesia and the Philippines—it will be insufficient to make significant inroads into unemployment and underemployment.

1.4.10 GDP growth, Southeast Asia



Sources: Asian Development Outlook database; staff estimates.

Growth in 2006

Growth in 2006 has been supported by strong exports, reflecting growth in key markets and higher commodity prices. The upturn in the global electronics cycle has benefited exports from Malaysia, Philippines, Singapore, and Thailand. High oil and natural gas prices have contributed to export growth in the subregion's net energy exporters—Indonesia, Malaysia, Myanmar, and Viet Nam. (These economies have not fully aligned their domestic fuel prices with global levels, though.)

Buoyant prices of nonfuel commodities—natural rubber and minerals for example—have helped countries such as Indonesia, Lao People's Democratic Republic (Lao PDR), and Malaysia. In many countries, receipts from tourism and remittances from workers abroad have abetted consumption and growth this year, while better agricultural performance in the Philippines and Thailand, as the effects of the previous year's

drought receded, buoyed economic growth there. However, agriculture has been subdued in Viet Nam as avian flu and adverse weather in some regions hurt production.

Apart from these common themes, several country-specific factors have impinged on the growth performance. In Indonesia, consumption and investment have been sluggish, reflecting continued adjustment to sharp hikes in fuel prices implemented in October 2005 to contain the cost of subsidies. As the effects of these increases fade, and supported by a rise in development spending, funded by reallocating some of the budget resources used for fuel subsidies, economic growth is expected to pick up in the second half to average 5.4% for this year, which matches the forecast in April.

In Malaysia and Singapore—the most export-dependent economies in the subregion—strong external demand has contributed to growth. Fixed investment has strengthened, but consumption growth has slowed, particularly in Malaysia, reflecting higher than expected inflation and rising interest rates. With external demand expected to soften in the second half of 2006, Malaysian GDP growth of 5.2% is projected for the whole year, slightly lower than the 5.5% forecast made in *ADO 2006*. In Singapore, the growth projection is revised up to 6.6% from 6.1%, reflecting stronger than expected growth in the first half.

Remittances to the Philippines from its overseas workers, equivalent to 11–12% of GDP, continue to provide impetus to consumption and to modest rises in overall growth. With an improvement in fiscal performance over the past few years, government spending also contributed modestly to growth. Fixed investment remains weak, however. For the year as a whole, the economy is projected to grow at 5.4%, up from the earlier 5.0% forecast.

Political uncertainty in Thailand since the annulment of April's elections has weighed on consumer sentiment and led both business and the Government to postpone investment. As a result, the growth projection for 2006 has been cut by a half percentage point to 4.2%.

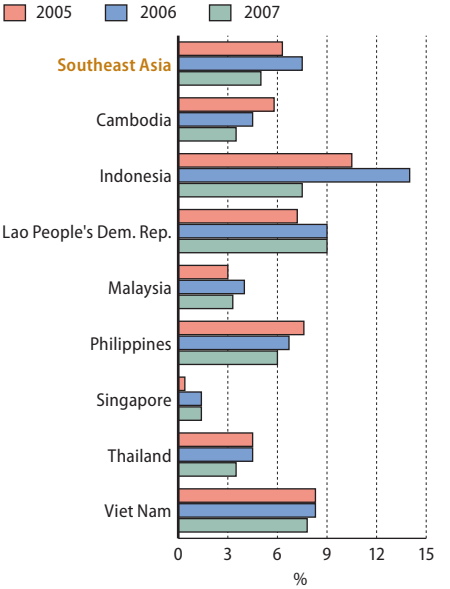
In the subregion's fastest-growing economy, Viet Nam, industry and services continue to perform well, reflecting broader and deeper private sector participation. Vigorous growth of 7.8% is still expected for this year, aided by higher international prices of oil and other commodities, buoyant remittances, and strong tourist numbers. There are signs that the fight against corruption is being stepped up.

Among the smaller economies, growth projections are unchanged. Cambodia's growth is expected to moderate to 6.3% this year from a revised rate of 13.1% in 2005, which was buoyed by a rebound of agriculture as the effects of an earlier drought faded. In the Lao PDR, several large projects in the hydropower and mining sectors are providing an impetus to growth. Economic growth in Myanmar is likely to be supported by high world prices of oil and natural gas, though data are hard to come by.

Inflation in 2006

Inflation for the subregion as a whole is projected to rise to 7.5% in 2006 (Figure 1.4.11), slightly higher than the 7.3% forecast in *ADO 2006*, and up by more than a percentage point from 2005. Consumer prices have

1.4.11 Inflation, Southeast Asia



Sources: Asian Development Outlook database; staff estimates.

risen faster than expected in Malaysia, Thailand, and Viet Nam, and all three countries have seen an increase in administered prices of various products. In Malaysia, a reduction in fuel subsidies and increases in taxes on liquor and cigarettes have helped push inflation to a projected average of 4.0%, the highest in 8 years.

Domestic prices of fuel in Thailand are now in line with world prices, as fuel subsidies were eliminated in 2005. This year, the Government has allowed a gradual adjustment to administered prices of other essential commodities so as to offset businesses' higher production costs stemming from the fuel price hikes. This has led to higher than expected inflation, which is now projected at 4.5%.

In Viet Nam too, inflationary pressures have been stronger than foreseen, reflecting robust economic growth and soft agricultural production. These are evident in prices of construction materials and food. An increase in the administered price of fuel in August will likely keep inflation at a year-average rate of 8.3%. Indonesia doubled its fuel prices in October 2005, and inflation soared as anticipated, to 16.2% in the first half of this year. With tighter monetary policy implemented over the past year, and an appreciation of the rupiah, inflation is expected to moderate to 8.0% by year-end, giving an annual average rate of 14%, one of the highest in the subregion.

Consumer inflation in the Philippines picked up in February when the value-added tax rate was raised, but has increased more slowly since then, kept down by a larger domestic supply of key staples such as rice and corn (maize) and a stronger peso against the US dollar. Inflation is projected to average 6.7% this year, similar to the April forecast.

Cambodia's inflation rate has also moderated this year from 2005 (to a forecast 4.5%) as food production has increased. Inflation in the Lao PDR is seen increasing to about 9%, with economic growth remaining vigorous. In Myanmar, the price of rice has been moving up since early last year. Combined with an eight-fold increase in fuel prices in October 2005, a 10-fold rise in electricity tariffs in May this year, and increases in public sector salaries in April, inflation likely accelerated further from 14.3% at end-2005.

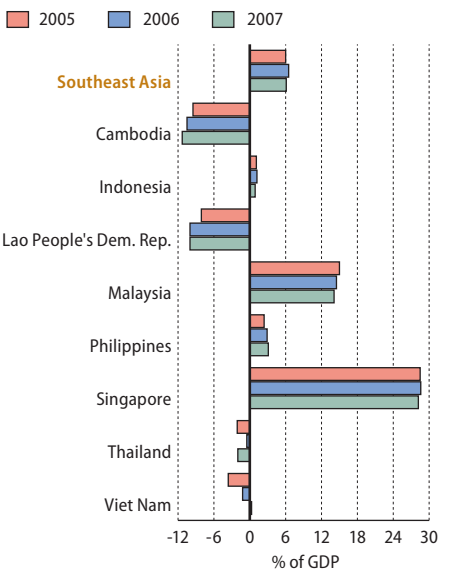
External payments balances in 2006

Stronger than expected export growth across Southeast Asia and continued buoyancy in receipts from tourism and remittances have contributed to an upward revision for this year's projected aggregate current account balance to a surplus of 6.5% of GDP (Figure 1.4.12). This is higher than the 5.6% forecast in *ADO 2006* and the actual surplus of 6.0% in 2005. In some countries, such as Philippines, Thailand, and to a lesser extent, Malaysia, the improvement in the current account also reflects softness in domestic demand.

In the Philippines, electronics exports have rebounded. Weak investment has led to a slower pace of import growth relative to exports, and a smaller trade deficit. With continued buoyancy of remittances, the current account surplus is likely to rise to 2.9% of GDP, higher than forecast in *ADO 2006*.

Thailand's export growth has been strong but import growth slack, also reflecting weak investment. With a solid rise in tourism receipts, the

1.4.12 Current account balance, Southeast Asia



Sources: Asian Development Outlook database; staff estimates.

current account deficit is likely to narrow to 0.5% of GDP, lower than that projected in April, and much less than the 2.1% of GDP recorded in 2005. The strong growth of Indonesia's oil and non-oil exports is expected to contribute to a slightly larger current account surplus of 1.2% of GDP in 2006, compared with 1% projected in April.

In Malaysia, although exports have grown faster than a year earlier, imports are expanding at an even higher rate with the recovery in investment. As a result, the current account is expected to show a smaller (but still-large) surplus this year than in 2005, but it remains higher than forecast in *ADO 2006*. Viet Nam's oil and non-oil exports have also risen at rapid rates, and its imports are rising at a double-digit pace. With inflows of remittances and tourism receipts both strong, the current account deficit is expected to shrink to 1.2% of GDP this year, compared with the projection of 2.7% made in *ADO 2006* and the actual outturn of 3.6% in 2005.

Tourism receipts in Cambodia are likely to help hold the current account deficit to 10.5% of GDP, somewhat better than April's forecast of 11.8%. In the Lao PDR, import requirements are likely to increase because of hydropower and mining projects. However, with exports of minerals, primarily gold and copper, rising fast, the deficit on the current account will likely be limited to 10% of GDP.

Growth in 2007

In 2007, world trade growth is expected to slow, but will remain at about trend, suggesting that exports will remain supportive of Southeast Asian growth. Malaysia's growth is expected to slow to 5.0% in 2007, compared with 5.8% projected in *ADO 2006,* as a softening of growth in the US economy and in domestic consumption have damped the outlook. In Thailand, GDP is now expected to grow at a slower rate of 4.0% in 2007, compared with April's forecast of 5.5%, as the impact of the prolonged political uncertainty on private and public investment is expected to spill over into next year. For other countries, growth forecasts are unchanged from those in *ADO 2006*. In Indonesia, Southeast Asia's biggest economy, growth is seen accelerating to 6.0% as the impact of the hike in fuel prices last year fades, stimulating consumption and investment. The significant decline in public debt in recent years and the reallocation of budget resources enabled by the reduction in fuel subsidies provide room for increasing expenditures on education, health, and infrastructure.

The Philippine economy next year is expected to expand at a similar modest rate as this, bolstered by remittances. The progress in lowering the fiscal deficit allows some room for additional government spending, but, with public sector debt levels and interest payments still high, fiscal consolidation will likely be maintained. In Viet Nam, the transition to private sector-led growth, the reform momentum gained in the process of securing accession to WTO, and the consequent positive impact on investor sentiment, should help the country attain growth of about 8%, the highest in Southeast Asia.

Inflation in 2007

Inflationary pressures in Southeast Asia are still expected to ease in 2007, especially in Indonesia as the effects of last year's surge in fuel prices recede. Assuming normal weather conditions, food price inflation also

will slow, so that Indonesia's year-average inflation rate falls to about 7.5%. The subregional inflation rate forecast for 2007 is maintained at about 5%, after upward revisions for Thailand and Viet Nam, virtually balanced by downward revisions for the Philippines and Singapore.

External payments balances in 2007

With slower export growth, the aggregate current account surplus in Southeast Asia (though revised up from April) is projected to decline from 2006 to 6.1% of GDP next year. The Philippines and Viet Nam are exceptions. The surplus in the Philippines is projected to rise as import requirements for investment remain subdued and remittances are likely to maintain their buoyancy. In Viet Nam, the current account may revert to a small surplus if WTO membership, expected by the end of this year, leads to new markets for exports, and if continued significant inflows of tourism revenues and remittances from workers abroad are seen.

The surplus in Indonesia may shrink slightly next year with the expected recovery in domestic demand. In Malaysia, the recovery in investment, partly reflecting planned public works projects, is projected to trim the current account surplus marginally. In Thailand, in addition to slower export growth, high fuel prices will likely increase the current account deficit.

The Pacific

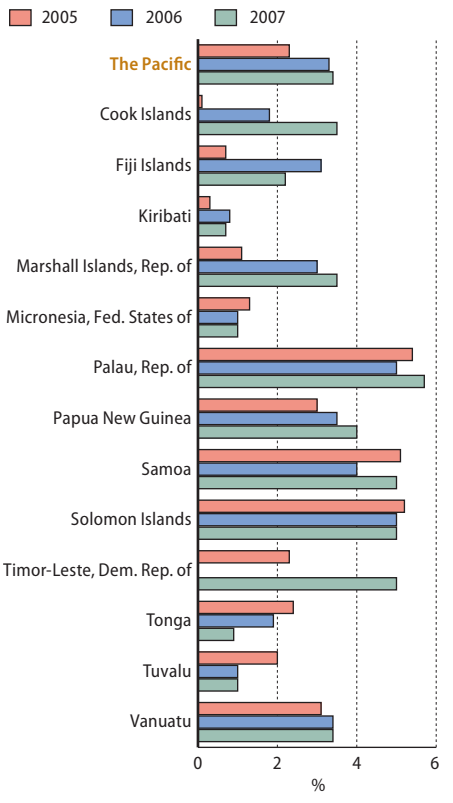
Trends in 2006 and 2007

Subregional growth projections for 2006 and 2007 are revised up from those in *ADO 2006*, primarily because of improved growth prospects for the larger economies, Papua New Guinea and the Fiji Islands (Figure 1.4.13). Aggregate GDP for the Pacific economies is now projected to expand by 3.3% this year and 3.4% in 2007, both raised by 0.4 percentage points from the *ADO 2006* forecast.

Rising global oil prices in 2006 continue to benefit the two oil-exporting economies (Papua New Guinea and Timor-Leste), but have increased inflationary and balance-of-payments pressures in other Pacific countries that depend on imported fuel. Timor-Leste's short-term outlook has been seriously damaged by civil unrest, but it is not yet possible to estimate reliably the extent of the setback to the country's 2006 non-oil GDP.

A major challenge for governments of the Pacific islands, acting individually and collectively through regional initiatives like the Pacific Plan approved in October 2005, is to facilitate faster, private sector-led economic growth that will both provide employment, especially for youth, and generate government revenue for use in public service delivery and investment. Youth unemployment, crime, and drug abuse are increasing throughout the subregion, and young unemployed people have been involved in sometimes violent civil unrest. While implementing the requisite microeconomic policies, governments must maintain macroeconomic stability. Fiscal management should stand firm in the face of increased pressures to spend, and monetary policy effectiveness will be tested by rapid credit growth and consequent balance-of-payments pressures.

1.4.13 GDP growth, The Pacific



Sources: Asian Development Outlook database; staff estimates.

Papua New Guinea

Accounting for about two fifths of Pacific production, the economy is expected to grow by 3.5% in 2006, up from the *ADO 2006* projection of 3.2%. The revision reflects a strong supply response to higher world prices for minerals and some agricultural exports, supplemented by an acceleration in construction activity. In the first quarter of 2006, exports of coffee and of minerals (mainly crude oil, copper, and gold) surged from a year earlier.

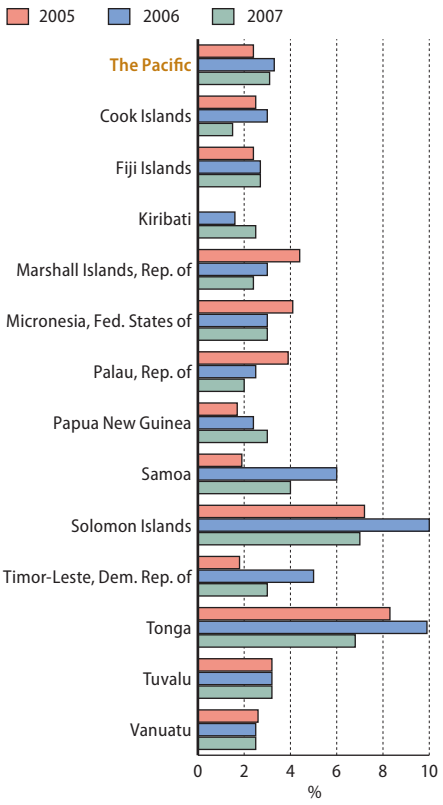
Oil production and export volumes increased because, contrary to earlier projections, higher extraction rates from the Kutubu and Moran oil fields and the start of production at the South East Mananda oil field more than offset declines from the Gobe fields. Palm oil production and exports also rose substantially. Employment in the formal private sector grew by 2.8% during the first quarter.

Inflation is forecast to average 2.4% in 2006 (Figure 1.4.14), steady with *ADO 2006*. A strong first quarter export performance and a drop in imports increased the current account surplus which, combined with a narrowing on the capital and financial account deficit, led to a lower overall balance-of-payments deficit. Gross foreign exchange reserves were $757 million at the end of the first quarter, equal to 5.5 months of total imports. The central bank maintained a neutral monetary policy stance, but remained watchful of the pace of domestic credit growth and the high level of liquidity in the banking system.

A small overall budget surplus is projected for 2006. Revenue collections benefited from high commodity prices through the first half, to such an extent that provision was made in an August mini-budget for additional expenditure on priority areas such as law and order and health.

The growth forecast for 2007 is raised to 4.0% from 3.0% in *ADO 2006*. Mining will benefit from new investment and the exploitation of higher-grade ore bodies, while construction activity is expected to accelerate as residential, commercial, and mineral sector projects commence. Inflation in 2007 is projected to be 3.0%, on the twin assumptions that exchange rate stability will remain underpinned by sound fiscal management, and that this in turn will be maintained after general elections in the second half of 2007.

1.4.14 Inflation, The Pacific



Sources: Asian Development Outlook database; staff estimates.

Timor-Leste

The petroleum fund, established by the Government in September 2005 to conserve oil and gas revenues in an effort to provide perpetual support for the budget, more than doubled its starting balance to over $640 million by 30 June 2006. The offshore Bayu-Undan oil and gas field is fully operational, an agreement for equal sharing of revenue from the Greater Sunrise field was signed by the Australian and Timor-Leste governments in January 2006, and the legislative framework for near-shore oil exploration is now in place.

Non-oil GDP, the preferred measure of the economy, continues to grow slowly, rising by 2.3% in 2005 as a result of expansions in agriculture and the public sector. The *ADO 2006* forecast of 5.0% growth in non-oil GDP in 2006 no longer applies, however, because of the economic consequences of civil unrest that started in April and continued at a low level into the second half of the year. The unrest involved armed clashes

between the army and the police, and widespread violence and property destruction in the capital, Dili. This led to the Government calling in a multinational intervention force that remains in the country, and to the resignation and replacement of the prime minister.

There is at present no reliable basis on which to revise non-oil GDP projections. However, adverse short-term effects are expected on agricultural production (as a result of population displacement), on nonfarm private sector activity (especially in Dili), and on implementation of public investment projects. Inflation is projected to accelerate to 5.0% this year as food and transport prices rise.

Actual budget outlays in FY2006 (ended 30 June 2006) fell short of targeted levels, largely because only a very small percentage of planned capital expenditure was pushed through, although spending was substantially higher than in FY2005. The budget for FY2007 projects an increase of 122% in total planned spending, but this is unlikely to be fully achieved, even with further improvements in budget execution.

Nonetheless, the 2007 non-oil GDP growth forecast is revised up from 4.0% to 5.0% in the expectation that there will be reconstruction of buildings damaged or destroyed in the unrest, some improvement in the implementation of the capital development program, and stronger agricultural production as transport infrastructure improves. Inflation is projected to moderate to 3.0% in 2007. A key assumption is that elections scheduled for 2007 will lead to the peaceful formation of a new government.

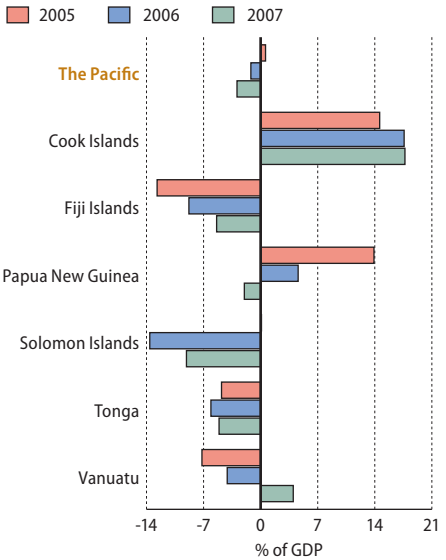
Fiji Islands

The GDP growth forecast for 2006 is revised up from 2.0% in *ADO 2006* to 3.1% on the basis that there will be stronger than expected growth in agriculture and the services subsectors of transport and communications, finance, insurance, real estate, and business services. Manufacturing is projected to register weak growth, with the clothing industry contracting substantially for the second year in succession after the ending of US quotas at end-December 2004 and in the face of stiffer competition from Asian producers in the Australian and New Zealand markets. Tourist arrivals are forecast to rise to 576,000 from 500,000 in 2005, which will stimulate the hotel and restaurants subsector. Inflation is projected to rise over the year as higher oil prices feed through the cost structure, to average 2.7% for 2006.

Merchandise imports are projected to rise much faster than exports this year as strong, credit-fueled domestic demand growth has spilled over into imports. Although tourism receipts and private remittances continued to support the balance of payments (Figure 1.4.15), the level of foreign exchange reserves fell from $484 million at end-December (4.0 months of import cover) to $366 million at end-April 2006 (2.8 months).

In order to restrain domestic credit growth and protect foreign reserves, the Reserve Bank of Fiji tightened monetary policy in the first half of the year. Budget estimates for 2006 projected an overall deficit of 4.7% of GDP, but that could be an underestimate since the budget did not allow for increases in the wage bill that will result from an April 2006 agreement between public sector unions and the Government. The

1.4.15 Current account balance, The Pacific



Sources: Asian Development Outlook database; staff estimates.

Government's intention is to use the pay rise agreement as the foundation on which to contain the public service wage bill (by eliminating automatic cost-of-living adjustments) and lower the budget deficit and public debt levels, thereby reducing crowding-out pressure on the private sector and freeing public resources for capital expenditure.

Economic growth is projected to slow to 2.2% in 2007, down slightly from *ADO 2006*, because construction will decline from record levels in 2006, the clothing industry is expected to contract further, and government spending will be constrained by the need to rein in the budget deficit.

Solomon Islands and Vanuatu

The Melanesian economies of Solomon Islands and Vanuatu are on track to reach the *ADO 2006* growth forecasts of 5.0% and 3.4%, respectively, with agriculture playing a leading role in both cases. In Solomon Islands, 2 days of riots in Honiara that followed the general election in April 2006 involved serious damage to property in the Chinatown area, but a new coalition government was formed quickly and the negative short-run macroeconomic impact is likely to be small. Export growth will be outpaced by import growth in response to strong domestic demand and implementation of externally funded projects. The forecast average annual inflation rate is raised to 10.0%.

Samoa and Tonga

In the larger Polynesian economies of Samoa and Tonga, growth is slowing from 2005, as expected, but not as sharply as projected in *ADO 2006*. The Samoan economy is now forecast to grow by 4.0% in 2006, helped by construction for the 2007 South Pacific Games and by increased tourism and private remittances. Samoa's inflation rate is expected to rise to 6.0% in 2006, in part reflecting rising fuel prices.

Tonga's growth is damped by an 18.5% downsizing of the civil service in June 2006, a response to the awarding of civil service wage rises ranging from 60% to 80%. Higher oil prices and upward pressure on private sector wages flowing from the civil service pay deal are likely to accelerate inflation to 9.9%. An overall budget deficit of 5.7% of GDP is projected, which will place a heavy burden on monetary and exchange rate policy as the instruments for ensuring macroeconomic stability.

Other Pacific economies

Slow growth and rising inflation characterize most of the other Pacific economies. Growth rates of about 1% are likely for Kiribati, Federated States of Micronesia, and Tuvalu in 2006, with inflation in the 2–3% range. Growth in the Marshall Islands will be stimulated by public construction projects, but is revised down to 3.0% from *ADO 2006* because of the impact of higher oil prices, while inflation is projected to reach 3.0%. Nauru has little prospect of growth, since resumption of commercial phosphate mining now appears unlikely. Cook Islands and Palau are benefiting from growth in tourism, though their 2006 growth forecasts are revised down from April.

Suspension of Doha talks and emerging trade issues

Suspension of Doha Development Round negotiations

This section updates the analysis of developments in the international trade arena previously presented in *ADO 2006* in April this year (ADB 2006). (Readers may wish to review that publication for discussion of technical issues and further background detail, which are not repeated here.) This section of Part 1 of the *Update* focuses on the implications of the failure of the Doha Round negotiations to make a breakthrough for the countries of developing Asia. One of the main implications—a continuing avalanche of bilateral trade deals throughout the region and the world—is evaluated in more detail. The performance of Asian developing countries in the post-quota era (i.e., since 31 December 2004) in the world textile and clothing trade is brought up to date from the discussion in *ADO 2006*. This section also includes an examination both of the relative market shares of nonpreferential and preferential suppliers in the large United States (US) market, and of the impact of safeguard restrictions placed on the People's Republic of China (PRC) by both the US and the European Union (EU) (Box 1.5.1).

The suspension of the negotiations in July 2006 has put 5 years of work on the Doha Development Agenda at risk and will almost certainly delay any World Trade Organization (WTO) agreement until after the next US presidential elections in 2008. The announcement by WTO Director-General Pascal Lamy of the suspension scarcely ruffled financial markets around the globe. Indeed, this may reflect the "deflation of the currency" in terms of the much lower level of ambition that was apparent in the aftermath of the Ministerial Conference of December 2005 held in Hong Kong, China and the repeated downgrading of the estimated gains reported by computable general equilibrium simulations (Hertel and Winters 2006, Anderson and Martin 2006). The inability of the developed countries to overcome an impasse over agricultural trade protection and domestic support measures was the proximate cause of the collapse of the talks.

The negotiating positions of the main protagonists—EU, US, and major developing countries, represented by the Group of 20 (G20) developing countries—did not appear to be irreconcilable. Agreement on the "first pillar" of the agriculture negotiations (export subsidies) appeared to be in hand with the EU offer to eliminate all export subsidies by an agreed date, provided that others also accepted the discipline over export support. The "second pillar" of the negotiations (domestic support) was more contentious. The EU and US positions for reductions of agricultural subsidies (called the Aggregate Measure of Support) diverged.

1.5.1 Impact of the memorandum of understanding between the United States and the People's Republic of China on market shares of developing Asian suppliers

In November 2005, the governments of the United States (US) and the People's Republic of China (PRC) signed a Memorandum of Understanding that set out a schedule of quantitative volume limits on 21 categories of clothing and textile products for the period 2006–2008 (as was reported in *ADO 2006*, pp. 50-55). The impacts of the restrictions on shares of shipments in the US market for the restricted products in clothing and textile yarns and fabrics of major developing Asian suppliers are significant (see box figures).

Import statistics in the US indicate that the surge in shipments from the PRC in volume and value following the removal of quotas on 31 December 2004 has been reversed by the new restrictions in the first half of 2006, particularly when compared with the only truly quota-free period of January–June 2005.[1] As expected, a number of competitive Asian suppliers are increasing their shipments in the restricted categories.

Market share gains that the PRC made during 2005 in these product categories are being rolled back significantly but still remain above where they were in 2004 prior to the full implementation of the WTO Agreement on Textiles and Clothing (see *ADO 2006*, pp. 36-38).

Moreover, the impact on prices of the reduced volume of PRC shipments (down by slightly over 40% in the first 6 months of 2006 compared with the quota-free first half of 2005) can be seen in the lesser reduction in the value of shipments (down 35% for clothing and down 27% for textile yarns and fabrics).

Higher prices have hit consumers in the US and have led to a reversal of the increase in imports from the world in value and volume terms. In fact, US imports from all foreign suppliers in PRC restricted items have contracted in 2006 (by 4% in volume and 2% in value).

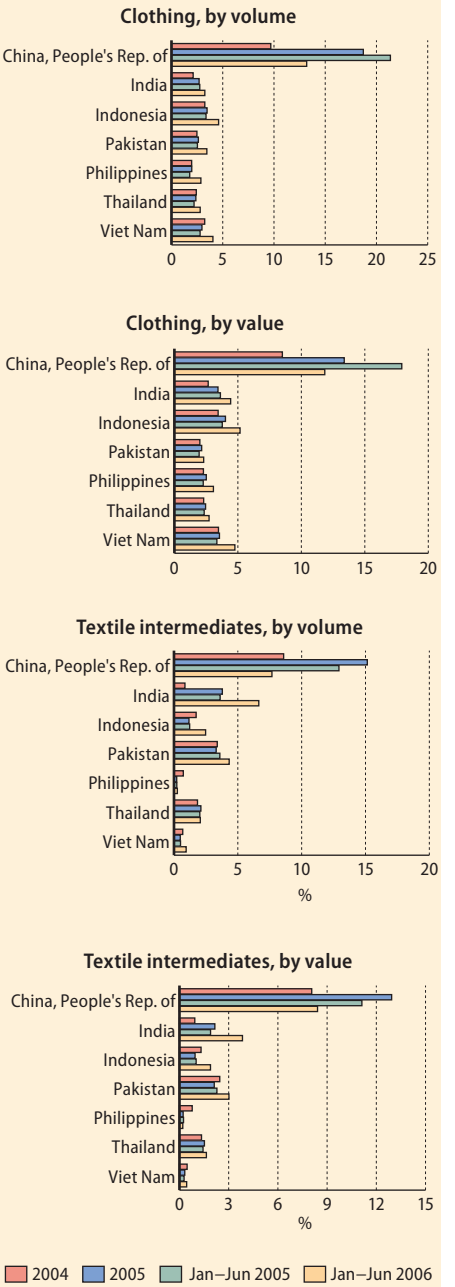
In the cases of shipments of PRC restricted clothing items India, Indonesia, and Viet Nam had volume gains less than value gains in the first half of 2006, indicating that exports have been helped somewhat by the resulting higher unit prices.

In contrast, volume gains have exceeded value gains in PRC restricted clothing items shipped to the US market from Pakistan, Philippines, and Thailand. The US Government has therefore become concerned that these countries may be involved in transshipment of restricted clothing items from the PRC.[2]

The sharp erosion in the market share of the PRC is also indicative of the difficulty the PRC authorities are experiencing in administering the quantitative restrictions. Reports indicate that PRC clothing suppliers are unlikely to fill the quotas in the restricted items in 2006 (*Emerging Textiles.com 2006*, various dates).

The consequences of the imposition of the new restrictions have been to add to trade costs, burden US consumers as well as workers in retail trade (fewer sales), and cause costly trade diversion. Alternative Asian suppliers may benefit for a short time, but will face renewed competition from the PRC after the restrictions are removed at the end of 2008.

Market share to the US of PRC restricted items



Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 30 August 2006.

1 The US unilaterally began to impose restrictions under the safeguards clause of the PRC WTO Accession Agreement in June 2006 following industry complaints made in May 2005, but the restrictions only began to affect shipments in the latter months of 2005.

2 Press reports indicate that the transshipment issue is being discussed with some of these countries by US authorities. The concern is exclusively with clothing products, not with textile products.

Moreover, the difference in Aggregate Measure of Support reductions that each side called for did not seem in themselves to create unbridgeable obstacles. It was over the "third pillar" of market access that the talks broke down. Tariff-cut offers and demands between the US, G20, and EU were not all that far apart. The US position was more ambitious than the EU or G20, but the gap did not seem impossibly large.

However, the lack of flexibility among all negotiators and the weak level of ambition expressed in the inability of the G20 to clarify its own tariff reductions meant that fixed positions among the G6 (Australia, Brazil, EU, India, Japan, and the US) became an immovable object. The offers of all the major parties, particularly of the US and the EU, to the negotiations were strictly conditional upon market access concessions, yet some key players in the developing world, particularly the large emerging economies, refused to budge on these concessions. The divisions over numerical values of tariff reductions and extent to which exceptions would be allowed for "special products" proved to be too much to overcome. The absence of flexibility and the hardened positions taken by all sides led the Director-General to declare a suspension in the talks.

Previous rounds also saw periods of impasse that finally gave way to renewal of efforts to reach a compromise. Hence, there is reason to believe that the talks may be eventually revived, though not in time to finish the complete text and to secure ratification of the agreement ahead of the lapse of the trade promotion authority of the US president in July next year.

Forgone benefits

Opinions on the implications of the suspension vary. Although some observers have concluded that the collapse of the talks is "good news for the world's poor" (ITC, July 2006, p. 8), the evidence points in the opposite direction.

The potential gains and losses from freeing up world trade in agricultural products for the poor were widely debated, but there is no question that the developing and least-developed countries (LDCs) will come out worse off than if the Doha Round had reached a successful conclusion. The World Bank estimates that about two thirds of the gains from a successful round for low-income developing countries would result from global liberalization of agricultural trade, with another one fourth coming from freeing up trade in textiles and clothing, with most of these gains stemming from tariff cuts in the developing countries themselves.

Leaving aside agriculture for the time being, developing countries had much to gain from non-agricultural market access (NAMA) negotiations had the round moved forward. NAMA covers all products other than agriculture including fish, forestry products, mining, fuels, and manufactures. The NAMA mandate is "to reduce, or as appropriate, eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as nontariff barriers, in particular on products of export interest to developing countries" (INSAT, December 2005, p. 5).

The approach adopted at the December 2005 Hong Kong Ministerial Meeting was very promising in enhancing market access for developing Asia's economies. The formula approach agreed at that meeting has

the virtue of sharply reducing peak and maximum tariffs in developed countries (as well as developing countries) and in reducing the dispersion of tariffs around the mean tariff rate. Indeed, the so-called "Swiss Formula" has great advantages over the "linear reduction approach," where all tariffs are cut by the same percentage. The extent to which the Swiss Formula reduces maximum tariffs depends upon the coefficient selected, but any coefficient in the range discussed for developed countries (5 to 10 with larger coefficients implying smaller overall reductions) and for developing countries (15 to 30) would have great benefits for developing Asia. This is because peak tariffs in developed countries are on products of export interest in developing Asia—footwear, textile intermediate and made-up products, clothing, and automotive components. The reductions would also have reduced tariff escalation that is facing processed agro-industrial products from developing Asia including fish, shrimp, wood, rubber, palm oil, and many others.

The Doha Round also promised to deliver at least some level of liberalization in services, although the offer-request approach (by which interested countries exchange concessions in market access and national treatment for one or more of the modes of supply of services) confined itself to a fairly low level of ambition. Many of the offers put on the table did not generate many new business opportunities, nor did they even reflect existing levels of liberalization. Still, a breakthrough in agriculture could have stimulated an improvement in offers of services liberalization.

For the LDCs in the region, the Doha Development Agenda held out the promise of providing them with duty- and quota-free access for 97% of tariff lines in developed-country markets. Unfortunately, agreement on whether this access was to be legally binding could not be reached. This creates uncertainty and lessens the likelihood of new investment flows into the region. The TRIPS (Trade-Related aspects of Intellectual Property Rights) component of the agreement was also promising in providing flexibility to developing countries by allowing them to override patent protection for life-saving pharmaceutical products needed to combat threats to public health.

The Doha Development Agenda also included provision for special and differential treatment for LDCs, requiring them to undertake only those concessions consistent with their individual development needs and capacities. The agenda was to emphasize trade facilitation and to enhance technical assistance and capacity building extended to developing countries under an "aid for trade" initiative. Although there is no reason why donors will not continue to provide technical assistance in the agenda's absence, there may well be less enthusiasm on the part of governments to commit resources to support the multilateral trade system with the suspension of talks.

Another major area of promise in the Doha Development Agenda was inclusion of a new rule-making component that could have improved transparency and discipline in a number of areas of vital interest to developing Asia's economies. In particular, improvement in reporting and monitoring of preferential trade agreements (PTAs) and possible improvements in discipline over use of contingent forms of protection—particularly antidumping duties and "safeguard" measures—would have been very beneficial.

Perhaps the most serious legacy of this failure of multilateralism is a renewed global push toward bilateralism, which will fragment the world trading system into a series of closed "hub-and-spoke" free trade agreements (FTAs). These agreements are actually discriminatory trade agreements that lower tariffs on selected goods and services only for member states. Barriers against nonmembers remain in place. Peak most-favored-nation (MFN) tariffs have not been touched and hence margins of discrimination of as high as 20–30% are maintained against exports of labor-intensive manufactured goods in the major industrial markets of the US and EU. Moreover, complex and restrictive rules of origin may divert trade and investment and complicate international commerce for businesses everywhere.

The net gains from a successful Doha Round were expected to be modest for developing Asia's economies (perhaps $20 billion–40 billion a year in increased welfare),[1] but the losses from an out-of-control system could be even larger and will be borne disproportionately by the poorest countries in the region and the world.

Renewed momentum for preferential trade agreements

Issues with preferential trade agreements

Trade ministers minced no words following the cessation of the Doha Round negotiations: from now on, they will focus on bilateral trade agreements to fill the vacuum left by WTO. This is worrying. Undisciplined expansion of bilateral trade agreements poses danger to the efficient development of international trade and to the multilateral trading system. Creation of hub-and-spoke systems or trading blocs consisting of bilateral FTAs that vary in degree of tariff reduction as well as in coverage of trade in goods and services, that have inconsistent rules of origin, and that are implemented over different time periods can complicate rather than facilitate commercial activity across borders. Small and isolated low-income countries are likely to be marginalized within hub-and-spoke systems or may be excluded altogether, thus facing new layers of tariff discrimination.[2]

Asian Development Outlook 2006 (*ADO 2006*) showed that Asian hub-and-spoke systems are distinctly inferior to global free trade and to an Asia-wide FTA (ADB 2006, pp. 288-9). A People's Republic of China (PRC) hub was shown to generate only half the benefits to developing Asian countries of a regionwide FTA. An Association of Southeast Asian Nations (ASEAN) hub implicitly removes more trade distortions than a single-country hub and generates about 70% of the benefits of a regionwide FTA. If this is indeed the case, then what can be done to minimize the downside potential of bilateralism and to steer the region toward a more general and unified approach to preferential trade?

The way forward is to preempt the development of competing hub-and-spoke systems by routing PTAs through ASEAN. ASEAN is engaged in ongoing negotiations with the biggest East Asian and South Asian economies: Japan, Republic of Korea (henceforth Korea), PRC, and India.

It is also considering ties with Australia and New Zealand. ASEAN has the advantage of having 10 members, thus automatically connecting the spokes rather than isolating them. Instead of being a closed regional trading bloc, ASEAN tends to trade more intensively with nonmembers and, in effect, has extended much of its liberalization on an MFN basis (IMF 2006). Moreover, ASEAN itself has plans to establish an ASEAN Economic Community (AEC) in the next decade.[3]

ASEAN initially planned a gradual evolution toward AEC but following its summit in 2006, it announced plans to push forward AEC from 2020 to 2015 with the ambitious goal of creating a "single market."[4] However, the older and newer member countries still have differences over the modalities for achieving AEC and over issues such as the ASEAN Charter (including whether it should simply codify existing agreements or should be more ambitious in providing a legal framework for the future), and these differences need to be resolved.

In addition, individual ASEAN member states are increasingly engaged in bilateral negotiations that are not entirely consistent with formation of AEC. For example, Singapore and Thailand are among the most prolific countries on the planet in engaging in bilateral agreements. Malaysia is also becoming active and has agreed to bilateral deals with India, Japan, and Pakistan. These individual bilateral FTAs will complicate the task of creating an integrated regionwide FTA as coverage, depth of reductions of barriers, and rules of origin differ from agreement to agreement.

A perusal of the different paths to notification of these agreements (see ADB 2006, p. 277) shows that there is a disconnection between the newer bilateral FTAs and existing regional arrangements. The older arrangements, including the ASEAN Free Trade Area and the South Asia Free Trade Area as well as the Asia-Pacific Trade Agreement (formerly the Bangkok Agreement), are notified under the "Enabling Clause" (by which the General Agreement on Tariffs and Trade [GATT] permitted developing countries to make preferential trade agreements that do not meet the more rigorous requirements of GATT Article XXIV).

In contrast, the new bilateral FTAs are notified mainly under GATT Article XXIV and GATS Article V, implying that the bilateral deals are more comprehensive in coverage (substantially all trade in goods and services) and are more rigorous in terms of rules, dispute settlement, and other provisions. In addition, many bilateral deals are emerging without notification—suggesting agreements that are inconsistent with GATT/WTO requirements and that therefore may raise barriers to nonmembers and reduce the inclination of members to reduce MFN tariffs both now and in the future.[5]

A review of product-specific rules of origin in newly emerging Asia-Pacific PTAs revealed that there was no consistency across hubs or even across bilateral agreements within hub-and-spoke systems (James 2006). For example, regional content requirements differ in percentage terms across agreements as well as across individual sectors. Moreover, agreements impose various types of mixed tests that sometimes require minimum regional content, a change in tariff classification, or specific manufacturing operations to be carried out for some but not other products. Private businesses wishing to take advantage of preferential

treatment would have to invest in separate production facilities for each separate bilateral agreement—not a likely prospect!

The proliferation of bilateral FTAs in other parts of the world involving the largest import markets for the products of developing Asia is also cause for concern as these agreements in the main involve more advanced countries and typically discriminate against lower-income countries in Asia. This is illustrated in the case of bilateral FTAs that the US has signed (Table 1.5.1). Import duties actually collected on shipments are divided by the customs value of all shipments to derive the effective

1.5.1 Effective rate of import duty (% of customs value of shipments to the US)

		2004	2005	Jan–Jun 2005	Jan–Jun 2006
Non-FTA Asian suppliers					
Bangladesh		14.3	14.7	15.0	15.1
Cambodia		15.2	15.9	15.5	16.4
Indonesia		5.5	5.5	5.5	5.8
Lao People's Democratic Republic		33.1	12.2	7.4	17.1
Mongolia		15.0	17.2	16.8	16.8
Nepal		11.3	8.8	9.9	8.9
Pakistan		10.3	10.1	10.1	9.8
Philippines		4.1	4.0	3.7	4.0
Sri Lanka		13.4	13.3	13.1	12.8
Viet Nam		10.0	9.0	9.1	9.0
FTA suppliers	**FTA in force**				
Australia	2005	1.6	0.8	0.7	0.4
Canada	1989	0.0	0.0	0.0	0.0
Chile	2005	1.0	0.6	0.6	0.2
Israel	1985	0.1	0.0	0.0	0.0
Jordan	2004	0.4	0.2	0.2	0.3
Mexico	1993	0.1	0.1	0.1	0.1
Singapore	2004	0.5	0.4	0.4	0.4

FTA = free trade agreement.

Note: Effective duty rate is actual duties paid as a percentage of the customs value of shipments.

Source: United States International Trade Commission.

rate of duty since some of the newer US bilateral agreements have entered into force. Typically, Asian nonmembers are at a significant disadvantage vis-à-vis FTA beneficiaries, mainly high-income or advanced developing nations. This problem would have been remedied to a large extent by a successful NAMA component of the Doha Round, but it now appears that the new tack in the direction of bilateral agreements will lead to further marginalization of some of the poorest countries in the region.

Tariff discrimination is most pronounced in selected labor-intensive manufactured products—particularly clothing, footwear, and textiles. For example, in 2005 calculations show that the difference in effective duty rates on Asian non-PTA suppliers and PTA suppliers in the US market was 12% for clothing, 10% for footwear, and 10% for textile yarns and fabrics (Table 1.5.2).[6] For individual suppliers, differences in applied tariff rates were even greater (for example over 15% in the case of clothing shipments from Indonesia and Mongolia compared with those from preferential suppliers).

In newly emerging bilateral FTAs involving Asian and non-Asian

1.5.2 Tariff discrimination in labor-intensive manufactured products in the US market, 2005

	Effective duty rate (%)
Clothing articles	
Nonpreferential suppliers	14.3
Preferential suppliers	2.5
Footwear products	
Nonpreferential suppliers	10.2
Preferential suppliers	0.3
Textile intermediate products	
Nonpreferential suppliers	10.1
Preferential suppliers	0.2

Note: Effective duty rate is actual duties paid as a percentage of the customs value of shipments.

Source: James (2006).

partners, there is the risk that tariff discrimination and restrictive rules of origin will disrupt efficient production networks and divert trade as Asian countries discriminate against other Asian countries vis-à-vis non-Asian partners. As an example of this, Japan has entered into an economic partnership agreement with Mexico, and the agreement extends duty-free treatment to textiles and clothing on a reciprocal basis, meaning that Mexican textile products (including clothing) may enter Japan duty free, provided that these products comply with the rules-of-origin requirements. Textiles and clothing from many developing Asian suppliers (other than Malaysia and Singapore, which also have economic partnership agreements with Japan) must pay the MFN tariff, which averages 8%.

Korea has entered into FTAs with Chile and Singapore. In the case of Chile, textile products and clothing may enter duty free but tariffs will remain on Singaporean shipments of textile fabrics and yarns and for clothing over a 5- to 10-year period, during which tariffs will only gradually be lifted. Similarly, in negotiations with ASEAN, India is seeking to exclude "sensitive" products such as textiles from the agreement. Such exceptions do not bode well for the creation of efficient trade in the region. To its credit, ASEAN has resisted efforts to limit coverage of goods and services in its "ASEAN Plus" negotiations and has pushed large partners to negotiate single deals rather than bilateral deals with individual ASEAN members with vague promises to piece together a patchwork of bilateral deals with varying coverage and inconsistent rules of origin.

Wider paths to regional trade gains

The creation of a seamless ASEAN single market or customs union would reinforce regionwide integration and would avoid the isolation of spokes. In order to ensure continued openness to the world, ASEAN could undertake to avoid complex and contradictory rules of origin in its agreements with the larger East Asian and South Asian partners. It could also mimic the Pan-European Cumulation System that allows inputs from all participating partners to count in regional content requirements of preferential tariffs. Development of a cumulation system within the region, based upon the ASEAN Plus agreements, would facilitate development of efficient production networks rather than disrupting them. This will be particularly important in ensuring that industries within the region remain globally competitive.

Another innovation that would help integrate spokes into the regional and global markets would be the introduction of flexibility into rules of origin. In particular, regional content requirements might be adjusted to accommodate lower-income, smaller, LDCs. Canada's reform of Generalized System of Preferences (GSP) rules of origin in 2000 provides a potential model in this respect (UNCTAD 2001). The general GSP rule of origin is to allow a maximum of 40% non-originating content, but for designated LDCs the maximum is raised to 60%. However, the liberalized GSP rule of origin did not provide for as much market access as hoped for due to the exclusion of textile yarn and fabric and of clothing. Beginning in 2003, however, Canada dropped this exclusion (UNCTAD 2005) by granting duty-free access to textile and clothing articles. This

provision greatly assisted low-income countries such as Bangladesh and Cambodia to take advantage of Canada's GSP scheme. The scheme allows cumulation across all Canadian GSP beneficiary countries (and Canada itself) to meet the flexible regional content rule of origin.

ADO 2006 emphasized the importance to Asia of having unfettered access to the major developed-country markets in Europe and North America and in the role that the Doha Development Agenda promised in this respect. With Doha in a state of suspension, however, Asian countries are now rushing into defensive bilateral agreements that frequently extend beyond the region and involve a complex web of discriminatory preferences that may do more to complicate commerce than to encourage it. Asia should not settle for a third-best alternative to multilateral trade liberalization that effectively amounts to discriminatory treatment favoring nonregional trading partners. A better solution would be to seek broad regional cooperation extending as far across the Asian region as possible, and at the same time to continue implementing unilateral reforms that are extended on an MFN basis.

The major gains from trade are likely to be enjoyed by those countries that open-up voluntarily and that minimize costly rules and discrimination amongst partners. As was shown in *ADO 2006*, reduction of behind-the-border obstacles to trade promises to deliver far larger gains than mere tariff reductions at the border. Trade costs remain extremely high in much of the region and can only be reduced by measures that are inherently nondiscriminatory and that boost efficiency. In the coming decade, it is likely that Asia itself will become an engine of growth to rival the major industrial powers in Europe and North America, and Asian demand will contribute even more significantly to intra-Asian trade. Growth in the emerging Asian markets is much higher than in Europe or the US, and the implications of this growth for Asia's trade should be recognized.

The outlook for global trade liberalization is distinctly cloudy, and the air is unlikely to clear until electoral processes have had an impact on the polities of the major players. New leadership in Japan, US, and Europe could make a difference. However, no one knows when—or even if—this leadership will emerge with any commitment to restarting the Doha Development Agenda round of negotiations. In the meantime, a pause in multilateral liberalization does not preclude countries from pursuing their own unilateral reforms.

Textile and clothing trade: Performance of Asian suppliers

The trends noted in world trade in textiles and clothing in *ADO 2006* have continued and deepened over the first half of the year. The prediction made in April 2006 (ADB 2006, p. 36) was:

"Going forward, it is likely that the PRC will lose some of the rapid gains it made in market share in 2005 and preferential non-Asian suppliers will continue to see contraction while other Asian suppliers increase their market shares."

In the US market for clothing this has proven to be the outcome.

Performance in the US market

Clothing. One of the most significant changes in the US has been the reversal of growth of shipments of clothing from the PRC in volume and value terms under the safeguard memorandum of understanding that the PRC signed with the US in November 2005. (Figures 1.5.1. and 1.5.2 show US market share for the top six developing Asian suppliers over various periods.) During the first 6 months of 2006, the volume of shipments from the PRC fell by almost 15% and the value by almost 11% (implying a slight rise in unit values). The impact on imports of textile intermediate products of the safeguards has been far less pronounced than upon clothing: although growth in volume and value of yarn and fabric imports from the PRC slowed in 2006, both remained positive.

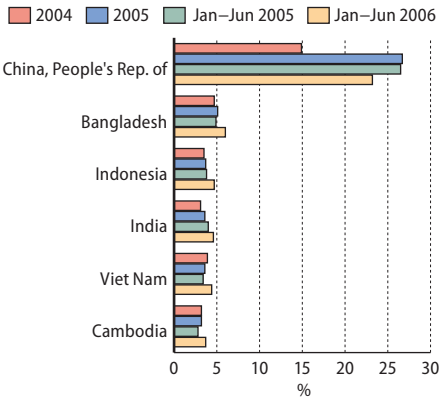
The effect of the memorandum on trade overall has been negative, with volume and value of imports from the world both declining in 2006 compared with the first half of 2005 (before the restrictions were imposed). As volume declines have exceeded value declines, there has been a slight upturn in unit values overall. Despite the overall trade-chilling effect of the safeguards on US imports to textiles and clothing from the world, competitive Asian suppliers other than the PRC have by and large had banner performances.

Indeed, the first 6 months of 2006 have evidenced a remarkable performance by major Asian competitive suppliers (other than the PRC) in the US market for clothing, despite the fact that imports have actually contracted in terms of total import volume (2.4%—Table 1.5.3) and value (0.5%—Table 1.5.4) from all foreign suppliers.[7] The second through tenth largest Asian suppliers by volume all experienced double-digit growth in volume and the second through eighth did so in value terms as well in the US market. In contrast, the PRC had double-digit declines in volume and value over the same period.

Of the major Asian suppliers, the three economies of Viet Nam, Philippines, and Hong Kong, China had the largest positive turnaround in performances relative to 2005, while Bangladesh, Indonesia, Cambodia, and Pakistan continued to build on solid growth relative to 2005. India experienced a slowdown in 2006 compared with 2005 while Thailand had strong volume growth but low value growth. Among all competitive Asian suppliers, Sri Lanka had the weakest performance aside from PRC in the first half of the year, with negative volume growth and low single-digit value growth. This growth, in part, stemmed from a rise in unit values, again reflecting the suppression of supply from the largest producer on the globe—the PRC.

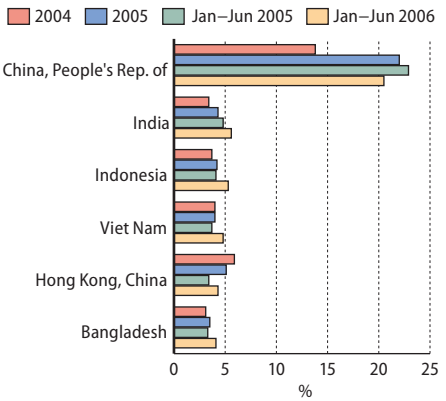
Small and marginal suppliers like Fiji Islands, Mongolia, and Nepal continued to experience a winding-up of production of clothing for export as did the two former large quota-holders of Korea and Taipei,China. Preferential suppliers performed poorly almost across the board, with only Egypt, Jordan, Morocco, and some small Caribbean Island suppliers having positive growth in volume and value. Large preferential suppliers in Central America and North America (particularly Mexico) had double-digit falls over the first 6 months of 2006 compared with the same period in 2005 in both volume and value in the US market. Among the poorest performers, however, were sub-Saharan African countries as they experienced a sharp deterioration in

1.5.1 US market share of top six Asian suppliers (clothing, by volume)



Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.2 US market share of top six Asian suppliers (clothing, by value)



Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.3 United States imports of clothing, by volume

	Volume, million square meter equivalent						Market share (%)			
	2004	2005	Change (%)	Jan–Jun 2005	Jan–Jun 2006	Change (%)	2004	2005	Jan–Jun 2005	Jan–Jun 2006
Nonpreferential developing Asian suppliers	10,974.7	13,878.2	26.5	6,366.9	6,585.3	3.4	55.0	63.1	60.9	64.5
People's Republic of China	2,972.5	5,883.4	97.9	2,769.4	2,364.0	-14.6	14.9	26.7	26.5	23.2
Bangladesh	941.7	1,124.8	19.4	512.9	613.5	19.6	4.7	5.1	4.9	6.0
Indonesia	703.4	823.5	17.1	397.6	476.8	19.9	3.5	3.7	3.8	4.7
India	609.3	790.2	29.7	413.8	470.5	13.7	3.1	3.6	4.0	4.6
Viet Nam	777.1	801.4	3.1	354.7	451.9	27.4	3.9	3.6	3.4	4.4
Cambodia	634.7	710.0	11.9	289.3	379.6	31.2	3.2	3.2	2.8	3.7
Pakistan	519.3	577.8	11.3	265.2	302.9	14.2	2.6	2.6	2.5	3.0
Philippines	513.6	518.7	1.0	231.4	296.0	27.9	2.6	2.4	2.2	2.9
Thailand	533.1	536.8	0.7	249.4	277.6	11.3	2.7	2.4	2.4	2.7
Hong Kong, China	739.0	596.6	-19.3	198.8	247.8	24.7	3.7	2.7	2.4	2.7
Sri Lanka	415.0	453.8	9.3	225.5	219.8	-2.5	2.1	2.1	2.2	2.2
Taipei,China	572.0	391.5	-31.6	164.0	172.4	5.1	2.9	1.8	1.6	1.7
Republic of Korea	624.4	359.4	-42.4	150.4	158.7	5.5	3.1	1.6	1.4	1.6
Malaysia	210.6	211.3	0.4	93.4	114.3	22.3	1.1	1.0	0.9	1.1
Mongolia	61.5	39.6	-35.5	17.1	14.2	-16.7	0.3	0.2	0.2	0.1
Nepal	34.8	19.2	-44.9	11.7	9.6	-17.7	0.2	0.1	0.1	0.1
Turkmenistan	21.8	20.4	-6.5	10.3	8.0	-22.6	0.1	0.1	0.1	0.1
Uzbekistan	6.2	7.8	26.3	3.7	3.6	-4.4	0.0	0.0	0.0	0.0
Kazakhstan	14.7	1.2	-91.6	0.4	2.6	567.3	0.1	0.0	0.0	0.0
Kyrgyz Republic	4.8	3.2	-33.9	2.0	0.8	-59.7	0.0	0.0	0.0	0.0
Armenia	3.4	1.1	-68.5	0.1	0.5	314.8	0.0	0.0	0.0	0.0
Fiji Islands	21.3	4.2	-80.5	3.4	0.3	-90.2	0.1	0.0	0.0	0.0
Maldives	37.9	2.4	-93.7	2.4	0.0	-	0.2	0.0	0.0	0.0
Tajikistan	2.8	0.0	-99.7	0.0	0.0	-	0.0	0.0	0.0	0.0
Other nonpreferential suppliers	933.8	655.7	-29.8	288.4	292.8	1.5	4.7	3.0	2.8	2.9
Turkey	307.4	239.3	-22.1	123.7	93.7	-24.3	1.5	1.1	1.2	0.9
European Union (15 countries)	137.8	116.8	-15.3	54.5	44.1	-19.0	0.7	0.5	0.5	0.4
Macao, China	448.1	291.8	-34.9	106.1	152.8	44.0	1.0	1.5	1.0	1.5
Japan	40.5	7.7	-81.0	4.1	2.2	-45.2	0.2	0.0	0.0	0.0
Preferential suppliers	7,434.8	7,236.6	-2.7	3,599.4	3,172.9	-11.9	37.3	32.9	34.4	31.1
CAFTA-DR	3,790.8	3,912.9	3.2	1,926.5	1,634.0	-15.2	19.0	17.8	18.4	16.0
Mexico	1,896.2	1,703.4	-10.2	876.1	755.5	-13.8	9.5	7.7	8.4	7.4
AGOA	440.3	376.8	-14.4	191.0	158.3	-17.2	2.2	1.7	1.8	1.6
Jordan	227.4	260.9	14.8	123.7	140.5	13.6	1.1	1.2	1.2	1.4
CBI	228.2	254.7	11.6	120.4	134.2	11.5	1.1	1.2	1.2	1.3
Egypt	156.0	164.7	5.5	73.5	105.1	43.0	0.8	0.7	0.7	1.0
ANDEAN	252.7	238.2	-5.8	122.3	104.8	-14.3	1.3	1.1	1.2	1.0
Canada	244.6	189.6	-22.5	100.9	86.1	-14.6	1.2	0.9	1.0	0.8
Israel	102.8	80.3	-21.9	42.1	34.0	-19.2	0.5	0.4	0.4	0.3
Singapore	46.7	28.7	-38.5	15.3	12.6	-17.9	0.2	0.1	0.1	0.1
Morocco	13.8	6.7	-51.4	3.1	5.3	69.8	0.1	0.0	0.0	0.1
Australia	32.8	17.3	-47.2	3.6	1.5	-59.4	0.2	0.1	0.0	0.0
Chile	2.4	2.4	1.0	0.9	0.9	2.0	0.0	0.0	0.0	0.0
World total	19,951.0	22,009.8	10.3	10,451.9	10,204.8	-2.4	100.0	100.0	100.0	100.0

- = data not available.

AGOA = African Growth and Opportunity Act; CAFTA-DR = Central American Free Trade Agreement-Dominican Republic; CBI = Caribbean Basin Initiative.

Notes: AGOA comprises Benin, Botswana, Cape Verde, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, United Republic of Tanzania, Uganda, and Zambia. ANDEAN comprises Bolivia, Colombia, Ecuador, and Peru. CAFTA-DR comprises Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua. CBI (here excluding CAFTA-DR) comprises Barbados, Belize, Guyana, Haiti, Jamaica, Panama, St. Lucia, and Trinidad and Tobago. European Union 15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Values do not add up to world totals because not all suppliers are included in the table; market shares do not sum to 100 for the same reason.

Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.4 United States imports of clothing, by value

	Value ($ million)						Market share (%)			
	2004	2005	Change (%)	Jan–Jun 2005	Jan–Jun 2006	Change (%)	2004	2005	Jan–Jun 2005	Jan–Jun 2006
Nonpreferential developing Asian suppliers	34,284.1	41,107.8	19.9	18,807.0	19,987.8	6.3	52.9	59.8	58.1	62.1
People's Republic of China	8,927.9	15,142.9	69.6	7,402.9	6,612.8	-10.7	13.8	22.0	22.9	20.5
India	2,217.1	2,976.2	34.2	1,537.6	1,810.5	17.8	3.4	4.3	4.8	5.6
Indonesia	2,402.8	2,875.4	19.7	1,330.4	1,694.6	27.4	3.7	4.2	4.1	5.3
Viet Nam	2,562.5	2,724.7	6.3	1,182.0	1,541.4	30.4	4.0	4.0	3.7	4.8
Hong Kong, China	3,849.0	3,510.6	-8.8	1,115.8	1,386.1	24.2	5.9	5.1	3.4	4.3
Bangladesh	1,977.6	2,371.7	19.9	1,054.0	1,333.8	26.5	3.1	3.5	3.3	4.1
Philippines	1,785.6	1,830.4	2.5	812.6	955.8	17.6	2.8	2.7	2.5	3.0
Cambodia	1,429.0	1,712.8	19.9	731.2	950.0	29.9	2.2	2.5	2.3	2.9
Thailand	1,799.4	1,807.8	0.5	840.4	888.6	5.7	2.8	2.6	2.6	2.8
Sri Lanka	1,549.4	1,650.2	6.5	796.0	817.3	2.7	2.4	2.4	2.5	2.5
Pakistan	1,137.7	1,258.9	10.7	551.7	622.8	12.9	1.8	1.8	1.7	1.9
Taipei,China	1,548.9	1,134.4	-26.8	498.2	477.1	-4.2	2.4	1.7	1.5	1.5
Republic of Korea	1,808.8	1,154.6	-36.2	522.4	468.8	-10.2	2.8	1.7	1.6	1.5
Malaysia	712.0	677.9	-4.8	294.0	310.8	5.7	1.1	1.0	0.9	1.0
Mongolia	227.0	134.5	-40.8	52.2	49.0	-6.1	0.4	0.2	0.2	0.2
Nepal	98.0	61.1	-37.6	37.4	29.7	-20.5	0.2	0.1	0.1	0.1
Turkmenistan	44.6	35.5	-20.4	17.8	17.4	-2.7	0.1	0.1	0.1	0.1
Uzbekistan	9.8	16.0	62.6	7.5	8.5	14.0	0.0	0.0	0.0	0.0
Kazakhstan	13.4	3.4	-75.0	0.4	8.6	1,907.0	0.0	0.0	0.0	0.0
Fiji Islands	85.8	19.1	-77.7	15.6	2.5	-84.3	0.1	0.0	0.0	0.0
Kyrgyz Republic	6.6	3.7	-43.7	2.1	1.5	-25.7	0.0	0.0	0.0	0.0
Armenia	7.2	1.4	-80.9	0.2	0.3	57.1	0.0	0.0	0.0	0.0
Tajikistan	3.1	0.0	-99.4	0.0	0.0	-	0.0	0.0	0.0	0.0
Maldives	81.0	4.7	-94.2	4.7	0.0	-	0.1	0.0	0.0	0.0
Other nonpreferential suppliers	4,962.5	4,154.4	-16.3	1,837.3	1,826.1	-0.6	7.7	6.0	5.7	5.7
European Union (15 countries)	2,067.6	1,925.8	-6.9	882.4	814.2	-7.7	3.2	2.8	2.7	2.5
Turkey	1,168.6	943.8	-19.2	475.5	345.7	-27.3	1.8	1.4	1.5	1.1
Macao, China	1,436.4	1,198.3	-16.6	436.2	636.2	45.9	2.2	1.7	1.3	2.0
Japan	289.9	86.5	-70.2	43.2	30.0	-30.7	0.4	0.1	0.1	0.1
Preferential suppliers	23,486.7	22,005.0	-6.3	10,971.6	9,844.0	-10.3	36.3	32.0	33.9	30.6
CAFTA-DR	9,509.5	9,104.1	-4.3	4,612.0	3,981.1	-13.7	14.7	13.2	14.3	12.4
Mexico	6,684.8	6,078.3	-9.1	3,066.0	2,640.2	-13.9	10.3	8.8	9.5	8.2
ANDEAN	1,323.0	1,429.2	8.0	707.0	650.7	-8.0	2.0	2.1	2.2	2.0
Canada	1,504.4	1,273.4	-15.4	656.0	607.1	-7.5	2.3	1.9	2.0	1.9
AGOA	1,757.5	1,464.5	-16.7	717.3	589.8	-17.8	2.7	2.1	2.2	1.8
Jordan	956.2	1,082.5	13.2	486.3	575.4	18.3	1.5	1.8	1.5	1.8
Egypt	422.3	444.3	5.2	188.5	288.9	53.3	0.7	0.6	0.6	0.9
CBI	442.7	490.9	10.9	242.5	245.2	1.1	0.7	0.7	0.7	0.8
Israel	336.2	288.6	-14.2	150.6	128.1	-15.0	0.5	0.4	0.5	0.4
Singapore	242.5	156.8	-35.3	76.7	67.9	-11.5	0.4	0.2	0.2	0.2
Morocco	74.3	55.9	-24.8	27.2	47.8	75.8	0.1	0.1	0.1	0.1
Australia	209.3	113.1	-45.9	31.0	11.3	-63.5	0.3	0.2	0.1	0.0
Chile	24.0	23.4	-2.5	10.5	10.5	-0.2	0.0	0.0	0.0	0.0
World total	64,767.7	68,713.3	6.1	32,357.2	32,208.6	-0.5	100.0	100.0	100.0	100.0

- = data not available.

AGOA = African Growth and Opportunity Act; CAFTA-DR = Central American Free Trade Agreement-Dominican Republic; CBI = Caribbean Basin Initiative.

Notes: AGOA comprises Benin, Botswana, Cape Verde, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, United Republic of Tanzania, Uganda, and Zambia. ANDEAN comprises Bolivia, Colombia, Ecuador, and Peru. CAFTA-DR comprises Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua. CBI (here excluding CAFTA-DR) comprises Barbados, Belize, Guyana, Haiti, Jamaica, Panama, St. Lucia, and Trinidad and Tobago. European Union 15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Values do not add up to world totals because not all suppliers are included in the table; market shares do not sum to 100 for the same reason.

Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

performance for the second year running (with a 17% drop in volume and an 18% fall in value).

US bilateral trade agreements distinctly favor preferential suppliers over nonpreferential suppliers (Figure 1.5.3) and in FTAs (as was noted above) tariff preferences in clothing are particularly large. However, Asian suppliers' price competitiveness has won them greater market share. Tariff discrimination in FTAs is a concern for small Asian countries that rely heavily on clothing shipments (Figure 1.5.4). By contrast with non-FTA suppliers, only Jordan has a similar reliance on shipments of clothing to the US market as other existing FTA partners either ship negligible amounts (Australia, Chile, Singapore) or have strongly diversified shipments to the US (Canada, Mexico, Israel).

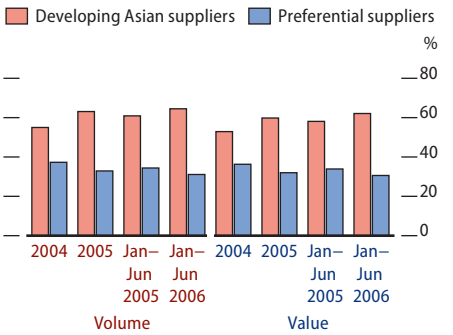
Intermediate products. The situation in the US market for textile intermediate products (yarns and fabrics) has been slightly different from clothing in that volume has not declined in the aggregate even though unit prices have, bringing about a decline in value (Tables 1.5.5 and 1.5.6). Shipments of textiles from the PRC experienced sharply decelerating growth in the first half of 2006, but market share has been maintained (Figures 1.5.5. and 1.5.6)—in sharp contrast to market share in clothing. As noted in *ADO 2006*, the US import market for textile intermediate products is much smaller than for clothing, and there are only a few major suppliers of any significant volume. Of these, Pakistan, India, Indonesia, and Malaysia had quite strong performances in 2006 (first 6 months) with high double-digit growth in volume and value for India and Indonesia and sharp reversals from contraction to growth for Pakistan and Malaysia. Viet Nam also performed well in terms of high growth from a very small base. Large East Asian suppliers (Korea and Taipei,China) increased volumes but had declines in value, reflecting the falling prices in the US market.

Preferential suppliers, chiefly Canada and Mexico (North American Free Trade Agreement members) experienced a contraction in volume and value in 2006 compared with 2005 and saw an erosion of market share as a result (Figure 1.5.7).

Performance in the European Union market

The EU also negotiated a trade restraint pact with the PRC in 2005, but had initial problems in implementing it when shipments continued to exceed agreed limits, as was pointed out in *ADO 2006* (p. 50). Although the EU-PRC restraint agreement covered fewer items than the US-PRC memorandum of understanding, it had a negative impact on the volume of trade with the PRC, with imports from the PRC falling by 2.4% in the first 4 months of 2006 compared with the same period in 2005 (Table 1.5.7). The EU also has initiated antidumping measures against synthetic fiber fabrics from the PRC, leading to a sharp reversal in growth of shipments to a contraction of 1.5% in early 2006 compared with a 25% increase in 2005 (Emerging Textiles 9 August 2006). The combined effect of restrictive measures has been to drive up unit prices in the EU, and this has led to a different result than that in the US market—values of import shipments actually increased by over 12% from the PRC in early 2006 and the value of global imports of textiles and clothing in the EU surged by over 15% in the first 4 months of 2006 compared with the same

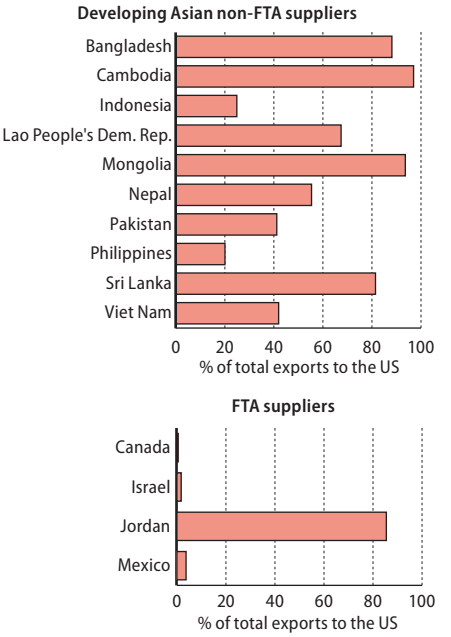
1.5.3 US market share (clothing imports)



Note: Preferential suppliers are listed in Table 1.5.3.

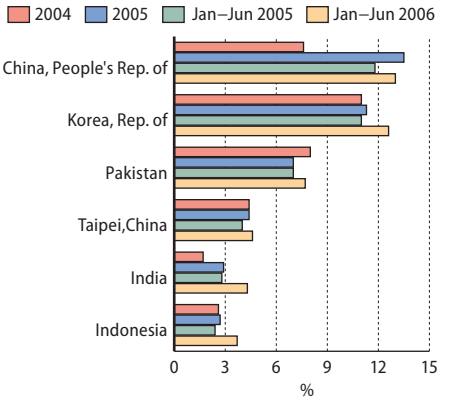
Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.4 Garments exports to the US, 2005



Source: United States International Trade Commission, available: http://dataweb.usitc.gov.

1.5.5 US market share of top six Asian suppliers (intermediate products, by volume)



Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.5 United States imports of textile intermediate products, by volume

	Volume, million square meter equivalent						Market share (%)			
	2004	2005	Change (%)	Jan–Jun 2005	Jan–Jun 2006	Change (%)	2004	2005	Jan–Jun 2005	Jan–Jun 2006
Nonpreferential developing Asian suppliers	5,281.8	6,103.3	15.6	2,896.5	3,321.5	14.7	41.4	46.4	43.9	50.3
People's Republic of China	968.4	1,769.3	82.7	777.8	860.6	10.6	7.6	13.5	11.8	13.0
Republic of Korea	1,403.7	1,485.8	5.9	727.8	834.8	14.7	11.0	11.3	11.0	12.6
Pakistan	1,024.7	917.3	-10.5	460.6	508.7	10.5	8.0	7.0	7.0	7.7
Taipei,China	567.4	574.3	1.2	267.2	305.7	14.4	4.4	4.4	4.0	4.6
India	213.7	383.2	79.3	186.3	281.0	50.8	1.7	2.9	2.8	4.3
Indonesia	334.7	357.2	6.7	155.3	246.0	58.4	2.6	2.7	2.4	3.7
Thailand	325.1	301.6	-7.2	142.1	139.4	-1.9	2.5	2.3	2.2	2.1
Malaysia	144.5	107.6	-25.6	55.6	62.1	11.7	1.1	0.8	0.8	0.9
Viet Nam	48.1	56.1	16.8	21.0	37.4	78.0	0.4	0.4	0.3	0.6
Hong Kong, China	62.6	69.5	10.9	55.9	20.0	-64.2	0.5	0.5	0.8	0.3
Philippines	108.3	42.7	-60.6	22.3	12.2	-45.2	0.8	0.3	0.3	0.2
Sri Lanka	27.7	16.6	-39.9	9.0	7.5	-16.4	0.2	0.1	0.1	0.1
Bangladesh	8.9	3.2	-63.8	1.3	4.0	203.8	0.1	0.0	0.0	0.1
Cambodia	6.3	2.9	-53.2	1.4	0.9	-32.4	0.0	0.0	0.0	0.0
Uzbekistan	30.9	13.0	-57.9	10.6	0.6	-94.0	0.2	0.1	0.2	0.0
Turkmenistan	4.3	2.4	-45.9	1.7	0.5	-70.6	0.0	0.0	0.0	0.0
Nepal	0.0	0.2	750.0	0.1	0.0	-66.7	0.0	0.0	0.0	0.0
Tajikistan	2.3	0.5	-77.8	0.5	0.0	-	0.0	0.0	0.0	0.0
Kazakhstan	0.2	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fiji Islands	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mongolia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other nonpreferential suppliers	2,241.1	2,102.5	-6.2	1,129.2	989.9	-12.3	17.6	16.0	17.1	15.0
European Union (15 countries)	1,649.7	1,553.4	-5.8	845.5	742.0	-12.2	12.9	11.8	12.8	11.2
Japan	286.5	266.6	-7.0	130.9	146.3	11.7	2.2	2.0	2.0	2.2
Turkey	304.9	282.5	-7.4	152.8	101.7	-33.4	2.4	2.1	2.3	1.5
Preferential suppliers	4,690.9	4,411.4	-6.0	2,296.7	1,952.0	-15.0	36.7	33.5	34.8	29.5
Canada	2,747.9	2,590.7	-5.7	1,348.4	1,126.1	-16.5	21.5	19.7	20.4	17.0
Mexico	1,227.8	1,154.9	-5.9	590.7	508.3	-14.0	9.6	8.8	8.9	7.7
Israel	500.3	473.3	-5.4	262.7	224.8	-14.4	3.9	3.6	4.0	3.4
Egypt	74.6	68.5	-8.2	36.7	30.8	-16.1	0.6	0.5	0.6	0.5
CAFTA-DR	67.0	44.9	-33.0	24.2	20.7	-14.8	0.5	0.3	0.4	0.3
ANDEAN	20.3	27.0	32.8	12.9	16.2	26.0	0.2	0.2	0.2	0.2
Australia	28.9	33.5	15.7	13.3	14.9	12.6	0.2	0.3	0.2	0.2
AGOA	17.5	11.0	-37.3	4.9	5.3	7.7	0.1	0.1	0.1	0.1
Chile	2.9	3.2	10.8	1.7	1.9	14.1	0.0	0.0	0.0	0.0
Singapore	1.2	2.1	71.0	0.1	1.7	1,766.7	0.0	0.0	0.0	0.0
CBI	2.0	1.1	-45.8	0.6	1.0	71.4	0.0	0.0	0.0	0.0
Morocco	0.5	1.3	166.0	0.5	0.3	-34.0	0.0	0.0	0.0	0.0
Jordan	0.1	0.0	-98.0	0.0	0.0	4,567.5	0.0	0.0	0.0	0.0
World total	12,764.8	13,151.8	3.0	6,600.5	6,609.2	0.1	100.0	100.0	100.0	100.0

- = data not available.

AGOA = African Growth and Opportunity Act; CAFTA-DR = Central American Free Trade Agreement-Dominican Republic; CBI = Caribbean Basin Initiative.

Notes: AGOA comprises Benin, Botswana, Cape Verde, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, United Republic of Tanzania, Uganda, and Zambia. ANDEAN comprises Bolivia, Colombia, Ecuador, and Peru. CAFTA-DR comprises Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua. CBI (here excluding CAFTA-DR) comprises Barbados, Belize, Guyana, Haiti, Jamaica, Panama, St. Lucia, and Trinidad and Tobago. EU 15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Values do not add up to world totals because not all suppliers are included in the table; market shares do not sum to 100 for the same reason.

Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

period in 2005 (Table 1.5.8). Unit prices of textiles and clothing in the EU jumped by 13% in the first 4 months of 2006 (Table 1.5.9).

The performance of Asian suppliers in the EU market for textiles

1.5.6 United States imports of textile intermediate products, by value

	Value ($ million)						Market share (%)			
	2004	2005	Change (%)	Jan–Jun 2005	Jan–Jun 2006	Change (%)	2004	2005	Jan–Jun 2005	Jan–Jun 2006
Nonpreferential developing Asian suppliers	2,805.2	2,954.4	5.3	1,441.5	1,514.8	5.1	38.5	39.7	38.1	42.0
People's Republic of China	575.7	896.9	55.8	409.1	459.4	12.3	7.9	12.1	10.8	12.7
Republic of Korea	666.4	665.5	-0.1	341.6	332.6	-2.6	9.1	9.0	9.0	9.2
Pakistan	509.2	411.3	-19.2	208.0	227.9	9.6	7.0	5.5	5.5	6.3
Taipei,China	432.4	415.1	-4.0	200.9	175.0	-12.9	5.9	5.6	5.3	4.9
India	150.6	183.6	21.9	88.8	116.0	30.6	2.1	2.5	2.3	3.2
Indonesia	134.0	138.8	3.6	63.6	92.5	45.5	1.8	1.9	1.7	2.6
Thailand	129.1	123.1	-4.6	58.6	58.2	-0.6	1.8	1.7	1.5	1.6
Malaysia	45.3	35.1	-22.6	19.1	22.9	20.3	0.6	0.5	0.5	0.6
Viet Nam	16.9	16.2	-4.0	6.5	10.4	60.6	0.2	0.2	0.2	0.3
Hong Kong, China	50.7	34.4	-32.1	25.0	9.7	-61.3	0.7	0.5	0.7	0.3
Philippines	57.7	17.6	-69.6	9.5	4.8	-49.9	0.8	0.2	0.3	0.1
Sri Lanka	13.0	7.7	-40.9	4.3	3.1	-26.8	0.2	0.1	0.1	0.1
Bangladesh	3.3	1.1	-65.3	0.5	1.1	132.7	0.0	0.0	0.0	0.0
Cambodia	2.5	1.9	-25.0	0.9	0.7	-23.3	0.0	0.0	0.0	0.0
Uzbekistan	13.7	4.2	-69.0	3.7	0.2	-95.7	0.2	0.1	0.1	0.0
Turkmenistan	1.8	1.0	-44.1	0.7	0.2	-72.4	0.0	0.0	0.0	0.0
Nepal	0.1	0.2	110.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Tajikistan	3.0	0.7	-76.5	0.7	0.0	-	0.0	0.0	0.0	0.0
Kazakhstan	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fiji Islands	0.0	0.0	-85.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mongolia	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0
Other nonpreferential suppliers	2,086.6	2,048.4	-1.8	1,085.7	946.4	-12.8	28.6	27.6	28.7	26.2
European Union (15 countries)	1,537.0	1,477.9	-3.8	791.6	696.5	-12.0	21.1	19.9	20.9	19.3
Japan	341.2	333.1	-2.4	173.5	166.8	-3.8	4.7	4.5	4.6	4.6
Turkey	208.4	237.5	13.9	120.6	83.1	-31.1	2.9	3.2	3.2	2.3
Preferential suppliers	2,141.5	2,168.9	1.3	1,123.9	993.5	-11.6	29.4	29.2	29.7	27.5
Canada	1,205.5	1,209.3	0.3	629.0	567.7	-9.7	16.5	16.3	16.6	15.7
Mexico	654.6	674.7	3.1	343.4	291.6	-15.1	9.0	9.1	9.1	8.1
Israel	155.4	153.9	-1.0	89.3	74.2	-16.9	2.1	2.1	2.4	2.1
ANDEAN	32.0	42.6	33.3	18.9	19.8	4.9	0.4	0.6	0.5	0.5
Egypt	30.0	26.3	-12.5	14.5	12.4	-14.4	0.4	0.4	0.4	0.3
Australia	20.6	21.9	6.4	10.4	9.2	4.9	0.3	0.3	0.3	0.3
CAFTA-DR	19.2	15.5	-19.3	7.8	7.2	-8.3	0.3	0.2	0.2	0.2
AGOA	18.7	14.6	-21.8	7.1	6.3	-8.3	0.3	0.2	0.2	0.2
Chile	3.1	5.0	62.2	1.7	3.3	-10.9	0.0	0.1	0.0	0.1
Morocco	0.6	3.5	496.9	1.2	0.7	-41.4	0.0	0.0	0.0	0.0
CBI	1.1	0.8	-30.7	0.5	0.5	-5.6	0.0	0.0	0.0	0.0
Singapore	0.7	0.8	10.3	0.1	0.5	227.7	0.0	0.0	0.0	0.0
Jordan	0.0	0.0	-87.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
World total	7,285.7	7,433.2	2.0	3,783.6	3,607.6	-4.7	100.0	100.0	100.0	100.0

- = data not available.

AGOA = African Growth and Opportunity Act; CAFTA-DR = Central American Free Trade Agreement-Dominican Republic; CBI = Caribbean Basin Initiative.

Notes: AGOA comprises Benin, Botswana, Cape Verde, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, United Republic of Tanzania, Uganda, and Zambia. ANDEAN comprises Bolivia, Colombia, Ecuador, and Peru. CAFTA-DR comprises Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua. CBI (here excluding CAFTA-DR) comprises Barbados, Belize, Guyana, Haiti, Jamaica, Panama, St. Lucia, and Trinidad and Tobago. EU 15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. Values do not add up to world totals because not all suppliers are included in the table; market shares do not sum to 100 for the same reason.

Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

and clothing in 2006 has improved dramatically over the poor showing in 2005. For example, the euro value of shipments from Indonesia had contracted by 10% in 2005 but rose by 37% in 2006 with market share

1.5.7 European Union imports of textiles and clothing, by volume

	Volume change over previous period (%)						Market share (%)					
	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
Developing Asia	55.1	-22.6	13.7	6.0	11.0	3.7	68.0	63.5	65.6	66.0	69.2	69.2
China, People's Rep. of	44.4	3.9	28.4	10.9	34.4	-2.4	16.9	21.2	24.7	26.0	33.0	29.3
India	5.9	-6.2	6.4	2.9	4.5	4.0	8.4	9.5	9.2	9.0	8.9	9.7
Bangladesh	401.2	-78.0	27.0	17.7	-0.9	9.8	19.4	5.1	5.9	6.6	6.2	7.1
Pakistan	8.2	11.7	13.0	6.8	-4.6	6.7	4.2	5.7	5.9	5.9	5.4	5.6
Indonesia	18.7	-6.1	-7.8	-7.9	-6.3	18.5	4.1	4.7	3.9	3.4	3.0	3.4
Malaysia	10.8	10.0	0.1	-0.1	-2.1	15.3	1.9	2.6	2.3	2.2	2.1	2.4
Thailand	9.0	7.0	3.7	-4.7	-3.4	-2.3	2.0	2.6	2.5	2.2	2.0	2.1
Hong Kong, China	40.6	-12.8	-8.9	-17.0	-16.0	66.1	2.4	2.5	2.1	1.6	1.3	1.8
Korea, Rep. of	-3.1	-1.8	2.0	-2.9	-20.8	-13.8	2.6	3.0	2.8	2.6	1.9	1.7
Viet Nam	20.1	-1.7	7.2	7.0	3.1	98.2	0.9	1.1	1.1	1.1	1.0	1.7
Taipei,China	26.8	-19.8	-0.2	-12.1	-4.8	-6.4	2.5	2.4	2.2	1.8	1.6	1.6
Sri Lanka	-4.2	5.1	6.6	12.1	-8.0	14.2	0.7	0.9	0.9	0.9	0.8	0.9
Cambodia	71.1	-9.1	19.7	24.7	-8.1	-0.5	0.3	0.4	0.4	0.5	0.4	0.4
Philippines	2.0	-3.6	0.7	14.7	-32.1	21.2	0.4	0.4	0.4	0.4	0.3	0.4
Myanmar	34.6	-3.6	11.0	53.0	-54.2	21.9	0.3	0.3	0.3	0.5	0.2	0.3
Uzbekistan	20.6	12.8	34.7	-11.0	-31.1	-39.5	0.3	0.5	0.6	0.5	0.3	0.3
Turkmenistan	13.2	13.6	-9.5	21.2	-18.4	85.5	0.1	0.1	0.1	0.1	0.1	0.1
Lao People's Dem. Rep.	18.9	46.2	-28.5	13.5	1.7	38.8	0.1	0.2	0.1	0.1	0.1	0.1
Tajikistan	7.2	18.9	41.1	-30.5	-4.1	-4.3	0.1	0.1	0.1	0.1	0.1	0.1
Nepal	-21.7	-20.6	-0.3	9.5	-11.8	-3.9	0.1	0.1	0.1	0.1	0.1	0.1
Non-Asia	6.9	-5.4	3.3	4.1	-4.1	-2.7	32.0	36.5	34.4	34.0	30.8	30.8
Turkey	17.9	-3.3	7.2	8.1	2.1	2.5	10.7	12.4	12.1	12.5	12.0	12.3
Romania	21.9	9.9	7.8	2.2	-8.6	-2.3	2.5	3.3	3.2	3.1	2.7	2.5
Morocco	6.6	-8.7	3.2	-1.4	-8.3	-2.2	1.9	2.1	2.0	1.8	1.6	1.6
Tunisia	8.8	-4.5	-5.1	-3.7	-8.0	-8.5	2.0	2.3	1.9	1.8	1.5	1.5
Egypt	-15.8	7.5	18.8	4.2	3.9	1.9	0.8	1.1	1.2	1.2	1.1	1.2
Bulgaria	26.5	-19.3	6.9	10.3	3.3	7.2	1.0	1.0	1.0	1.0	1.0	1.0
Israel	-1.2	0.9	5.9	0.1	11.5	11.4	0.5	0.7	0.6	0.6	0.6	0.7
Russia	-0.3	-5.0	-8.9	-7.7	-22.4	-8.8	0.8	0.9	0.8	0.7	0.5	0.5
Syria	-0.9	6.3	26.3	-11.7	-31.3	27.6	0.5	0.6	0.7	0.6	0.4	0.5
Ukraine	14.5	6.6	5.1	3.5	-1.6	-9.5	0.4	0.5	0.5	0.5	0.5	0.4
Belarus	5.4	0.6	23.7	-0.2	-4.7	-13.7	0.3	0.4	0.5	0.4	0.4	0.4
Brazil	20.8	10.6	13.5	-12.8	-26.4	-18.1	0.5	0.6	0.6	0.5	0.4	0.4
United Arab Emirates	-5.9	-19.9	10.8	25.6	-34.8	-0.7	0.4	0.4	0.4	0.5	0.3	0.3
Mauritius	13.4	-17.9	-4.8	-6.1	-13.8	3.2	0.5	0.5	0.4	0.4	0.3	0.3
Croatia	11.0	-7.1	-3.4	2.2	-8.4	-4.1	0.4	0.4	0.4	0.4	0.3	0.3
World	35.5	-17.1	9.9	5.3	5.9	1.6	100.0	100.0	100.0	100.0	100.0	100.0

Note: Data for 2006 through April only.

Source: Eurostat, available: http://epp.eurostat.ec.europa.eu, downloaded 23 August 2006.

climbing from 2.2% to 2.4% (Figure 1.5.8). For India, the improvement in growth was from 17% to 23% with an increase in market share from 7.5% to 8.8%. The following Asian suppliers saw similar turnarounds in value of shipments to the EU in 2006: Bangladesh; Cambodia; Hong Kong, China; Malaysia; Pakistan; Thailand; Sri Lanka; and Myanmar. Nepal and Taipei,China also improved their performance, although growth was in single digits in value terms in 2006. The extent to which Asian suppliers were able to make use of EU preferences in achieving this performance is unknown, but it is certainly likely to be a factor. Unlike the US, the EU has included textiles and clothing in its GSP-eligible trade.

Non-Asian suppliers (most of them preferential suppliers) improved from declines to low value increases in 2006 relative to 2005. Volumes continued to shrink for these suppliers, however. Market share of Asian

1.5.8 European Union imports of textiles and clothing, by value

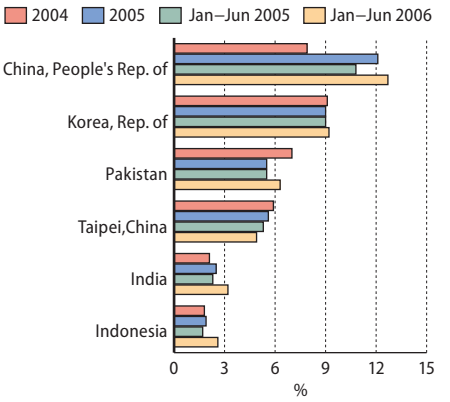
	Value change over previous period (%)						Market share (%)					
	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
Developing Asia	1.2	-0.3	0.1	8.1	13.8	23.6	53.2	53.2	53.5	55.2	59.1	60.4
China, People's Rep. of	7.0	10.5	7.2	12.4	39.8	12.1	18.0	19.9	21.4	23.0	30.2	26.9
India	5.5	-4.7	-1.1	5.1	16.7	23.0	7.1	6.8	6.8	6.8	7.5	8.8
Bangladesh	8.9	-2.8	12.2	20.2	-4.8	38.2	4.4	4.3	4.9	5.6	5.0	6.0
Hong Kong, China	-16.9	-9.9	-9.8	-6.4	-13.0	195.5	4.1	3.7	3.3	3.0	2.4	4.0
Pakistan	6.8	4.5	3.6	9.6	-11.9	15.7	3.2	3.3	3.4	3.6	3.0	3.1
Indonesia	-2.0	-14.5	-11.8	-3.8	-10.1	37.3	3.7	3.2	2.8	2.6	2.2	2.4
Thailand	-5.8	-1.2	-5.6	4.2	-7.3	17.2	2.0	2.0	1.9	1.9	1.7	1.7
Viet Nam	0.6	-8.6	-21.0	19.4	6.4	70.6	1.3	1.2	0.9	1.1	1.1	1.4
Sri Lanka	-7.7	-3.7	-5.6	13.3	-1.1	30.1	1.3	1.2	1.2	1.3	1.2	1.3
Korea, Rep. of	-8.7	-9.8	-11.6	-7.7	-25.7	-1.5	2.8	2.5	2.2	1.9	1.4	1.2
Malaysia	-5.2	-0.3	-14.5	-4.6	-0.4	25.3	1.3	1.3	1.1	1.0	0.9	1.0
Taipei,China	-10.6	-10.7	-11.8	-16.4	-18.4	5.5	1.7	1.5	1.3	1.1	0.8	0.8
Cambodia	39.7	7.4	-0.7	22.5	-8.2	22.3	0.6	0.6	0.6	0.7	0.6	0.6
Philippines	-10.9	-0.1	-5.6	13.8	-32.2	23.6	0.5	0.5	0.5	0.5	0.3	0.4
Myanmar	30.3	-16.5	-7.7	23.0	-48.2	12.0	0.6	0.5	0.5	0.5	0.3	0.3
Lao People's Dem. Rep.	11.1	-4.1	-13.1	7.7	1.1	27.8	0.2	0.2	0.2	0.2	0.2	0.2
Nepal	-27.4	-29.9	-12.3	10.8	-5.9	3.3	0.2	0.1	0.1	0.1	0.1	0.1
Non-Asia	8.1	-0.2	-1.1	1.0	-2.9	4.5	46.8	46.8	46.5	44.8	40.9	39.6
Turkey	10.5	10.9	5.8	4.5	3.5	6.0	12.9	14.3	15.2	15.2	14.8	14.5
Romania	29.0	11.4	3.0	1.4	-5.2	0.3	5.5	6.1	6.3	6.1	5.5	4.8
Tunisia	13.4	0.7	-5.8	-4.5	-5.7	-3.0	4.7	4.7	4.5	4.1	3.6	3.5
Morocco	11.9	-0.6	-5.7	-1.9	-7.2	3.3	4.2	4.1	3.9	3.7	3.2	3.1
Bulgaria	29.9	-7.2	10.1	9.5	1.9	9.0	1.7	1.5	1.7	1.8	1.7	1.7
Egypt	-10.7	-1.2	0.3	13.1	-0.9	12.6	0.8	0.8	0.8	0.9	0.8	0.8
Mauritius	-1.2	-7.8	-10.8	-6.6	-13.9	0.5	1.0	0.9	0.8	0.7	0.6	0.6
Ukraine	13.2	2.8	-1.7	7.3	-7.5	2.8	0.7	0.7	0.7	0.7	0.6	0.6
Croatia	12.6	-8.0	-5.8	-1.3	-10.6	-4.8	0.9	0.9	0.8	0.8	0.6	0.5
Israel	-17.9	-11.7	-8.1	-0.4	-4.9	1.2	0.6	0.5	0.5	0.5	0.4	0.4
United Arab Emirates	-9.1	-15.8	-3.7	17.1	-37.8	20.0	0.4	0.4	0.4	0.4	0.2	0.3
Brazil	12.5	5.1	5.7	5.8	-11.3	-12.9	0.3	0.3	0.3	0.3	0.2	0.3
Russia	-0.4	-7.6	-11.7	-7.4	-26.5	0.4	0.5	0.5	0.4	0.4	0.2	0.2
Belarus	6.1	-7.7	3.8	-4.1	-4.8	-7.8	0.3	0.3	0.3	0.3	0.3	0.2
Syria	5.4	-3.8	-2.8	-5.3	-24.9	13.1	0.3	0.3	0.3	0.3	0.2	0.2
World	4.3	-0.3	-0.5	4.8	6.3	15.3	100.0	100.0	100.0	100.0	100.0	100.0

Note: Data for 2006 are through April.

Source: Eurostat, available: http://epp.eurostat.ec.europa.eu, downloaded 23 August 2006.

suppliers rose to over 60% in the EU market (69% for volume) in 2006, while non-Asian suppliers' share (excluding intra-EU imports) fell to below 40% (31% in volume). (The top six developing Asian suppliers by volume are shown in Figure 1.5.9.) Unit prices of non-Asian suppliers rose by less than half those of Asian suppliers.

1.5.6 US market share of top six Asian suppliers (intermediate products, by value)



Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

What developing Asia can now do

It is now clear that the textile and clothing industries in much of Asia have succeeded in competing in the absence of global quotas under the terms of the WTO Agreement of 1994 (for discussion see *ADO 2006*, pp. 36-38). Although some isolated marginal suppliers have fallen by the wayside, developing Asian suppliers that had expressed concern over their ability to compete have actually done quite well, including Bangladesh, Cambodia, and Indonesia. Former large Asian quota-holders, such as

1.5.9 Change in unit prices of textiles and clothing in the European Union, %

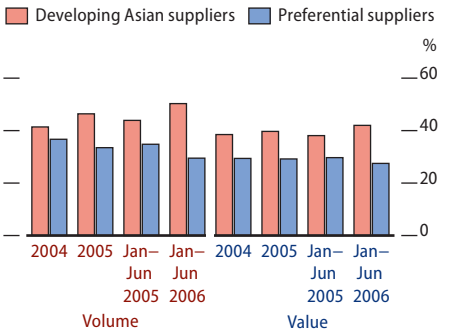
	2001	2002	2003	2004	2005	2006
Developing Asia	-34.8	28.7	-11.9	2.0	2.5	18.9
Central Asia	2.6	-11.7	-12.3	21.8	-2.2	6.8
Armenia	-34.3	33.6	9.9	33.0	-19.7	-27.5
Azerbaijan	-16.6	1.5	54.2	54.1	-19.8	11.6
Kazakhstan	7.2	-29.2	-12.5	-10.1	8.4	7.8
Kyrgyz Republic	81.7	-67.7	47.4	142.3	-54.0	-70.6
Tajikistan	8.7	-17.7	-16.1	20.7	12.6	17.9
Turkmenistan	-0.5	-4.9	-11.5	26.8	16.3	-31.9
Uzbekistan	1.6	-13.2	-13.0	11.0	-15.2	18.6
East Asia	-26.4	4.7	-14.9	0.5	2.1	22.0
China, People's Rep. of	-25.9	6.4	-16.5	1.3	4.0	14.3
Hong Kong, China	-40.9	3.3	-1.0	12.7	3.5	59.0
Korea, Rep. of	-5.8	-8.2	-13.3	-4.9	-6.2	13.8
Mongolia	32.4	-9.4	-36.2	-94.1	-1.5	-
Taipei,China	-29.5	11.4	-11.6	-4.9	-14.2	12.7
South Asia	-46.9	80.5	-8.9	2.6	2.5	18.3
Afghanistan	-16.8	-4.7	6.2	-0.1	-11.9	20.4
Bangladesh	-78.3	341.9	-11.6	2.1	-3.9	23.4
Bhutan	-69.2	865.3	-86.4	225.8	-48.3	-
India	-0.4	1.6	-7.0	2.2	11.7	18.2
Maldives	20.8	-5.2	-5.8	-48.9	-17.4	-
Nepal	-7.3	-11.7	-12.0	1.2	6.7	9.8
Pakistan	-1.3	-6.5	-8.3	2.6	-7.7	7.9
Sri Lanka	-3.7	-8.4	-11.5	1.1	7.5	13.5
Southeast Asia	-15.0	-6.6	-10.0	4.8	-3.5	10.9
Brunei Darussalam	-19.0	-31.8	33.1	-91.4	-5.1	124.8
Cambodia	-18.4	18.2	-17.1	-1.8	-0.1	18.9
Indonesia	-17.4	-9.0	-4.4	4.5	-4.0	14.9
Lao People's Dem. Rep.	-6.6	-34.4	21.5	-5.1	-0.6	-7.8
Malaysia	-14.5	-9.4	-14.5	-4.5	1.7	8.4
Myanmar	-3.2	-13.4	-16.8	-19.6	13.0	-11.1
Philippines	-12.6	3.6	-6.3	-0.9	-0.1	2.1
Singapore	-66.2	208.5	-17.7	-11.1	-1.0	16.0
Thailand	-13.6	-7.7	-9.0	9.3	-4.0	19.6
Viet Nam	-16.2	-7.0	-26.3	11.6	3.2	-12.6
The Pacific	335.3	-45.8	-34.2	-4.8	-15.5	-70.0
Cook Islands	-	-57.2	-23.6	58.8	63.0	-
Fiji Islands	259.6	-62.5	-22.8	8.5	16.7	120.4
Kiribati	-81.3	276.1	-29.1	-52.8	174.4	-
Marshall Islands, Rep. of	-21.9	88.2	-33.9	217.3	-51.0	-
Papua New Guinea	-21.5	156.8	-21.5	-32.1	-58.0	-
Samoa	-10.8	-18.2	-36.8	9.7	-27.1	-
Tonga	-	-	-77.3	125.6	-79.6	-
Tuvalu	49.4	-89.7	1087.3	-88.2	56.6	-
Non-Asia	1.1	5.5	-4.3	-3.0	1.2	7.3
Turkey	-6.3	14.7	-1.3	-3.4	1.4	3.4
Romania	5.9	1.4	-4.5	-0.8	3.8	2.5
Tunisia	4.3	5.5	-0.8	-0.8	2.6	5.9
Morocco	4.9	8.9	-8.6	-0.5	1.2	5.8
Bulgaria	2.7	15.0	3.0	-0.7	-1.4	1.5
Egypt	6.1	-8.1	-15.5	8.5	-4.6	10.7
Israel	-16.9	-12.4	-13.3	-0.4	-14.7	-9.6
Russia	-0.2	-2.7	-3.1	0.3	-5.3	11.4
Ukraine	-1.1	-3.5	-6.5	3.6	-6.0	13.5
United Arab Emirates	-3.3	5.2	-13.1	-6.7	-4.6	20.9
Brazil	-6.9	-4.9	-6.8	21.4	20.5	7.4
Belarus	0.6	-8.2	-16.1	-3.8	-0.1	7.6
Croatia	1.4	-1.0	-2.5	-3.5	-2.4	-0.6
Mauritius	-12.9	12.3	-6.3	-0.5	-0.1	-2.8
Syria	6.4	-9.5	-23.1	7.3	9.3	-11.4
World	-23.0	20.3	-9.4	-0.5	0.4	13.2

- = data not available

Note: Data for 2006 through April only.

Source: Eurostat, available: http://epp.eurostat.ec.europa.eu, downloaded 23 August 2006.

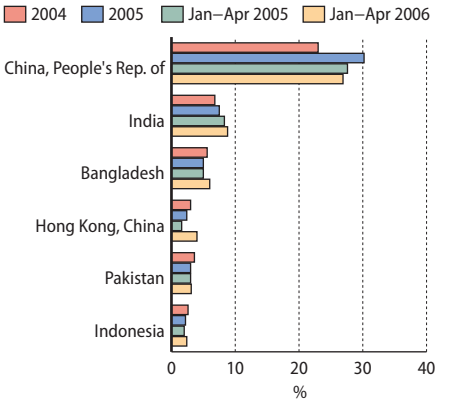
1.5.7 US market share (intermediate products)



Note: Preferential suppliers are listed in Table 1.5.3.

Source: United States Department of Commerce, Office of Textiles and Apparel, available: http://www.otexa.ita.doc.gov/, downloaded 11 August 2006.

1.5.8 EU market share of top six Asian suppliers (textiles and clothing, by value)



Source: Eurostat, available: http://epp.eurostat.ec.europa.eu, downloaded 23 August 2006.

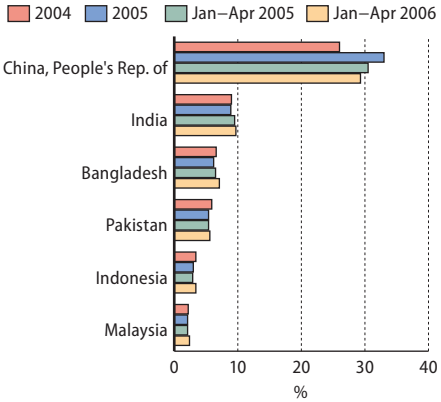
Korea and Taipei,China, have already moved their clothing factories to more competitive locations and are expected to similarly move textile production abroad.

A threat to the efficient development of the Asian supply chain, however, exists within the region itself and that is the proclivity of some countries to enter into bilateral FTAs that actively discriminate against efficient suppliers within the region. On a global scale, tariff discrimination and increasingly complex and inconsistent trade rules under a burgeoning web of PTAs are threats as well. Opportunities are there for the taking—not least by Asian countries' own efforts to unilaterally open trade on an MFN basis. Regional arrangements could also be designed that will stimulate rather than suppress efficient production networks in these industries (as was discussed in *ADO 2006*). The ability of ASEAN to hold out for comprehensive coverage, cumulation, and flexible rules of origin in negotiations with large trading hubs will be crucial for avoiding trade-diverting blocs that could impair Asian competitiveness in the global textile and clothing trade.

ASEAN's ability to serve as a connector of spokes in bilateral negotiations, however, is uncertain. The limited institutional capacities call into question whether ASEAN can implement the bold objectives of AEC. For example, the ASEAN Ministerial Conference in Kuala Lumpur in August 2006 agreed to bring forward AEC to 2015 from 2020, and stated that a "standstill" in the use of nontariff measures would be implemented. However, a standstill does nothing to remove existing nontariff measures, many of which apply to trade in textiles and clothing. Hence, it will be more effective if ASEAN members push ahead with plans to eliminate all nontariff measures that prevent efficient development of the single ASEAN market and extend such treatment to all trade partners on an MFN basis.

The way forward is for all competitive Asian suppliers of intermediate textile products and clothing to proceed with unilateral reforms of both border measures such as tariff reductions and behind the border barriers and trade costs. This will encourage the most efficient development of regional production networks and will further boost development of consumer markets in the region. In turn this will enhance Asia's ability to continue to compete effectively in large nonregional markets, despite the discriminatory tariffs that Asian suppliers face in those markets relative to preferential suppliers.

1.5.9 EU market share of top six Asian suppliers (textiles and clothing, by volume)



Source: Eurostat, available: http://epp.eurostat.ec.europa.eu, downloaded 23 August 2006.

Endnotes

1 See estimates in Anderson, Martin, and van der Mensbrugghe (2006).

2 Nonreciprocal preference programs such as GSP provide limited access for exports of less-developed countries and typically exclude or place strict limits on products of strong interest to the intended beneficiaries (James 2006). Moreover, restrictive rules of origin undermine the ability of smaller and poorer countries to benefit from such arrangements (Consultative Board 2004).

3 The discussion herein is limited to trade in goods and services and does not consider issues such as monetary arrangements and cooperation or mobility of factors of production within the single market. For discussion of these issues, see Lloyd and Smith (2004).

4 The "single market" concept in theory implies that the law of one price holds within the region (Lloyd and Smith 2004). In practical terms, the hoped-for level of economic integration is more nearly that of a customs union (internal elimination of border restrictions on trade and a common external tariff) than a common market (removal of all internal barriers to the movement of goods, services, and factors of production plus a common external tariff).

5 Indeed a recent article in the *American Economic Review* (Limao 2006), using the US as a case study, finds that membership of a PTA lessens a country's willingness to reduce MFN tariffs on PTA goods.

6 In these calculations, special nonreciprocal preference programs such as the African Growth and Opportunity Act, which provide duty-free access for garments, are taken into account, as well as free trade agreements, which are reciprocal in exchange of concessions (James 2006).

7 These tables provide a glimpse of how growth has been affected by the imposition of restraints upon the PRC. January–June 2005 in Tables 1.5.3 and 1.5.4, as well as in Tables 1.5.5 and 1.5.6, is a period of completely quota-free trade.

References

Anderson, Kym and Will Martin (eds.). 2006. *Agricultural Trade Reform and The Doha Development Agenda*. A copublication of Palgrave Macmillan and The World Bank, London: Palgrave Macmillan, and Washington, DC: World Bank.

Anderson, Kym, Will Martin, and Dominique van der Mensbrugghe. 2006. "Doha Merchandise Trade Reform: What's At Stake for Developing Countries?" *World Bank Economic Review* 20(2). July.

Asian Development Bank (ADB). 2006. *Asian Development Outlook 2006*, especially Part 3. "Routes for Asia's Trade." Manila: Asian Development Bank. April. Available: http://www.adb.org/documents/books/ado/2006/default.asp.

Consultative Board (Peter Sutherland, Jagdish Bhagwati, Kwesi Botchwey, Niall FitzGerald, Koichi Hamada, John H. Jackson, Celso Lafer, and Thierry de Montbrial). 2004. *The Future of the WTO: Addressing Institutional Challenges in the New Millennium.* Report to the Director-General Supachai Panitchpakdi. Geneva: World Trade Organization Secretariat.

Emerging Textiles.com. 2006. "China's Exports of Polyester Filament Fabrics curbed by EU and US protections." Statistical Report, 9 August, downloaded from http://www.emergingtextiles.com/.

Hertel, Thomas W. and L. Alan Winters (eds.). 2006. *Poverty and The WTO: Impacts of the Doha Development Agenda*. London: Palgrave Macmillan and Washington, DC: World Bank.

Inside Southern African Trade (INSAT). 2005. USAID Southern Africa, *Special Issue: WTO Hong Kong Ministerial*. Issue 3, December.

International Monetary Fund (IMF). 2006. *Regional Economic Outlook: Asia and Pacific*, World Economic and Financial Surveys, Washington, DC. May.

International Trade Centre (ITC). 2006. *World Tr@de Net Newsletter*, Geneva: UNCTAD/WTO No. 7 (2). July.

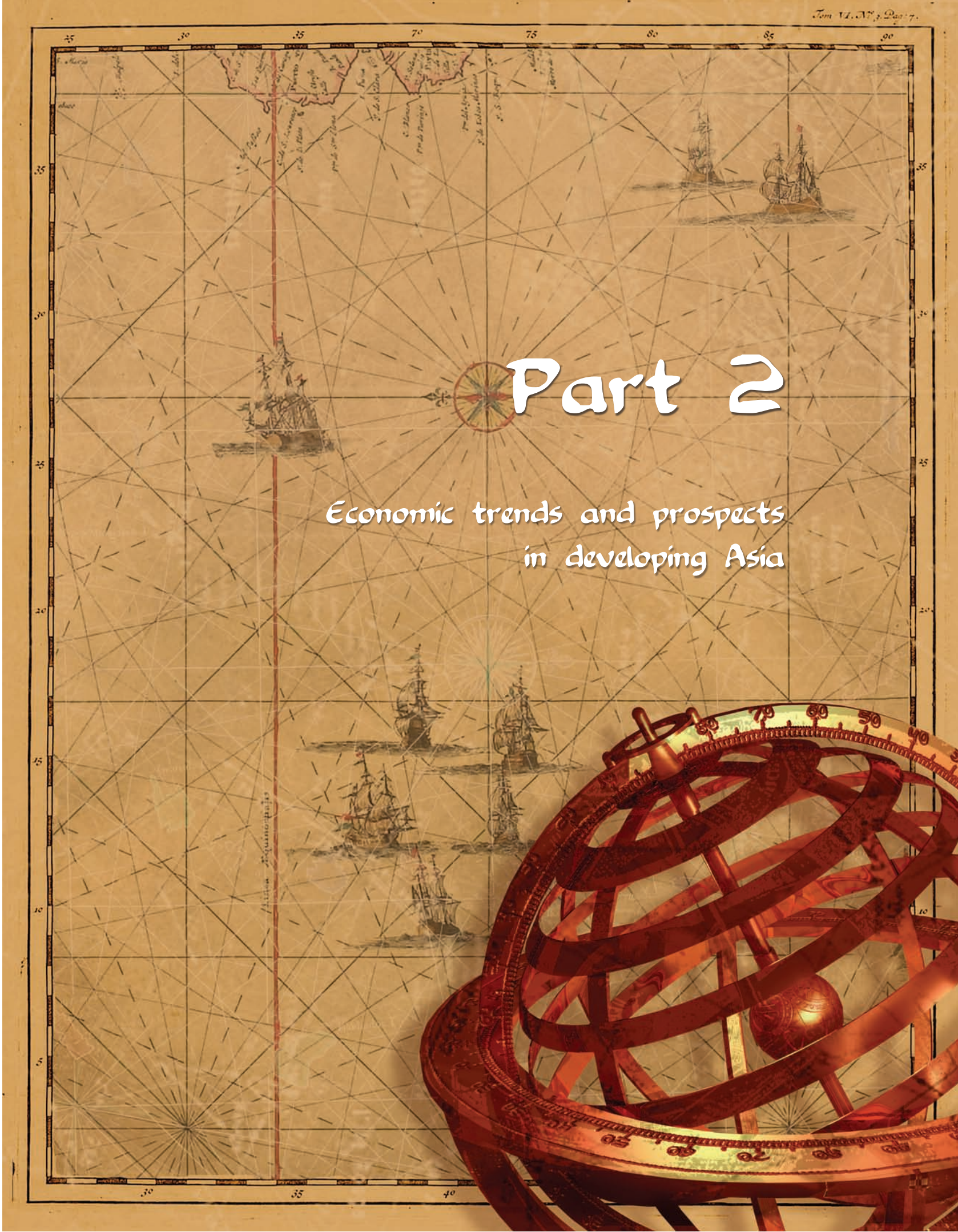
James, William E. 2006. *Rules of Origin in Emerging Asia-Pacific Preferential Trade Agreements: Will PTAs Promote Trade and Development?* UNDP/UNESCAP ARTNeT Working Paper.

Limao, Nuno. 2006. "Preferential Trade Agreements as Stumbling Blocks to Multilateral Trade Liberalization: Evidence for the United States." *American Economic Review*, Vol. 96 (3). June.

Lloyd, Peter and Penny Smith. 2004. *Global Economic Challenges to ASEAN Integration and Competitiveness: A Prospective Look*, ASEAN Secretariat REPSF Project 03/006a. September.

United Nations Conference on Trade and Development (UNCTAD). 2001. *Generalized System of Preferences: Handbook on the Scheme of Canada*. UNCTAD Technical Cooperation Project on Market Access, Trade Laws, and Preferences, Geneva: UNCTAD/ITCD/TSB/Misc.66. December.

———. 2005. *UNCTAD GSP Newsletter*. "Recent Developments in the GSP Scheme of the European Union, the United States and Canada Regarding Textiles and Clothing." UNCTAD/DITC/TNCD/MISC/2005/6. No. 7. Geneva. December.



Part 2

Economic trends and prospects in developing Asia

Bangladesh

Asian Development Outlook 2006 (ADO 2006) in April this year forecast that GDP growth in FY2006 (ended June 2006) would accelerate; that inflationary pressures would heighten; and that the current account would show a modest deficit. Whereas GDP growth and inflation turned out close to projections, the current account posted a small surplus, primarily because export growth was faster, and import expansion slower, than expected. This *Update* maintains the earlier FY2007 projection for GDP growth, sees less progress in reducing inflation, and forecasts a small surplus (rather than deficit) on the current account due to continued robust export performance and contained import growth. Despite the generally positive outlook though, substantial underpricing of energy products is continuing to build large financial imbalances, which are posing a growing threat to both fiscal and monetary stability. Other risks include political uncertainty that could disrupt the economy in the lead-up to general elections in January 2007.

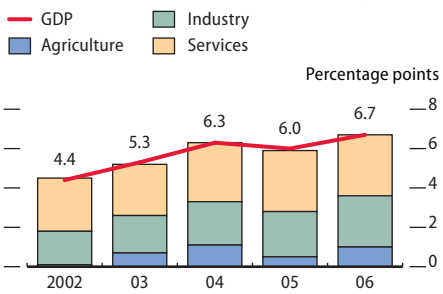
Updated assessment

Recently released data estimate GDP growth in FY2006 at 6.7%, up from 6.0% in the previous year (Figure 2.1.1). Following a flood-induced setback in FY2005, agriculture rebounded sharply with growth estimated at 4.5%. (Foodgrain production steadily increased to 27.3 million tons—largely on account of favorable weather.) Lifted by a robust performance in export-oriented manufacturing, expansion in industry is estimated at 9.6%, even though the manufacturing subsector performed somewhat below full potential because of frequent power disruptions. Performance in services also remained robust, with a 6.5% gain in output.

On the expenditure side, private consumption was the main driver of growth (Figure 2.1.2), bolstered by a near 25% surge in workers' remittances from abroad. Investment maintained a positive contribution to growth, while that of net exports of goods and services was slightly negative—though less so than in FY2005, as import growth has subsided. At 25.0% of GDP, investment spending showed a moderate 8.0% advance, mainly reflecting a rise in private investment.

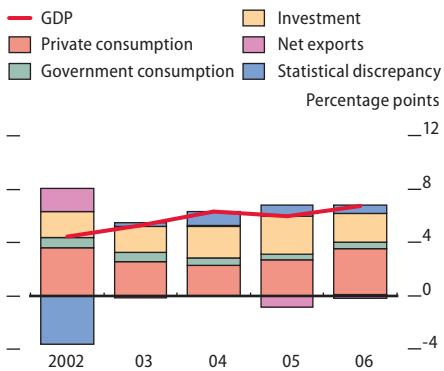
Inflation climbed to 7.2% in FY2006, from 6.5% in FY2005. Rapid growth in the money supply and rising import prices—amplified by a marked depreciation of the taka against the US dollar (of 8.5% in FY2006)—heightened price pressures. Moreover, growing exports of some items, such as fish and vegetables, appear to be nudging up their domestic prices toward international levels. As indicated in Figure 2.1.3, food price inflation has continued to pull up the overall index despite the agricultural recovery, possibly reflecting the uptick in international food prices in the April–June quarter of 2006.

2.1.1 Contributions to growth (supply)



Source: Bangladesh Bureau of Statistics, *National Accounts Statistics*, May 2006.

2.1.2 Contributions to growth (demand)



Source: Bangladesh Bureau of Statistics, *National Accounts Statistics*, May 2006.

Bangladesh Bank adopted a tighter monetary policy stance for FY2006. The broad money growth target under the monetary program was set at 14.3%, and policy interest rates, the cash-reserve requirement, and the statutory liquidity ratio were all revised upward during the year. The yield on 28-day treasury bills moved up moderately from 6.6% in June 2005 to 7.1% in June 2006, while the reverse repo rate rose from 4.5% to 6.0% over the period. Nevertheless, in the fiscal year ended June 2006, expansion in broad money (19.5%) and domestic credit (20.2%) remained high (Figure 2.1.4), and well above both Bangladesh Bank's program targets for FY2006 and actual growth rates in FY2005. The growth of credit was much faster to the public sector than to the private sector.

The FY2006 fiscal deficit, estimated at 3.9% of GDP, was lower than the budget target of 4.5%, and stemmed from underperformance in development spending. In line with key fiscal objectives, domestic financing was limited to 2.0% of GDP and total government revenue rose by 0.5 percentage points to 10.8% of GDP. Total expenditure increased by 1 percentage point to 14.7% of GDP. The development spending component edged up marginally to 5.2% of GDP, mirroring delays in project starts and continued slow implementation of projects already under way.

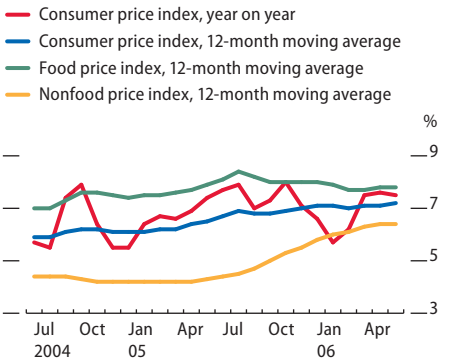
In FY2006, marked increases in export earnings and in workers' remittances (Figure 2.1.5), as well as lower growth in imports (at 12.1%), strengthened the current account position. Concerns about the impact on the economy of the elimination of textile and clothing quotas at end-2004 have not been borne out. Outperforming many competing countries, the industry's exports (about 75% of total exports) continued to expand rapidly. A steep depreciation in the nominal exchange rate (Figure 2.1.6) worked to maintain export competitiveness. Other exports also did well.

Despite a 25% steady increase in oil imports, reflecting primarily higher prices, overall import growth slowed, mainly because of credit restrictions for non-oil imports. Accordingly, the FY2006 current account is estimated to have recorded a surplus of 0.9% of GDP, moving from a 0.9% deficit in FY2005. The improvement in the current account brought gross international reserves to $3.5 billion at end-FY2006, up by $0.6 billion for the year (Figure 2.1.7).

The Government's policy of limiting domestic price increases for petroleum products (Figure 2.1.8) has substantially weakened the financial position of state-owned Bangladesh Petroleum Corporation (BPC) as well as the nationalized commercial banks (NCBs). This is because the resulting subsidies have been financed entirely by bank credit rather than paid for by budget allocations. Effective 9 June 2006, domestic prices for diesel and kerosene, which account for three quarters of domestic consumption of fuel, were increased by 10% to Tk33 per liter (or about two thirds of prevailing international prices). At the same time, prices were raised by about 30% for high octane and regular gasoline (to Tk58 and Tk56 per liter, respectively), but these items account for only about one tenth of petroleum consumption. Even though these first price increases since September 2005 were expected to generate additional revenue of around $210 million annually, they were seen as reducing the likely implicit subsidy for FY2007 by no more than one fifth.

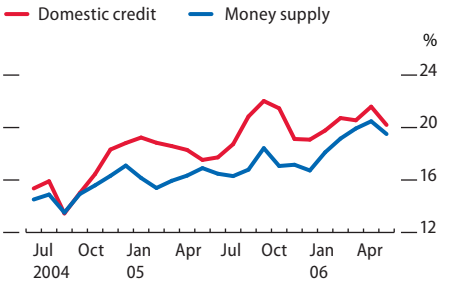
Because of its straitened financial situation, BPC experienced

2.1.3 Inflation



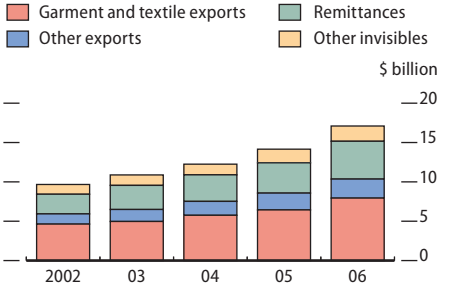
Sources: Bangladesh Bureau of Statistics; Bangladesh Bank, *Economic Trends* and *Major Economic Indicators: Monthly Update,* July 2006, available: http://www.bangladesh-bank.org, both downloaded 31 July 2006.

2.1.4 Growth in money supply and domestic credit



Sources: Bangladesh Bank; CEIC Data Company Ltd., downloaded 1 August 2006.

2.1.5 Foreign exchange receipts



Sources: Bangladesh Bank, *Annual Report 2004/2005* and *Major Economic Indicators: Monthly Update,* July 2006, available: http://www.bangladesh-bank.org, both downloaded 31 July 2006.

problems in financing and importing petroleum products in FY2006, though the Government assisted it by providing sovereign guarantees against its borrowing from NCBs. In late FY2006, the authorities settled Tk10 billion of BPC credit at the Sonali Bank (the largest NCB) with a 3-year bond to ease that bank's liquidity crunch. BPC's liability to the four NCBs at end-FY2006 was estimated at Tk105 billion (about $1.5 billion), or 2.4% of GDP.

Heavily subsidized petroleum prices pose considerable risks to fiscal sustainability. BPC's accumulated losses constitute a quasi-fiscal obligation, with which the Government will eventually have to deal. On the basis of BPC's mid-June cost and selling prices, the implicit subsidy per liter of fuel was $0.24 for diesel and $0.23 for kerosene. This translates into an annual implicit subsidy for these two fuels of $810 million in FY2007 (about 1.3% of GDP), which will apparently be added to BPC's large existing obligations to NCBs.

While the Government has indicated that a further round of fuel price increases in FY2007 is possible, it clearly needs to adopt a new pricing system that will regularly set retail prices closer to international levels. A new system (which could include a budget-supported safety net for the very poor) is evidently needed to avoid the further accumulation of unsustainable debt that has resulted from nonmarket pricing. Then, as a next step, the Government could relieve the present stress in the financial system by cleaning up the BPC and NCB balance sheets through budgetary allocations to help these institutions return to normal commercial operations.

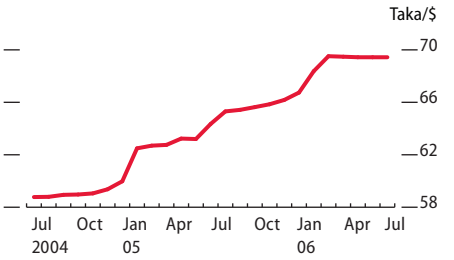
Good progress was made in financial sector reform, particularly in the banking sector, in terms of improving regulatory oversight and in tightening provisioning standards. The banking system's gross nonperforming loan ratio declined from 17.5% in the first quarter of 2005 to 15.4% a year later. However, the ratio for NCBs increased by about 1 percentage point to 27.1%, mainly due to the inability of BPC to fully service its large debts. Privatization of the Rupali Bank continued, and the process is likely to be completed in the next few months.

Prospects

The key baseline assumption for the FY2007 growth forecast is that any political instability before the general elections in January 2007 will not significantly affect economic activity. GDP growth is forecast to moderate to 6.0% in FY2007 (as in the *ADO 2006* projection), mainly due to a reversion to more normal growth in agriculture following the post-flood high-growth recovery of FY2006. Conditions for expansion in industry (aided by new capacity in garments and textiles, chemicals, and engineering) as well as in services are expected to be favorable, though the frequent power disruptions need to be addressed. The two main challenges facing the thriving garment industry are social compliance issues (as epitomized in recent labor unrest over wages) that are a concern to many international buyers, and progress in relieving infrastructure constraints.

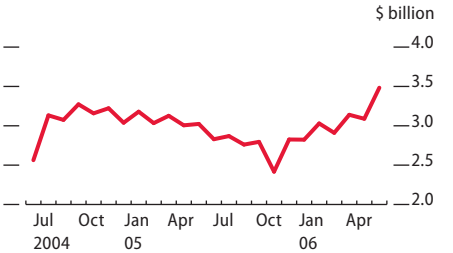
For FY2007, this *Update* raises the average inflation forecast from 6.0% to 7.0%. This rate is the target ceiling in Bangladesh Bank's monetary program for the year. While the Bank has indicated that it

2.1.6 Nominal exchange rate



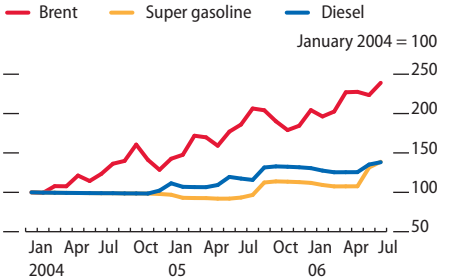
Source: Datastream, downloaded 3 August 2006.

2.1.7 Gross international reserves



Source: CEIC Data Company Ltd., downloaded 1 August 2006.

2.1.8 Oil and fuel price indexes



Note: Super gasoline and diesel prices have been converted to US dollars prior to indexing.
Sources: Bangladesh Petroleum Corporation; Datastream, downloaded 7 August 2006.

will maintain its tightening bias, the elections suggest that a broadly accommodative stance will continue and, with the legacy of large rises in monetary aggregates in FY2006, only a slight moderation in inflation is expected during the year. Apart from international price rises, inflationary pressures include likely further upward adjustments to domestic oil prices, though these may well come only after the January elections and expected further depreciation of the taka.

Growth in imports in FY2007 is projected at about 12%, the same as in the preceding year. The restrictive monetary policy may well contain growth in non-oil imports, though the oil import bill is likely to rise, reflecting further increases in international oil prices. Exports in FY2007 are set to remain buoyant with 18% growth, aided by continued robust performance in garments. The projected decline in the trade deficit, reinforced by strong growth in workers' remittances, is expected to generate a small surplus on the current account, equivalent to 0.3% of GDP.

As discussed in *ADO 2006*, Bangladesh faces several downside risks to its medium-term prospects. These include infrastructure constraints, underpricing of energy products, and the longer-term competitiveness of the garment and textile industry. Possible political disruption affecting the economy prior to the general elections in early 2007 is also a concern, given the country's record of confrontational politics.

2.1.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	6.5	6.7	6.0	6.0
Inflation	7.5	7.2	6.0	7.0
Current acct. bal. (share of GDP)	-0.8	0.9	-1.0	0.3

Sources: Bangladesh Bureau of Statistics; staff estimates.

People's Republic of China

Economic growth sprinted ahead in the first 6 months of 2006, as fixed investment and exports again surged. This *Update* revises up the full-year growth forecast, made in *Asian Development Outlook 2006* (*ADO 2006*) in April, to 10.4%. For 2007, it upgrades the growth forecast to 9.5%. To cool the economy, the authorities have raised the key interest rate and implemented administrative controls. However, the effectiveness of monetary and fiscal policy is constrained by institutional, social, and technical factors, and though administrative controls can be useful they are often difficult to fine-tune. New approaches, including greater flexibility in managing the exchange rate and capital flows, and a variety of structural reforms, are likely to be needed. Yet if the current investment boom continues and leads to chronic overcapacity, achieving balanced and sustainable long-term growth could become somewhat problematic.

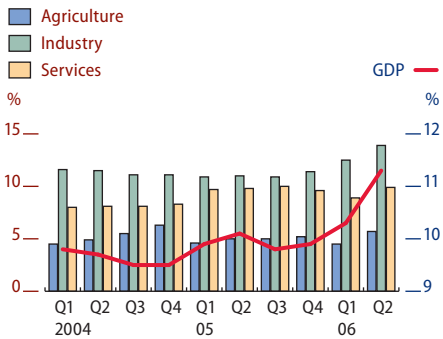
Updated assessment

GDP grew by 10.9% in the first half of 2006 relative to the year-earlier period. Its 11.3% growth in the second quarter (Figure 2.2.1) was the fastest year-on-year rate since 1994. Investment again spearheaded GDP growth. Fixed asset investment surged by 29.8% in January–June, continuing the strong expansion seen in the second half of 2005, and even if down from its recent peak of early 2004, it is well above the official target of 18% (Figure 2.2.2). Gross capital formation is set to climb to nearly 46% of GDP in 2006, an increase of 10 percentage points over 4 years.

Direct estimates of consumption expenditure in the first half of 2006 are unavailable. Although retail sales grew strongly at 12.4% in real terms, overall consumption growth may be slower. Personal consumption growth has averaged 8% since the early 1990s, consistently lagging GDP growth by about 2 percentage points. Some of this gap is explained by a declining share of household disposable income in GDP and by the need for significant personal saving to finance education, health care costs, pensions, and purchases of expensive durable goods.

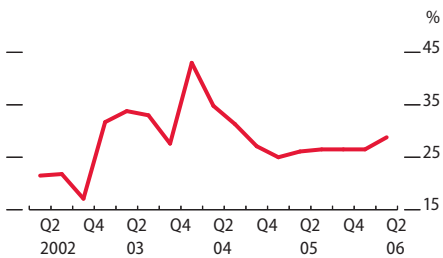
Favorable conditions in the global economy continue to support rapid expansion of merchandise trade, and net exports again contributed positively to growth in the first half of 2006. Exports and imports both grew rapidly, by 25.2% and 21.3%, respectively, resulting in a $61.4 billion trade surplus for the first half of the year (Figure 2.2.3). Although the capital account remains in surplus, disbursed foreign direct investment fell slightly, perhaps a result of a more restrictive policy on property. The current account surplus is now expected to be around 7% of GDP in 2006, slightly below the record high of 7.2% in 2005.

2.2.1 GDP growth



Source: National Bureau of Statistics, *China Monthly Economic Indicators*, various issues.

2.2.2 Fixed asset investment growth



Source: CEIC Data Company Ltd., downloaded 15 August 2006.

Despite rapid economic growth, consumer price inflation has remained tame. This reflects the supply-side nature of the current upswing and a rapid expansion of capacity. Indeed, output prices have been falling in some sectors even with increases in input costs. A good grain harvest has also helped keep consumer prices in check. The full-year rise in the consumer price index is now projected at just 1.6%, down from the 2.3% forecast in *ADO 2006* in April this year.

One area where prices are rising at a worrying rate is housing. Upward pressures come from easy liquidity (Figure 2.2.4), buoyant lending (Figure 2.2.5), and speculation. In an attempt to control the boom, the Government has imposed new restrictions on real estate development. For example, in April, the minimum downpayment on apartments larger than 90 square meters was increased from 20% to 30%, and a higher sales tax was applied on the sale of residential properties owned for less than 5 years. A 20% capital gains tax on residential property in force in some cities was extended nationwide. Additional restrictions on foreign investment in real estate were also imposed.

On the back of vigorous growth, fiscal revenue grew by 22% in the first 6 months of 2006; expenditure rose by 17.5% over the same period. Under the guidelines of the 11th Five-Year Program (2006–2010), one of the priorities is to increase spending on rural infrastructure and social welfare, especially education and health, and on lower-income groups in urban areas.

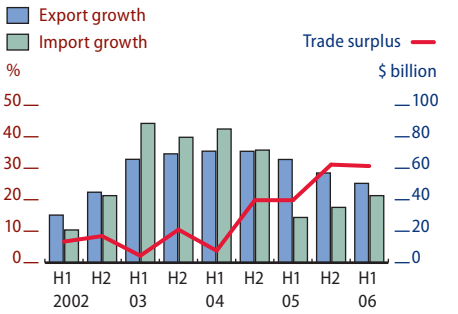
The acceleration of growth has heightened concerns about overcapacity and the possibility of a painful pullback in economic activity. The authorities have signaled their discomfort with the current pace of economic expansion, taking various tightening steps, including: two 27 basis point increases in the 1-year benchmark lending interest rate; increases in commercial bank reserve requirements effective July and August; and restrictions on investment in property. The People's Bank of China has also imposed direct controls on lending and adopted measures to absorb bank liquidity. It is now expected that the economy will expand by 10.4% in 2006, revised up from 9.5% in *ADO 2006*.

Statements by top leaders hint at more tightening measures to come. However, the actual likely magnitude and timing of the measures' impact are uncertain. In addition, their effectiveness, and the wider challenge of economic stabilization in the People's Republic of China (PRC), are complicated by a variety of factors.

First, economic incentives in the provinces are frequently at odds with those at the center. For example, provincial officials tend to attach higher priority to visible projects that support growth than to less tangible macroeconomic stabilization objectives. A senior regional leader and his deputies were recently publicly reprimanded for violating controls on investment. Administrative measures and exhortation may help moderate investment, but exercising close control across such a vast economy is not easy.

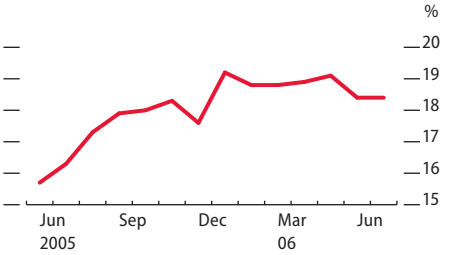
Second, the central Government is less able to exert direct control than formerly over investment decisions now that private investors, as well as local governments, play a more important role in investment. The funding of new projects has also diversified away from loans by state-owned banks, with enterprises' retained earnings an increasingly

2.2.3 Trade indicators



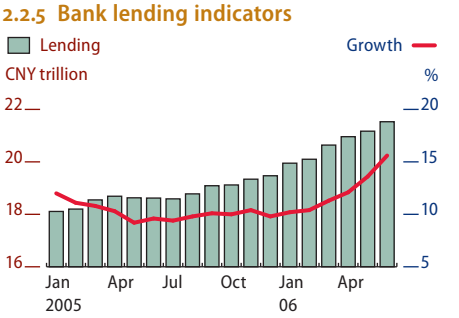
Source: National Bureau of Statistics, *China Monthly Economic Indicators*, various issues.

2.2.4 Money supply (M2) growth



Source: National Bureau of Statistics, *China Monthly Economic Indicators*, July 2006.

2.2.5 Bank lending indicators



Source: National Bureau of Statistics, *China Monthly Economic Indicators*, July 2006.

important source. In an effort to curb investment, the central authorities are pressing local officials to scrutinize new investment projects with a value of more than CNY100 million, to ensure that they are consistent with macroeconomic objectives.

Third, although the timeliness and reliability of statistics are improving, the central authorities must base some decisions on doubtful data from the regions. Moreover, available data may not be comprehensive, such that current economic developments can be subject to sharply different interpretations. For example, industrial profits were reported as rising by 28% in the first half of 2006, faster than a year earlier. For some, this suggests that the sector is performing well and making sound investment decisions. For others, these and other data imply that most of the profits were earned by a select group of favored state-owned industries that do not always base investment decisions on commercial grounds, given that many small and medium enterprises report a severe squeeze on profit margins.

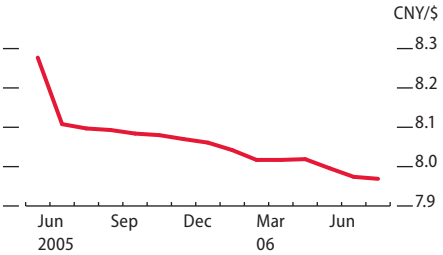
Finally, interest rates and credit risks do not have the same pull on credit demand and allocation in the PRC as they do in a full market economy. Nonmarket considerations still play a significant, if declining, role. Even administrative controls are handicapped by a fragmented banking system. In addition, rising foreign reserves and capital inflows can undermine the impact of higher interest rates. Difficulties in constraining domestic credit expansion would be eased by allowing greater flexibility of the exchange rate and by relaxing controls on capital outflows. From just before the central bank's adoption of the managed exchange rate regime in July 2005, i.e., including the initial revaluation, to end-July 2006, the yuan appreciated by only 3.8% against the US dollar (Figure 2.2.6).

2.2.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	9.5	10.4	8.8	9.5
Inflation	2.3	1.6	3.0	1.8
Current acct. bal. (share of GDP)	6.7	7.0	5.7	6.8

Source: Staff estimates.

2.2.6 Monthly nominal exchange rate



Note: August data are for the first 3 weeks.

Sources: CEIC Data Company Ltd., downloaded 17 August 2006; Datastream, downloaded 22 August 2006.

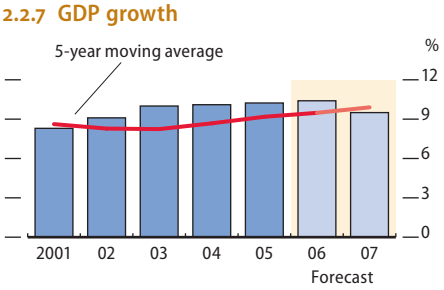
Prospects

Although the Government would like to slow economic growth, it does not want to risk a disruptive, sudden deceleration. Creating jobs and reducing the widening income gap remain high priorities (Box 2.2.1), and require sustained growth. There are some forces that could even push up growth in the short term, risking more painful adjustments later on. Most immediately, fiscal spending is likely to increase in 2007 ahead of the 17th Communist Party Congress that year and in the lead-up to the 2008 Olympic Games in Beijing.

It may also be difficult to control credit expansion if large capital inflows continue. In these circumstances, it would become increasingly difficult to insulate the domestic monetary base, and to prevent liquidity from spilling over into investment. On the supply side, power supply and transportation bottlenecks, which in the past held back output, have eased following significant investments. Considering these factors against the tightening measures that have already been taken as well as the possibility of further restraints, the baseline forecast for GDP growth in 2007 is revised to 9.5% (Figure 2.2.7), but with significant uncertainty around this estimate.

The rate of increase in the trade surplus is projected to moderate next year as export growth slows alongside somewhat softer conditions in the

2.2.7 GDP growth



Sources: National Bureau of Statistics; staff estimates.

2.2.1 Widening income gaps

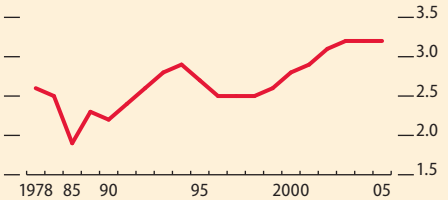
Inequality in incomes has widened rapidly in the PRC in recent years. The Gini coefficient for the country, used as a measure of income inequality, increased from 0.30 in 1981 to more than 0.40 in 2005 (zero equals perfect equality and income distribution becomes more unequal as the coefficient approaches 1, its maximum value).

While some deterioration in income distribution is inevitable as the PRC moves from a largely agrarian and centrally planned economy to an urban-based, industrialized market economy, the degree to which the gap has opened is a concern. Unequal opportunities for education, health care, and migration of workers and their families from the countryside to cities are major reasons for the widening rift.

Since the PRC started opening up in 1978, the ratio between urban and rural incomes has risen from 2.6:1 to 3.2:1 (box figure). Typifying the uneven development between coastal and inland regions, the ratio between per capita GDP in Shanghai and Guizhou province in 2005 was 9.9:1. To some extent, this reflects growing divergence among different sectors of the economy. Looking at various jobs, the average wage in the highest-earning occupation in 2000 was 4.7 times that of the lowest-earning. This ratio had widened to 7.5:1 in 2004. Intragroup inequality has also widened. During 2000–2003, the ratio between the highest and the lowest rural income groups rose from 6.5:1 to 7.3:1, and the Gini coefficient in rural areas from 0.36 to 0.38. In the same period, the ratio between the highest and lowest urban income groups rose from 3.6:1 to 5.7:1, and the Gini coefficient in urban areas from 0.33 to 0.37.

Increasing income inequality has added to social tensions in recent years. Consequently, measures that lift rural incomes and improve the quality of life in the countryside should help ease such pressures. To address other aspects of inequality, the Government needs to direct more public resources toward the provision of affordable safety nets and other social protection mechanisms for those who cannot protect themselves against shocks and risks.

Income ratio between urban and rural residents



Source: National Bureau of Statistics, *China Statistical Abstract 2006.*

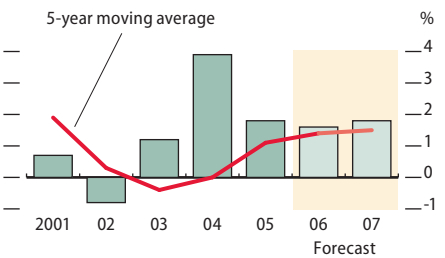
world economy. Government efforts to slow exports of resource-intensive products should also have an effect. In addition, the opening of more areas in the services sector, as a result of the PRC's commitments to the World Trade Organization, should stimulate imports by that sector. The current account surplus is forecast to decline to 6.8% of GDP in 2007.

Consumer price inflation is projected to be little changed next year (Figure 2.2.8). Low food price inflation and manufacturing overcapacity will maintain downward pressure on prices, but increases in public sector wages and in state-controlled prices of water, power, and oil products, as well as the easy credit conditions, will lift some consumer prices.

Risks to the outlook are finely balanced. If the investment momentum does not slow, growth in 2007 could again surprise on the upside, raising the possibility of more difficult adjustments later. Burgeoning excess capacity would increase the probability of a profit crunch, bankruptcies, bad loans, and consumer price deflation. But if the authorities brake too hard, GDP growth could fall by more than forecast. This happened in 1989–1990, when the Government stopped approving all new investment projects and GDP growth slumped from about 12% to 4% (Figure 2.2.9) In contrast, in the late 1990s, the Government successfully engineered a soft landing, with growth slowing from above 12% to 7–8%.

Structural weaknesses contribute to risks. Despite ongoing strengthening within the financial sector, significant vulnerabilities remain. Nonperforming loans have probably declined in recent years, though significant value would likely be at risk in the event

2.2.8 Annual inflation

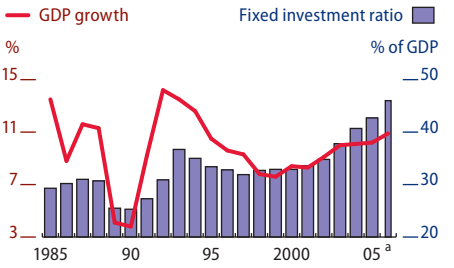


Sources: National Bureau of Statistics, *China Statistical Abstract 2006;* staff estimates.

of an economic downturn. To improve efficiency and mitigate risks, commercial banks need to further strengthen their capital positions and credit risk management functions. Rural households, meanwhile, lack access to formal financial services, and many rural credit cooperatives operate at a loss and carry a high proportion of nonperforming loans. The arrival of foreign banks and relaxation of restrictions on their activities should help improve overall banking system efficiency and safety. Already in July, Standard & Poor's raised the PRC's long-term sovereign credit rating to A from A-minus, citing among other reasons "persistent efforts to strengthen the banking sector."

Other growing concerns are environmental degradation and low energy efficiency. The PRC's economic boom is being driven largely by the development of heavy industry, and has come at a high cost in terms of pollution. In 2005, the country consumed 1.2 tons of coal equivalent for every CNY10,000 ($1,234) of GDP, about three times that of the US and 10 times that of Japan, and one of the main targets of the new Five-Year Program is to lower energy intensity by 20% by 2010. But in the first half of this year, this ratio actually rose by 0.8%. Among other elements, cleaner energy technology and stricter monitoring are required to tackle the problem.

2.2.9 GDP and fixed investment



[a] First half 2006.
Sources: National Bureau of Statistics, *China Statistical Yearbook 2005*; staff estimates.

India

Strong agricultural results and a steady expansion of industry and services fueled 8.4% GDP growth in FY2005 (April 2005–March 2006). Key developments over the first 5 months of FY2006 include: steadily accelerating industrial expansion; further delays in adjusting domestic fuel prices as international oil prices rise; deterioration of the federal Government's fiscal position; and rising inflationary pressures from food and fuel prices, as surging demand for credit has both led to higher interest rates and complicated attempts to control the money supply. Relative to the forecast given in *Asian Development Outlook 2006* (*ADO 2006*) in April this year, growth of 7.8% is now expected in FY2006 and FY2007 (a marginal increase for FY2006), and the inflationary outlook is more uncertain. A smaller current account deficit is now forecast in light of stronger than expected industrial exports.

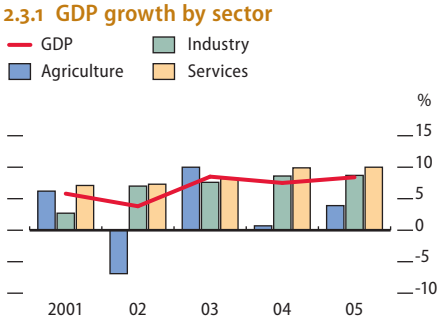
Updated assessment

While India's rapid and stable expansion in services has been widely recognized (services contributed 54% of GDP and 63% of growth in FY2005), revised national income data for the year confirm a steadily accelerating industry sector (Figure 2.3.1). Industrial growth of 8.7% complemented a 10% expansion in services and a good year for agriculture (which grew by 3.9%, up from 0.7% in FY2004). Full-year balance-of-payments data for FY2005 show a 27.5% rise in merchandise exports (measured in nominal US dollars), comprising primarily industrial products—transport equipment; machinery; readymade garments; basic chemicals and pharmaceuticals; woolen yarn; and fabrics.

FY2005 marked the fourth successive year that manufacturing has led merchandise export growth in excess of 20%, confirming that Indian manufacturers are carving out important, high-growth international markets for themselves. Continuing this trend, manufacturing in the first quarter of FY2006 was up by 11.2% on the same period of the previous year, with capital goods production rising by 22.9%. Further buttressing the outlook for investment and industrial expansion, the Directorate General of Commercial Intelligence and Statistics reports that exports in the first quarter of FY2006 were up by 16.9% year on year.

Moderating these buoyant prospects for FY2006 slightly, the Business Confidence Index of the National Council of Applied Economic Research for July–December 2006 shows that, while firms remain upbeat about production growth and exports, they are nervous about slowing profit growth and the rising cost of capital. To illustrate, in FY2005, the net profits of a sample of 1,450 manufacturing companies cited in

2.3.1 GDP growth by sector



Source: Central Statistical Organization, available: http://mospi.nic.in/cso.htm, downloaded 3 June 2006.

the monthly review of the Economic and Political Weekly Research Foundation recorded their lowest rate of increase in the last 4 years. Rising bank lending rates compounded the pressure on profits, and continue to do so.

Outstripping export growth, merchandise imports grew by 31.6% in FY2005, with imports of crude oil and oil products surging by 47.3% in value terms. The oil import bill in the first quarter of FY2006 was 39% higher than in the same quarter of FY2005, due almost entirely to price increases. Yet despite higher international oil prices, the current account gap in FY2005 was held in check by the stellar performance of exports, and widened only to 1.3% of GDP, from 0.8% in FY2004.

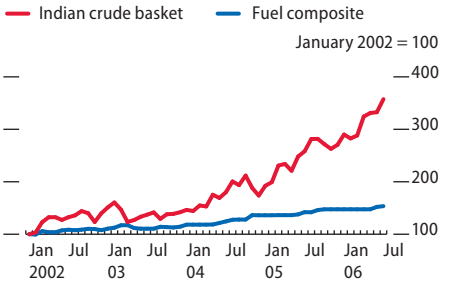
Rising international oil prices pose significant fiscal and inflationary risks, as domestic fuel prices have been allowed to climb only much more slowly (Figure 2.3.2). The federal Government revised marginally the (administered) prices of gasoline and diesel by 9% and 6%, respectively, in the first week of June—the first revision since August 2005—and lowered duties on gasoline and diesel. Notwithstanding the February recommendations of the Government's Committee on Pricing and Taxation of Petroleum Products, the domestic price of cooking gas was left untouched.

By 14 July 2006, the wholesale price index (WPI) for fuel had risen by 52% since the beginning of 2002, while the crude-oil basket had risen by 333% to $73.96 per barrel over the same period. Thus, the implicit quasi-fiscal burden of fuel price controls continues to expand. Although the public oil-marketing companies (whose total underrecoveries in FY2006 were projected at roughly $15.9 billion in June, or roughly 2% of GDP) were recently given permission to revise retail fuel prices if the monthly average price of India's crude-oil basket crossed $70 per barrel, implementation remains uncertain for political reasons. These delays in adjusting fuel prices risk heightened inflationary expectations.

Inflation, as measured by the WPI, began rising in May 2006, touching 5.4% by the third week of June (Figure 2.3.3). The upward trend has been led by rapidly growing prices of "primary articles" (with a 22% weight in the WPI), especially vegetables, pulses, and wheat. "Other commodity" price inflation (with a 14.2% weight) is also a factor, having risen on higher international oil and other commodity prices, the June retail fuel price adjustment, and rupee depreciation. Manufactured goods inflation (63.8% weight), despite picking up slightly, remains restrained.

Food price rises do not stem from low production: harvests in FY2005 were good. Rather, they can be linked to liberalization of rules on the activities of private stockholders, traders, and agroprocessors in, perhaps, three ways. First, some observers argue that liberalization has permitted various private traders to corner markets, though this argument is difficult to verify. Second, other commentators cite inefficient federal buffer stock management in the context of liberalization, which allowed federal wheat stocks to fall to roughly 10% of their historical norm by April 2006, sharply constraining the Government's usual price-smoothing operations. Low stocks stem both from several poor harvests prior to FY2005, and from the fact that the minimum support prices offered to farmers have lately been far below market prices (for example, only Rs7.0

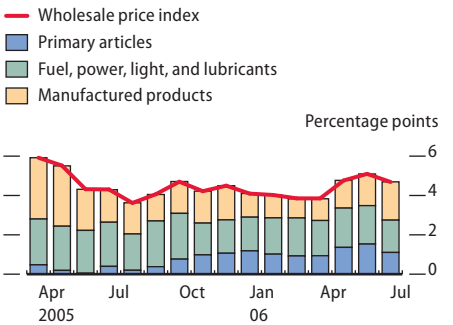
2.3.2 Oil and fuel price indexes



Note: The Indian crude basket has been converted to rupees prior to indexing. The fuel composite is the weighted average of the WPI for gasoline, high-speed diesel oil, LPG, and kerosene.

Sources: Datastream; CEIC Data Company Ltd., downloaded 3 August 2006.

2.3.3 Contributions to wholesale price inflation



Source: Reserve Bank of India, Database on Indian Economy, available: https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/, downloaded 16 August 2006.

per kilogram in May 2006 for wheat, compared with Rs13.7 in the Delhi wholesale market). Third, liberalization of agroprocessing has released pent-up demand for food inputs for processing, pushing up prices.

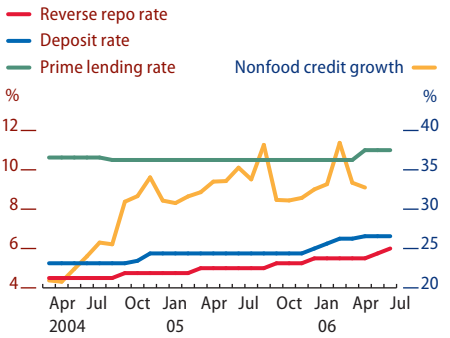
In response to such burgeoning price pressures, the Government has temporarily reduced import duties on food, and has resolved to use the futures market more effectively for stock smoothing. The latter is a critical, if belated, component of a sensible liberalization plan, as it permits the Government to maintain a public claim on a substantial buffer stock (thus smoothing prices and discouraging would-be market manipulators), while allowing private traders and agroprocessors to manage stocks for their own use.

In an effort to curb inflationary expectations and to siphon off excess liquidity, the Reserve Bank of India (RBI) raised its key short-term—repo and reverse repo—interest rates by 25 basis points in early June 2006 and again in late July (Figure 2.3.4). Notwithstanding earlier tightening, money supply growth, at 18.8%, continued to outstrip the RBI's 15% target by the first week of July, mainly because of growth in bank credit. Robust demand for credit and a shift in household savings toward mutual and pension funds have placed upward pressure on bank deposit rates, and consequently, on lending rates. Concerns have arisen that short-term policy interest rate hikes may not suffice to contain credit-driven expansion in the money supply. Yet firms are wary of rising capital costs, and the RBI appears attuned to the fact that inflationary pressures are coming from aggregate supply as well as aggregate demand, implying that monetary policies need to be supplemented with structural responses in the areas of food and fuel.

Against this background of socially sensitive food and fuel price pressures, the federal Government is struggling to balance fiscal prudence with provision of resources for development expenditure. The federal gross fiscal deficit for the first quarter of FY2006 totaled a worrying 52% of the targeted deficit for the entire year. This high rate is primarily attributable to a sharp rise in spending on the National Rural Employment Guarantee scheme, which has lately been implemented in some additional states. Moreover, the Government's disinvestment program was recently suspended following a political crisis that broke out over the proposed privatization of a publicly owned lignite mining company in Tamil Nadu. While tax revenues have been very impressive so far, supported by buoyant industrial production, they are likely to come under some pressure in the future owing to the lowering of customs duties on key primary articles (mainly food), gasoline, and diesel. Continuing losses at the oil-marketing companies will also hamper tax and dividend federal revenues. Thus, meeting the federal Government's deficit target of 3.8% of GDP has emerged as a major challenge.

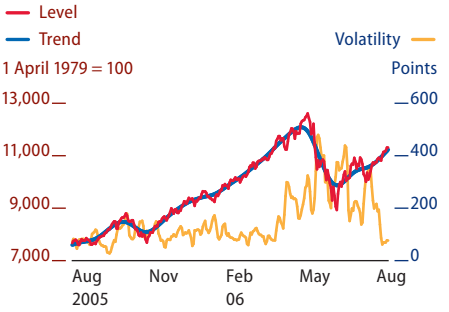
The Bombay Stock Exchange Sensitivity Index (BSE Sensex), which more than tripled over 3 years, experienced a sharp increase in inter- and intraday volatility from the first week of April 2006 (Figure 2.3.5). After touching an all-time high of 12,600 in early May 2006, the Sensex dropped rapidly, coincident with a temporary reversal of inflows from foreign institutional investors (FIIs) (Figure 2.3.6) similar to those into other emerging markets, and a resumption of rupee depreciation (3.5%

2.3.4 Interest rates and nonfood credit growth



Source: CEIC Data Company Ltd., downloaded 16 August 2006.

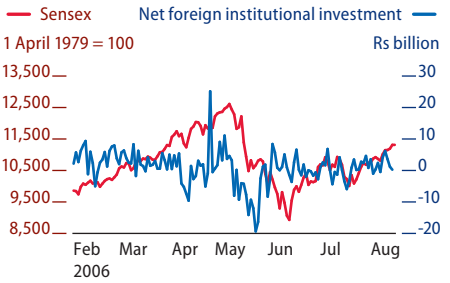
2.3.5 Sensex stock price index



Note: Trend line is calculated using a Hodrick-Prescott filter (with a penalty on variation of 1,600). Volatility is measured as a 10-day standard deviation of Hodrick-Prescott residuals.

Source: Datastream, downloaded 16 August 2006.

2.3.6 Sensex movements and net foreign institutional investment



Sources: Datastream; Securities and Exchange Board of India, available: http://www.sebi.gov.in, downloaded 16 August 2006.

against the US dollar between 3 April 2006 and 6 July 2006—Figure 2.3.7). Given the small share of FII activity in the total turnover on India's equity market (8.1% in FY2005 according to the Government's *Economic Survey*), and some econometric evidence that FII behavior responds to local equity prices rather than the other way round, much of the momentum behind the adjustment must have been local. Indeed, local investors appear to have retreated from stocks to safer assets as the adjustment progressed.

Since early July, the Sensex has resumed an upward trend, and inflows from FIIs have returned to positive territory, suggesting some earlier overshooting—a view corroborated by business confidence indicators. Notwithstanding the current account deficit, a steady increase in foreign direct investment and net-positive inflows from FIIs, especially to manufacturing, business, and computer services, permitted a foreign exchange accrual of $15 billion in FY2005 (Figure 2.3.8), raising foreign exchange reserves by $10.1 billion (net of valuation change) to $145 billion. Foreign exchange reserves increased further by $13.4 billion in the first 4 months of FY2006. Despite these inflows and industrial export growth, the rupee remains under pressure as international oil prices firm.

2.3.7 Nominal exchange rate

Source: Reserve Bank of India, Database on Indian Economy, available: https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/, downloaded 16 August 2006.

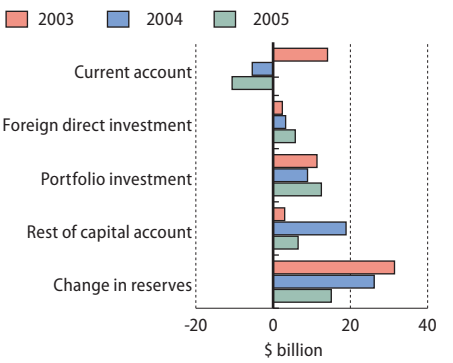
Prospects

Three of the four assumptions specific to India underlying the *ADO 2006* forecasts are maintained: gradual monetary tightening will continue through 2006; southwest monsoon conditions will be roughly average; and attempts to improve urban planning and expand infrastructure will continue. However, the fourth assumption—that the recommendations of a national committee on the pass-through of international oil and gas price increases to local fuel prices would be implemented by mid-2007—requires modification.

On the one hand, the growing losses of the oil-marketing companies imply both cash-flow problems that limit much-needed investment by these companies, and, ultimately, substantial fiscal pressure that portends further domestic fuel price increases. On the other, the general rancor that greeted the June fuel price hike, coupled with higher food price inflation and the restraints on the coalition Government, makes further large imminent price rises extremely unlikely. Therefore, while this forecast assumes further gasoline and diesel price increases later this fiscal year, rationalization with international prices by mid-2007 is unlikely. Similarly, the targeting of subsidies on liquefied petroleum gas and kerosene is unlikely to be tightened to exclude the nonpoor until later in the year, if at all.

Developments in FY2006 dictate only slight revisions to the growth forecast for FY2006, and none for FY2007. The hardening of interest rates (which was anticipated) is unlikely to significantly dampen domestic demand growth this fiscal year. On the demand side, still-strong business confidence, accelerating industrial production, widespread capacity constraints, and robust expansion of capital goods production imply that investment is unlikely to decelerate before FY2007 begins, even if infrastructure bottlenecks become tighter. Despite recent growth, consumer finance is not widespread (loans to consumers for housing

2.3.8 Change in reserves



Source: Reserve Bank of India, Database on Indian Economy, available: https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/, downloaded 1 August 2006.

and consumer durables accounted for only 8.6% of total bank credit in FY2004), so that changes in interest rates will have only minor effects on household spending. Conversely, delays in fuel price adjustments imply that nonfuel consumption may be slightly higher than was anticipated in *ADO 2006*, boosting real expenditures. The improved outlook for exports is slightly overshadowed by expected import growth.

Turning to the supply side, industrial expansion is expected to accelerate to around 9% in FY2006, almost catching up that of services. These trends point to an overall growth rate of 7.8% in FY2006 (Figure 2.3.9). The forecast for FY2007 remains unchanged, also at 7.8%, reflecting firming growth in industry and a maturing high-end services sector.

Sustaining the high industrial growth rates required to realize the FY2007 growth forecast (much less the 12% average industrial growth target of the recently released Approach Paper for the 11th Five-Year Plan: FY2007–FY2011) will require more and better infrastructure and continued high levels of investment.

Given both limited progress in attracting private infrastructure investment, as well as the improvements in governance, bureaucratic processes, and dispute-resolution mechanisms required to ensure an adequate investment environment, the Government has announced an ambitious plan for developing special economic zones (SEZs). It has approved private investments of a trillion rupees in SEZs over the next 3 years, which it estimates would boost employment opportunities significantly (though not all these jobs will be new, since some of them will reflect economic activity diverted to these enclaves). In addition to permitting captive infrastructure facilities, which should be easier to manage on a commercial basis than the nation's wider infrastructure, the SEZ Act of 2005 provides several incentives to participating firms, including exemption from customs duty, excise duty, etc; 100% income tax exemption for 5 years; and dedicated courts and administrative authorities for each SEZ. There is active debate on the fiscal cost of these incentives, which, in combination with other fiscal pressures, clouds the FY2007 outlook.

Some recent developments are contributing to inflationary pressures, while others are alleviating them. Recent inflation in essential food items is stoking inflationary expectations, as well as contributing to the actual FY2006 average inflation rate. However, changes in the way that government food security agencies use futures markets, the reduction in food import tariffs, and the normal monsoon forecast suggest that this food price spike may be short-lived, ameliorating inflationary pressures in both FY2006 and FY2007. Rising prices of fuel imports are certainly adding to inflationary concerns, even while the delays in pass-through mean that their direct impact on current prices will be limited.

Consequently, the baseline WPI inflation forecast remains unchanged from *ADO 2006* at 5.5% for FY2006 and 5.0% for FY2007 (Figure 2.3.10). However, inflationary risks are building: no experience exists to evaluate the likely efficacy of remedial actions on food prices in the newly liberalized environment; the fuel price problem is unlikely to be resolved soon; and while the RBI will probably need to take stronger measures to restrain liquidity, it remains wary of the real-economy consequences of

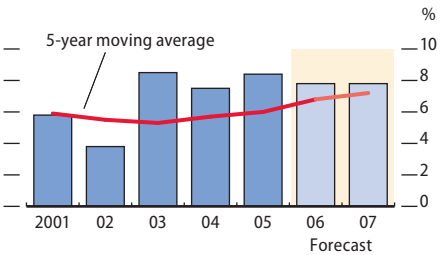
2.3.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	7.6	7.8	7.8	7.8
Inflation[a]	5.5	5.5	5.0	5.0
Current acct. bal. (share of GDP)	-3.0	-2.1	-3.3	-1.9

[a] Wholesale price basis.

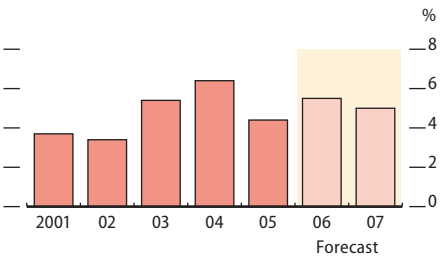
Source: Staff estimates.

2.3.9 GDP growth



Sources: Central Statistical Organization, available: http://mospi.nic.in/cso.htm, downloaded 3 June 2006; staff estimates.

2.3.10 Annual inflation



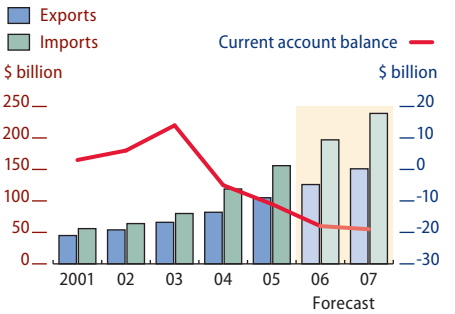
Sources: Reserve Bank of India, Database on Indian Economy, available: https://cdbmsi.reservebank.org.in/cdbmsi/servlet/login/, downloaded 31 July 2006; staff estimates.

doing so. Confirming these gathering risks, the RBI has signaled that, if necessary, it will not hesitate to squeeze liquidity further, perhaps by varying the medium-term interest rate (the RBI bank rate), which it has left untouched since April 2003, or even by raising the cash-reserve ratio.

As mentioned, the FY2005 current account deficit came in substantially lower than was expected when *ADO 2006* was produced. The acceleration of exports, particularly manufactures, appears to reflect a strengthening industrial export position across the board, and might well be sustained through FY2006. Thus, the current account forecast needs to be adjusted positively. However, relative to *ADO 2006*, this *Update* revises assumptions regarding international fuel and nonfuel commodity prices upward, while the Government has not strengthened price signals to curb domestic energy consumption to the extent earlier assumed. In light of these developments, the current account forecast for FY2006 is adjusted to reflect a deficit of $18.4 billion (Figure 2.3.11), or 2.1% of GDP, down from *ADO 2006's* 3.0% deficit. Similarly, a current account deficit of $19.0 billion, or 1.9%, is forecast for FY2007 (against 3.3% previously), as rising domestic fuel prices and stabilizing international oil prices constrain growth in the oil import bill.

The key risks to the above outlook stem from the hardening of interest rates, incomplete oil price pass-through, and the deteriorating fiscal position. The first of these three factors could eventually deter private investment; the second has inflationary and fiscal implications; and the third could severely limit the Government's ability to loosen critical infrastructure bottlenecks, thereby restraining much-needed investment. Because resolution of the fuel price problem has in effect been postponed, and the risks to investment would still be nascent this fiscal year, each of these risks factors, if realized, would adversely affect growth, inflation, and the fiscal position in FY2007.

2.3.11 Balance-of-payments indicators



Sources: Reserve Bank of India Bulletin, June 2006, available: http://www.rbi.org.in, downloaded 31 July 2006; staff estimates.

Indonesia

The impact of sharp rises in fuel prices and interest rates in 2005 checked economic growth in the first half of 2006, but increased public spending in the second half is expected to take full-year growth back to 5.4%, as forecast in *Asian Development Outlook 2006* (*ADO 2006*). In 2007, growth is seen picking up to 6.0%, reflecting easing inflationary pressures and a lift to investment from likely lower interest rates and from policy reforms. However, growth is still not strong enough to boost employment. A run of natural disasters has heightened vulnerabilities, and Indonesia has suffered the most deaths from avian flu.

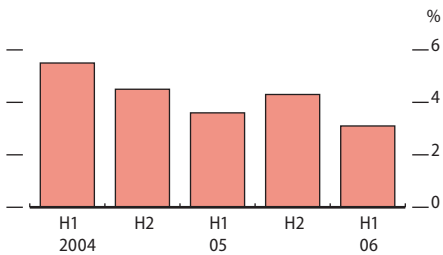
Updated assessment

In October 2005, the Government cut its expensive fuel subsidies and more than doubled the price of fuels. In addition, Bank Indonesia hiked its policy rate from 8.5% in July 2005 to 12.75% in December, in an attempt to damp rapid inflation sparked by the fuel price rises. These two sets of moves restored international investor confidence, as reflected in a return of capital inflows and a 7.2% appreciation of the rupiah in the first 7 months of 2006. But they also dented private consumption spending (Figure 2.4.1) and investment in the first half of 2006, which grew by only 3.1% and 0.9%, respectively, year on year. The effect was to lower GDP growth to 5.0% in the first half of 2006, from 5.9% in the year-earlier period.

Government spending, however, jumped by about 23%, both on improved budgetary execution and on increased fiscal transfers to the regions that were enabled by the fuel subsidy reduction. Net exports grew by 36%, supported by strong global demand for Indonesia's energy and commodities, and were the major contributor to aggregate growth from the demand side (Figure 2.4.2). Among industry groups, construction, transportation, and communication were the stronger-growth areas in the first half of 2006. All the major sectors expanded, and services were the biggest contributor to growth from the supply side (Figure 2.4.3).

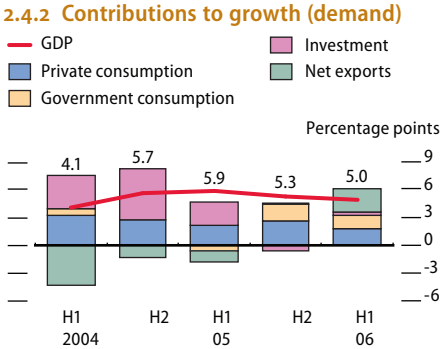
The combined impact of high interest rates (the policy rate was only eased back after May 2006, to 11.75% by late August) (Figure 2.4.4) and of long-standing problems of poor contract enforcement, inadequate infrastructure, and corruption has cut the growth of total investment to less than 3% year on year in the past 4 quarters, about one fifth of the rate of 2004 and early 2005. The investment-to-GDP ratio now stands at 22%, down from around 30% in the late 1980s and most of the 1990s. Despite this, a proposal for a simplified, one-stop approval process to spur foreign direct investment has been hampered by line ministries, which want to retain control over investments.

2.4.1 Private consumption growth



Source: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 15 August 2006.

2.4.2 Contributions to growth (demand)



Source: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 15 August 2006.

On the external front, the escalation of global prices for energy and metals pushed up the value of mining exports by just over 25% in US dollar terms during January–June 2006, year on year. Exports of oil and gas rose by about 15% to $10.4 billion, outpacing their imports (which rose by 13% to $9.0 billion), in part because demand for oil imports was moderated by the rise in domestic fuel prices. Total exports picked up by about 15%. The first-half 2006 trade surplus is estimated at around $18 billion, 50% greater than in the year-earlier period. The current account surplus for all of 2006 is now projected at 1.2% of GDP, up from 1.0% forecast in *ADO 2006* in April. Foreign exchange reserves, supported by returning capital inflows, shot up from $24.8 billion to $40.1 billion in the first half (Figure 2.4.5).

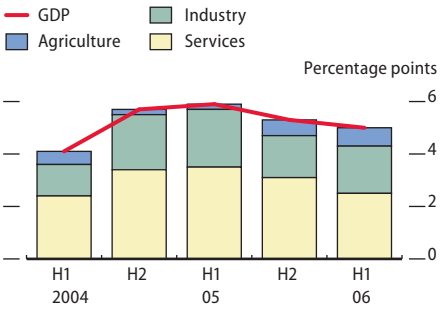
A noteworthy outcome in fiscal policy has been the increase in spending on development and social goals facilitated by the reduction in fuel subsidies. About $6 billion, or the equivalent of 1.8% of GDP, is available in 2006 for additional spending on education, health, and rural infrastructure, as well as for a cash-compensation program to cushion the impact of fuel price increases on the poor. In the second half of the year, a continued acceleration in public expenditures in these categories is expected to lift the growth pace. The Government has also raised civil service wages and paid its employees an extra month's salary as a bonus in July, which should provide some support to consumption. Further, the monetary authorities are expected to guide policy interest rates lower. The result is projected to be full-year GDP growth in line with the 5.4% *ADO 2006* forecast.

Greater public spending, together with a decision to postpone increases in electricity tariffs (so maintaining subsidies for power users), will help push up the 2006 fiscal deficit to about 1.2% of GDP, from 0.5% in 2005. Driven by the boost in fuel prices, average year-on-year inflation in the first half of 2006 rose to 16.2%, more than double a year earlier. Partly because of the hike in interest rates last year, upward pressure on inflation has eased, and by December 2006 the year-on-year inflation rate is expected to be down to 8.0%, giving a full-year average of around 14%.

Effective debt-management measures lowered public debt to 42% of GDP at end-June 2006, heading it toward the Government's target of 30% by 2010. Indonesia prepaid in June half ($3.7 billion) of its debt to the International Monetary Fund and plans to prepay the other half next year. There still are some near-term concerns on debt, including an increase in total public debt falling due this year to $8.1 billion, from $6.4 billion in 2005, and the fact that around 25% of all tax revenue is needed to pay interest on public debt. Standard & Poor's, citing an "improving fiscal and external performance," in July upgraded Indonesia's external debt rating to BB-minus (but still below investment grade).

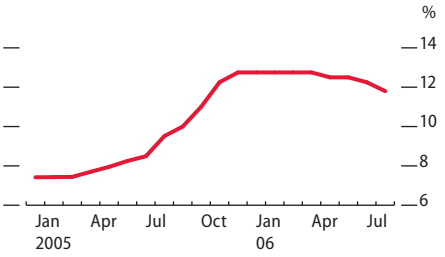
Despite progress in several policy areas, current rates of economic growth are insufficient to create jobs for all new entrants to the labor force. The economy has expanded at an annual rate of about 5% between 2004 and 2006, yet the unemployment rate in this period rose from 9.6% to 10.4% in the February 2006 labor force survey (Figure 2.4.6). Moreover, underemployment is high, with an estimated 30% of the labor force working fewer than 35 hours a week. Agriculture, which has traditionally provided jobs to those left out of the formal sector, is not growing fast

2.4.3 Contributions to growth (supply)



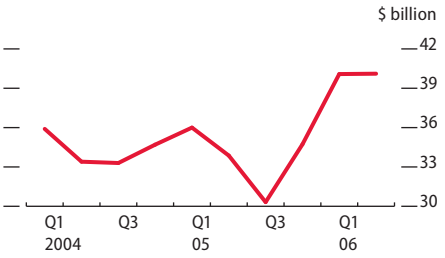
Source: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 15 August 2006.

2.4.4 One-month policy rate



Source: CEIC Data Company Ltd., downloaded 14 August 2006.

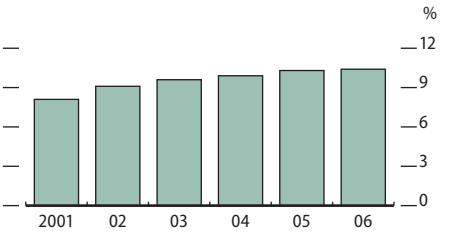
2.4.5 Foreign exchange reserves



Source: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 25 August 2006.

enough to absorb much of the increase in the labor force. Weakness in the labor market is also reflected in lower incomes: farmers' real wages fell by 2.3% in the 12 months to March 2006, and wages of industrial and construction workers came down by 10.4% and 2.2%, respectively, during 2005. Firms often cite lack of flexibility in the labor market as one factor discouraging investment, but planned revisions to labor laws are stalled as the Government tries to strike a balance between the interests of workers and employers.

2.4.6 Unemployment rate



Source: Badan Pusat Statistik, available: http://www.bps.go.id/index.shtml, downloaded 28 August 2006.

Prospects

The authorities are pursuing a vigorous policy reform agenda aimed at reviving investment, which enhances prospects that economic growth will reach about 6.0% in 2007 (Figure 2.4.7), as predicted in April. Three policy packages have been unveiled in 2006: an Infrastructure Policy Package that sets out reform goals in nine infrastructure sectors, supplemented by measures to boost investment; an Investment Climate Policy Package that supports broad-ranging reforms on tax, customs, investment law, and labor; and a Financial Sector Reform Package that aims to strengthen both banking and nonbanking sectors and to diversify sources of financial intermediation. Furthermore, a small and medium enterprise reform package is in preparation. Growth could exceed 6% if the reform agenda is implemented well enough to revive investment, and if public spending stays at higher levels throughout 2007, which looks possible.

The president has outlined plans to boost health spending in 2007 by 11%, education spending by 19%, and infrastructure investment by 5% compared with 2006 levels. This scaling-up will help accelerate development, if the authorities are able to effectively use the additional allocations. In this context, one problem is the practice by many local authorities of investing transfers from the national Government into Bank Indonesia certificates of deposit, rather than spending them on development. It is estimated that the equivalent of at least $4.5 billion, or 2.2% of GDP, is diverted this way. Causes include delays in disbursements and regulatory impediments related to decentralization, all of which slow spending. The Government has begun to focus on measures to unblock these funds to accelerate spending in the regions.

Private investment is projected to pick up in 2007, helped by proposed policy improvements, including legal amendments under deliberation in Parliament aimed at reducing the tax burden, strengthening governance of tax administration, and providing tax incentives for selected sectors. Some streamlining of the customs system should also help lift private investment. Private consumption is set to strengthen if inflation steps down as forecast to average 7.5% next year (Figure 2.4.8). Containing inflation will be assisted by a low political appetite for raising electricity prices now, though a power tariff revision will be needed or subsidies maintained to bolster the finances of the state electricity corporation. Externally, the current account surplus is projected to fall slightly to 0.9% of GDP (Figure 2.4.9) on a widening services deficit, stemming in part from higher international shipping and insurance costs.

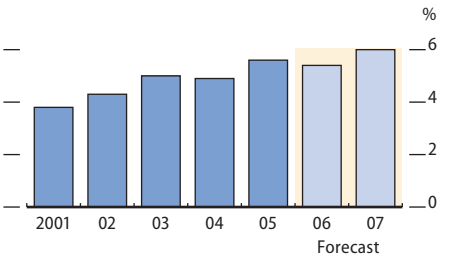
Accelerating infrastructure investment will be important if growth is to get a lift. In turn, this requires the Government to translate good policy

2.4.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	5.4	5.4	6.0	6.0
Inflation	14.0	14.0	7.5	7.5
Current acct. bal. (share of GDP)	1.0	1.2	0.9	0.9

Source: Staff estimates.

2.4.7 GDP growth



Sources: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 15 August 2006; staff estimates.

and regulatory measures adopted into viable public-private partnership projects. A list of 91 infrastructure projects was drawn up in early 2005 for such potential partnerships, but the only contracts awarded thus far are for three gas pipelines, one power plant, and three toll roads. This reflects a continuing incapacity to follow through on policies or regulations, rather than problems with the policy framework itself. The authorities are now focusing on a smaller and more realistic set of projects.

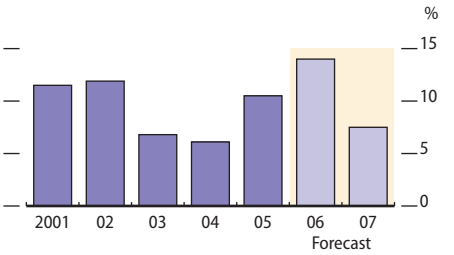
The challenge of improving the civil service is likely to be addressed in 2007. The Government appears to recognize that unless administrative capacity improves, policy or regulatory reforms may not be successful. For example, the president has established a high-level team on civil service reform, while a package of laws covering public administration and the ethics of state officials is being prepared. The draft budget provides for increasing civil service salaries again in 2007, and for similar reasons the Minister of Finance has set up a working group to review the civil service remuneration structure with a view to improving incentives to attract and retain able administrators, initially aimed at high-ranking officials. The recommendations of the group are expected to be implemented gradually from 2007 and replicated across the broader civil service. However, translating all these measures into action faces incentive constraints as well as political sensitivities.

Another policy area for strengthening is dealing with the aftermath of natural disasters, especially since recent events have highlighted the country's vulnerability to them. As Indonesia was recovering from the December 2004 earthquake and tsunami in Aceh, it was struck by an earthquake in May 2006 in Yogyakarta and Central Java, and again by an earthquake and tsunami on the southern Java coast in July, all of which require significant attention and funding from the Government. Social and economic structures come under heightened stress when disasters hit within a relatively short time. Disaster preparedness and management need to take a more central role in regular planning and fiscal management to enhance the economy's resilience.

Not a disaster, but a growing anxiety, avian flu poses an increasing risk. With 46 human deaths as of August 2006, Indonesia has become the country hardest hit by the disease. The Government has estimated that about $900 million is needed over the next 3 years to combat the problem, but there are serious concerns about availability of resources and commitment by the authorities to containing the spread of the disease in the poultry stock.

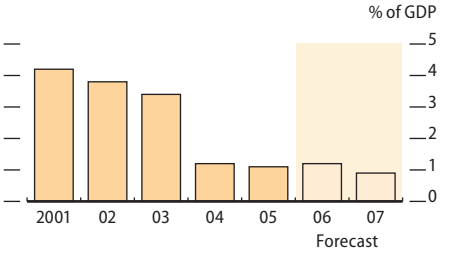
Finally, given a dependence on portfolio investment flows and weakness in foreign direct investment inflows in recent years, Indonesia is vulnerable to shifts in international investor sentiment and developments in global financial markets. This reinforces the need to accelerate reforms that would swing the composition of foreign investment toward greater direct, rather than portfolio, investment.

2.4.8 Inflation



Sources: CEIC Data Company Ltd., downloaded 14 August 2006; staff estimates.

2.4.9 Current account surplus



Sources: Bank Indonesia, available: http://www.bi.go.id/web/en, downloaded 26 July 2006; staff estimates.

Malaysia

A pickup in investment has been a bright spot so far in 2006, with investment the main contributor to GDP growth in the first half of the year. This was timely because consumption growth has eased in the face of higher than expected inflation and rising interest rates. GDP is now projected to expand by 5.2% this year, slightly below the prediction of 5.5% made in *Asian Development Outlook 2006* (*ADO 2006*) in April this year. The growth forecast for 2007 is revised down more sharply, to 5.0% from 5.8%, on expectations that the United States (US) economy and global demand for information technology products will soften.

Updated assessment

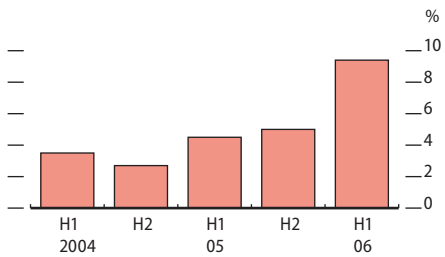
The economy expanded by 5.7% in the first 6 months of 2006, up from 5.1% in the year-earlier period. Fixed investment, spurred by capacity utilization of 78% in export-oriented manufacturing and by solid expansion for some export lines, rose by 9.4%, much faster than in the past 2 years (Figure 2.5.1). Total investment was the main driver of aggregate growth in the first half, with about equal contributions from fixed investment and an increase in inventories. Private sector investment performed particularly well. Private consumption grew by 7.4%, slowing from near double-digit rates in the past 2 years as inflation and rising interest rates took a toll (Figure 2.5.2). Government consumption rose slowly and made little contribution to growth, and net exports contracted.

On the supply side, industry made the biggest contribution to aggregate growth in the first half of 2006. The manufacturing subsector grew by 8.4%, accelerating from 2005, with strong expansion in production of electronics, chemical and petroleum products, and textiles and footwear. In contrast, mining production declined a little, reflecting the temporary shutdown of some liquefied natural gas facilities to expand capacity. Construction also contracted, damped by cutbacks in public works and by slowing residential building after a boom in recent years.

Growth in services decelerated to 5.7%, affected by the moderation in private consumption, though the services sector remained a major contributor to growth. Agriculture recorded a sizable 6.5% production gain, buoyed by a jump in rubber production as global prices have surged. Natural rubber benefits from rising prices of synthetic rubber, which, made from petrochemicals, is heavily influenced by global oil prices.

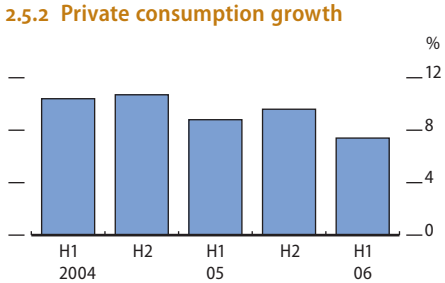
In the second half of the year, a softening US economy and weakening leading indicators for information technology demand point to slowing export growth, which, combined with flagging consumer demand, is likely to cause GDP growth to dip slightly. This would leave full-year growth at around 5.2%, compared with an estimate of 5.5% in *ADO 2006*.

2.5.1 Fixed investment growth



Source: Bank Negara Malaysia, available: http://www.bnm.gov.my, downloaded 31 August 2006.

2.5.2 Private consumption growth



Source: Bank Negara Malaysia, available: http://www.bnm.gov.my, downloaded 31 August 2006.

Consumer inflation picked up to average 3.9% in January–July. Factors included reductions in fuel subsidies (which led to a 23% jump in fuel prices in February), higher duties on cigarettes and liquor, and steeper highway toll charges. An average 12% rise in electricity tariffs in June will feed through into the general price level in the second half. Electricity accounts directly for 3% of the consumer price index, and the indirect impact of the price rise will be significant for some industries' production costs. Inflation for all of 2006 is forecast to average 4.0%, up from 3.5% penciled in by *ADO 2006* and the highest rate in 8 years.

To combat inflationary expectations, Bank Negara Malaysia, the central bank, raised the benchmark overnight policy rate by 80 basis points to 3.5% between November 2005 and April 2006, but this still left the policy rate negative in real terms (Figure 2.5.3). The authorities believe that the rate is below its "neutral" level and is still supportive of growth. Yet despite these rate increases, the differential between Malaysian and US interest rates widened. Still, foreign reserves rose by over $8 billion in the first half to $78 billion, with the current account surplus outweighing net outflows on the capital account.

Federal spending got off to a slow start in 2006, so that the budget was in surplus by RM11.3 billion, or 4.3% of GDP, at end-June. Traditionally, government spending is stronger in the second half of the year, and if this is the case once more, a fiscal deficit of 3.5% of GDP for the full year, in line with *ADO 2006*, is expected.

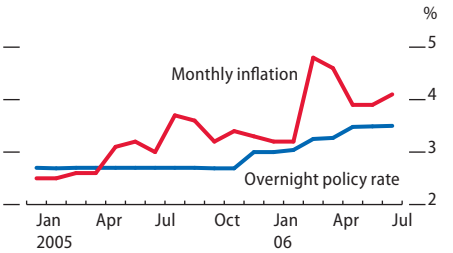
Merchandise exports rose by 14.3% in US dollar terms in the first 6 months of 2006, lifted by higher global prices for export commodities such as oil and rubber. Imports grew by 16.3% (Figure 2.5.4) as the pickup in investment spurred imports of capital equipment. Accelerated investment will likely maintain a higher growth rate of imports than exports, lowering slightly the trade surplus in 2006. The current account surplus will also decline modestly, but remain substantial at about 14.5% of GDP, revised up from 13.0% in *ADO 2006*. (The upward revision is due to softer than expected consumer spending, resulting in a steeper increase in saving relative to investment.) Despite net capital outflows from direct and other investments, the overall balance of payments was in surplus by $1.4 billion in the first quarter of 2006. The ringgit appreciated from a monthly average of RM3.75/$ in January to RM3.63 in May, but then consolidated at RM3.68 in late August (Figure 2.5.5).

In the labor market, the workforce expanded faster than employment, helping nudge up the unemployment rate to 3.8% in the first quarter of 2006. Of particular concern is the rising number of unemployed graduates—many with inadequate command of English, despite policies introduced to improve language abilities, and with less marketable degrees—estimated to have reached 80,000 last year.

Prospects

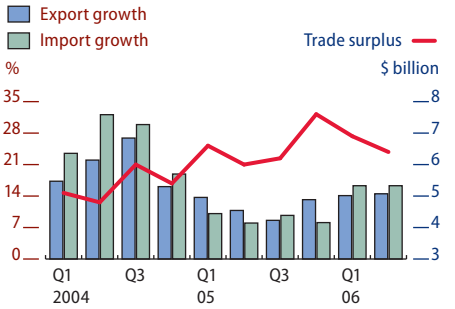
The combination of the expected slowdown in the US economy (the biggest market for Malaysia's exports), the softening of global information technology demand (electrical and electronic products account for 53% of total exports), as well as slower growth in domestic consumption will trim economic growth in 2007. Malaysia's deceleration will be cushioned

2.5.3 Inflation and policy rate



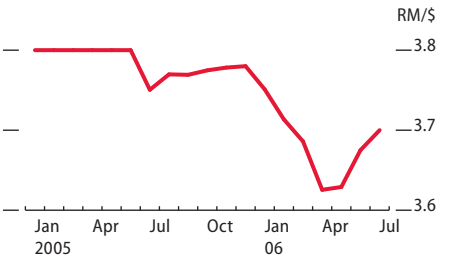
Source: Bank Negara Malaysia, available: http://www.bnm.gov.my, downloaded 7 August 2006.

2.5.4 Trade indicators



Source: CEIC Data Company Ltd., downloaded 15 August 2006.

2.5.5 Monthly nominal exchange rate



Source: CEIC Data Company Ltd., downloaded 15 August 2006.

to some degree by strong demand for commodity and energy exports as well as by growth in investment. Government development spending will also increase, contributing to keeping the fiscal deficit at over 3%, which reflects less emphasis on an earlier goal of moving toward a balanced budget. In this context, the GDP growth forecast for next year is revised down to 5.0% (Figure 2.5.6) from 5.8% in *ADO 2006*.

The softer economic outlook, slightly weaker employment prospects, and the higher costs of fuel, utilities, and borrowing (at a time of increased household debt) are projected to further damp growth in consumption spending. Investment will remain fairly robust in 2007, driven largely by the rise in development spending. An ongoing need for imported capital equipment is likely to continue to push up imports faster than exports, but the trade surplus is still expected to increase since exports' total value is much higher than imports'. For that reason, the current account surplus will be larger in value terms, but will probably decline slightly from 2006's level as a share of GDP to 14.1% (Figure 2.5.7).

The Ninth Malaysia Plan (2006–2010) will have an impact as 2007 progresses—tender documents for the first 880 projects, valued at RM15 billion, will be ready only late this year. With new infrastructure projects initiated under the development plan offsetting a likely pullback in residential building, construction is expected to rebound modestly in 2007. The plan projects 6% annual GDP growth over the next 5 years and a marginal narrowing in the budget deficit to 3.4% of GDP in 2010, from 3.8% in 2005. It has a different focus from the previous plan, and concentrates both on smaller-scale projects that will yield more direct economic benefits and on development outside the main population center of the Klang Valley (which should help reduce regional disparities in levels of development).

The authorities have also unveiled a Third Industrial Master Plan, which targets the development of higher value-added manufacturing as well as expansion of the services sector, such that services generate 60% of GDP by 2020, up from about 50% currently. This master plan puts the annual GDP growth goal at 6.3% on average between now and 2020, requiring growth in manufacturing and services of 7.7% a year.

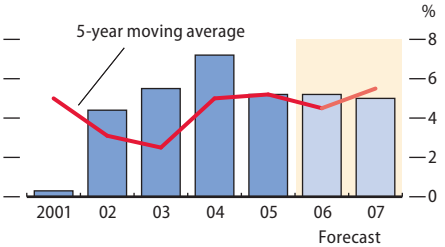
Inflation remains a domestic risk to the near-term economic forecasts. If global oil prices rise, or even stay at current lofty levels, further increases in domestic fuel prices next year are possible. Stronger than expected inflation, in turn, could prompt higher interest rates, which would further dent the growth outlook. Another threat would be delays, inefficient implementation, or a lack of transparency in government procurement for the Ninth Malaysia Plan, which should be a driver of the economy over the next few years. For the financial sector, high household debt levels and a rising glut in residential property remain potential problems.

2.5.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	5.5	5.2	5.8	5.0
Inflation	3.5	4.0	3.3	3.3
Current acct. bal. (share of GDP)	13.0	14.5	11.2	14.1

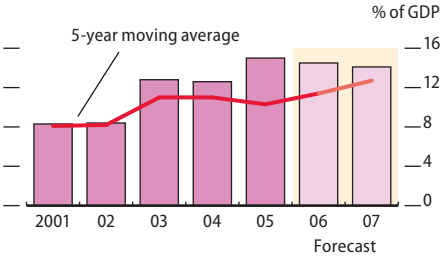
Source: Staff estimates.

2.5.6 GDP growth



Sources: Bank Negara Malaysia, available: http://www.bnm.gov.my, downloaded 1 August 2006; staff estimates.

2.5.7 Current account surplus



Sources: Bank Negara Malaysia, available: http://www.bnm.gov.my, downloaded 1 August 2006; staff estimates.

Pakistan

The economy advanced strongly in FY2006 (ended June 2006), despite the shocks of the devastating earthquake of 8 October 2005 and the continued surge in international oil prices. This marked a continuation of the fast growth stemming from the Government's far-reaching macroeconomic and structural reforms initiated in 2001, which subsequently propelled the economy to annual expansion of about 7% over 4 years. A new dynamism has taken hold in economic activity and social indicators have improved, which together augur well for continued rapid development. The main macroeconomic challenges are bringing down high inflation and containing the markedly growing trade and current account deficits, which are largely financed by nonrecurring inflows. Since these inflows accrue to the budget, fiscal adjustment is also an issue. Relative to the forecasts in *Asian Development Outlook 2006* (*ADO 2006*) for FY2007, this Update makes little change to GDP growth, sees greater progress in reducing inflation, and projects a wider current account deficit.

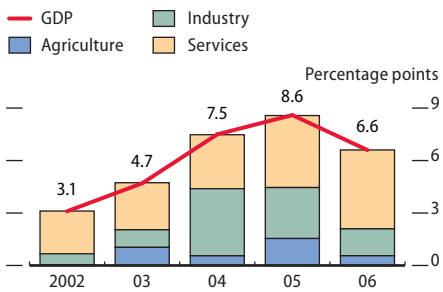
Updated assessment

The economy maintained robust growth of 6.6% in FY2006, coming in marginally higher than the *ADO 2006* projection of 6.5%. Slower growth (as expected, following a cyclical peak in the previous year) was seen in reduced contributions to GDP growth from agriculture and industry (Figure 2.6.1). Agriculture's very weak performance was in large part a reflection of lower output of the major crops of cotton (down 12.9% from the record high in FY2005) and sugarcane (off 6.2%), as the exceptionally favorable production conditions deteriorated somewhat in FY2006. Minor food crops also showed a lackluster outturn, though livestock picked up, growing by 8.0%.

Industrial expansion fell by about half, to 5.9%, from the prior-year level. This was mainly because growth in large-scale manufacturing declined to 9.0% from 15.6% on capacity constraints, availability and prices of some inputs, and scattered power outages toward the end of the year, as well as the high-base effect of FY2005. Construction activity also slowed somewhat, but remained robust at 9.2%.

In marked contrast, services (accounting for just over half of GDP) generated a further head of steam and recorded their highest ever growth of 8.8% in FY2006, providing a welcome fillip to the economy. Financial services, telecoms, and wholesale and retail trade all continued to expand rapidly, on the back of new retail banking services; a jump in the number of mobile telephone users to 34.5 million at end-June 2006 from 12.0 million a year earlier; and continued double-digit growth in exports and imports.

2.6.1 Contributions to growth (supply)



Source: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 7 June 2006.

On the expenditure side, contributions to real GDP growth have varied widely over the past several years (Figure 2.6.2) with consumer spending prominent in the most recent years. In FY2005 and FY2006, investment expenditure strengthened substantially and amounted to 20.0% of GDP in FY2006, up from 16.8% in FY2002. In FY2005, the contribution of net exports turned negative, reflecting a surge in imports in the year; they were also a negative factor in FY2006.

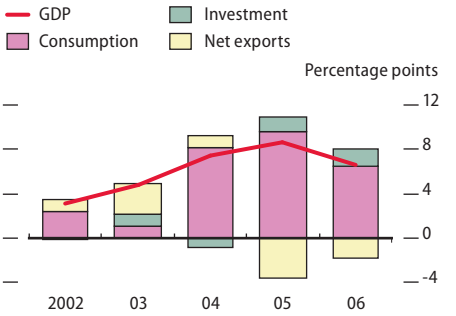
High inflation persisted for a second year in FY2006, though average consumer price inflation declined to 8.0% from 9.3% in the previous year (Figure 2.6.3). The reduction of price pressures was more apparent in the second half of FY2006, as food inflation declined to almost half its year-earlier level. High inflationary pressures prevailing in these 2 years—when the Pakistan rupee/dollar exchange rate was stable—were stoked in part by escalation in international prices, especially of oil; and in part by domestic supply constraints, especially for certain basic food items. However, the principal cause was an upsurge in domestic demand (Figure 2.6.4) fostered by the momentum of dynamic growth, and bolstered by increased credit availability, especially personal and housing credit.

Demand pressures on prices have been partly mitigated by a spillover into a large volume of imports, while the main policy response has been to tighten the monetary stance. Supply constraints have been addressed by lowered tariffs on some food items and by expanded import programs for certain staple foods. In addition, budget expenditures have been raised on items that should, in time, raise agricultural productivity. Some success on the inflation front was achieved in the past fiscal year as policies took hold; however, year-on-year core inflation at 6.3% in June 2006 was still uncomfortably high, though 1.1 percentage points lower than a year earlier.

The State Bank of Pakistan (SBP) raised its discount rate from 7.5% to 9.0% in April 2005, but coming late in the fiscal year the move had relatively small impact on annual inflation. The implementation of a tighter monetary stance in FY2006 did not, though, include a change in the policy rate: SBP focused on draining liquidity from the interbank market to push up the whole interest rate structure and thereby rein in the expansion in credit. Despite the fact that the 6-month treasury bill rate stayed negative in real terms through most of FY2006, the average lending rate charged by banks in real terms was positive from the start of the year and, at 10.1% in June 2006, was 250 basis points above year-on-year consumer price inflation for the month. SBP's approach worked, and over the year growth of private sector credit decelerated markedly to 23.5% from 34.4% in FY2005 (Figure 2.6.5). Also in the period, overall monetary expansion (M2) moderated to 15.0%, from 19.3%, and was less than the 17.2% increase in nominal GDP.

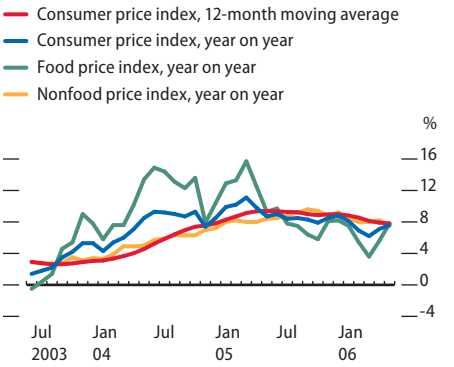
The general government budget remained expansionary in FY2006, with expenditure up by about 27%, reflecting a policy seeking to sharply raise spending on poverty reduction and to improve infrastructure. The overall fiscal deficit worsened to 4.2% of GDP, against a target of 3.8% (though excluding unplanned spending related to the 8 October earthquake, the deficit was only 3.4%). While the budgeted expansion in tax revenue was realized, the increasing importance of receipts from the United States for logistics support for operations in Afghanistan, of

2.6.2 Contributions to growth (demand)



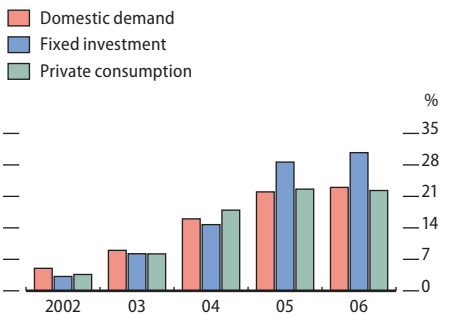
Source: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 7 June 2006.

2.6.3 Inflation



Sources: Ministry of Finance, available: http://www.finance.gov.pk; State Bank of Pakistan, available: http://www.sbp.org.pk, downloaded 7 August 2006; CEIC Data Company Ltd., downloaded 16 August 2006.

2.6.4 Growth of nominal demand components



Source: Federal Bureau of Statistics, available: http://www.statpak.gov.pk, downloaded 11 August 2006.

privatization proceeds, and of foreign grants—together amounting to 2.4% of GDP—raises the issue of sustaining expenditure over the long term.

The balance-of-payments position worsened markedly in FY2006, as imports powered ahead by 31.3%, against only 14.0% growth in exports. Oil imports leaped by 66.6%, accounting for one third of the rise in the import bill (Figure 2.6.6). This outsized jump in oil imports (relative to higher oil prices in this period) reflects buying under long-term contracts as earlier price rises are now showing up with a time lag. Apart from this, the increase in non-oil imports (they account for about three fourths of total imports) was striking at 32.1%, reflecting the large expansion in domestic demand. Accordingly, the trade deficit deteriorated sharply. The current account deficit rose to $5.7 billion, or 4.4% of GDP, from 1.6% in FY2005.

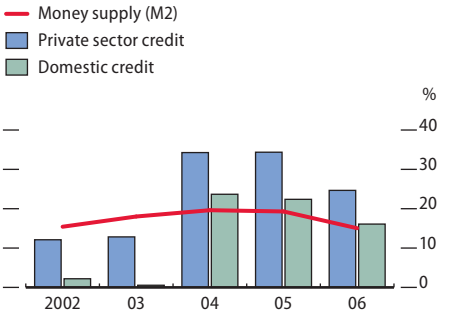
Other worrying features were that the current account deficit rose so strongly, despite receipts of $1.1 billion from the United States for logistics support; and that one third of current account deficit financing was nonrecurrent, and related to inflows from privatizations and foreign investment in equities. The heavy reliance on these nonrecurrent and sometimes volatile inflows is a major issue for sustaining such high levels of both imports and the current account deficit, highlighting the Government's need to strengthen the underlying fundamentals of the balance of payments.

In addition to the privatization and equity inflows, a large surplus on the financial account in FY2006 was buoyed by substantial private capital inflows (both direct investment and borrowing) and a moderate expansion in government borrowing, including an $800 million Eurobond issue that was well received by the market. An overall $1,328 million payments surplus raised foreign exchange reserves to $10.8 billion at end-June 2006. The nominal exchange rate stayed in a narrow range throughout the fiscal year, closing at PRs60.2/$ at end-June 2006.

High economic growth in recent years and a significant increase in pro-poor public expenditure has had a positive impact on poverty reduction, as consumption poverty (measured by the national poverty line) fell to 23.9% in FY2005 from 34.5% in FY2001. Poverty declined in both rural and urban areas. The literacy rate and primary school enrollment also improved, as did the national unemployment rate, moving from 8.3% in FY2002 to 6.5% in the first half of FY2006.

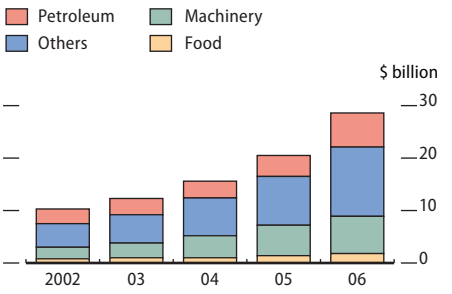
The privatization of state-owned enterprises accelerated in FY2006, when government assets worth PRs196 billion ($3.3 billion) were sold, compared with PRs43 billion ($0.7 billion) in FY2005. With the sale of 26% of the shares of Pakistan Telecommunication Company in January 2006 and the transfer of its management to the private sector, almost the entire telecoms sector is now in private hands. As a result of privatization and reforms in the past several years, telecoms and banking have emerged as two of the most vibrant sectors in the economy.

2.6.5 Growth of money and credit



Sources: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 14 August 2006; State Bank of Pakistan, available: http://www.sbp.org.pk, downloaded 29 August 2006.

2.6.6 Imports by major commodity



Source: CEIC Data Company Ltd., downloaded 18 August 2006.

Prospects

As well as the *Update*'s baseline conditions for the global economy, forecasts for FY2007 are based on the assumption that the prudent economic policies pursued in the past 6 years will be continued and

that macroeconomic stresses that have emerged in the last 2 years will be addressed. Most important, the *Update*'s forecasts presuppose that SBP will carry out monetary tightening and that budget reliance on SBP finance will be consistent with attainment of the monetary objectives.

FY2007 production conditions in the main commodity-producing sectors are expected to improve from FY2006. A positive outlook is also underpinned by a substantial strengthening in investment in FY2006 and forecasts of yet further increases the following year. GDP growth in FY2007 is now projected at 7.0%, slightly below the *ADO 2006* expectation.

Substantial public sector investment in irrigation in the last few years and a sharp increase in imports of agricultural machinery in FY2006 are seen boosting agricultural output, as will the duty-free import of tractors, enhanced subsidies on fertilizers, and the new package of incentives for the livestock subsector, announced in the FY2007 budget. Assuming normal weather conditions, agriculture is projected to grow by 4.5% in FY2007.

Growth in industry is expected to rebound to 9.1%. New investments, especially in the textile, cement, and fertilizer subsectors, and incentives provided in the FY2007 budget for exports of leather and footwear goods, and marble, as well as for rice-processing plants, should buoy output. In services, heavy foreign investment in telecoms in recent years will help the subsector maintain fast momentum in FY2007. Strengthened by reforms and privatization, the financial services industry will also maintain robust growth. Nevertheless, services-sector growth as a whole is projected to slow to a more sustainable 7.1% in FY2007, following the very rapid rises of the last 2 years.

In the FY2007 budget, extension of the tax net to real estate transactions and raised tax rates on some financial services are expected to increase receipts at a very healthy double-digit rate, while nontax receipts are likely to exceed the budget estimate. Current expenditure, however, may exceed the budget target for two main reasons: a likely overrun in defense expenditure due to ongoing operations against militants; and possibly, greater domestic debt servicing. Various measures favoring low-income groups announced in the FY2007 budget may also raise current spending. On balance, the fiscal deficit, targeted at 4.2% of GDP in FY2007, including 0.6% for earthquake expenditure, is likely to increase to 5.0% of GDP (Figure 2.6.7), with the budget as a whole continuing to impart a strong expansionary impetus to the economy.

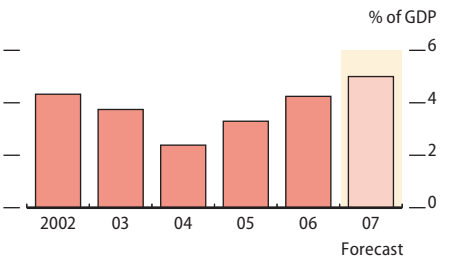
Inflation is forecast to decline in FY2007 to average 6.5%. However, this moderation depends crucially on SBP's implementing a tighter monetary policy to keep domestic demand in check. Already in July, SBP tightened its stance by raising its policy rate (the 3-day repo rate, which is its rediscount rate) from 9.0% to 9.5%, and adjusted upward both the banks' cash-reserve requirement ratio and their statutory liquidity requirement ratio. These measures are likely to impact on domestic demand, but only with a lag. SBP's Monetary Policy Statement for July–December 2006 set a program for FY2007 that envisages lowering growth in monetary assets (M2) to 13.5% and plans a reduction in private sector credit growth to 18.4%. Achieving these targets, aimed at reducing inflation to 6.5%, will again require SBP to focus on money market conditions to control reserve money appropriately.

2.6.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	6.5	6.6	7.3	7.0
Inflation	8.5	8.0	7.6	6.5
Current acct. bal. (share of GDP)	-4.9	-4.4	-3.1	-5.5

Sources: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 7 June 2006; staff estimates.

2.6.7 Budget deficit

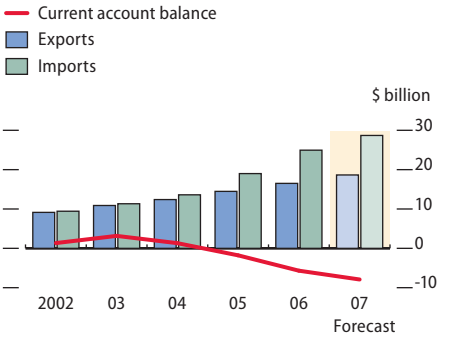


Sources: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 7 June 2006; staff estimates.

Import growth is likely to decelerate in FY2007, though projected healthy GDP growth and the substantial increase forecast for investment will sustain high demand. Coming off FY2006 highs, import growth is expected to remain still vigorous at 15.0%. On the other side, taking account of projected strong expansion in global trade, continued safeguards specific to the People's Republic of China (a major competitor) imposed on certain garment and textile items by the United States and European Union, and the lower antidumping duty on Pakistan bed linen imports set by the European Union, total exports in FY2007 are expected to rise by 13.0%. With these main determinants, the current account deficit is now projected to increase to $7.9 billion (Figure 2.6.8), or 5.5% of GDP, well above the 3.1% forecast in *ADO 2006*.

The burgeoning current account deficit, continuing high inflation, and latent power shortages are potential risks to the country's medium-term economic prospects. Moreover, additions to the pro-poor measures already announced in the FY2007 budget may, in the lead-up to the 2007 general elections, further weaken the budgetary position in the coming year.

2.6.8 Balance-of-payments indicators



Sources: Ministry of Finance, available: http://www.finance.gov.pk, downloaded 7 June 2006; staff estimates.

Philippines

The outlook for 2006 has brightened. GDP is forecast to grow by 5.4%, faster than expected in *Asian Development Outlook 2006* (*ADO 2006*); inflation is likely to be slightly lower and the current account surplus larger than earlier projected; and long-standing fiscal weaknesses are starting to be addressed. Some problems remain: fixed investment is weak and job creation is inadequate to make a meaningful dent in unemployment and underemployment. Looking ahead to 2007, the economy is seen expanding by about the same rate as this year. A sustainable acceleration in growth would require further progress on fiscal consolidation (enabling higher development spending) and a durable improvement in investor sentiment.

Updated assessment

The economy expanded by 5.6% in the first half of 2006, faster than the 4.8% rate of a year earlier. The acceleration followed a turnaround in agricultural production, which accounts for about a fifth of GDP, and better performance of the industry sector (about one third of GDP). Net factor income from abroad remained strong and gross national product rose by 6.5%, over a percentage point higher than a year earlier.

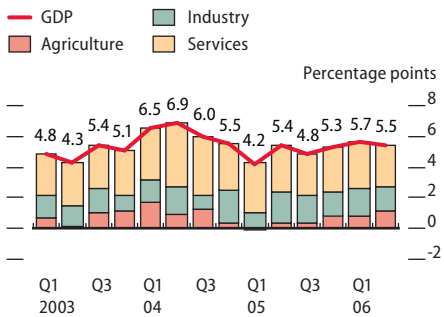
As the effects of the drought induced by the El Niño weather phenomenon in early 2005 receded, output of major crops—rice and corn (maize)—increased sharply. Concerns subsided during the first half that La Niña, which brings torrential rains and floods, would reduce farm production. Expansion of agricultural output contributed 1 percentage point to GDP growth in the first half of 2006. In contrast, agriculture had subtracted from aggregate growth in the first quarter of the previous year and made only a minor contribution in the second (Figure 2.7.1).

Industrial expansion also picked up from a year earlier as output in manufacturing, which accounts for about three quarters of industry, was boosted by stronger exports and domestic demand. The services sector (nearly half of GDP) was again the main contributor to GDP growth in the first half, but this sector grew at a more moderate rate than a year earlier.

On the demand side, personal consumption (about three quarters of GDP) contributed 4.2 percentage points to growth in the first half of 2006 (Figure 2.7.2). A modest improvement in labor market indicators and higher farm incomes shored up consumption, as did continued strong inflows of remittances from overseas workers. Net exports contributed much more significantly to GDP growth than in the first half of 2005. Investment continued to decline, for a sixth consecutive quarter.

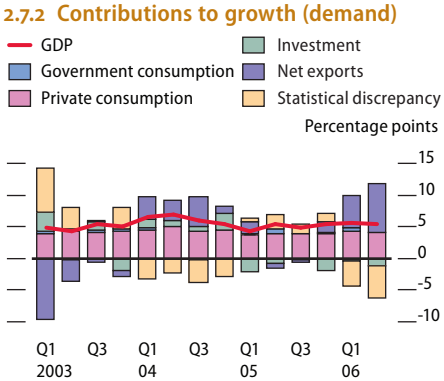
A rebound in export expansion has been a welcome feature of the

2.7.1 Contributions to growth (supply)



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: http://www.nscb.gov.ph, downloaded 31 August 2006.

2.7.2 Contributions to growth (demand)



Sources: Asian Development Outlook database; National Statistical Coordination Board, available: http://www.nscb.gov.ph, downloaded 31 August 2006.

economy so far this year. Merchandise exports, in US dollar terms, rose by about 17% in the first 6 months, much stronger than a year earlier (Figure 2.7.3). A major reason was a revival in exports of electronic products (57% of total exports), comprising primarily semiconductors, which rose by 12.5% in the 6 months to June, compared with less than 1% a year earlier. Merchandise imports rose by 8.4% in the January–June period, reflecting faster domestic economic growth, higher world oil prices, and the import-intensity of electronic products, offset in part by a reduced need for food imports and weak demand for equipment investment. The merchandise trade deficit narrowed by about half in the first 6 months to $1.8 billion from a year earlier.

Overall, the outlook for 2006 has improved. Growth momentum through the second half should be supported by agriculture and exports, and by the likelihood that an enhanced fiscal position will support consumer and investor sentiment. On these factors, the GDP forecast for this year is revised up to 5.4%.

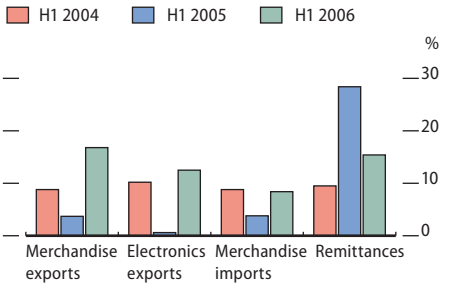
Balance-of-payments data available for the first quarter indicate that buoyant remittances from overseas workers and a smaller deficit on the services account—partly reflecting healthy growth in net travel receipts and in call center income—bolstered the current account surplus to 4.4% of GDP from 3.3% a year earlier. In the first half of the year, remittances rose by about 15% to $6.0 billion. These developments have led to an upward revision in the forecast for the 2006 current account surplus to 2.9% of GDP.

Net inflows of portfolio and direct investment were recorded on the capital account. However, net foreign direct investment totaled just $398 million in the first quarter, mainly as a result of increased intercompany loans, suggesting that investment is geared more toward expansion of existing operations rather than establishment of new ones. The overall balance-of-payments surplus exerted some upward pressure on the currency, which the central bank sought to keep down by accumulating foreign exchange reserves. Gross international reserves rose to $21.1 billion in June, providing 4.3 months of import cover (Figure 2.7.4).

Consumer price inflation slowed a little to average 7.0% in the first 7 months of the year from the same period in 2005 (Figure 2.7.5). The increase in farm production helped, by slowing the rise in food prices. The full-year inflation forecast is lowered marginally to 6.7% from that made in *ADO 2006*. With the moderation in inflation as well as a lower risk premium, as reflected in narrower spreads of Philippine bonds over US treasuries and a stronger peso (Figure 2.7.6), the central bank has kept policy rates steady since November 2005.

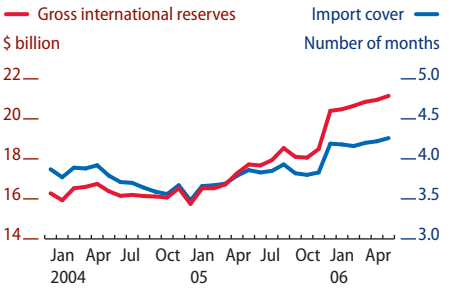
An improved fiscal performance saw the national Government's deficit narrow to P31.5 billion in the January–June 2006 period, less than half the level of a year earlier, and two thirds below the target deficit for this period (Figure 2.7.7). Of this two thirds, and relative to the targets, 25% reflected higher revenue, 55% lower noninterest expenditure, and 19% lower interest payments. Encouragingly, total revenue was up by 21% year on year, 3.3% above target, as receipts of the bureaus of Customs and the Treasury exceeded targets. Receipts of the Bureau of Internal Revenue (68% of the total) were slightly below the first-half

2.7.3 Growth in trade and remittances



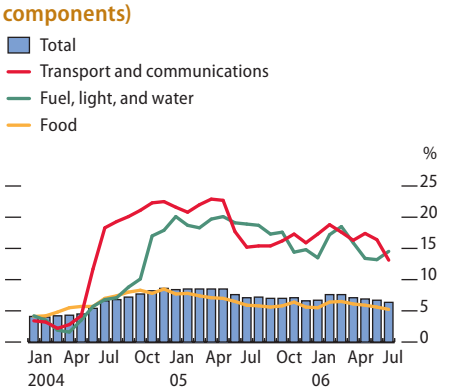
Sources: CEIC Data Company Ltd., downloaded 2 August 2006; National Statistics Office, available: http://www.census.gov.ph, downloaded 25 August 2006.

2.7.4 Reserves



Source: Bangko Sentral ng Pilipinas, available: http://www.bsp.gov.ph, downloaded 2 August 2006.

2.7.5 Monthly inflation (total and selected components)



Sources: National Statistics Office, available: http://www.census.gov.ph; CEIC Data Company Ltd., downloaded 4 August 2006.

target, though they were 22% above the year-earlier level, following implementation of a new value-added tax (VAT) law and an increase in the VAT rate from 10% to 12%.

Fiscal gains enabled a moderate expansion in first-half expenditure. Noninterest outlays rose by 10% year on year in the first half, but remained about 9% below target, implying room for still-higher spending, especially on social and physical infrastructure, without jeopardizing the objective of fiscal consolidation.

With a significant gain in receipts and a likely shortfall in expenditure, the fiscal deficit for the full year is expected to undershoot the Government's target of P125 billion (2.1% of GDP), continuing its trend decline from a peak of 5.3% in 2002. These narrower deficits, and the associated increases in the primary surplus, have contributed to falling interest rates, an appreciating peso (against the dollar), and declining debt ratios (Figure 2.7.8). However, the debt burden is still high—the national Government's debt was equivalent to 71% of GDP in March, excluding contingent liabilities of 10.2% of GDP. Interest payments on the debt still consume more than one third of government income, so a sustained increase in tax collection will be needed to finance necessary development expenditure over the medium term.

Although the labor market strengthened somewhat, the rate of employment creation remains below the Government's annual target of 1.5 million new jobs. Employment rose by 2.5% in April from a year earlier, or barely matching the rate of increase in the labor force, with agriculture and services the main sources of new jobs. The unemployment rate edged down to 8.2% in the 12 months to April, as did the underemployment rate, but to a still-high 25.4%.

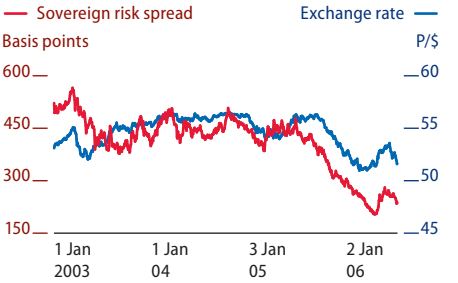
Prospects

The outlook for 2007 is for GDP growth to stay on around the same modest trajectory as 2006. This forecast is predicated on the assumption that the fiscal position's trend improvement will continue, thereby helping maintain investor confidence and setting the stage for much-needed development spending in subsequent years. In the near term, fiscal policy is likely to be biased toward stability rather than growth, considering the high level of debt. Monetary policy, too, offers limited room for maneuver as domestic–international interest rate differentials are already narrow (Figure 2.7.9). The actual growth outturn will thus depend to a large extent on external developments and the weather.

Growth impetus from the production side will originate in the services sector, which is expected to expand at around its 5-year trend of about 6%, increasing its share in total output. In industry, export-oriented manufacturing is likely to benefit from continued, though slower, expansion of world trade. Agriculture should grow at its trend rate of close to 4%, assuming normal weather conditions. On the demand side, personal consumption will remain the main contributor to growth, partly supported by remittances of around 11–12% of GDP.

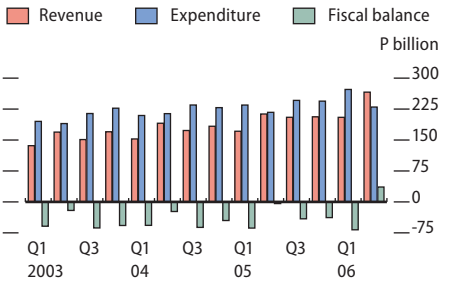
Assuming a slowdown in world trade growth, exports and imports are both likely to decelerate next year. The trade deficit is projected to be 7–7.5% of GDP and the current account surplus will likely increase to 3.1%

2.7.6 Sovereign risk spread and exchange rate



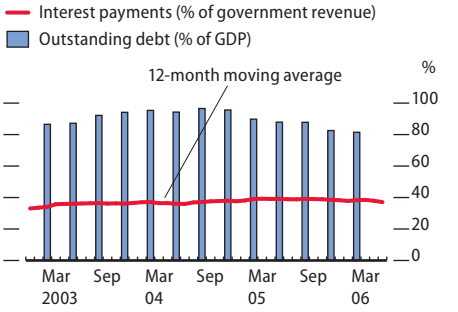
Note: Sovereign risk spreads are yield spreads of Philippine sovereign bonds over US treasury bonds.
Source: Datastream, downloaded 3 August 2006.

2.7.7 Fiscal performance



Source: Bureau of the Treasury, available: http://www.treasury.gov.ph, downloaded 4 July 2006.

2.7.8 National government debt



Sources: CEIC Data Company Ltd.; Bureau of the Treasury, available: http://www.treasury.gov.ph, downloaded 2 August 2006.

of GDP, buoyed by remittances, after allowance for a modest deficit on the service and income accounts.

Successive improvements in the current account from a deficit of 3.8% of GDP in 1999 to a surplus since 2003 stems partly from weakness in investment. Its share in GDP has fallen from 18.8% in 1999 to about 15% in 2005, the lowest among the larger countries in Southeast Asia, as political uncertainties and deteriorating public finances damped investor sentiment. Efforts in recent years to reduce the fiscal deficit also entailed cutbacks in development spending, which further compressed investment.

If the improvement in government revenue continues, it would allow scope to boost spending on physical and social infrastructure over the medium term. Coupled with an improvement in bank balance sheets (Figure 2.7.10) and the likelihood that this will eventually stimulate loan growth, the higher public spending could arrest the decline in the investment rate and thus relieve an increasingly binding constraint to future growth.

Inflationary pressures may moderate further, given that world oil prices are expected to remain stable, albeit at high levels, and as the effect of the rise in the VAT rate moves out of the picture. An increased supply of foodstuffs, based on agricultural production maintaining trend growth, and an expected moderation in world prices of nonfuel commodities would also limit pressures. The *Update* forecast for inflation in 2007 is revised to 6.0% from 6.5% in *ADO 2006*.

The national Government has set a budget deficit target for 2007 at 0.9% of GDP. On this basis, further improvement on this year's revenue goal will be necessary—including efforts to expand the tax base and to improve collection—to allow for a significant increase in development expenditure while keeping the fiscal consolidation program on track, especially as the impact of the VAT rate increase recedes.

Better financial performance of government owned or controlled corporations has helped lower the consolidated public sector deficit (a wider measure of the deficit) alongside that of the national Government. Losses incurred by state-owned National Power Corporation, in particular, were a cause of fiscal deterioration in previous years. The financial performance of 14 monitored government corporations has continued to improve in 2006, largely generated by a better result from the National Power Corporation, following an increase in electricity tariffs last year. However, significant privatization of power-sector assets, which has been on the drawing board for some time, has yet to push through. In addition to progress on fiscal consolidation, a significant power asset sale could be a powerful catalyst for improving investor sentiment, or a confidence damper if delays are further prolonged.

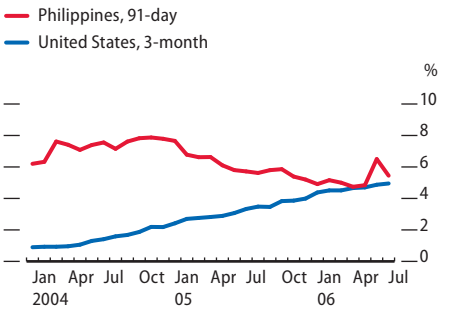
The main risk to the outlook centers on maintaining the pace of reforms. Continued improvement in the fiscal position and in banking, as well as reforms in the power sector, will likely be necessary to lift investor confidence, given that political noise is likely to increase ahead of midterm elections in May 2007.

2.7.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	5.0	5.4	5.3	5.3
Inflation	6.8	6.7	6.5	6.0
Current acct. bal. (share of GDP)	1.9	2.9	1.8	3.1

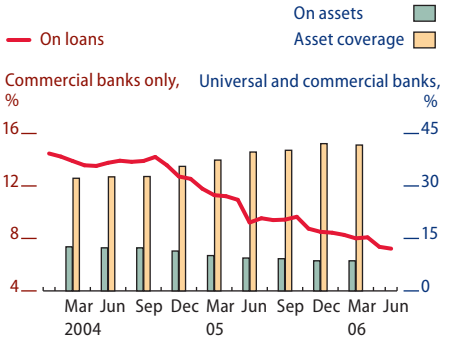
Source: Staff estimates.

2.7.9 Treasury bill rates



Source: Datastream, downloaded 2 August 2006.

2.7.10 Nonperforming loan and asset ratios



Sources: CEIC Data Company Ltd.; Bangko Sentral ng Pilipinas, available: http://www.bsp.gov.ph, downloaded 2 August 2006.

Thailand

The economy has been hurt by political uncertainty, higher oil prices, and rising interest rates, prompting a downward revision to the 2006 growth forecast from April's *Asian Development Outlook 2006* (*ADO 2006*). With a caretaker government in place for much of the first half of this year, the budget for the fiscal year starting October 2006 cannot be approved, which will reduce government spending and investment in 2007. Consequently, some of the megaprojects planned by the Government will be delayed. Consumer spending will also soften. The GDP growth projection for 2007 is therefore downgraded sharply to about 4% from 5.5% in *ADO 2006*.

Updated assessment

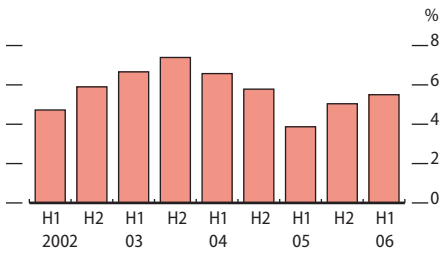
Robust growth of 5.5% was recorded for the first half of 2006, due mainly to a good performance by agriculture and exports (Figure 2.8.1). This growth rate was also favorably influenced by the comparison with early 2005, when the economy was hit by drought and the effects of the December 2004 tsunami. Agricultural production rose significantly by around 7% in January–June 2006 year on year as major crops benefited from improved weather and higher farm-product prices. Manufacturing production also increased by about 7%, with higher levels of growth recorded in office and electrical machinery, motor vehicles, and textiles, spurred mainly by stronger exports.

On the demand side, household consumption expenditure expanded by 4.1% in the first quarter, stimulated by rising farm incomes and an increase in minimum wages in January. After the first quarter, concerns about higher oil prices, inflation, and rising interest rates damped consumer spending. So did political uncertainties—Thailand has been under a caretaker government since results of elections held in April were annulled. New elections are scheduled for October. Meanwhile, consumer confidence has steadily slipped (Figure 2.8.2).

Also affected by the political situation, growth in private investment slowed to 5.4% in the first 6 months, less than half the rate of a year earlier. The slowing of private investment (despite relatively high capacity utilization) is a concern for the country's medium-term prospects. The lack of a government that can take longer-term decisions has also affected public investment, slowed policy implementation, and delayed some infrastructure projects. For example, construction of three new subway lines for Bangkok was scheduled to start early in 2006, but the political impasse has delayed crucial decisions and none of the $4.3 billion earmarked for the lines will be spent this year.

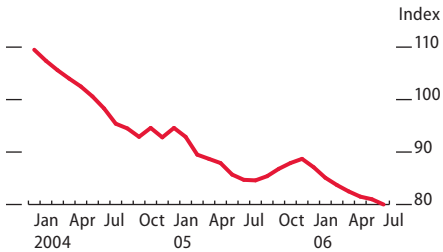
Exports were a bright spot, however, and in net terms were the main

2.8.1 GDP growth



Source: National Economic and Social Development Board, available: http://www.nesdb.go.th, downloaded 17 June 2006.

2.8.2 Consumer confidence



Note: A reading of less than 100 marks deteriorating consumer confidence.

Source: Center for Economic and Business Forecasting, University of the Thai Chamber of Commerce, available: http://www.utcc.ac.th, downloaded 25 August 2006.

driver of growth in the first quarter of the year (Figure 2.8.3), and will likely remain so over the full 12 months. But the slowdown in consumer spending and investment has led to a downward revision in the GDP growth forecast to 4.2%, from 4.7% in *ADO 2006*.

Merchandise exports climbed by 17.1% in the first 6 months of 2006 from a year earlier, and are expected to grow by 14% over the full year. Merchandise imports, in contrast, slowed to grow by just 4.2% over the period (Figure 2.8.4) and will be lower than expected in 2006 because of weakening domestic demand. The import slowdown stemmed partly from a decline in the import volume of fuel (the elimination of fuel subsidies in 2005 curbing demand), and of vehicles and vehicle parts. Despite strong exports and slowing import growth, the trade balance for the first 6 months remained in deficit. The current account is expected to register a small deficit for 2006, now projected to be about 0.5% of GDP instead of 2.5% forecast in *ADO 2006*. The baht (B) appreciated by 4.8% against the US dollar in the first half of 2006 from the second half of 2005, in line with movements among several other Asian currencies.

Inflation has been stronger than expected in *ADO 2006*, driven by higher oil and food prices. The consumer price index rose at an average rate of 5.9% in January–June 2006, with core inflation at 2.7%. The Government is gradually allowing increases in the prices of 26 essential goods and 150 other consumer items and construction materials that it controls, to offset rising production costs caused by expensive oil.

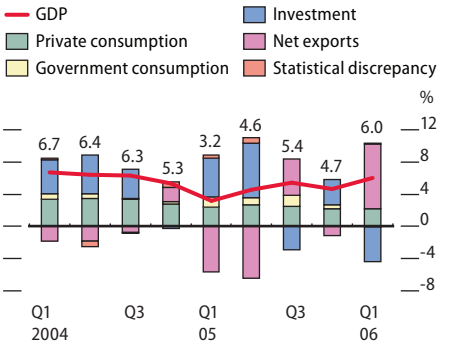
To lean against inflation, the central bank raised its policy interest rate four times in the first half of 2006, to 5.0% (Figure 2.8.5). The Bank of Thailand's Monetary Policy Committee said in a July statement, after leaving the 14-day repo rate unchanged that month, that softening economic growth, too, will help relieve pressure on inflation. The rate of increase in the consumer price index slowed to 4.4% in July, largely a result of the slowdown in consumer demand and a high-base effect in July 2005 when Thailand abolished fuel subsidies. For all of 2006, the inflation forecast is 4.5%, up from 4.0% in *ADO 2006*, principally due to continued high oil prices and increases in wages and interest rates, all of which are feeding into production costs.

The fiscal position remains strong, with the overall budget likely to be in balance in the fiscal year ending 30 September 2006. Total public debt as of end-June 2006 stood at 42.1% of GDP, well below the Government's self-imposed limit of 50%.

Prospects

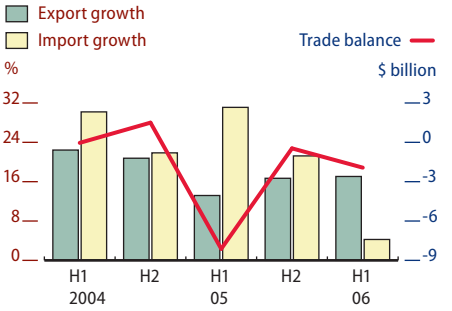
The unsettled political situation has delayed approval of the FY2007 budget as well as some large public infrastructure investments. Moreover, the Government originally set spending for FY2007 at B1.48 trillion, based on expectations of economic growth of 5–6%. With growth now likely much lower, the revenue forecast for FY2007 is probably too optimistic. Therefore, in addition to being delayed, the budget for FY2007 will likely involve a lower level of spending than originally planned. Public investment could also be significantly lower than earlier projected. Combined with high oil prices and inflation, this will have an adverse effect on short-term growth prospects.

2.8.3 Contributions to growth (demand)



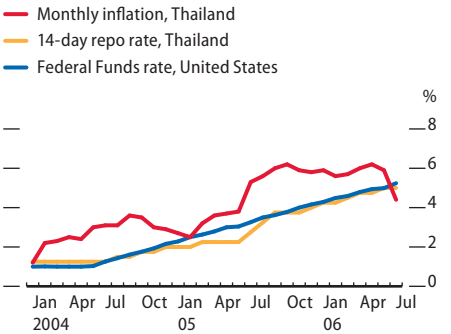
Source: National Economic and Social Development Board, available: http://www.nesdb.go.th, downloaded 17 June 2006.

2.8.4 Trade indicators



Source: Bank of Thailand, available: http://www.bot.or.th, downloaded 4 August 2006.

2.8.5 Inflation and interest rates



Sources: Bank of Thailand, available: http://www.bot.or.th; Bureau of Trade and Economic Indices, Ministry of Commerce, available: http://www.indexpr.moc.go.th; Federal Reserve Board, available: http://www.federalreserve.gov, downloaded 1 August 2006.

Major new government spending cannot be initiated until a new budget is approved, which is unlikely before January or February 2007. Even when a new government is elected, it may focus on rebuilding its political base rather than on economic matters. (Thailand's major political parties have said that, if elected, they would work to amend the constitution and aim then to hold new elections after 12–18 months.) This is likely to result in delays in disbursements of the $42 billion planned for infrastructure megaprojects, most of which had been targeted for 2007–2009. The investment in megaprojects was originally expected to contribute about 0.7 percentage points to GDP growth each year from 2007, and this will not now be fully realized. (Some of the megaproject investments are not, though, affected by political uncertainties as they have already been approved and accounted for in the 2006 budget. For example, many housing and energy projects will go ahead as planned.) As the lack of certainty will also curtail private investment, the 2007 baseline assumption for growth in total investment is revised down to 6.0% from 9.0%.

Further eroding growth prospects in 2007, private consumption will continue to slow due to upward adjustments to prices, though this deceleration will be offset a little by reductions in personal income taxes effective August 2006. Exports should continue to be the main engine of economic growth as the generally robust outlook for trading partners, together with favorable prices for export crops, supports the export sector and partly offsets weakening domestic demand. Within the overall export picture though, the slowdown in the US economy and in global electronics demand will have some impact. For the full year, export growth of around 14% is projected, down 1.3 percentage points from the April forecast. Against this background, the GDP forecast for 2007 is revised to 4.0% or a touch higher, from 5.5% in *ADO 2006* (Figure 2.8.6).

High oil prices will keep the current account in deficit in 2007, at about 2% of GDP (Figure 2.8.7). Delays in capital expenditure disbursements and softer consumer spending will help bring down inflation by about 1 percentage point to 3.5%—though this is still above *ADO 2006*'s 3.0%, partly because of higher than expected increases in farm incomes this year (Figure 2.8.8).

In policy areas, the political hiatus has set back the privatization of state-owned enterprises. An initial public offering of shares in EGAT, the state electricity generation authority, was suspended in November 2005 by the supreme administrative court. This ruling, and the political logjam, has stymied the privatization process. Even with a new government in place, the privatization process will have to be revised as a result of the court decision, and this could take some time. Overall, the economic forecasts have a greater than usual degree of uncertainty, since it is unclear that economic policies pursued in recent years will be continued.

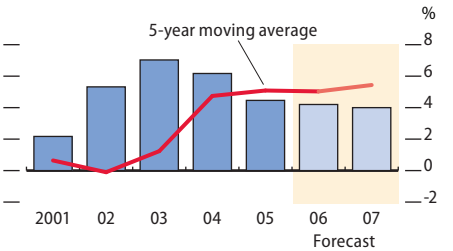
The extended political uncertainty and subsequent delays in decision making and investment have led to a downward revision of the medium-term growth projection, to 4–4.5% in the next 3 years, compared with 5–6% in *ADO 2006*, though the end of this period could see a pickup in GDP growth, based on restored political stability and the solid fiscal position.

2.8.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	4.7	4.2	5.5	4.0
Inflation	4.0	4.5	3.0	3.5
Current acct. bal. (share of GDP)	-2.5	-0.5	-2.5	-2.0

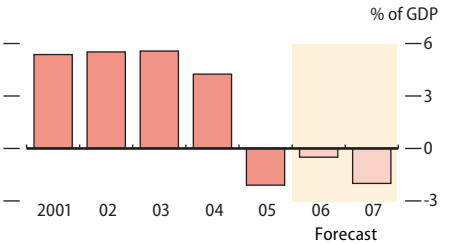
Source: Staff estimates.

2.8.6 Annual GDP growth



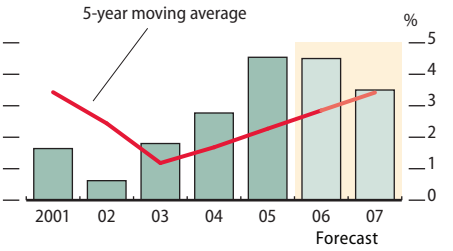
Sources: National Economic and Social Development Board, available: http://www.nesdb.go.th, downloaded 17 June 2006; staff estimates.

2.8.7 Current account balance



Sources: Bank of Thailand, available: http://www.bot.or.th, downloaded 3 August 2006; staff estimates.

2.8.8 Annual inflation



Sources: National Economic and Social Development Board, available: http://www.nesdb.go.th, downloaded 1 August 2006; staff estimates.

Viet Nam

Robust growth has continued in 2006, with strong expansion in industry and services. Investment surged in the first half of the year, bolstered by ongoing improvements in the business environment and the country's expected accession to the World Trade Organization (WTO). The full-year growth forecast is maintained at 7.8%, though inflation is revised up to 8.3% in part because of rises in administered fuel prices to reduce the cost of fuel subsidies. Next year, GDP growth is seen edging up to around 8%, underpinned by vigorous business investment. There are signs that the ongoing fight against corruption is being stepped up.

Updated assessment

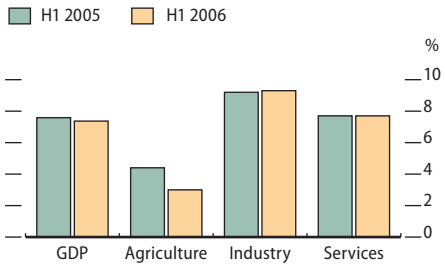
Underpinned by rapid growth in private investment, strong consumption, and robust exports, the economy grew by 7.4% in the first half of 2006, close to the 7.6% rate in the year-earlier period. Industry (rising by an estimated 9.3%) and services (7.7%) continued to drive the expansion (Figure 2.9.1). Industry accounted for 3.7 percentage points of growth, with a particularly strong performance from the private sector, especially manufacturing, while services contributed 3.1 percentage points (Figure 2.9.2). Good performances were recorded in the trade, finance, and hotels and restaurant subsectors as consumption and tourism remained buoyant.

Agriculture, affected by prolonged cold weather in the north, by floods in the central area and the Mekong delta, and by avian flu, showed lackluster growth of 3.0% and contributed little to aggregate expansion. Agriculture's share of GDP has over the years declined steadily and was about 20% in 2005, down 4 percentage points since 1999. The sector still plays a critical role though, since it generates about 57% of total employment.

Industry and services continue to increase their share of the economy. This reflects market-oriented reforms, a gradual reduction in barriers to competition and to private-sector development, and improvements in physical infrastructure. Greater diversification in industrial production and services is laying the foundation for further sustained growth in output and employment. For all of 2006, industry is expected to expand by 10.0% and services by 8.0%.

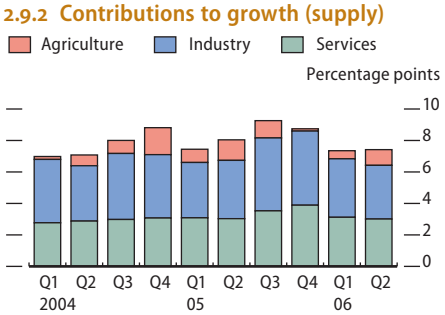
Looking at demand, both investment and consumption remained strong in the first half of 2006. Investment, spurred by improvements in the business environment, is estimated to have grown by about 24%. The domestic private sector has expanded its share of overall investment from

2.9.1 GDP growth by sector



Source: General Statistics Office of Viet Nam, available: http://www.gso.gov.vn, downloaded 3 August 2006.

2.9.2 Contributions to growth (supply)



Source: CEIC Data Company Ltd., downloaded 3 August 2006.

23% in 2001 to 34.5% in the first half of 2006. Private consumption was bolstered by higher farm incomes (reflecting rising prices for agricultural products), strong growth in employment in manufacturing and services, and buoyant remittance inflows. Retail sales of goods and services are estimated to have grown by 21.6% in the first half.

Surging exports are helping underpin GDP's rise this year. Merchandise exports for the first half of the year jumped by 28.8% to $18.8 billion. As a net oil exporter, Viet Nam benefits from rising global oil prices, which more than offset a 6% decline in the volume of oil exports, resulting in export growth of 22.5% for oil in dollar terms during the first half (Figure 2.9.3). (The volume of oil shipments fell because output from existing oil fields is declining and production from new deposits has yet to begin.)

Exports of textiles and clothing rebounded by nearly 34.5% in the first half of 2006, following modest growth of 11.3% in all of 2005, after the abolition of global quotas enabled members of WTO to increase exports to the US, at the expense of Viet Nam and other non-WTO members. Other exports that strengthened were fisheries products, footwear, electronic goods, and wood products. Improved access to major export markets and higher prices supported the robust export growth.

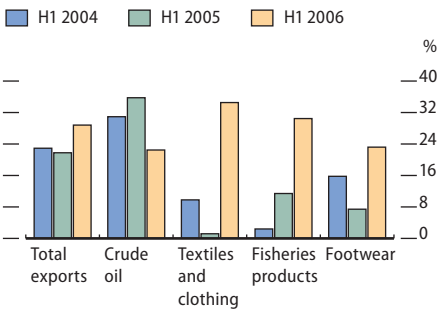
The structure of exports is becoming more diversified. While exports of largely unprocessed commodities such as crude oil, rice, fisheries products, and coffee remain significant, the share of manufactures such as clothing, footwear, and wood products in total exports is becoming more important (Figure 2.9.4). Exports for the full year are likely to rise by about 22%, faster than projected in *Asian Development Outlook* (*ADO 2006*) in April this year.

Imports grew by 15.3% in January–June. The trade deficit narrowed to an estimated $2 billion, significantly less than $3.6 billion in the first half of 2005. Stronger exports and vigorous expansion in both private remittances and tourism receipts have led to a revision of the 2006 current account deficit to 1.2% of GDP, from the 2.7% forecast in *ADO 2006*. Buoyant foreign direct investment (FDI) inflows further supported the balance of payments, resulting in a rise in gross official reserves.

GDP growth for 2006 is forecast at 7.8%, unchanged from the *ADO 2006* projection. However, the forecast for consumer inflation is raised. Inflation averaged 8.0% in the first half, pushed up by rising prices for food, housing construction materials, and transport (Figure 2.9.5); a further increase in administered fuel prices in August will maintain upward pressure on inflation. The forecast for 2006 is raised to 8.3% in annual average terms and to 7.6% in year-end terms. Monetary tightening by the State Bank of Viet Nam in 2004 and 2005 has had some impact on rapid credit growth, which has slowed from nearly 42% in December 2004 to about 32% in December 2005 and 25% in February 2006. The central bank targets 25% credit growth for this year.

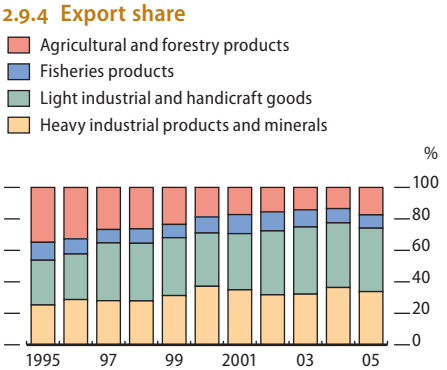
Reflecting an expansionary fiscal stance, government spending rose by an estimated 18.5% in the first 6 months of 2006, while revenue grew by about 14.6%, supported by the rapid economic growth and high crude oil prices (income from crude oil production accounts for more than 20% of total government revenue). The primary budget deficit, which excludes off-budget items, is forecast at 1.7% of GDP in 2006.

2.9.3 Export growth (total and selected categories)



Source: CEIC Data Company Ltd., downloaded 3 August 2006.

2.9.4 Export share



Source: CEIC Data Company Ltd., downloaded 22 August 2006.

In policy developments, Viet Nam finalized a series of bilateral trade agreements in its effort to join WTO, which looks likely to happen this year. Accession will allow the country greater access to international markets and provide impetus for a deepening of domestic structural reforms, particularly in banking and state-owned enterprises (SOEs).

As a prelude to WTO membership, the authorities are inking in further measures to strengthen the banking system. In May, the Government issued a plan for banking sector reform, under which the supervisory functions of the State Bank of Viet Nam will be separated from the management functions that it performs for state-owned commercial banks (SOCBs). These banks must increase their capital-adequacy ratio to at least 8% by April 2008.

Vietcombank, one of the biggest SOCBs, late in 2005 issued convertible bonds to raise second-tier capital ahead of a planned equitization (part-privatization). The Bank for Investment and Development, another SOCB, in May 2006 issued fixed-rate bonds to strengthen its second-tier capital base. For its part, the central bank is taking steps to bring prudential regulations on loan classification and loan-loss provisions closer to international standards. However, a strategy to resolve nonperforming loans and to recapitalize SOCBs has been delayed.

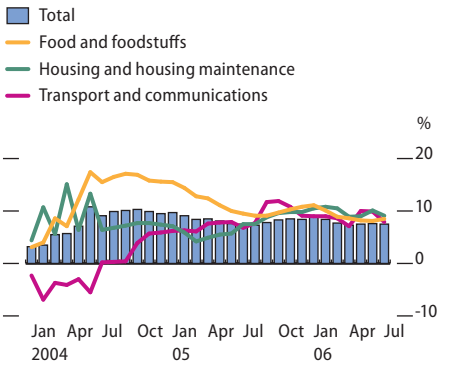
Viet Nam's fledgling securities market has grown this year, with the market capitalization of listed equities and bonds rising to the equivalent of nearly 10% of GDP by mid-2006 from 5% in mid-2005. The number of listed companies on the Ho Chi Minh City and Hanoi stock trading centers has increased to 51 from 28 over this period. Gains in corporate profits and strong business sentiment pushed share prices sharply higher in the first 5 months of 2006, although—in common with many other bourses worldwide—the market retreated in June and July (Figure 2.9.6).

To further develop the securities market, the National Assembly in June passed a law that provides a legal framework for market operations, protection for investors, as well as greater corporate disclosure and market transparency. The Securities Depository Center was established to build up the infrastructure for market operations. And to promote reforms of SOEs, a state corporation of investment capital has been set up to manage the Government's stakes in equitized SOEs. However, progress on equitizing the larger SOEs has been slow.

The Unified Enterprise Law and Common Investment Law (approved in December 2005 and effective July 2006) aim to simplify administrative procedures for firms and to enable equal treatment for local and foreign businesses. Such improvements in the business environment, coupled with the continuation of solid economic growth and the prospect of Viet Nam joining WTO, have supported investor sentiment: more than 20,000 new enterprises were established in the first half of 2006, and FDI commitments rose by 21% to $2.3 billion.

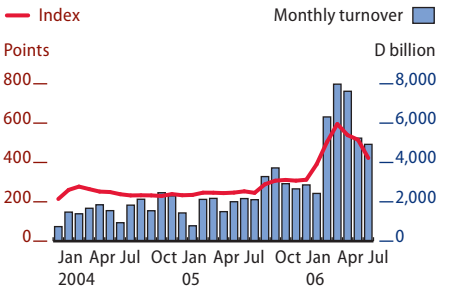
On broader policy issues, the 10th Congress of the Communist Party, a quinquennial event, was held in April, followed by the National Assembly's election in June of new government leaders and approval of the socioeconomic development plan for 2006–2010, which targets continued vigorous economic growth. The new leadership has indicated that it is committed to accelerating economic reforms.

2.9.5 Inflation (total and selected categories)



Source: CEIC Data Company Ltd., downloaded 21 August 2006.

2.9.6 Ho Chi Minh City stock trading center



Source: CEIC Data Company Ltd., downloaded 21 August 2006.

Prospects

Improvements in the business environment and expected WTO membership are likely to support continued strong investment through 2007. Investment is forecast to grow by around 15%, reaching 38% of GDP. Industry and services, together accounting for around 80% of GDP, will remain the engines of growth through 2007, expanding by projected rates of 10.4% and 8.0%, respectively. The forecast for GDP growth next year is maintained at 8.0%.

Implementation of commitments related to the Association of Southeast Asian Nations Free Trade Area and expected WTO accession will provide opportunities for further export growth, albeit at levels below those reached in the first half of 2006. In 2007, exports are projected to increase by about 18%, outpacing import growth and narrowing the trade deficit to 4.5% of GDP. Strong remittance inflows are expected to help turn the current account into a surplus equivalent to 0.3% of GDP, a turnaround from the deficit forecast in *ADO 2006* (Figure 2.9.7). Higher inflows of FDI are likely to produce a surplus on the capital account, such that foreign exchange reserves rise again.

Inflation will continue to feel upward pressure from expansionary macroeconomic policies, continued strong domestic demand, and likely wage rises in both public and private sectors. The Government has said that it will raise wages for state employees in October 2006, while many private firms are expected to follow suit because of high inflation, a need to attract labor into expanding industries, and an increase in the minimum wage. Subsequently, the forecast average inflation rate for 2007 is revised up to 7.8% (Figure 2.9.8), from 5.0% in *ADO 2006*.

The primary budget deficit could widen slightly in 2007, as fiscal policy remains supportive of growth. An expanding formal sector is broadening the tax base, and the rising price of crude oil is a boon for the Government, with oil revenue up by 46% in 2005 to 4.6% of GDP. Fuel prices are subsidized, but retail price increases—two this year after three last year—have kept the cost of subsidies to about 1.6% of GDP in the first 7 months of 2006. Raising prices also helps remove the incentive for smuggling fuel to neighboring countries, particularly Cambodia. A 5% gasoline import tax was also eliminated, in April this year.

Further ahead, the 2006–2010 socioeconomic development plan sets ambitious targets for achieving the Viet Nam Development Goals and the Millennium Development Goals, including annual GDP growth of 7.5–8% over the period to lift per capita income to $1,100. These targets appear achievable, given both the momentum already built up, especially in investment, and the private sector's rate of expansion.

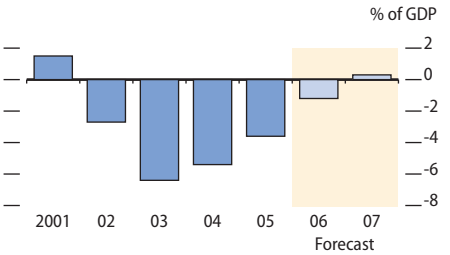
One major challenge is to use resources better and reduce corruption. A widely publicized scandal known as the PMU-18 case involved a project management unit under the administration of the Ministry of Transportation, with senior officials accused of corruption and misappropriation of public funds. The head of PMU-18 was arrested in January, a deputy transport minister who was a former head of PMU-18 was also detained, and the transport minister resigned. Recognizing increasing public concern, political leaders have stepped up their efforts against corruption.

2.9.1 Selected economic indicators, %

	2006		2007	
	ADO 2006	*Update*	*ADO 2006*	*Update*
GDP growth	7.8	7.8	8.0	8.0
Inflation	6.0	8.3	5.0	7.8
Current acct. bal. (share of GDP)	-2.7	-1.2	-2.8	0.3

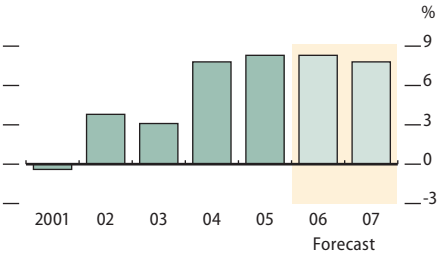
Source: Staff estimates.

2.9.7 Current account balance



Sources: Asian Development Outlook database; staff estimates.

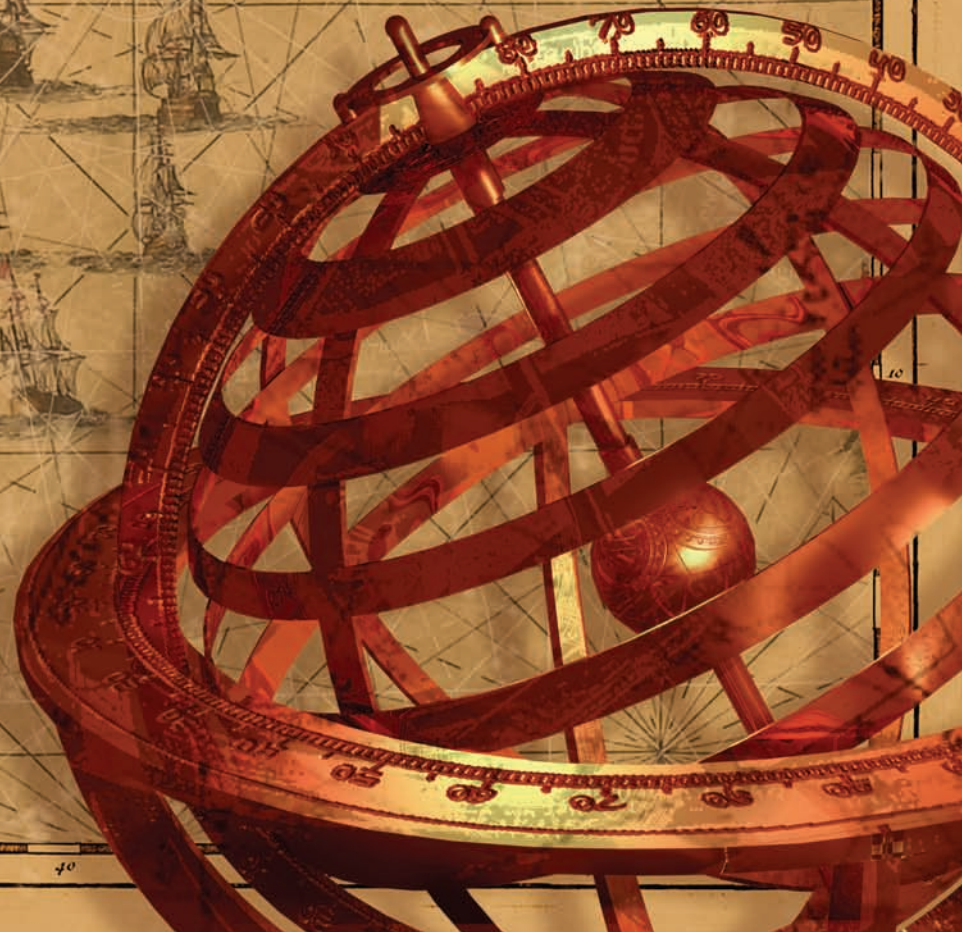
2.9.8 Annual inflation



Sources: Asian Development Outlook database; staff estimates.

Part 3

Developing Asia's imprint on global commodity markets



Developing Asia's imprint on global commodity markets

Introduction

Since 2001, primary commodity prices have surged. In nominal terms, the International Monetary Fund overall index has more than doubled, driven by strong energy and base metal prices. Energy prices rose by about 20.5% on average each year during 2001–2005, on significant increases in oil and natural gas. In the same period, base metal prices accelerated, helping push up prices of nonenergy commodities by 9.2% annually. Although base metal prices have eased from their May 2006 peak, the broad picture for primary commodities remains intact. Soaring prices can be traced, on the one hand, to robust global demand and, on the other, to restraints on supply stemming largely from chronic underinvestment in earlier years, particularly in energy and metal sectors. But other factors have also played an important role.

As developing Asia's weight in the global economy has become larger, its leverage on global commodity price dynamics has increased. Although the region is still small compared with the United States or European Union in terms of overall economic mass, it is rapid growth that implies a disproportionate impact on short- and medium-term movements in global demand. For example, the global commodity price upswing in the early 1990s and the subsequent fall in commodity prices in the late 1990s correlate with rapid growth in developing Asia in the first half of the 1990s, which was then punctured in 1997 by Asia's financial crisis. Again, starting in 2001, rising global commodity prices have been linked to a period of strong expansion in developing Asia.

Allied to rapid growth are deep structural changes that stimulate developing Asia's appetite for commodities. Industrialization and urbanization tend to intensify resource demands, although improvements in productivity and efficiency in end use also occur. In the same vein, rising affluence increases the demand for goods that place large indirect demands on resources. For example, dietary habits tend to switch from grains toward higher protein foods and growing automobile ownership entails not just additional demand for petroleum but also for base metals, plastics, and rubber, which are used as intermediate inputs in the

production of cars. These trends are set to accelerate as income levels, led by the People's Republic of China (PRC) and then India, reach thresholds that put within reach of hundreds of millions of consumers what were once considered "luxury" goods.

The analysis presented in this part of *ADO 2006 Update* suggests that over the long term, developing Asia is likely to drive up the real prices of many commodities in global markets. For some commodities, this could mark a reversal of historical price trends. But the factors now pushing up prices cannot adequately account for the boom in global commodity prices that began in late 2001, and that is yet to come to a definitive halt (let alone reverse). As the short-term factors that have driven prices up and above trend dissipate, it is possible that by 2015 many commodity prices may be cheaper in real terms than they are now. Nevertheless, they will still be significantly above the levels seen at the beginning of the millennium, and may well continue to drift up well beyond 2015.

In the next section, *Commodity price drivers*, the broad factors that influence commodity price dynamics are set out. Evidence is presented that supports the view that developing Asia has come to play an increasingly important role in influencing commodity price movements. Following this, *Commodity prices: Short and long views* explains the factors responsible for the recent boom in commodity prices, and places them in context of price movements over the past quarter century. Evidence is presented that is consistent with the view that rising oil prices themselves have helped hike up the price of other commodities. Also, factors such as short-run constraints on supply, political uncertainty, and easy global liquidity may, in addition to global growth, have been important in driving global commodity prices higher since 2001.

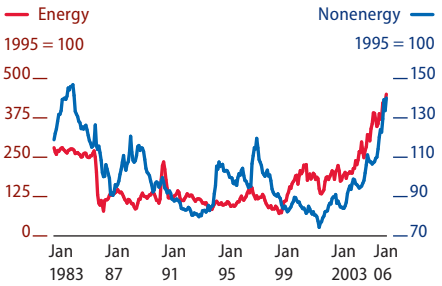
Subsequently, *Developing Asia's imprint on global commodity markets* looks ahead at the possible influence of continuing fast growth in developing Asia on longer-term price trends, on commodity demand, and on trade. A model-based analysis helps quantify the influence of developing Asia on global commodity demands. Simulations suggest an important role for policy in influencing outcomes.

A concluding section takes up some policy issues that warrant careful consideration. The agenda is long and difficult, and priorities will differ across countries. Some of the challenges that are linked to developing Asia's hunger for commodities include raising agricultural productivity and ensuring better alignment between environmental and economic interests. Commodities are also an arena in which rivalry and security issues are never far away. Indeed, energy security issues are often tightly bound to national security concerns.

Commodity price drivers

Figure 3.1 shows price indexes of energy and nonenergy commodities from 1983 to 2006. These are World Bank indexes (Box 3.1) for the "real" price of commodities, which deflate nominal commodity prices by an index of manufactured goods' prices. Throughout this part of *ADO 2006*, reference is to real prices, unless otherwise indicated. The charts clearly depict a sharp escalation in global commodity prices that began around

3.1 Global commodity prices



Source: World Bank Development Prospects Group, Commodity Price Indexes.

3.1 Global commodity price indexes

Primary commodities are defined as raw materials and industrial products that are close to the initial processing stage. The main price indexes of primary commodities used here are the World Bank and International Monetary Fund (IMF) commodity indexes. Although they differ in terms of their constituents and weighting, their movements track each other closely. For the most part, this section uses the World Bank energy and nonenergy commodity indexes. On an annual basis, these are available for the longer time period, dating back to 1970. Monthly data start in January 1983. Data for the IMF nonfuel subindex starts in January 1980, but its fuel subindex begins only in January 1992. However, for specific commodity groups or individual commodities, the IMF indexes are preferred since they have comparatively broader coverage.

the fourth quarter of 2001. Although dips have occurred since, these have been shallow and short-lived.

In Figure 3.2, percentage changes in (real) nonenergy prices are shown for the period 1980–2005, together with growth in world GDP over the same interval. Local peaks and troughs in changes in nonenergy prices coincide closely with peaks and troughs in the global business cycle. Typically, as global growth accelerates, the demand for commodities rises, pushing their relative prices up. But when global growth slows, nonenergy commodity prices fall against the manufacturing basket. Periods of falling real prices generally occur when global growth is below trend.

Fixed investment and inventory cycles can aggravate the pro-cyclical behavior of changes in real commodity prices. Short-run price inelasticity of commodity supplies tends to amplify the price response to faster demand growth and depletes inventories. But after investment and supply have expanded in response to rising profits, when demand growth subsequently slows there is greater downward pressure on real commodity prices. Likewise, if inventory demand increases on expectations of rising real prices, and falls when real prices dip, this will amplify cyclicality.

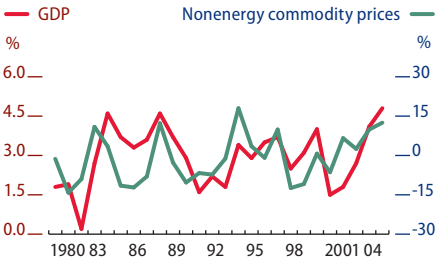
Historically, the global business cycle has been dominated by the performance of industrial countries. But with developing Asia's growing weight in the global economy, and its expanding appetite for commodities, the region has come to exert greater influence on commodity price movements. One way to look at this is to consider simple correlations between GDP growth and changes in real commodity price. Figure 3.3 displays correlation coefficients between real nonenergy price changes (%) and GDP growth rates for different regions from 1980 to 2005. These computations are made in rolling 10-year windows from 1971 to 2005. This means that at any point in time, the reported correlation coefficient refers to the association between percentage changes in real prices and growth over the preceding decade.

Figure 3.3 illustrates two important stylized facts. First, the link between the ups and downs of growth in the Group of Seven leading industrialized countries (G7) and nonenergy commodity price changes has been reasonably consistent over the past 25 years. The dip in the correlation in the latter period reflects the asymmetric impact of the Asian financial crisis on real commodity prices (they dipped) and on G7 growth (it was barely affected). Second, for developing Asia a strong positive correlation between growth and nonenergy commodity price changes has been present since the early 1990s. In the 1970s through the early 1980s, when growth and (nonenergy) commodity price changes were negatively correlated, developing Asia was mainly a primary commodity producer and exporter. The intercept shift coincides with a period of rapid industrialization during which developing Asia began to import significant quantities of primary commodities.

However, growth is not the only factor that influences the direction of commodity prices. Another important element is global liquidity. Figure 3.4 shows the relationship between real interest rates and an index of real nonenergy, primary commodity prices over the period 1950–2005. This suggests that when global liquidity conditions are easy and real short-term interest rates are low, real commodity prices tend to be higher.

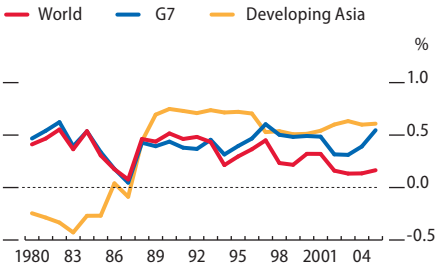
Monetary influences on primary commodity prices work through a

3.2 Commodity price changes (%) and growth



Sources: World Bank, *World Development Indicators* online database, available: http://devdata.worldbank.org/dataonline, downloaded 24 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

3.3 Correlations between real commodity price changes (%) and growth



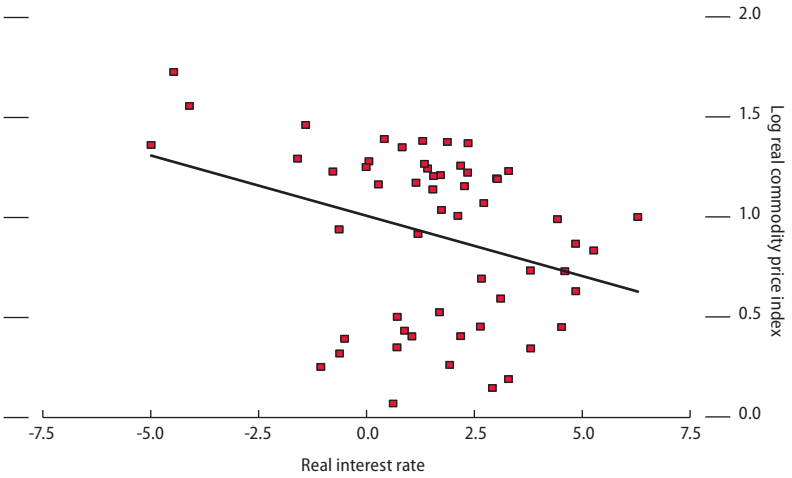
Sources: Staff calculations; World Bank, *World Development Indicators* online database, available: http://devdata.worldbank.org/dataonline, downloaded 24 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

number of channels. On the demand side, low real interest rates cut the costs of storage and encourage investment in inventories; on the supply side, they increase the discounted value of future supply (particularly of nonrenewable resources) and provide an incentive to defer extraction. Finally, as recent events attest, low real interest rates and easy liquidity make commodities an attractive asset class for financial investors.

Investing in commodities as part of a hedging strategy against financial risks or as part of a broader portfolio has a long history. However, the past few years have witnessed a flurry of hedge fund and institutional investor activity in commodity futures, though precise numbers about the scale of these investments are hard to come by. In recent times, investment in commodities has been driven by the hunt for yield in a low-interest-rate environment (Box 3.2).

Of course, many other factors influence the behavior of primary commodity prices. Low price elasticities of supply and demand tend to make primary commodity prices volatile. Also, because primary commodity prices are less "sticky" than many other prices—they go down easily as well as up—they have a tendency to overreact to shocks (Frankel

3.4 Real interest rates and real commodity prices, 1950–2005



Notes: Real interest rates are defined as 1-year interest rates, less inflation of the previous year.
Source: Frankel (2006), Figure 1a, p.9.

3.2 Speculation and commodity prices

"Hedgers" and "speculators" are two major groups of players in commodity futures' markets. Hedgers use futures trading for insurance, protecting themselves against unfavorable price movements. Hedgers, such as oil refineries, usually have a direct economic or commercial interest in the underlying commodity. Speculators, however, search for profits by exploiting price differences between buying and selling points in the futures market and have no intrinsic interest in the underlying commodity. Speculators take the price risks that hedgers want to transfer.

In theory, speculators' activities in the futures' markets contribute to market liquidity and efficiency. A large pool of speculators with diverse expectations and risk profiles should help markets at all dates function more efficiently by allowing hedgers with specific needs to transfer risks at lower costs. By permitting a wider range of hedging opportunities that reduce financial risks, speculation may help stabilize spot prices (Anderson 1991). However, an increase in trading volume due to speculative activity may lead to higher volatility in futures prices in the short run, as market participants attempt to sieve new information from trading behavior.

However, empirical evidence about the stabilizing effect of futures trading and speculation on spot price movements is mixed. Cox (1976) and Danthine (1978) found that an introduction of futures trading helped stabilize spot prices due to improved information. Kawai (1983) and Newbery (1987) provide evidence that speculation could be destabilizing for storable commodities. Nevertheless, a diverse group of speculators should enhance liquidity and broaden the scope of trading in the commodity futures markets. The benefits of market liquidity created by speculative activity appear to be unambiguous over the long run (see BIS [1999] for a survey).

References

Anderson, Ronald. W. 1991. "Futures trading for Imperfect Cash Markets: A Survey." In Louis Phlips (ed.), *Commodity, Futures and Financial Markets*. Amsterdam: Kluwer Academic Publishers, 207-48.

Bank for International Settlements (BIS). 1999. "Market Liquidity: Research Findings and Selected Policy Implications." Committee on the Global Financial System Publications No. 11, May. Basel.

Cox, Charles C. 1976. "Futures Trading and Market Information." *Journal of Political Economy* 84(6):1215–37.

Danthine, Jean-Pierre. 1978. "Information, Futures Prices, and Stabilizing Speculation." *Journal of Economic Theory* 17(1):79–98.

Kawai, Masahiro. 1983. "Price Volatility of Storable Commodities Under Rational Expectations in Spot and Futures Markets." *International Economic Review* 24(2):435–59.

Newbery, David M. 1987. "When Do Futures Destabilize Spot Prices?" *International Economic Review* 34(2):1041–60.

1986). Figure 3.5 illustrates how crude oil prices bounce after supply shocks. While supply conditions are obviously critical, they can be very difficult to predict. There are many sources of genuine uncertainty as well as risk. Future technological, political, and institutional conditions, which do not easily lend themselves to forecasting or precise calculation, can have a critical bearing on the profitability of primary commodity production.

Commodity prices: Short and long views

Various factors seem to lie behind the recent escalation in commodity prices. These are best considered in a longer context and by main commodity class: energy and nonenergy, the latter including food and beverages, agricultural raw materials, and metals.

Energy commodities

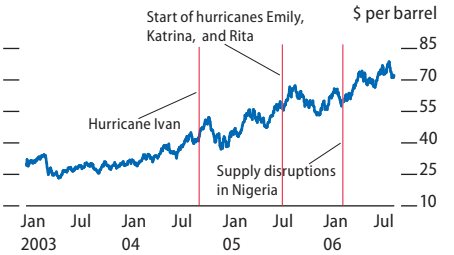
Figure 3.6 shows the trajectory of the real price of the energy basket, along with a similarly deflated benchmark Brent crude price from 1983 through July 2006. Since 2001, real energy prices have more than doubled. Prices are also high measured over a much longer period. Real gains have been most pronounced for energy among all commodity classes. Since energy is also an intermediate input into the production of many other primary commodities, its price movements reverberate through other markets. Crude oil prices, which are primarily responsible for energy price movements, have risen steadily higher, leading to a strong run-up well into the first half of 2006. As can be seen from the graph, crude oil prices and the energy price index move almost in lockstep.

The world demand for oil is dominated by the industrial countries, with the G7 accounting for roughly half of total demand over the last two decades. However, growth in oil demand has generally been much faster in the developing world—growing by 79.2% over 1990–2005 (excluding former Soviet Union countries). This compares with just 12.5% growth for the G7. Developing Asia alone has accounted for nearly 60% of the growth in world demand for oil. Figure 3.7 shows the rising importance of developing Asia for oil demand since 1990.

The special chapter on the challenge of higher oil prices in *Asian Development Outlook 2005 Update* examined the global factors in the recent surge in oil prices. These included strong demand growth (associated with the strength of global economic recovery and expansion since 2002), tight supply conditions (related to limited spare capacity and binding infrastructure constraints), and a significant risk premium (based on geopolitical uncertainties). Little has changed in the last 12 months. Low levels of spare capacity continue to put upward pressure on global oil prices (Figure 3.8). Declining output at maturing oil fields is an important factor and significant delays are likely before new fields open up.

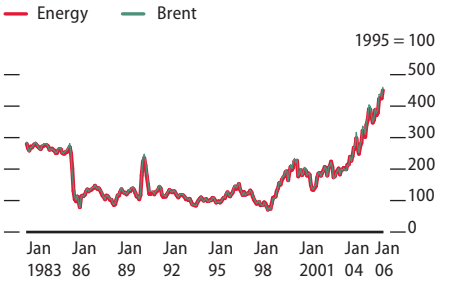
There are indications that significant uncertainties surrounding supply/demand conditions may continue. Oil futures market volatility reflects heightened uncertainty over supply. In particular, the movements of futures prices have closely mirrored fluctuations of spot prices—these tend to be more sensitive to "news"—suggesting a lack of clarity about longer-term direction. Over the course of 2006, oil futures prices have tracked up for all time horizons, suggesting that the market thinks

3.5 Nominal oil price spikes and shocks



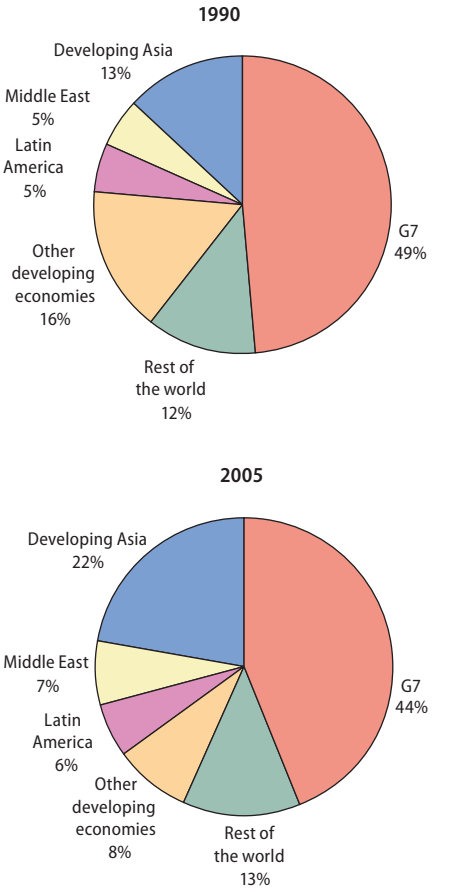
Source: Datastream, downloaded 24 August 2006.

3.6 Real energy and oil prices



Sources: Datastream, downloaded 24 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

3.7 Oil demand by region



Source: BP, *Statistical Review of World Energy 2006*, available: www.bp.com, downloaded 30 June 2006.

unlikely a meaningful improvement in the oil supply and demand balance in the near-term future (Figure 3.9). Moreover, oil futures prices are again in "contango" (distant futures prices exceed spot prices), encouraging a continuing buildup in inventories, which itself is usually a tell-tale sign of jittery market sentiment (Box 3.3). Indeed, average commercial stock

3.3 Oil prices, refineries, and futures markets

Crude oil quality is important for refinery margins as it determines the level of processing and reprocessing required for the optimal output. Depending on its density and sulfur content, crude oil is classified into "light" or "heavy," "sweet" or "sour." As lighter and sweeter crude is relatively easy to refine and produces higher yields of high-quality products (also required by tightened environmental regulations), world demand is increasingly driven by this crude grade. However, recent additions to production capacity have generally been in heavy and sour crude grades.

The world's largest refining center is the United States with much of this capacity in the Gulf Coast area. Therefore, when Hurricane Katrina hit the region in August 2005, it caused extensive damage to national refining capacity, and the prices of some refined products, particularly gasoline, shot up. Higher gasoline prices increased the difference between the prices of refined products and the prices of crude oil—the "crack spread." This stimulated refineries with less sophisticated processing capacity to come on stream.

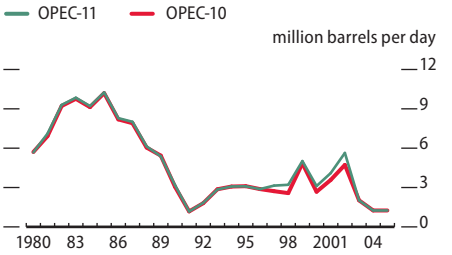
The rise in the crack spread also affected the futures markets. Refineries profit from wide crack spreads, but if the gasoline price falls at the time of sale or crude prices suddenly rise, the refineries can lose substantially. Thus, refineries have an incentive to hedge against price risks, by taking a short position in gasoline futures (a legal obligation to sell gasoline at an agreed future time at an agreed price) and a long position in crude (a legal obligation to buy crude oil at an agreed future time at an agreed price). In last year's period of uncertainty, refineries started to buy crude futures, bidding futures prices up, and to sell gasoline futures. However, given the shortage in upgrading capacity, gasoline prices did not fall significantly, thus the narrowing crack spreads originated mainly in rising crude prices.

The futures market situation in turn reinforced spot market conditions. As longer-dated futures prices had risen much higher than spot prices or near-month futures ("contango"), this gave refiners an incentive to hold larger inventories. When distant futures prices are significantly higher than spot prices, refiners are willing to hold oil and to pay for the cost of carry. This leads to an increase in spot prices, and a buildup in inventories.

Such situations are unusual: generally, oil futures prices are in "backwardation" (i.e., spot prices are higher than futures prices), reflecting the "convenience yield," i.e., what refiners will pay to hold stocks for ensuring smooth day-to-day operations (bearing in mind that crude can be stored most efficiently and at lowest cost with producers, not the refiners). This convenience yield is greatly discounted for distant futures, say 12 months ahead.

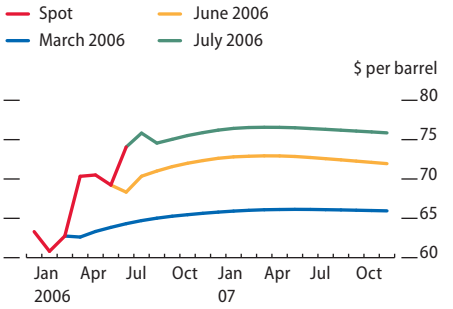
In summary, strong market fundamentals, i.e., robust demand and tight supply, have been the main reason for current high oil prices. Nevertheless, underlying market structures appear to play an important role by reinforcing the crude oil/refinery products price dynamics through the futures markets.

3.8 Global spare oil-production capacity



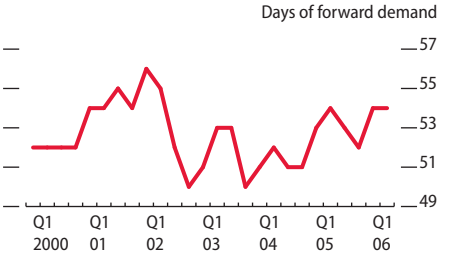
Source: International Monetary Fund, *World Economic Outlook April 2006*, Table 1.21, available: www.imf.org, downloaded 23 June 2006.

3.9 Nominal Brent spot and forward prices



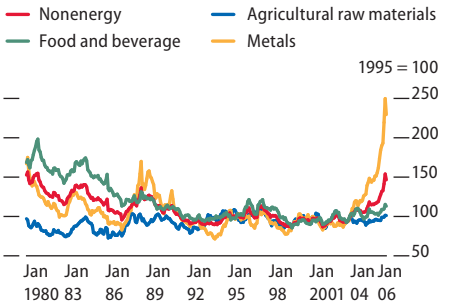
Source: Datastream, downloaded 8 August 2006.

3.10 Average commercial stock holdings in OECD



Source: International Energy Agency, *Oil Market Report*, various issues, available: www.oilmarketreport.org.

3.11 Real nonenergy commodity price indexes



Sources: International Monetary Fund Primary Commodity Prices, available: www.imf.org, downloaded 10 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

holdings in Organisation for Economic Co-operation and Development countries have increased since 2004, despite rising prices (Figure 3.10).

Nonenergy commodities

Nonenergy commodities have seen the price rally that began around 2001 stretch into May 2006, largely on strong base metal prices (Figure 3.11). Although prices are high compared both with 2001 and with their 1995 base (= 100), they are at about the same levels seen at the beginning of the 1980s. Despite some similarities in price movements across groups, individual commodities are frequently subject to idiosyncratic influences, both short term and structural (the supply of agricultural commodities, for example, is influenced by the weather). One common factor though, is the influence of energy prices, as many nonenergy commodities are energy intensive in their production (Box 3.4).

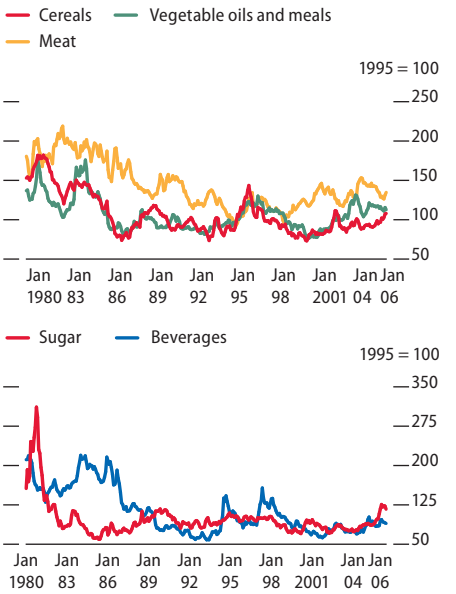
Food and beverages. Real prices of food and beverages have been trending down for a century or more, owing to increased agricultural productivity and low income elasticities of demand for some foodstuffs. Trends for the last quarter century are shown in Figure 3.12 and show the drift down. Real prices of food and beverages declined rather sharply during the 1980s and remained depressed until 2001. Food prices, particularly those of vegetable oils and meals, as well as meat, have since picked up but remain well below the prices of the early and mid-1980s.

Relatively stable food prices in recent years reflect firm demand. For some food commodities, such as rice, soya beans, meat, and fruits and vegetables, Asian (particularly PRC) demand has been strong, largely reflecting rapidly changing dietary patterns and rising income levels (Figure 3.13). A surge in soya bean imports by the PRC bears witness to its growing consumption as feedstock for live animals. In the past few years, high crude oil prices have also lifted demand for soya beans and sugar to produce bio-fuel, as a partial substitute for transportation fuels.

Agricultural raw materials. After falling at the time of the Asian financial crisis, agricultural raw material prices subsequently recovered. Since then, they have changed little (Figure 3.11). But the aggregate index masks important changes in the prices of component commodities (Figure 3.14). Most notably, rubber (which had hitherto been on a long descent) and timber prices have climbed from 2001's levels. Surging automobile production in the PRC has lifted rubber prices, and tire production in the PRC has increased at about 20% a year since the early 1990s (International Rubber Study Group 2004), making the PRC the world's largest consumer of natural rubber in 2001. Rubber prices have also increased as demand has switched away from synthetic alternatives, whose prices have soared with oil's. Timber prices have held up as a consequence of the construction boom in the PRC and growth of its domestic-furniture industry.

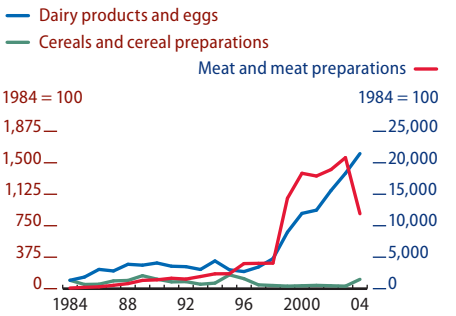
Base metals. Prices of base metals have made handsome gains since 2001, reflecting strong demand, low inventories, and high oil prices (Figure 3.15). Lifted by vigorous industrial growth in developing Asia, including the PRC—the PRC is currently the world's biggest importer of iron and steel, and second-biggest importer of metal ores and nonferrous

3.12 Selected food and beverage price index components



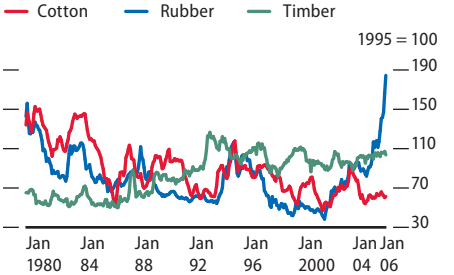
Sources: International Monetary Fund, Primary Commodity Prices, available: www.imf.org, downloaded 10 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

3.13 PRC food imports



Source: United Nations, Commodity Trade Statistics Database, available: http://unstats.un.org/unsd/comtrade/default.aspx, downloaded 31 July 2006.

3.14 Selected agricultural raw materials price index components



Sources: International Monetary Fund, Primary Commodity Prices, available: www.imf.org, downloaded 10 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

3.4 Energy and the cost structure of primary commodity production

Higher energy prices generally translate into higher nonenergy commodity prices, since typically, the production of basic commodities and semifinished manufactures (e.g., fertilizers) is highly dependent on oil and energy products. Box table 1 reports different degrees of energy intensity for various industries as reported by the Canadian Office of Energy Efficiency. As these estimates are indicative and sensitive to technological factors and relative prices, they cannot be replicated with any degree of certainty for other countries.

1 Energy intensity index of selected industries in Canada, 2003

All industries	100.0
Petroleum refining	2,203.6
Pulp mills	1,438.1
Cement industry	705.6
Paper mills (except newsprint)	536.0
Iron and steel	486.0
Primary production of alumina and aluminum	472.3
Fertilizer industry	443.6
Other nonferrous smelting and refining	349.4
Upstream mining	146.7
Resin and synthetic rubber industries	73.3
Fruit and vegetable industries	54.2
Rubber products industries	53.5
Other food industries	50.4
Wood products industries	49.1
Dairy products industry	45.4
Meat products industries	44.9
Motor vehicle industry	27.2
Electrical equipment and components industries	12.8
Machinery industries	10.2
Computer and electronic products industries	5.0

Note: Canada is used as an illustrative example only, since energy intensity differs across countries.

Source: Canadian Office of Energy Efficiency, available: http://oee.nrcan.gc.ca, downloaded 1 August 2006.

Metallurgy and smelting are highly energy intensive, suggesting that high oil prices are likely to have a pronounced effect on their costs of production, and hence price. Paper and pulp, cement, and fertilizer industries also rank high in terms of their energy intensity. Fertilizer costs are most likely to influence the prices of agricultural food commodities.

High oil prices also have indirect effects on nonenergy commodity demand and prices. For instance, some agricultural commodities are used to produce energy substitutes, such as sugar and soya beans for the production of ethanol and other bio-fuel. Demand for natural rubber also rises as energy prices increase, given the relatively high energy intensity of synthetic alternatives.

A more formal way of investigating the relationship between oil and non-oil commodity prices is to test whether changes in oil prices "cause" changes in non-oil commodity prices. This can be done by examining whether lagged values of the nominal oil price have a statistically significant (and positive) impact on subsequent (nominal) prices for non-oil commodities. Tests were conducted using monthly data with lags up to 12 months, spanning the period from January 1983 to July 2006. The results strongly suggest that movements in nominal oil prices precede movements in nominal nonenergy commodity prices (and in the same direction), but not the other way around. The results are statistically significant, with greatest significance for energy prices lagged by 1 month (see Box table 2). Even when this test is conducted with real rather than nominal prices, the result is robust. This suggests that energy prices influence other commodity prices to a greater extent than they do the manufactured goods price basket.

2 F-statistics of Granger causality tests

Number of lags (months)	Null hypothesis: Nonenergy prices do not Granger-cause energy prices	Null hypothesis: Energy prices do not Granger-cause nonenergy prices
1	0.95	14.61 *
2	0.77	4.98 *
3	0.53	4.49 *
4	0.43	3.15 *
5	0.58	3.79 *
6	0.73	3.18 *
7	0.65	2.96 *
8	0.72	2.52 *
9	0.66	2.52 *
10	0.64	2.20 *
11	0.69	2.11 *
12	0.66	1.89 *

* Indicates significance of F-statistics at the 5% level and rejection of null.

Source: Staff calculations.

metals—the prices of iron ore, lead, copper, zinc, nickel, aluminum, and other widely used metals have surged in recent years.

In real terms, base metal prices grew at an annual average rate of 13.2% from 2001 to 2005. Nickel, copper, iron ore, and lead (in descending order) were the strongest movers. Zinc prices have increased

sharply in 2006. These metals are generally used in steel production, a rapidly growing industry in both the PRC and India, as well as in electrical wires and cables, and building infrastructure. Comparing the first 6 months of 2006 to the first 6 months of 2001, copper prices more than tripled, whereas the prices of zinc, nickel, iron ore, and lead more than doubled.

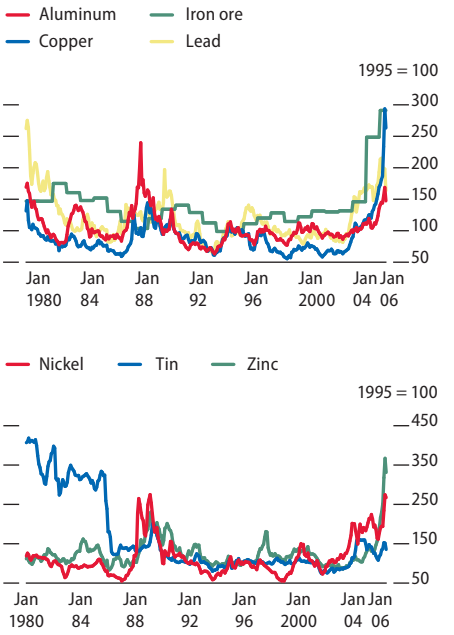
The fate of different metal prices is also critically influenced by supply. For example, during the May 2006 market sell off, the price of nickel held its ground, due to low inventory levels. Copper and zinc rebounded fairly quickly, on the back of tight supply conditions. But aluminum and lead, with rising and strong inventory positions, have not seen a recovery in their prices.

More generally, base metal production has been constrained by generally tight mining and smelting capacity. A rather long period of depressed prices and capacity overhang through the 1990s led the mining industry to reduce excess capacity by means of mergers and restructuring. It also slashed investment in exploration and development of new mines. Even when metal demand started to rise after the Asian crisis, several major producers continued to reduce their inventory overhang rather than add new production capacity, a process that is now becoming more drawn out as regulations tighten, reflecting environmental concerns.

Summary

Since the beginning of 2001, primary commodity prices have surged in both nominal and real terms (measured relative to the prices of manufactured goods). During this boom, fast growth in developing Asia has played a significant role in propelling commodity demand. Although the region is still small compared with the United States or European Union in terms of overall economic mass, its brisk growth implies a disproportionate impact on the expansion of global demand for commodities and other goods. Developing Asia also punches above its weight in global commodity markets because the processes of rapid industrialization and urbanization, through which it is passing, place particularly heavy demands on energy and metals.

3.15 Selected metals price index components



Sources: International Monetary Fund, Primary Commodity Prices, available: www.imf.org, downloaded 10 August 2006; World Bank Development Prospects Group, Commodity Price Indexes.

Developing Asia's imprint on global commodity markets

Growth, structural change, and commodity demand

Developing Asia is likely to make an even larger imprint on world commodity markets as it continues to grow. As people move off farms and into cities and factories, commodity demand will ramp up. Modernizing and extending developing Asia's infrastructure will also make heavy demands on commodities.

There are different ways to look at the impact of growth on the likely trajectory of commodity demand. One way is through a historical lens. By weaving together information on demand for different countries at different points in the income ladder, it may be possible to get a glimpse of the future. As no data on physical quantities of domestic consumption

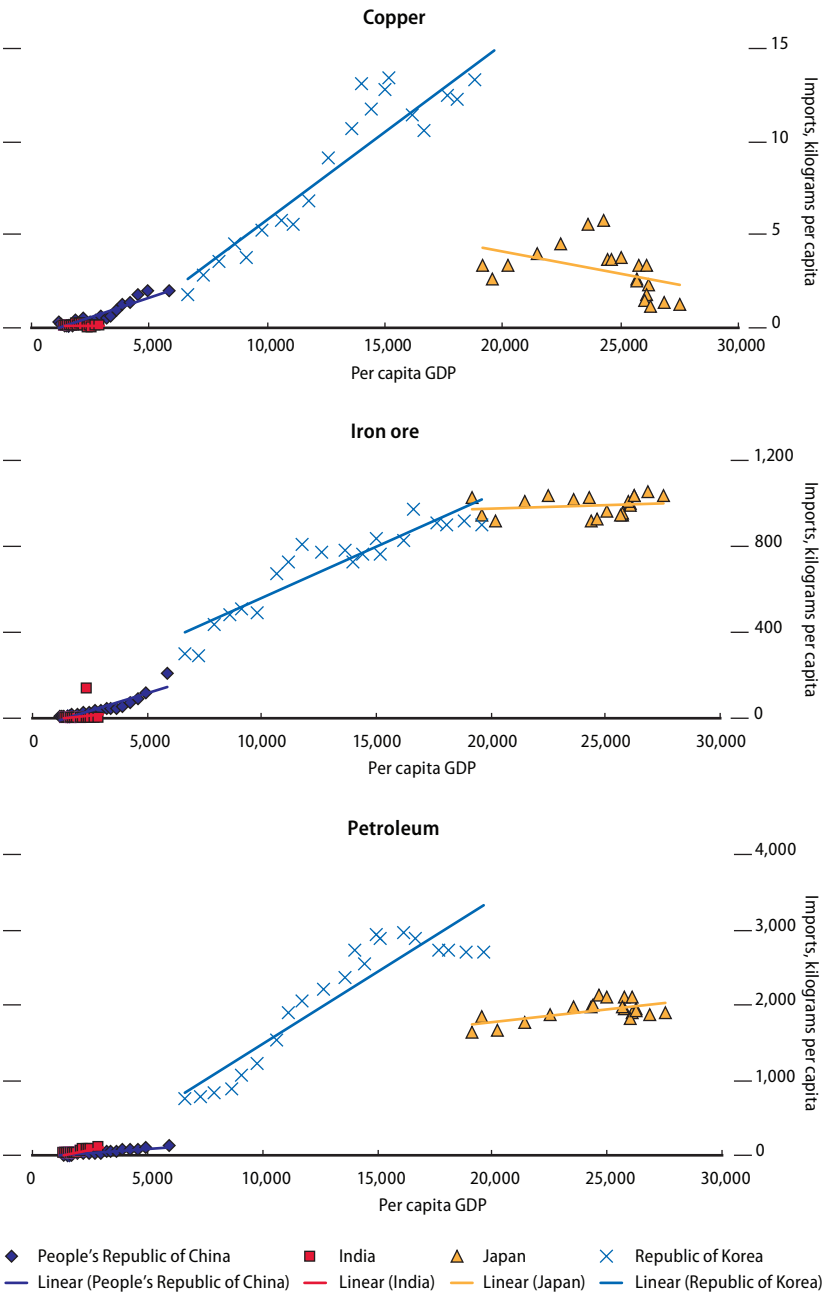
are available, Figure 3.16 combines information on per capita physical imports of copper, iron, and petroleum for four Asian countries at widely differing income levels (PRC, India, Japan, and Korea). Differences in the "intercepts" of the country scatter-plots reflect differences in affluence as well as different economic structures, including resource endowments, but do not detract significantly from the overall pattern.

These pictures suggest a similar development path in which physical commodity demand follows a "logistic" or "S-shaped" pattern as income grows. At low income levels, commodity demand is small and grows only slowly. At this stage, most countries would be primarily agrarian, with manufacturing activity concentrated on materials—particularly agro-material—processing. But as income per capita continues to grow, an inflexion point is eventually reached at which the demand for mineral ores and energy commodities takes off. It is difficult to be precise about the level of income at which this inflexion point occurs, but for the three commodities shown, it is somewhere in a range of $5,000–10,000 per capita, measured in purchasing power parity (PPP) terms. In this income range, economies are typically not only growing quickly but are also rapidly industrializing.

The move from the countryside to the towns is also picking up tempo, and as affluence increases so too does the demand for income-elastic durable goods, such as motor vehicles, which themselves place large direct and indirect demand on commodities. Eventually, the demand for commodities dissipates and may plateau. At high levels of income, the processes of industrialization and urbanization are largely complete, and services and high-technology activities, both of which tend to be low in terms of their commodity intensity, occupy prime place. Affluence possibly also increases the demand for goods such as environmental quality, and conservation is more of a concern.

If the past is a good guide to the future and if developing Asia grows quickly, this stylized account of the phases through which commodity demand passes suggests that developing Asia will exert a strong pull on

3.16 Commodity demand, income, and structural transformation



Note: Per capita GDP is in purchasing power parity at constant 2000 international dollars.

Sources: United Nations, Commodity Trade Statistics Database, available: http://unstats.un.org/unsd/comtrade/default.aspx; World Bank, *World Development Indicators* online database, available: http://devdata.worldbank.org/dataonline; United Nations, World Population Prospects, available: http://esa.un.org/unpp/, all downloaded 24 August 2006.

global commodity demand for some time to come. Per capita income in the PRC, measured in PPP terms, is now close to $6,000 and is rising quickly. Although India is further behind, its rate of income growth has accelerated, and there are ambitions to lift growth higher still.

Table 3.1, which shows the top 10 commodity imports in 1984 and 2004, together with their global shares, illustrates how rapid income growth in the PRC changed the complexion of its import commodity demand, away from agriculture, food, and raw materials, toward energy and metals. It also illustrates how, even at comparatively low income levels, processes of fast growth and structural change in the PRC have made a large impression on global commodity markets. Today, the PRC consumes nearly 8% of the world's crude oil, over 20% of aluminum, copper, steel, and zinc, about 40% of iron ore and coal, and imports an increasing share of the world's agricultural food commodities.

3.1 Top 10 primary commodity imports of the People's Republic of China

	1984	
	% of PRC imports	% of total world imports
Cereals and cereal preparations	7.0	5.4
Nonferrous metals	4.4	2.7
Wood, timber, and cork	2.9	3.9
Textile fibers, not manufactured, and waste	2.7	3.9
Metalliferous ores and metal scrap	1.2	1.2
Crude rubber including synthetic and reclaimed	1.2	4.1
Pulp and paper	1.1	2.5
Sugar, sugar preparations, and honey	1.0	3.3
Tobacco and tobacco manufactures	0.4	1.5
Feed stuff for animals excluding unmilled cereals	0.4	0.8
	2004	
	% of PRC imports	% of total world imports
Petroleum and petroleum products	7.9	5.5
Metalliferous ores and metal scrap	4.1	21.9
Nonferrous metals	2.6	8.6
Oilseeds, oil nuts, and oil kernels	1.3	27.9
Textile fibers, not manufactured, and waste	1.2	23.6
Pulp and paper	0.9	19.3
Wood, timber, and cork	0.8	8.7
Fixed vegetable oils and fats	0.7	13.6
Crude rubber including synthetic and reclaimed	0.5	15.4
Cereals and cereal preparations	0.4	3.4

Source: United Nations, Commodity Trade Statistics Database, available: http://unstats.un.org/unsd/comtrade/default.aspx, downloaded 7 August 2006.

The outlook for commodity demand, trade, and prices to 2015

To sift through the many influences that may come to bear on commodity markets, a formal economic model is helpful. An economic model brings the discipline of theoretical and empirical consistency to the analysis. In this section, the results of experiments are presented that utilize a model of the global economy that identifies 16 "regions," including 10 in Asia.

(Further information about this model, GEMAT, is given in the appendix to this part.) The focus here is on results and, albeit briefly, on the sensitivity of the results to changes in key assumptions. In much, but not all, of what follows, it is assumed that the future is much like the past. In particular, it is assumed that developing Asia grows at or about the rate of the past decade (6.6%), and that the rest of the world moves along a lower trend of about 2.8%. (Scenario details are explained in the appendix.)

A key set of assumptions in the model relates to reserves of oil, gas, and coal. In Table 3.2, estimates of the ratios of proven and unproven energy reserves to annual production ratios are shown for each region featured in the model. These numbers are expressed in years. So, for example, the model assumes that there are 45 years of proven crude oil reserves for the world. However, there may be up to another 77 years of as yet unproven reserves. For each country, the fraction of unproven reserves that may be converted to proven in each year is set out in the "conversion rate" columns. No conversion rate assumptions are needed for coal, as proven reserves are measured in centuries, rather than decades.

3.2 Assumptions on ratios of energy reserves to annual production in 2001

	Proven reserves			Unproven reserves		Conversion rate[a] (%)	
	Oil	Gas	Coal	Oil	Gas	Oil	Gas
China, People's Rep. of	15.4	69.1	66.5	43.4	27.0	2.5	4.5
Japan	9.2	6.7	326.7	15.9	6.7	2.5	3.5
NIEs	6.9	20.0	61.0	26.9	20.0	2.0	2.5
Indonesia	10.4	36.3	37.0	40.4	30.0	2.0	3.0
Malaysia	13.9	41.4	40.0	46.9	33.0	2.0	3.0
Philippines	12.0	30.0	40.0	36.0	24.0	2.0	3.0
Thailand	5.3	16.5	64.0	18.5	13.2	2.0	3.0
Viet Nam	21.8	45.6	30.0	48.8	27.0	2.0	3.0
India	20.1	38.3	259.7	35.1	22.0	3.5	3.0
Rest of Asia	9.2	49.1	79.3	58.3	49.1	2.0	3.0
United States	9.4	10.2	225.4	49.4	24.9	2.2	2.0
Latin America	31.3	45.9	227.2	74.3	43.0	1.3	3.5
Australia and New Zealand	15.8	63.8	207.0	73.2	62.6	2.0	3.0
Europe	6.2	19.1	110.0	30.5	22.3	2.0	1.5
Africa	35.1	100.1	185.3	88.6	63.4	2.0	4.0
Rest of the world	70.4	108.4	447.1	102.6	73.8	1.0	2.0
World	45.0	67.0	180.0	76.6	51.2		

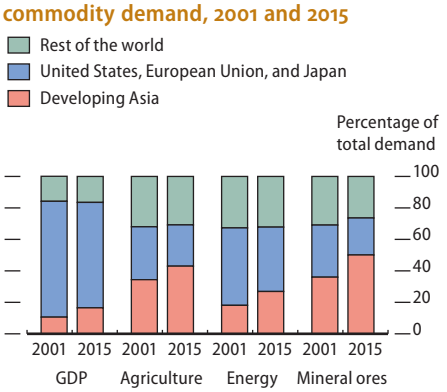
NIEs = newly industrialized economies, comprising Hong Kong, China; Republic of Korea; Singapore; and Taipei,China.

[a] Conversion rate refers to the fraction of unproven reserves that can be converted into proven every year. Conversion rates are set to roughly match the consensus growth projection of energy output by EIA (2006) and IEA (2005).

Sources: Proven reserves are based on BP (2006); unproven reserves are estimates based on IEA (2005) and Paltsev et al. (2005).

In Figure 3.17, shares of global income and total global commodity demand are shown for the base year, 2001, for developing Asia (which throughout this section excludes Central Asia and the Pacific due to lack of data), an amalgam of the United States, European Union, and Japan, and the rest of the world. Also shown in the figure are the model projections of these same shares in 2015. These shares are calculated at

3.17 Developing Asia's imprint on global commodity demand, 2001 and 2015



Source: GEMAT simulations.

market exchange rates. If PPP shares had been used instead, developing Asia's weight in the global economy would be 2.3 times as large.

In the base year, 2001, developing Asia makes a much greater impression on global agricultural, oil, and mineral markets than is suggested by its income weight. For agricultural commodities, the explanation lies in comparatively low income levels that lead to specialization in agricultural commodity production and in secondary processing, to comparatively large shares of food in total consumption expenditure, and to high population concentrations. The base-year share of global demand for energy is about twice as large as the income share. Although developing Asia is not specialized in highly energy-intensive activities, it is a comparatively energy-inefficient region and this lifts demand. Mineral ore demand also outweighs income. This largely reflects intensive consumption of metals by industry, as well as for infrastructure investment and construction of fixed structures.

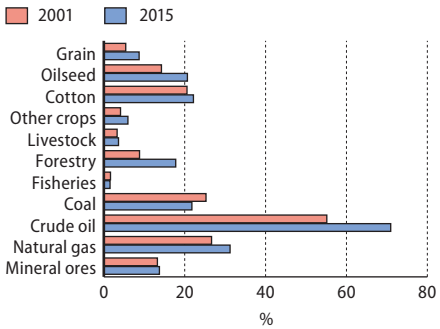
However, of more interest are the dynamics of commodity demand. Given developing Asia's faster growth, its share of global income must obviously increase. Between 2001 and 2015, a nearly 4 percentage point premium on growth drives a wedge between marginal and initial income weights. Developing Asia accounts for 27% of the total expansion of global demand (again measured at market exchange rates), which is larger by a factor of 2.6 than its initial income weight. But more striking still is developing Asia's contribution to the expansion of global commodity demand. Notwithstanding its small initial income share, developing Asia contributes over 60% of the expansion in commodity demand, even having allowed for significant improvements in end-use efficiency (see the appendix) and long-run income elasticities of demand that are generally less than one. The growth in commodity demand is most pronounced for energy and mineral ores (largely used in metal production), but the share of agricultural commodities also grows as Asia's share in the global population increases.

Figure 3.18 shows what these changes imply for commodity structure of imports over 2001–2015. For all commodities, other than fisheries products and coal, import dependence increases, with oil showing the largest increase. By 2015, more than 70% of the region's oil needs (excluding the net oil exporters in Central Asia) will be met by imports. Imports of mineral ores increase, but less so.

What effects do these largely Asian-driven changes in commodity demand have on commodity prices? Table 3.3 (data column 2) summarizes the accompanying estimates of commodity prices in 2015. These are expressed in index form (2005 = 100). All price indexes are deflated by the world consumer price index, which is held constant through the simulation, and so are real prices: the cost of commodities measured against the global consumption basket. Table 3.4 (data column 2) provides a conversion to price levels for energy products. Note that in this table these have been expressed in constant 2005 prices, to ease comparison with other independent price estimates (below).

Starting from 2001 as a base, a striking feature of these calculations is that they suggest a rising trend for (most) real commodity prices—notwithstanding assumed improvements in productivity and efficiency of resource use. On average, there is assumed to be about a 19%

3.18 Developing Asia's dependence on commodity imports, 2001 and 2015



Note: Including intraregional imports.

Source: GEMAT simulations.

3.3 Commodity price projection in the baseline scenario

	Projected prices in 2015[a]	Projected prices in 2015[b]	Actual prices in 2005[a]
Grain	93.9	88.5	106.1
Oilseed	94.8	77.9	121.7
Cotton	94.4	94.7	99.7
Other crops	102.4	86.4	118.6
Livestock	93.9	88.0	106.7
Forestry	116.7	111.5	104.7
Fisheries	127.3	126.4	100.7
Coal	123.2	92.9	132.5
Crude oil	153.3	80.6	190.2
Natural gas	107.1	73.4	145.9
Mineral ores	110.6	67.9	162.8

[a] 2001 = 100; [b] 2005 = 100.

Note: All prices are real prices deflated by the world consumer price index.

Sources: GEMAT simulations; International Monetary Fund, *World Economic Outlook* April 2006 database, available: www.imf.org, downloaded 26 August 2006.

improvement in energy and mineral efficiency by 2015. Even some agricultural commodity prices, which historically have trended down, edge up. Limited endowments and low productivity growth cause the prices of fisheries and forestry commodities to rise sharply. From the 2001 base, the prices of "other crops," including fruits, vegetables, and sugar cane and beet, increase marginally. But not all prices rise. The price of livestock and most crop products trend down, due to fast productivity growth in the case of livestock and a particularly low income elasticity of demand in the case of crops. In mining sectors, global prices also rise.

3.4 Real energy commodity prices in the baseline scenario

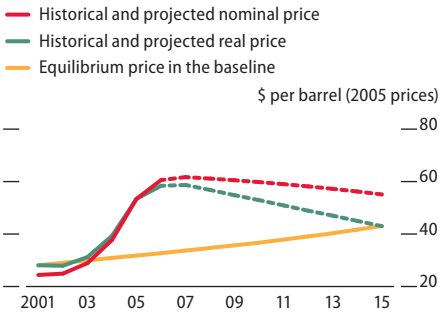
	2001 (actual)	2005 (actual)	2015 (projection)
Coal ($ per metric ton)	35.9	47.6	44.2
Crude oil ($ per barrel)	28.1	53.4	43.0
Natural gas ($ per million British thermal units)	6.1	8.9	6.5

Sources: Projections—GEMAT simulations; Actuals—International Monetary Fund, *World Economic Outlook* April 2006 database, available: www.imf.org, downloaded 26 August 2006.

Of particular interest are the model computations for the price of crude oil. Figure 3.19 shows the trajectory over 2001–2015. The trend calculated by the model shows the real cost (in 2005 prices) of crude oil rising from about $28 per barrel in 2001 to $43 per barrel in 2015, a rise of 53%. Barring critical supply disruptions, the International Energy Agency (2005) and Energy Information Administration (2006) forecast a price range for crude oil of $35–50 per barrel (in 2004 prices) by 2015.

Figure 3.19 also makes clear that the model estimate of the real price of crude oil in 2015 is below the average price for 2005, and the average price for the first 6 months of 2006. This is not surprising. Even over a period of years, market prices may diverge significantly from their theoretical equilibrium levels. Market prices are susceptible to macroeconomic fluctuations, weather conditions, political factors that disrupt supplies, speculation, and price-setting behavior by oligopolies (such as OPEC), none of which is captured by the model. But if, in the long run, markets are driven by fundamentals, the present computations suggest that while the price of crude oil may be less expensive in real terms by 2015 than it is today, it will be considerably more expensive than it was at the beginning of the millennium, and in decades past. Beyond 2015, the price may continue to trend up. This scenario is perfectly consistent with nominal prices that are much stickier (Figure 3.19, top line). For example, if for the sake of argument, global consumer price index inflation is set at 2.5% (rather than 0% as assumed in the model calculations) over the period 2001–2015, this translates to $55 per barrel by 2015 in current prices, a little above the average price in 2005.

3.19 Model price trajectory and extrapolations of market prices

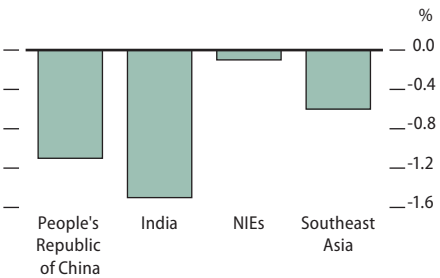


Note: The yellow line at the bottom shows model-generated price indexes. The other two lines show simple linear extrapolations of real and nominal prices that converge on trend by 2015. The distance between the nominal price and the real price in 2015 occurs because it has been calculated on the assumption of global inflation of 2.5% a year.

Source: GEMAT simulations.

These calculations suggest changes in developing Asia's terms of trade. Developing Asia is a major exporter of agricultural and manufactured goods and a significant importer of energy and mineral commodities. Figure 3.20 summarizes model estimates of terms-of-trade changes for major countries and subregions of developing Asia. It is notable that the projected terms of trade slide the most in the PRC and India. Their hunger for commodities and their tendency for growth are likely to lower the prices of manufactured and industrial output relative to global commodity prices, particularly of energy and mineral ores.

3.20 Annual average change in terms of trade, 2001–2015



NIEs = newly industrialized economies, comprising Hong Kong, China; Republic of Korea; Singapore; and Taipei,China.

Source: GEMAT simulations.

These results, and the calculations that underpin them, make a number of important assumptions that are subject to significant margins of uncertainty. To gauge how robust the numbers are, the model assumptions can be varied (see the appendix for details). For example, it is possible to make different assumptions about the efficiency of energy and mineral ore use. A cumulative 19.0% improvement in efficiency has

been assumed in all earlier calculations. But one can imagine a wide range around this number within which actual gains may lie. If, for example, the improvement in energy use is such that by 2015 efficiency increases by another 10%, this reduces the estimate of real oil prices in 2015 by nearly 2%. But if the assumptions that have been made about oil reserves are too optimistic, and perhaps 10% too large, this would add another 7% to oil prices by 2015.

In the context of the still-extensive use of fuel subsidies in developing Asia (see Box 1.1.1 in Part 1, *Developing Asia and the world*) another interesting experiment would be to consider the impact of their removal. Beyond the removal of subsidies, higher energy taxes might be warranted to mitigate environmental damage. Removing all energy subsidies in developing Asia and imposing taxes at one third of those in the European Union has a striking impact on results: the model suggests that such a regime change would reduce global oil prices in 2015 by 13% and reduce demands for oil in developing Asia by 44% (compared with what they would be under the status quo—Table 3.3).

Conclusions

Developing Asia's imprint on global markets is already visible, and is set to get bigger. In 2005, the region accounted for nearly all the growth in global demand for base metals. Fast growth in Asia, combined with commodity-intensive industrialization and urbanization, will continue to ratchet up demand for primary commodities. Increasingly, countries in developing Asia will have to look outside their own borders for supply—and indeed, outside the region.

Predicting the future is perilous. Nevertheless, rough indications of the likely impacts of demand and supply trends on prices are of interest. Underlying drivers are pushing up the real prices of energy and mineral ore prices, and this trend could continue well in to the future. By 2015, developing Asia is likely to be paying more in real terms for its oil and other fossil fuels, metals, forestry products, and selected agricultural crops than it did at the turn of the millennium, or in decades past. But compared with prices prevailing in the first half of 2006—which have jumped significantly above longer-term trends—2015 prices as suggested by the model analysis are less expensive. The short-run factors that have driven prices above trend should eventually dissipate. For most countries in developing Asia, higher commodity prices imply a deterioration in their terms of trade.

These global trends are not preordained, though. They can be influenced by conscious policy choices. Of course for small countries, who are price takers in global commodity markets, domestic policy decisions will have their main impacts at home, but for Asia's titans (the PRC and India) domestic policy decisions could easily ripple through global markets.

At least four sets of issues are worth underscoring. First, developing Asia has a big stake in the future of agriculture. Even today, many millions of Asians are malnourished, and pressures on food supply are increasing with an expanding population and shrinking arable land resources. Although real food prices have been falling over an extended

period and the model calculations presented in this part (and in the appendix) also suggest a comparatively benign outlook, this outlook depends critically on positive trends for agricultural productivity growth. Some countries are displaying worrying signs that their agricultural productivity growth may be declining. If such a reversal were to take root, this would raise the specter of rising prices for basic foodstuffs consumed by the poor and put at risk achievements on nutrition.

It is important, therefore, that policy makers continue to support the agricultural research and the extension services that are the ultimate sources of future productivity gains. The prospect of dwindling self-sufficiency in agriculture and food commodities suggests, too, that developing Asia has an interest in the maintenance of an open trading system. Perhaps the best assurance of supply comes through open trade rather than efforts to achieve self-sufficiency.

Second, the "grow now, pay later" philosophy that has generally guided environmental management in developing Asia comes at a heavy cost. The air above many of Asia's cities is heavily polluted as fossil fuel is burned to provide much-needed power. Asia is devouring its forests, many of which can no longer be regenerated, to feed timber demands in construction and other activities. Agricultural productivity growth is threatened by excessive use of fertilizers, often subsidized, that damage soil structures.

Yet fixing these problems need not come at high economic cost. Indeed, there are many investments that would be good for both the environment and for economic efficiency. For example, the recent reduction of fuel subsidies in Indonesia has brought additional spending for important social services that are likely to contribute positively to future growth prospects. In fact, if developing Asia were to take concerted steps to price energy at levels fully reflecting its environmental costs, the results presented here suggest that a significant proportion of these costs would be covered by a reduction in the global prices of energy commodities. Other approaches that encourage the adoption of cleaner and more efficient technologies for energy supply are also needed.

Third, the vexed issue of security has become more prominent as supply disruptions, terrorist threats, and rising prices have alerted governments to the risks inherent in being dependent on others for the supply of vital resources. The uneven geographic distribution of commodity resources places some countries at a strategic advantage and presents a notable risk for others.

In these circumstances, it makes sense both to diversify the locations from which supply is obtained and, in the case of energy, to diversify the types of energy (though direct equity investments in oil and mineral resources in other countries carry their own risks). For example, developing Asia has barely begun to tap renewable sources of energy. Regional cooperation can play an important role not just in building trust among neighbors, but also in providing the infrastructure and institutions that are needed to facilitate the efficient and safe transit of commodities across borders. For small countries that cannot afford to build up their own strategic inventories of key commodities, regional cooperation could provide a practical way of pooling resources to mitigate risks.

Finally, traders and producers in developing Asia are already making good use of futures markets, long-term supply contracts, and other means to lower the risks that are presented by volatile commodity prices. Nevertheless, developing Asia often pays more than it should for commodities. Better financial market infrastructure should help the development of markets and trading within the region. But for commodity markets to work efficiently they need good information. It is important, therefore, that countries in the region regularly provide accurate information to the markets about local conditions. Failure to do so runs the risk of putting domestic producers and consumers at a competitive disadvantage.

References

BP. 2006. *Statistical Review of World Energy*. June. London. Available: www.bp.com.

Energy Information Administration (EIA). 2006. *International Energy Outlook*. United States Department of Energy. Available: www.eia.doe.gov.

Frankel, Jeffrey. 1986. "Expectations and Commodity Price Dynamics: The Overshooting Model." *American Journal of Agricultural Economics* 68(2):344-48. Reprinted in Frankel. 1995. *Financial Markets and Monetary Policy*. MIT Press.

Frankel, Jeffrey. 2006. "Commodity Prices and Monetary Policy." In John Campbell (ed.) *Asset Prices and Monetary Policy*. Chicago: University of Chicago Press.

International Energy Agency (IEA). 2005. *World Energy Outlook 2005*. Paris.

International Rubber Study Group. 2004. "The Future of the Tyre and Rubber Sector of China and Consequences for the World Rubber Industry." London.

Paltsev, Sergey, John M. Reilly, Henry D. Jacoby, Richard S. Eckaus, James R. McFarland, Marcus C. Sarofim, Malcolm O. Asadoorian, and Mustafa H.M. Babiker. 2005. *The MIT Emissions Prediction and Policy Analysis (EPPA) Model: Version 4*. MIT Joint Program on the Science and Policy of Global Change. Report No. 125, August. Cambridge, Mass.

Appendix
GEMAT: A Global General Equilibrium Model

GEMAT (General Equilibrium Model for Asian Trade) is an applied general equilibrium model of the global economy, with a focus on Asia. It has strong micro-foundations and captures detailed interactions among industries, consumers, and governments, across the global economy. GEMAT is ideally suited for the analysis of structural changes over periods that are sufficiently long to allow markets to adjust and rigidities to work themselves out.

In GEMAT, producers in each industry are assumed to maximize profits and a representative household in each country or region maximizes its utility. In each (annual) period, relative prices equate demand and supply for all goods and factors of production—given resource endowments, technology, taste, substitution parameters, and taxes and subsidies. Mobile factors of production are allocated in a way that promotes equalization of factor prices across sectors. Labor is immobile across countries as is capital, once invested. For fixed foreign saving, external balance is assured by adjustment of the real exchange rate. Finally, domestic investment is determined by the availability of domestic and foreign saving. GEMAT models only the "real" economy and does not explain nominal variables such as inflation. The numeraire is the global consumer price index, which is assumed to be constant. Letting it grow simply scales all nominal variables equi-proportionately, and leaves real variables unchanged.

Based on the latest release of the Global Trade Analysis Project (GTAP) database (version 6.2), GEMAT provides a detailed disaggregation of commodities. In the model, the supply of each commodity percolates up from producers' decisions on profit-maximizing levels of output. Demand is an amalgam of producers' and consumers' decisions, domestic and foreign, on optimal levels of demands for intermediate, capital, and consumption goods. For those commodities that exploit resources, resource supplies enter the production function as a primary factor. GEMAT features a resource-depletion module for coal, crude oil, and natural gas to capture the long-term dynamics of energy resource supply, following the Green model of the Organisation for Economic Co-operation and Development (Lee, Oliveria-Martins, and van der Mensbrugghe 1997). The production of energy from reserves is price responsive, as higher prices encourage investment in retrieving higher-cost (usually less-accessible) sources of supply. In GEMAT, there are differentiated production structures for agriculture, primary energy, oil refining, electricity, and other industry and services sectors. This follows the treatment in the MIT Emissions Prediction and Policy Analysis (EPPA) model (Paltsev et al. 2005).

GEMAT solves recursively from its base year, 2001, to 2015. The model captures long-term equilibrium tendencies in product and factor markets, abstracting from short-term adjustment and fluctuations. The version of GEMAT used in this section aggregates the world economy into 16 regions (including 10 Asian countries/regions), shown in Table A1; 28 economic sectors; and four primary factors (capital, labor, land, and other natural resources).

A1 Regional disaggregation in GEMAT

Countries/regions in developing Asia	Countries/regions not in developing Asia
China, People's Rep. of	United States
NIEs	Japan
Indonesia	Australia and New Zealand
Malaysia	Europe
Philippines	Africa
Thailand	Latin America
Viet Nam	Rest of the world
India	
Rest of Asia[a]	

NIEs = newly industrialized economies, comprising Hong Kong, China; Republic of Korea; Singapore; and Taipei,China.

[a] Rest of Asia comprises Afghanistan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; Democratic People's Republic of Korea; Lao People's Democratic Republic; Macao, China; Maldives; Mongolia; Myanmar; Nepal; Pakistan; Sri Lanka; and Timor-Leste. Central Asia and the Pacific are not included in the global economy or in developing Asia.

Table A2 summarizes the main assumptions that underpin the results that are described in the main text.

A2 Scenario assumptions, 2001–2015

Technical and policy variables	Assumption
GDP and total factor productivity (TFP) growth	GDP growth of each region is exogenous, and region-specific nonagricultural TFP growth is set endogenously to match the exogenous GDP growth. TFP growth is assumed to be identical across all nonagricultural sectors. Developing Asia is set to grow at 6.6% and the rest of the world at 2.8%.
Efficiency of energy and mineral ores use	Improvement of 1.25% a year, leading to 19.0% higher use efficiency of energy and mineral ores in 2015 relative to 2001.
Reserves of global fossil fuels	Determined by the speed of depletion, the size of unproven reserves, and the conversion rate from unproven to proven reserves. See Table 3.2 in the main section about the assumption for reserves and conversion rates.
Productivity in agricultural and natural resources sectors	Grows by 1.02% a year for the world average of crops and 0.72% for livestock, based on the projection by Hertel, Ludena, and Golub (2006). There is no TFP growth in forestry, fisheries, and mining (including fossil fuels and mineral ores) sectors.
Energy taxes and subsidies	No changes.
Income and price substitution elasticities	The model contains a very large number of parameters. Essentially, income and price substitution elasticities reflect estimates of long-run rather than short-run effects. Long-run price elasticities of demand for most commodities are usually smaller in value than long-run price elasticities of supply.

Table A3 shows two alternative sets of assumptions that may be compared with those of the scenario set out in Table A2. The impact of these alternative assumptions on real commodity prices in 2015 is described in Table A4. These simulations are intended to be illustrative.

A3 Alternative scenario assumptions, 2001–2015

Technical and policy variables	Softening markets	Tightening markets
GDP and TFP growth	GDP growth of each region is endogenous and TFP growth in each region is set at the same level as in Table A2.	GDP growth of each region is endogenous and TFP growth in each region is set at the same level as in Table A2.
Efficiency of energy and mineral ores use	Faster growth in all regions, leading to 30.9% improvement in efficiency.	Slower growth in all regions, leading to 7.1% improvement in efficiency.
Reserves of global fossil fuels	10% higher than the level in Table A2 in 2015 due to gradually enlarged unproven reserves.	10% lower than the level in Table A2 in 2015 due to gradually reduced unproven reserves.
Agricultural productivity	Annual growth rate is 1 percentage point higher than that in the baseline for all regions, leading to 10% higher total factor productivity in 2015 relative to that in the baseline.	Annual growth rate is 1 percentage point lower than that in the baseline for all regions, leading to 10% lower total factor productivity in 2015 relative to that in the baseline.
Energy tax	Increase the energy tax rates to one third of European Union levels for countries/regions whose energy tax rates are lower than that.	No changes.

A4 Commodity prices under the "softening" and "tightening" scenarios, 2015 (for price index, 2001 = 100)

	Baseline	Softening	Energy efficiency up	Higher energy reserves	Higher agricultural TFP growth	Energy tax	Tightening	Energy efficiency down	Lower energy reserves	Lower agricultural TFP growth
	Index	Index	(% change from the baseline)				Index	(% change from the baseline)		
Grain	93.9	83.0	-0.2	0.0	-10.8	-0.6	107.2	0.3	-0.1	13.9
Oilseed	94.8	84.8	-0.1	0.0	-10.3	-0.2	107.1	0.3	0.0	13.9
Cotton	94.4	83.7	-0.4	-0.1	-9.8	-1.3	106.5	0.2	0.0	12.9
Other crops	102.4	90.9	0.1	0.0	-10.7	-0.7	116.1	0.5	0.1	12.2
Livestock	93.9	82.7	-0.1	0.0	-11.3	-0.6	107.6	-0.1	-0.1	13.6
Coal	123.2	111.4	-2.7	-2.3	0.8	-3.9	132.7	3.2	5.3	-1.0
Crude oil	153.3	117.1	-1.8	-3.1	0.9	-21.4	165.5	2.0	7.3	-1.2
Natural gas	107.1	97.2	-1.9	-2.2	1.0	-5.1	113.7	2.2	5.3	-1.3
Mineral ores	110.6	105.4	-4.6	0.0	0.7	-0.8	116.4	6.2	0.0	-0.9

Source: GEMAT simulations.

Although assumptions have been combined and their aggregate impact is reported in Table A4, care should be taken in comparing "shocks" with each other, since they are not necessarily of equivalent size. Given the comparative price inelasticity of demand relative to supply, supply (demand) shocks tend to have a bigger (smaller) impact on prices and a smaller (larger) impact on quantities.

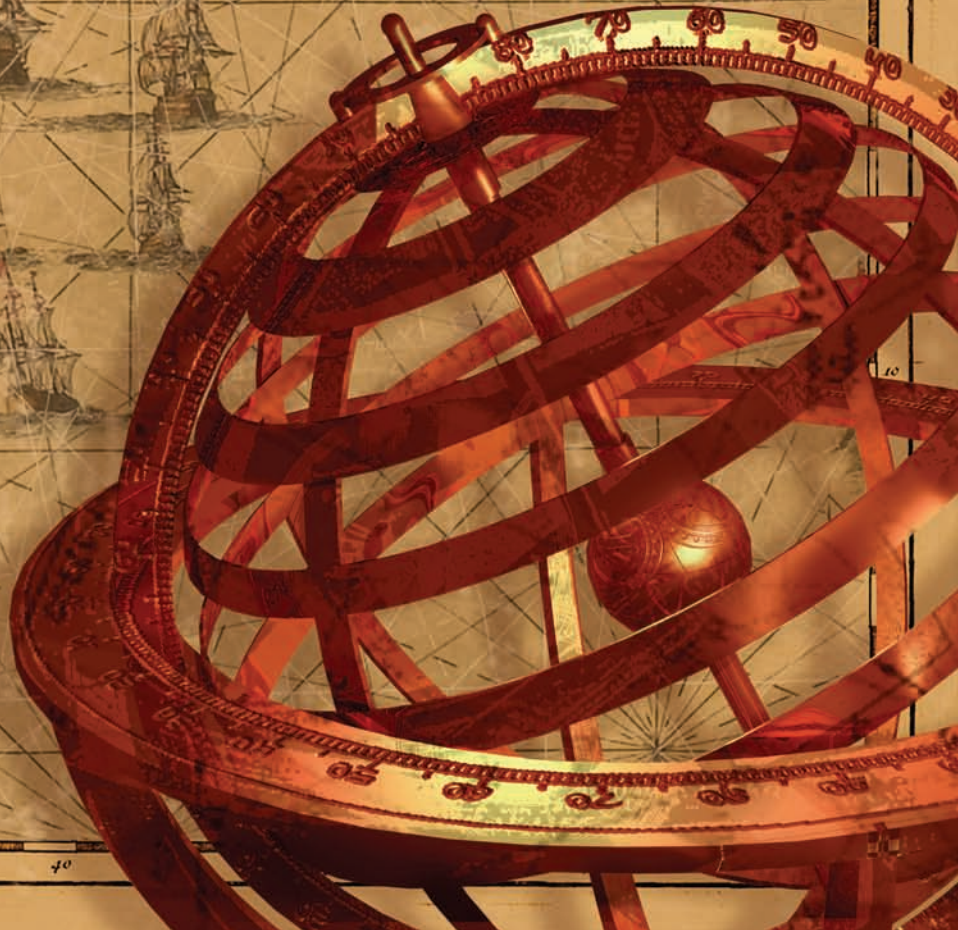
Appendix references

Hertel, Thomas W., Carlos E. Ludena, and Alla Golub. 2006. "Economic Growth, Technological Change and the Patterns of Food and Agricultural Trade in Asia." Center for Global Trade Analysis, Purdue University.

Lee, Hiro, Joaquim Oliveira-Martins, and Dominique van der Mensbrugghe. 1994. "The OECD Green Model: An Updated Overview." OECD Development Centre Working Paper No. 97. Paris.

Paltsev, Sergey, John M. Reilly, Henry D. Jacoby, Richard S. Eckaus, James R. McFarland, Marcus C. Sarofim, Malcolm O. Asadoorian, and Mustafa H.M. Babiker. 2005. *The MIT Emissions Prediction and Policy Analysis (EPPA) Model: Version 4*. MIT Joint Program on the Science and Policy of Global Change. Report No. 125, August. Cambridge, Mass.

Statistical appendix

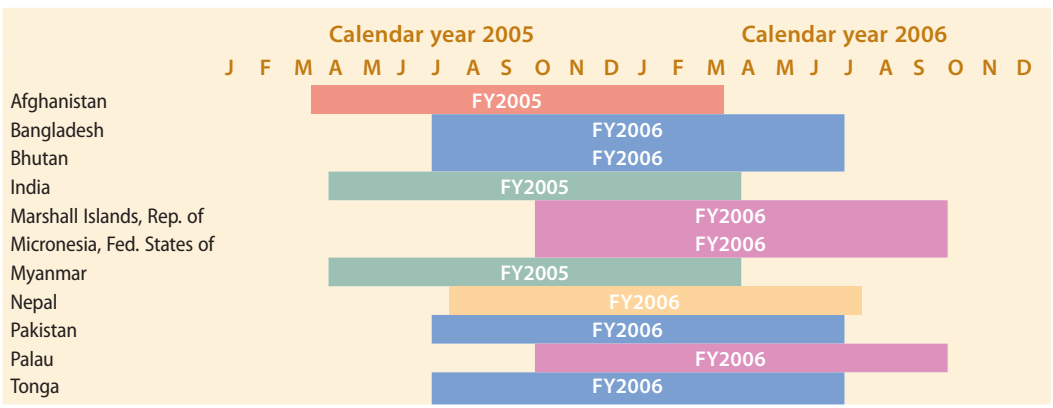


Statistical notes and tables

The statistical appendix presents three selected economic indicators for 43 developing member countries (DMCs) of the Asian Development Bank (ADB). These tables are gross domestic product (GDP) growth, inflation, and current account balance as a percentage of GDP. The DMCs are grouped into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific.

These tables contain historical data from 2003 to 2005 and forecasts for 2006 to 2007. *Update* forecasts are compared with forecasts provided in *Asian Development Outlook 2006* (*ADO 2006*). For countries where *Update* forecasts are not available, projections are from *ADO 2006*. As much as possible, efforts were undertaken to standardize the data to allow comparability over time and across DMCs. However, limitations exist because of differences in statistical methodology, definitions, coverage, and practices. A discussion of the sources, definitions, scope, and nature of data in the tables, as well as the methodology for the computation of regional and subregional averages/totals, follows.

Historical data are obtained from official sources, statistical publications, secondary publications, other working papers, and documents of ADB, International Monetary Fund (IMF), and World Bank. Projections for 2006 and 2007 are generally staff estimates, although for a few countries some projections are in accord with government economic programs agreed with IMF. Data in the tables are reported either on a calendar year or fiscal year basis. The DMCs that record most of their accounts on a calendar year basis are: Armenia; Azerbaijan; Hong Kong, China; Kazakhstan; Kyrgyz Republic; Lao People's Democratic Republic (Lao PDR); Maldives; Samoa; Sri Lanka; Taipei,China; Tajikistan; Thailand; Democratic Republic of Timor-Leste; and Uzbekistan. Palau reports balance-of-payments data on a fiscal year basis. Some countries record the majority of their accounts on a fiscal



year basis, with some accounts recorded on a calendar year basis, e.g., GDP data for Bhutan.

Regional and subregional averages for DMCs are provided for the three economic indicator tables. Data for Afghanistan, Myanmar, and Nauru are excluded from the computation of subregional averages due to measurement problems. Where there are missing data for a given year, regional and subregional averages are computed on the basis of available information only. For these tables, levels of gross national income (GNI) in current US$ using the World Bank Atlas method are used as weights to calculate the subregional and regional averages.

The GNI data, in current US$, were obtained from the World Bank Group WDI Data Query (http://devdata.worldbank.org/data-query/). The same weights used in ADO 2006 are applied in computing regional and subregional averages. The GNI data, in current US$, for three of the DMCs are unavailable, namely Cook Islands; Taipei,China; and Tuvalu. For these economies, GNI data are estimated. The tables are now reviewed in more detail.

Table A1: Growth rate of GDP (% per year). This 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. 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 DMCs use constant market price valuation. South Asian countries predominantly use constant factor costs, including India, Nepal, Pakistan, and Sri Lanka, while the Maldives' GDP valuation is at basic prices. The series for Bhutan has been revised to reflect GDP growth at market prices. Meanwhile, the Fiji Islands employs constant factor cost valuation. For Hong Kong, China, the computations of real GDP and sector growth rates are based on volume indexes. Growth forecasts for Cook Islands, Fiji Islands, and Vanuatu adopt official government projections.

Table A2: Inflation (% per year). Data on inflation rates represent period averages. Except for India, which reports the wholesale price index, and Solomon Islands, which uses the retail price index, annual inflation rates presented are based on the consumer price index. Kiribati reports a new series for the consumer price index, based on the household survey on income and expenditure conducted in 1996. The consumer price indexes of the following countries are for a given city or group of consumers only: Cambodia is for Phnom Penh, Solomon Islands is for Honiara, Republic of Marshall Islands is for Majuro and Ebeye, and Nepal is for urban consumers.

Table A3: Current account balance (% of GDP). The values on the current account balance, which is the sum of the balance of trade for merchandise, net trade in services and factor income, and net transfers, are divided by GDP at current prices in US$. The series for Bangladesh has been revised to include official transfers in the current account. In the case of Bhutan, GDP for the previous calendar year is used as the denominator.

Table A1 Growth rate of GDP (% per year)

Subregion/Economy	2003	2004	2005	2006		2007	
				ADO 2006	*Update*	*ADO 2006*	*Update*
Central Asia	10.3	10.7	10.9	10.3	11.3	9.8	10.3
Armenia	14.1	10.5	14.0	7.5	11.3	6.0	6.0
Azerbaijan	13.3	12.7	26.4	30.5	35.0	27.3	30.0
Kazakhstan	9.2	9.6	9.4	8.5	9.0	8.5	9.0
Kyrgyz Republic	7.0	7.0	-0.6	5.0	5.0	5.5	5.5
Tajikistan	10.2	10.6	6.7	8.0	8.0	6.0	6.0
Turkmenistan	23.0	21.0	10.0	6.5	6.5	6.5	6.5
Uzbekistan	4.4	7.7	7.0	6.2	6.2	6.0	6.0
East Asia	7.1	8.3	7.9	7.7	8.2	7.1	7.5
China, People's Rep. of	10.0	10.1	10.2	9.5	10.4	8.8	9.5
Hong Kong, China	3.2	8.6	7.3	5.5	6.5	5.0	5.2
Korea, Rep. of	3.1	4.7	4.0	5.1	5.1	4.9	4.6
Mongolia	5.6	10.7	6.2	6.0	6.8	5.0	5.6
Taipei,China	3.4	6.1	4.1	4.4	4.3	4.0	4.0
South Asia	7.7	7.4	8.1	7.3	7.5	7.5	7.5
Afghanistan	15.7	8.0	14.0	11.7	12.0	10.6	10.6
Bangladesh	5.3	6.3	6.0	6.5	6.7	6.0	6.0
Bhutan	7.1	7.5	6.1	10.0	10.0	12.0	12.0
India	8.5	7.5	8.4	7.6	7.8	7.8	7.8
Maldives	8.5	9.5	-5.2	9.0	18.7	6.0	6.0
Nepal	3.0	3.5	2.3	2.0	2.3	3.4	4.0
Pakistan	4.7	7.5	8.6	6.5	6.6	7.3	7.0
Sri Lanka	6.0	5.4	6.0	5.3	6.1	5.2	5.8
Southeast Asia	5.4	6.4	5.5	5.5	5.4	5.7	5.3
Cambodia	9.5	10.0	13.1	6.3	6.3	6.4	6.4
Indonesia	5.0	4.9	5.6	5.4	5.4	6.0	6.0
Lao People's Dem. Rep.	5.8	6.9	7.2	7.3	7.3	6.5	6.5
Malaysia	5.5	7.2	5.2	5.5	5.2	5.8	5.0
Myanmar	13.8	13.6	13.2	-	-	-	-
Philippines	4.9	6.2	5.0	5.0	5.4	5.3	5.3
Singapore	2.9	8.7	6.4	6.1	6.6	4.6	4.6
Thailand	7.0	6.2	4.5	4.7	4.2	5.5	4.0
Viet Nam	7.3	7.8	8.4	7.8	7.8	8.0	8.0
The Pacific	1.9	3.9	2.3	2.9	3.3	3.0	3.4
Cook Islands	8.2	4.3	0.1	3.5	1.8	3.5	3.5
Fiji Islands	1.2	5.6	0.7	2.0	3.1	2.4	2.2
Kiribati	-4.0	3.3	0.3	0.8	0.8	0.7	0.7
Marshall Islands, Rep. of	4.1	4.5	1.1	4.0	3.0	3.5	3.5
Micronesia, Fed. States of	0.1	1.0	1.3	1.0	1.0	1.0	1.0
Nauru	-	-	-	-	-	-	-
Palau	0.6	6.1	5.4	5.7	5.0	5.7	5.7
Papua New Guinea	2.9	3.0	3.0	3.2	3.5	3.0	4.0
Samoa	3.5	3.8	5.1	2.2	4.0	5.0	5.0
Solomon Islands	5.6	7.8	5.2	5.0	5.0	5.0	5.0
Timor-Leste, Dem. Rep. of	-2.2	1.2	2.3	5.0	-	4.0	5.0
Tonga	3.2	1.4	2.4	1.6	1.9	2.5	0.9
Tuvalu	4.0	4.0	2.0	3.0	1.0	3.0	1.0
Vanuatu	-4.7	4.2	3.1	3.4	3.4	3.4	3.4
Average	7.0	7.8	7.6	7.2	7.7	7.0	7.1

- = data not available.

Table A2 Inflation (% per year)

Subregion/Economy	2003	2004	2005	2006		2007	
				ADO 2006	*Update*	*ADO 2006*	*Update*
Central Asia	6.6	5.8	7.4	7.9	8.5	6.3	6.8
Armenia	4.7	7.0	0.6	3.0	3.0	3.0	3.0
Azerbaijan	2.2	6.7	9.6	13.0	11.0	7.0	8.0
Kazakhstan	6.4	6.9	7.6	7.3	8.5	7.0	7.5
Kyrgyz Republic	3.0	4.0	4.4	4.5	4.5	4.3	4.3
Tajikistan	16.8	6.8	7.1	7.0	7.0	5.0	5.0
Turkmenistan	5.6	5.9	-	-	-	-	-
Uzbekistan	10.3	1.6	7.8	9.2	9.2	6.0	6.0
East Asia	1.3	3.3	2.0	2.4	1.9	2.7	2.1
China, People's Rep. of	1.2	3.9	1.8	2.3	1.6	3.0	1.8
Hong Kong, China	-2.5	-0.4	0.9	2.5	2.4	2.5	2.8
Korea, Rep. of	3.6	3.6	2.7	3.0	2.8	2.8	3.0
Mongolia	5.0	8.2	12.7	5.5	5.5	5.0	5.0
Taipei,China	-0.3	1.6	2.3	1.6	1.6	1.3	1.3
South Asia	5.0	6.2	5.2	6.1	6.0	5.4	5.4
Afghanistan	24.1	13.2	12.3	8.0	9.2	5.0	5.0
Bangladesh	4.4	5.8	6.5	7.5	7.2	6.0	7.0
Bhutan	2.1	3.6	4.8	5.5	4.9	6.0	4.5
India	5.4	6.4	4.4	5.5	5.5	5.0	5.0
Maldives	-2.9	6.4	3.3	2.8	2.8	2.5	2.5
Nepal	4.8	4.0	4.5	8.0	7.9	6.5	6.5
Pakistan	3.1	4.6	9.3	8.5	8.0	7.6	6.5
Sri Lanka	2.6	7.9	10.6	9.0	9.0	8.0	8.0
Southeast Asia	3.4	4.2	6.3	7.3	7.5	4.9	5.0
Cambodia	1.2	3.9	5.8	4.5	4.5	3.5	3.5
Indonesia	6.8	6.1	10.5	14.0	14.0	7.5	7.5
Lao People's Dem. Rep.	15.5	10.5	7.2	9.0	9.0	9.0	9.0
Malaysia	1.2	1.4	3.0	3.5	4.0	3.3	3.3
Myanmar	24.9	3.8	-	-	-	-	-
Philippines	3.5	6.0	7.6	6.8	6.7	6.5	6.0
Singapore	0.5	1.7	0.4	1.7	1.4	1.6	1.4
Thailand	1.8	2.8	4.5	4.0	4.5	3.0	3.5
Viet Nam	3.1	7.8	8.3	6.0	8.3	5.0	7.8
The Pacific	8.5	3.3	2.4	2.9	3.3	2.8	3.1
Cook Islands	2.0	0.9	2.5	2.0	3.0	2.0	1.5
Fiji Islands	4.2	2.8	2.4	2.7	2.7	2.7	2.7
Kiribati	1.6	-0.7	0.0	-	1.6	-	2.5
Marshall Islands, Rep. of	1.2	2.2	4.4	2.9	3.0	2.4	2.4
Micronesia, Fed. States of	0.1	2.3	4.1	2.5	3.0	2.5	3.0
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	0.9	5.0	3.9	2.5	2.5	2.0	2.0
Papua New Guinea	14.7	2.2	1.7	2.4	2.4	2.4	3.0
Samoa	0.1	16.3	1.9	6.0	6.0	4.0	4.0
Solomon Islands	10.1	6.9	7.2	7.0	10.0	7.0	7.0
Timor-Leste, Dem. Rep. of	7.1	3.2	1.8	2.0	5.0	2.0	3.0
Tonga	11.6	11.0	8.3	8.0	9.9	8.0	6.8
Tuvalu	3.3	2.8	3.2	2.8	3.2	2.8	3.2
Vanuatu	3.0	1.4	2.6	2.5	2.5	2.5	2.5
Average	2.4	4.0	3.4	4.0	3.8	3.7	3.3

- = data not available.

Table A3 Current account balance (% of GDP)

Subregion/Economy	2003	2004	2005	2006		2007	
				ADO 2006	*Update*	*ADO 2006*	*Update*
Central Asia	-2.3	-1.6	1.1	2.9	3.6	4.8	7.4
Armenia	-6.8	-4.5	-3.9	-4.1	-4.1	-4.3	-4.3
Azerbaijan	-27.8	-29.8	1.3	15.8	19.7	32.9	50.8
Kazakhstan	-0.9	1.1	-0.9	0.7	1.1	0.5	1.0
Kyrgyz Republic	-4.8	-3.5	-8.1	-4.7	-4.7	-4.0	-4.0
Tajikistan	-0.3	-2.8	-0.8	-4.5	-4.5	-4.5	-4.5
Turkmenistan	3.0	0.6	-	-	-	-	-
Uzbekistan	8.7	9.7	9.8	5.1	5.1	3.9	3.9
East Asia	3.9	4.3	6.0	5.5	5.6	4.8	5.2
China, People's Rep. of	2.8	3.6	7.2	6.7	7.0	5.7	6.8
Hong Kong, China	10.4	9.5	11.4	11.0	11.3	10.0	10.5
Korea, Rep. of	2.0	4.1	2.1	1.0	0.6	1.1	0.0
Mongolia	-7.5	3.9	5.5	-8.5	-8.0	-8.5	-8.0
Taipei,China	9.6	5.5	4.8	5.1	5.2	4.8	4.6
South Asia	2.3	-0.5	-1.4	-3.0	-2.1	-3.1	-2.1
Afghanistan	3.0	1.4	-0.9	-0.9	-2.0	-2.4	-4.8
Bangladesh	0.3	0.3	-0.9	-0.8	0.9	-1.0	0.3
Bhutan	-12.4	-8.9	-25.7	-9.0	-9.0	10.1	10.1
India	2.3	-0.8	-1.3	-3.0	-2.1	-3.3	-1.9
Maldives	-4.6	-16.1	-40.0	-21.4	-21.4	-16.9	-16.9
Nepal	2.5	2.9	2.2	4.6	2.4	3.2	2.0
Pakistan	3.8	1.3	-1.6	-4.9	-4.4	-3.1	-5.5
Sri Lanka	-0.4	-3.2	-2.8	-3.7	-3.6	-2.7	-2.8
Southeast Asia	7.0	6.3	6.0	5.6	6.5	5.2	6.1
Cambodia	-10.8	-8.3	-9.5	-11.8	-10.5	-12.5	-11.3
Indonesia	3.5	1.2	1.1	1.0	1.2	0.9	0.9
Lao People's Dem. Rep.	-2.6	-8.6	-8.1	-10.0	-10.0	-10.0	-10.0
Malaysia	12.8	12.6	15.0	13.0	14.5	11.2	14.1
Myanmar	0.0	0.0	-	-	-	-	-
Philippines	0.4	1.9	2.4	1.9	2.9	1.8	3.1
Singapore	24.1	24.5	28.5	28.6	28.6	28.2	28.2
Thailand	5.6	4.2	-2.1	-2.5	-0.5	-2.5	-2.0
Viet Nam	-6.4	-5.4	-3.6	-2.7	-1.2	-2.8	0.3
The Pacific	-0.4	-4.3	0.6	-	-1.2	-	-2.9
Cook Islands	10.4	6.6	14.6	-	17.6	-	17.7
Fiji Islands	-6.1	-14.9	-12.7	-	-8.8	-	-5.4
Kiribati	0.9	3.3	-	-	-	-	-
Marshall Islands, Rep. of	21.8	12.8	6.8	-	4.8	-	-
Micronesia, Fed. States of	7.3	-11.3	-15.7	-	-	-	-
Nauru	-	-	-	-	-	-	-
Palau, Rep. of	7.8	9.4	10.4	-	-	-	-
Papua New Guinea	3.9	2.9	13.9	-	4.6	-	-2.0
Samoa	-0.5	-12.2	-14.5	-	-	-	-
Solomon Islands	2.4	4.9	0.1	-	-13.6	-	-9.1
Timor-Leste, Dem. Rep. of	-16.1	-14.3	-9.1	-	-	-	-
Tonga	-3.1	4.2	-4.8	-	-6.1	-	-5.1
Tuvalu	-	-	-	-	-	-	-
Vanuatu	-10.5	-5.1	-7.2	-	-4.1	-	4.0
Average	4.1	3.6	4.5	3.9	4.2	3.4	4.0

- = data not available.

ADO forecasting performance for GDP growth and inflation

Asian Development Outlook (*ADO*) has tended to underpredict growth and overpredict inflation, according to analysis of its track record in forecasting these indicators. Its forecast errors are most pronounced at times of large swings in economic growth. Forecasting performance has improved since the end of the Asian crisis, though directions of bias remain the same. Also, *ADO*'s growth and inflation forecasts have generally been more accurate than Consensus Forecasts for the group of countries covered in the *Update*.

Introduction

The Asian Development Bank (ADB) has been publishing its assessment of the economic prospects for its developing member countries (DMCs) since 1989 in *ADO*. This is released in April of each year, and its *Update* (since 2000) has appeared in September the same year. The *ADO* country economic analysis and projections provide important context for ADB's policy dialogue with its DMCs and other developing partners, and guides ADB management in its public commentary about economic developments and other important policy issues.

It is important therefore to review *ADO*'s forecasting performance and to consider ways in which their accuracy and usefulness can be improved. Readers need to be mindful that forecasts are prone to errors. An investigation of past errors may provide useful information that will permit future improvements.

Measuring the quality of forecasts

This exploratory investigation will examine errors in forecasts of real GDP growth and inflation, as these generally receive more public interest and attention than other economic variables. Current-year and next-year forecasts of nine DMCs of ADB, from 1990 to 2005, are considered. (The nine DMCs are those covered in this *Update*: Bangladesh, India, Indonesia, Malaysia, Pakistan, People's Republic of China [PRC], Philippines, Thailand, and Viet Nam.) The *ADO* forecasts are then compared with the April release of Consensus Forecasts from Consensus Economics (which polls forecasts on a monthly basis) for the post-crisis period from 1999 to 2005.

One measure of the accuracy of forecasts is the size of the forecast error or the difference between actual values and the forecast for a given year. For example, the *current-year* forecast error in GDP growth in 2005 is the difference between actual growth in 2005 and the forecast made in *ADO 2005*. As the *ADO 2005* forecast published in April is formulated in March, the forecast has about a 9-month lead to end-2005. The *next-year* forecast error is the difference between actual growth in 2005 and the forecast made in *ADO 2004*. *Positive forecast errors* indicate underprediction and *negative forecast errors* indicate overprediction.

Although the *mean forecast error* is widely used as a simple measure of accuracy, it can be misleading if positive and negative values cancel each other out. Thus, a small mean forecast error can result either from the fact that all errors are small or if all the errors are large, because underestimates and overestimates cancel each other out. To overcome these limitations, one can look at alternative measures that disregard the arithmetic signs—the *mean absolute error* (MAE) and the *root-mean-square error* (RMSE). These show the magnitude of the errors without regard for the sign, and the latter gives greater weight to larger errors.

ADO's forecasting record

Table 1 reports basic statistics for the forecast errors for both current-year and next-year forecasts of GDP growth and inflation for each of the nine DMCs. The mean, median, standard deviation, coefficient of the 1st-order serial correlation of the forecast errors, the fraction of positive errors, the MAE, and the RMSE are shown.

GDP growth

Current-year forecasts. For GDP growth, the mean of the current-year forecast error (i.e., the bias averaged across time and across countries) is close to zero. The PRC posted the largest forecast error—close to 2 percentage points. This indicates that the PRC GDP growth forecasts are predominantly underestimated. Mean forecast errors for other countries are also positive (i.e., growth is underpredicted) but are less than 1 percentage point (Bangladesh, India, Malaysia, and Viet Nam). On the other hand, forecasts for the Philippines, Thailand, Pakistan, and Indonesia have negative errors (i.e., growth is overpredicted). With the exception of the Philippines, GDP growth forecasts for the three countries are higher than actual data by less than half a percentage point. On average, *ADO* forecasts of Philippine GDP growth are overestimated by 0.6 percentage points. This is largely due to the large negative errors during periods when the country faced economic turmoil (i.e., 1991 economic recession, and the 1997–98 Asian financial crisis). For countries not affected by outliers, the biases are low. This is true for Bangladesh and India where mean forecast errors are close to zero.

Due to the sensitivity of the mean forecast error to extreme values, it is useful to consider the median forecast error and the fraction of positive errors. A case in point is Indonesia, where the mean forecast error is negative while the median forecast error and more than 80% of the forecast errors are positive. This is because its mean forecast error is significantly influenced by a few large negative errors (which occurred at the time of the Asian crisis). The same is true for Thailand. The standard deviations of the forecast errors for these two countries are high.

Except for the Philippines, a majority of the forecasts for each country's GDP growth are underpredicted. A particularly high fraction of positive errors are observed for the PRC, Indonesia, Malaysia, and Viet Nam. Consistent with this, the median forecast errors are large and positive.

Next-year forecasts. Next-year mean forecast errors are negative except for the PRC and Viet Nam. The observation that next-year's overall mean forecast error is smaller and hence more accurate than the

1 Descriptive statistics for forecast errors, 1990–2005

	Mean	Median	Standard deviation	Serial correlation[a]	Fraction of positive errors	Mean absolute error	Root mean square error
				GDP growth			
Current-year forecasts	0.11	0.43	2.27	0.16	0.67	1.48	2.26
China, People's Rep. of	1.69	1.65	1.80	0.22	0.88	1.93	2.43
Bangladesh	0.04	0.02	0.69	-0.03	0.56	0.53	0.67
India	0.01	0.18	1.70	-0.07	0.63	1.32	1.65
Pakistan	-0.34	0.11	1.59	0.10	0.56	1.21	1.58
Indonesia	-0.05	0.80	2.97	0.27	0.81	1.68	2.88
Malaysia	0.16	1.07	3.60	-0.20	0.75	2.30	3.49
Philippines	-0.56	-0.10	1.34	0.31	0.50	1.09	1.41
Thailand	-0.43	0.38	3.21	0.27	0.63	2.17	3.14
Viet Nam	0.51	0.69	1.43	0.02	0.75	1.13	1.48
Next-year forecasts	-0.36	0.18	3.54	0.22	0.53	2.07	3.55
China, People's Rep. of	1.81	1.80	2.86	0.33	0.81	2.51	3.31
Bangladesh	-0.46	-0.50	0.74	-0.40	0.25	0.71	0.85
India	-0.23	0.24	1.74	0.15	0.56	1.41	1.70
Pakistan	-1.14	-1.27	2.25	0.24	0.25	2.04	2.46
Indonesia	-0.57	0.75	5.69	0.14	0.69	2.63	5.54
Malaysia	-0.19	1.40	4.89	-0.06	0.63	2.90	4.74
Philippines	-1.51	-0.55	2.51	0.22	0.38	1.82	2.86
Thailand	-1.07	0.33	5.32	0.24	0.63	3.10	5.26
Viet Nam	0.11	0.40	1.97	0.37	0.63	1.51	1.91
				Inflation			
Current-year forecasts	-0.61	-0.60	5.28	0.32	0.41	2.71	5.30
China, People's Rep. of	-0.56	-1.55	4.68	0.53	0.31	3.38	4.57
Bangladesh	-0.88	-0.70	2.88	0.41	0.44	2.24	2.93
India	0.10	0.35	2.81	0.34	0.56	2.24	2.72
Pakistan	-0.29	-0.60	1.80	0.23	0.38	1.58	1.77
Indonesia	2.70	0.70	9.99	-0.05	0.63	4.47	10.04
Malaysia	-0.59	-0.60	0.67	0.01	0.19	0.73	0.88
Philippines	-0.93	-0.75	1.72	0.26	0.38	1.41	1.91
Thailand	-0.84	-0.50	1.99	0.23	0.44	1.40	2.10
Viet Nam	-4.39	-3.40	9.75	0.51	0.40	7.21	10.40
Next-year forecasts	-0.45	-0.40	7.98	-0.09	0.47	4.13	7.96
China, People's Rep. of	-0.89	-1.95	6.98	0.64	0.31	5.34	6.82
Bangladesh	-1.05	-0.28	4.43	0.23	0.50	3.61	4.42
India	0.44	0.10	3.30	0.55	0.56	2.50	3.22
Pakistan	0.16	0.10	3.40	0.30	0.50	2.70	3.29
Indonesia	4.09	1.85	12.94	-0.06	0.75	6.17	13.18
Malaysia	-0.80	-0.92	1.03	0.00	0.19	1.14	1.28
Philippines	-0.03	-0.65	3.48	0.02	0.50	2.72	3.37
Thailand	-0.69	-0.15	2.88	0.11	0.50	2.09	2.87
Viet Nam	-5.64	-1.20	17.05	-0.51	0.40	11.35	17.41

[a] Coefficient on lagged forecast error in a regression of the forecast error on a constant and its lagged value.

Note: Figures with underlining indicate statistical significance at the 5% level. This test should be treated with care as sample sizes are small and the test is unlikely to be statistically robust.

Source: Staff calculations.

current-year is misleading, as large positive and negative forecast errors are canceling out. Disregarding arithmetic signs, the MAE and the RMSE are larger for next-year forecasts. The PRC, Philippines, Pakistan, and Thailand all report forecast errors exceeding 1 percentage point. The negative bias of forecast errors for Bangladesh, Pakistan, Philippines, and Thailand and the positive bias for PRC are notable.

The proportion of positive next-year forecast errors is very low for Bangladesh (0.25), Pakistan (0.25), and the Philippines (0.38). But just as for current-year forecasts, next-year forecasts for the PRC, Indonesia, Malaysia, Thailand, and Viet Nam have a large proportion of positive forecast errors, reflecting a strong tendency to underpredict GDP growth.

As next-year forecasts are more susceptible to unexpected economic developments, errors are more volatile when compared with current-year forecasts. The standard deviations of next-year forecast errors are greater than those of the current year. In particular, the increase of the spread in errors between the current-year and the next-year forecasts for many of the countries appears quite large, and was, for Indonesia for example, almost double.

Inflation

Current-year forecasts. A handful of countries have experienced high inflation rates: PRC, India, Pakistan, Philippines, and Viet Nam during the early part of the 1990s and Indonesia and Thailand during the latter part. Indonesia and Viet Nam recorded the two highest inflation rates. Consequently, mean forecast errors for these two countries were significantly higher than for other countries. For Indonesia, current-year forecasts for inflation were underpredicted by 2.7 percentage points. This was largely driven by the failure to anticipate the positive effect on inflation in 1998 of the Asian financial crisis. For Viet Nam, current-year inflation estimates were, on average, above outcomes by 4.4 percentage points. This is largely explained by the forecast errors made in 1990 and 1991, when inflation was high.

A negative overall mean forecast error suggests a general tendency for *ADO* to overpredict inflation rates. But again this measure may be affected by the presence of outliers. With the exception of India and Indonesia, the majority of the countries' forecast errors are negative. Taken as a whole, almost 60% of the countries' forecast errors are negative, suggesting a general tendency of current-year forecasts of the *ADO* to overpredict inflation.

Next-year forecasts. A somewhat similar picture emerges for the next-year forecast errors. The mean forecast errors and the proportion of positive errors suggest a general tendency for next-year forecasts to overpredict inflation rates. Taken as a whole, the proportion of positive errors is only a little bit below 50%. The proportions of positive errors are low for the PRC (0.31), Malaysia (0.19), and Viet Nam (0.4). It is only India and Indonesia that have high proportions of positive errors (0.56 and 0.75, respectively) while remaining countries have equal proportions of positive and negative forecast errors.

Although the mean forecast error for the next-year forecasts may appear to be lower than the current-year forecasts, this is again because of self-cancellation of large positive and negative errors. An examination of the MAE and the RMSE statistics confirms this. Next-year forecasts' MAE is 4.1 percentage points compared with the current-year forecasts' MAE of 2.1 percentage points. Furthermore, standard deviations of next-year forecast errors are higher than current-year forecast errors.

Serial correlation appears to be a problem for the forecast errors

for PRC, India, and Viet Nam. In the case of PRC and Viet Nam, the problem appears in both current- and next-year forecast errors.

Forecast errors and volatility in growth and inflation

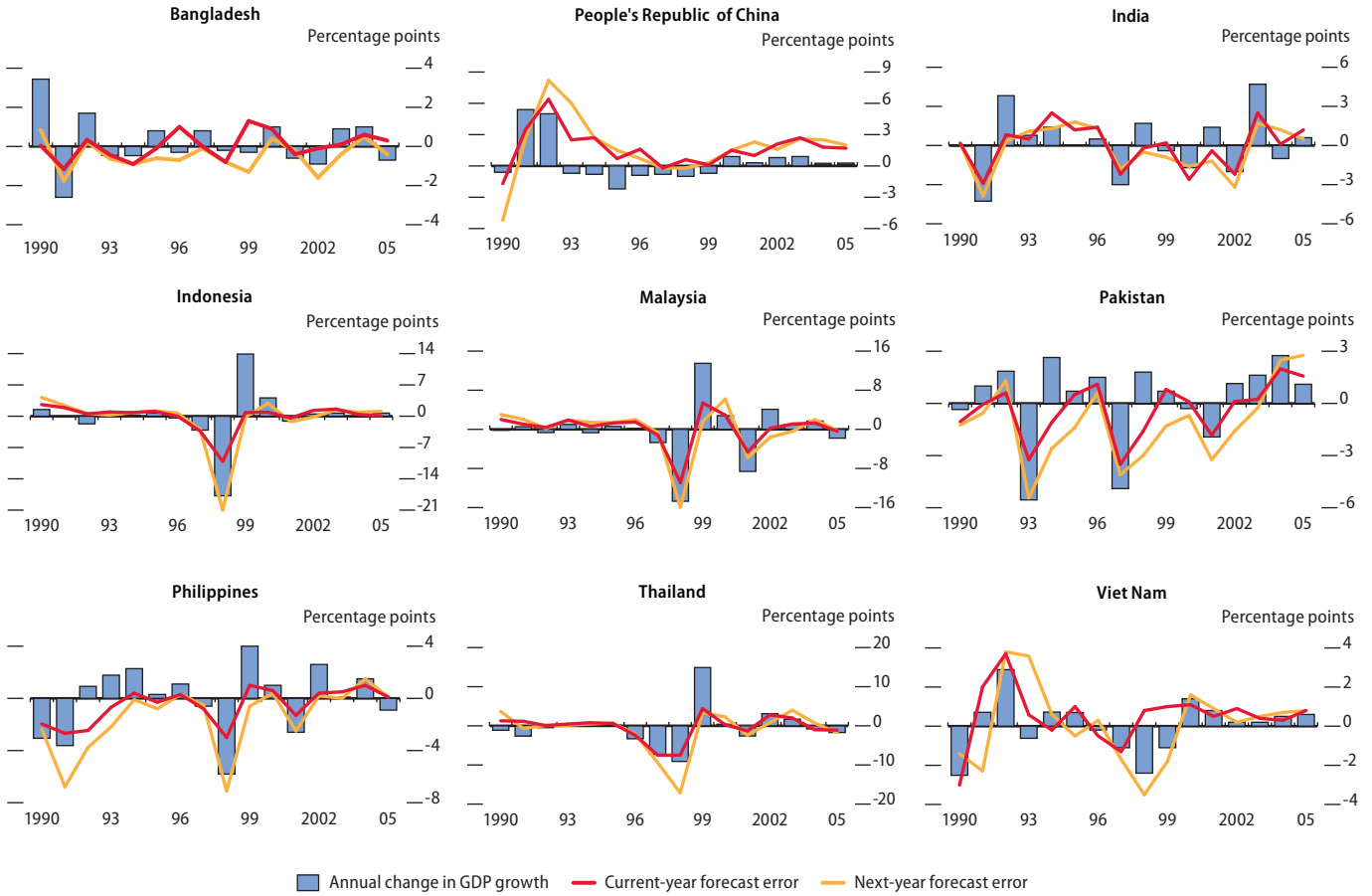
Figures 1 and 2 plot annual change in GDP growth and inflation against current- and next-year forecast errors. The figures show the relationship between forecast errors and year-to-year changes in growth and inflation.

From Figures 1 and 2, it can be seen that forecasts tend to miss the mark most when there are sharp changes in outcomes. For example, GDP growth was significantly overpredicted for the Asian financial crisis years: the 1997 current-year forecasts by about 2.2 percentage points, and the 1998 current-year forecasts by about 3.6 percentage points. Next-year forecast errors were even larger.

The figures show the presence of large forecast errors during positive and negative swings for both growth and inflation. But generally, forecast errors are larger at the time of downturns than upturns. The reasons for this are not immediately apparent, but would be consistent with a reticence to add to bad news.

As regards inflation, large overpredictions were made not only during the Asian financial crisis but also during the early 1990s, when many

1 Forecasting performance (GDP growth)



Sources: Asian Development Bank, *Key Indicators 2006*, available: http://www.adb.org/Documents/Books/Key_Indicators/2006/default.asp, downloaded 8 August 2006; *Asian Development Outlook,* various issues; staff estimates.

countries were adversely affected by generally slower growth in the world economy and higher petroleum prices following the onset of the Gulf crisis.

Although *ADO* forecasts generally follow the ups and downs of GDP growth and inflation, there would appear to be a bias in the forecasts against substantial departures from the preceding year's outcome. It would appear that the future is often assumed to be much like the present.

ADO and Consensus Forecasts

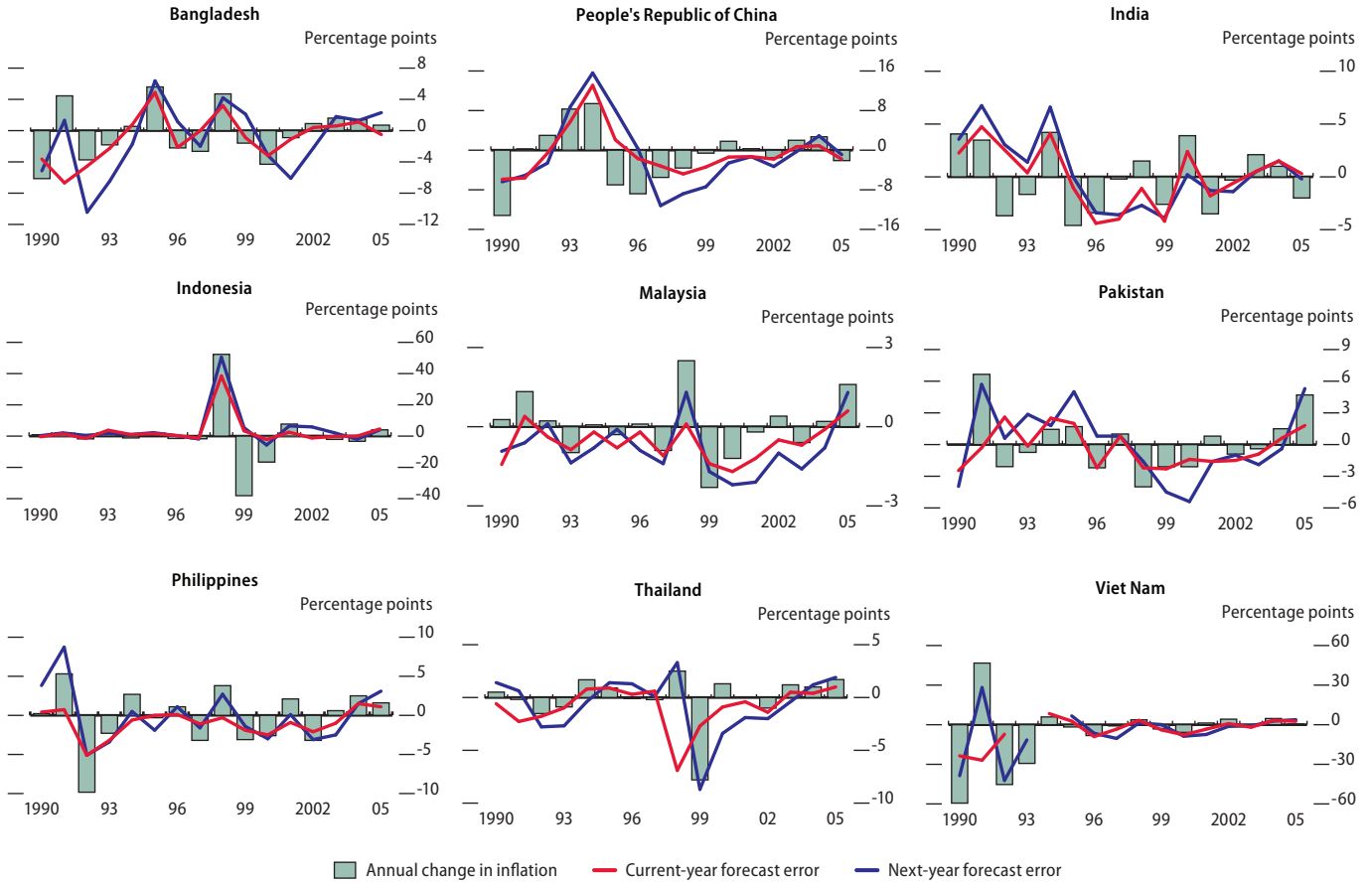
Since the Consensus Forecasts represent judgments of a broader sample of economic forecasters, they generally reflect a wider mix of methods and sources of information than *ADO* forecasts. Although the Asia Pacific Consensus Forecasts began in 1995, a shorter common sample period is used, focusing on the post-Asian crisis years (i.e., 1999–2005). Significant turbulence during the Asian crisis years impaired forecasts.

Table 2 presents the summary statistics for the current-year and the next-year forecasts for GDP growth and inflation of both *ADO* and Consensus Forecasts.

GDP growth

GDP growth forecasts generally improved in the post-Asian crisis

2 Forecasting performance (inflation)



Sources: Asian Development Bank, *Key Indicators 2006,* available: http://www.adb.org/Documents/Books/Key_Indicators/2006/default.asp, downloaded 8 August 2006; *Asian Development Outlook,* various issues; staff estimates.

2 Descriptive statistics for forecast errors, 1999–2005

	Mean absolute error		Median		Fraction of positive errors	
	ADO	Consensus forecast	ADO	Consensus forecast	ADO	Consensus forecast
			GDP Growth			
Current-year forecast	1.20	1.44	0.60	0.80	0.79	0.84
China, People's Rep. of	1.80	1.52	1.75	1.70	1.00	1.00
Bangladesh	0.53	0.77	0.30	0.80	0.71	0.86
India	1.31	1.39	0.10	0.40	0.57	0.57
Pakistan	0.95	1.51	0.23	0.23	0.86	0.57
Indonesia	0.79	1.06	0.80	0.70	0.86	1.00
Malaysia	2.27	1.94	1.10	1.10	0.71	0.71
Philippines	0.70	0.94	0.50	0.60	0.86	0.86
Thailand	1.84	2.89	0.30	3.00	0.57	1.00
Viet Nam	0.71	0.96	0.80	0.80	1.00	1.00
Next-year forecast	1.51	1.61	0.50	0.90	0.62	0.72
China, People's Rep. of	2.20	1.86	2.30	2.40	1.00	1.00
Bangladesh	0.58	0.50	-0.30	0.10	0.33	0.67
India	1.57	1.87	-0.35	0.25	0.50	0.50
Pakistan	1.84	1.84	-0.48	0.17	0.33	0.50
Indonesia	1.28	1.02	1.00	0.80	0.67	0.83
Malaysia	2.72	2.47	-0.35	-0.20	0.33	0.33
Philippines	0.78	1.32	0.15	0.95	0.83	0.83
Thailand	1.98	2.67	0.75	2.05	0.67	0.83
Viet Nam	0.78	1.07	0.75	1.05	1.00	1.00
			Inflation			
Current-year forecast	1.60	1.55	-0.80	-0.55	0.39	0.35
China, People's Rep. of	1.32	1.00	-1.35	-0.70	0.33	0.33
Bangladesh	1.11	1.50	-0.50	-0.40	0.43	0.14
India	1.61	1.99	0.30	-1.00	0.57	0.43
Pakistan	1.44	2.09	-1.40	-2.10	0.29	0.29
Indonesia	2.01	1.53	0.00	1.00	0.57	0.71
Malaysia	0.89	0.59	-0.70	-0.40	0.14	0.29
Philippines	1.57	1.11	-1.00	-0.50	0.29	0.29
Thailand	1.04	0.71	-0.40	-0.10	0.43	0.29
Viet Nam	3.37	3.39	-1.90	-1.60	0.43	0.43
Next-year forecast	2.46	2.53	-0.90	-1.00	0.38	0.32
China, People's Rep. of	1.74	1.82	-0.90	-1.10	0.20	0.20
Bangladesh	2.82	2.20	-0.45	-1.60	0.50	0.33
India	0.85	1.53	0.00	-0.90	0.50	0.33
Pakistan	2.60	3.28	-1.30	-3.05	0.17	0.17
Indonesia	4.37	3.77	3.05	2.65	0.67	0.67
Malaysia	1.50	1.28	-1.30	-0.90	0.17	0.17
Philippines	2.22	2.15	-1.20	-1.20	0.50	0.33
Thailand	1.80	1.55	-1.15	-0.90	0.33	0.33
Viet Nam	4.13	5.05	-1.05	-1.00	0.33	0.33

Source: Staff calculations.

period. Both the MAEs and the median forecast errors are smaller in the shorter sample than in the full sample period. The MAE and median forecast error of *ADO* are also smaller than Consensus Forecasts. But the general pattern of underpredicting GDP growth remains. The current-year median forecast errors are all positively skewed and around 80% of current-year GDP forecasts are overpredictions. GDP growth forecast errors for the PRC and Viet Nam are all positive.

Again, both *ADO* and Consensus Forecasts show Malaysia, Thailand, and PRC as having the largest MAEs. Among the 9 DMCs examined

here, Malaysia and Thailand recorded the highest change in GDP growth in 1999. From contraction of 7.4% in 1998, Malaysia posted growth of 6.1% in 1999. Similarly, Thailand's GDP performance improved from a contraction of 10.5% in 1998 to 4.4% growth in 1999. And both *ADO* and Consensus Forecasts failed to foresee these sharp changes. The case of the PRC is different. Annual changes in GDP growth for 1999–2005 were small—less than 1 percentage point, yet both largely underpredicted PRC's GDP growth.

The same broad patterns can be detected in next-year forecasts.

Inflation

Inflation errors are preponderantly negative. Again the *ADO* errors are slightly better than the Consensus Forecasts. For both of them, the mean absolute error for Viet Nam is more than 3 percentage points. This is primarily because of the large overprediction of inflation in 2000 when both *ADO* and Consensus Forecasts predicted positive inflation and the country experienced deflation. Absolute mean errors for Indonesia (in the case of *ADO*) and Pakistan (in the case of Consensus Forecasts) are also high—more than 2 percentage points. In the case of Indonesia, inflation was underpredicted in 1999 and 2005 by 3.4 and 4.6 percentage points, respectively. For Pakistan, inflation was, on the average, overpredicted by 2.3 percentage points, from 1999-2003 and underpredicted in 2005 by 3.1 percentage points.

Next-year inflation errors are higher than current-year. Mean absolute errors averaged more than 2 percentage points for both *ADO* and Consensus Forecasts. Five out of the nine DMCs have inflation errors of more than 2 percentage points, with Indonesia and Viet Nam having inflation errors higher than 4 percentage points.

The median forecast errors and the fraction of positive errors suggest a general tendency to overpredict inflation. It is only for India and Indonesia (in the case of *ADO*) that more than half the forecast errors are positive. The predominance of countries with proportions of positive signs below 0.5 is consistent with the tendency of forecasters to overpredict this year's and next year's inflation.

Conclusion

The analysis suggests that while GDP has generally been underpredicted inflation has been overpredicted. However, these errors are similar to—indeed, the forecasts are somewhat more accurate than—wider "industry" performance. Work is ongoing to recognize possible sources of errors and to improve forecasts.

References

Consensus Economics Inc. Various issues. *Asia Pacific Consensus Forecasts*.

Asian Development Bank. Various issues. *Asian Development Outlook*. Manila.

Pindyck, Robert and Daniel Rubinfeld. 1998. *Econometric Models and Economic Forecasts.* Singapore: McGraw-Hill Book Company.

Timmerman, Allan. 2006. "An Evaluation of the World Economic Outlook Forecasts." IMF WP/06/59. International Monetary Fund, Washington, DC. March.