ASIAN DEVELOPMENT OUTLOOK 2014 UPDATE

ASIA IN GLOBAL VALUE CHAINS

ASIAN DEVELOPMENT BANK

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6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 4444
Fax +63 2 636 2444
www.adb.org

For orders, please contact:
Public Information Center
Fax +63 2 636 2584
adbpub@adb.org

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Foreword

Developing Asia is maintaining its growth momentum, even as the pace of recovery among the major industrial economies falls short of expectations. The United States, the euro area, and Japan are now expected to grow collectively by 1.5% in 2014, before growth picks up to 2.1% next year. Developing Asia remains on track to meet the April forecasts of growth acceleration from 6.1% in 2013 to 6.2% in 2014 and 6.4% in 2015.

The People's Republic of China is making a smooth transition to a lower medium-term growth path, with growth edging down from 7.7% in 2013 to 7.5% in 2014 and 7.4% in 2015, as forecast in April. Meanwhile, India looks poised to capitalize on a new government mandate and shake off the stagnation of recent years, bettering April's forecast for 2015 with growth at 6.3%.

Moderating domestic demand in the larger Southeast Asian economies has slowed growth there, while weakness in the Russian Federation is spilling over into Central Asia. However, both subregions are expected to rebound in 2015. The devastating floods in Solomon Islands affected growth in the Pacific, but gas production commencing in Papua New Guinea will drive Pacific growth to new heights in 2015.

Also heartening is the calm that has prevailed in regional capital markets this year as the US tapered its expansive program of bond purchases, the mere prospect of which roiled them last year. Developing Asia seems prepared to cope with eventual US monetary tightening. Policy makers have retained elevated policy rates and room to maneuver. Meanwhile, lending premiums and stock prices have largely returned to their levels before last year's shock, without large inflows of short-term capital.

Stability extends to inflation and the current account. Weakening food prices and steady oil prices will hold regional inflation in 2014 at the 2013 rate of 3.4% before it picks up to 3.7% in 2015, as projected earlier. Because most economies in developing Asia will likely continue to grow below potential, as they have since the global financial crisis of 2008–2009, inflation will remain subdued to the forecast horizon.

The Association of Southeast Asian Nations is scheduled to launch its ambitious economic community at the end of 2015, and that subregion and East Asia will continue to see growth in trade and the broader economy tied to further integration with global value chains (GVCs). As reported in the theme chapter of this *Update*, industries that doubled their trade through cross-border production networks from 1995 to 2008 boosted their output by 19% over other industries and expanded their employment by 10%. Economies whose GVC trade doubled in the same period enjoyed a 12% increase in real per capita income.

Few economies in Central Asia, South Asia, or the Pacific have made many connections to cross-border production networks. Remote location, underdeveloped transport infrastructure, or excessive regulatory burdens have hindered GVC entry. Although not all barriers can be overcome, policy makers should keep in mind that small savings in trade costs—through lower tariffs, predictable taxes, improved infrastructure, or smoother logistics—can have outsized benefits within value chains.

Those developing Asian economies that have found their place in cross-border production networks have reaped considerable income and employment benefits. Further gains can come from strengthening existing GVC ties and helping others to forge new links.

TAKEHIKO NAKAO
President
Asian Development Bank

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Shang-Jin Wei
Chief Economist
Economics and Research Department

Definitions

The economies discussed in *Asian Development Outlook 2014 Update* (*ADO 2014 Update*) are classified by major analytic or geographic group. For purposes of this publication, the following apply:

- **Association of Southeast Asian Nations (ASEAN)** comprises Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.
- **Developing Asia** comprises the 45 members of the Asian Development Bank.
- **Central Asia** comprises Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
- **East Asia** comprises the People's Republic of China; Hong Kong, China; the Republic of Korea; Mongolia; and Taipei,China.
- **South Asia** comprises Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka.
- **Southeast Asia** comprises Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.
- **The Pacific** comprises the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Papua New Guinea, Palau, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Unless otherwise specified, the symbol "$" and the word "dollar" refer to US dollars. *ADO 2014 Update* is generally based on data available up to **5 September 2014**.

Abbreviations

ADB	Asian Development Bank
ADO	Asian Development Outlook
AfT	Aid for Trade initiative
AFC	Asian financial crisis
AEC	ASEAN Economic Community
ASEAN	Association of Southeast Asian Nations
CPI	consumer price index
EU	European Union
FDI	foreign direct investment
FSM	Federated States of Micronesia
FTA	free trade agreement
FY	fiscal year
GDP	gross domestic product
GFC	global financial crisis
GVC	global value chain
ICT	information and communication technology
IIT	intra-industry trade
IMF	International Monetary Fund
Lao PDR	Lao People's Democratic Republic
LNG	liquefied natural gas
NAFTA	North American Free Trade Agreement
NIE	newly industrialized economy
NTB	nontariff barrier
NPL	nonperforming loan
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PNG	Papua New Guinea
PRC	People's Republic of China
RMI	Republic of the Marshall Islands
SBV	State Bank of Viet Nam
SMEs	small and medium-sized enterprises
SOE	state-owned enterprise
TBB	technology bubble and burst
TiVA	trade in value added indicator
US	United States of America
VAT	value-added tax
WTO	World Trade Organization

ADO 2014 Update—Highlights

Developing Asia is continuing along a stable growth path. Regional growth is forecast to pick up from 6.1% in 2013 to 6.2% in 2014 and further to 6.4% in 2015.

Asian financial markets have taken the winding down of unconventional United States monetary policy in stride. Although US policy could still surprise markets if growth there sped ahead of expectations and pushed the Federal Reserve toward an early interest rate increase, the effect on developing Asia would be modest next to the shock caused in 2013 by anticipated tightening.

Demand does not threaten to reignite inflation, as regional economies continue to produce somewhat below capacity. This and benign international commodity prices will keep inflation in developing Asia moderate at 3.4% in 2014 and 3.7% in 2015.

Many regional economies have in recent decades spurred their income and employment growth by connecting with global value chains. Strengthening these links with cross-border production networks can further cement developing Asia's reputation as the world's workshop.

Maintaining growth momentum

Developing Asia sustains its growth path

- **Developing Asia is continuing along a stable growth path**. Although the major industrial economies underperformed in the first half of the year, the region's GDP is expected to expand by 6.2% in 2014 and 6.4% in 2015. As envisaged in *ADO 2014*, published in April, this pace is a slight pickup from the 6.1% growth recorded in 2013.

  - **Growth in the major industrial economies slipped in the first half of 2014.** Severe winter weather in the US caused GDP to contract in the first quarter, as did Japan's value-added tax hike in the second quarter, such that both economies recorded virtually no growth in the first half of the year. With recovery even shakier in the euro area, the major industrial economies are now forecast to expand by 1.5% collectively in 2014, down 0.4 percentage points from the *ADO 2014* forecast, before growth picks up to 2.1% next year.

  - **Targeted measures to stabilize investment helped the PRC sustain growth.** Following first quarter growth at 7.4%, steady consumption and improved external demand edged second quarter growth up to 7.5%. The authorities deployed targeted monetary easing and a mini fiscal stimulus to keep growth from decelerating further from the 7.7% recorded in 2013, while keeping credit growth in check. The PRC appears on track to meet *ADO 2014* growth forecasts of 7.5% in 2014 and 7.4% in 2015.

  - **India shows new promise of a turnaround.** After winning a decisive parliamentary election victory, the new government is better positioned than the old to pursue the reform necessary to unlock the economy's growth potential. Reform to stimulate investment, the timely award of environmental clearances, and measures to control inflation are expected to augment firming export demand from the major industrial economies to boost economic growth. This *Update* maintains the 5.5% growth forecast for 2014 but upgrades by 0.3 percentage points to 6.3% the forecast for 2015, when reform can begin to bear fruit.

  - **Growth slows in the main economies of Southeast Asia.** Despite some common strengths in the five large economies of the Association of Southeast Asian Nations (ASEAN), and Malaysia's surprising growth acceleration, aggregate growth is moderating in 2014, slowed by stabilization policy and weaker commodity export prices in Indonesia, political disruption in Thailand, a government spending slowdown in the Philippines, and soft domestic demand in Viet Nam. Aggregate growth in the ASEAN-5 is now expected to be 4.8% in 2014—0.4 percentage points off the pace in 2013 and *ADO 2014*—before recovery at 5.6% next year.

- **Weakening food prices and stable oil prices keep inflation in check.** Consumer prices in the region are forecast to rise by 3.4% in 2014, the same pace as in 2013, but pick up a bit to 3.7% in 2015. Most governments have maintained their policy rates in line with the low inflation environment. However, Malaysia raised its key interest rate in July to curb the risk of inflation and financial imbalances, and the Philippines increased its policy rates in July and September as inflation accelerated. Indonesia's inflation rate is likely to reach 6.9% in 2015 as the government scales back fuel subsidies.

- **Developing Asia's current account balance remains stable.** While demand for the region's exports is improving, the trend in the current account balance is forecast to be flat. The region will maintain a current account surplus equal to 2.1% of regional GDP in 2014, the same as in 2013, and 2.0% in 2015.

Embracing tighter global liquidity

- **Financial markets take the winding down of US quantitative easing in stride.** Market reaction to the actual slowing of US Federal Reserve asset purchases stands in stark contrast to the reaction to the talk in May 2013 of a possible start to tapering. Back then, stock market and currency values plummeted and risk premiums rose in emerging markets—including those in developing Asia—as investors rebalanced portfolios toward safe havens. This year, financial markets in the region have reacted calmly to actual US tapering that began in January 2014.

- **Asia seems prepared for the eventual US monetary tightening.** Taper talk in 2013 took the region's policy makers by surprise. Today, they seem to have factored in the upcoming tightening of US monetary policy by keeping policy rates elevated, limiting the risk that a surprise factor will worsen any financial turbulence, as it did in the second half of last year. In addition, while interest rate premiums and stock prices in developing Asia have largely returned to their May 2013 levels, they have done so without large inflows of short-term capital, which reduces the risk of large outflows.

- **Changes to US monetary policy may still surprise markets, but with modest impact on Asia.** A sustained jump in US growth could induce the Federal Reserve to tighten monetary policy sooner than anticipated to preempt unwanted inflationary consequences from its quantitative easing policies. A US interest rate shock should prompt developing Asia's policy makers to raise their interest rates to forestall large capital and exchange rate movements, though this would increase the domestic cost of capital and limit the scope for growth. Model simulations suggest that policy response in the region adequate to avoid these disruptions should not derail growth.

Will demand reignite inflation?

- **Developing Asia has enjoyed moderate inflation since the global financial crisis.** Inflation plummeted to 1.4% in 2009 from 6.6% a year earlier and has hovered around 3.5% since 2012. The global crisis brought about external and internal conditions that have combined to keep price pressures in check. The drop in global demand tempered international food and fuel prices, weakening their influence on consumer prices. Within developing Asia, economies have been producing below their potential over the past 2 years following the collapse of demand in the major industrial countries for regional exports, leaving slack production capacity.

- **The shock from the global financial crisis reduced the region's potential GDP growth.** In the larger economies of East and Southeast Asia plus India, potential growth is estimated to have fallen by more than 1 percentage point on average since 2008. The drop was largest in Thailand and Hong Kong, China, where potential growth nearly halved. Even so, the region has been operating below its potential capacity. Other than in 2010, when crisis-response fiscal stimulus helped growth rebound sharply, the output gap has been negative, estimated in 2013 at −0.5% of GDP.

- **Demand-side price pressures in developing Asia will remain subdued in 2014 and 2015.** At projected growth rates, the region is closing the output gap. Absent negative shocks, the newly industrialized economies—Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China—will approach their potential output next year, but most economies will not reach potential within the forecast horizon. Inflationary pressure from domestic demand is therefore expected to remain muted for the region as a whole.

Building the ASEAN economic community

- **ASEAN members are progressing toward establishing an economic community.** Yet many challenges must be overcome for the ASEAN Economic Community to become a reality as scheduled at the end of 2015. Indonesia, Malaysia, the Philippines, Singapore, and Thailand in particular can claim noteworthy achievements in tariff reduction, trade facilitation, and investment liberalization, but the newer members—Cambodia, the Lao People's Democratic Republic, Myanmar, and Viet Nam—are lagging. Progress has slowed since negotiations progressed to the more difficult reforms: eliminating nontariff barriers, liberalizing service trade, improving the business climate and competition policy, strengthening the protection of intellectual property rights, and narrowing development gaps.

- **While unlikely to meet the 2015 launch deadline, ASEAN will benefit from the steps taken.** The theme chapter of this *Update* emphasizes that cross-border production networks thrive where the direct and indirect costs of moving goods between countries are low. Reforms undertaken to establish the ASEAN Economic Community are dismantling trade barriers, facilitating the movement of goods, and harmonizing standards and regulations. These efforts will strengthen ASEAN members' existing ties with global value chains and help them forge new links.

Outlook by subregion

- **Stable growth for the region as a whole masks shifting fortunes across subregions.** Growth in developing Asia largely reflects local dynamics, which are a mixed bag. Upward adjustments to South Asia's growth projections will be counterbalanced by likely slowdowns in Central Asia and Southeast Asia.

- **East Asia will maintain stable growth.** GDP growth in East Asia will remain at 6.7% in 2014 and 2015, as moderation in the PRC and Hong Kong, China—and a slowdown in Mongolia—are offset by upswings in the Republic of Korea and Taipei,China as both benefit from rising exports. A shrinking workforce and a sluggish property sector will tamp down growth in the PRC, but economic stimulus and rising external and internal demand are expected to contain the impact, with GDP growth slipping from 7.7% in 2013 to 7.5% in 2014 and 7.4% in 2015. GDP growth in Mongolia will fall sharply below the *ADO 2014* forecast for 2014 and 2015 as foreign direct investment plummets and mining projects suffer delays. Inflation in East Asia will remain subdued at 2.4% in 2014 but likely creep up to 2.9% in 2015, mainly reflecting the trend in the PRC. Mongolia will be the outlier, recording rising and double-digit inflation in 2014, followed by a smaller price hike in 2015.

- **South Asia is performing better than expected.** The subregional growth forecast for 2014 is edged up slightly to 5.4% in 2014. The improvement reflects strengthening in Bangladesh on export growth and in Pakistan on higher remittances. Growth in India in 2014 is expected to revive to 5.5% as previously forecast, after 2 disappointing years below 5%. Growth in South Asia will pick up to 6.1% in 2015, 0.3 percentage points faster than previously forecast. India's 2015 growth projection is raised to 6.3% on the expectation that the newly elected government will begin to implement long-delayed reforms to deal with investment bottlenecks, fiscal imbalances, and other structural deficiencies. Growth forecasts for Pakistan and Bangladesh are also edged up in 2015, but efforts to improve the climate for private investment are key in both cases. Forecasts for subregional inflation are trimmed since April by about a third of a percentage point to 6.1% in 2014 and 5.9% in 2015.

- **Southeast Asia will see growth pick up next year after a surprisingly soft 2014.** Growth in this subregion is now projected at 4.6%, down from the 5.0% forecast in April and actual growth of 5.0% in 2013. Domestic demand has moderated in some of the bigger economies, with GDP forecasts trimmed for Indonesia, Thailand, the Philippines, Viet Nam, and Singapore. By contrast, a rebound in exports from Malaysia has helped to propel considerably stronger economic growth there. Next year, better performance in the major industrial economies and Thailand's recovery from its slump will spur Southeast Asian growth to 5.3%. Subregional inflation is still seen at 4.1% in 2014, slightly lower than expected in April, but the forecast for 2015 is upgraded to 4.7%, mainly on an anticipated increase in Indonesian fuel prices.

- **Central Asia is hobbled by a slowdown in the Russian Federation.** Underperforming *ADO 2014* projections, growth in the subregion is now projected to decelerate to 5.6% in 2014 as growth slows in Armenia, Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan, and the forecast for 2015 is lowered to 5.9% on revisions for Armenia, Georgia, Kazakhstan, the Kyrgyz Republic, and Uzbekistan. These lower growth projections reflect a stagnant Russian Federation (a key source of trade and remittances) and a sharp industrial slowdown in Kazakhstan. This *Update* reduces the subregion's inflation projections to 7.6% in 2014 and 7.0% in 2015 to reflect mainly slower growth in Kazakhstan and easing inflation in Turkmenistan.

- **The Pacific has its growth projections trimmed.** Prospects have dimmed because of damage caused by torrential rains in Solomon Islands in early 2014, disappointing business activity in Timor-Leste, and a downturn in construction and tourism in Palau. Economic growth in Timor-Leste is now predicted to stay sluggish in 2015, more than offsetting slightly higher forecasts for Kiribati and Tonga. Inflation projections for the Pacific are revised down from *ADO 2014* forecasts of 5.9% in 2014 and 5.1% in 2015 to 4.5% in both years. The largest revisions are for Timor-Leste, where change in how inflation is calculated is an important factor. That said, 2014 has brought significant reductions in inflation forecasts for the Cook Islands, Papua New Guinea, and Samoa—where deflation is now expected in 2014—but also increases for Palau, Solomon Islands, and Tonga.

Asia in global value chains

The rise of global value chains

- **Liberalized trade and modern communications ushered in cross-border production networks.** Global value chains (GVCs) have blossomed since the late 1980s, distributing production steps across boundaries as tariffs and shipping costs fell and advances in information and communication technology facilitated more complex production arrangements. Stages of factory production formerly performed in advanced economies have been relocated to the developing world to benefit from cheap labor and other locational advantages. This helped expand developing economies' share of global output from 33% in 1988 to 50% in 2010.

- **The emergence of GVCs alters the global trade map.** Traditional trade statistics count the value of parts and components each time intermediate goods clear customs along a GVC. When value is properly attributed to the economy in which it was added, the composition of trade by industry and the relative importance of trading partners can change radically. For example, the trade surplus with the US maintained by the PRC, a final assembler in many product lines, is 41% smaller when measured in value-added terms than as gross trade. Conversely, Japan's trade surplus with the US is 40% larger in value-added terms.

- **Services are the dominant source of value in goods produced by global networks.** From initial product conception to after-sales support, services add value to final goods. Yet trade statistics underestimate their role because services are intangible, which makes them difficult to identify and count, and their inputs become embedded in the final goods. Cost breakdowns have shown services contributing 65%–80% of total value in mass-produced consumer goods. For specialty goods like designer clothing, the share is even higher. Firms profitably differentiate their products through the services bundled with them. By integrating services with goods to emphasize their unique strengths, producers can reach new market segments and command higher prices.

- **GVC production has boosted the economies of those involved.** Economies that have found their niche within global production networks have reaped income and employment dividends. While being part of a GVC exposes an economy to potential contagion from adverse shocks that hit others in the chain, the benefits seem to outweigh the costs.

  - **Rapid output and income expansion accompanies GVC trade increase.** Even more than trade in final goods, specializing in a particular stage of production can bolster productivity and enhance economic growth. Industries in which GVC trade doubled during 1995–2008 saw output grow 19% more quickly than did other industries. Economies whose GVC trade doubled in the same period enjoyed a 12% increase in real per capita income.

  - **Industries with more extensive links to GVCs create more jobs.** Higher industrial productivity arising from specialization in cross-border production enhances employment. Industries that doubled their GVC trade during 1995–2008 saw employment rise by 10%.

- **Risks to economies from shocks that hit others in the GVC exist but are limited.** The 2011 earthquake in Japan and floods in Thailand, for example, had repercussions along their value chains. But a shock in the real economy to one member of a supply chain need not become a macroeconomic shock to the rest. Flexible labor and capital markets can help contain the impact within the affected sector. Further, a shock to one economy may become an opportunity for others in the network as they temporarily replace production disrupted when their competitor was affected.

Asia's links to global value chains

- **Asia is the region that has benefited most from the rise of cross-border production networks.** Regional production networks appeared in the 1980s as Japanese conglomerates invested in East and Southeast Asia to benefit from such locational advantages as lower labor costs. Once established, production networks attracted multinationals from other developed economies, turning regional networks global. Declining trade barriers in East and Southeast Asia—particularly since the PRC's accession in 2001 to the World Trade Organization (WTO)—made these subregions even more attractive to foreign investment. From 1995 to 2008, the share of Asia's GVC trade in worldwide manufacturing exports almost doubled, from 8.6% to 16.2%. GVCs have grown most quickly in Asia, evolving into increasingly complex arrangements.

- **Yet GVC benefits are largely concentrated in East and Southeast Asia.** The economies of East and Southeast Asia including Japan accounted for the bulk of the region's GVC trade in 2008. While the surge in GVCs in Asia reflects the PRC's growing role as the regional hub for final assembly, the underlying reality is more complex. The core components in the final goods exported to affluent markets, and hence the bulk of added value, originate mainly in the industrialized East Asian economies—Japan; the Republic of Korea; and Taipei,China—and in the more advanced Southeast Asian economies such as Malaysia and Thailand.

- **Few countries in Central Asia, South Asia, or the Pacific have found their GVC niche.** These economies face multiple challenges to linking with GVCs, some of them beyond the reach of policy.

  - **Remote location can preclude involvement in GVCs.** A remote Pacific economy's high transport costs would be magnified by a GVC that required frequent shipments of intermediate goods between production stages.

  - **Underdeveloped transport infrastructure exacerbates geographic disadvantages.** In the World Economic Forum's Global Competitiveness Index 2013–2014, East Asia's transport infrastructure scored 5.0 on a scale of 6.0, and Southeast Asia scored 4.0. In contrast, the Pacific scored only 2.1, Central Asia 3.3, and South Asia 3.4.

  - **Regulatory hurdles and policy deficiencies further erode an economy's appeal.** Red tape and burdensome procedures delay the movement of goods. While exporters in East or Southeast Asia need to complete six documents on average, exporters in Central and South Asia must deal with nine. The combination of poor infrastructure and red tape is deadly for GVCs. Whereas exporting standard cargo takes only 18 days from Southeast Asia or 19 days from East Asia, it takes nearly 50 days from Central Asia.

- **All Asian economies face the challenge of strengthening links to dynamic production chains.** GVCs present opportunities to policy makers and industrialists to reevaluate their domestic comparative advantages in a new light, with the focus on being competitive at selected stages of production rather than over the whole process. Actors need to be attuned to both opportunities and challenges.

Forging stronger links with global value chains

- **Falling tariff, logistics, and transport costs nurture cross-border production, but more can be done.** Simulations of simple two-stage chains in Southeast Asia show that GVCs magnify trade costs by as much as 80%. As chains become more complex, they further amplify the costs of moving intermediate goods between customs territories. Savings from small reductions in costs are similarly amplified and therefore offer outsized benefits for production network growth. Public policy can help connect an economy to cross-border production networks or fortify existing ties.

- **GVCs thrive only where tariffs are low and predictable.** The PRC, for example, allowed processing firms to import components duty-free. This policy helped boost growth and productivity in the processing sector, supporting firms' efforts to shift quickly from simple labor-intensive manufactures to more sophisticated high-technology goods. Yet, even if tariffs are low today, uncertainty about future rates can dissuade firms from investing in GVCs. The authorities can make tariffs more predictable by normalizing trade relations with partners, lowering bound tariffs under the WTO, and eschewing temporary trade measures. As with tariffs, low and predictable rates for other taxes, including value-added taxes collected at the border, benefit GVCs.

- **Better logistics and transport infrastructure may cut trade costs even more than tariff reduction.** Delays in moving goods from inland factories to the coast, through customs facilities, or through ports themselves add to shipping costs. Trade delays are significant: 9 days for imports into East Asia and 19 days into South Asia. In parts and components trade, each day in transit equates to an ad valorem tariff of 0.6%–2.1%. Infrastructure investment can ease port congestion and speed inland transport. Streamlining customs procedures to eliminate unnecessary paperwork further trims shipping times. International cooperation—such as investment in regional transport corridors or WTO trade facilitation—can complement national efforts.

- **Process and product standards must not be hijacked as barriers to trade.** As with tariffs, GVCs magnify costs from nontariff measures such as product standards. With production lines spanning more jurisdictions, harmonized standards gain importance. Harmonization is less a question of eliminating standards than of ensuring that they are appropriate, because standards are crucial to public policy. Regulations and conformity assessments should not discriminate or unduly add costs, but ensuring compliance does require investment in laboratories and other facilities for calibration, accreditation, certification, and conformity assessment.

- **Asia can boost income and employment by building on its reputation as the world's workshop.** Over the past 2 decades, the region has established itself as a global leader in GVC development and manufacturing—accruing the dividends of faster output, income, and employment growth as a result. Policies that enhance free trade in goods and services, and that foster the integration of regional markets for goods and their components, can further cement this reputation. Looking ahead, Asia is well positioned to deepen, broaden, and upgrade its role in global production networks.

Growth rate of GDP (% per year)

Subregion/Economy	2013	2014		2015	
		ADO 2014	*Update*	*ADO 2014*	*Update*
Central Asia	**6.5**	**6.5**	**5.6**	**6.5**	**5.9**
Azerbaijan	5.8	5.0	5.0	4.8	4.8
Kazakhstan	6.0	6.0	4.5	6.4	5.2
East Asia	**6.7**	**6.7**	**6.7**	**6.7**	**6.7**
China, People's Rep. of	7.7	7.5	7.5	7.4	7.4
Hong Kong, China	2.9	3.5	2.5	3.6	3.2
Korea, Rep. of	3.0	3.7	3.7	3.8	3.8
Taipei,China	2.1	2.7	3.4	3.2	3.3
South Asia	**4.7**	**5.3**	**5.4**	**5.8**	**6.1**
Bangladesh	6.0	5.6	6.1	6.2	6.4
India	4.7	5.5	5.5	6.0	6.3
Pakistan	3.7	3.4	4.1	3.9	4.2
Sri Lanka	7.3	7.5	7.5	7.5	7.5
Southeast Asia	**5.0**	**5.0**	**4.6**	**5.4**	**5.3**
Indonesia	5.8	5.7	5.3	6.0	5.8
Malaysia	4.7	5.1	5.7	5.0	5.3
Philippines	7.2	6.4	6.2	6.7	6.4
Singapore	3.9	3.9	3.5	4.1	3.9
Thailand	2.9	2.9	1.6	4.5	4.5
Viet Nam	5.4	5.6	5.5	5.8	5.7
The Pacific	**5.0**	**5.4**	**5.3**	**13.3**	**13.2**
Fiji	4.6	2.8	3.3	3.0	3.0
Papua New Guinea	5.1	6.0	6.0	21.0	21.0
Developing Asia	**6.1**	**6.2**	**6.2**	**6.4**	**6.4**
Major industrial economies	**1.2**	**1.9**	**1.5**	**2.2**	**2.1**

Notes: Developing Asia refers to the 45 members of the Asian Development Bank. Central Asia comprises Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. East Asia comprises the People's Republic of China; Hong Kong, China; the Republic of Korea; Mongolia; and Taipei,China. South Asia comprises Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. Southeast Asia comprises Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam. The Pacific comprises the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Papua New Guinea, Palau, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

(continued on the next page)

Inflation (% per year)

Subregion/Economy	2013	2014		2015	
		ADO 2014	*Update*	*ADO 2014*	*Update*
Central Asia	**6.0**	**9.0**	**7.6**	**7.4**	**7.0**
Azerbaijan	2.4	4.0	4.0	3.5	3.5
Kazakhstan	5.8	11.5	8.7	8.8	7.7
East Asia	**2.4**	**2.5**	**2.4**	**2.9**	**2.9**
China, People's Rep. of	2.6	2.6	2.4	3.0	3.0
Hong Kong, China	4.3	3.8	3.8	3.7	3.7
Korea, Rep. of	1.3	2.1	2.0	2.5	2.4
Taipei,China	0.8	1.1	1.4	1.3	1.5
South Asia	**6.2**	**6.4**	**6.1**	**6.2**	**5.9**
Bangladesh	6.8	7.5	7.4	6.5	6.5
India	6.0	6.0	5.7	5.8	5.5
Pakistan	7.4	9.0	8.6	9.2	8.2
Sri Lanka	6.9	5.0	5.0	6.0	6.0
Southeast Asia	**4.2**	**4.3**	**4.1**	**4.0**	**4.7**
Indonesia	6.4	5.7	5.8	4.8	6.9
Malaysia	2.1	3.2	3.3	3.5	3.6
Philippines	3.0	4.3	4.4	4.0	4.1
Singapore	2.4	3.0	2.0	2.9	2.3
Thailand	2.2	2.4	2.2	2.6	2.6
Viet Nam	6.6	6.2	4.5	6.6	5.5
The Pacific	**4.5**	**5.9**	**4.5**	**5.1**	**4.5**
Fiji	2.9	3.0	3.0	3.5	3.5
Papua New Guinea	4.0	6.5	6.0	5.0	5.0
Developing Asia	**3.4**	**3.6**	**3.4**	**3.7**	**3.7**
Major industrial economies	**1.3**	**1.6**	**1.6**	**1.6**	**1.6**

(continued from the previous page)

Major industrial economies comprise the United States, the euro area, and Japan.

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

1

Maintaining growth momentum

Maintaining growth momentum

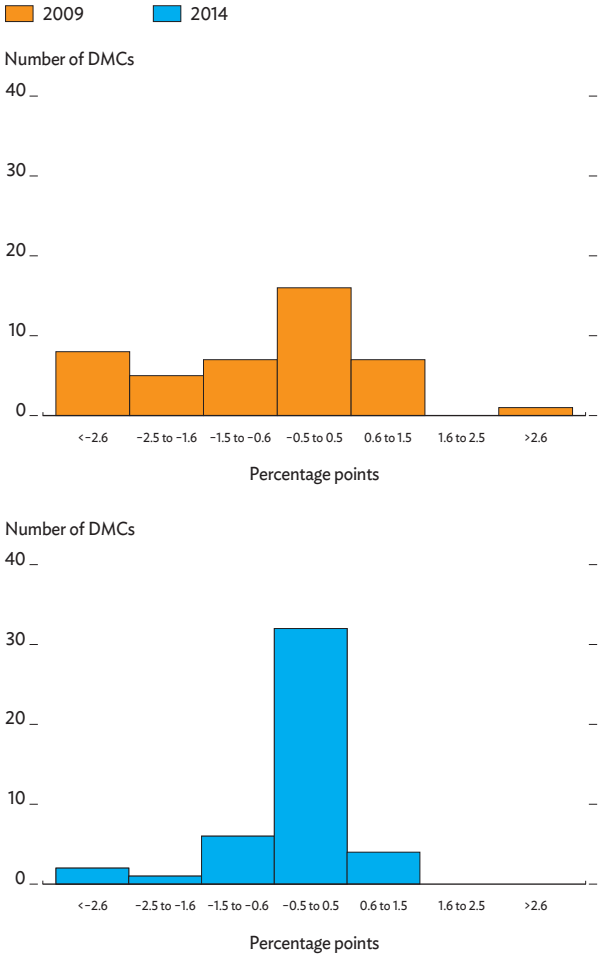
Since late 2008, uncertainty has reigned as the world economy faced a series of shocks. First the global financial crisis, with the United States (US) and Europe at its epicenter, threw global growth into a tailspin. Recovery had barely begun in 2010 when a sovereign debt crisis welled up in the euro area. Even good news has rocked markets. In mid-2013, talk from the Federal Reserve that the US might have recovered sufficiently for it to taper its asset purchase program sparked anxiety in global financial markets. Emerging economies bore the brunt of the so-called taper tantrum as investors fled to safe assets.

By comparison, 2014 has been calm, with events in the first half largely supporting Asia's prospects as presented in April by *Asian Development Outlook 2014* (*ADO 2014*). This contrasts starkly with the experience in 2009. Illustrating the relative calm is the dispersion of growth rate adjustments between *ADO* and its *Update*, comparing 2009 with this year. In the *2009 Update*, forecasts for 18 economies in developing Asia were adjusted by more than a percentage point. This year, forecasts for only 5 economies are adjusted by that much. Moreover, the average adjustment in this *Update* is only 0.5 percentage points, compared with 1.7 percentage points in 2009.

That is not to say that 2014 has been uneventful. What had been just talk of dismantling unconventional US monetary policy in 2013 became reality starting in January. Yet financial markets in developing Asia have largely taken it in stride. And conflict in Ukraine and the Middle East—particularly renewed fighting in Iraq—raised the specter of oil supply shocks. Yet the price of Brent crude has been less volatile than in the previous 5 years, even continuing its slight downward trend.

Risks to the outlook remain, and prospects for individual economies vary. However, the region as a whole is maintaining its growth momentum and likely to achieve the steady growth envisaged last April.

1.0.1 Frequency distribution of *ADO Update* forecast changes, 2009 and 2014



Sources: Asian Development Outlook 2009 and *Asian Development Outlook 2014*.

This chapter was written by Akiko Terada-Hagiwara, Shiela Camingue-Romance, Arief Ramayandi, Aleli Rosario, Madhavi Pundit, Nedelyn Magtibay-Ramos, Shikha Jha, Pilipinas Quising, and Joseph E. Zveglich, Jr. of the Economics and Research Department, ADB, Manila and Jayant Menon, Office of Regional Economic Integration, ADB.

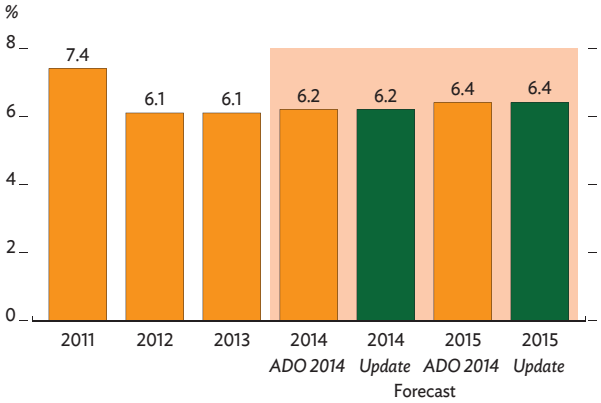
Developing Asia sustains its growth path

Developing Asia as a whole is expected to grow at a steady pace of 6.2% in 2014 and 6.4% in 2015, up from the 6.1% growth recorded in 2013 (Figure 1.1.1). These projections remain the same as previously forecast by *ADO 2014* in April. This is despite the disappointing recovery in the major industrial economies. Gross domestic product (GDP) in the United States (US), euro area, and Japan is now expected to expand by a combined 1.5% in 2014, or 0.4 percentage points below the anticipated pace (Box 1.1.1). As governments in developing Asia struggle to implement reform to ease structural bottlenecks, boost productivity, and lift consumer spending, their efforts are expected to be hindered by greater uncertainty regarding external demand, remittances, and capital flows. Inflation in developing Asia is likely to remain subdued along with calm food and energy markets. Forecasts for the region's current account surplus remain largely unchanged from April.

Steady growth in Asia and the Pacific as a whole masks uneven performance by subregion. South Asia is now expected to grow more quickly than anticipated as several countries display surprising strength. The forecast for growth in East Asia is retained from April, while Central Asia, Southeast Asia, and the Pacific are projected to show weaker activity, especially in 2014, than previously forecast. These adjustments will counterbalance upward revisions for South Asia. Improving prospects in India will buoy the 2015 regional growth outlook somewhat, even as the growth path of the People's Republic of China (PRC) moderates.

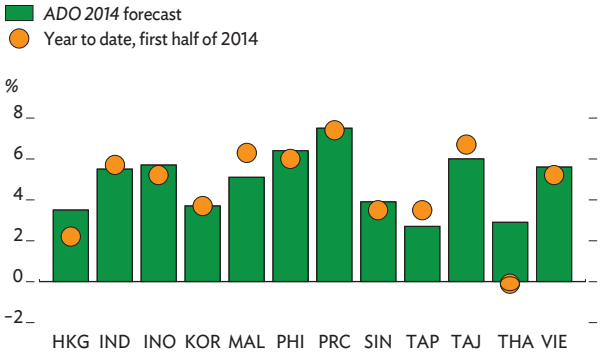
The PRC grew by 7.5% in the first half of 2014, in line with *ADO 2014* projections (Figure 1.1.2). Following growth in the first quarter at 7.4% year on year, second quarter growth registered a slight improvement at 7.5%, driven by steady consumption, targeted government measures to stabilize investment, and a pickup in external demand. Industrial production expanded by 8.8% in the second quarter, slightly outpacing the 8.7% growth recorded in the first quarter as input costs declined and operating conditions improved. Retail sales growth in the second quarter remained generally flat in the PRC (Figure 1.1.3). HSBC's purchasing managers' index for manufacturing in the PRC declined slightly in August on rising competition and falling returns (Figure 1.1.4). More rapid expansion lifted the services growth rate to 8.0% in the first half of the year from 7.8% in the first quarter. Although real estate indicators signaled continued weakness, this was overshadowed by accelerating infrastructure investment.

1.1.1 GDP forecasts for developing Asia, 2014 and 2015



Source: Asian Development Outlook database.

1.1.2 2014 GDP growth forecasts in *ADO 2014* versus the year to date



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

Note: Data for India refer to GDP at factor cost. Latest data for India is from the first quarter of FY2014 (ends 31 March 2015).

Sources: Asian Development Outlook database; CEIC Data Company (accessed 5 September 2014).

1.1.1 Performance in advanced economies lets down expectations

Growth in the major industrial economies slowed in the first half of 2014, bringing down the combined forecast for the year to 1.5% in this *Update* from 1.9% in *ADO 2014*. However, these economies face diverging prospects for future growth. US recovery is back on track after a disappointing first quarter, and Japan's economy is bouncing back from a sharp contraction in the second quarter following a sales tax hike. On the other hand, feeble recovery in the euro area stalled in the second quarter with few signs of optimism for a rebound in the coming quarters. On the back of the strengthening US economy, combined GDP growth is forecast to pick up to 2.1% in 2015.

GDP growth in the major industrial economies (%)

Area	2012 Actual	2013 Actual	2014 *ADO 2014*	2014 *Update*	2015 *ADO 2014*	2015 *Update*
Major industrial economies	1.1	1.2	1.9	1.5	2.2	2.1
United States	2.3	2.2	2.8	2.1	3.0	3.0
Euro area	−0.7	−0.4	1.0	0.8	1.4	1.0
Japan	1.5	1.5	1.3	1.0	1.3	1.4

ADO = Asian Development Outlook.

Notes: Average growth rates are weighed by gross national income, Atlas method. More details in Annex table A1.1.

Sources: US Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov; Eurostat, http://epp.eurostat.ec.europa.eu; Economic and Social Research Institute of Japan, http://www.esri.cao.go.jp; ADB estimates.

A severe winter caused US GDP to contract in the first quarter of 2014, but the economy rebounded strongly in the second quarter, driven by private investment and private consumption. Domestic demand-led growth also quickened imports, which outpaced exports in the quarter. Climbing industrial production, manufacturing, and consumer confidence indexes, and a pickup in housing starts, all point to recovery strengthening in the second half of the year. Unemployment has declined to 6.1% and inflation remains stable, averaging 1.8% for the year. With the rebound in economic activity but stable inflation, the US Federal Reserve is likely to raise the federal funds rate only from mid-2015. Thus, while the US economy looks set to continue to recover, the GDP forecast for the full year is adjusted down to 2.1% from 2.8% in *ADO 2014* in light of the first quarter contraction. Growth in 2015 is expected to reach the previously forecasted 3.0%.

Recovery in the euro area failed to gain momentum as growth stalled in the second quarter of 2014. Among the major euro economies, GDP growth in Germany, France, and Italy declined, while only Spain recorded positive growth. Investment dragged down second quarter growth, and the August decline in the purchasing managers' index suggests continued weakness ahead. Consumption spending contributed positively to growth in the second quarter, but declining retail sales and consumer confidence do not augur well for future quarters. Unemployment remains high at 11.5%. The harmonized index of consumer prices fell to 0.3% in August 2014, the lowest in 5 years. The risk of deflation prompted the European Central Bank to announce measures to increase banking sector liquidity to spur lending. However, credit conditions remain tight and deflationary pressures strong. Hence the outlook for euro area growth is revised down to 0.8% in 2014 and 1.0% in 2015 from the 1.0% and 1.4% forecast in *ADO 2014*.

In Japan, robust growth in the first quarter of 2014 was followed by a deep contraction in the second. Private consumption and investment fell sharply as households and firms brought spending forward before the value-added tax (VAT) rate hike in April. As consumer confidence and the purchasing managers' index are both rising, domestic demand will likely recover in the second half. Consumer price index inflation is around 1.0% excluding the VAT effect, but inflationary effects from last year's yen depreciation will gradually fade. With the improving economy, the government is expected to go through with the planned second VAT rate increase in October 2015, using fiscal stimulus to mitigate some of its impact. Sluggish external demand and domestic weaknesses, particularly in the labor market, could pose risks to growth. In sum, the performance in the first half of 2014 suggests slower growth at 1.0% in 2014, revised down from the 1.3% forecast in *ADO 2014*. For 2015, GDP growth is expected to pick up to 1.4%.

Global recovery will benefit Asia through greater demand for its exports. The effect of a slowdown in the euro area should be more than offset by strengthening in the US and Japan. The region has the ability to withstand financial shocks such as a sudden shift in the Federal Reserve's monetary policy.

While the PRC is on track to meet *ADO 2014* growth forecasts of 7.5% in 2014 and 7.4% in 2015, weak indicators in August for industrial production, property, investment, and retail indicators underscore a clear downside risk.

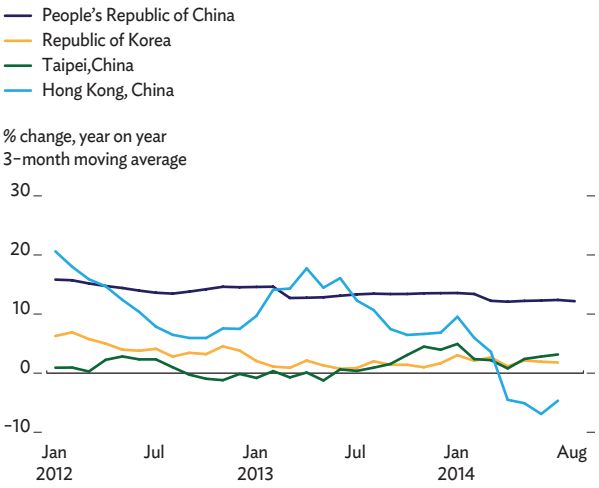
Within East Asia, the growth picture is varied. Worsening prospects for Mongolia and Hong Kong, China than forecast in April are offset by a strong performance in Taipei,China. Growth in the first half of 2014 improved on 2013 in the Republic of Korea and Taipei,China on account of robust exports and solid domestic consumption. Retail sales have contracted in Hong Kong, China but are showing signs of recovery (Figure 1.1.3). In Mongolia, growth decelerated as local currency depreciation dampened domestic demand and foreign direct investment fell dramatically. With forecasts for the PRC and the Republic of Korea unchanged, the net result is that East Asia's growth outlook is unchanged from *ADO 2014*, at 6.7% in 2014 and 2015.

A new single-party government in India with the strongest mandate in 3 decades has outlined wide-ranging reforms, which will gradually overcome the difficult structural problems that have beset the economy and caused 2 years of slow growth and stagnant investment. Public expectation of strong economic policy from the government is seen in record highs on the stock market and robust capital inflows. As demand from consumers and businesses continued to grow, the purchasing managers' index rose through the first half of 2014 (Figure 1.1.4). India's economy is forecast to expand by 5.5% in 2014 despite a weak monsoon. The projection for growth in 2015, as reforms take hold, is set at 6.3%, higher than projected in *ADO 2014*. Growth in South Asia as a whole in 2014 is now expected to be higher at 5.4% on unexpectedly strong outcomes in Bangladesh, Nepal, and Pakistan, as well as India. Greater momentum is expected in 2015 as well, with South Asian growth now forecast at 6.1%, revised up from 5.8%. India accounts for the bulk of the higher forecast, but with contributions from positive revisions for Bangladesh and Pakistan.

Other larger South Asian countries—Bangladesh, Pakistan, and Nepal—show higher growth prospects in 2014. Exports and remittances are expected to boost growth in Bangladesh to 6.1% in 2014 and 6.4% in 2015, exceeding the previous forecast. The corresponding numbers for Pakistan are 4.1% and 4.2%, against *ADO 2014* projections of below 4.0% for both years. The April growth forecasts for other countries in the subregion are maintained, except for a downward revision for Afghanistan owing to political uncertainty. *ADO 2014* growth forecasts for 2015 were edged up for Bangladesh, India, and Pakistan.

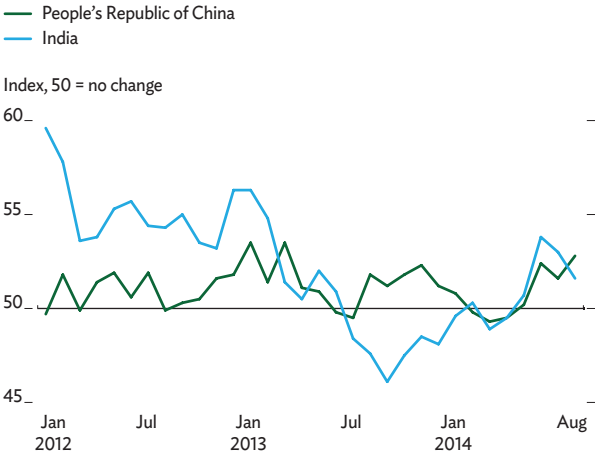
In Southeast Asia, economic prospects have faltered since April. Despite some common strengths in the five large economies in Southeast Asia—known as the ASEAN-5, and Malaysia's surprising growth acceleration, aggregate growth is moderating in 2014, slowed in Indonesia by weaker commodity export prices and a policy of

1.1.3 Retails sales in East Asia



Source: CEIC Data Company (accessed 19 September 2014).

1.1.4 Purchasing managers' index, PRC and India



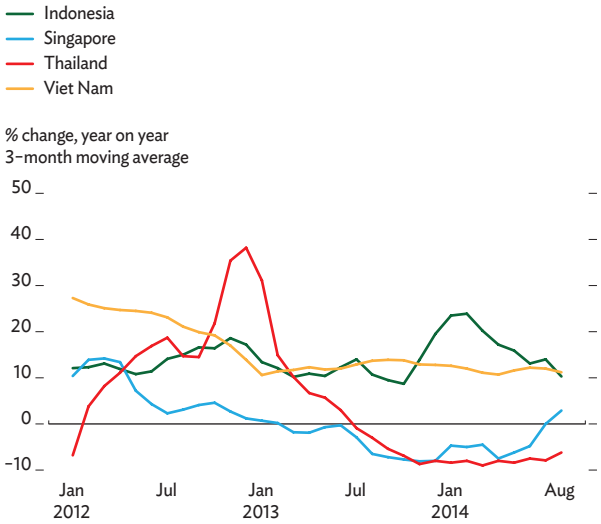
Source: Bloomberg (accessed 18 September 2014).

stabilization, in Thailand by political disruption in the first half of the year, and in the Philippines by a government spending slowdown. Growth in Viet Nam picked up slightly in the first half of 2014 but remained below its long-term trend. Retail sales fell in Thailand in the first half from the year-earlier period (Figure 1.1.5). Aggregate growth in the ASEAN-5 is now expected to be 4.8% in 2014, or 0.4 percentage points off the pace in 2013 and *ADO 2014*. As the factors slowing growth in 2014 are expected to be temporary, growth in 2015 is forecast to edge up to 5.6%.

Growth in Central Asia is gradually moderating, with many economies affected by a deteriorating outlook for the Russian Federation, the subregion's main trading partner and source of remittances. Downward revision of projections reflects weaker-than-expected growth performances in Armenia, Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan so far this year. The earlier growth projection for the subregion in aggregate, 6.5% in both years, is now downgraded to 5.6% in 2014 and to 5.9% in 2015.

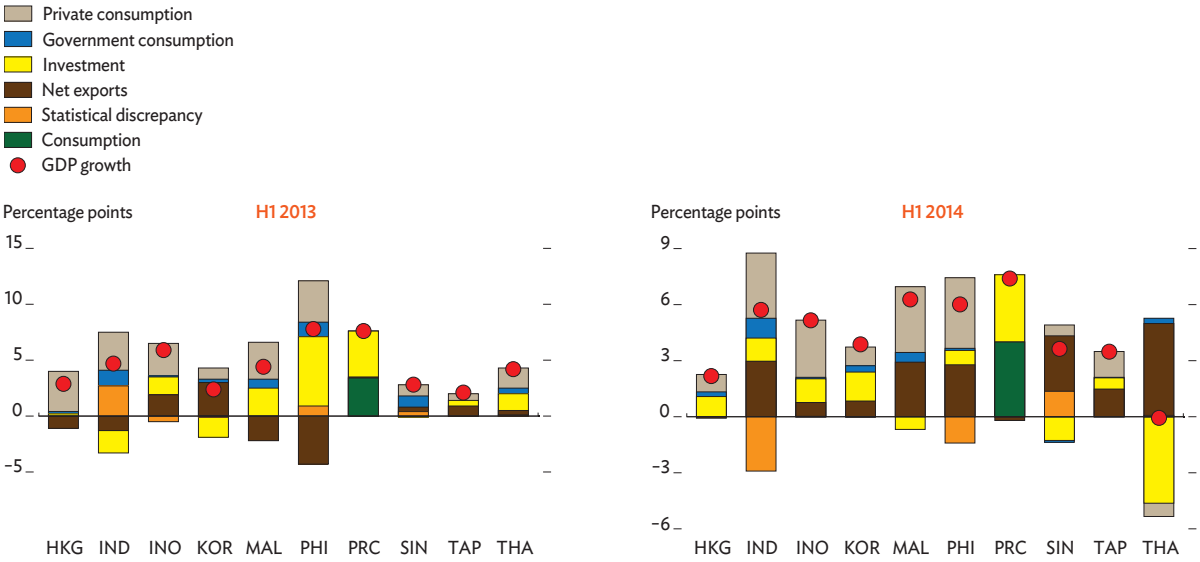
ADO 2014 forecast that the Pacific economies would grow more quickly in 2014 than in 2013 and that the aggregate growth rate in 2015 would improve on 2014 by a multiple of 2.5—a projection retained in this *Update*. The dramatic surge in 2015 will come from Papua New Guinea, the subregion's largest economy and the one with the highest forecast for GDP growth in 2015, at 21.0%. This forecast anticipates a massive increase in energy exports as a large new liquefied natural gas project comes online.

1.1.5 Retail sales in Southeast Asia



Source: CEIC Data Company (accessed 18 September 2014).

1.1.6 Contribution to growth by demand components, first half of 2013 and 2014



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

Note: Data for India refer to GDP at factor cost. Latest data for India is the first quarter of the fiscal year (ending on the following year's 31 March).

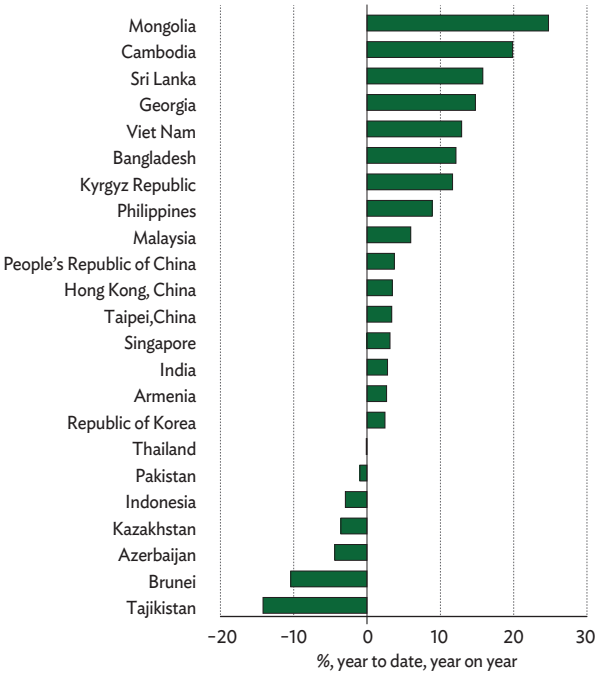
Source: CEIC Data Company (accessed 12 September 2014).

In developing Asia as a whole, economic expansion this year has been broad-based. In most economies, domestic demand (mostly private consumption) contributed more than half of growth in the first half of 2014 (Figure 1.1.6). However, the contribution of investment to growth was negative in Malaysia, Singapore, and Thailand. In tandem with improving prospects for the advanced economies, net exports—which were a drag on 2013 growth in India; Malaysia; the Philippines; and Hong Kong, China—improved to become a major contributor to growth in all except the PRC. Wide variation exists in export performance so far this year (Figure 1.1.7).

Developing Asia's current account surplus has almost stabilized within 10 basis points of 2.0% of regional GDP. This stable outlook does not apply uniformly across all economies in the region, however, especially not to the two largest ones. Better export prospects support the PRC's current account surpluses in 2014 and 2015 being marginally wider than forecast in April. In the first half of this year, the surplus stood at 1.8% of GDP. India stands in contrast with consistent current account deficits—equal to 1.7% of GDP in the first quarter of FY2014 (ends 31 March 2015). That said, a more competitive rupee, weaker domestic demand, and measures to curb gold imports helped strengthen the trade balance. India's buoyant portfolio flows mean that financing the deficit should not be a problem, as capital flows are more resilient under global volatility this year than they were last year. The forecasts for current account deficit as a percentage of GDP have been narrowed for both 2014 and 2015. With trade balances, supported by global recovery, strengthening their contributions to growth in developing Asia overall, the current account forecasts for the region for the next 2 years nevertheless remain more or less unchanged from April (Figure 1.1.8).

Global oil prices have continued to be stable, while food prices have maintained their downward trend. These factors are helping to keep regional inflation in check and lower than projected in *ADO 2014* (Figure 1.1.9). This *Update* forecasts that inflation will be 3.4% in 2014, or 0.2 percentage points slower than earlier envisaged, before rising further to 3.7% (Figure 1.1.10). The downward revision reflects a more benign inflationary outlook for all subregions than predicted earlier. Though lower than previously forecast, inflation is nevertheless likely to remain elevated in some subregions: above 7% in Central Asia, driven by the Kyrgyz Republic, Tajikistan, and double-digit inflation in Uzbekistan, and more than 6% in South Asia, mainly on account of Bhutan, Nepal, and Pakistan.

1.1.7 Change in export value

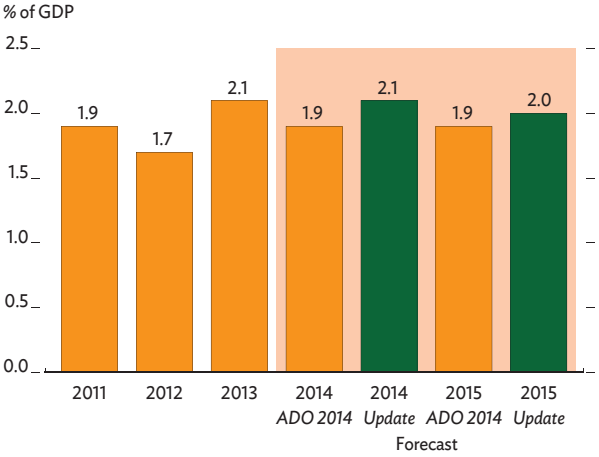


PRC = People's Republic of China.

Note: Bangladesh, Brunei Darussalam, Cambodia, Georgia, and the Kyrgyz Republic to June 2014. Armenia; Azerbaijan; Hong Kong, China; Indonesia; Kazakhstan; Malaysia; the Philippines; Sri Lanka; and Thailand to July 2014. The PRC; India; Republic of Korea; Mongolia; Pakistan; Singapore; Taipei,China; Tajikistan; and Viet Nam to August 2014.

Source: CEIC Data Company (accessed 12 September 2014).

1.1.8 Current account balance forecasts, 2014 and 2015



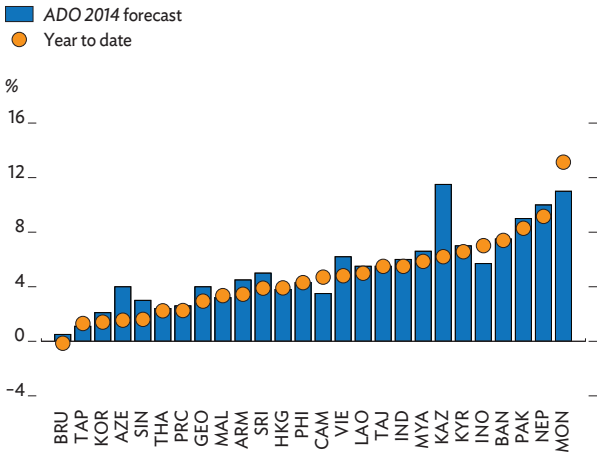
Source: Asian Development Outlook database.

Governments have maintained policy interest rates in line with the inflation environment. In July 2014, Malaysia raised its key interest rate for the first time in more than 3 years, adding 25 basis points after economic growth and inflation quickened in the first half and threatened to upend central bank plans to curb financial imbalance risks. The Philippines also increased its policy rate, by 50 basis points from July to September, to preempt higher inflation expectations, as inflation hit 4.9% in July and August, close to the upper bound of the central bank's inflation target. The Bank of Korea decided in August, amid low inflationary pressures, to cut its policy rate of a year's standing by 25 basis points to stimulate the economy. In addition, on 24 July, the Government of the Republic of Korea unveiled a $40 billion stimulus package to boost economic growth.

Looking ahead perhaps begins best by considering the lessons of the recent past. Last year saw capital markets in developing Asia roiled by talk starting in May that the US Federal Reserve would begin to taper its expansive program of bond purchases. This surprised investors who, in an environment of easy money with no end in sight, had shifted funds into emerging markets in developing Asia and elsewhere for higher returns. Calm returned in September with the Fed's announcement that tapering was not imminent—and calm has been maintained since tapering actually began with the new year.

Today, the Fed's dwindling program of bond purchases is on course to reach zero before the end of 2014. What are the prospects for further monetary normalization in the US in 2015? And what are the implications of tighter liquidity for developing Asia?

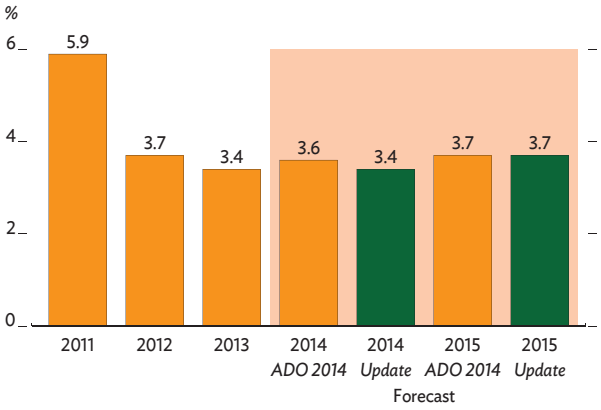
1.1.9 Inflation forecast versus year to date



Note: Latest data is to July, except to May for Myanmar and to June for Bangladesh, Brunei, and Cambodia.

Source: CEIC Data Company (accessed 12 September 2014).

1.1.10 Inflation forecasts for developing Asia, 2014 and 2015



Source: Asian Development Outlook database.

Embracing tighter global liquidity

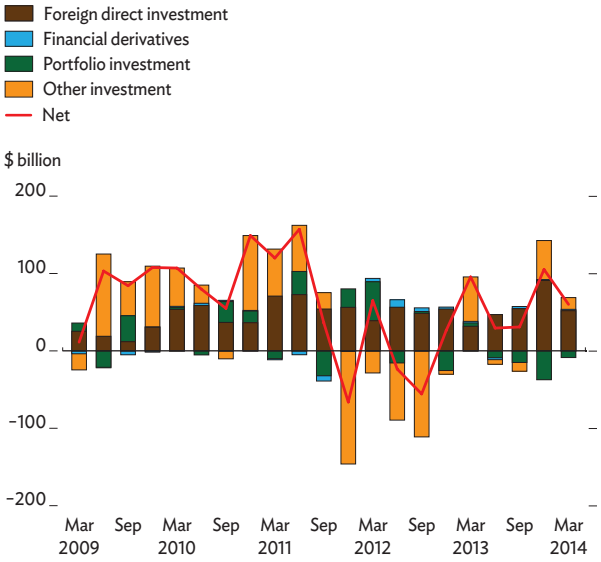
The talk that began on 22 May last year about possibly reining in US monetary expansion wreaked havoc on emerging financial markets. This "signal" upended investor sentiment and reversed the flow of capital away from emerging markets, not least in Asia. The *ADO 2013 Update* noted massive corrections in regional risk premiums, currencies, and stock and bond markets. Back then, global investors seemed to have accepted the prolonged period of massive monetary stimulus, or "quantitative easing," in the US as the new normal, such that just the announcement that the US Federal Reserve would begin to taper its asset purchase program caught investors by surprise and sent them fleeing emerging markets for safe havens. After the Fed finally announced in mid-September 2013 that it would extend its asset purchase program after all, calm seemed to return in the last quarter of 2013.

The "taper talk" incident, near the end of the second quarter of 2013, induced the "taper tantrum," immediately interrupting the stream of capital flows into the 10 economies of emerging Asia (the PRC, Hong Kong, China, India, Indonesia, the Republic of Korea, Malaysia, the Philippines, Singapore, Taipei,China, and Thailand) for at least 2 quarters (Figure 1.2.1). However, net flows of capital into these economies remained positive in the last 3 quarters of 2013, mainly because foreign direct investment into the PRC remained strong. Taking the PRC out of picture reveals that net flows of capital in the region have not yet returned to positive territory since they left it in the second quarter of last year (Figure 1.2.2). Net outflows from emerging Asia excluding the PRC have moved mainly as short-term capital in the form of portfolio and bank transactions. In short, the huge capital outflows that forced costly corrections to financial markets in the region last year were triggered by nothing more than talk about slower monetary accommodation in the US.

Monetary tightening in the US: How costly for Asia?

As economic recovery in the US gathers momentum, however gradually, the time approaches for the Fed to start normalizing its policy stance by tightening monetary conditions. The baseline assumptions of this *Update* have US interest rates starting to rise in the second half of 2015. However, if currently steady economic improvement suddenly accelerates

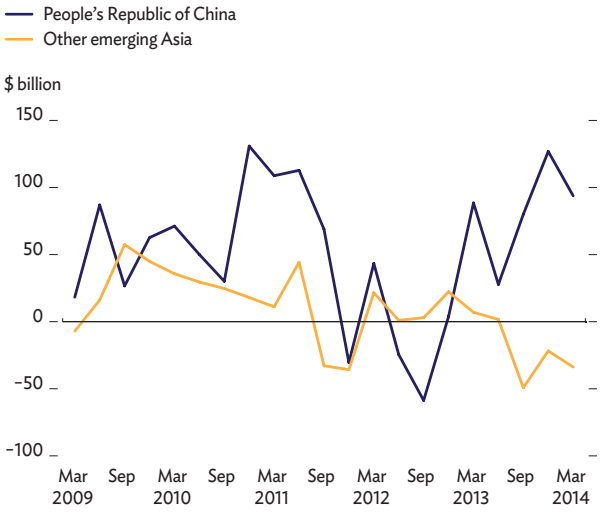
1.2.1 Capital flows, Emerging Asia



Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

Source: Haver Analytics (accessed 8 August 2014).

1.2.2 Net capital flows, PRC and other Emerging Asia



Note: Other Emerging Asia consists of Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

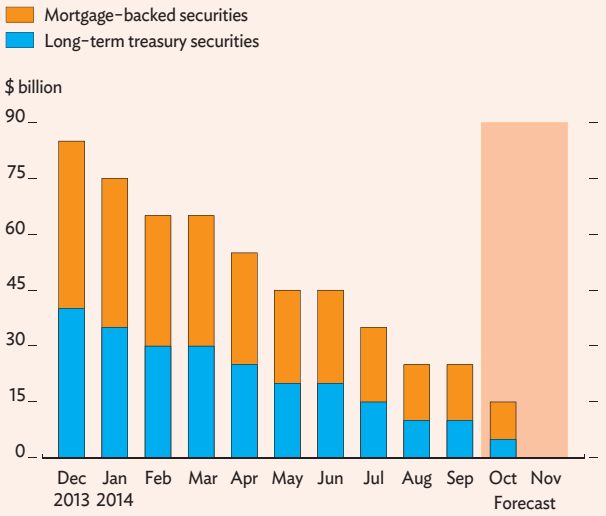
Source: Haver Analytics (accessed 8 August 2014).

1.2.1 The latest round of US quantitative easing

The US Federal Reserve has conducted unconventional monetary policy to stimulate the economy, especially since interest rates' hitting the zero bound bumped them from the Fed's toolbox. In late November 2008, after the financial crisis hit, the Fed bought up mortgage-backed securities and Treasury bills. It resumed the program in August 2010 by buying up Treasury bonds to boost the economy further.

Needing to stimulate the economy further, the Fed announced in September 2012 an open-ended program of monthly purchases of $40 billion in mortgage-backed securities and, the following December, supplemented it with additional monthly purchases of $45 billion in longer-term Treasury securities. Talk began on 22 May 2013 about ending this open-ended asset purchase program, but the actual decision to start winding down this latest round of the asset purchase program was made only in December 2013. Since then, the Fed has announced in each of its regular meetings $10 billion reductions to its monthly asset purchases, dividing them equally between mortgage-backed and Treasury securities. The box figure shows the pace at which the Fed is winding down its asset purchases. At this rate, the program should dwindle to nothing by November this year.

The Federal Reserve's shrinking asset purchases



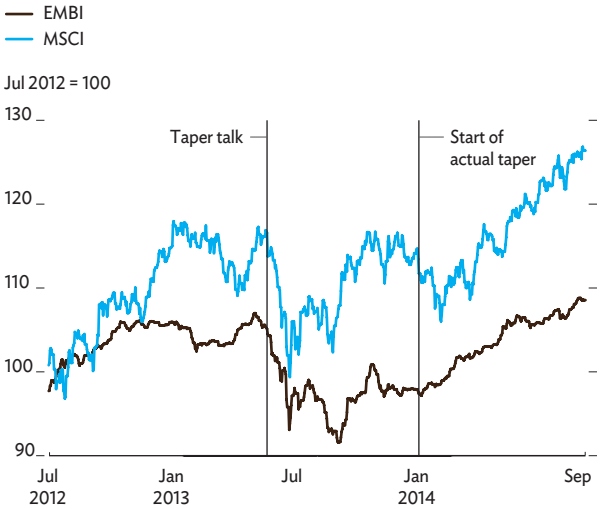
Sources: US Federal Reserve, http://www.federalreserve.gov/monetarypolicy/default.htm; ADB estimates.

because of an incidental boon to the US economy—a favorable shock—the Fed may raise interest rates sooner and probably at a faster pace. This leaves Asian and other emerging economies asking about its probable implications. If a signal to slow the pace of monetary easing could shove emerging financial markets into abrupt corrections, would actual tightening in the US have even more costly consequences for them?

This question has no simple answer, but the widespread belief at present is that monetary tightening in the US may not affect financial markets in emerging economies as much as taper talk did last year because investors have now factored the possibility of higher US interest rates into their calculations. The big surprise element that played a starring role in wreaking havoc on financial markets last year is unlikely to matter much next time around. Because it was expected, the actual start of the Fed's winding down of its asset purchase program announced last December has had minimal impact on financial markets in Asia. By the same logic, the effect on the region of an interest rate increase in the US will also be minimal, as it has now been built into expectations.

The trends for some financial indicators suggest, however, that the recent situation in Asia looks similar to that just before taper talk in May 2013. Figure 1.2.3 shows movements in aggregate indexes of emerging Asia markets for bonds (EMBI)

1.2.3 Bond and stock market movements, Emerging Asia

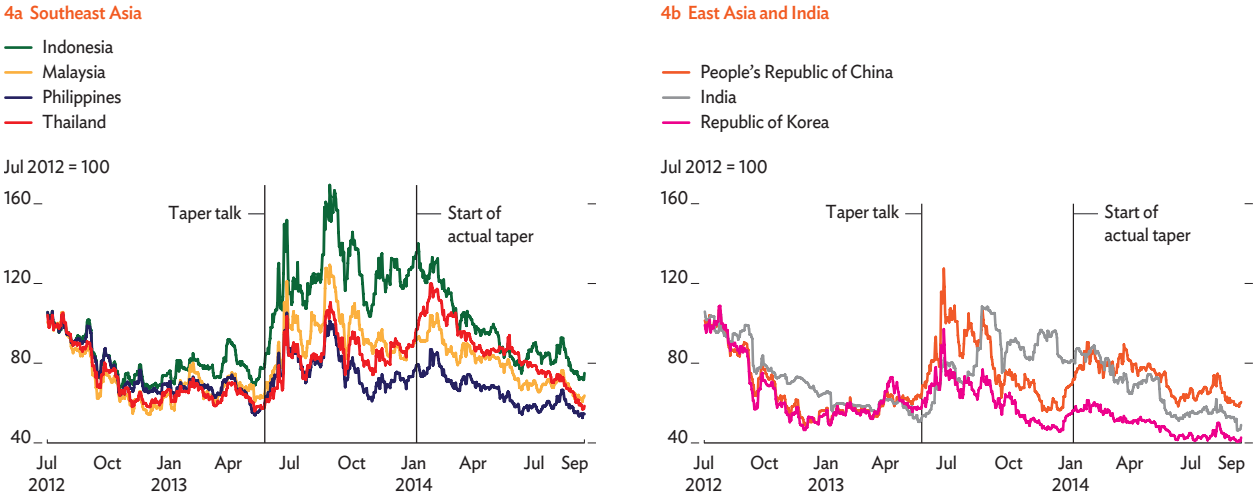


EMBI = JP Morgan's emerging markets bond index, MSCI = Morgan Stanley Capital International.

Notes: For EMBI, emerging Asia consists of the People's Republic of China (PRC); India; Indonesia; Malaysia; Mongolia; Pakistan; the Philippines; Sri Lanka; and Viet Nam. For MSCI, emerging Asia consists of the PRC; India; Indonesia; Republic of Korea; Malaysia; the Philippines; Taipei,China; and Thailand.

Source: Bloomberg (accessed 9 September 2014).

1.2.4 Credit default swap premium



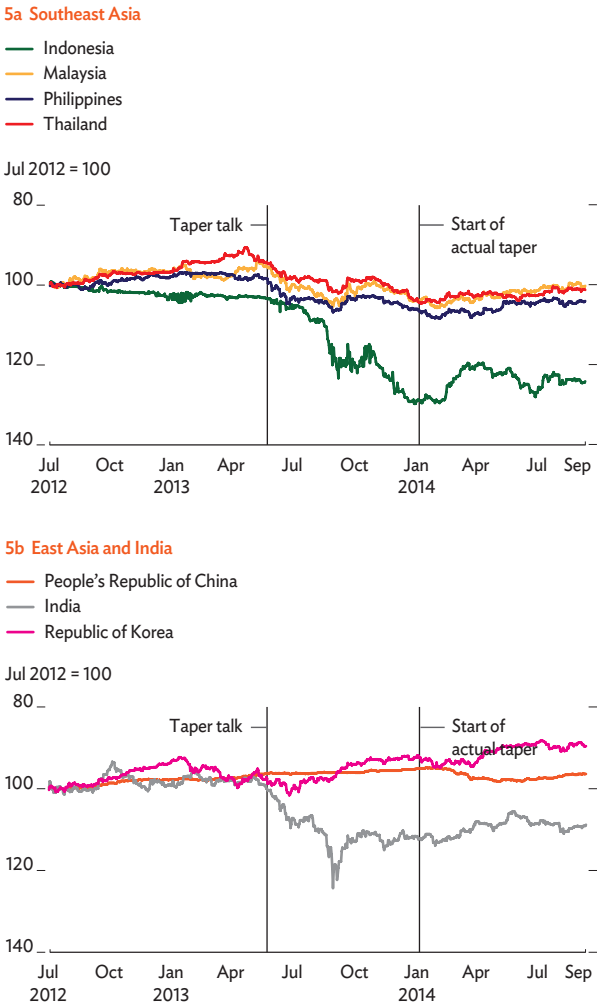
Note: Credit default swap premium for government sovereign senior 5-year debts in US dollars except for India which refers to banks' senior 5-year debts in US dollars.
Source: Bloomberg (accessed 9 September 2014).

and stocks (MSCI). The two indicators suggest that the recent trend looks similar to that observed before the taper talk signal in May 2013, after which the markets plunged into deep corrections. Trends for credit default swap premiums broadly mirror stock and bond movements (Figure 1.2.4), with the premium declining since the start of actual tapering.

The situation today is not, however, quite the same as before taper talk. First, the net flow of global funds in emerging Asia excluding the PRC still languishes in negative territory, suggesting that less money is being parked in the region. Consequently, despite superficially similar trends, the underlying story behind the increase in emerging Asia's MSCI and EMBI is quite different. The recent increase is not boosted by as much short-term capital inflow as was the one before taper talk, and it has taken place in an environment in which the increase in global liquidity is decelerating. Second, despite reduced risk premiums, average credit default swap premiums in the PRC, India, Indonesia, Malaysia, and Thailand are still somewhat higher than they were before taper talk. That said, the recent declines look like gradual reversion to their previous levels, not risk perception improved by an external shock. Similarly, Asian currencies have tended to appreciate since US asset purchases actually started winding down, though most are still lower than they were before taper talk (Figure 1.2.5).

The Indonesian rupiah and the Indian rupee in particular are still much lower than their average rates before taper talk. Indonesia and India were the two countries in the region worst hit by taper talk, their currencies depreciating by over 10% from May to September 2013. They responded by aggressively tightening monetary policy toward the end of 2013

1.2.5 Exchange rates



Source: Bloomberg (accessed 9 September 2014).

to soften the impact of the sudden reversal in capital flows, but at the cost of undermining economic growth. Both governments succeeded in stabilizing their exchange rates, albeit at lower values. In both countries, the current account deficit was the culprit behind the suffering during the taper tantrum. India has since narrowed its deficit quite significantly, while initial narrowing in Indonesia is being reversed as the deficit slowly creeps back up. Inflation in both countries, on the other hand, has been brought down to rates deemed conducive to economic growth. Nevertheless, both countries still maintain interest rates at their highest in the past couple of years to sustain economic stability.

Cautious monetary policy is pursued partly in anticipation of monetary tightening in the US. This is the main difference between the recent situation and that prior to May 2013. While the big surprise was a huge factor in the financial mayhem of the second half of last year, such dramatic surprise is unlikely next time, as the authorities and investors have taken into account the possibility of the US monetary tightening when making decisions, at least to some extent.

Gauging the implications of US monetary tightening

Would the story change if US interest rates went up sooner and more steeply than anticipated? The baseline assumptions for this *Update* have the US economy growing by 3.0% in 2015. Monetary policy is seen being maintained as the Fed finishes winding down its asset purchase program in 2014, but then US interest rates starting to rise gradually by the end of the second quarter of 2015, reaching an average of 1.0% in the last quarter. An unforeseen quickening of growth in the US would be welcome, of course, as it would speed economic recovery everywhere, but earlier and stiffer monetary tightening in the US would be an inevitable consequence. As it would not be a surprise, a US interest rate increase should elicit appropriate responses elsewhere, mitigating harm to emerging markets.

To illustrate the implications to Asia of US interest rates rising sooner than expected, a scenario is derived from the global projection model GPM7 (Box 1.2.2). The base scenario assumes that US economic growth speeds up from the third quarter of 2014. The favorable shock considered here is envisaged being capable of boosting the US growth rate by 0.4 percentage points in 2014 and by 1.0 percentage point in 2015. A shock of that magnitude would certainly be good news to the global economy, as it would improve demand, but it would also have global inflationary consequences as stronger US growth would push up global commodity prices. Such a shock would not be enough to lift Europe or Japan out of the doldrums, but it would boost average growth in emerging Asia by 0.1 percentage point in 2014 and 0.5 percentage points in 2015, and average inflation by 0.4 percentage points in 2015. The impact on exchange rates would be relatively muted.

To preempt unwanted inflationary consequences from its ultra-loose monetary policy, the Fed is then assumed to react immediately to the shock in the fourth quarter of 2014 and increase interest rates sufficiently

1.2.2 Global projection model GPM7

The global projection model GPM7, described in detail in Blagrave et al. (2013), models multiple blocks of economies to comprehensively and coherently generate global forecasts to inform policy analysis. The model has seven economy blocks: the US, the euro area, Japan, the PRC, emerging Asia excluding the PRC, Latin America, and "the rest of the world," mostly developed European economies that are not part of the euro area. The block emerging Asia excluding the PRC consists of Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand. Combined with the PRC, these emerging Asia economies generate over 90% of GDP in developing Asia in purchasing power parity terms.

The model offers features that policy makers and academics alike have found relevant to analyzing business cycles, such as nominal rigidities, rationality, and linkages for trade in goods, services, financial assets, and oil. Most importantly, monetary policy is described explicitly through Taylor-type interest rate rules, which link interest rates to movements in inflation and the output gap. An exception is the structure of monetary policy in the standalone PRC block, which is tailored to the particular ways the PRC manages its exchange rate, capital flows, and banks.

Reference

Blagrave P., P. Elliott, R. Garcia-Saltos, D. Hostland, D. Laxton, and F. Zhang. 2013. Adding China to the Global Projection Model. *IMF Working Papers 13/256*. International Monetary Fund.

to contain inflation. The interest rate increase is not too obvious in 2014, as the Fed starts to react only in the fourth quarter, but by 2015 the US rate is assumed to reach an average of 2.0%. Under this US tightening scenario, it is projected that the annual growth rate of the US economy is cut as a result by 0.3 percentage points in 2015.

Absent policy responses in emerging Asia, growth effects will tend to be outweighed by a jump in inflation worsened by currency depreciation resulting from capital outflows. It bears noting here that the PRC will be less affected than the other economies in emerging Asia because of differences in its economic structure, especially the government's control over domestic banks and capital movements. During the taper tantrum in 2013, capital flight was manifested in change to the currency basket of emerging Asia excluding the PRC, which depreciated by an average of 3.7%. Capital flight under the US tightening scenario, though not as great as during the taper tantrum, could still be quite substantial, as reflected in the model by 2.4% average depreciation of the same currency basket in 2015 barring policy response (Table 1.2.1). This is enough to be potentially destabilizing for these economies.

To ensure stability, economies in emerging Asia would need to appropriately tighten their monetary positions, somewhat diminishing growth. Regional economies would have to raise interest rates by 0.5–1.0 percentage points on average just to offset about one-third of the currency depreciation induced by the US interest rate shock. This policy would help stabilize domestic inflation but would trim the region's growth prospects by about 0.4 percentage points.

In sum, the effect on the global economy of an interest rate increase sooner than expected in the US would be relatively muted but require some monetary tightening in emerging Asia. The cost of capital in Asia would then have to rise further, narrowing the scope for faster growth in the region.

1.2.1 Implications of a tighter US monetary policy to emerging Asia

	No policy response (deviation from base scenario)		With policy response (deviation from no policy response)	
	2014	2015	2014	2015
Growth				
PRC	0.00	−0.09	−0.01	−0.08
emerging Asia (ex-PRC)	0.00	0.15	−0.01	−0.40
Inflation				
PRC	0.00	−0.05	0.00	−0.03
emerging Asia (ex-PRC)	0.00	0.23	−0.01	−0.41
Nominal exchange rate				
PRC	0.01	0.56	−0.01	−0.10
emerging Asia (ex-PRC)	0.09	2.40	−0.14	−1.63

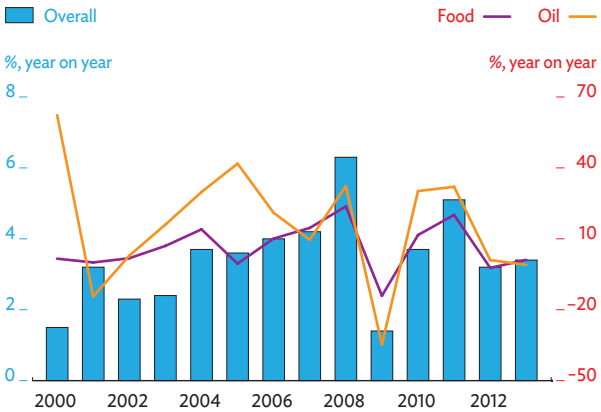
PRC = People's Republic of China.

Source: ADB estimates.

Will demand reignite inflation?

Since the global financial crisis (GFC), inflation has been generally stable in developing Asia. Average inflation fell sharply to less than 2% in 2009 and has remained at around 3%–5% since then (Figure 1.3.1). Mohanty and Klau (2001) and other studies suggest that supply factors like agricultural shocks, severe weather, exchange rate fluctuation, and import price variation explain a large part of price movements in developing countries. However, as economies mature, demand fluctuations in domestic markets become the more prominent inflationary pressures. In such cases, the output gap—the difference between an economy's current production and what it could produce at relatively stable prices—can be a good leading indicator for inflation. As the global recovery continues, is there a danger of inflation picking up in developing Asia?

1.3.1 Inflation in emerging Asia and food and oil prices



Note: Weighted average of emerging Asia countries of the Asian Development Bank.

Source: Global Projection Model database, IME, and *International Financial Statistics*, International Monetary Fund.

A negative output gap occurs during economic downturns when actual output is below potential, leaving the economy with spare capacity and substantial unemployment. A negative output gap consequently reduces pressure on prices. The opposite happens when an economy is overheating. A positive output gap occurs when demand is very high and, to meet that demand, factories and workers operate far above their most efficient capacity, forcing unemployment temporarily below its natural rate and generating inflationary pressures. When the output gap is close to zero, inflation tends to be steady, neither slowing nor accelerating.

The most common measure of excess demand today is the gap between an economy's potential and its actual output. This measure acknowledges that economic fluctuations can result from either demand or supply shocks. This subsection looks closely at the effect of domestic demand on inflation, with particular focus on emerging Asia, a group that features relatively large domestic markets.

Potential growth and output gaps

Large shocks not only produce big swings in actual growth but can alter the trajectory of potential growth if they persist long enough. For example, sluggish growth in the industrial economies since the GFC appears to be partly structural and therefore persistent. OECD (2014) estimates that the GFC reduced OECD-wide potential output per capita by 3.3%. For some euro area countries, the effect is estimated to be much larger, with the reduction in potential output in 2014 being more than 10% for the Czech Republic, Estonia, Finland, Greece, Hungary, Iceland, and Slovenia.

Sluggish demand from industrial economies during the GFC may have affected developing Asia's potential growth through trade and technology diffusion links. The drop in demand for the region's exports

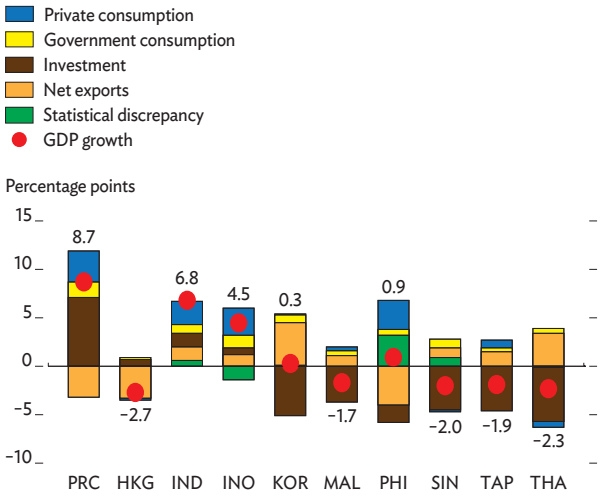
triggered a sharp deceleration of growth, slowing capital accumulation and diminishing job prospects. The growth rate almost halved from 10.3% in 2007 to 5.8% in 2009. The impact was much more severe if India and the PRC are excluded, with growth in the other eight economies collapsing to 0.2%. In 2009, fixed capital investment collapsed across emerging Asia (Figure 1.3.2), while the unemployment rate rose by nearly 0.3 percentage points. Large stimulus packages helped developing Asia rebound strongly in 2010, but the disruption to investment and job growth caused by the sharp deterioration in the external environment persisted. The euro area sovereign debt crisis followed, and developing Asia's potential and actual growth rates have been strained since 2008 because of these events.

The few existing studies analyzing the GFC impacts on potential growth in developing Asia point in different directions depending on the methodology used and the sample period considered. This is partly because the region rebounded strongly in 2010, which gives an upward bias to estimates of potential output and growth if a methodology such as the Hodrick–Prescott (HP) filter is used without enough observations after the crisis (see, for example, Anand et al. 2014 and Park, Majuca, and Yap 2010). Box 1.3.1 compares results from the different methodologies. Using a multivariate filter helps remedy the end-of-sample bias and address a possible structural break.

Results using a multivariate filter show that emerging Asia's potential growth rate has fallen by 1.4 percentage points since the onset of the GFC, from 7.4% in 2008 to 6.0% in 2013. The main contributor to this downward trend, because of its large statistical weight, is the PRC, where the estimated potential growth rate plunged from almost 10.0% in 2008 to 7.5% by 2013. This finding corroborates those by Wu (2014) that the PRC's annual rate of labor productivity growth slowed to 5.9% during 2007–2012 from 9.3% in 2002–2007.

Except for Indonesia, emerging Asia experienced lower potential growth post-GFC in 2009–2011 than before the GFC (Figure 1.3.3). The drop was largest in Thailand and Hong Kong, China, where potential growth rates almost halved. For seemingly unscathed Indonesia, Anand et al. (2014) find a similar underlying trend, noting that Indonesia's high post-GFC growth rates reflect projects sponsored and financed by the government that may have raised capital accumulation and sustained gains in total factor productivity during the period.

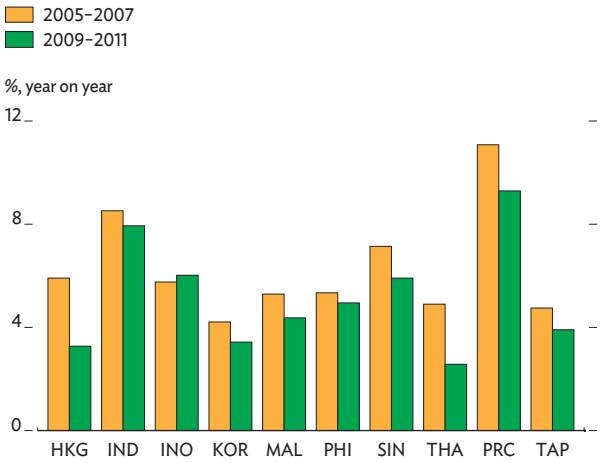
1.3.2 Demand-side contributions to growth in emerging Asia, 2009



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

Source: ADO 2010, chart 1.3.5.

1.3.3 Potential growth rates in 2005–2007 versus 2009–2011, by country



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

Source: ADB estimates.

1.3.1 Measuring potential growth and output gaps

Potential growth is unobservable and hard to measure. One approach is to estimate a production function directly. While this approach is firmly rooted in economic theory, it suffers from strong assumptions and unreliable data. For example, the widely used Cobb-Douglas production function can be too simplistic, while data on the capital stock, a critical factor input, are often unavailable. Another approach is to use time series statistical methods to discern the underlying trends and business cycles from the data. This box compares the alternative statistical methods.

The most common way to estimate potential output uses the univariate HP filter, which requires only its data series and an appropriate choice of smoothing parameter to achieve an optimal potential output. However, the resulting estimates of potential output are biased because an inaccuracy in the estimated series worsens toward the end of the sample period with changes in the sample size and/or the forecast data (Butler 1996). Another problem with this method involves the choice of an appropriate smoothing parameter to be used in the estimated series, which can be arbitrary (Razzak and Dennis 1995). A third problem is that by drawing only on output data, the univariate HP filter ignores other relevant economic information.

A multivariate filter approach can address this third issue by drawing not only on output data but also on other relevant time series such as inflation (Laxton and Tetlow 1992, Kuttner 1994). Specifically, the multivariate filter approach uses a simple macroeconomic model that accounts for unemployment, output, and inflation interaction to obtain, through the Kalman filter procedure, estimates of potential output, nonaccelerating inflation rate of unemployment, and some other parameters.

The box table compares the potential growth rates for the years 2011–2013. The computed potential growth rates are generally comparable across the two filtering approaches (univariate and multivariate estimations), but for some economies there are major differences from the estimates made using the production function approach. For the filtering approaches, the major difference in results is for 2013, where estimates of the output gap differ by more than 0.5 percentage points for India, the Philippines, Thailand, and Taipei,China.

In all of these economies, the multivariate filter results show a more negative output gap. For the Philippines and Thailand, the two methods give opposite signs to the output gap, with the multivariate filter suggesting that the economies were still below potential and the univariate HP filter saying the economies had exceeded potential output. The differences result from the additional information that the multivariate filter uses: inflation. In both the Philippines and Thailand, inflation has remained too low to suggest positive output gaps. Though the multivariate filter may introduce some noise with extra information, the approach is more informed in economic terms than the univariate HP approach and requires fewer assumptions than either the univariate HP or the production function approach. Hence results from the multivariate approach inform this section.

Different approaches for estimating 3-year average potential growth rates and output gap

	Multivariate Filter		HP Filter		Production Function
Country	Potential Growth Rates (Average 2011–2013)	Output Gap (2013)	Potential Growth Rates (Average 2011–2013)	Output Gap (2013)	Potential Growth Rates (Average 2011–2013)
China, People's Rep. of	8.08	–0.14	8.47	–0.16	6.69
Hong Kong, China	3.20	–0.50	2.89	–0.50	5.03
India	6.62	–2.00	5.89	–0.76	4.92
Indonesia	5.94	0.30	6.07	0.28	4.94
Korea, Republic of	3.25	–0.51	3.01	–0.50	4.61
Malaysia	4.92	0.14	4.98	0.11	5.89
Philippines	5.96	–0.30	6.10	0.37	6.16
Singapore	4.82	–0.00	5.13	0.37	5.77
Taipei,China	3.09	–1.07	3.02	–0.48	4.05
Thailand	2.97	–0.82	3.49	0.57	4.27
Weighted Average	6.43	–0.52	6.60	–0.26	5.77

Source: ADB estimates.

Has Asia closed its output gap?

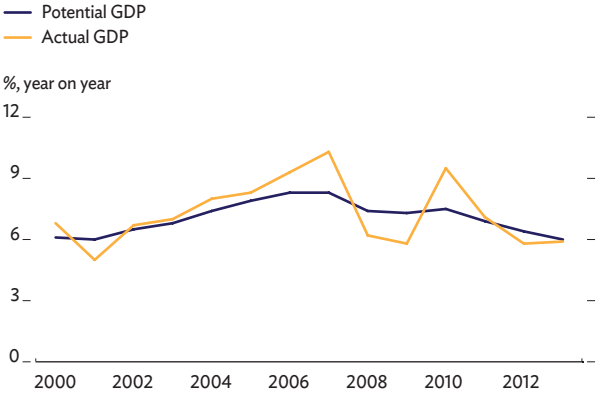
While potential growth rates have moderated since the GFC, actual growth rates have fallen even more sharply. Except in 2010, when many countries bolstered growth with fiscal stimulus, actual growth rates have been below potential in most of developing Asia (Figure 1.3.4). Indeed, growth has been below potential since 2011, reflecting both internal and external factors (ADB 2012). Growth below potential contrasts sharply with the pre-crisis period, when growth rates arguably exceeded potential in 2002–2007 as the collective potential growth rate in emerging Asia reached 8.3%.

For emerging Asia as a whole, the output gap swung from negative to positive, from –0.5% of GDP in 2001 to 2.2% in 2007, before turning negative in 2009 and again in 2012–2013. These economies were still operating below full capacity in 2013, with a collective output gap exceeding –0.5% (Figure 1.3.5). Moreover, the effects of the GFC varied across countries, with India and the PRC remaining above potential output until 2011 while the other eight economies fell below potential in 2009 (Figure 1.3.6).

The newly industrialized economies (NIEs)—Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China—raised their growth rates above potential after the slump of 2009. However, the positive output gap in 2011 turned negative for all except Singapore in 2012 and 2013. Moreover, among emerging Asia, the NIEs suffered the steepest rise in unemployment post-GFC (Figure 1.3.7). In particular, the two very trade-dependent economies, the Republic of Korea and Taipei,China, saw an increasingly negative output gap in 2013, reflecting renewed weakness in the major industrial economies.

Meanwhile, slack lingered for a prolonged period in Indonesia, Malaysia, the Philippines, and Thailand, despite their responding to the GFC with stimulus packages to various extents. Only in 2012 did output reach potential in Malaysia, driven by robust consumption and investment, and only in 2013 did it happen in Indonesia. The Philippines and Thailand are still estimated to be operating below potential output, probably because of weather-related factors and, in Thailand, political unrest in recent years (Figure 1.3.6).

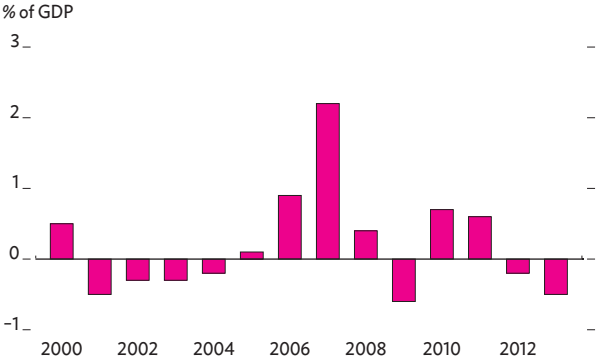
1.3.4 Potential and actual growth rates, emerging Asia



Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

Source: ADB estimates.

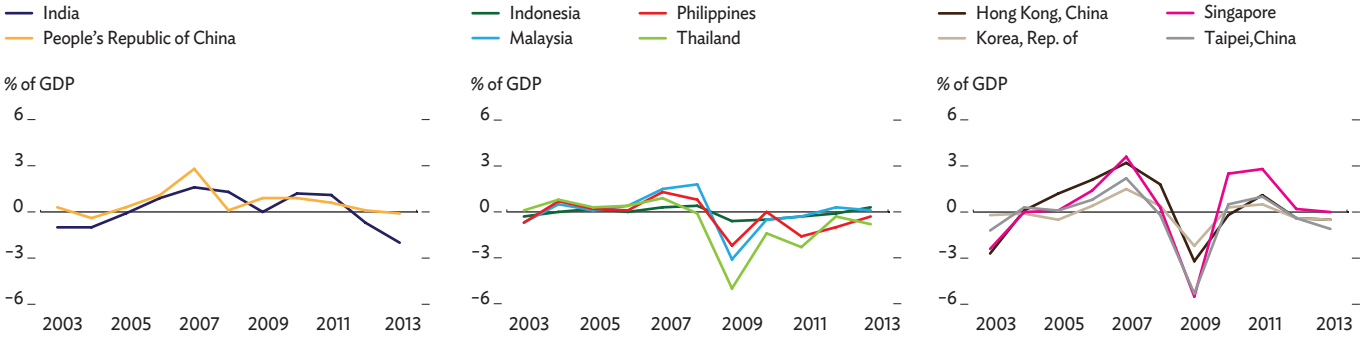
1.3.5 Average output gap, emerging Asia



Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

Source: ADB estimates.

1.3.6 Output gap, emerging Asia



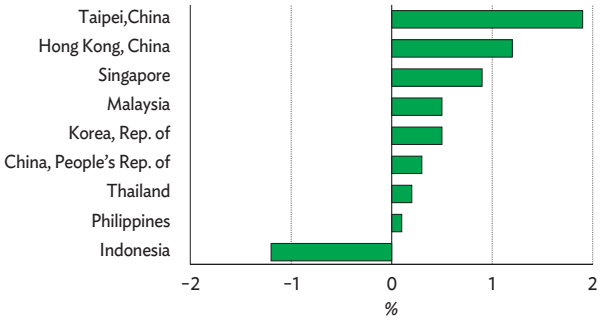
Source: ADB estimates.

Recent crises compared

How does the demand shortfall during the GFC compare with earlier recessions? The region has experienced two other sizable recessions over the past 2 decades: the Asian financial crisis (AFC) that started in 1998 and the technology bubble and burst (TBB) episode that started 2001. Comparing these recessions suggests that the demand shortfall of 0.6% of GDP suffered by emerging Asia in 2009 was smaller than in the two previous episodes. The most serious widening of the output gap occurred during the AFC, when the collective negative output gap exceeded 2% of GDP in 1998 and did not return to potential until 2000. The output shortfall was smaller in the TBB episode but dragged on for 4 years before finally turning positive in 2005 (Figure 1.3.8).

Excluding India and the PRC, which have large domestic markets that help insulate them from the changing external environment, changes the picture slightly. In four economies that were severely hit by the AFC—Indonesia, the Republic of Korea, Malaysia, and Thailand—the negative output gap widened to –5.4% of GDP in 1998. These four also suffered more severely during the GFC, but the resulting negative output gap of 2.3% of GDP was barely half of that during the AFC. The more trade-oriented and open NIEs experienced major losses during all three crises. During the GFC, the drop in demand from the US, the European Union, and Japan helped push the negative output gap in the NIEs beyond –3% of GDP, about 6 times that of emerging Asia as a whole and almost equivalent to their losses during the AFC.

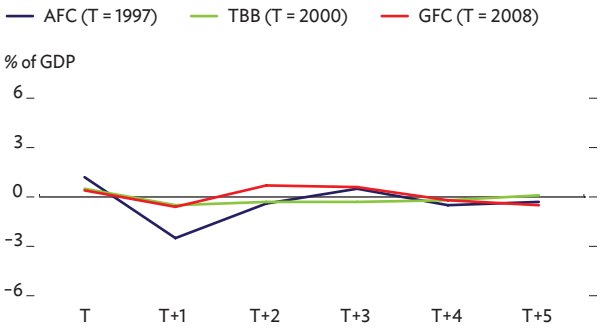
1.3.7 Unemployment rate gap



Note: The gap is the difference between the peak before the global financial crisis (2007) and the trough post-crisis (2009).

Source: Asian Development Outlook database.

1.3.8 Output gap during crisis years, emerging Asia

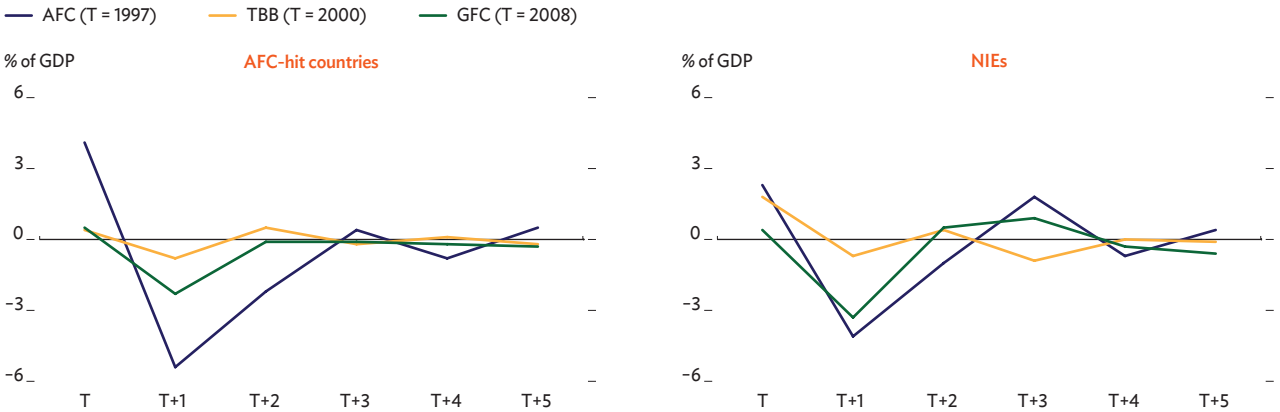


AFC = Asian financial crisis, GFC = global financial crisis, TBB = technology bubble and burst.

Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

Source: ADB estimates.

1.3.9 Output gap of the AFC-hit economies and NIEs (% of GDP)



AFC = Asian financial crisis, GFC = global financial crisis, NIE = newly industrialized economy, TBB = technology bubble and burst.

Notes: AFC-hit economies consists of Indonesia, the Republic of Korea, Malaysia, and Thailand. NIEs consists of Hong Kong, China; the Republic of Korea; Singapore; and Taipei,China.

Source: ADB estimates.

Output gaps and inflation to come

Simple correlation suggests that inflation in the current year is highly correlated with the previous year's output gap in emerging Asia (Figure 1.3.10). However, the causal links between inflation and a lagged output gap are unclear. Dale (2009) and Dwyer et al. (2010) have argued that inflation might rise if growth rates exceed short-term "speed limits." According to this hypothesis, even an economy with a negative output gap can experience inflationary pressure if it emerges very quickly from recession, as idle resources cannot be reemployed instantly. Some observers have also argued that large fiscal deficits will, coupled with unconventional monetary policies, inevitably erode central bank credibility and drive up inflation.

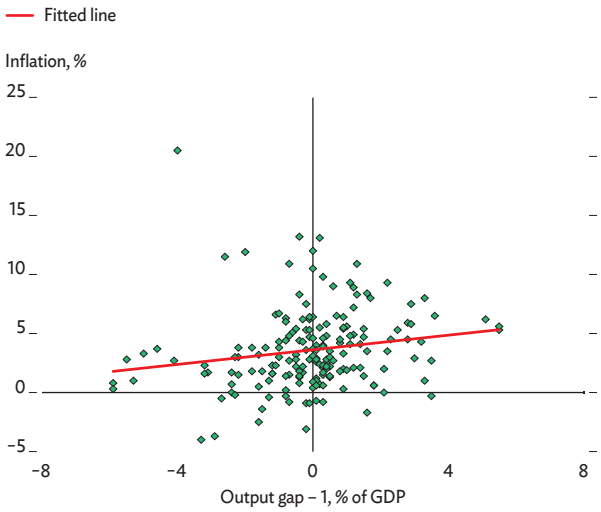
Many empirical studies suggest that the output gap is a reasonable leading indicator for inflation, but the evidence comes mostly from more developed industrial economies. Studies of developing countries in Asia or elsewhere are still limited. Mohanty and Klau (2001) note that the difficulty of measuring potential output in developing countries makes it harder to confirm whether demand is a key factor. Yet the available literature suggests that the output gap level, more than the change in the output gap (as per the "speed limits" hypothesis) explains inflation in developing Asia (see, for example, Coe and McDermott 1996, Gerlach and Peng 2006).

For emerging Asia, the multivariate estimate suggests that price pressure from domestic demand is rather moderate: a 1 percentage point deepening of output gap slows inflation by 0.2–0.3 percentage points, and a widening positive gap accelerates inflation to the same degree. Thus, the largest output gap, –6% of GDP experienced in 1998, probably slowed the average inflation rate in these countries by about 2 percentage points at most.

Meanwhile, inflationary pressure from domestic demand built up before the GFC and reached a peak in 2007, when emerging Asia were operating far above their full potential with an output gap at 2.2% of GDP. Large inflation shocks in 2007 and 2008 caused by commodity prices added inflationary pressure to the already overheated economies, and inflation soared during this period (ADB 2008). In 2008, for example, one-third of inflation in emerging Asia excluding the PRC, or 1.4 percentage points, came from the rise in global food and oil prices. By comparison, the PRC suffered more from its pork supply cycle in 2007 than from the global commodity price shock. The shortage in pork became acute as blue-ear disease took a toll on pigs there in 2007 and, to a lesser extent, in 2008, driving up inflation (Figure 1.3.11).

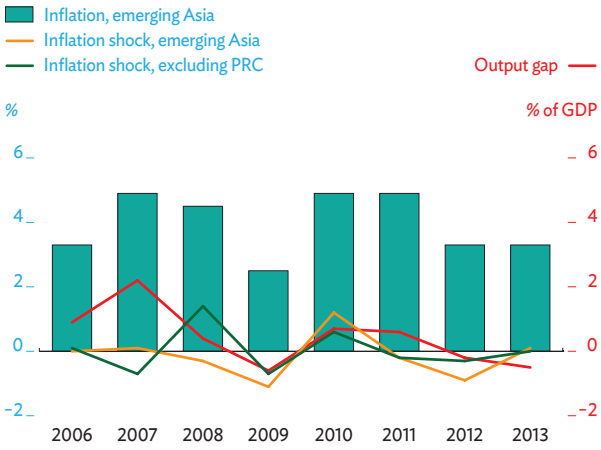
This *Update* forecasts that emerging Asia should experience growth rates above potential, averaging slightly above 6% over the next 2 years. The negative output gap in these economies is thus expected to close gradually, though

1.3.10 Output gap in the previous period and inflation



Sources: ADB estimates; *International Financial Statistics*, International Monetary Fund.

1.3.11 Inflation shock and output gap



PRC = People's Republic of China.

Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

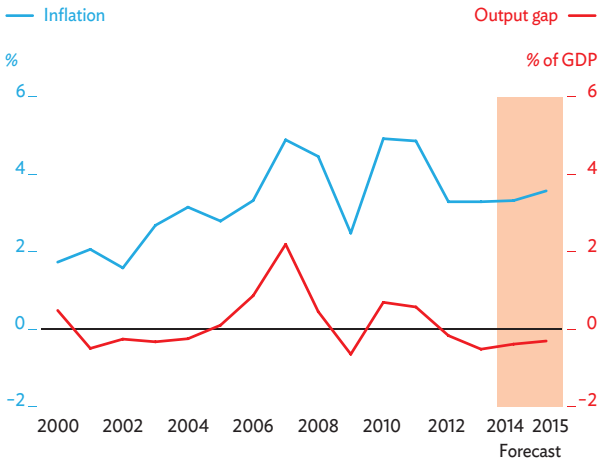
Sources: ADB estimates; *International Financial Statistics*, International Monetary Fund.

the anticipated growth rate will be insufficient to eliminate the negative output gap by 2015 (Figure 1.3.12). Regarding inflation, the *Update* forecasts it remaining stable this year before rising slightly in 2015. As inflationary pressures from domestic markets are expected to remain limited during the forecast period, the expected rise in inflation will likely be driven by other factors, such as the planned liberalization of regulated prices in the PRC.

While sluggish domestic demand continues, and slack remains in these economies, the authorities must be ready to respond and stimulate their economies if unexpected shocks derail growth.

More broadly, governments must continue to press policy reform that can revive potential growth tempered by the GFC. This should include reform to enhance productive capacity and so make economies more resilient to shocks affecting either supply or demand. The next section of this *Update* discusses how economies in the Association of Southeast Asian Nations are striving to expand their potential by facilitating trade, liberalizing investment, and ultimately establishing a fully integrated economic community.

1.3.12 Output gap and inflation, emerging Asia



Note: Emerging Asia consists of the People's Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; and Thailand.

Sources: ADB estimates; *International Financial Statistics*, International Monetary Fund.

Building the ASEAN economic community

Launched as a political bloc and security pact in the aftermath of the Viet Nam War, the Association of Southeast Asian Nations (ASEAN) has evolved to embrace an ambitious economic agenda (Hill and Menon 2012). Its latest project is to establish the ASEAN Economic Community (AEC) by 31 December 2015. The blueprint for achieving the goal envisages the AEC as a single market and production base that is highly competitive as it pursues equitable economic development and full integration into the global economy (ASEAN 2008).

This vision stands on four pillars about which leaders of ASEAN members have agreed on a range of actions. Progress has been achieved on several fronts, but many hurdles remain along the road to the AEC in 2015.

A community built on four pillars

Single market and production base. There have been a number of noteworthy achievements under this first pillar. The greatest success has been in tariff reduction. Following the implementation of the ASEAN Free Trade Area, common effective preferential tariff rates between Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand fell to virtually zero. As a result, more than 70% of intra-ASEAN trade incurs no tariff, and less than 5% is subject to tariffs above 10% (WTO 2011). With tariffs largely gone, leaders need to prioritize eliminating nontariff barriers and some nontariff measures that are being used as barriers to trade.

Some progress has been made in trade facilitation and investment liberalization. The national single window—a one-stop shop to speed customs clearance within ASEAN—has gone live in Indonesia, Malaysia, the Philippines, Singapore, and Thailand, with full rollout planned for all significant ports and airports by 2015. In addition, these economies now approximate international best practice in investment liberalization. However, the four newer ASEAN members—Cambodia, the Lao People's Democratic Republic, Myanmar, and Viet Nam—lag in both areas. Trade in services, meanwhile, has enjoyed less liberalization partly because it has a much shorter history than trade in goods and is harder to grasp. Agreements have been finalized to mutually recognize qualifications for some services, but the number of such services needs to be expanded, and agreements need to be implemented in ways that improve mobility for skilled labor.

Highly competitive economic region. To achieve this second pillar, policy on competition needs to be improved and the protection of intellectual property rights strengthened. These are difficult areas to reform, and questions remain regarding how effective a regional approach can be compared with national action or a multilateral

approach. Nevertheless, standards harmonization and regulatory convergence offer considerable potential benefits to ASEAN as it develops its regional market.

Equitable economic development. The huge income and development disparities among ASEAN members are inconsistent with the idea of economic community, however conceived. The Initiative for ASEAN Integration is one of several arrangements that have been proposed to help close the development gap and accelerate the integration of newer members. While such initiatives may be helpful, progress must come from within the newer members themselves as they institute broad economic reform that promotes trade and investment, as they have been doing (Menon 2013).

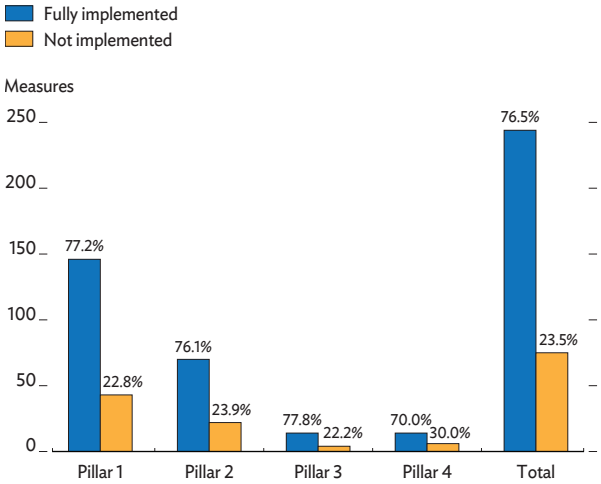
Full integration into the global economy. This fourth pillar has witnessed the greatest strides, which have enabled a thriving Factory ASEAN to link to global value chains (GVCs). Progress to date underlines how liberalization has been driven thus far more by market forces than by regional agreements, and that the shift from unilateral liberalization to preferential liberalization through free trade agreements has not promoted further external opening or domestic reform because such agreements are often weakened by politically expedient exemptions (Sally 2013, WTO 2011). ASEAN's long-standing commitment to openness is one of its defining features and needs to be burnished to sustain and advance regionalism in Southeast Asia.

Each of the four pillars presents a demanding set of challenges to be met before the AEC can be fully realized. A crosscutting challenge is to achieve greater engagement with the private sector and the broader community. The AEC may be led by governments, but it cannot succeed without fully engaging business and the public at large. Meanwhile, efforts to prepare the private sector have enjoyed negligible success, and public awareness is equally abysmal (ASEAN Business Advisory Council 2013). This needs to change quickly if the AEC is to make a difference.

The 2015 deadline and beyond

Although ASEAN has come a long way toward realizing its goal, the challenges that remain suggest that the AEC will not meet its approaching deadline. Indeed, the AEC Scorecard, ASEAN's self-assessment mechanism, suggests that the region achieved only 76.5% of its AEC targets that were due by March 2013, the cutoff date for the most recent Scorecard (Figure 1.4.1). Moreover, this does not take into account the additional targets falling due from April 2013 to December 2015 (except for 15 tasks completed in advance). It further reveals that the pace of reform seems to have slowed rather than accelerated, partly because the process reached the more difficult parts of the reform agenda. Even if the pace picked up now and ASEAN managed to hit its remaining targets and meet its deadline for inaugurating the AEC, the real test for the community would lie in the years beyond 2015.

1.4.1 AEC scorecard for key deliverable across ASEAN, January 2008–March 2013



Note: Pillar 1: Single market and production base; Pillar 2: Competitive economic region; Pillar 3: Equitable economic development; Pillar 4: Integration into the global economy.

Source: Milo, M. 2013. *Linkage between Greater Mekong Subregion Economic Cooperation and ASEAN Economic Community.* Presentation at the Mekong Forum 2013: Towards More Inclusive and Equitable Growth in the Greater Mekong Subregion. 11–12 July 2013, Khon Kaen. http://www.mekongforum.com

Accommodating AEC accords will not be easy when they require changes to domestic laws or even the national constitution. The flexibility that characterizes ASEAN cooperation, the celebrated "ASEAN way," may hand member states a convenient pretext for noncompliance. How to enforce the accords remains an issue, and giving the commitments more teeth is a challenge to overcome toward ensuring that the AEC is realized as more than a display of political solidarity. The 2015 deadline, whether or not it is met, should therefore be viewed not as the final destination but as a milestone on the long journey to the AEC—a journey whose direction is collectively ensured by constant engagement and active peer review (Severino and Menon, 2013).

Economic community and global value chains

The theme chapter of this *Update* discusses the significance of GVCs in Asia and policy strategies that strengthen links with these cross-border production networks. It highlights how policy that lowers direct and indirect trade costs enables them to flourish. GVC participation can be enhanced by further reducing current tariffs and uncertainty regarding future tariffs, developing infrastructure that lowers transport costs to and through seaports and international airports, and harmonizing product and process standards to contain production costs while protecting public well-being and the environment and ensuring that standards are not hijacked for use as nontariff barriers.

Clearly, past achievements and future efforts toward implementing the four pillars of the AEC resonate with the factors that build stronger links with GVCs. ASEAN has managed to minimize tariffs and is working to eliminate nontariff barriers, improve trade facilitation, liberalize investment, and establish regional standards and regulations. ASEAN members have agreed to carry out mutual recognition arrangements for various services, which play important roles in GVCs at every phase of production and distribution. These reforms will surely benefit the region by strengthening existing trade ties, forging new links to GVCs, and providing more jobs and higher incomes.

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Annex: Global recovery

This *Update* projects growth in the major industrial economies in 2014 at a subdued 1.5% (Table A1.1). This is slightly higher than in 2013 but a downward revision from the *ADO 2014* forecast of 1.9%, made to accommodate weak performance in the first half of the year in the US, the euro area, and Japan. However, growth trends and prospects for these economies are diverging. While growth in the US and Japan appears to be gradually strengthening, in the euro area it has stalled. In 2015, combined GDP growth is expected to pick up to 2.1%, mainly on the back of recovery in the US.

Inflation in the major industrial economies is expected to remain low and stable. While an uptick in prices in the US may bring higher interest rates sooner than expected, the euro area and Japan may further loosen monetary policy to avoid deflation. Despite conflicts in the Middle East and Ukraine, international oil prices have remained relatively calm, but the anticipated decline in oil prices will be slower than envisaged in *ADO 2014*. Food prices, on the other hand, are expected to drop more sharply in 2014.

A1.1 Baseline assumptions for the international economy

	2012	2013	2014		2015	
	Actual		*ADO 2014*	*Revised*	*ADO 2014*	*Revised*
Gross domestic product growth (%)						
Major industrial economies[a]	1.1	1.2	1.9	1.5	2.2	2.1
United States	2.3	2.2	2.8	2.1	3.0	3.0
Euro area	-0.7	-0.4	1.0	0.8	1.4	1.0
Japan	1.5	1.5	1.3	1.0	1.3	1.4
Prices and inflation						
Brent crude spot prices (average, $ per barrel)	112.0	109.0	106.0	107.0	102.0	104.0
Food index (2010 = 100, % change)	1.6	-7.0	-3.5	-5.0	-1.0	-1.0
Consumer price index inflation (major industrial economies' average, %)	1.8	1.3	1.6	1.6	1.6	1.6
Interest rates						
United States federal funds rate (average, %)	0.1	0.1	0.1	0.1	0.6	0.6
European Central Bank refinancing rate (average, %)	0.9	0.6	0.3	0.2	0.3	0.1
Bank of Japan overnight call rate (average, %)	0.1	0.1	0.1	0.1	0.1	0.1
$ Libor[b] (%)	0.2	0.2	0.2	0.2	0.4	0.4

[a] Average growth rates are weighed by gross national income, Atlas method.

[b] Average interbank quotations on 1-month loans.

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

Recent developments in major industrial economies

United States

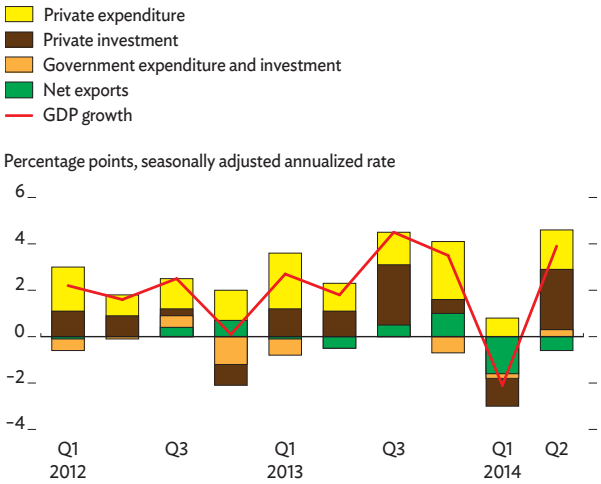
The US economy rebounded quickly in the second quarter of 2014, growing at a seasonally adjusted annualized rate of 3.9% after the weather-related 2.1% contraction in the first quarter (Figure A1.1). Strong growth in private investment at 17.5% and private consumption at 2.5% combined to drive growth in the second quarter. That the rebound was led by domestic demand was also reflected in stronger import growth at 11.0%, resulting in net exports shaving 0.4 percentage points from GDP growth despite 10.1% growth in exports.

The strengthening trend in the economic recovery is continuing into the third quarter (Figure A1.2). Monthly data through August support optimism for a stronger US economy. The Institute for Supply Management's manufacturing index strengthened to a 41-month high of 59.0 in August (values above 50.0 denoting increased production), and its industrial production index improved further to 64.5 from 61.2 in July. The consumer confidence index climbed from May to reach 92.4 in August, its highest since October 2007, indicating that the public is becoming more upbeat about the health and prospects of the US economy. Home sales in January–July were slower than a year earlier, but housing starts were more vibrant, with an average of 980,000 residential units starting construction monthly, up from an average of 905,000 units in the first 7 months of 2013. As such, the US economy looks to be on track for continued gradual strengthening for the remainder of the year.

Average weekly earnings rose in July by 2.3% from a year earlier. This was a modest increase of 0.3% in real terms but nevertheless improved on the declines recorded in previous months and suggests stronger purchasing power going forward. Nonfarm payroll employment—jobs in general—grew steadily at an average rate of 1.8% from January to July, helping to push unemployment down from 6.6% to 6.2% in the same period. The August figure seemed to snag, though, as the number of jobs increased by only 142,000, well below the monthly average of 226,000 from January to July. Despite this slowdown, other labor data continued to show improvement, however small. Unemployment declined to 6.1% in August, the number of long-term unemployed declined by 192,000, and the mean duration of unemployment shortened to 31.7 weeks from an average of 34.8 weeks in January–July 2014. All in all, the weak nonfarm payroll employment figure in August looks to be more of a hiccup than an alarm announcing a new drag on recovery.

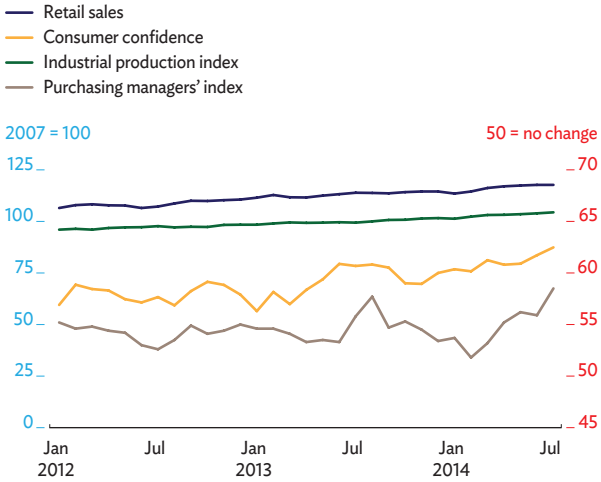
Inflation remains stable, averaging 1.8% in the year to July, but core inflation has accelerated gradually since March 2014 to 1.9% by July (Figure A1.3). Noting the rebound in economic activity and

A1.1 Demand-side contributions to growth, United States



Source: Haver Analytics (accessed 5 September 2014).

A1.2 Business activity and consumer confidence indicators, United States

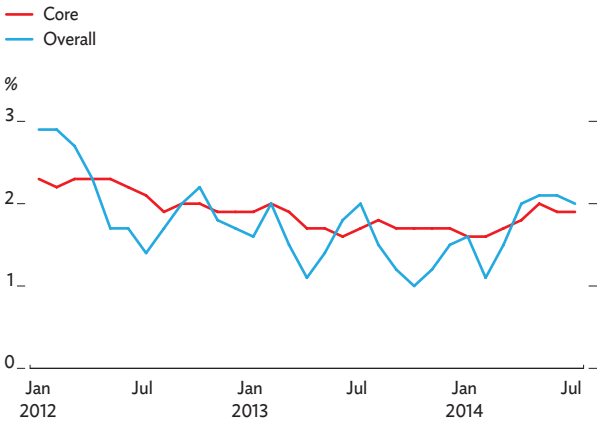


Source: Haver Analytics (accessed 5 September 2014).

stable inflation expectations, the US Federal Reserve has progressively scaled back its monthly asset purchases. As of August 2014, its monthly purchases of mortgage-backed securities had fallen to $10 billion from $40 billion in December 2013, and its monthly purchases of longer-term Treasury securities had fallen to $15 billion from $45 billion in December 2013. At the current pace, the asset purchase program should dwindle to zero by November 2014. Still, monetary policy is expected to remain highly accommodative in 2014 to further shore up recovery momentum. The federal funds rate is likely to be increased starting in mid-2015, slightly earlier than assumed in *ADO 2014*.

The US economy looks set to continue to recover, but in light of the first quarter contraction the GDP forecast for the full year is adjusted downward to 2.1% from 2.8% in *ADO 2014*. The forecast for growth in 2015 is unchanged at 3.0%. However, if inflation picks up or unemployment declines more quickly than currently anticipated, the Federal Reserve may raise interest rates before mid-2015, which could undermine growth momentum.

A1.3 Inflation, United States



Source: Haver Analytics (accessed 5 September 2014).

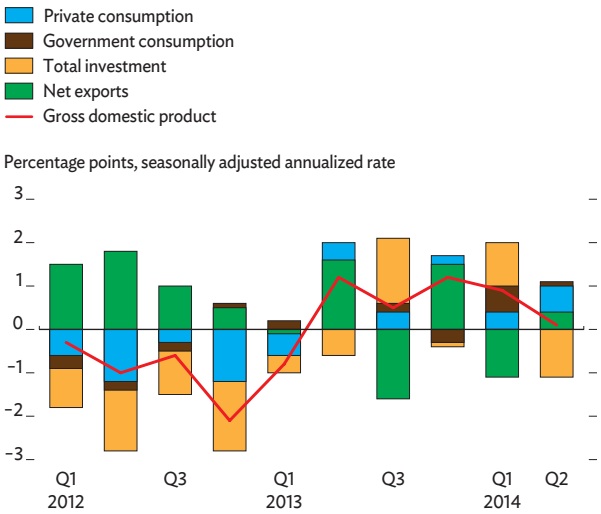
Euro area

Recovery stalled in the euro area as growth weakened further from a seasonally adjusted annualized rate of 0.9% in the first quarter of 2014 to 0.1% in the second quarter. The three largest economies contracted: Germany by 0.8%, reversing its 3.3% growth burst in the first quarter; France by 0.1%; and Italy by 0.7% in its second consecutive quarter of contraction. By contrast, Spain grew by 2.3%, accelerating from 1.5% growth recorded in the first quarter of 2014, while the Netherlands, Portugal, Finland, and Sweden all reversed the contractions they had recorded the previous quarter.

Breaking down euro area GDP into its expenditure components shows that in the second quarter of 2014 a positive contribution came from private consumption, at 0.6 percentage points the strongest since the third quarter of 2011. The contribution of government consumption was smaller at 0.1. Total investment dragged down growth by 1.1 percentage points, and shrinking inventories by 0.8. Net exports added a slight 0.4 percentage points to growth, reversing a large deduction in the previous quarter (Figure A1.4).

The fall in investment is reflected in feeble business indicators (Figure A1.5). Industrial production fell by a seasonally adjusted 0.3% in June, continuing a large drop of 1.1% in May. The decline in May was partly attributed to temporary factors such as weather-related drop in construction and public holidays, but weaknesses in the sector appear deeper in many member economies. The third quarter however started out on a positive note with the index increasing by 1.0% in July. A ray of hope also comes from the composite purchasing managers' index, which remains

A1.4 Demand-side contributions to growth, euro area



Source: CEIC Data Company (accessed 9 September 2014).

over 50 and so indicates that economic activity is expanding. However, its value slid from 53.8 in July to 52.5 in August, the lowest this year. The European Commission's economic sentiment indicator also declined sharply, from 102.1 in July to 100.6 in August.

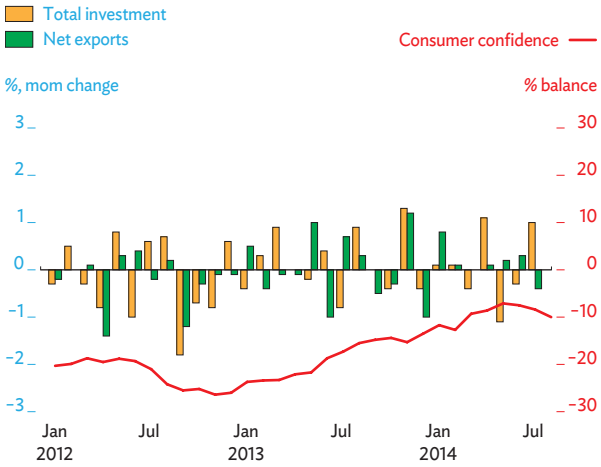
While unemployment is inching down, it remains historically high. The unemployment rate stood at 11.5% in July 2014 as over 18 million people sought jobs in the euro area. The situation is quite diverse among member countries, ranging from 27.2% in May in Greece to only 4.9% in Germany. Gradual labor market improvement helped lift retail sales during the first few months of 2014. However, this trend was reversed as retail sales slipped by 0.4% in July. Looking ahead, consumer demand may be weakening as consumer confidence, having improved through 2013 and early 2014, sagged from a reading of –8.4 in July 2014 to –10.0 in August.

Low inflation, which has remained below 1.0% since October 2013 and well under the target rate of 2.0%, is weighing on euro area policy makers (Figure A1.6). The harmonized index of consumer prices slowed further from 0.4% in July 2014 to 0.3% in August, the lowest in 5 years. Facing the risk of deflation, the European Central Bank announced a series of policy measures in June that reduce interest rates and increase bank liquidity to spur lending. The central bank cut the main refinancing rate, which had been at 0.25% since November 2013, to 0.15% in June 2014 and to 0.05% in September. The deposit rate, which was brought below zero to –0.10% in June, was cut by a further 10 basis points in September. Such unconventional measures as a purchase program for asset-backed securities and a targeted long-term refinancing operation were also initiated. However, with the recent decline in inflationary expectations and with interest rates at the lower bound, the central bank may become compelled to apply stronger monetary easing.

Despite the measures, credit continues to be tight. High unemployment, a strong euro, and stagnating growth in the major economies combine to keep deflationary pressure strong. Fiscal burdens continue to drag down growth in many member countries.

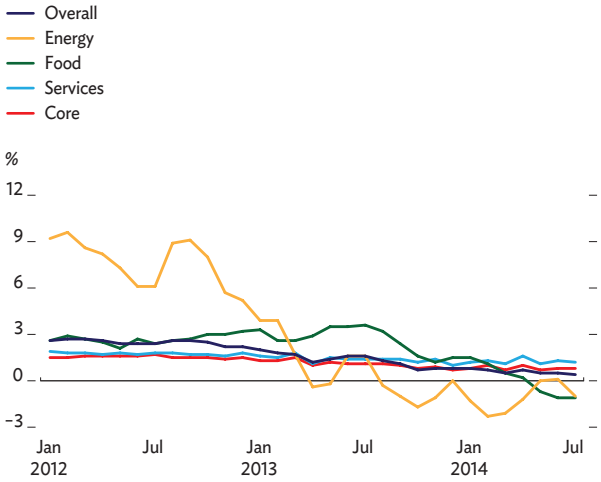
The outlook for euro area growth is revised down to 0.8% in 2014 from 1.0% forecast in *ADO 2014* and to 1.0% in 2015 from 1.4%. A downside risk to the forecasts is that the conflict in Ukraine and accompanying economic sanctions on the Russian Federation could further undermine consumer and business sentiment in Europe.

A1.5 Indicators, euro area



Source: Haver Analytics (accessed 9 September 2014).

A1.6 Inflation, euro area



Source: Haver Analytics (accessed 9 September 2014).

Japan

GDP growth in Japan swung widely in the first half of 2014. Despite the government's approval in February of ¥5.5 trillion, or roughly 1% of GDP, to use to smooth the impact of hiking the value-

added tax (VAT) in April, GDP contracted by a seasonally adjusted annualized rate of 7.1% in the second quarter, after having expanded by 6.0% in the first quarter because households and firms brought spending forward to beat the tax (Figure A1.7). Consumption surged by 8.4% in the first quarter and then contracted by 19.0% in the second. Private investment jumped by 16.9% in the first quarter before moderating to 4.9% growth in the second. Public sector demand could not fill the gap in second quarter private demand, as the rise in public consumption was offset by declining public investment. Some relief came from a strong positive contribution of net exports, but this largely reflected weak import demand.

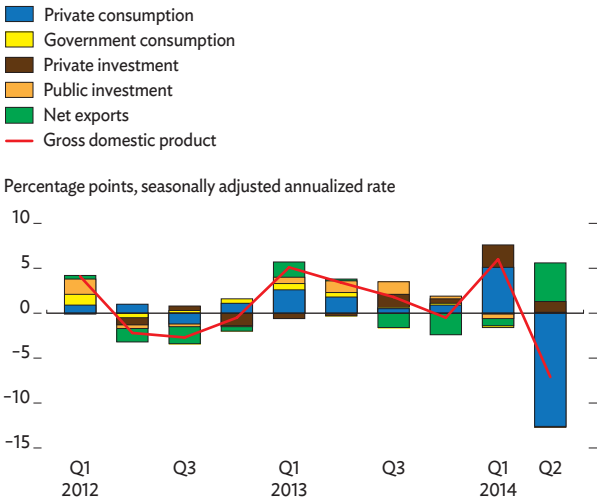
In the second half of 2014, private domestic demand for both consumption and investment is expected to gradually recover. The purchasing managers' index has climbed back above 50 after a slump in April and May. Consumer confidence was steadily gaining strength going into the third quarter in July. Public demand should be able to add to growth once the implementation of public works begins in the second half of the year. Meanwhile, external demand is forecast to be somewhat weak as developing Asia maintains only modest growth and the euro area gains strength more slowly than earlier forecast. In sum, performance in the first half of 2014 suggests slower growth at 1.0% in 2014, revised down from the 1.3% forecast in *ADO 2014*.

The consumer price index is firmly in positive territory at around 1% excluding the VAT effect. Annual headline inflation averaged 1.5% in the first quarter before jumping to 3.4% in April and to 3.7% in May and June. Core inflation, excluding food and energy, has also remained above 2.0% since April (Figure A1.8). Inflationary impetus may fade in the months ahead as upward pressure on prices from the Japanese yen's depreciation last year fades and output continues to languish below potential. Nonetheless, headline inflation, including the effects of the VAT hike, is expected to hover around 3% this year. Monetary policy is expected to remain accommodative during the forecast period, with additional stimulation possible if deemed necessary.

The growth forecast for 2014 has been revised down from 1.3% to 1.0%. Economic performance in the second half of 2014 will affect whether the government goes through with the second stage of VAT increase, from 8% to 10%, on 1 October 2015 as currently scheduled. While the government's decision will come only at the end of this year, the *Update* assumes, in light of the generally positive economic data, that the VAT hike will be introduced as planned. However, it may be accompanied by fiscal stimulus to mitigate its impact. The forecast is for GDP growth to pick up slightly to 1.4% in 2015.

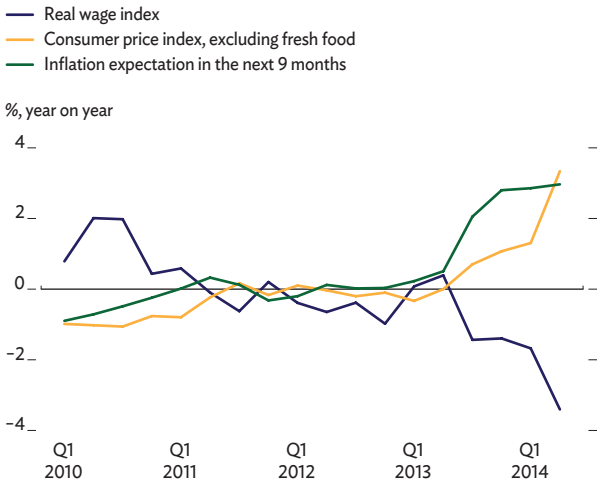
Despite the positive signs, Japan's growth trajectory faces various risks. On the domestic front are concerns that reform under the "third arrow" of Abenomics may be unsuccessful or delayed.

A1.7 Demand-side contributions to growth, Japan



Source: Haver Analytics (accessed 9 September 2014).

A1.8 Consumer and wage inflation, Japan



Source: Haver Analytics (accessed 9 September 2014).

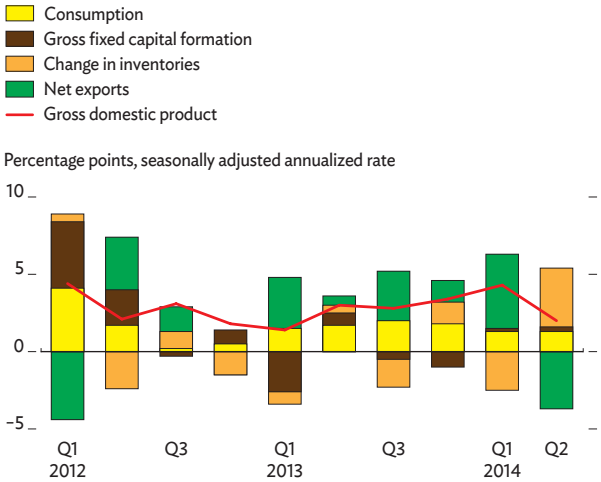
Decisions to reduce corporate taxes and to relax immigration regulations to address the labor shortage in construction have been announced, but their feasibility and actual implementation remain uncertain. Even with strong labor demand and low unemployment, wage increases have not offset inflation, which could undermine fragile consumer confidence. Another concern is external demand being weaker than expected. Although the global economy is expected to gradually recover, Japan's major trading partners in Asia appear sluggish.

Australia and New Zealand

The consensus forecast shows Australia likely to grow at 3.0% in 2014 and 2.9% in 2015. The growth forecast for New Zealand is 3.5% in 2014 and 3.0% in 2015.

Australia's economic growth slowed to a seasonally adjusted annualized rate of 2.0% in the second quarter of 2014, halving strong growth of 4.3% in the first quarter (Figure A1.9). External demand became a drag on growth in the second quarter. While private consumption contributed positively, recent monthly data show signs that domestic demand may be slowing. Seasonally adjusted retail sales increased by 0.4% in July, less than the 0.6% increase in June. Consumer confidence declined in September from the previous month. This can be attributed to the rising unemployment rate, which hit a 12-year high of 6.4% in July, jumping from 6.0% in June. On the positive side, the Australian Industry Group's performance of manufacturing index moved up to 50.7 in July after 8 months below 50, indicating improvement in manufacturing. Inflation accelerated to 3.0% in the quarter ending in June from 2.9% in the previous quarter but remains under control. The outlook for Australia is for stable growth, though high unemployment and the long-term decline in mining investment may pose risks to it.

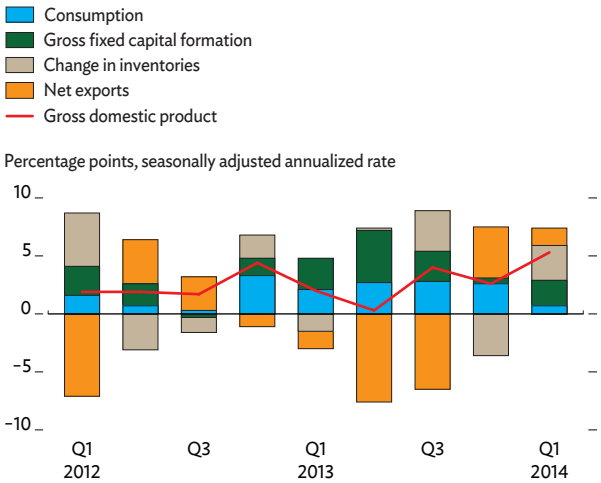
A1.9 Demand-side contributions to growth, Australia



Source: CEIC Data Company (accessed 9 September 2014).

New Zealand's economy has been expanding consistently in recent quarters, recording growth at a seasonally adjusted annualized rate of 5.3% in the first quarter of 2014 (Figure A1.10). This strong growth was led by residential investment and exports. Consumption spending did not grow, however, and consumer confidence also slipped by 0.4% in the second quarter of 2014. However, retail sales picked up in the second quarter by a seasonally adjusted 1.0% over the previous quarter, possibly because the unemployment rate fell to a seasonally adjusted 5.6%. Annual inflation rose from 1.5% in the first quarter to 1.6% in the second but remains well within the target rate of the Reserve Bank of New Zealand. The New Zealand dollar has been strengthening. While the outlook for New Zealand's economy is good, a slight slowdown can be expected following monetary tightening in recent months.

A1.10 Demand-side contributions to growth, New Zealand



Source: CEIC Data Company (accessed 9 September 2014).

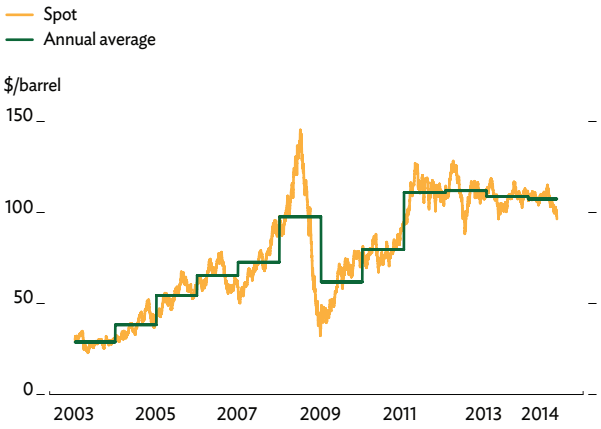
Commodity prices

Favorable supply conditions have kept commodity prices broadly stable in the first 7 months of 2014. Oil prices have receded but remain high because of persistent geopolitical uncertainties, while food prices continue to weaken.

Oil prices

The price of Brent crude oil averaged $101 per barrel in the first week of September, having retreated from its recent peak of $115 per barrel in June 2014 (Figure A1.11). Brent had climbed to that peak on 19 June, the highest in 9 months, following renewed attacks by Sunni militants in Iraq. But the oil price rally did not last, as market participants perceived reduced risk of oil supply disruption because fighting in Iraq was far from the country's major oilfields. Meanwhile, Libyan oil production surged to a 5-month high of 600,000 barrels a day in July following the end of protests staged by a local ethnic group at the country's largest oil field and the reopening of two eastern ports that had been held by rebels.

A1.11 Price of Brent crude

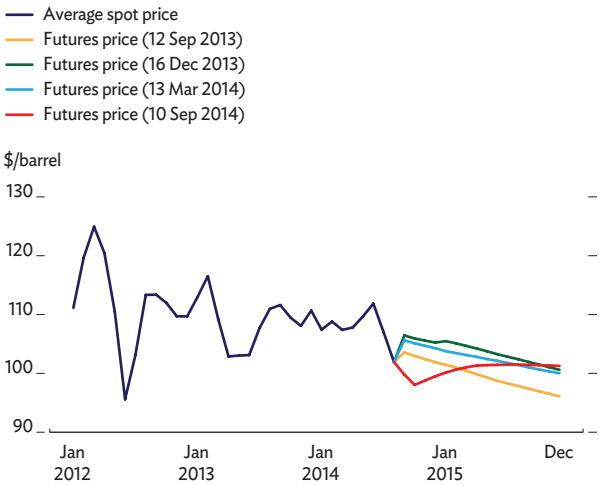


Source: CEIC Data Company (accessed 8 September 2014).

In its August 2014 report, the International Energy Agency (IEA) revised down its global demand forecasts for 2014 and 2015 because economic growth in the first half of 2014 was lower than expected. The IEA forecasts global oil demand to increase by 1 million barrels per day (mb/d) in 2014 and by 1.3 mb/d in 2015. Demand growth will come from emerging economies, mainly Brazil, the PRC, and India, while demand from advanced economies will be relatively flat. According to the IEA, improved fuel efficiency and shifts to alternative fuels in industrial economies will more than offset demand increases in these economies that come with economic improvement.

Global oil supplies were 1.4 mb/d higher in the first half of 2014 than a year earlier, with growth of 2.0 mb/d from outside the Organization of the Oil Exporting Countries (OPEC) more than offsetting the 0.6 mb/d decline in OPEC production, which was largely lower output from Libya. Libya's average daily production of 291,000 barrels was a far cry from the 1.4 mb/d it produced a year ago. However, July showed a major rebound in production from June, notably from Libya and Saudi Arabia, which made up for lost production in Angola, Iran, and Iraq. The IEA forecasts non-OPEC supply growth to reach 1.5 mb/d in 2014 and 1.2 mb/d in 2015. Large production increases in these 2 years are forecast for the US, Canada, Brazil, the PRC, and South Sudan.

A1.12 Brent crude futures and spot price



Sources: Bloomberg; CEIC Data Company Ltd. (both accessed 11 September 2014).

Although political concerns in the Middle East and Ukraine remain, oil prices continue to slide. The year-to-date average of Brent crude stands at $107 per barrel. In August, the average price of Brent crude was the lowest since June 2012 because ample supplies of oil on the market combined with weak seasonal demand. Futures prices suggest Brent crude will trade within the narrow range of $100–$102 per barrel for the remainder of 2014 (Figure A1.12). The US and the European Union recently imposed sanctions on the

Russian Federation designed to diminish the viability of its long-term production. The Russian Federation is a major supplier of oil and gas, especially to Europe, but sanctions have not yet affected oil prices.

The EIA estimates OPEC's spare oil production capacity at 2.1–3.3 mb/d. This is enough to cushion the market against any currently foreseeable disruption to global oil supply, but rising global demand for oil may nevertheless combine with future large oil supply shocks to leave the market with razor thin margins, placing upward pressure on global oil prices. Barring additional major supply disruptions, the price of Brent crude is forecast to slide from $109 per barrel in 2013 to $107 in 2014 and $104 in 2015. This decline is not quite as steep as forecast in *ADO 2014*.

Food prices

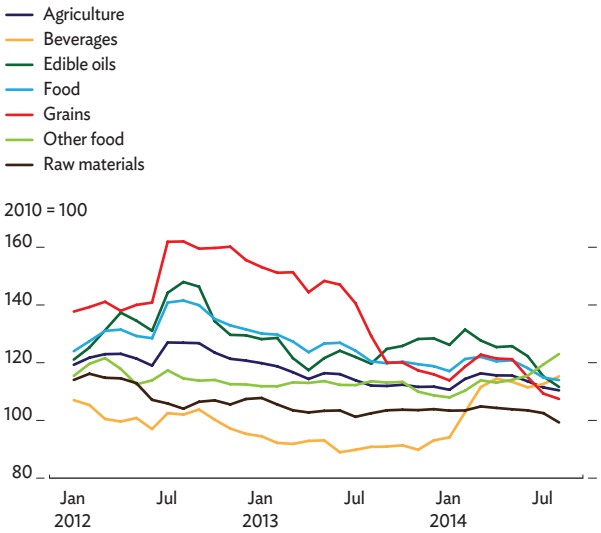
The agriculture price index has continued to drop, falling by 1.6% in August 2014 from a year earlier (Figure A1.13). The decline in the index simply reflected a continuous decline in food prices since March 2013. The food price index was down by 5.8% year on year, with indexes for grains and edible oils both lower than a year earlier. Good supplies have kept food prices moving lower for the past 18 months.

The grain price index was down 18% in August from a year earlier, reflecting significant falls in international grain prices in response to better production prospects in many major producing countries. In its August report, the US Department of Agriculture revised upwards its projections of global grain production for the crop year 2014/15 to reflect improved prospects for wheat output. Large production increases are expected in the Russian Federation, the PRC, and Ukraine. The US wheat benchmark No. 2 hard red winter, freight on board, averaged $263 per ton, 8% less than a year earlier. World maize production was also revised upward as US supply prospects improved. International maize prices continued to slide in July, with the US maize benchmark No. 2 yellow averaging $176 per ton, 26% less than a year earlier.

By contrast, the projection for global rice production is revised down by 2.1 million tons to a still-high 477.3 million tons, primarily on forecast reductions in Bangladesh, Brazil, Indonesia, and India. The Thai benchmark white rice 100% B rose by 4.3% from its July average to $458 per ton in August, 9% less than a year earlier. August prices strengthened on a month-on-month basis because of renewed import demand, especially as sales from Thailand's public stocks remained suspended. However, September prices showed some weakening because of new supplies of off-season rice and anticipated sales of government rice stocks in mid-September.

The price declines for grains and edible oils more than offset the increase for other foods, which were up by 9% year on year as beef and sugar prices strengthened. In sum, assuming normal weather and stable energy prices, food prices are forecast to drop by 5% in 2014 and 1% in 2015, which is a faster pace of decline than forecast in *ADO 2014*.

A1.13 Agricultural commodity price indexes



Source: World Bank. Commodity Price Data (Pink Sheet). Http://www.worldbank.org (accessed 5 September 2014).

External environment in sum

Global recovery bodes well for developing Asia, as it will improve demand for the region's exports. While the weakening euro area growth is cause for concern, this seems to be balanced by possible upside risks from the US and Japan. There may be some impact on the region from upcoming monetary tightening in the US, but this will be tempered by expected loosening in Japan and euro area. Financial sector shocks like that experienced in mid-2013 when the US Federal Reserve surprised investors with talk of possible shifts in monetary policy are unlikely in the current environment. Strong supplies of commodities have kept their prices stable and should keep inflation in check, but possible oil price shocks from unrest in the Middle East and Ukraine need to be monitored closely.

2

Asia in global value chains

Asia in global value chains

Global value chains (GVCs) divide the production of goods and services into linked stages of production scattered across international borders. While such exchange of inputs is as old as trade itself, rapid growth in the extent and complexity of GVCs since the late 1980s is unprecedented. Expanding GVC trade is associated with more rapid output and income growth. Even more than trade in final goods, specializing in a particular stage of production can bolster productivity, enhance economic growth, create jobs, and boost per capita income. On the down side, being part of a GVC exposes an economy to potential contagion from adverse shocks to others in the chain. On balance, the benefits seem to outweigh the costs.

The Asian GVC network centers on East and Southeast Asia, with the People's Republic of China (PRC) at its core. By contrast, few economies in Central Asia, South Asia, or the Pacific have found their GVC niche because of such disadvantages as remote location, underdeveloped transport infrastructure, regulatory hurdles, and policy deficiencies. Yet economies across Asia face the challenge of strengthening links to dynamic production chains. Policy makers and industrialists must reconsider comparative advantage in a new light, with the focus on competitiveness at selected stages of production rather than over the whole process.

Cross-border production arrangements work only where the costs of moving goods between countries is low. Public policy can help by instituting low and predictable tariffs, reducing transport costs through investment in infrastructure to ease port congestion and speed inland transport, streamlining customs procedures, and harmonizing product standards.

Asia is the region that has benefited the most from the rise of GVCs, and it can further boost income and employment by building on its reputation as the world's workshop. Policy makers and scholars of international economics now recognize that GVCs should figure more prominently in policies and research. This chapter explores the importance of GVCs in the Asian context, discusses why and how they affect markets, and describes their intersection with policy.

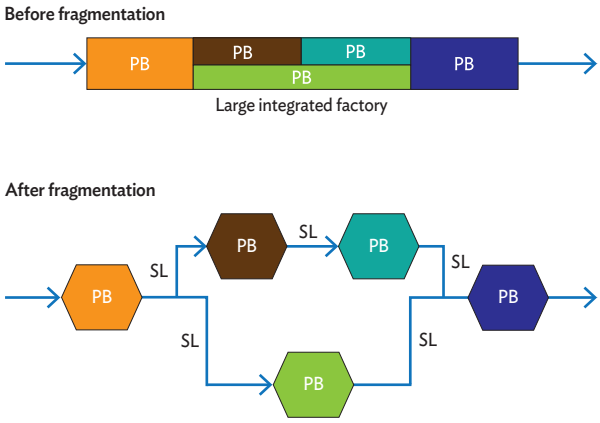
This chapter was written by Benno Ferrarini and Joseph E. Zveglich, Jr., of the Economics and Research Department, ADB, Manila, and David Hummels, external advisor.
The sections on services and product standards draw on research done in collaboration with the Fung Global Institute. The background papers used to develop the chapter are listed at the end. Also gratefully acknowledged are additional materials from Alisa Di Caprio, Shintaro Hamanaka, and Jayant Menon of the Office of Regional Economic Integration and Ganeshan Wignaraja of the Asian Development Bank Institute. Shang-Jin Wei, ADB chief economist, and Juzhong Zhuang, deputy chief economist, provided detailed guidance.

The rise of global value chains

A value chain denotes the full range of firms' activities, from product conception to production and finally after-sales service. GVCs result from slicing up these activities into stages that are distributed across different economies—a process called fragmentation. Instead of producing a product in a single factory, a company establishes a network of suppliers and affiliates scattered across different locations, each overseeing a specific production block (Figure 2.1.1). Such fragmentation is viable if it brings about lower production costs after accounting for the service costs incurred in connecting remote production blocks.

Production fragmentation depends on production processes being separable, the existence of locational advantages such as cheap labor or specific know-how, and manageable trade barriers and transport and coordination costs (Kimura and Obashi 2011). How did these elements come together to create the proliferation of GVCs today?

2.1.1 Fragmentation of production



PB = production block, SL = service link.
Source: Kimura and Obashi 2011.

In the beginning

In what Baldwin (2006) called the "first great unbundling," steam power radically lowered transport and trade costs, creating the conditions needed to spatially separate production and consumption. Greatly augmented much later by containerization, this process dispersed production internationally but did not weaken its concentration within factories and industrial districts. Fragmented production, or the "second great unbundling," started in the late 1980s with the advent of the information and communication technology (ICT) revolution, which saw telecommunication and transmission capacity become cheaper and more reliable, and computing power increase and diffuse very rapidly. The technological revolution radically lowered the coordination costs that had constrained the unbundling of factories spatially.

Box 2.1.1 explains how comparative advantages and newly obtainable economies of scale made international fragmentation processes inevitable. The spread of GVCs accelerated in the 2000s, fueled by sustained growth in household consumption globally and the accession to the World Trade Organization (WTO) of the PRC and other key economies that participate in GVCs, such as Taipei,China.

Remapping world trade

Over time, the global distribution of production changed. Japan dominated trade between Asia and the United States (US) from the 1970s to the late 1990s. The fall in trade costs and the PRC's accession to the WTO in 2001 pushed Japan and other early industrializers in the region, notably the Republic of Korea and Taipei,China, into

2.1.1 What explains the rise in global value chains?

One approach to understanding what caused the explosive growth in GVCs emphasizes traditional ideas of comparative advantage. In textbook models of trade, economies specialize in exporting goods they can produce more cheaply than their trade partners. These cost advantages may reflect relative differences in productivity, the supply of factor inputs (capital and labor, skilled or not) or natural resources, or differences in the scale of production. Understanding GVCs is then a matter of applying comparative advantage to stages of production rather than to final goods.

In this view, economies like Japan should specialize in stages of production that intensively use capital or skilled labor. This could include research and development, producing complex inputs, or marketing. In contrast, economies with abundant labor like the PRC should specialize in assembly and other stages of production that intensively employ unskilled labor. The resulting industry specialization can seem counterintuitive, such as the PRC exporting highly sophisticated electronics. However, a deeper look at trade in valued-added statistics reveals that the PRC's processing firms import sophisticated inputs from economies like Japan and assemble them for export using unskilled labor, a point shown clearly when "ordinary" exporters are compared with "processing" exporters (Feenstra and Wei 2010).

This view builds a strong case for why GVCs should improve productivity for both nations and firms. Following comparative advantage models, economies that engage in trade reallocate resources away from uses with low productivity toward those with high productivity. In a GVC context, this reallocation occurs within industries and even within firms, as low-productivity stages of production are moved offshore, freeing up resources for other uses that are more highly productive.

GVCs also allow greater specialization. If differences in factor use are greater within industries than across industries, task specialization is a more effective way to profit from trade than is goods specialization. For example, compare the production of motorcycles and automobiles. Both require research and development, complex inputs, assembly, and marketing. Assuming that each good must be produced entirely in one place, any economy wanting to produce either a motorcycle or an automobile must be capable of every task in its production. This assumption also means that producing each good entails only small differences in the aggregate use of skilled and unskilled labor. Economies that export motorcycles and import automobiles, or vice versa, enjoy only small gains. However, several gains derive from disaggregating tasks within each good. First, economies that entirely lack capability in research or marketing can still participate in the GVC because they are capable of assembly. Second, the differences in factors needed to conduct research and to assemble goods are very different, so the extent of specialization and the gains from trade will be much larger.

GVCs also allow specialization along unique dimensions. In many high-income markets, the desire to protect workers has instituted minimum wages, hiring and firing restrictions, and strong unions, which limit labor market flexibility. When firms are subjected to significant demand volatility, they would like to expand and contract output and employment to match the vagaries of the market for products. Inflexible labor markets prevent frequent expansion and contraction, increasing costs for these firms.

However, if the firm can produce offshore, it enjoys a newfound flexibility through GVCs. It can maintain constant production and employment in its home market while responding to rising and falling demand through foreign production. Rather than specialize in different goods, production locations specialize in segments of demand, either stable or unstable, and labor market flexibility becomes a comparative advantage for the unstable segment. Bergin et al. (2011) and Coronado (2011) show that both employment and output in Mexico's export assembly industry are at least twice as volatile as in the comparable industry in the United States. In a sense, American producers ship volatility offshore to Mexico.

If GVCs are driven by trade in tasks based on comparative advantage, what explains their explosive rise? One likely possibility is that reduced trade costs, including for tariffs and shipping, allow a finer division of specialization. Yi (2003) emphasizes that GVCs and multiple stages of production demand that trade costs be paid every time an input crosses an international border. Koopman et al. (2014) calculate this magnification effect using tariffs in 2004. The study uses a general notion of tariffs and transportation cost that encompasses the value-added tax collected at the border. It shows that two-stage production magnifies tariffs in Asia considerably, by 18%–80%. These effects would be even larger with more than two stages of production and incorporating nontariff barriers such as transportation and coordination costs. A small reduction in trade costs can therefore generate incentive to form GVCs and a disproportionately large rise in trade as a whole.

Other studies point to particular ways in which trade costs are reduced. Hummels (2007) documents a sharp fall in the cost of air transportation in this period.

continued next page

2.1.1 *(continued)*

Hummels and Schaur (2013) use the tradeoff between fast but expensive air transport versus slow but inexpensive water transport to estimate the value of saving time. This study concludes that each day saved in transit is worth up to 2% of the value of the good, with especially large valuations for trade in parts and components. Taken together, this suggests that the proliferation of GVCs arises not just from lower trade costs but also from lower time costs, which are especially deleterious for multistage production.

A related explanation for the growth in GVCs is that the falling cost of passenger aviation and its extended geographic reach have made it easier for managerial and engineering expertise to move between locations. Cristea (2011) and Poole (2010) show a strong correlation between growth in business travel and growth in trade. This effect is greater for economies that are expanding the set of traded goods, and for economies that trade more complex goods, both of which likely require increased travel inputs. Hovhannisyan and Keller (2011) show that business travel facilitates a substantial increase in knowledge flows, as revealed through the increasing number of patents.

Baldwin and Forslid (forthcoming) point to the importance of ICT in coordinating far-flung production processes. The starting point is recognizing that the inputs traded within GVCs are not homogeneous but, instead, highly differentiated and specific to individual products. This implies that the way that parts and components come together to make a final product is far more important than any small reduction in the cost of producing one component. Slight errors in quality or specifications render the final good worthless. Historically, these problems were solved by producing all components entirely in-house. However, high-speed communication and computer modeling of specifications now allow production to be geographically separated, exploiting scale and comparative cost advantages.

Fort (2014) provides a compelling example of this process by examining the use of contract manufacturing services, by which firms offshore the production of inputs specific to their needs. The study finds that offshoring such services is strongly related to the adoption of computer-aided design and manufacturing. In essence, without these ICT breakthroughs, it would not be feasible for firms to use GVCs to produce those inputs.

This example points to an additional factor fueling the rise in GVCs. Firms in developing Asia may in many cases lack the technology to produce high technology inputs or to assemble inputs according to exacting specifications. However, GVCs exchange not just goods but also the technology to produce them. This turns traditional notions of productivity-based comparative advantage on their head. Rather than viewing productivity as residing in locations, productivity resides within firms themselves. And firms can use that productivity directly by offering foreign direct investment, or indirectly by communicating their technologies for production to partners within the GVC. When American or Japanese multinational firms combine frontier technologies with offshore labor costs that are a fraction of those at home, the result is significant reductions in delivered costs and explosive growth in GVCs and trade.

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2.1.2 Tracking trade in value added

As GVCs are fundamentally related to international trade in inputs, a natural way to measure their extent and complexity is to focus on input–output tables. Domestic input–output tables reveal which inputs are used by which sectors, and in which proportions. Combining input–output data with detailed data on trade flows makes it possible to disaggregate inputs geographically. Rather than examine the value of electronics parts and components that are used as inputs into automobile manufacturing, analysts can examine, for example, the value of electronics from Malaysia that are used as inputs into automobile manufacturing in Japan. A detailed discussion of the strengths and weaknesses of this approach in the Asian context is available in Walmsley et al. (forthcoming) and Escaith (forthcoming).

The result is a regional or even global input–output table that can be used to calculate the contribution of foreign versus domestic value added embodied in a dollar of output and exports. The Institute of Developing Economies of the Japan External Trade Organization has calculated Asian regional input–output tables with coverage for some economies dating back to 1975. More recently created are the World Input–Output Database, which covers 40 economies from 1995 to 2011, and the OECD–WTO Trade in Value-Added (TiVA) database, which provides measures of value added dating back to 1995 for 57 economies and 18 industries. TiVA is drawn on here to contrast GVCs in Asia with those of other important trading nations. As is the case with most input–output tables, the TiVA dataset is limited, mainly by data gaps, to only a few Asian economies: Brunei Darussalam (excluded here because of data limitations); Cambodia; the PRC; Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam. This group does, however, include the core Asian participants in GVCs, which are in East and Southeast Asia.

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relative decline. The production of key inputs and components remained in the original economies, but firms increasingly relocated final product assembly to the PRC and, to a lesser extent, Thailand. Production of goods for sale mainly in high-income markets thus relocated to economies offering such locational advantages as cheap labor and lower environmental and other standards (IDE-JETRO and WTO 2011). Similarly, as the European Union expanded to the east, GVC production moved to the new member countries to exploit their locational advantages. Prior to that, the signing of the North American Free Trade Agreement (NAFTA) established Mexico as the main host of US firms' GVC investment and operations in the region.

The rise of GVCs increased trade flows in intermediate goods—or trade in value added—among and within the NAFTA, European, and Asian regional GVC blocks, particularly in such manufacturing sectors as electronics and automobiles. As detailed in Box 2.1.2, statistics on trade in value added, notably from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the WTO (OECD–WTO TiVA), are used to show the extent of GVC trade and its development over time.

Trade is measured in two ways. *Gross exports* correspond to standard trade flows as measured in customs statistics and include both domestic and foreign value added. *Value-added exports* include only the

2.1.3 Value chains and understanding trade patterns

Recent efforts to correctly measure the extent of GVCs have enabled researchers to revisit their basic understanding of international trade flows and their determinants.

Much of the analysis presented here focuses on the value-added share of exports, essentially disaggregating gross export flows into domestic and foreign value-added components. Using such a disaggregation, Johnson (2014) highlights how GVCs reshape understanding of trade at a broad sector level. Measured in gross export terms, manufacturing trade comprises about 70% of world trade and services about 20%. However, when measured in terms of value added, manufacturing and services trade are each about 40% of trade. Even this likely underestimates services' contribution to value, as discussed elsewhere in this chapter (e.g., see Table 2.1.1). Two mechanisms give services greater prominence in value-added trade results. First, manufacturing trade embodies significant value added by services. Second, much more than in services trade, manufacturing trade features vertical specialization, which pushes down the ratio of value-added to gross output in manufacturing.

Timmer et al. (2014) further break down the value added in GVCs into the contributions of various factors of production. This allows analysis to reveal three critical facts concerning the factor intensity of GVCs. First, the share of value added by less-skilled labor is falling within most GVCs, and the share of capital and of highly skilled labor is rising. From 1995 to 2008, capital's share of value added in GVCs rose from 40.9% to 47.4% while the share of low- and medium-skilled labor fell from 45.3% to 37.2%. Second, emerging economies increasingly focus on capital-intensive activities. The Republic of Korea saw its low- and medium-skilled labor share fall by 17.1% (as its capital income share rose by 9.3%), the PRC by 11.4% (capital income share up by 9.3%), India by 7.6% (4.5%), and Indonesia by 6.8% (5.3%). This is consistent with a pattern of capital substituting for unskilled labor throughout the emerging world. Third, advanced nations increasingly specialize in activities carried out by highly skilled workers. This is consistent with the view of GVCs from studies of offshoring industries and firms that find offshoring associated with rising dependence on skilled labor.

Koopman et al. (2014) use a more comprehensive measure of GVC participation that nests many other competing measures. This measure can thus more accurately avoid double counting in trade statistics that, for example, count twice parts that Malaysia sells to the PRC for incorporation into a finished product exported to Japan. Using 2004 data, the study reports that 2.7% of the PRC's ordinary exports are double counted, while 10.1% of exports from the PRC's processing sector are double counted. With these measures in hand, it is possible to provide much more accurate measures of revealed comparative advantage. For example, in finished metal products (ISIC 28 under the International Standard Industrial Classification of all Economic Activities), the PRC records the world's strongest revealed comparative advantage on a gross trade basis but ranks only 7th on a value-added trade basis. Conversely, the US ranks 10th on a gross basis but 3rd on a value-added basis. Systematic data for many economy pairs and sectors is found in a companion paper by Wang et al. (2013).

Once value added is appropriately assigned to each economy of origin, additional calculations can be performed to inform macroeconomic policy. For example, some bilateral trade imbalances look quite different in valued-added and gross export terms. Koopman et al. (2014) report that because the PRC is the final assembler of parts and components produced elsewhere, its trade surplus with the US is 41% smaller when measured as value-added rather than gross exports. In contrast, Japan's bilateral surplus with the US is 40% larger in value-added terms. Similarly, real exchange rates constructed from value-added trade look considerably different from those calculated using gross exports. Bems and Johnson (2012) report that from 2000 to 2009 the PRC renminbi appreciated in value-added real terms by 20 percentage points more than by the conventional trade-weighted real exchange rate.

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domestic value added to an economy's gross exports. The difference is that the value-added figures exclude the foreign value added to gross exports. For example, if Japan exports a car that contains Malaysian electronics, the gross export is the value of the whole car, but the value-added export is just the value that was added in Japan. Box 2.1.3 discusses the issues and implications of measuring value-added exports and GVC participation.

Figure 2.1.2 uses network graphs to depict the geographic orientation of GVCs and how they are increasing connected. Three main hubs—the US, Germany, and the PRC—occupy the center of a tightly knit web of value-added transfers, mainly among regional economies engaged in split production processes. The US is at the center of the GVCs both as the largest exporter of goods and services measured in gross terms and as the main exporter of value added to the exports of other economies. Germany and the PRC follow in rank in terms of gross and value-added exports. Compared with the US, these economies are positioned further downstream in the GVCs and are involved in a substantial share of value-added inflows and outflows.

In the European regional network, horizontal integration prevails, with value added to goods flowing in both directions between pairs of countries. Asian production networks are more hierarchical. At the top, Japan and the US inject value by providing key components and services directly to the PRC, which is the downstream hub. Malaysia, Thailand, and some other Southeast Asian economies, as well as India, also supply components to the PRC that often embody valued added by the US and other industrial economies. Other key players right at the center of the regional networks are the Republic of Korea; Singapore; and Taipei,China—each economy exporting high shares of foreign value added that reflect their strong GVC involvement.

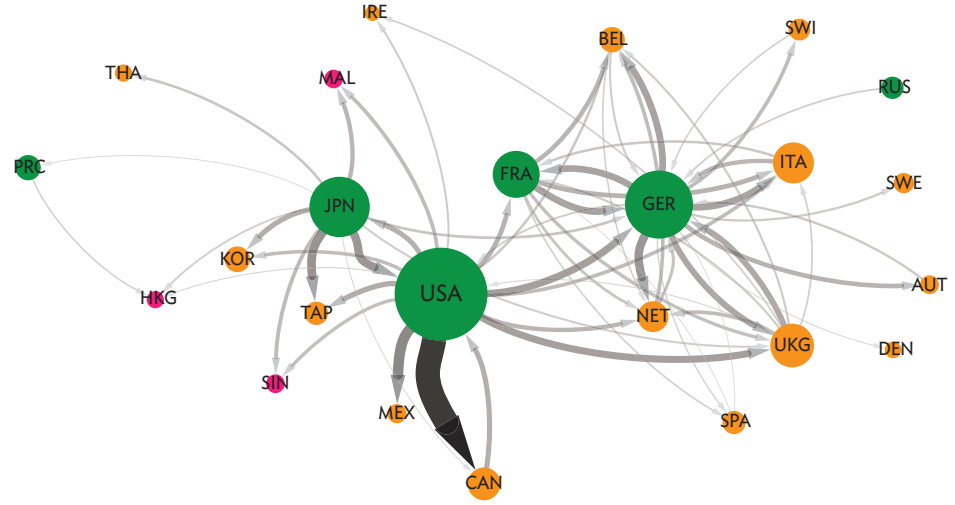
The time progression panels in Figure 2.1.2 show that GVCs have expanded rapidly and grown more complex since 1995. By 2005, the PRC had overtaken Japan as the center of the Asian regional production network. GVC expansion reached a peak in 2008. This was because the global economic crisis slowed consumption in 2009, causing the temporary collapse of international trade that year and curtailing the trade flows associated with GVCs.

Comparative trends

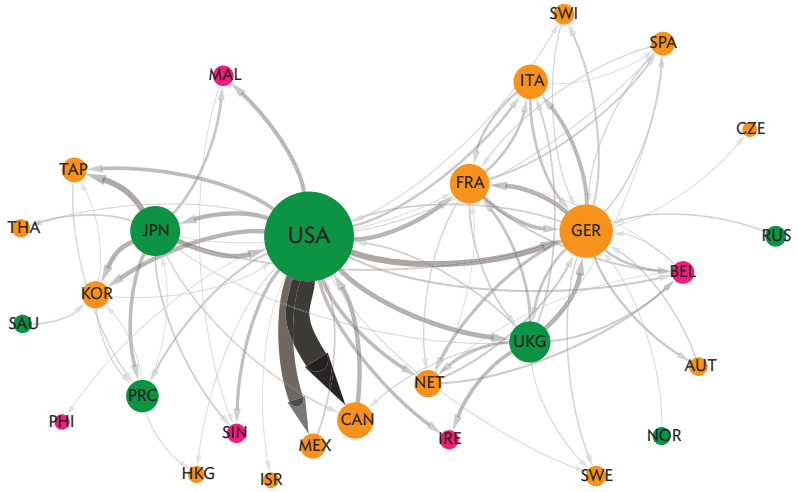
Figure 2.1.3 details growth in trade from 1995 to 2009 for a number of Asian economies and other emerging markets, contrasted with that of the Group of Seven (G7) countries and exporters of primary commodities. The gap between growth in value-added exports and growth in gross exports is a useful measure of the extent of supply chain trade, as they widen in tandem. Trade growth has been uneven. In general, emerging markets have seen higher growth, with the PRC, Cambodia, and Viet Nam showing spectacular growth—though from very low bases in the latter two cases. Note that there appears to be a connection in Asia between the magnitude of trade growth and the extent of supply chain trade (the gap between gross and value-added exports), a point explored in greater depth below. However, the pattern

2.1.2 Global value chains expanding

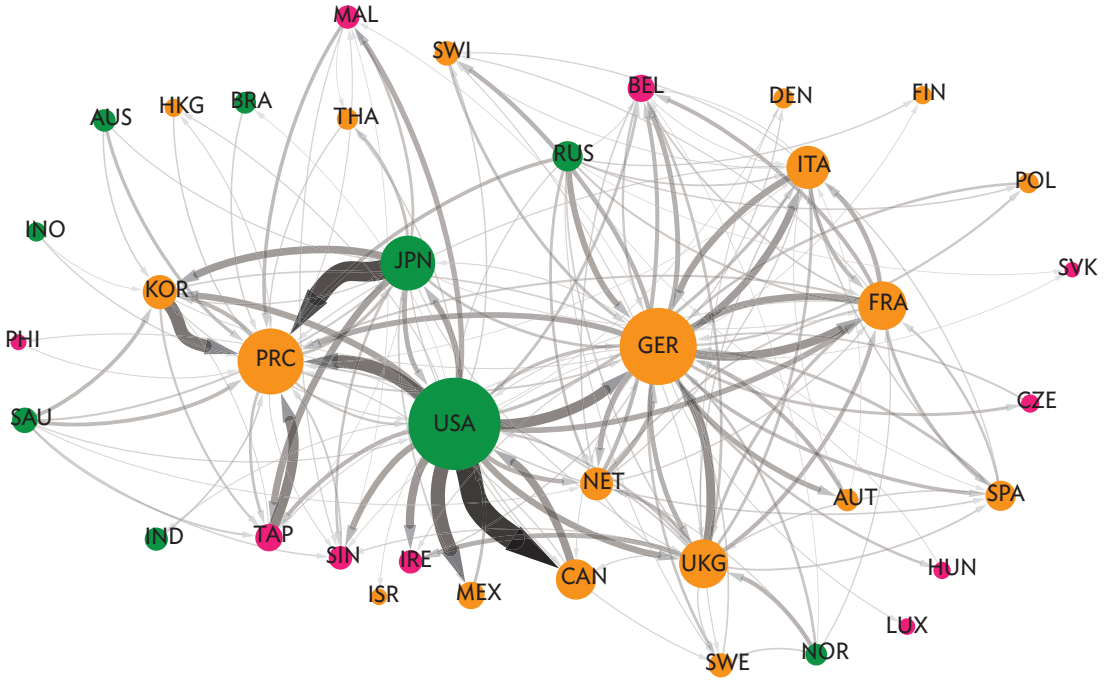
1995

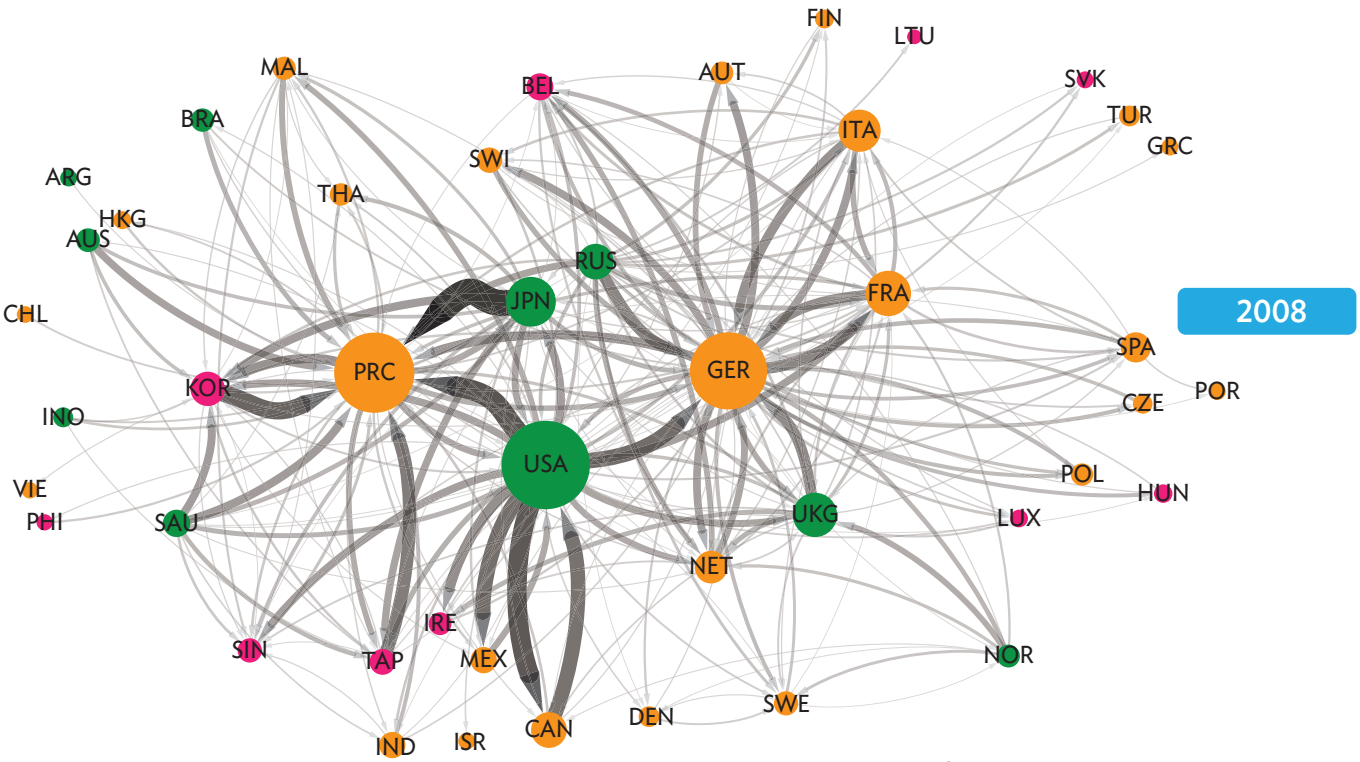


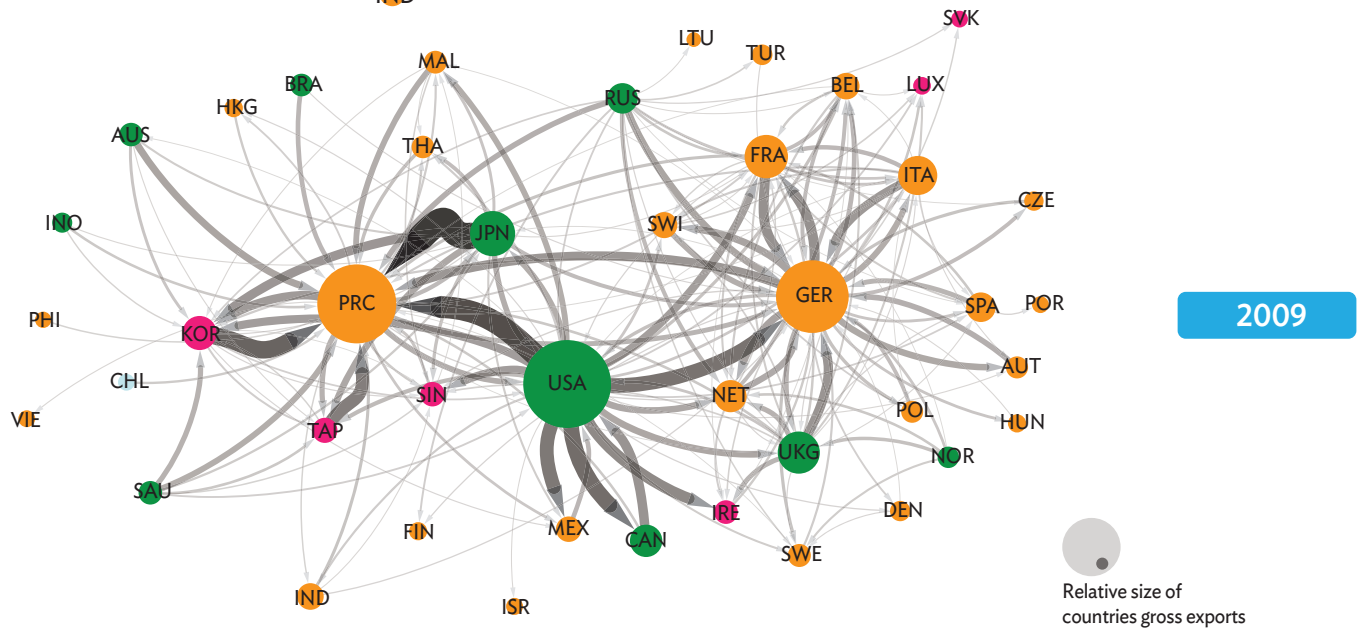
2000



2005







Relative size of countries gross exports

Relative intensity of value added and direction of transfer

>40% >60% >80%

Domestic value added as a share of gross exports

Figures show the value added domestically in countries' gross exports, based on the OECD–WTO TiVA database (accessed 15 September 2013). Only the top 5% of bilateral trade flow connections are shown. A force-directed algorithm is applied to lay out the data as network maps. The size of the nodes indicates relative magnitude of countries' gross exports. The width of the arrows indicates the intensity of value-added transfers. Green nodes denote countries with the highest share of value added domestically, at least 80%. Orange nodes denote 60%–80% of value added domestically, and pink nodes 40%–60%.

ARG = Argentina, AUS = Australia, AUT = Austria, BRA = Brazil, BEL = Belgium, CAN = Canada, CHL = Chile, CZE = Czech Republic, DEN = Denmark, FIN = Finland, FRA = France, GER = Germany, GRC = Greece, HKG = Hong Kong, China, HUN = Hungary, IND = India, INO = Indonesia, IRE = Ireland, ISR = Israel, ITA = Italy, JPN = Japan, KOR = Republic of Korea, LTU = Lithuania, LUX = Luxembourg, MAL = Malaysia, MEX = Mexico, NET = The Netherlands, NOR = Norway, PHI = Philippines, POL = Poland, POR = Portugal, PRC = People's Republic of China, RUS = Russian Federation, SAU = Saudi Arabia, SIN = Singapore, SPA = Spain, SWE = Sweden, SWI = Switzerland, SVK = Slovakia, TAP = Taipei,China, THA = Thailand, TUR = Turkey, UKG = United Kingdom, USA = United States of America, VIE = Viet Nam.

Sources: Ferrarini 2013b, based on OECD–WTO TiVA data and Cytoscape for visualizing the data (www.cytoscape.org; see Shannon et al. 2013).

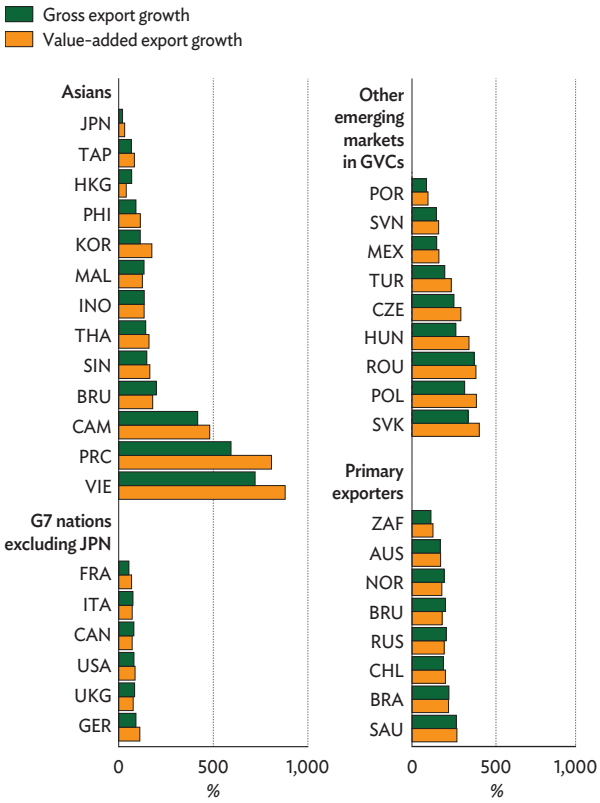
is quite different for Brazil, the Russian Federation, and other economies that achieve high export growth on the back of the booming demand for commodities.

Measures of trade in value added can be used to provide additional detail on Asian exporters' participation in GVCs. Figure 2.1.4 segregates gross exports into three parts: (i) foreign value added that is used to produce economy X's exports (GVC-B), (ii) domestic value added that is used by a destination economy to produce its exports (GVC-F), and (iii) domestic value added that is consumed in the destination economy. The first two parts identify the two distinct ways that an economy's trade can integrate into GVCs. GVC-B is economy X's backward linkage into GVCs, using imported inputs to produce its exports. GVC-F is its forward linkage into GVCs, producing and exporting intermediate goods that are subsequently used in the production of other economies' exports. Adding the two together provides a measure of total GVC participation. This can be expressed relative to total trade, which includes an economy's regular value-added trade that is not part of GVCs and its value added for domestic consumption. A participation value of 50%, for example, means that half of a nation's trade is comprised of either forward or backward GVC linkages.

How important is GVC trade? Figure 2.1.5 plots the share of GVC trade (GVC-B + GVC-F) in manufacturing exports from the 59 economies included in the OECD–WTO TiVA data. From 1995 to 2008, this portion grew by more than 10 percentage points, from 36.9% to 48.0% of total manufacturing exports, suggesting the growing importance of GVCs in mediating trade. Johnson and Noguera (2014) document a similar trend from 1970 to 2010. By far the larger part of this expansion reflected economies' growing backward linkage into GVCs. From 1995 to 2008, the share of foreign content in gross manufacturing exports (GVC-B) grew from 23.6% to 32.9%. By comparison, forward linkage into GVCs grew less quickly, with the share of domestic value added used in other economies exports (GVC-F) increasing only from 13.3% to 15.1% in the same period.

It is noteworthy that the share of GVC trade in the manufacturing exports of TiVA economies declined in 2009. This reflects the trade collapse during the recession of 2008–2009, which disproportionately affected GVC trade over regular trade (Bems et al. 2011). To avoid distortion caused by the crisis, and for lack of more recent data at the time of writing, comparisons over time are best made to 2008, just before trade was affected.

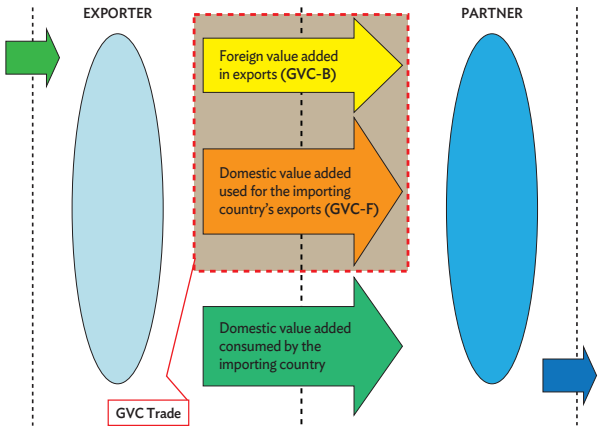
2.1.3 Total gross and value-added export growth, 1995–2009



AUS = Australia, BRA = Brazil, BRU = Brunei Darussalam, CAM = Cambodia, CAN = Canada, CHL = Chile, CZE = Czech Republic, FRA = France, G7 excluding Japan = Canada, France, Germany, Italy, the United Kingdom, and the United States of America, GER = Germany, GVC = global value chain, HKG = Hong Kong, China, HUN = Hungary, INO = Indonesia, ITA = Italy, JPN = Japan, KOR = Republic of Korea, MAL = Malaysia, MEX = Mexico, NOR = Norway, PHI = Philippines, POL = Poland, POR = Portugal, PRC = People's Republic of China, ROU = Romania, RUS = Russia, SAU = Saudi Arabia, SIN = Singapore, SVK = Slovakia, SVN = Slovenia, TAP = Taipei,China, THA = Thailand, TUR = Turkey, UKG = United Kingdom, USA = United States of America, VIE = Viet Nam, ZAF = South Africa.

Source: Baldwin and Forslid, forthcoming.

2.1.4 Gross export decomposition into GVC trade and regular trade



GVC = global value chain.

Source: Ma and Van Assche, unpublished.

The role of services

Multiregional input–output data like TiVA capture only a small part of the fundamental role services play in all economic activity, not least in GVCs. They are the global economy's single largest source of gross domestic product (GDP), jobs, and value added in trade (Table 2.1.1). Yet services remain less understood than physical goods. Because they are intangible, services are difficult to identify and count. They are often tailored to individual transactions or bundled with goods and other services, defeating accurate value attribution.

Precisely valuing services in production and trade has always been a challenge. This is especially true when a manufacturing firm supplies services in-house rather than outsourcing their supply to independent firms. When a manufacturing firm uses in-house services, the value of product design, bookkeeping, and many other services—even facility maintenance—becomes part of the goods produced. This causes the true contribution of services in GDP and trade to be understated.

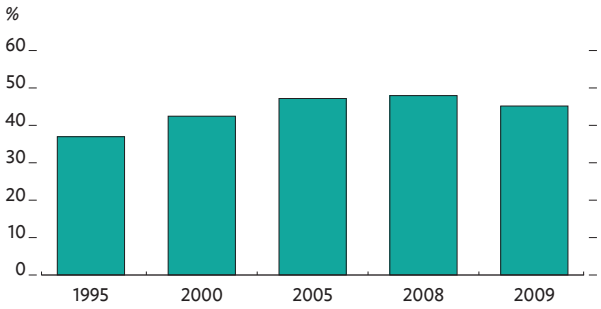
Without services, GVCs as we know them would not exist. What are taken to be value chains for goods are frequently dominated by services. It is commonplace to think of the egg on the breakfast table as a good, but from a value perspective it is more accurately a complex bundle of services. The washing, sanitizing, grading, labeling, packaging, storing, transporting, and retailing of the egg make up a great deal more of its value than does the egg itself. So, while a good is the focus of attention, it is often far from the core source of value (Low 2013).

Everyone understands the role of so-called producer services: transport, communications, distribution, and business services. While these services are often characterized as the glue that holds supply chains together, services do a lot more than that. They play a role at every stage of production and consumption, from product conception, design, and branding to manufacturing or production itself, and on to marketing, selling, and the provision of after-sales services such as training, technical assistance, maintenance, and repair.

In global production networks, it is not only the aggregate value of services in production that deserves attention, but also their sheer number and variety. For example, a case study of the Swedish multinational Sandvik Tooling revealed that, to manage the supply chain and deliver goods, the firm had recourse to 40 discrete services (Kommerskollegium 2010). A further 12 services were required to handle customer delivery (Table 2.1.2). The study did not specify whether these services were separately identified (let alone separately supplied) or packaged or modularized into composite offerings.

A number of production cost breakdowns have been undertaken for supply chains in consumer electronics, apparel, and other sectors producing goods for mass consumption. The studies reveal that services'

2.1.5 GVC share of manufacturing export, selected economies



Note: ADB estimates using the data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization.

Source: Ma and Van Assche, unpublished.

2.1.1 The share of services in the world economy (%)

Economic measure	Agriculture	Industry	Services
GDP, 2012[a]	6	30	64
Employment, 2013[b]			
World	32	23	45
Developed economies	4	23	74
Trade in value added, 2008[c]			
Gross	12	65	23
Value added	18	37	45

[a] CIA World Factbook. https://www.cia.gov/library/publications/the-world-factbook

[b] ILO Global Employment Trends. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_233953.pdf

[c] OECD–WTO TiVA database. http://stats.oecd.org/index.aspx?queryid=47807

2.1.2 Services necessary to the Sandvik Tooling value chain

Services	Tasks covered
Operating the supply chain	Legal services, accounting and bookkeeping, taxation services, medical services, computer services, research and development, rental and leasing, advertising, market research, services incidental to manufacturing, placement of personnel, maintenance and repair, convention services, security services, packaging, printing and publishing, design, building cleaning services, photographic services, courier services, logistic services, postal services, telecommunications, audio-visual services, educational services, environmental services, banking services, insurance, health-related services, hotels and restaurants, travel agency services, maritime freight transport, inland waterways freight, air transport for freight and passengers, road transport for freight and passengers, cargo-handling services, storage and warehouse services, freight transport agency services, feeder services, energy services.
Customer delivery	Computer services, research and development, rental and leasing, maintenance and repair, management consulting, technical testing and analysis services, services incidental to manufacturing, design, environmental services, financial services, logistics, warehouse services.

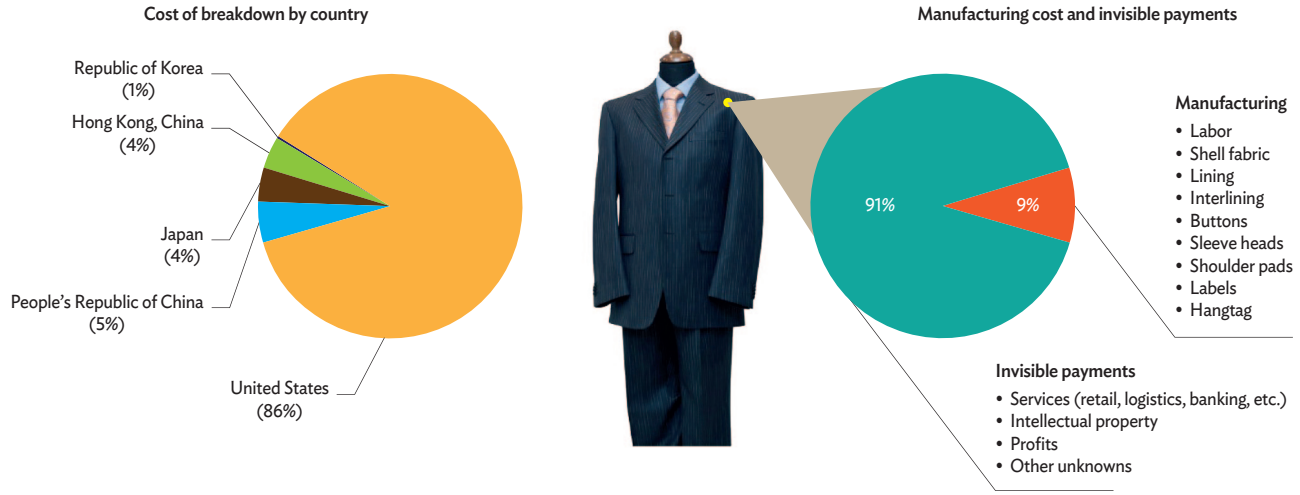
Source: Kommerskollegium 2010.

share of value added far exceeds what has been calculated as the contribution of services through traditional approaches to measurement, and that they often actually amount to some two-thirds to four-fifths of the total value. In some cases, the services component is even more dominant, as in the case of the jacket illustrated in Figure 2.1.6.

The figure shows the geographical sources of value contained in the jacket. Of the total, 14% originated in Asia and 86% was attributable to the US, to which the jacket was imported and sold. The manufacturing share of the retail value of $425 amounted to only $38, or 9%. All the rest was nonmanufacturing invisible payments. This residual could not be broken down for lack of information.

It should be noted that not all of the unexplained $387 is attributable to services that added value along the chain. Part of the number is profit. Moreover, the $425 price tag in a US retail outlet was for a high fashion jacket, and the price might well have been discounted if the item did not sell quickly. This is because fashions change, and

2.1.6 The cost structure of a jacket



Source: Fung Global Institute 2014.

sellers do not want to end up with large inventories of unsold products. Nevertheless, a large share of the unidentified value includes upstream and downstream services, such as design, intellectual property protection, branding, advertising, transportation, financial services, telecommunications, and retailing (Low 2013).

Some goods and services are tradable and others are not. This is not necessarily an immutable distinction. Many services have not traditionally been viewed as tradable, but technology, trade openness, and the business practices of GVCs have radically enhanced the tradability of services. In health services, for example, the physical presence of the patient and the specialist would have been required in the past, but the development of the internet lifted this constraint through e-health diagnosis services.

Communications developments in recent years mean the location for providing many services can generally be decided by suppliers, lead firms, and consumers. A GVC that markets toys, for example, can ask toy manufacturers to package and label them to be ready for shipment to retail outlets. Alternatively, it can take bulk delivery from toy manufacturers, warehouse the toys, and prepare shipments customized to order for retail outlets. This can be carried out by the lead firm itself or outsourced, and it can be done in the exporting or importing economy.

Decisions as to where to provide services likely maximize efficiency but may also be influenced by policy. The increased tradability of services has quickened competition because it fosters new players entering additional parts of value chains. With modern technology and internationalized production and consumption, the scope for outsourcing has expanded over the years, and services are a major element in this movement. Moreover, outsourcing allows all firms in the chain to focus on their areas of core competence. This trend increases opportunities for broader participation in GVCs, including by small and medium-sized enterprises.

The growth of interconnected production in GVCs has created opportunities for strategic product differentiation and market segmentation. Increasingly, suppliers can bundle products and services to emphasize unique characteristics for different market segments and thus command higher prices. Again, consider the example of a simple egg. The supplier can choose to differentiate by size, brand, packaging, and labeling, taking into account the firm's product range and the offerings of other producers. Eggs marketed by some producers may be stamped to tell the date the egg was laid and other promotional information such as the conditions under which the egg was produced: free range, no use of antibiotics or hormones, and its Omega 3 content. Lower-priced eggs are likely to be sold in cheaper packaging without tracing, or else in bulk.

Market segmentation and differentiation may be achieved through bundling, and the addition of services including information can add more value than improved quality or other physical characteristics of the product. An example is the bundling of green beans, summarized in Box 2.1.4 (overleaf).

Sophistication in bundling usually stems from productivity-enhancing innovation and fresh thinking, as firms involved in the

2.1.4 Options for bundling beans

Bundling for additional value can be very simple. A producer of green beans in Thailand, for instance, can decide simply to export fresh beans in bulk for sale by weight in retail outlets. Alternatively, the bean producer can decide to package the beans labeled and sealed in plastic bags, trays, or clamp-lid boxes. The producer can go one step further and wash the beans before packaging and advertise them as ready for cooking.

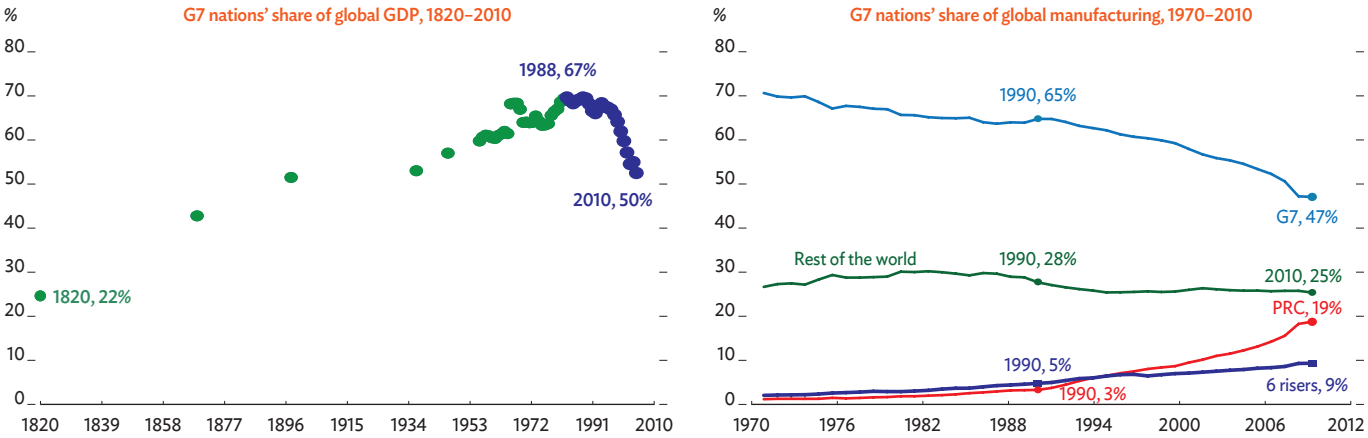
On the other hand, the importer of bulk beans from Thailand can undertake these tasks before the beans reach retail outlets. These are straightforward illustrations, at the low-technology end of the spectrum, of what can be done though bundling, depending on the choices made about whether or not to trade in services. Efficiency, market opportunities, and policy will doubtless affect decisions.

value chain seek to expand profit margins and secure their competitive position. Producers of durable goods can achieve differentiation by tying sales to product guarantees, after-sales service, and repair arrangements. Such strategies succeed when they provide consumers with higher value, earning for the firm some combination of higher profit and larger market share. In a recent survey of 300 firms in six manufacturing industries worldwide, 70% of the respondents reported that they would use services to distinguish their products, and many said they intended their services relating to the manufacturing value chain to be profit centers (Oxford Economics 2013).

Growth and employment

Figure 2.1.7 plots the G7 industrialized nations' share of global GDP in a very long-run perspective back to 1820 and their share of global manufacturing from 1970 to 2010. The G7 share of world output grew steadily for 168 years, peaking in 1988 at 67% of the global economy. That share dropped precipitously to only 50% in 2010—reflecting not an absolute fall in the size of these economies but rather explosive growth in emerging markets, especially the PRC, in this period. The timing is right to link this trend to GVCs, but can the link be more explicit?

2.1.7 Globalization: one process or two?



6 risers = India, Indonesia, Republic of Korea, Poland, Thailand, and Turkey, G7 = Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States of America, PRC = People's Republic of China.

Source: Baldwin and Forslid, forthcoming.

Table 2.1.3 provides regression evidence. The first column measures annualized growth in real GDP per capita between 1995, 2000, 2005, 2008, and 2009 as a function of growth in GVC trade, drawing on OECD–WTO TiVA data. The regression uses controls for differences in growth rates for each combination of industry, economy, and year. That is, it accounts for the PRC having very fast growth in all of these years while the US and Germany had much slower growth, and then asks whether relatively fast growth for each economy corresponds to periods of relatively fast growth in GVCs. The table shows that economies in which GVC trade growth doubled also enjoyed a 12% increase in real per capita income. Turning to data at the industry level, employment and output growth correlate for each combination of industry, economy, and year. Industries that doubled GVC growth also experienced a 10% rise in employment and a 19% rise in output.

It is important to be cautious in interpreting data like this. One should say that rises in GVC trade growth *correlate* with increases in income, employment, and output, rather than saying that increases in GVC trade *cause* these outcomes to improve. Still, the correlations are suggestive, and they are strongly supported by careful microeconometric studies. Box 2.1.5 reviews research that seeks to establish a causal link between growing participation in GVCs and changes in productivity and wages.

2.1.3 GVC trade growth versus income, employment, and output growth, 1995–2009

Dependent variable	Real GDP per capita growth	Industry-level employment growth	Industry-level output growth
GVC trade (growth)	0.12* (0.037)	0.10* (0.016)	0.19* (0.042)
R^2	0.65	0.41	0.65
Number of observations	221	1,236	1,248

* = significant at 1%, ( ) = standard error, GDP = gross domestic product, GVC = global value chain, R^2 = coefficient of determination.

Notes: ADB estimates using data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization, and employment data from the World Input–Output Database. The dependent variable is annualized growth between periods (1995, 2000, 2005, 2008, and 2009). All estimates include year and economy fixed effects, while the industry-level employment and output growth estimates also include industry fixed effects.

Source: Ma and Van Assche, unpublished.

Exposure to adverse shocks

Greater integration and interdependence can improve efficiency, but they can also expose national economies to adverse shocks occurring elsewhere in the world. The shocks can arise from such natural disasters as earthquakes, windstorms, or floods; man-made upheavals such as rioting, terrorism, or war; or macroeconomic dysfunction.

Anecdotally, these effects seem important. When the Tohoku earthquake and tsunami hit Japan in 2011, the production of Japanese intermediate components halted and inventories dried up. This disrupted international supply chains in the automotive and electronics industries, affecting the price and availability of these goods around the world (Escaith et al. 2011). Similarly, when liquidity in US financial markets dried up in 2008, US demand for final durable goods plummeted, causing a sudden and synchronized drop in international trade for manufacturing firms (Bems et al. 2011).

These incidents are particularly concerning if more extensive participation in GVCs magnifies exposure to shocks that hit linked national economies or the global economy. A growing number of studies show that economy pairs with stronger GVC linkages experience more synchronized business cycle movements (Burstein et al. 2008, Di Giovanni and Levchenko 2010, Johnson 2013, Ng 2010). In the Asian context, Chinn (forthcoming) shows that business cycle synchronization has intensified over time, especially between the PRC and its major trading partners.

2.1.5 Why global value chains matter to productivity and wages

GVCs and productivity. There is a strong theoretical case for why GVCs should improve productivity in economies that engage in them. The empirical evidence is equally strong. To begin with industry-level evidence, Feenstra et al. (1999) look at total factor productivity growth from 1973 to 1991 at the sector level in the Republic of Korea and Taipei,China and link it to growth in the sectors' use of imported inputs. The study finds that relatively rapid growth in imported input variety leads to rapid growth in productivity. Feenstra et al. (2013) show that roughly 20% of the apparent productivity growth experienced by the US economy from 1995 to 2006 reflected reduction in the cost of imported inputs, primarily those in information technology products. Amiti and Wei (2009) find that services offshoring accounts for 10%, and material offshoring 5%, of the growth in labor productivity of US manufacturing industries during 1992–2000.

Evaluating the effect of offshoring on productivity at the industry level can be challenging because of substantial heterogeneity within industries regarding firm size, productivity, factor use, and participation in global markets. This makes it difficult to discern whether industry-level variables reflect changes occurring for each firm within an industry or reflect instead compositional change within the industry. However, it turns out that industry-level findings are strongly supported by research at the firm level.

Kasahara and Rodrigue (2008) study Chilean manufacturing firms in GVCs from 1979 to 1996 and find that using imported inputs raises productivity for those firms by 13%–22%. Amiti and Konings (2007) examine productivity growth in Indonesian firms from 1991 to 2001, a period in which import tariffs were cut and firms expanded their use of imported inputs. They find that a 10 percentage point fall in input tariffs accounted for a 12% productivity gain for the firms.

Using a similar tariff reduction experiment in India, Goldberg et al. (2010) find that access to imported inputs lowers input prices by 4.7% per year and accounts for 31% of new products introduced by firms. This "new product" gain from trade is distinct from changes in total factor productivity but is particularly relevant for economies interested in diversifying their exports. Finally, Bøler et al. (2012) show that imported inputs are complementary with research and development by the firm, as a reduction in input costs achieved through access to GVCs encourages firms to intensify their research efforts.

GVCs and wages. The impact of GVCs on worker's employment and wages is unclear. At some fundamental level, task specialization must mean that a firm's participation in a GVC renders some workers redundant.

The starting point for much of the theoretical and empirical literature on this point is comparative advantage based on differences in relative factor abundance and an effect under the Stolper-Samuelson theorem. The theorem posits that, when economies that have relatively abundant skilled labor start to trade with economies with abundant unskilled labor, demand should rise for skilled labor and the "skill premium" should increase in the economy with abundant skilled labor. The reverse pattern should drive down demand for skilled labor and wages in the economy with a largely unskilled labor force.

The literature shows the skill premium rising substantially in the US and other high-income economies during the 1980s. As trade with developing economies also increased substantially during the period, this seems consistent with the Stolper-Samuelson theorem. However, skill premiums and the use of skilled labor increased in many developing economies as well. Trying to understand these observations through the lens of traditional comparative advantage models is problematic, but they are consistent with the prediction of models that incorporate offshoring and GVCs.

Feenstra and Hanson (1997) provide such a model, in which increasing trade in GVCs raises the use of skilled labor and skill premiums worldwide. The study's key insight is to examine specialization along a continuum of intermediate inputs within a given industry. Economies divide the continuum, with developing economies specializing in a range of less skill-intensive inputs and higher-income economies producing the skill-intensive inputs. GVCs are introduced, allowing multinational firms to move production offshore to the developing economies through foreign direct investment. The newly offshored products are more skill intensive than those previously produced by developing economies. Meanwhile, having moved their less skill-intensive products offshore, high-income economies see their own production become more skilled. Therefore, economies worldwide experience a rise in average skill intensity, relative demand for skilled labor, and skill premiums.

What does the evidence say? Feenstra and Hanson (1997) find that the use of skilled labor rose most in those industries and states in Mexico that received the most foreign direct investment from the US. This accounted for over half of the rise in skilled labor's share of the wage bill in those Mexican regions where foreign plants were concentrated. Feenstra and Hanson (1999) show that those US industries that increased offshoring to Mexico the most also experienced the largest increases in relative demand for skilled labor, explaining 15%–40% of the increase in skilled workers' share of wages from 1979 to 1990.

Amiti and Davis (2011) study how tariff cuts during Indonesia's 1991–2000 trade liberalization affected average wages paid by Indonesian manufacturing firms. As tariffs fell, increased competition drove down wages in firms that participated only in the domestic market. However, firms that exported or performed offshore production increased wages. This was because falling tariffs lowered production costs and increased profits for offshoring firms, boosting sales and profits for exporting firms.

In contrast, studies from France (Biscourp and Kramarz 2007), the US (Ebenstein et al. 2013, Liu and Trefler 2011) and Denmark (Hummels et al. 2014) find that offshoring tends to drive down employment and wages for low-skilled workers, while driving up employment and wages for highly skilled workers. The US and Danish studies emphasize that the wage effects of offshoring are especially strong when they cause workers to switch occupations or stop working altogether.

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Box 2.1.6 (overleaf) summarizes reports that assess to what extent GVCs transmit or even magnify shocks across national borders. As noted in the box, Asia and North America are the most vulnerable to large natural disasters, both at home and abroad, because they are more disaster prone in the first place and because production in both regions has become more globalized across economies and industries. However, simulation analysis suggests that the regional and global impact of adverse shocks tends to be limited in vertical chains as competitors to the disrupted area step in to replace lost production, at least temporarily (and to their profit), thereby stemming the losses suffered by linked sectors and economies. Also, adverse shocks to a single industry like electronics need not inflict pain on the broader economy if factor mobility is sufficient to redirect resources toward unaffected sectors.

2.1.6 Global value chain integration and exposure to adverse shocks

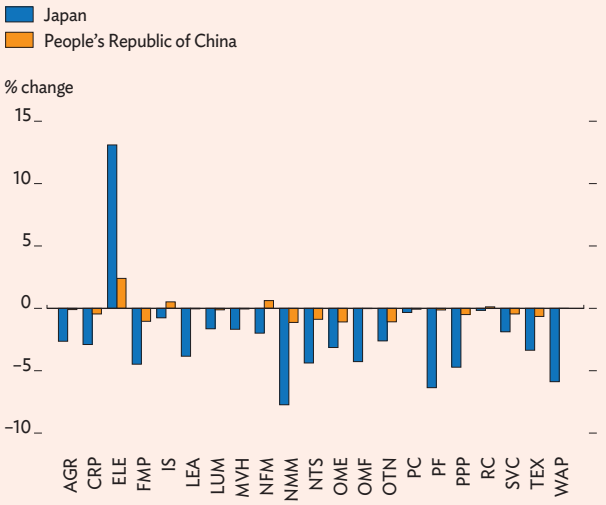
Several studies analyze how GVC participation exposes economies to adverse shocks. They address the following questions. To what extent do GVCs transmit shocks across national borders or even magnify them? When a national economy absorbs the blow from an international shock, what are the most important responses? Do firms respond to the failure of a key supplier or curtailed foreign demand by shifting to new partners? If not, do GVC-transmitted trade shocks cause large changes in output and employment, or are they absorbed through changes in factor and product prices?

Hertel et al. (forthcoming) use a multiregional input–output analysis to simulate two major disasters that reduce output and productivity: the first in the electronics sector in Taipei,China and the second at the port of Singapore. The study's Global Trade Analysis Project–Supply Chain model traces through-effects on goods and factor markets, focusing on the distribution of effects as a function of GVC linkages to these sectors.

As an example, the box figure traces out the impact of a shock to Taipei,China's electronics sector on two major partner economies by showing percentage changes in export volumes from Japan and the PRC by industry. In the case of Japan, there is a very strong increase in electronics exports and a consistent reduction in other exports, as resources are drawn away from other sectors to permit this expansion. From this perspective, Japan looks like a competitor with Taipei,China. In the PRC, the pattern is different, with trade effects that are generally very muted as electronics exports expand much more modestly and other exports change less than in Japan, even expanding in two industries. Exports of PRC iron and steel and nonferrous metals are tied into the Taipei,China economy and benefit when tradable sectors other than electronics expand to take up otherwise idle resources. In this sense, Taipei,China and the PRC appear to be complementary economies.

A novel benefit of using general equilibrium models such as the Global Trade Analysis Project–Supply Chain is their ability to evaluate changes that occur within different time horizons. To very short time horizons, output quantities may be slow to respond to shocks, so all adjustment must occur through prices. To medium horizons, some factors of production such as unskilled labor may be mobile across firms, which allows adjustment through a mix of price and quantity changes, even if time is too short to mobilize capital and build factories.

Impact of an electronics productivity shock on exports from Japan and the PRC (% change)



AGR = agriculture, CRP = chemicals, rubber, and plastics, ELE = electrical equipment, FMP = fabricated metals, IS = iron and steel, LEA = leather, LUM = lumber, MVH = motor vehicles, NFM = nonferrous metals, NMM = mineral products, NTS = nontrade services, OME = machinery equipment, OMF = other manufactures, OTN = transport equipment, PC = petrochemicals, PF = processed food, PPP = paper products, RC = resource products, SVC = services, TEX = textiles, WAP = wearing apparel.

Source: Hertel et al., forthcoming.

An interesting insight that arises from this analysis is that inflexibility in factor markets induces welfare losses from shocks specific to individual sectors. When an adverse shock hits a single industry like electronics, a flexible economy can absorb this shock with relatively little damage by redirecting resources toward unaffected sectors. Inflexibility, by contrast, locks factors within the damaged sector, exacerbating pain across the economy. That said, flexibility is little help against an adverse shock that affects all sectors and does not generate much reallocation.

A second insight is that there are large differences between sectors and economies that are vertically linked to the disrupted area, on the one hand, and sectors and

economies that are substitutes. Vertically linked sectors suffer in the wake of adverse shocks, while substitutes can enjoy tremendous growth as they replace disrupted production, at least temporarily.

This is a critical point for understanding the aggregate impact of adverse shocks. One surprising result from the paper is that even a major disruption to the Taipei,China electronics industry has only modest effects on incomes elsewhere, despite its being a critical world supplier of inputs. How does this square with the notion that disruptions to supply chains create havoc worldwide?

The impact of a disaster depends heavily on individual firms' ability to substitute away from inputs affected by supply chain disruption. When substitution is easy, the consequences of the disaster are small. Still, it may seem that some critical inputs have no substitutes, at least in the short run, so input supply disruptions force downstream firms to simply shut down.

To understand this case, it is important to contrast responses from the level of the firm and that of the economy. Macro data can mask two very different realities at the level of individual firms.

One case is where firms share inputs in common. Disruptions to a particular input are important to the extent that the input represents a large share of costs and that close substitutes are difficult to acquire. An example is energy inputs affected by changes in the price of oil. For economies that use energy intensively in manufacturing, disruption to oil supplies is extremely costly (consider recessions in the 1970s triggered by oil exporter embargoes). However, for economies based on services, the cost share of energy is quite low, and so the impact of the disruption is minimal.

The other case is where individual firms are very different in their technologies and use of inputs. Maybe only a small subset of firms needs any particular input, but these inputs are absolutely critical to their operation. Disruption in input supply shuts these firms down entirely, but, because the affected firms are only a small percentage of all firms in the industry, the impact on aggregate output is modest. In macroeconomic terms, 90% of firms being unaffected by the disruption and 10% of firms shutting down is the same as all firms reducing output by 10%. The aggregate effects at the sector level—and the consequences for labor markets and regional income—are the same in both cases.

Puzzello and Raschky (forthcoming) also examine natural disasters but focus on disasters that have actually occurred. The study econometrically examines the linkage between these disasters and trade flows. Drawing on a comprehensive database of natural disasters, it constructs measures of GVC vulnerability to natural disasters. Next, it estimates a regression model that explains an economy's exports at the industry level as a function of, among other factors, the vulnerability to natural disasters of that national industry's supply chain.

The analysis reveals a set of interesting facts. It finds that manufactured products are highly exposed to large natural disasters abroad, which is consistent with the high incidence of input trade in the manufacturing sector. Historical records show that Asia and North America are the regions most vulnerable to large natural disasters, both at home and abroad, because they are more disaster prone and because production there is more globalized. The regression estimates show that higher supply chain vulnerability to large natural disasters significantly reduces exports, and that the effects are larger when large disasters happen at home. More complex industries are little affected by disasters at home but more affected by disasters abroad. This is consistent with the idea that firms find it relatively easy to substitute away from affected inputs that are sourced domestically but difficult to do the same for imported inputs.

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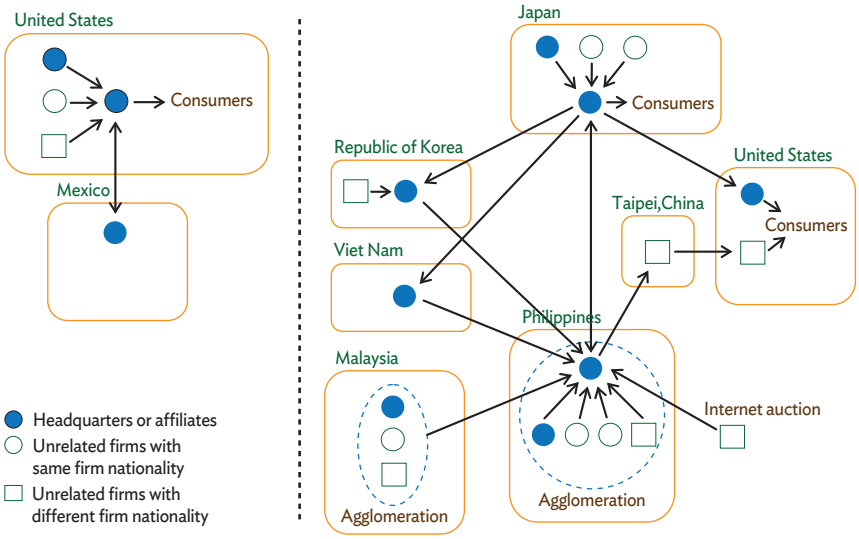
Asia's links to global value chains

Regional supply chains in Asia started to emerge in the mid- to late-1980s, as Japanese conglomerates deployed massive foreign direct investment to move production bases offshore to many economies—initially in East Asia and later also in Southeast Asia—to access locational advantages and develop export platforms for components trade. To keep the costs of labor and final products low, final assembly took place in a third economy, from where the finished products were exported to the global markets at a competitive price. Soon multinationals from other developed economies invested in and established subsidiaries in the region, aiming to improve their cost competitiveness (Banga 2013). The PRC's accession to the WTO in 2001 was a watershed in the process, firmly establishing the PRC and Asia as the world's manufacturing powerhouse.

According to Ando and Kimura (2009), what makes Asia's production networks stand out is their intricate open-loop web of transactions within and between firms that span a number of economies and continents. Figure 2.2.1 shows in the left-hand panel production sharing between the US and Mexico, which tends to display a comparably simple structure of closed-loop, back-and-forth transactions. To illustrate, a US firm's headquarters may send components to its Mexican factory and have final products shipped back to it to sell in the US market. European GVCs have a similar structure. By contrast, the right-hand panel shows a somewhat simplified rendering of the more complex Asian model,

2.2.1 Production networks: The US–Mexico nexus versus East Asia

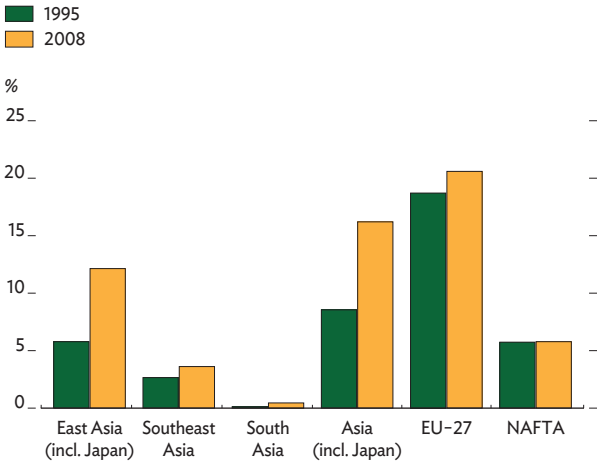


Source: Kimura and Obashi 2011, based on Ando and Kimura 2009.

with reference to the production and distribution networks of a Japanese manufacturer in the electronics industry, which extends all over East Asia and the US.

Asia has played a key role in the expansion of GVC trade. From 1995 to 2008, the share of Asia's GVC trade in worldwide manufacturing exports almost doubled from 8.6% to 16.2%, cementing the region's reputation as "Factory Asia" (Figure 2.2.2). Within Asia, most GVC trade was concentrated in East Asia (the PRC; Hong Kong, China; Japan; the Republic of Korea; and Taipei,China), which provided 12.1% of worldwide manufacturing exports in 2008 and three quarters of Asian GVC trade. Including seven Southeast Asian economies (Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam) accounts for essentially all Asian GVC trade. By comparison, South Asia is less integrated into GVCs, with its GVC trade amounting to less than 0.5% of worldwide manufacturing exports in 2008. Central Asia and the Pacific are not included in the OECD–WTO TiVA database, but they are known to be largely excluded from GVCs by poor connectivity to the GVC hubs, as discussed below.

2.2.2 GVC trade share of world manufacturing exports, by region and subregion



EU = European Union, NAFTA = North America Free Trade Agreement.

Note: ADB estimates using the data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization.

Source: Ma and Van Assche, unpublished.

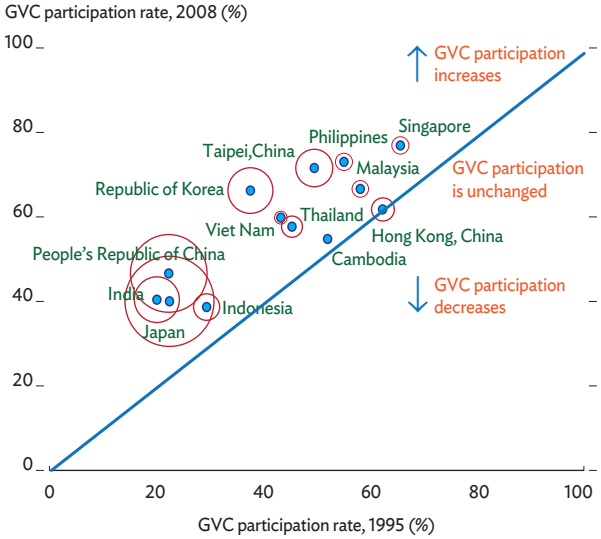
East and Southeast Asia dominant

Figure 2.2.2 shows, once again, that the emergence of GVCs has not been limited to Asia. In fact, 27 countries in the European Union conduct more GVC trade than their Asian counterparts. This partly reflects how small most European countries are and the vast amount of GVC trade crossing national borders in this unified market, but it also points to the expansion of Western European value chains into Eastern Europe. In all three main trading regions, though only marginally in NAFTA, GVC trade has grown more quickly than world manufacturing exports, showing the rise of GVCs to be a global phenomenon.

Figure 2.2.3 plots the total GVC participation rate for a number of Asian economies, shown in 1995 on the horizontal axis and in 2008 on the vertical axis. The blue line corresponds to no change in the participation rate, and the size of the bubble indicates each economy's real GDP in 2008. Several observations stand out. First, there are substantial differences in GVC participation across economies, from as little as 20% in India in 1995 to nearly 80% in Singapore in 2008. Second, all of the included economies except Hong Kong, China experienced significant growth in GVC participation over this period. Third, smaller economies exhibit significantly higher GVC participation than do larger economies. This is consistent with the view that larger economies have the scope to produce a wider range of inputs, so their exports embody a larger share of their own domestic value added.

An economy's position in GVCs is intrinsically linked to its stage of development. A GVC has multiple stages or

2.2.3 Asian countries' participation in manufacturing GVCs, 1995 and 2008



GVC = global value chain.

Note: ADB estimates using the data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization. Red bubble size represents an economy's real GDP in 2008.

Source: Ma and Van Assche, unpublished.

2.2.1 Increasing complexity of the PRC's value chain involvement

The PRC takes a middle position in Figure 2.2.4. However, PRC firms participate in production chains that have become increasingly complex over time (Swenson, forthcoming). The study examines the evolution of GVCs in the PRC at the level of the firm. For each firm, it characterizes how many stages of production are upstream from the firm and how many downstream, or closer to the final consumer. Over time, a firm can change its position in two ways. For a given production process, it can move closer to the point of final consumption (adding stages and moving downstream) or move further away. Or it can switch to a more complex production process involving more steps. For firms in the PRC, the number of both upstream and downstream stages are increasing over time. This is consistent with the view that they are switching to more complex goods with more steps.

Reference

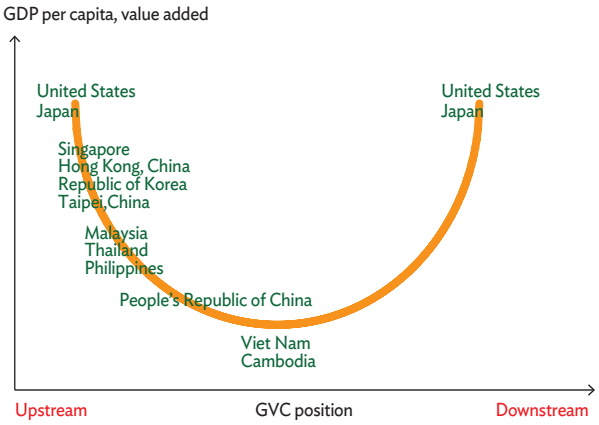
Swenson, D. Forthcoming. Changes in the Production Stage Position of People's Republic of China Trade. In Ferrarini, B. and D. Hummels, eds. *Asia and Global Production Networks—Implications for Trade, Incomes and Economic Vulnerability.* Edward Elgar.

tasks, upstream and downstream, that need to be combined to produce a final good. Upstream tasks such as producing inputs tend to be more knowledge intensive and responsive to specific business relationships, while final assembly is generally a more standardized, repetitive, and labor-intensive task. As the more highly developed Asian economies such as Japan; the Republic of Korea; Taipei,China; and Hong Kong, China have a comparative advantage in knowledge- and contract-intensive tasks, they naturally specialize in upstream activities. By contrast, labor-abundant economies such as the PRC, Viet Nam, and Cambodia remain concentrated in downstream assembly activities with lower value added. However, evidence shows changing patterns in economies' GVC participation over time, notably in the case of the PRC (Box 2.2.1).

This specialization pattern gives rise to the "smile of value creation" depicted in Figure 2.2.4. For manufacturing products, much of value is added at the two extremes of the value chain: upstream research and development and core input production, and downstream marketing and sales. A key policy concern for many developing economies in Asia is how to shift from being a final assembly platform for GVCs and upgrade into activities that add more value.

Figure 2.2.5 further examines the differences between economies in terms of whether their GVC participation is upstream or downstream. It shows, for example, the value of GVC-F linkages for Japan (the value of Japan's exports that are inputs used in another economy's production) relative to the value of its GVC-B linkages (the value of inputs that Japan imports to use in Japanese production for export). A low ratio means that the economy is closer to producing directly for the final consumer, while a high ratio means that the economy is producing upstream inputs primarily for use in other industrial processes. This is plotted on the horizontal axis and graphed against national per capita

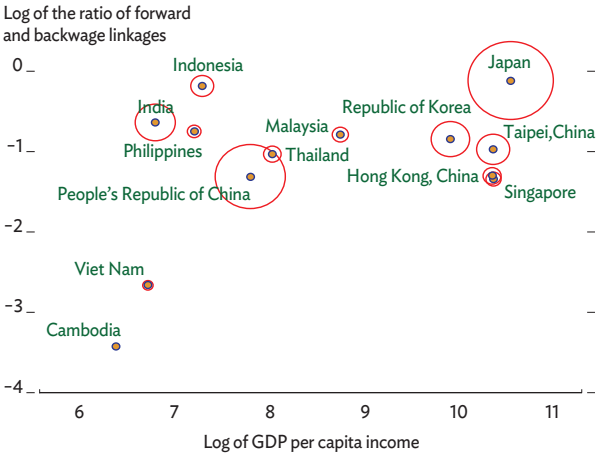
2.2.4 Smile of value creation



GDP = gross domestic product, GVC = global value chain.

Source: Ma and Van Assche, unpublished.

2.2.5 Asian economies' position in manufacturing GVCs, 2008



GVC = global value chain.

Note: estimates using the data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization. Red bubble size represents an economy's real GDP in 2008.

Source: Ma and Van Assche, unpublished.

2.2.1 Relative intensity in GVC trade by region, 2008

Industry	EU-27	NAFTA	Asia	East Asia	Southeast Asia	South Asia
Electrical and optical equipment	0.56	0.93	1.76	1.75	1.94	0.46
Textiles, textile products, leather, and footwear	0.63	0.36	1.29	1.18	1.48	2.71
Machinery and equipment	1.24	0.80	0.83	0.83	0.82	0.70
Chemicals and nonmetallic mineral products	1.11	1.05	0.81	0.76	0.91	1.34
Basic metals and fabricated metal products	1.08	0.96	0.78	0.90	0.33	1.28
Transportation equipment	1.31	1.48	0.64	0.75	0.27	0.61
Food products, beverages, and tobacco	1.28	0.76	0.55	0.30	1.32	0.99
Wood, paper, paper products, printing, and publishing	1.09	1.08	0.54	0.50	0.69	0.44

EU = European Union, GVC = global value chain, NAFTA = North American Free Trade Agreement.

Source: Estimates by Ma and Van Assche (unpublished) using data from the trade in value added indicator of the Organisation for Economic Co-operation and Development and the World Trade Organization.

income on the vertical. Large differences are evident across economies. At the high end of per capita income, Japan's forward/backward ratio is balanced: for every dollar of inputs that Japan exports for use in production by another economy, it imports slightly more than a dollar of inputs to be used in domestic production. At the low end of the income scale, Cambodia's GVC participation is primarily backward linked or downstream: For every dollar of inputs exported for foreign use, Cambodia imports $30 of inputs for domestic production.

Exploring differences in GVC trade by sector, Table 2.2.1 reports measures of relative intensity of GVCs by region. The total value of GVC participation is calculated for each economy and industry. As seen above, these values differ systematically with the size and development stage of an economy, and GVC participation differs considerably across sectors—high for electronics, low for food products. A relative intensity measure adjusts for these differences: A value greater than 1 indicates that GVC participation is higher than the global average.[1] The relative intensity for Asia's GVC trade is greater than 1 for *electrical and optical equipment* and for *textiles, textile products, leather, and footwear*. This reflects East and Southeast Asia's strong integration in electronics GVCs, as well as the prevalence of textile value chains in East, Southeast, and South Asia. By contrast, NAFTA has high relative intensity scores for GVCs in *transportation equipment*, while the EU-27 has its highest relative intensity indices for *transportation equipment*; *food products, beverages and tobacco*; and *machinery and equipment*.

International input–output tables are invaluable for providing a clear picture of forward and backward linkages with sector and regional detail. However, they provide a relatively short time series, which makes it difficult to put recent growth in historical perspective. Providing that longer perspective is an alternative measure of GVC participation: indices of intra-industry trade (IIT). The standard IIT index captures the extent to which an economy both exports and imports goods within the same industry. A value of 1 (or 100%) indicates exports and imports within an industry exactly balanced, and a value of 0 indicates a flow entirely one way (only exports or only imports). This IIT index is often viewed in terms of horizontal specialization, or economies exchanging

distinct varieties of similar goods. But since standard traded goods categories encompass both inputs and final goods within the same industry, IIT indices also capture hierarchical upstream–downstream specialization.[2]

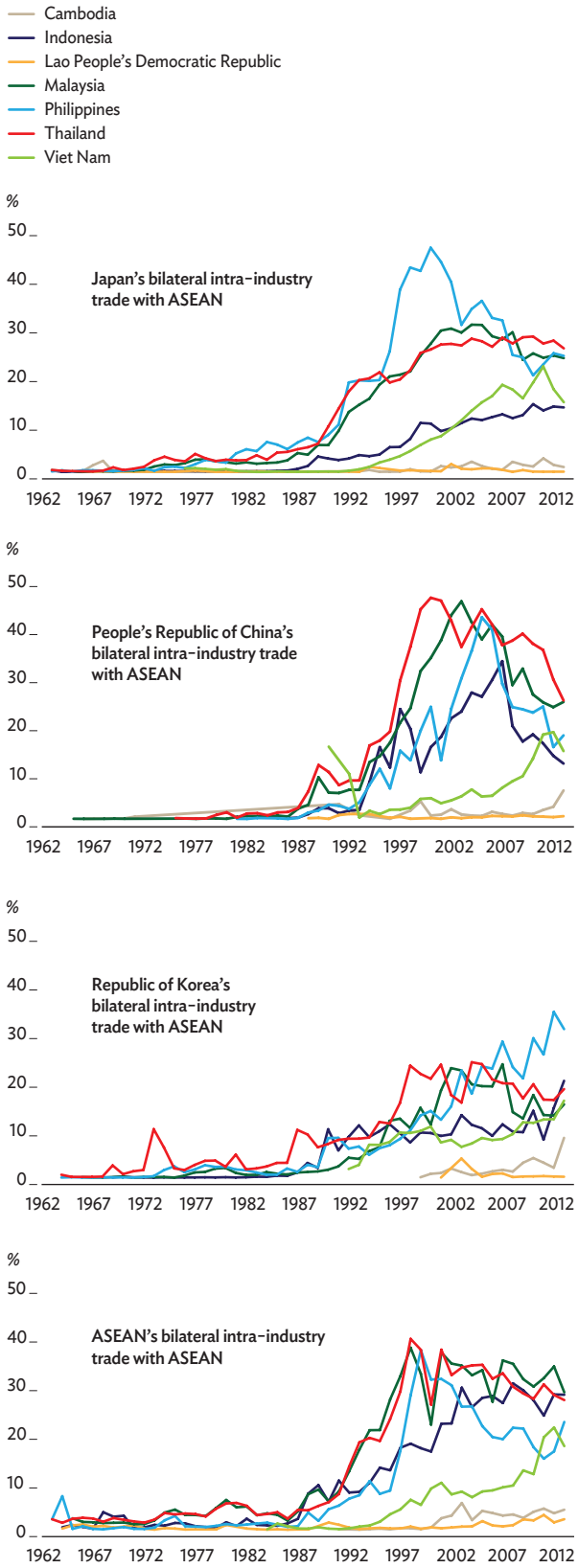
IIT measures can be calculated using data for each year since the early 1960s. Figure 2.2.6—drawn from Baldwin and Forslid (forthcoming)—plots IIT measures for Japan, the PRC, and the Republic of Korea with Association of Southeast Asian Nations (ASEAN) members as a whole, as well as for ASEAN members with other ASEAN members. As these measures express intra-industry trade as a share of total trade, they track only the composition of trade and not its growth in aggregate. Two insights arise from these pictures. First, intra-industry trade within Asia was initially close to zero in all cases but started to grow significantly in the 1980s and has accelerated over the past 2 decades. This is the period during which GVC formation has been particularly rapid. Second, these illustrations make clear the extent to which GVCs are regionally focused. Indeed, some scholars claim that the term "global value chain" is misleading and would more properly be "regional value chain."

Figure 2.2.6 depicts growth in Japan's exchanges with the other Asian economies since the 1960s. In the early days, much of it was in microelectronics (Grunwald and Flamm 1985). In the mid- to late-1980s, Japan's IIT with three of the large ASEAN members—Malaysia, the Philippines, and Thailand—took off at about the same time. Its sharp rise in IIT with Indonesia and Viet Nam came a decade later. The rise for Indonesia was much less marked than for the other economies, as it is a large commodity exporter. Cambodia and the Lao People's Democratic Republic are not really involved in Japanese supply chains, according to this indicator. The timing of the Republic of Korea's IIT with ASEAN members is similar to that of Japan's, but its engagement is less intense.

The PRC's bilateral IIT with Malaysia and Thailand took off in the mid-1980s, with Indonesia and the Philippines following in the early 1990s. The IIT measure slopes up for Viet Nam from the later 1990s, but did not take off until the early 2000s. Cambodia's IIT with the PRC took off only in 2010. ASEAN's intraregional IIT pattern follows similar timing as that of exchanges with the PRC. The ASEAN-4 (Indonesia, Malaysia, the Philippines, and Thailand) saw their IIT scores jump in the mid-1980s. Viet Nam's uptick was delayed until the late 1990s but featured significant acceleration in the 2000s.

Even within economies where GVC production is common, not all firms manage to take part. In ASEAN, for example, small and medium-sized enterprises (SMEs) account for 96% of all enterprises and generate 50%–85% of domestic

2.2.6 Bilateral intra-industry trade



ASEAN = Association of Southeast Asian Nations.
Source: Baldwin and Forslid, forthcoming.

employment and 30%–53% of GDP. Yet SMEs remain underrepresented in international trade, accounting for only 19%–31% of ASEAN's exports. Box 2.2.2 looks at evidence from recent firm surveys to uncover factors that help determine which firms link to GVCs. While firm size is one factor determining involvement in production networks, productivity and foreign ownership are also key. Economies of scale and other factors may inhibit smaller firms from directly linking to supply chains, but few studies account for indirect links.[3] SMEs may benefit from an economy's GVC links by supplying larger firms that already have a place in the supply chain.

Asian economies with limited access

Many countries in South and Central Asia and the Pacific, as well as elsewhere in the developing world, do not yet actively engage in GVCs or are relegated to their less-profitable margins, capturing only a low share of value added in their domestic economies. As a result, they forego much of the potential development benefits and dynamism from participation in GVCs.

The challenges of meeting the fundamental conditions for successful GVC participation are multifaceted, requiring further research to pinpoint the exact combination of factors that determines why certain firms in certain economies do better than others. Clearly, though, the hindrances to GVC participation pertain mainly to soft and hard infrastructure deficiencies that undermine connectivity to regional and global production hubs: insufficient capital, unconducive business environments, restrictive trade and investment regimes, and weak policy and institutional environments in general (OECD 2013).

Notwithstanding considerable heterogeneity among individual countries in South Asia, Central Asia, and the Pacific, many of these challenges seem to prevent firms' broader GVC participation. In East and Southeast Asia, these challenges tend to be less accentuated. Figure 2.2.7 shows a small set of typical indicators of Asian economies' GVC competitiveness, as determined by a survey of global firms' perception of economies' logistics performance and the ease of doing business. For example, the World Bank's Logistics Performance Index reflects a broad mix of external and regulatory hurdles affecting the quality of transport infrastructure, efficiency of customs clearance, and ability to track and trace consignments, among other aspects relevant to a multinational corporation's decision whether to outsource to a particular economy or not. According to this metric, East Asia leads by a wide margin, followed by Southeast Asia. The other subregions clearly fall behind. Similarly, the availability of airline seats highlights just how much some parts of Asia are deemed by multinational firms to be more or less suitable for the relocation of GVC production processes that require key GVC personnel such as lead engineers to travel internationally.

To an extent, lower scores in these indices reflect disadvantages that are beyond government control, such as geographic distance from GVC hubs or poor connectivity. These disadvantages affect many island

2.2.2 Firm characteristics and value chain participation

Very little is known about which characteristics of firms determine participation in global production networks. Two recent studies examine data from firm surveys to help bridge this gap. To better understand why some Asian businesses—especially SMEs—are able to link to production networks, Wignaraja (2013) uses the World Bank's Enterprise Survey of 5,900 manufacturing enterprises in five ASEAN economies: Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. Arudchelvan and Wignaraja (forthcoming) employ an Asian Development Bank Institute survey of 234 Malaysian manufacturing firms.

The results of the two studies show that large firms are the leading players in production networks in ASEAN, with 72% of large firms surveyed by the World Bank engaged in GVCs. However, a creditable minority of SMEs also participate, with 22% of all SMEs in the World Bank survey active as direct exporters or suppliers to multinational corporations. This is reflected in their share of exports as well, as 77% of exports are from large firms and 23% from SMEs. Tellingly, the larger SMEs are more likely to participate in GVCs. This suggests that economies of scale help cover the fixed costs of establishing and maintaining a foothold in a production network.

SME participation rates in GVCs are substantially higher in Malaysia and Thailand than in less industrially developed ASEAN economies, with 46.2% of Malaysian and 30.0% of Thai SMEs having found a niche in cross-border production chains. These two economies attract more foreign investment than do other ASEAN economies, giving their SMEs more opportunities to link to global production networks. SME participation rates in other ASEAN economies are much lower: 21.4% in Viet Nam, 20.1% in the Philippines, and only 6.3% in Indonesia.

Econometric analysis of the survey data underscores the importance of firm size, but the relationship is not static or linear. Estimates suggest that economies of scale and fixed costs are significant in the early stages of joining GVCs but become less so over the longer term. Further, SMEs may form clusters or embark on niche market strategies to overcome the disadvantages of being small.

Even to this extent, firm size is not the whole story. Efficiency—particularly investment in technological capability and skills and in labor productivity—raise the probability of GVC participation, as does access to commercial bank credit. The effects of how old a firm is and who owns it are also revealing. Younger firms are more likely to join production chains than are older ones, as they are more information and knowledge oriented. Foreign ownership facilitates participation in GVCs by smoothing access to marketing and technological know-how.

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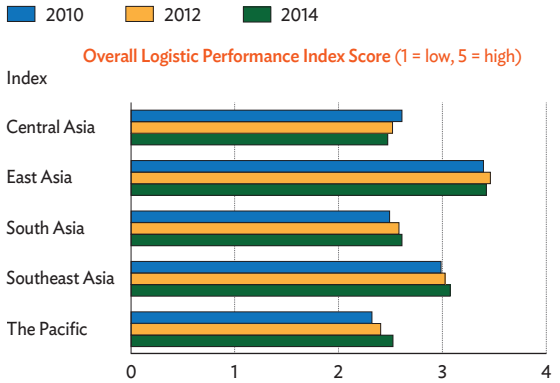
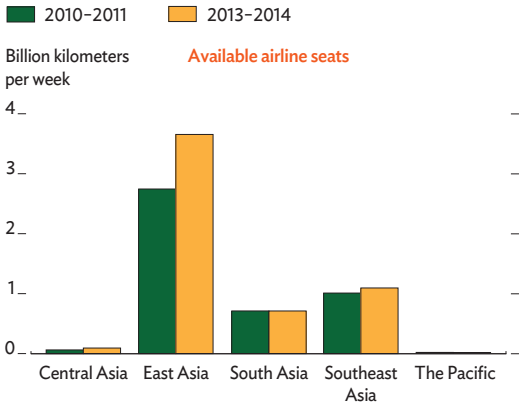
economies in the Pacific and landlocked countries in Central and South Asia. According to the World Economic Forum's Global Competitiveness Index in 2013/14, East Asia's transport infrastructure scores 5.0 on a scale of 6.0, followed by Southeast Asia at 4.0. This sets these subregions off from those where the presence of GVCs has been hampered by poor connectivity, notably the Pacific, which scores only 2.1, and Central Asia, scoring 3.3. South Asia does only marginally better, at 3.4.

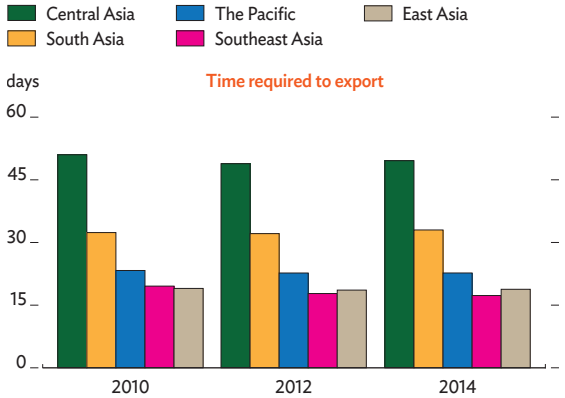
However, many measures show regulatory hurdles and policy deficiencies undermining economy competitiveness and attractiveness, such as those affecting the time required to export or import a standardized cargo of goods by sea. Figure 2.2.7 shows that substantially fewer documents are required in East and Southeast Asia than in other subregions, where GVC participation is limited.

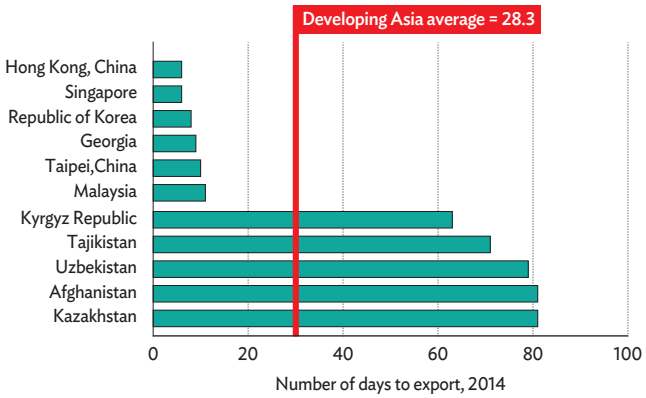
This analysis clearly identifies some areas for policy action and international support, such as improving connectivity and building the necessary physical infrastructure where it is lacking. Investments in cross-border land infrastructure to facilitate trade and reduce its

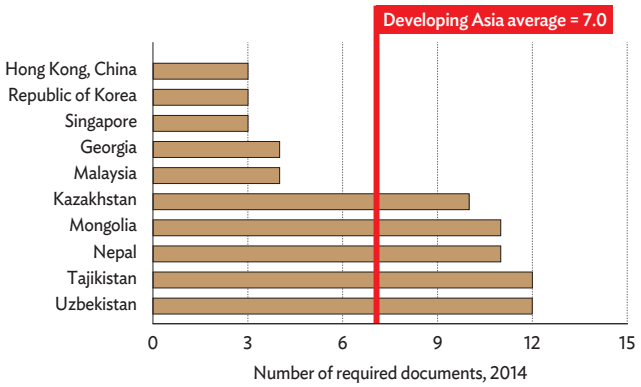
2.2.7 GVC competitiveness indicators

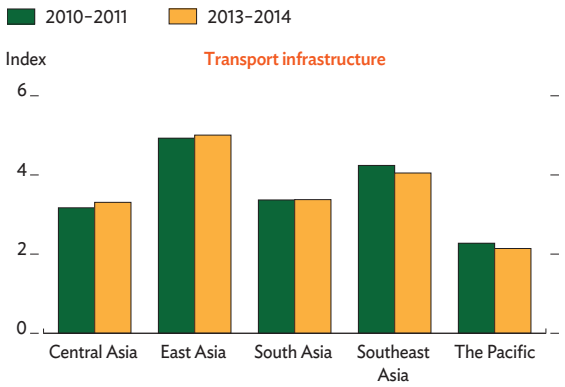












Note: Similar rankings are observed in time required to import, and, in documents required to import.

Sources: Doing Business, World Bank (http://www.doingbusiness.org), World Economic Forum, The Global Competitiveness Report 2013–2014 (http://www.weforum.org/reports/global-competitiveness-report-2013-2014), and Logistics Performance Index, World Bank (http://lpi.worldbank.org).

2.2.3 Aid for trade support and trade facilitation to enable broader Asian participation in value chains

While some developing economies have benefitted from engagement in GVCs, opportunities for others have been limited. Pacific states and landlocked developing economies in particular occupy the periphery of Asia's dynamic core and have struggled to overcome the high trade costs that deter investment and trade.

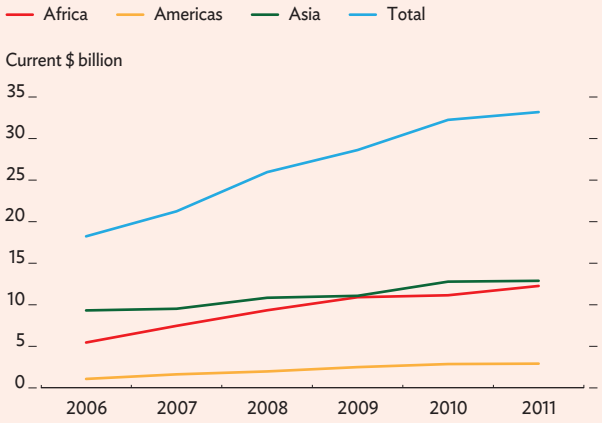
Launched at the 2005 WTO Ministerial Conference in Hong Kong, China, the Aid for Trade (AfT) initiative devotes resources to building supply-side capacity and trade-related infrastructure in developing economies, especially in least-developed countries. By recognizing that internal constraints on trade can be just as limiting as external constraints, AfT targets many of the same bottlenecks that limit GVC participation.

Fostering trade by supporting investment infrastructure

Support provided through AfT enhances both hard and soft infrastructure. While the international community has increasingly focused on soft infrastructure, both types are critical to create an enabling environment for the private sector. Support for hard infrastructure—labeled *economic infrastructure* and *productive capacity building* in the box table—constitutes most AfT flows to Asia. This reflects countries' needs and is particularly important in helping peripheral countries in the region connect to GVCs. Nevertheless, even the finest ports will not facilitate GVC linkages if customs rules are not harmonized, and the box table shows growing resources (albeit from a very small base) devoted to soft infrastructure: *trade policy and regulations* and *trade-related adjustment*.

Total AfT flows to ADB member economies, as reported to the Organisation for Economic Co-operation and Development (OECD), increased by an annual average of 13% from 2006 but slowed markedly in 2011, the latest year for which data are available (box figure). Resource flows from emerging markets have increased in recent years and may address this plateau in Asia.

Aid for Trade flows by region, 2006–2011



Sources: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System database; Alicia Di Caprio.

Unfortunately, since these economies do not report their statistics using OECD criteria for official development assistance, precise numbers for aid resource flows from emerging markets are not available. In addition to contributing additional resources, these flows appear to be different in character to OECD flows, as they use untraditional instruments such as concessional export credits and human resource development.

Engaging the private sector in policy making

AfT further contributes to GVC development by including stakeholders in the private sector. In Asia, many governments acknowledged the benefit of active and open consultations with the private sector. Vibrant public–private dialogue facilitates interface between the government, as the official recipient of AfT funds, and the private sector, which is best able to identify trade

Aid for Trade flows into Asia by category ($ million)

Category	2006	2007	2008	2009	2010	2011
Economic infrastructure	3,431.2	4,152.5	5,777.8	5,945.8	7,166.6	7,408.7
Productive capacity building	2,639.3	3,322.5	3,487.7	3,873.2	3,998.8	4,118.4
Trade policy and regulations	73.0	102.0	180.5	107.4	150.8	148.6
Trade-related adjustment	0.0	0.0	1.2	1.4	1.6	2.3

Sources: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System database; Alicia Di Caprio.

challenges and opportunities. By recognizing the role of GVCs in trade development in the region, AfT promotes conditions for engagement.

Trade facilitation

Trade facilitation broadly refers to measures to lower trade costs and the time required to receive and make shipments, which is essential to connecting national economies with GVCs. National and regional efforts toward trade facilitation are key to enhancing the competitiveness of regional economies within GVCs. The Ninth Ministerial Conference of the WTO, held in Bali on 3–6 December 2013, agreed to strengthen the WTO Agreement on Trade Facilitation, toward enhancing the capacity of developing economies to facilitate trade and link up with GVCs in Asia and beyond, but the agreement was not ratified by its deadline at the end of July 2014 (Hamanaka 2014).

Even without global agreements, trade facilitation has been a policy prerogative in Asia, both for individual economies and regionally. For example, ASEAN members have introduced the so-called "single window," promoted as a best endeavor under the WTO Agreement on Trade Facilitation. The national single window enables data and information to be submitted only once, for synchronous processing toward a single decision for customs clearance of cargo, which expedites clearance, reduces transaction time and costs, and thus enhances trade efficiency and competitiveness.

In addition, the ASEAN Single Window integrates the operation of the 10 national single windows toward simple, harmonized, and standardized trade and customs processes, procedures and related information flows, which are expected to reduce transaction costs within ASEAN. It is further expected to enhance export competitiveness and facilitate the integration of ASEAN into a single market for goods, services, and investments and as a single production base as described by the ASEAN Economic Community Blueprint.

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costs are policy entry points offering clear benefits to traditional trade and vertical GVC trade alike. An emblematic example of successful regional efforts in this direction is the program Central Asian Regional Economic Cooperation, which is developing several transport and trade corridors interlinking participating countries—many of them landlocked—and linking the subregion as a whole to markets in Europe and elsewhere in Asia. Other examples of international support are the WTO Aid for Trade initiative, which funnels aid toward building trade capacity in low-income countries, and another WTO trade facilitation initiative that seeks to improve logistics and customs procedures toward increased connectivity across trading nations (Box 2.2.3).

Forging stronger links with global value chains

Declining trade costs paved the way for global production networks to emerge. Further reducing tariffs and transport costs remains a critical component of a policy strategy to forge stronger links with GVCs. Yet, as tariff rates have declined, nontariff barriers have come more clearly into focus as possible trade impediments. Nontariff measures such as product and process standards similarly impose costs. However, because standards are often necessary to meet public policy aims, the issue is more complicated than with other trade costs.

Tariffs are the traditional focus when considering trade costs that impede GVC participation. In the past 2 decades, progressive trade liberalization has brought down tariffs in much of Asia and the rest of the world. However, remaining tariffs are magnified under dispersed GVC production and still pose a critical hindrance to the development of GVCs in a number of economies. Apart from tariff rates per se, there is significant scope for reducing uncertainty about tariff applicability, now and in the future, thus spurring foreign direct investment and the relocation of GVC production to host economies.

High transport costs and delays that impede the movement of goods between markets often pose a larger obstacle to GVC expansion than do tariffs. Shipping costs and delays significantly compound trade costs and are highest for smaller and poorer countries. Policy to lower transport costs and shorten delays in these countries should seek to build infrastructure, cut red tape, and mitigate other impediments to trade within borders. To lower transport costs relative to product value, policy can facilitate the production of higher-quality goods or goods with a high ratio of value to weight and volume.[4]

Product and process standards are emblematic of a changing policy reality. As tariffs and other border measures have become relatively less prominent, nontariff measures within borders have grown in significance. Product and process standards are just part of the complex world of regulation, but they constitute a core aspect of GVC participation. One challenge is to ensure that these measures do not become unjustifiable nontariff trade barriers.

Tackling tariffs to improve access

GVCs face significantly increased trade costs because fragmented production chains incur them frequently. A complex manufactured good may have hundreds or even thousands of components, and if component production is separated geographically, the components themselves must be shipped between locations, arriving at the appointed place and time so they can be assembled. Reductions in trade costs are thus critical to the development of GVCs. With multiple stages of production, trade costs must be paid every time an input crosses an international

border. A small reduction in trade costs can therefore generate large growth in the formation of GVCs and a disproportionately large rise in trade as whole. Policies that help reduce trade costs deal with tariffs, transportation, logistics, and trade facilitation. (On the magnification effect of trade costs, also see the discussion in Box 2.1.1.)

Reducing tariffs on imported inputs can be a key to generating significant gains for both workers and firms. Consider one example from the PRC and another from India. In the PRC, inputs are imported duty-free for the processing sector but are subject to tariffs for other sectors. Scholars examining growth in the processing sector relative to others over the past 2 decades have shown that processing firms grew much more quickly, enjoyed greater productivity gains, and shifted readily from simple labor-intensive manufactures into more sophisticated high-technology goods (Feenstra and Wei 2010). In India, trade reform lowered input prices and allowed firms to significantly expand the range of outputs produced, generating diversification gains for these firms (Goldberg et al. 2010).

Reducing uncertainty about tariffs

Apart from tariff rates, there is significant value in reducing uncertainty about tariffs and other trade costs. GVCs are not built overnight. Rather, firms make sizeable fixed investments in product design, plant facilities, and business relationships that are expected to be repaid over many years. Even if tariff rates are currently low, uncertainty about future tariff and trade costs can dissuade firms from making investments. Strong evidence of this effect has been recently documented in the case of US–PRC trade. From the 1980s, US imports from the PRC were subject to the relatively low "normal trade relations" tariff rates offered to WTO members, but these rates were subject to frequent review and could have been sharply raised by the US at any time. It was only with the grant of "permanent normal trade relations" and the PRC's accession to the WTO that these low rates became certain. Immediately thereafter came an explosion in PRC trade with the US, with the greatest growth occurring in those products that were subject to the greatest uncertainty under the old regime (Handley and Limao 2013, Pierce and Schott 2013). Similar evidence emerged with Portugal's accession to the European Community in 1986 (Handley and Limao 2012).

Economies can reduce uncertainty about tariffs three ways. First, as in the US–PRC and Portugal–European Community cases, economies can permanently normalize trade relations with partners. Second, WTO bound rates can be lowered. WTO members bind tariffs at maximum rates but actually apply lower rates in many cases. Because low applied rates may legally be raised as high as bound rates at any time, this can create significant uncertainty for partner economies. Lowering bound rates would commit economies to certain low rates. Third, economies can commit to eschewing temporary trade measures such as antidumping duties and safeguards, which can raise tariffs well above previously agreed to rates. Doing so would mitigate uncertainty about future tariff rates facing firms in GVCs.

2.3.1 Can free trade agreements facilitate production networks in Asia?

Free trade agreements (FTAs) have been proliferating in Asia for more than a decade. GVCs and the fragmented production trade that they generate have been growing for a much longer period. That Factory Asia emerged before FTAs illustrates that FTAs are not necessary for forming GVCs. The question remains whether FTAs can support their further growth or spread. Empirical studies do not provide a clear answer as their results are mixed, possibly reflecting mutual causality with growth in GVC trade inducing FTAs and vice-versa (Menon 2013). Therefore, the issue may best be resolved using a qualitative approach that examines the characteristics of GVC trade and FTAs in Asia to ascertain possible linkages, taking into account the presence of other trade policies that can affect the relationship.

GVC trade can be affected by changes in tariffs or other trade costs, such as trade facilitation. Therefore, each must be examined separately in the context of Asian FTAs. After looking at tariffs and nontariff issues, this analysis assesses alternative modalities of trade and related policies that support production networks.

Can preferential tariff reductions affect GVC trade? There are a number of reasons why FTAs in Asia may have limited impact on GVC trade. First, most of it already travels duty-free across the region. Most important is the WTO's multilateral Information Technology Agreement (now being enhanced), as most GVC trade in Asia involves electronics parts and components. Even for trade other than in electronics, FTAs have little to offer since most firms involved in production networks (mostly multinational enterprises) are located in export processing or free trade zones. Even those operating outside such zones normally enjoy import duty exemptions under duty-drawback and bonded warehouse schemes (Menon 2013).

These factors operate against a backdrop of low and falling tariffs on parts and components, which have more to do with unilateral actions than preferential ones (Vézina 2010). As a result, the trade-weighted preference margin for intra-ASEAN trade in 2008 was a mere 2.3%, while 72.9% of trade traveled at a most favored nation rate of zero (WTO 2011).

Even with the Information Technology Agreement, free trade zones, and duty-drawback schemes set aside, it appears that FTAs are still unlikely to play much of a role in promoting this type of trade because they need to exclude nonmembers. The impact that preferential tariff reductions can have on GVC trade relates to the need to implement rules of origin to exclude trade that does not comply with requirements. Formulating and implementing rules of origin for GVC trade are far more complex than for trade in final goods. This is because each GVC activity adds little value, being only a small part of a larger process (Athukorala 2011).

Are deeper FTAs the answer? How have FTAs fared in terms of nontariff issues such as trade facilitation, which can matter even more than tariffs when it comes to promoting GVC trade? WTO (2011) finds that most Asian FTAs are shallow and have failed to deal adequately with nontariff barriers (NTBs). The fundamental problem with FTAs that limits their usefulness is the need to discriminate in providing concessions. Unlike tariff liberalization, but as with most public goods, removing NTBs in a preferential manner is either impractical or costly.

What are the alternative modalities of reform? If the cost of complying with FTA provisions is high, the benefits that flow are generally quite low compared with those of other liberalization modalities. Although FTAs may

The limits of trade regulation

Notwithstanding the benefits from bound tariff commitments and reduced uncertainty, regional trade agreements may have had only limited impact on the growth and spread of GVCs in Asia. As discussed in Box 2.3.1, much of GVC trade already travels duty-free or at very low tariffs across the region, and most firms involved in production networks are located in export processing and free trade zones or enjoy import duty exemptions under duty-drawback and bonded warehouse schemes.

Furthermore, a sufficiently flexible and diversified GVC can effectively avoid some temporary trade measures. Consider a multinational firm that produces parts and components in many locations and can choose to assemble its product in any of these locations before exporting it to, for example, the US. If the US imposes a temporary trade measure that is specific to one location, such as

provide a framework for foreign multinationals looking to invest, many of the safeguards are usually already in place these days, arising from competition to attract foreign direct investment that predates most FTAs.

In addition, the global nature of supply chains suggests that regional approaches to liberalization are bound to be of only limited value, as most of what Factory Asia produces continues to be consumed outside the region. On the supply side, selective or geographically constrained liberalization can choke off the natural spread of such networks. Comparing the experience of Viet Nam and India confirms the point: While Viet Nam has emerged as a major player in production networks through a host of production arrangements, India's aggressive pursuit of FTAs has left it a laggard because of insufficient domestic reform.

The same is true of plurilateral agreements such as the Trans-Pacific Partnership, which includes four ASEAN members but excludes the PRC—an omission that Winters (2014) disparagingly describes as its most glaring feature. Preferential agreements that cover some but not all members of a GVC can disrupt its operation and, by distorting trade patterns, retard its expansion. Since these agreements continue to increase in number, the only way to mitigate their negative impacts on supply chains is for members to pursue multilateral preferences, whereby the preferential accords—both tariff and nontariff—are offered to nonmembers without discrimination. In this way, any preference discrepancies can be eliminated, and differences in standards or regulatory divergence addressed (Menon 2014).

In conclusion, it is more likely that GVCs have prospered despite the noodle bowl of overlapping FTAs in Factory Asia, not because of them. FTAs are designed to promote trade in final goods, not GVC trade. Most Asian FTAs are shallow, focusing on tariff reduction rather than addressing other NTBs and facilitating trade in a way that could better promote production networks. Even if they were to deepen over time, NTBs are difficult or costly to remove in a preferential manner. Therefore, a nondiscriminatory modality building on the WTO's multilateral agreement on trade facilitation could more effectively reduce the kinds of logistical costs that affect GVC trade. That is, making preferences multilateral while instituting national action on regulatory reform to address incumbency issues may be the best way to support the growth of GVCs, benefitting current participants and new ones.

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an antidumping duty against the PRC, the firm may simply switch assembly to another GVC participant, perhaps Viet Nam, and avoid the duty. Viewed from the perspective of national trade statistics, it appears that trade is extraordinarily responsive to the imposition of duties. From the perspective of the firm, a new duty changes only the location of final assembly, having no other effect on its operations. Put another way, GVCs undermine the efficacy of trade measures that are geographically specific.

Ma and Van Assche (forthcoming) provide evidence of such tariff avoidance by Chinese firms, distinguishing those firms by customs regime for processing trade versus ordinary trade. The processing trade regime is used primarily by PRC exporting firms that are part of a GVC, while the ordinary trade regime is used by exporting firms that have more extensive domestic value chains. The study examines antidumping cases against the PRC and finds strong evidence that PRC processing

2.3.2 Delay as a hindrance to trade and value chain participation

Delay is an important impediment to trade. Moving seaborne cargo over long distances is slow: steaming times from European ports to Japan average 30 days. Additional shipment delays are incurred in moving goods from inland factories to the coast, through customs facilities, and through ports themselves. Inland trade delays are significant for East Asian nations, at nearly 9 days for imports and 5 for exports, and much more so for South Asia, at 19 days for imports and 16 for exports (Hummels and Schaur 2013, Hummels and Nathan Associates 2007).

These delays translate into significant increases in the cost of trade. Hummels and Schaur (2013) estimate that each day in transit is equivalent to an ad valorem tariff of 0.6%–2.1% and find that the most time-sensitive trade flows involve parts and components trade. Djankov et al. (2010) show that poor infrastructure and lengthy inland delays reduce trade significantly for the most time-sensitive goods.

Why are delays so costly? Lengthy shipping times impose inventory-holding costs while goods are in transit. Goods subject to spoilage suffer immediate depreciation, while goods subject to rapid technological obsolescence such as consumer electronics suffer shortened selling windows. Timeliness is particularly important when demand is uncertain (Aizenman 2004, Evans and Harrigan 2005, Hummels and Schaur 2010). If firms know exactly what features of goods will appeal to consumers and the quantities they will sell, they can overcome any delay by simply ordering earlier and allowing time for goods to arrive. But when demand is uncertain, long lags between ordering and delivery require firms to commit to product specifications and quantities that may turn out to be costly mistakes.

These time costs are magnified when firms participate in GVCs. Inventory holding and depreciation costs on early value addition accrue for the duration of production in the chain. Demand uncertainty in later stages can be magnified in orders for early stage products in what is called the "bullwhip effect." Perhaps most importantly, the unexpected absence of key components, because of late delivery or quality defects, can idle an entire assembly plant. The opportunity cost imposed by delays can thus be many times the value of the parts being imported.

While countries cannot change their geography or the frequency with which oceangoing vessels call at their ports, there are policy remedies at their disposal. For many Asian economies, port congestion, slow customs procedures, and paperwork requirements significantly delay trade. Port congestion can be remedied through infrastructure investment, customs procedures can be streamlined, and paperwork requirements eased.

In some cases, customs delays result from inadequate staffing or deliberate attempts to slow competition from imports. It is important to recognize that many trade-related rules and standards can impose inadvertent delays. Subjecting cargos to more onerous security screening or checks for sanitary and phytosanitary standards can slow clearance. Enforcing preferential tariffs can cause delays as screeners ascertain whether

firms are more responsive to duties. That is, processing firms reduce their exports from the PRC much more than do ordinary firms, which is consistent with the view that processing firms switch production locations to avoid such tariffs.

As with tariffs, low and predictable rates for other taxes, including value-added taxes collected at the border, benefit GVC. Firms that lead GVCs often find their operations most profitable in the particular economies along the value chain where the tax regime is most favorable. Meanwhile, governments attract foreign direct investment with competitive investment incentives including tax holidays, not just internationally but among jurisdictions within a single economy. In this situation, national governments should coordinate stable and predictable tax policies that complement trade and investment policy but are not dictated by it (Madiès and Dethier 2010).

a particular cargo has met rules of origin and been registered under the appropriate tariff regime. These additional procedures may appear to be costless because no money changes hands but can nevertheless impose significant time costs.

Where ocean transit times are slow, air cargo is an important option. A large and growing fraction of world trade travels by air. From 1965 to 2004, the worldwide use of air cargo grew 2.6 times more quickly than the use of ocean cargo. Air cargo accounts for over 18% of world trade by value, but this percentage is much higher for economies that are remote, have high income, or trade goods with high ratios of value to weight, like electronics. Air cargo can be particularly valuable for inland regions with inadequate overland travel infrastructure to domestic ports.

Policy can play an important role here. First, deepwater ports should be centrally placed to the extent possible to shorten overland transport to them. Airports can be smaller than seaports and located in more places, making aviation infrastructure less expensive. To be clear, waterborne cargo will always be preferred for moving large quantities of heavy goods, but for light goods with high value air transport can be economical.

Second, international aviation services remain tightly regulated. Bilateral air service agreements typically restrict points of entry, the number of competitors, capacity, and pricing. Recent efforts to liberalize these markets have significantly reduced costs, improved the quality of transport services, and encouraged their expansion. This is true for both air cargo and for passenger aviation (Micco and Serebrisky 2006, Piermartini and Rousovà 2008, Cristea et al., unpublished).

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Trimming transport costs and delays

Difficulties in transporting goods between markets often impede GVC expansion more than tariffs do. Generally, transportation costs are higher and more volatile than tariffs. Prices for imports, particularly oil, can fluctuate significantly. Sharp increases in trade volumes cause expensive congestion in ports. Imbalanced trade, particularly between Asia and the US, means having to haul back empty containers, such that container prices on full ships steaming east across the Pacific are 2–3 times higher than on half-empty westbound ships—and prices fluctuate significantly with changes in the balance of trade. Popular accounts focus on the gains from containerization, especially when containers are stacked on ultra-large vessels plying major sea lanes between large trading partners. Waterborne transport does indeed offer very low costs in these cases, but this is not representative of the experience faced by many smaller exporters. What are their challenges, and which can be remedied by policy?

Shipping costs and delays are significantly higher for smaller and poorer countries (Box 2.3.2). For example, Ecuador's imports

from low-income countries bear transportation costs that are 4 times higher than those on US imports from OECD economies. This pattern holds systematically worldwide and is driven by several factors. First, transportation costs are proportional to shipment quantity, not value, which means that economies producing goods with a high ratio of weight or volume to value face higher ad valorem transportation costs. Second, the trend toward large container vessels has rendered small shipments inefficient as shipping services consolidate and concentrate on serving larger ports. As a consequence, in 2006 one in six importer–exporter pairs worldwide was served by a single vessel operating on that route. Monopolization on these routes has pushed shipping costs sharply higher (Hummels et al. 2009). Third, establishing modern transport infrastructure entails significant fixed costs: ports equipped with container lifts, warehouses, electronic data interchange capability, and multimode connections to ports. Smaller economies may not generate trade volumes sufficient to support these fixed costs. Or they may support fixed cost for only a few port cities, allowing them to connect to GVCs while leaving the hinterlands unconnected.

Some of these problems lie beyond remedy because transportation services are subject to international competitive pressures. But recent research suggests some important dimensions for policy intervention. First, producing higher-quality goods, or goods with high ratios of value to weight and volume, can minimize the ad valorem impact of high shipping costs (endnote 4). Second, high tariff and nontariff barriers reduce trade volume, and low trade volume translates into high shipping costs because of positive scale effects in transport. Thus, high policy barriers have a doubly malevolent effect on trade, reinforcing demand for their review. Third, where routes are monopolized by a single shipper, governments may want to pursue policies that counter this exercise of market power. Fourth, the scholarly evidence is clear that trade costs and trade volumes are highly sensitive to changes in the extent and quality of trade infrastructure, so governments should take this into account when setting their investment priorities (Volpe Martincus and Blyde 2013).

Product and process standards

The gradual shrinking of tariffs over the years—in part because export-oriented GVCs rely on imported intermediate products—has left other measures affecting imports correspondingly more influential on market outcomes (Kaplinsky 2010). Product and process standards are good examples of this trend. Standards are regulatory measures frequently referred to under the generic category of nontariff measures, which are broadly defined as policy measures other than ordinary custom tariffs that may have an economic effect on international trade in goods and services. Their effects are accentuated by the nature of GVC production. As GVC production, sourcing, and sales involve more jurisdictions than in the past, different standards regimes interact more intensely. Standards have thus become more important in the internal governance of value chains, affecting the ways in which costs, risks, and benefits are distributed along chains.

The need for standards

Lead firms that have the ultimate responsibility for the functioning of a value chain want to ensure that outsourced inputs meet technical specifications and quality demands. Global lead firms choose locations for different value chain activities partly on the perceived capability of potential suppliers and the state of infrastructure and services in their jurisdictions standards and conformity for assessing. Standards can thus help lead firms choose candidate suppliers with confidence that they can deliver.

From the perspective of outsourced suppliers, standards compliance signals to lead firms their capabilities. The ability of suppliers to meet standards enhances their competitiveness and mitigates their risk of being held captive in one GVC or lowly activity. However, acquiring the ability to meet standards is neither easy nor costless. Inability to conform to standards bars entry to less capable suppliers, often small firms or those with less capital. The actual costs of compliance include upgrading infrastructure, developing systems and practices including staff training, and establishing audit and certification capabilities.

Standards thus serve multiple functions that need to be understood when assessing standards regimes in terms of cost and suitability. They protect producers and consumers from harm, alleviate information asymmetries in the market place, promote compatibility in networked economies, facilitate production fragmentation, and signal potential partners' capabilities (Box 2.3.3, overleaf).

Standards that hinder trade

Unlike traditional policies affecting trade, such as tariffs, there is no debate about whether standards are necessary or not. The discussion is not about eliminating them, as might be the case with tariffs or quantitative restrictions. Rather, it is about the way they are designed, interpreted, and applied. If they are poorly designed, inefficiently managed, or appropriated for protectionist ends, standards can add to trade costs. In so doing, they diminish consumer welfare and the capacity of economies to participate fully in GVCs and thereby gain more opportunities to create value.

Standards can be a hindrance to international trade where there is regulatory divergence. If different economies espouse different standards, producers may either be cut out of markets or end up needing to run more than one production line. Differing packaging, marking, and labeling requirements across markets, for example, can considerably add to the costs of supplying multiple markets. For example, a GVC that produces infant products in the PRC to be sold internationally must comply with safety standards in both the PRC and all final markets, which often diverge. Even if standards are compatible, some jurisdictions may recognize certification only by domestic authorities or designated bodies, requiring duplicated assessments. Harmonized standards are clearly a solution, but harmonization across jurisdictions can be a fraught and lengthy process. The alternative of mutual recognition, built on the notion of equivalence, can be as effective. The existence of either harmonized and mutually recognized standards obviates the need for multiple conformity assessments.

2.3.3 Why standards are necessary

If markets imparted full information to all parties to every transaction, if there were no negative spillovers from market-driven behavior, if the requisite technical knowledge were available to all, and if no network interdependencies existed, there would arguably be no need for standards, whether government-mandated or not. Since none of these conditions hold in the real world, standards are essential for a variety of purposes.

Ensuring protection

Market transactions alone cannot adequately protect people or the environment in which they live. The failure of private actors to ensure acceptable protection of health, safety, social well-being, and the environment can be attributed to ignorance, deficient capacity to comply, neglect, and disregard for regulations. Protection has to be ensured through government.

Some standards relate to production processes. Public concern over food safety and traceability prompts many governments to place great importance on the process standards of food chains. Consider, for example, a value chain for egg products processed in Hong Kong, China. Local poultry farms must have a license to keep livestock, which requires compliance with treatment standards and processes to control and prevent disease. Imported eggs must be from sources approved by the jurisdiction's own food safety authority or competent regulatory authorities in the country of origin. In addition, all food premises involved in the chain, including food factories, cold storage, restaurants, and retailers, have to comply with the Food Hygiene Code, which specifies standards on premises design and construction, hygiene conditions, maintenance, safe food handling, and the training and hygiene of food handlers. Moreover, specific standards exist for certain food products and activities.

Some standards for goods themselves may be verified after production. For services, the emphasis is more on prequalifying, licensing, or certifying service providers because services, especially certain professional services, are supplied and consumed simultaneously, and the consequences of any shortcomings in competence or capacity are immediate. Civil engineering is a good example: Professional licenses with stringent requirements are required in most jurisdictions because of the grave risks to public safety from structures with faulty engineering.

Standards and asymmetric information

Producers almost always know more about their products than do consumers. This situation makes the case for government action to ensure that adequate information is available through the regulatory content of standards and associated requirements such as packaging, marking, and labeling, along with conformity assessments.

For GVCs, standards codify information about quality requirements, as well as product and process specifications. This becomes particularly important in value chains that involve multiple independent suppliers.

Infrastructure and institutions for effective standards

Although other institutions play a role in shaping standards in many sectors, the public sector is largely responsible for determining how standards regimes affect GVCs. National government policy in this domain is crucial for attracting GVCs and creating opportunities to participate in them. The quality of the standards regime is a determining factor here. This makes it essential to promote appropriate soft infrastructure by building capacity, developing suitable standards, streamlining regulation, and strengthening institutions that deal with standards. Standards and conformity assessment should not be barriers to entry or competitiveness. To this end, technical regulations and conformity assessment should neither discriminate nor impose unnecessary costs. Hard infrastructure also matters, perhaps requiring the government to foster the development of laboratories and other facilities, particularly where demand for calibration, accreditation, certification, and conformity assessment services is inadequately served. As more developing economies seek to enhance their participation in GVCs—including by undertaking more downstream production activities

In codifying complex information on product and process specifications and on quality, standards facilitate the fragmentation of production through modularization, which allows component production in the most efficient location. Modularization may also facilitate composite offerings or bundles of goods and services, which enhance value for suppliers.

Standards as signals

Suppliers advertise their compliance with standards to signal their production capability and product quality. For the most part, the signaling function of standards is voluntary and not a consequence of a government-mandated regulation. Obtaining quality assurance certification under the International Organization for Standardization, and getting more certification than is required by legislation, are ways of signaling excellence. Signaling may help a producer penetrate premium market segments and is particularly important when the exporting economy has not yet established a reputation for consistent safety and quality standards.

Civil society organizations are increasingly acting as watchdogs on environmental and socioeconomic standards, as social media raises public awareness. In the Republic of Korea, strong public resistance to genetically modified food has prevented its production by the domestic food industry despite the lack of a regulatory ban. Campaigns against genetically modified food organized by consumer groups and nongovernmental organizations appear to have played a major role in forming public opinion (Kim 2012). As consumer preferences go beyond the quality of final products, lead firms are becoming increasingly careful about the way they manage their value chains and how they communicate information to the public.

Standards and networks

Many economic activities take place through networks or rely on networks to operate effectively. Where networks are important, the value of a common standards increases with the number of users. Examples of network economies are the interoperability of satellite systems, standard electric power sockets, and a uniform gauge for railway lines. Radio-frequency identification is an example of a network effect brought about by a standardized protocol. Here the benefit is generated by the reading, updating, and sharing of data attached to the identification tag, as each participant in a value chain derives benefit from data provided by other participants.

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for GVCs that start in their jurisdiction with the primary production or extraction of raw materials—they will need to build up the quality of their standards regimes.

Governments should seek opportunities to strengthen the commercial and social benefits of standards while reducing unnecessary costs for businesses and consumers. Success requires focused commitment from policy makers, a strategic and proactive approach from business, and cooperative engagement among all stakeholders.

Conclusion

Asia has been central to the expansion of cross-border production networks. Many economies in the region have benefited greatly as a result from job creation and higher incomes. The economies of East and Southeast Asia including Japan generate the bulk of the region's GVC trade. The PRC has emerged as the regional hub for final assembly, particularly since its accession in 2001 to the WTO. The core components in the final goods exported to affluent markets originate

mainly in the industrialized East Asian economies—Japan, the Republic of Korea, and Taipei,China—and in the more advanced Southeast Asian economies, such as Malaysia and Thailand.

Few countries in Central Asia, South Asia, or the Pacific have found their GVC niche. These economies face multiple challenges to linking with GVCs: primarily remote location, underdeveloped transport infrastructure, and regulatory hurdles and policy deficiencies that further erode economies' appeal for GVC investment. All Asian economies face the challenge of strengthening links to dynamic production chains.

Falling trade costs have allowed cross-border production to emerge, but more can be done. Simulations of simple two-stage chains in Southeast Asia show that GVCs magnify trade costs by as much as 80%. As chains become more complex, the costs of moving intermediate goods between economies are amplified. Savings from small reductions in costs are similarly amplified and therefore offer outsized benefits for production network growth. Public policy can help connect an economy to cross-border production networks or fortify existing ties. However, because GVCs also magnify the costs of policy mistakes, policy makers must acquire skills and proceed cautiously.

Tariffs that are low and predictable are necessary for connection to GVCs. The PRC, for example, allowed processing firms to import components duty-free. This policy helped boost growth and productivity in the processing sector, supporting firms' efforts to shift quickly from simple labor-intensive manufactures to more sophisticated high-technology goods. Yet, even if tariffs are low today, uncertainty about future rates can dissuade firms from investing in GVCs. Economies can make tariffs more predictable by normalizing trade relations with partners, lowering their bound tariffs under the WTO, and eschewing temporary trade measures.

Lower transport costs may reduce trade costs even more than tariff reductions. Delays in moving goods from inland factories to the coast, through customs facilities, or through ports themselves add to shipping costs. Trade delays are significant: 9 days for imports into East Asia and 19 days into South Asia. Infrastructure investment can ease port congestion and speed inland transport. Streamlining customs procedures to eliminate unnecessary paperwork further trims shipping times. International cooperation—such as investment in regional transport corridors or WTO trade facilitation—can complement national efforts.

Process and product standards must not become barriers to trade. As with tariffs, GVCs magnify costs from nontariff measures such as product standards. As production lines span more economies, harmonized standards gain importance. Harmonization is less a question of eliminating standards than of ensuring that they are appropriate, as standards are crucial to public policy. Regulations and conformity assessments should not discriminate or unduly add costs, but they do require investment in infrastructure—laboratories and other facilities for calibration, accreditation, certification, and conformity assessment—to ensure compliance.

Asia can boost income and employment by building on its reputation as the world's workshop. Over the past 2 decades, the region has established itself as a global leader in GVC development and manufacturing—accruing the dividends of faster output, income, and employment growth as a result. Policies that enhance free trade in goods and services, and that foster the regional integration of markets for goods and their components, can further cement this reputation. Looking ahead, Asia is well positioned to deepen, broaden, and upgrade its role in global production networks.

Endnotes

1 The relative intensity measure is closely related to a traditional revealed comparative advantage (RCA) index.

$$RCA_c^i = \left(X_c^i / X_c^{total}\right) / \left(X_{world}^i / X_{world}^{total}\right).$$

Here, exports X is replaced in each case with the value of GVC participation (forward + backward) for each industry. The difference is that GVC participation for some industry i may include the use of inputs from some other industry. As such, it does not reveal comparative advantage so much as describe the intensity with which a country engages in the GVC in a given industry, relative to its overall participation in GVCs, and relative to participation in GVCs in industry i globally.

2 Indeed, an examination of international input–output structures reveals that the largest share of foreign value added in domestic production comes from imported inputs within the same industry. That is, electronics parts and components, for example, are the single largest imported input used in the production of final consumer electronics.

3 Wignaraja (2013) defines SMEs in GVCs as both direct exporters and, in their roles as suppliers to multinational corporations and other large firms, as indirect exporters.

4 To be clear, this is not to suggest that governments should favor firms producing goods of this sort. However, existing policy often favors goods with low ratios of value to weight and volume, especially those produced through agriculture, forestry, and mining. Such policies push firms to specialize in goods that face high trade costs.

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3

Economic trends and prospects in developing Asia

Economic trends and prospects in developing Asia

Subregional summaries

Central Asia

Subregional assessment and prospects

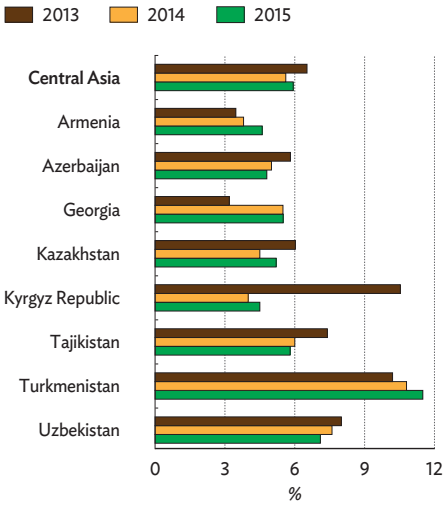
This *Update* cuts the growth forecast for Central Asia in 2014 to 5.6% from the 6.5% projected in *Asian Development Outlook 2014* (*ADO 2014*). This revision reflects lower growth projections in five of the eight countries: Armenia, Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan (Figure 3.1.1). The growth forecast for 2015 is also reduced, to 5.9% from 6.5% in *ADO 2014*, in line with lower projections for Armenia, Georgia, Kazakhstan, the Kyrgyz Republic, and Uzbekistan despite a slightly higher forecast for Turkmenistan.

The inflation forecast for the subregion in 2014 is decreased to 7.6% from the 9.0% in *ADO 2014*, as lower projections for Kazakhstan and Turkmenistan outweigh higher forecasts for the Kyrgyz Republic and Tajikistan (Figure 3.1.2). Inflation is projected to decline to 7.0% in 2015, as it further eases in Kazakhstan.

The projected current account balance for Central Asia in 2014 is reduced to 2.7% of GDP from 2.9% in *ADO 2014* because of narrowing surpluses in Turkmenistan and Uzbekistan and a wider deficit in Georgia (Figure 3.1.3). The subregion's surplus of 3.5% originally projected for 2015 is trimmed to 3.1% due to smaller surpluses in Kazakhstan, Turkmenistan, and Uzbekistan.

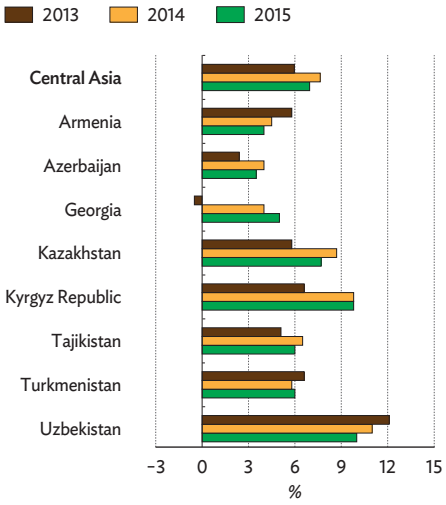
Lower growth projections reflect weakness in the Russian Federation, the subregion's main trading partner and source of remittances (Box 3.1.1), and smaller gains in key production sectors.

3.1.1 GDP growth, Central Asia



Source: Asian Development Outlook database.

3.1.2 Inflation, Central Asia



Source: Asian Development Outlook database.

This chapter was written by Christopher Hnanguie for Central Asia; Shiela Camingue-Romance, Donghyun Park, Arief Ramayandi, Aleli Rosario, Akiko Terada-Hagiwara, and Reza Vaez-Zadeh for East Asia; Hoe Yun Jeon, Sarah Carrington, and Anthony Baluga for South Asia; Anthony Patrick and Samiuela Tukuafu for Southeast Asia; and Aaron Batten, Prince Cruz, Caroline Currie, Christopher Edmonds, Ruth Francisco, David Freedman, Ella Gamboa, Milovan Lucich, Rommel Rabanal, Shiu Raj Singh, and Cara Tinio for the Pacific. Country highlights were contributed by various ADB resident mission staff.

For Armenia, the growth forecast is reduced for 2014 and 2015, as weakness in industry and construction caused economic activity to slow in the first half of 2014. Growth is projected to recover in 2015, reflecting higher production, increased domestic demand, and an expected revival in the Russian Federation. In Kazakhstan as well, a significant slowdown in industrial output in the first half of 2014 prompts lower growth forecasts for both years. Higher investment and massive stimulus packages are expected to support recovery in the second half of 2014 and into 2015.

For the Kyrgyz Republic, the growth forecast for 2014 is slashed by 2.5 percentage points, reflecting smaller gains in industrial production apart from gold mining in the first half of the year, lower remittances, and declining trade. A modest recovery in 2015 is projected, based on gains in agriculture and industry.

Turkmenistan's growth forecast is trimmed slightly for 2014 on the basis of reported growth in the first half but revised up by 1.5 percentage points for 2015, as new processing facilities should boost gas production. In Uzbekistan, growth is downgraded for 2014 in light of uncertain prospects in major trading partners and a projected slowdown in the fuel industry, and for 2015 because lower prices for cotton and gold, and slower growth in key trading partners, will affect external demand beyond 2014.

Growth projections for Azerbaijan, Georgia, and Tajikistan remain unchanged for 2014, despite the geopolitical uncertainty. Although Azerbaijan's growth slipped to less than half of the forecast rate in the first half of 2014, anticipated increases in oil production, construction, services, and agriculture in the second half of the year are expected to sustain earlier growth projections. Georgia's growth forecast for 2014 remains unchanged, reflecting a strong performance in the first half of the year, but for 2015 is cut by half a percentage point, partly because of a slower recovery forecast in the Russian Federation. Tajikistan's projected growth rates are retained because domestic demand has remained strong. This reflects increased remittances, which have boosted private consumption, and continued growth in industry despite a drop in aluminum production.

The subregional inflation forecast is reduced from 9.0% to 7.6% in 2014 and from 7.4% to 7.0% in 2015 in line with slower growth prospects and continuing price controls in some countries. The sharp revision for 2014 reflects a forecast 2.8 percentage points lower for Kazakhstan and nearly 1.0 point lower for Turkmenistan, which outweigh higher inflation forecasts for the Kyrgyz Republic and Tajikistan. In Kazakhstan, price spikes following the tenge devaluation in February 2014 were offset by significant declines in prices for services. In Turkmenistan, the lower forecast for 2014 reflects price declines for food and services in the first half of the year. The downward revision for 2015 follows from lower inflation in 2014.

Currency depreciation prompts higher 2014 inflation forecasts for the Kyrgyz Republic and Tajikistan. In the Kyrgyz Republic, the 2014 inflation forecast is revised to 9.8%, as depreciation raised food prices by 9.5% in the first half of the year. Inflation is now projected to remain at this rate in 2015, 3.8 percentage points above the *ADO 2014*

3.1.1 The Russian Federation connection

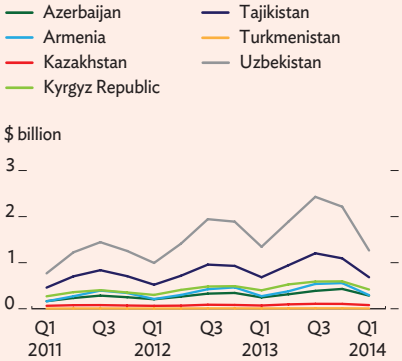
Central Asia has extensive economic ties with the Russian Federation through trade, investment, and workers' remittances. The links are especially close in the energy, construction, and service sectors, where trade and remittance connections are the strongest.

Weakness in the Russian Federation's economy—exacerbated by Western sanctions—is affecting Armenia, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan through lower trade volumes (box figure 1) and smaller remittance inflows (box figure 2). These trends help explain the slower growth outlook for Central Asia as a whole.

1 Merchandise imports to the Russian Federation from the rest of the Commonwealth of Independent States

Source: The Central Bank of the Russian Federation. http://www.cbr.ru/eng/statistics

2 Personal remittances from the Russian Federation to Central Asia



Source: The Central Bank of the Russian Federation. http://www.cbr.ru/eng/statistics

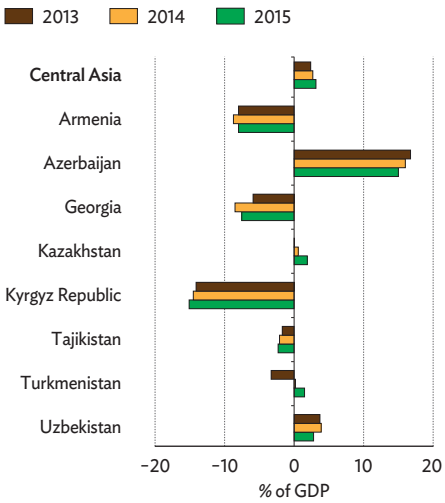
projection, as entry into the customs union with Belarus, Kazakhstan, and the Russian Federation in late 2014 is expected to cause price hikes. In Tajikistan, a 5.0% currency depreciation helped raise inflation to 6.6% in the first half. The 2014 inflation forecast for Tajikistan is thus revised up a percentage point to 6.5%, while the 2015 inflation forecast remains unchanged.

As upward pressure on global commodity and food prices moderates, inflation forecasts for Armenia, Azerbaijan, Georgia, and Uzbekistan are maintained for 2014 and 2015.

The subregional current account surplus is now forecast at 2.7% of GDP in 2014, reduced from 2.9%, and at 3.1% in 2015, revised down from 3.5%, mainly because of smaller projected surpluses in three petroleum exporters. Kazakhstan's projected surplus remains unchanged for 2014 but is lower for 2015 because of delays in commissioning the Kashagan oil field. Turkmenistan's surplus is now projected to decline in 2014 on the expectation of much larger imports of goods and services for the hydrocarbon and construction sectors; the projected rebound in 2015 as new gas facilities come into operation will generate a surplus smaller than expected in *ADO 2014*. Uzbekistan's projected surpluses for both 2014 and 2015 are lowered because of weaker demand and prices for exports.

Current account deficits are still expected in Central Asia's four energy importers: Armenia, Georgia, the Kyrgyz Republic, and Tajikistan. Georgia's deficit projection is now widened for 2014 because of higher imports but maintained for 2015 in view of expected improvements in the trade balance. Current account forecasts for Armenia and Tajikistan remain unchanged for 2014 and 2015 in anticipation of lower fuel prices and relatively favorable prices for exports. The projection for the Kyrgyz Republic's current account deficit is narrowed for 2014 because of slower growth, but a weaker trade balance linked to entry into the customs union is projected to expand the deficit in 2015 to 15.1%, as forecast in *ADO 2014*.

3.1.3 Current account balance, Central Asia



Source: Asian Development Outlook database.

Country highlights

Armenia

Growth slowed to 2.6% in the first half of 2014 from 3.5% in the same period of 2013. An 0.8% drop in industry and growth at only 0.7% in construction and 1.9% in agriculture contributed to the slowdown; services grew by 3.7%. Acceleration over the whole of 2014 is expected to come on the supply side mainly from faster growth in services, and on the demand side mainly from a recovery in private consumption supported by public sector wage hikes. Considering current trends and the effects of the slowdown in the Russian Federation, growth projections are trimmed by 0.8 percentage points for 2014 and half as much for 2015.

Inflation eased in the first half of 2014 to an annual rate of 4.0%, down from an average of 5.8% in the full year 2013, as the remaining effects of electricity and gas price hikes in July 2013 were fully absorbed. The 12-month inflation rate declined further to 1.8% in June from 5.6% in December 2013, well below the central bank's target band of 2.5%–5.5%. Nevertheless, inflation forecasts are retained for both 2014 and 2015,

3.1.1 Selected economic indicators, Armenia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	4.6	3.8	5.0	4.6
Inflation	4.5	4.5	4.0	4.0
Current acct. bal. (share of GDP)	−8.7	−8.7	−8.0	−8.0

Source: ADB estimates.

as expansionary fiscal policy, the easing of monetary conditions, and a 10% electricity price increase in August 2014 are expected to exacerbate inflationary pressures during the second half of 2014.

The current account deficit narrowed markedly to 8.0% of GDP in 2013 from 11.1% in 2012, reflecting improvements in all components. However, slower economic growth in the Russian Federation—Armenia's largest trading partner and main source of remittances—has weakened the outlook for the external sector. The forecast deficits in the current account, unchanged for the next 2 years, show no further improvement.

Azerbaijan

ADO 2014 forecasts are maintained across the board.GDP grew by 2.1% during the first half of 2014, sharply decelerating from 5.0% in the same period in 2013. The slowdown reflected mainly a 3.9% contraction in the oil sector, which accounts for half of GDP. However, growth in the rest of the economy also declined in the first half, to 7.0% from 10.9% a year earlier, partly because cuts in public investment slowed growth in construction. Despite the slowdown, the growth forecasts for 2014 and 2015 are maintained for two reasons. First, oil production is expected to catch up during the rest of the year, as oil wells other than the main Azeri–Chiraq–Gunashli platform are brought on line. Second, the government's regional development program, approved early this year, is expected to complement the ongoing social housing program and rising demand for real estate in boosting investment in the second half of the year.

The consumer price index showed a 1.6% increase in the first half of 2014, as food prices rose by only 1.2% and inflationary pressures from higher fuel tariffs were offset by price-controlled food markets and lower import costs from tax exemptions for some agricultural items and equipment. However, a cut in the central bank's policy rate from 4.75% to 4.25% is expected to accelerate credit growth, boosting domestic demand and monetary expansion. Thus, the *Update* maintains the *ADO 2014* inflation forecasts for 2014 and 2015.

External trade remains robust despite lower oil production during the first half of 2014. The current account surplus narrowed slightly to $6.2 billion in the first half of 2014. However, the trade balance for the full year is projected to be unchanged, as the imposition of new standards for imported cars and a slowdown in consumer lending reduced imports by some 20% in the first half of 2014 from the same period of 2013. Accordingly, the *Update* maintains the *ADO 2014* forecasts for current account surpluses in 2014 and 2015.

3.1.2 Selected economic indicators, Azerbaijan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.0	5.0	4.8	4.8
Inflation	4.0	4.0	3.5	3.5
Current acct. bal. (share of GDP)	16.0	16.0	15.0	15.0

Source: ADB estimates.

Georgia

GDP grew by an estimated 6.0% in the first half of 2014, following a relatively flat performance in 2013. Growth was driven by higher domestic demand, exports, foreign direct investment, and remittances, as a low refinancing rate and increased fiscal stimulus improved business confidence. Despite the strong first half, the *Update* maintains the 2014 growth forecast and lowers the 2015 estimate by half a percentage point because of the growth slowdown in the Russian Federation and continuing geopolitical uncertainty.

3.1.3 Selected economic indicators, Georgia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.5	5.5	6.0	5.5
Inflation	4.0	4.0	5.0	5.0
Current acct. bal. (share of GDP)	–8.0	–8.5	–7.5	–7.5

Source: ADB estimates.

Inflation forecasts remain unchanged from those made in *ADO 2014* for both years. Annual inflation rose to 2.8% by July 2014 (versus reported deflation in 2013) as food and utility prices increased in the first half of 2014. Higher demand-side inflationary pressures, driven by expanded fiscal stimulus and an accommodating monetary policy that should boost lending, are expected to fuel inflation in 2015.

Exports rose by 14.9% in the first half of 2014, sharply above the 8.5% recorded for the corresponding period of 2013. Imports grew even more, by 15.8%, partly reflecting a steep rise in investment inflows—and causing the trade deficit in the first half of the year to deteriorate by 16.3% to $2.6 billion. Growth in remittances in the first half slowed to 4.2%, reflecting a 3.1% decline in remittance inflows from the Russian Federation. In view of these developments, the forecast current account deficit for 2014 is raised by half a percentage point. However, the deficit forecast for 2015 remains unchanged.

Kazakhstan

Growth slowed to 3.9% in the first half of 2014, the slowest rate since 2009, from 5.1% in the same period of 2013. The 19% devaluation of the Kazakh tenge in February 2014 depressed services, while industrial output fell by 0.4%, reflecting a decline in oil production and slowdowns in metallurgy (particularly copper), chemicals, and other manufacturing. However, agriculture expanded by 3.3%, and construction by 4.2%, benefiting from ongoing state support. Higher fixed capital investment, improved consumer sentiment, and massive government stimulus packages are expected to accelerate growth in the second half of 2014 and into 2015. Nevertheless, the growth forecast is downgraded for both years.

Inflation in the first half of 2014 eased to 6.1% from 6.6% a year earlier. Despite extensive price controls, prices for food rose by 5.7%, compared with 4.8% in the first half of 2013, and for other goods by 5.8%, compared with 3.3% in the earlier period. Price increases for services slowed to 6.9% from 12.0% a year earlier, owing to regulatory restrictions on utilities. Efforts to freeze prices caused shortages that are expected to fuel inflation in the second half of 2014. Nevertheless, because of the slowdown in growth, the inflation forecast is revised down by 2.8 percentage points in 2014 and by rather less in 2015.

The current account posted a record surplus of $6.3 billion in the first quarter of 2014, as exports expanded by 10.8% on a 22.0% increase in oil exports. Imports slid by 10.8%, mainly reflecting a 19.5% decline in imported investment goods. As both developments are considered temporary, the current account surplus for 2014 is still projected at 0.6% of GDP, but the projected surplus for 2015 is revised down on the expectation that the Kashagan oil field will not be commissioned before 2016.

3.1.4 Selected economic indicators, Kazakhstan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.0	4.5	6.4	5.2
Inflation	11.5	8.7	8.8	7.7
Current acct. bal. (share of GDP)	0.6	0.6	2.3	1.9

Source: ADB estimates.

Kyrgyz Republic

Growth slowed to 4.1% in the first half of 2014 from 7.9% in the same period of 2013, as the expansion in industry slowed to 7.2% from 13.8% a year earlier, reflecting a decline in glass, cement, and mining other than

3.1.5 Selected economic indicators, Kyrgyz Republic (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.5	4.0	5.5	4.5
Inflation	7.0	9.8	6.0	9.8
Current acct. bal. (share of GDP)	–15.7	–14.5	–15.1	–15.1

Source: ADB estimates.

gold. The slowdown in industry and a modest 1.4% rise in agriculture offset an 18.5% expansion in construction. On the demand side, stagnation in the Russian Federation weakened remittances and trade, though investment strengthened. Exports are expected to rise, but meager gains in domestic demand prompt cutting the growth forecast for 2014 by 1.5 percentage points and for 2015 by 1.0 point. An expected modest rebound of the Russian economy would help realize these projections.

Inflation in the first half of 2014 reached 6.3%, reflecting a 9.5% rise in food prices, fueled by the 5.8% depreciation of the Kyrgyz som in the first half of the year and smaller increases of 2.3% for other goods and 2.0% for services. Current trends and the expectation of further modest price increases for food and services prompt an upward revision of the inflation forecast for 2014 by 2.8 percentage points to 9.8%. Inflation is projected to remain at this rate in 2015, 3.8 points above the *ADO 2014* forecast. This reflects mainly the price adjustments expected from the country's anticipated accession into the customs union with Belarus, Kazakhstan, and the Russian Federation, including a rise in fuel prices by roughly 30% to match those in the Russian Federation.

The trade deficit shrank by 16.5% in the first half of 2014, as exports rose by 11.7% and imports fell by 9.5%. Export growth came from increases of 45.0% for gold and 36.1% for other metals, while the decline in imports resulted mainly from sharply lower imports of gas (by 60.0%), diesel (26.1%), other fuel (25.4%), textiles (12.4%), and machinery and equipment (11.4%). As slower growth is expected to keep imports weak, the projected current account deficit for 2014 is reduced by 1.2 percentage points. However, the deficit forecast for 2015 remains unchanged.

Tajikistan

Growth remained robust at 6.7% in the first half of 2014, though less than the 7.5% recorded in the same period of 2013. On the demand side, growth reflected higher consumption and a 28.4% rise in investment. On the supply side, industrial expansion halved to 2.9% from 6.6% in the same period of 2013, reflecting a 47% contraction in aluminum production and increases in coal and cement production, food processing, and electricity generation and distribution. Growth in agriculture also slowed, to 6.0%, as cultivated area contracted, particularly for cotton.

Remittance inflows declined slightly in the first half of 2014, as growth slowed in the Russian Federation, but are expected to remain strong enough to continue fueling growth through private consumption. Retail trade and services are expected to continue growing strongly for the rest of 2014, while continued moderate growth is expected in industry, construction, and agriculture. Accordingly, the growth forecasts in *ADO 2014* are maintained.

Average inflation rose slightly to 6.6% in the first half of 2014, higher than in the same period of 2013, as the Tajik somoni depreciated by about 5% in the first quarter of 2014. The exchange rate remained relatively stable in the second quarter of 2014, moderating inflationary expectations. The authorities remain committed to maintaining prudent fiscal and monetary policies. Nevertheless, the inflation forecast is raised by 1.0 percentage point for 2014, with no change for 2015.

3.1.6 Selected economic indicators, Tajikistan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.0	6.0	5.8	5.8
Inflation	5.5	6.5	6.0	6.0
Current acct. bal. (share of GDP)	–2.1	–2.1	–2.3	–2.3

Source: ADB estimates.

Exports shrank by 14.8% year on year in the first 6 months of 2014, mainly tracking declines in aluminum and cotton exports. Meanwhile, imports soared by 23.5%, fueled by remittances. Continued healthy remittance inflows are expected to help limit the current account deficit for the rest of the year. Projected current account deficits in *ADO 2014* are retained for both 2014 and 2015.

Turkmenistan

GDP reportedly rose in the first half of 2014 by 10.3%, which underperformed expectations. On the supply side, a 9.0% expansion in industry was the main factor responsible, as gas output increased by 12.0% and construction by 15.0%. On the demand side, growth was sustained by an 8.3% rise in investment and a 14.7% rise in gas exports. Growth is expected to remain strong, as large public investment projects are implemented and new processing facilities at the Galkynysh gas field raise production. The growth forecast is trimmed marginally to 10.8% in 2014. Then growth is seen accelerating to 11.5% in 2015, rather than slowing as in the *ADO 2014* projection.

Despite continued rapid growth in domestic demand, the inflation forecast for 2014 is lowered because of reported declines in prices for food and services in the first 5 months of the year. Faster growth in 2015 is expected to nudge inflation up in 2015 but less than forecast in *ADO 2014*.

Using new facilities at the Galkynysh gas field, exports are expected to rise steadily in 2014 and 2015 to fill long-term gas contracts with the People's Republic of China (PRC). However, anticipated heavy imports of technological goods and services for the hydrocarbon and construction sectors are expected to hold the current account surplus well below the 2.0% forecast in *ADO 2014*. For 2015, the forecast of the current account surplus is narrowed by half a percentage point, despite expectations that higher gas exports to the PRC will continue to offset possible declines in demand from the Russian Federation and Iran.

3.1.7 Selected economic indicators, Turkmenistan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	11.0	10.8	10.0	11.5
Inflation	6.7	5.8	6.2	6.0
Current acct. bal. (share of GDP)	2.0	0.2	2.0	1.5

Source: ADB estimates.

Uzbekistan

According to government sources, GDP grew by 8.1% in the first half of 2014, up slightly from 8.0% in the same period of 2013. On the supply side, growth was driven by gains of 8.1% in industry and 14.2% in services, the latter reflecting strong performances in finance and telecommunications. Agriculture rose by 6.9%, as favorable weather contributed to a record grain harvest and higher fruit and vegetable output.

Investment was the main source of growth on the demand side, with gross fixed capital formation rising by 10.8% as the government continued implementing large development programs. Although the trade balance had moved into surplus by the end of the second quarter, lower global prices for cotton and gold, coupled with decelerating growth in such key trading partners as the Russian Federation, the PRC, the Republic of Korea, and Ukraine, have begun to affect external demand. The possible further weakening of the already stagnating economy of the Russian Federation has raised additional risks to domestic consumption in the form of a projected fall in remittances.

3.1.8 Selected economic indicators, Uzbekistan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	8.0	7.6	7.8	7.1
Inflation	11.0	11.0	10.0	10.0
Current acct. bal. (share of GDP)	4.7	3.9	3.6	2.8

Source: ADB estimates.

The deteriorating external environment prompts downward revisions in the growth forecasts for 2014 and 2015.

The government reported that average monthly inflation in the first quarter of 2014 was 0.9%, or 11.3% on an annualized basis, identical to consumer price index increases in the first quarter of 2011, 2012, and 2013. As trends in supply-and-demand factors of inflation have generally followed the scenarios projected in *ADO 2014*, the earlier inflation forecasts are retained.

Unexpectedly weak trade performance in the first half of 2014 and slowing growth in Uzbekistan's main trading partners call for a more conservative forecast for the current account balance. Thus, the current account surpluses projected for 2014 and 2015 are both reduced by 0.8 percentage points.

East Asia

Subregional assessment and prospects

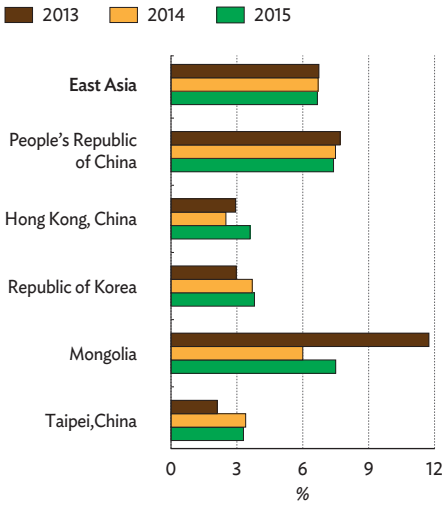
Growth decelerated in the first half of 2014 in all the economies of East Asia but one. In Taipei,China, both domestic and external demand strengthened thanks to increased travel and retail sales and higher private sector investment. In the rest of the subregion, both domestic and external demand weakened. In the Republic of Korea in particular, growth faltered as the Sewol ferry disaster softened private consumption. Hong Kong, China saw investment fall, especially in construction and industry, and growth in private consumption decelerate as retail sales suffered a sharp slump. Mongolia was hard hit by curtailed stimulus measures and a steep fall in foreign direct investment.

Fiscal tightening and a decline in real estate investment moderated growth in the People's Republic of China (PRC) in the first quarter of 2014, but more accommodative policies in the second quarter revived the growth rate. The contribution of investment and net exports to GDP growth declined while that of consumption increased, spurred by rising wages.

As in past years, growth rates will vary substantially across East Asia, but average growth in the subregion will remain stable at 6.7% in 2014 and 2015, as moderation in the PRC and Hong Kong, China and a slowdown in Mongolia are offset by upswings in the Republic of Korea and Taipei,China, both benefiting from rising exports. The PRC economy will be buffeted by a shrinking workforce and a sluggish property sector, but economic stimulus and rising external and internal demand are expected to sustain the growth momentum; growth projections for 2014 and 2015 thus remain unchanged. GDP growth in Mongolia will fall sharply below the *ADO 2014* forecasts for 2014 and 2015 as foreign direct investment plummets and mining projects are delayed, but this resource exporter will remain the fastest growing economy in the subregion in 2015, followed by the PRC.

Consumer price inflation in East Asia will remain subdued at 2.4% in 2014, a little less than forecast by *ADO 2014* in April, but is likely to creep up to 2.9% as forecast in 2015, mainly reflecting the trend in the PRC. The 2014 inflation forecast for the PRC is reduced from 2.6% to

3.1.4 GDP growth, East Asia



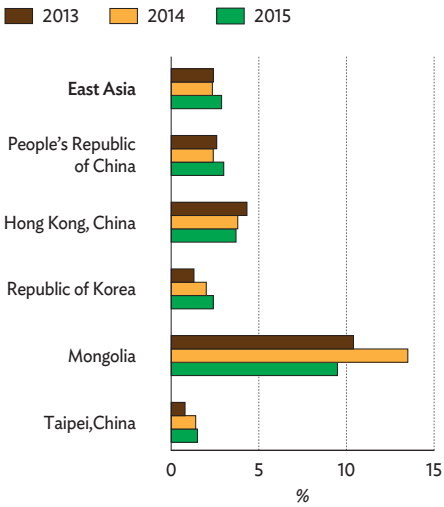
Source: Asian Development Outlook database.

2.4% in response to the downward trend in the first half of the year. However, inflation will likely accelerate to 3.0% in 2015 as forecast in April, pushed up by price reform and moderating producer price deflation as global metal prices rise. In Taipei,China, rising incomes and rising labor costs will push inflation above *ADO 2014* projections for both years, and inflation in Hong Kong, China will outpace the subregional average. Mongolia will again be the outlier, recording rising double-digit inflation in 2014 that exceeds earlier expectations, followed by a smaller price hike in 2015.

On the external front, PRC exports suffered from weakening external demand and an appreciating currency during the first half of the year, while the slack in construction curtailed imports. The trade surplus grew, but the deficit in services and transfers widened, which cut into surpluses in both the current account and the overall balance of payments. Improved terms of trade, stronger external demand, and a weaker renminbi should widen the current account surplus in 2014, but the surplus may narrow again in 2015 as the currency appreciates. In Hong Kong, China, exports rebounded in the first half of 2014, but a huge contraction in tourist expenditure pushed net exports down and the current account into deficit in the first quarter. In Mongolia, the current account deficit halved in the first 6 months of the year as copper and oil exports expanded and imports contracted with slowing mine development. However, the still-sizable deficit and plummeting capital inflows pushed the balance of payments into a deep deficit, sharply draining Mongolia's gross international reserves, which covered only 3.0 months of merchandise imports by midyear, and weakening its currency. This starkly demonstrates Mongolia's vulnerability to external shocks.

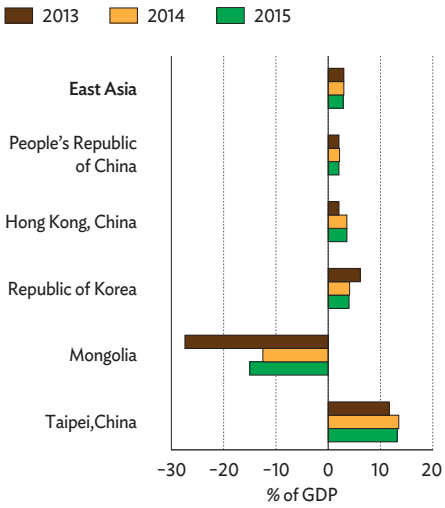
Expected growth acceleration in the US should improve the current account for the subregion, but such optimism is tempered by renewed uncertainty about growth in the euro area and a possible early tightening of monetary policy in the US. On balance, East Asia's current account surplus is projected at 3.0% of combined GDP in 2014 and 2.9% in 2015. Only Mongolia is expected to record deficits, and they will be large in both years, albeit lower in 2014 than projected in April as a percentage of GDP. For the Republic of Korea and Hong Kong, China, the forecasts of the current account surplus as a ratio to GDP for 2014 and 2015 remain unchanged as in April, but they are raised for the PRC and Taipei,China.

3.1.5 Inflation, East Asia



Source: Asian Development Outlook database.

3.1.6 Current account balance, East Asia



Source: Asian Development Outlook database.

Country highlights

People's Republic of China

GDP growth moderated in the first quarter of 2014 as real estate investment declined, but monetary and fiscal measures revived growth in the second quarter to reach 7.4% in the first half. The contribution of investment and net exports declined while that of consumption increased as wages rose. On the supply side, services outpaced other sectors, driven by urbanization, tax reform, and business deregulation. Consumer price inflation eased from 2.5% year on year in December 2013 to 2.3% in July 2014, and producer price deflation moderated as global metal prices rose.

3.1.9 Selected economic indicators, People's Republic of China (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.5	7.5	7.4	7.4
Inflation	2.6	2.4	3.0	3.0
Current acct. bal. (share of GDP)	2.0	2.2	1.9	2.1

Source: ADB estimates.

Budgetary tightening at the beginning of 2014 was followed by accelerated government spending that, with a decline in revenue growth, trimmed the consolidated budget surplus of the central and local governments in the first half of the year to 2.0% of GDP. As off-budget expenses similarly seemed to decline in early 2014 and pick up again later, fiscal policy was contractionary in early 2014 but later became more accommodative. Monetary policy was accommodative in the first half, during which the broad money supply grew by 13.3%. However, credit growth outside the banking sector was on a declining trend.

Weakening external demand weighed on exports, but slack in construction slowed import growth such that the trade surplus widened in the first half. Both the current account surplus and the overall balance of payments declined, however, as the deficit on services and transfers widened. Central bank liquidity injections beginning in February 2014 interrupted the trend appreciation of the renminbi vis-à-vis the US dollar, but moderate appreciation resumed in May.

GDP growth projections for 2014 and 2015 are unchanged, supported by continued government stimulus and rising external demand. Consumption expenditure will remain robust, driven by more equitable income growth and higher social spending. The inflation forecast is revised down for 2014 but not for 2015. Improved terms of trade, stronger external demand, and a weaker renminbi should mean a slightly larger current account surplus as a percentage of GDP in 2014, not smaller as forecast in April. Likely renminbi appreciation could reverse this trend in 2015.

Regarding policy, the consolidated budget deficit for the whole of 2014 will likely exceed the indicative target of 2.1% of GDP and continue to grow in 2015 as more off-budget activities are brought on budget. Monetary policy will likely be tighter in 2015 to encourage financial deleveraging, and the renminbi–dollar exchange rate band will be widened to allow more effective response to capital flows.

The projections assume that the government can fine-tune measures to sustain growth without a buildup of fiscal and financial risks. They further assume that the US Federal Reserve's tapering of quantitative easing will not impede capital inflows and that the PRC will weather the effects of any slowdown in Europe.

Hong Kong, China

Growth in the first half of 2014 slowed to 2.2% year on year from 2.9% a year earlier. Inflation averaged 3.9%, down from 4.3% in 2013. GDP growth moderation in the first quarter was followed in the second by contraction of 0.1%, quarter to quarter and seasonally adjusted, as investment fell and private consumption markedly decelerated to 1.4% year on year in the first half of 2014 from 5.5% a year earlier. Retail sales, which had grown rapidly since 2010, dropped in June 2014 by 9.1% year on year and seasonally adjusted, following contraction over the previous 3 months, and private consumption contracted by 0.9% quarter on quarter and seasonally adjusted. Gross domestic fixed capital formation shrank by 1.5% year on year in the first half, dragged down mainly by low expenditure on machinery and equipment.

3.1.10 Selected economic indicators, Hong Kong, China (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.5	2.5	3.6	3.2
Inflation	3.8	3.8	3.7	3.7
Current acct. bal. (share of GDP)	3.5	3.5	3.5	3.5

Source: ADB estimates.

Exports grew by 1.2% in the first half of 2014, but services exports slowed as lower tourist spending caused travel services to drop by 11.5% in the second quarter. Faster growth in imports at 1.3% led net exports to subtract 0.1% from growth in the first half of the year. As the income account grew only marginally, the current account balance registered a deficit equal to 0.8% of GDP in the first quarter, following a seasonal pattern.

The growth forecast for 2014 is revised down 1.0 percentage point based on the slowdown in the first half, cautious consumer sentiment, and risks to external demand from rickety growth in some advanced economies. The 2015 growth forecast is moderated to 3.2% as some of the weaknesses in 2014 may be carried through to 2015. The inflation forecast is unchanged, showing a downward trend on stable oil and food prices and milder rent increases. While trade-related data up to July and rising optimism about a recovery in the US imply an improved current account, renewed uncertainty about growth in the euro area and a possible early tightening of monetary policy in the US counter such expectations. On balance, the forecasts for the surplus in the current account remain unchanged.

Republic of Korea

GDP growth decelerated from 3.9% year on year in the first quarter of 2014 to 3.6% in the second, dragged down as private consumption contracted by 0.3%. Quarter-on-quarter construction investment rose by 0.4% and plant investment by 1.1%, contributing to a 1.1% rise in imports. Exports also grew, by a healthy 1.7%, on strong foreign demand for chemicals and liquid crystal displays.

Private consumption softened in response to one-off shocks: the Sewol ferry disaster, the government-ordered suspension of service by three major telecom companies for 45 days for violating subsidy and other regulations, and large layoffs at Korea Telecom and in the finance industry. Expenditure on private dining and entertainment was especially affected.

In light of these developments, the government lowered in July its forecast for GDP growth in 2014 from 3.9% to 3.7% and its forecast for consumer price index inflation from 2.3% to 1.8%. At the same time, it adopted a fiscal stimulus of W41 trillion in additional spending and financing support, and relaxed some mortgage rules. The Bank of Korea announced plans to create a W3 trillion lending facility to support capital investment, and it cut its benchmark interest rate in mid-August by 25 basis points after 14 months at 2.5%. These measures reflect concern about a loss of economic dynamism beyond the one-off shocks. They indicate the commitment of the government and the central bank to growth and, coupled with a favorable external environment and a brightening US outlook in particular, will likely stimulate growth despite a strong won—and barring a slowdown in the PRC, the top export market. Stable global commodity prices and fragile domestic demand will keep inflation subdued.

In sum, this *Update* projects GDP growth unchanged from the *ADO 2014* forecasts. The inflation forecasts are now marginally more

3.1.11 Selected economic indicators, Republic of Korea (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.7	3.7	3.8	3.8
Inflation	2.1	2.0	2.5	2.4
Current acct. bal. (share of GDP)	4.1	4.1	4.0	4.0

Source: ADB estimates.

benign for both 2014 and 2015. The forecasts for the current account surplus are unchanged.

Mongolia

Economic growth slowed to 5.3% in the first half of 2014. It decelerated sharply from 8.7% year on year in the final quarter of 2013 to 7.5% in the first quarter of 2014 and to 3.8% in the second, as stimulus was partly withdrawn and foreign direct investment plunged by 62.4%, tamping down investment by 32.4%. Consumption increased by 10.1%, however, and exports grew by 19.1%, driven by copper and oil. Imports fell by 8.3% as mine development slowed. On the supply side, agriculture expanded by 16.3% to continue as a key driver of growth. Industry value added increased by 10.1% thanks to increased output from the Oyu Tolgoi copper mine and dynamism in construction boosted by the central bank's mortgage program. Services expanded by only 1.9% as currency depreciation and plunging investment in new mining projects took their toll.

Consumer price inflation soared to 12.9% year on year in July, fueled by last year's highly expansionary fiscal and monetary policies. This prompted the central bank to raise its policy rate from 10.5% to 12.0% in August and to reduce lending to banks by 32.5% by midyear.

Government revenues increased by 8.4% in the first half of 2014, while on-budget expenditure rose by 12.6%, significantly less than budgeted, to leave a deficit of 2.2% of GDP. Financing from the Development Bank of Mongolia, a major source of off-budget expenditure, dropped to 6.3% of GDP in the first half from 8.8% in 2013 as a whole.

The current account deficit narrowed by 50.6% in the first half of this year, but the deficit in the balance of payments remained high. Gross international reserves had fallen by June to $1.3 billion, or cover for 3.0 months of merchandise imports, and the Mongolian togrog had depreciated by the middle of August by 14% to MNT1,892, its lowest rate ever against the US dollar. The togrog subsequently recovered by 5% in light of an agreement with the central bank of the PRC to increase the ceiling on currency swaps.

The growth forecast is revised down substantially for 2014 and 2015 because of unexpectedly slow growth in the first half, persistent delays in large mining projects, and likely further policy tightening. Given the trend so far in 2014, inflation this year will be higher than forecast in *ADO 2014*, but restrictive policies are expected to rein in price increases in 2015 with inflation moderating but remaining above the April forecast. The current account deficit will narrow in 2014 much more than earlier forecast, then return in 2015 to the forecast narrowing trend from a high in 2012. Risks to this outlook stem from the economy's vulnerability to external shocks, in particular from commodity prices, and uncertainty regarding the authorities' success in moderating its expansionary policies.

3.1.12 Selected economic indicators, Mongolia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	9.5	6.0	10.0	7.5
Inflation	11.0	13.5	8.0	9.5
Current acct. bal. (share of GDP)	–20.0	–12.5	–15.0	–15.0

Source: ADB estimates.

Taipei,China

As growth momentum gathers pace, inflation is creeping up but remains low. GDP grew in the second quarter of 2014 by 3.7% year on year as both domestic and external demand strengthened, bringing average growth for the first 6 months of the year to 3.5%. Private consumption rose by 2.7% and contributed 1.5 percentage points to growth, thanks to increased travel and retail sales. Investment climbed by 3.8% as the private sector boosted capacity, adding 0.6 percentage points to growth. Net exports expanded by 7.0%, adding another 1.4 percentage points to growth. Consumer prices rose by 1.2% during the first 6 months of the year, as electricity rates crept up and heavy rainfall and a viral livestock epidemic inflated food prices.

Demand is expected to remain strong at home and abroad. Export orders, an indicator of near-term export volume, increased by 5.4% in the first half of 2014, reversing a 1.7% slump in the first half of 2013. Domestic demand will be buoyed by improved consumer confidence as the labor market strengthens (unemployment dropped to 3.9% in June 2014, the lowest since July 2008) and by rising tourist arrivals from the PRC. On the supply side, the launch of new electronic and information technology products has factories gearing up to meet rising demand, and the service sector will grow on strong government support.

The GDP growth forecast is revised up for both 2014 and 2015. Inflation is projected to be slightly higher than forecast in April, as labor costs rise in 2014 and rising incomes lift demand in 2015. The overall balance of payments surplus is projected to grow in both 2014 and 2015, with the current account surplus hovering above 13.0% of GDP, higher than previously forecast, and the services account balance strengthening as tourism from the PRC expands.

3.1.13 Selected economic indicators, Taipei,China (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.7	3.4	3.2	3.3
Inflation	1.1	1.4	1.3	1.5
Current acct. bal. (share of GDP)	12.3	13.5	12.5	13.2

Source: ADB estimates.

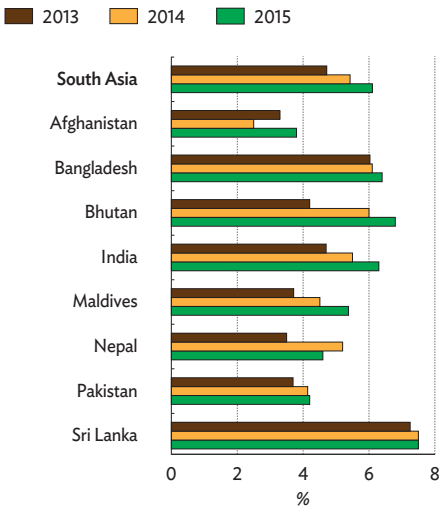
South Asia

Subregional assessment and prospects

A new government in India—by far the largest economy in South Asia—has outlined wide-ranging reform to revive growth after 2 years in the doldrums and stagnant investment. As India is expected, despite a disappointing monsoon, to meet the forecast of GDP growth improving by 80 basis points over the previous year, and in light of unexpectedly strong growth in Bangladesh, Nepal, and Pakistan, this *Update* revises the forecast for growth in South Asia this year, but only marginally to 5.4% from the previous forecast of 5.3% (Figure 3.1.7). However, South Asia is now expected to show somewhat greater momentum in 2015, so the growth forecast is upgraded to 6.1% from the 5.8% forecast in April. Upward revision for growth in India to 6.3% accounts for the bulk of the 30 basis point increase for the subregion, with positive revisions for Bangladesh and Pakistan making up the balance.

Inflationary pressures that arose in the first half of 2014, including the short-lived rally in global crude oil prices and a weak southwest monsoon that has undermined food supply, appear to have abated.

3.1.7 GDP growth, South Asia



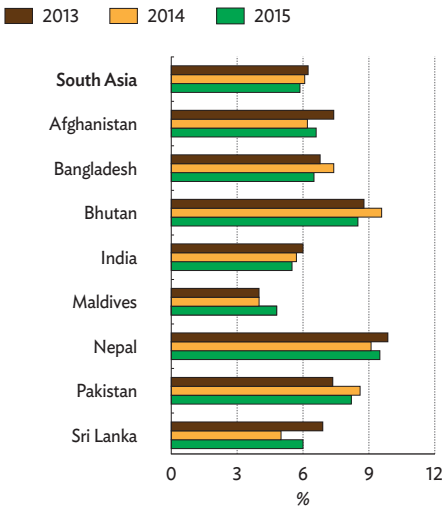
Source: Asian Development Outlook database.

Consumer inflation in South Asia has softened and stabilized at lower levels. This trend is seen to continue in the forecast period, as governments in the subregion have proactively restrained food inflation and enacted vigilant monetary policies. This *Update* forecasts inflation in South Asia at 6.1% in FY2014, an improvement from the 6.4% forecast earlier (Figure 3.1.8). Inflation forecasts have been downgraded in all countries in the subregion except Sri Lanka, where a low estimate was maintained. This reflects the continuation of favorable developments in prices for oil and other global commodities, as well as domestic measures. Inflation in 2015 is now expected to be at 5.9%, another 0.3 percentage points improvement from the 6.2% forecast earlier. Again, most countries in the subregion can expect some improvement.

The forecast for South Asia's current account deficit in 2014 is narrowed to 2.0% of combined GDP from 2.2% projected earlier, in part reflecting favorable global prices (Figure 3.1.9). This improvement is paced by India, where the deficit forecast is trimmed by 0.2 percentage points as improved growth momentum is likely to boost exports, while expansion in imports is tempered by a gradual revival in investment spending. Both Bangladesh and Nepal should now look for unexpectedly high current account surpluses this year, reflecting strong exports in the former and buoyant remittances in the latter. In the Maldives, the projected current account deficits have been halved for 2014 and 2015. Improvement reflects a substantial upward revision of estimates of tourism earnings rather than any change in the Maldives' external fundaments. Bhutan recorded the subregion's largest current account deficit as a percentage of GDP because of imports for constructing several large hydropower projects that will eventually greatly expand its capacity to export electricity to India. Seesaw revisions to Bhutan's recent current account result and its forecast reflect changes to project construction schedules.

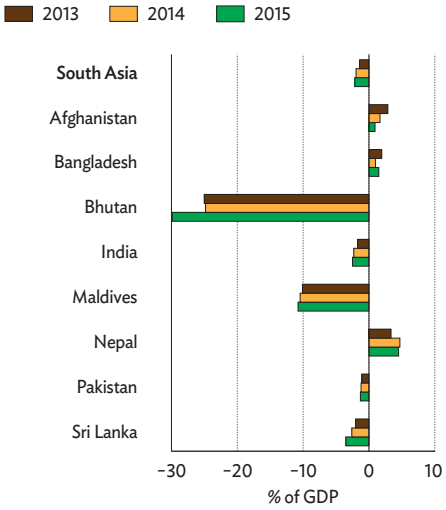
The FY2015 current account deficit in South Asia as a whole is now expected to narrow to 2.1% of GDP, less than the 2.6% forecast in *ADO 2014*. Essentially all of the improvement for the subregion comes from India's deficit, now projected to be 0.3 percentage points narrower, and Bangladesh's current account, now projected to be a surplus of 1.5%, not a deficit of equal magnitude. Nepal also has an improved outlook for 2015. Its surplus is now expected to equal 4.5% of GDP, revised up from 3.7% because of strong remittances.

3.1.8 Inflation, South Asia



Source: Asian Development Outlook database.

3.1.9 Current account balance, South Asia



Source: Asian Development Outlook database.

Country highlights

Afghanistan

The forecast for GDP growth in 2014 is tentatively revised down by 1.0 percentage point. Following the April 2014 presidential election, the June runoff to see which of the top two contenders could win at least half of the votes, as required, was marred by charges of electoral fraud and delays in finalizing the result. By mid-September, the Independent Election Commission had still not announced the winner, compounding the uncertainty created by the withdrawal of International Security Assistance Forces by the end of the year and creating a further drag on economic activity.

However, on 20 September the two candidates signed a power-sharing agreement to create a unity government followed by the Commission's formal declaration of the winner on 21 September. According to the agreement, the declared winner would be president and runner-up would become the chief executive officer, a role similar to that of prime minister. While this agreement has averted a breakdown in governance, its effectiveness will need to be developed over time.

The limited system for reporting current economic indicators makes it difficult to gauge the impact of the crisis on developments in industry and services. Growth is driven by private consumption on the demand side and by agriculture on the supply side. Important to continuing economic activity are the continuation of substantial receipts for projects funded by development partners, international forces' still-high spending on materials and services, and major funding of the national budget by development partners, including for police and security forces. A strong harvest is expected, but no forecast of growth this year can be made with much confidence. The satisfactory resolution to the political crisis will help to sustain development.

Food inflation reached 9.7% in June 2014 as prices for vegetables and cereals rose. Despite this, headline inflation declined steadily to 5.6% year on year in June from 6.8% in January, as real estate prices fell. The afghani has been stable, depreciating by only 0.8% against the dollar in the first 8 months of the year. This was a positive development following a 10.3% decline in 2013. International reserves of about $7 billion have been maintained.

Growth in 2015 is now expected to be 0.7 percentage points less than forecast in *ADO 2014* but still a substantial improvement. This projection assumes that the unity government created in September is effective, reasonable security prevails, and the country begins its medium-term transition plan, which is supported by large security grants pledged at the May 2012 summit of the North Atlantic Treaty Organization in Chicago and by substantial economic development assistance pledged at the July 2012 conference of development partners in Tokyo.

Inflation forecasts are revised down by 0.6 percentage points for 2014 and half a point for 2015 on slower growth, favorable global prices, and a further decline in real estate prices. Regarding current account surpluses, which include very large grant inflows, the forecast for 2014 is maintained, but the one for 2015 is revised down slightly on the anticipated export balance being less favorable.

3.1.14 Selected economic indicators, Afghanistan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.5	2.5	4.5	3.8
Inflation	6.8	6.2	7.1	6.6
Current acct. bal. (share of GDP)	1.7	1.7	1.2	0.9

Source: ADB estimates.

Bangladesh

Despite widespread political demonstrations ahead of national elections in January 2014, GDP growth in FY2014 (ended 30 June 2014) is estimated at 6.1%, half a percentage point higher than projected in *ADO 2014*. The strong performance came from higher public investment and strong exports. For FY2015, growth is now projected at 6.4%, slightly higher than forecasted earlier, as a revival in worker remittances is expected to bolster private consumption, while private sector investment will pick up on greater political stability. Moreover, the government will continue its efforts to step up project implementation.

3.1.15 Selected economic indicators, Bangladesh (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.6	6.1	6.2	6.4
Inflation	7.5	7.4	6.5	6.5
Current acct. bal. (share of GDP)	–0.5	1.0	–1.5	1.5

Source: ADB estimates.

Food prices were high for much of FY2014 because political unrest disrupted supply, pushing inflation up by 60 basis points to an average of 7.4% for the year, or nearly the *ADO 2014* forecast. This *Update* retains the April projection, shared by the central bank, of 6.5% for average inflation in FY2015. Price pressures are expected to soften with easing supply constraints, a better crop outlook, supportive monetary policy, and large public stocks of food grain. Lower international food and oil prices will contribute.

Strong expansion in exports outweighed a more moderate rise in imports to narrow the trade deficit in FY2014. Workers' remittances declined slightly but were sufficient to offset the trade deficit and push the current account to a surplus equal to 1.0% of GDP, not the 0.5% deficit that had been projected. While a larger trade deficit is projected for FY2015, remittances are expected to grow by 7.0%, continuing the revival of inflows seen in the second half of the FY2014. With higher remittances, the current account is now projected to post a surplus equal to 1.5% of GDP, rather than the 1.5% deficit projected earlier.

Bhutan

GDP growth in FY2014 (ended 30 June 2014) is estimated at 6.0%, as projected in *ADO 2014*, marking a recovery from 4.2% growth a year earlier. Hydropower sales grew by nearly 9%, and tourism continued to expand with earnings increasing to $66 million, or 3.5% of GDP. Despite bans on credit for transport and construction that aim to curb imports and the resulting drain on Indian rupee reserves, bank lending picked up to 11.3% as credit to trade and manufacturing grew, offsetting declines in the restricted sectors. Support to the economy is being provided by a stimulus package worth Nu500 million financed by India. The funds are being made available to banks for priority lending to potential growth sectors such as small and cottage industries. Over half of the package, estimated at about 3% of GDP, was rolled out in FY2014 and provided important impetus to growth.

3.1.16 Selected economic indicators, Bhutan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.0	6.0	6.8	6.8
Inflation	10.2	9.6	8.5	8.5
Current acct. bal. (share of GDP)	–28.6	–24.8	–26.4	–29.9

Source: ADB estimates.

Barring any geological difficulties, the large program of hydropower construction and the removal of credit and import restrictions from September 2014 are expected to boost consumption and trade and thereby support economic growth at 6.8% in FY2015, as projected in April. The start of operations at the Dagachhu hydropower plant will augment generation and bring economic benefits.

Inflation peaked at about 11.3% in the second quarter FY2014, driven by higher domestic food prices and the pass-through of high food prices from India, which supplies about 80% of Bhutan's imports. Inflation has since moderated, to 8.5% in the last quarter, as food prices eased in India. Inflation averaged 9.6% in FY2014, which is slightly lower than forecasted, and is expected to ease to 8.5% in FY2015, as projected earlier and reflecting moderation in consumer prices in India.

Imports of materials for large hydropower projects keep current account deficits high, estimated at 24.8% of GDP in FY2014 (lower than forecast in *ADO 2014*) and now projected to widen to 29.9% in FY2015, somewhat higher than the earlier forecast. These revisions accommodate changes to the project construction timetable. Adequate financial and capital flows are expected to sustain a surplus in the

balance of payments. However, there are risks of delay in receiving grants and other funds, which demand enhanced financial monitoring and coordination with development partners.

India

The economy is expected to grow by 5.5% in FY2014 (ending 31 March 2015), unchanged from *ADO 2014* forecast. The revival of investment, a possible easing of interest rates in mid-2015, and improved growth in the industrial economies should boost growth to 6.3% in FY2015, a bit higher than the *ADO 2014* forecast. Recent measures such as easing environmental and forest clearances for mines, roads, power stations, and irrigation systems—and expanding the monitoring role of the project monitoring group—will help speed the implementation of projects in the pipeline.

Inflation continued to track lower in the first 4 months of FY2014, with year-on-year consumer inflation averaging 8.1%. This was well below the FY2013 average of 9.7%, as was wholesale inflation at 5.6% versus 6.0%. A base effect, subdued corporate pricing power, tight monetary policy, and sluggish consumer demand combined to temper inflation.

Monetary policy is likely to remain tight, given the central bank's focus on reining in inflation. Consumer inflation is expected to average 8.1% in the whole of FY2014 and then moderate to 7.2% in FY2015. These forecasts assume continued measures to tame food inflation, modest hikes in support prices for farmers, and moderating growth in rural wages. Wholesale price inflation—which excludes services, has a smaller food component, and was earlier the target of monetary policy—is forecast to average 5.7% in FY2014 and 5.5% in FY2015, in both cases 0.3 percentage points lower than forecast in *ADO 2014*.

Since raising key policy rates by 25 basis points in January 2014, the central bank has maintained the status quo. It is reluctant to lower rates and risk missing its targets for lower inflation at 8.0% by January 2015 and 6.0% by a year later.

The new union budget presented in July 2014 aims to cut the fiscal deficit to 4.1% of GDP in FY2014. The ratio of tax (including the provincial share) to GDP is projected to come in at 10.6%, which assumes a 17.7% increase in gross tax collections, for tax buoyancy of 1.4. This is a much higher ratio of tax collection growth over GDP growth than has been experienced before. Without any major change in tax structure, achieving higher tax buoyancy will be a challenge.

The external sector improved in the first quarter of FY2014 as measures initiated in mid-2013 took hold. The trade deficit shrank to $34.6 billion from $50.5 billion in FY2013. Imports contracted by 6.5% as gold imports, which had caused very high trade deficits, fell by more than half from the year-earlier quarter to $7.8 billion as various import curbs were imposed. While oil imports increased marginally by 4.1% in this period, imports other than gold and oil remained flat.

The FY2014 current account deficit is likely to be 2.3% of GDP, a tad less than forecast in *ADO 2014*. In FY2015, the current account deficit is expected to widen slightly to 2.5% (again less than the earlier forecast)

3.1.17 Selected economic indicators, India (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.5	5.5	6.0	6.3
Inflation	6.0	5.7	5.8	5.5
Current acct. bal. (share of GDP)	–2.5	–2.3	–2.8	–2.5

Source: ADB estimates.

on account of imports growing by 10% as industry and investment revive, and with further relaxation of import curbs. Exports are also expected to pick up and grow by 10% as partner countries further consolidate their growth momentum.

Maldives

With tourism continuing to be the major source of growth, the economy is expected to grow in 2014 and 2015 as projected in *ADO 2014*. In the first half of 2014, tourist arrivals grew strongly by 11.5% but less than in the same period of the previous year. The relatively successful local council and parliamentary elections this year indicate more stable political conditions than prevailed during last year's presidential election, and this may help underpin tourism growth over the near term.

Inflation in the first half of 2014 was slight, the average easing to 2.9% from 4.7% in the previous year. The improvement stems from lesser rises in prices for furnishings and household equipment and lower food prices in the first quarter. Inflation is expected to pick up in the second half of the year and into 2015 in tandem with economic growth. Reflecting this, inflation is now projected to be 1 percentage point lower in 2014, but the forecast for 2015 is retained.

Revaluation of travel receipts, mostly from tourism, substantially brought down estimates of the current account deficit in recent years. With a new basis for projection, the current account deficit is recorded as 10.1% of GDP in 2013, and the projections for 2014 and 2015 are similarly halved. As the economy expands, increased earnings from tourism will partly offset rising imports.

Risks to the outlook include high public debt and currently low capital expenditure, which throw into question the sustainability of the country's medium-term growth. The budget deficit was slashed nearly by half to equal 4.7% of GDP in 2013, with further reductions planned to 3.2% in 2014 and 1.0% by 2016. Under the Fiscal Responsibility Act, 2013, fiscal consolidation and discipline will likely contain debt and maintain the ratio of debt to GDP at about 80% over the next 3 fiscal years, as targeted. Strong fiscal consolidation efforts may limit current expenditure in favor of expanded capital expenditure.

3.1.18 Selected economic indicators, Maldives (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	4.5	4.5	5.4	5.4
Inflation	5.0	4.0	4.8	4.8
Current acct. bal. (share of GDP)	–21.8	–10.5	–22.1	–10.8

Source: ADB estimates.

Nepal

GDP grew by an estimated 5.2% in FY2014 (ended 15 July 2014), up from 3.5% a year earlier and exceeding the forecast. Timely monsoon rains boosted agriculture by 4.7%, and robust growth in remittance inflows fueled growth in services at 6.1%. Inflation, which had been expected to stay about the same, moderated from 9.9% last year as food and other price pressures abated on improved domestic food supplies, some easing of inflation in India, and marginal strengthening of the Nepalese rupee.

Despite the timely presentation of the complete FY2014 budget, realized public expenditure, especially capital spending, was lower than planned, indicating ministries' continued low absorption capacity. High revenue growth and low expenditure combined to shrink the budget deficit to the equivalent of only 0.1% of GDP. The external position strengthened significantly on the high remittance inflows and

3.1.19 Selected economic indicators, Nepal (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	4.5	5.2	4.7	4.6
Inflation	10.0	9.1	9.5	9.5
Current acct. bal. (share of GDP)	3.6	4.7	3.7	4.5

Source: ADB estimates.

despite the widening trade deficit, boosting the current account surplus beyond the forecast to 4.7% of GDP, up from 3.4% in the previous year.

In FY2015, GDP growth is now expected to slow to 4.6% as the disappointing monsoon will likely hurt agricultural production. A slew of investment-friendly reforms in the FY2015 budget is likely to boost investor confidence and industrial output, and growth in remittance inflows is expected to stay robust, supporting strong expansion in services and keeping growth just a touch below the 4.7% projected in *ADO 2014*.

Inflation is expected to remain elevated in FY2015 as price pressures mount because of the expected smaller harvest, high (though moderating) food prices in India, hikes for administered fuel and transportation prices, and higher public sector wages. Despite accelerated import growth, marginally faster growth in remittances is now expected to generate a current account surplus 0.8 percentage points wider than projected in April.

Pakistan

Reflecting some improvement in electricity supply that facilitated increased industrial production, GDP growth reached an estimated 4.1% in FY2014 (ended 30 June 2014), unexpectedly accelerating from 3.7% in FY2013. Reform initiated by the government helped improve economic conditions during the year. Renewed support from development partners and a $2 billion eurobond issue, the first in 7 years, helped stabilize the currency and rebuild foreign exchange reserves from very low levels. The continuation of economic reforms and efforts to improve the security environment would improve business confidence and help revive private investment. This *Update* revises the growth projection for FY2015 to 4.2%. However, even concerted reform will need several years to eliminate electricity and gas shortfalls and to effect the change needed to lift structural constraints on growth.

The consolidated fiscal deficit excluding grants was contained at 5.5% of GDP in FY2014, down from an average of 8.0% in the previous 3 years. This improvement came mainly from a large one-off increase in nontax revenues and a provincial cash surplus equal to 0.3% of GDP. The budget for FY2015 targets further reduction in the fiscal deficit to 4.9% of GDP through expenditure economies, reduced energy subsidies, and a provincial cash surplus equal to 0.9% of GDP.

Headline inflation increased to an average of 8.6% in FY2014 from 7.4% in the previous year, lower than the *ADO 2014* forecast. Consumer price inflation was volatile through the year because of food price spikes in the first half of 2014. In response, the central bank kept monetary policy tight in FY2014, increasing the policy rate by a cumulative 100 basis points to 10%. Inflationary expectations have nevertheless stabilized according to a May 2014 joint survey of business and consumer sentiment, with respondents apparently reacting to exchange rate stability stemming from improved financial inflows in the second half of FY2014 and reduced government borrowing from the domestic banking sector to support the budget. Inflation is now expected to average 8.2% in FY2015, slightly lower than FY2014. Security challenges,

3.1.20 Selected economic indicators, Pakistan (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.4	4.1	3.9	4.2
Inflation	9.0	8.6	9.2	8.2
Current acct. bal. (share of GDP)	–1.4	–1.2	–1.3	–1.3

Source: ADB estimates.

floods in September 2014 in parts of the country, and political demonstrations pose downside risks to the FY2015 forecast.

The current account deficit in FY2014 was essentially unchanged from the previous year's 1.1% of GDP and slightly below the *ADO 2014* forecast. The trade deficit widened moderately, but this was largely offset by continued strong growth in remittances from overseas workers. The projection for the current account in FY2015 is unchanged.

Sri Lanka

GDP growth was consistently robust in the first half of 2014: 7.6% in the first quarter and 7.8% in the second. Growth in agriculture slowed to 0.2% in the first quarter as drought prevailed through most of the country but rebounded by 5.9% in the second quarter largely on favorable weather in tea-growing areas. Faster growth in construction, textiles, and apparel maintained steady expansion in industry, which averaged 12.4% in the first half of the year. Services grew by 6.5% in the first quarter but slowed to 5.7% in the second as high growth in hotels and restaurants moderated, as did wholesale and retail trade. The projection of 7.5% growth in 2014 is maintained despite the downside risk that a prolonged drought could affect growth in the second half.

Inflation continued to moderate in 2014 from 4.4% in January to 2.8% in June but reversed slightly in August to reach 3.5%. While nonfood inflation remained flat, food inflation stepped up to 4.8% in August. Though the drought may accelerate food inflation further in the second half of the year, the forecast of 5.0% average inflation in 2014 is maintained.

The balance of payments markedly strengthened in the first 6 months of the year. Exports grew by 16.8% as imports fell by 1.2%, generating a 20.1% reduction in the trade deficit to $3.5 billion. All major exports—garments, other manufactures, tea, and other agricultural products—recorded double-digit growth. Imports fell as moderate increases in consumer and intermediate imports could not balance a decline in investment goods. With thermal power generation increasingly deployed to offset hydro generation shortfalls on account of the drought, oil imports are likely to increase in the second half of the year. Invisible earnings were buoyant, as tourism surged by 33.8% to $1.1 billion and workers' remittances rose by 10.6% to $3.4 billion. Foreign direct investment doubled to reach $442.3 million. With a substantial overall surplus, gross official reserves increased to $9.2 billion by the end of June 2014.

Bank lending rates fell in the first half 2014, but real interest rates remained stable as inflation moderated. There was only a slight increase in credit to the private sector through midyear. Higher growth in credit to the private sector and investment in the second half of the year will be key to achieving sustained economic expansion as forecast at 7.5% this year and next.

3.1.21 Selected economic indicators, Sri Lanka (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.5	7.5	7.5	7.5
Inflation	5.0	5.0	6.0	6.0
Current acct. bal. (share of GDP)	–2.6	–2.6	–3.5	–3.5

Source: ADB estimates.

Southeast Asia

Subregional assessment and prospects

Economic growth in this subregion is softer than *ADO 2014* anticipated in April, primarily the result of an unexpectedly sharp slowdown in Indonesia, where growth is the weakest in 5 years and political disruption in Thailand that saw its economy contract in the first half of this year.

Aggregate GDP growth in the 10 Southeast Asian economies is now forecast to decelerate for a second year in a row, to 4.6% in 2014 from 5.0% in 2013 and 5.7% in 2012, before recovering in 2015 (Figure 3.1.10). Indonesia and Thailand, the two biggest economies in the subregion, have dragged on subregional growth over the past 2 years.

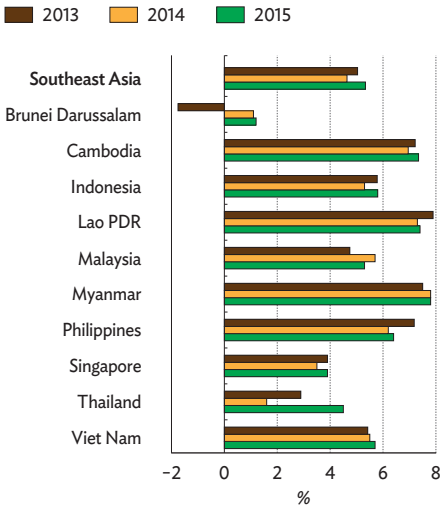
The growth forecast for 2014 in Southeast Asia is revised down by 0.4 percentage points from April's projection. The biggest downward revision is for Thailand, where the economy was severely buffeted by political gridlock and street protests that culminated in a military coup in May. Growth forecasts are also lowered since April for Indonesia, the Philippines, Singapore, and Viet Nam. By contrast, Malaysia is performing more vigorously than expected and is now forecast to grow at its strongest pace in 4 years. Brunei Darussalam, Cambodia, the Lao People's Democratic Republic (Lao PDR), and Myanmar appear on track to grow at rates projected in *ADO 2014*, though Brunei Darussalam's GDP could contract further unless oil and gas production recovers.

Private consumption has held up relatively well in most economies, and foreign direct investment has generally remained robust. However, economic growth has been dampened by one or more of the following factors: a slowdown in fixed investment, sluggish government spending, and lackluster global demand for export commodities such as coal, palm oil, and natural rubber. Fixed investment decelerated in Indonesia, Malaysia, and the Philippines in the first half and actually fell in Singapore and Thailand. Growth in government spending slowed in Indonesia, Malaysia, the Philippines, and Thailand, while governments in other countries including the Lao PDR and Viet Nam are constrained by wide fiscal deficits. Merchandise exports fell in Brunei Darussalam, Indonesia, and Thailand in the first half, and domestic exports other than oil fell in Singapore. However, Malaysia and the Philippines have benefited from a rebound in exports, particularly electronics, and Viet Nam's exports are buoyant. Declining imports in several economies are a sign of weak investment.

Tourism has been muted this year. Tourist arrivals to Thailand fell by 10.4% in the first half, reflecting the political strife and coup. As a result, neighboring Cambodia and the Lao PDR, favorite destinations for side trips, have seen slower growth in tourism. Some tourists from the People's Republic of China (PRC) have been deterred by political unrest in Thailand, perceived safety issues in the Philippines and Malaysia, and a maritime territorial dispute between the PRC and Viet Nam.

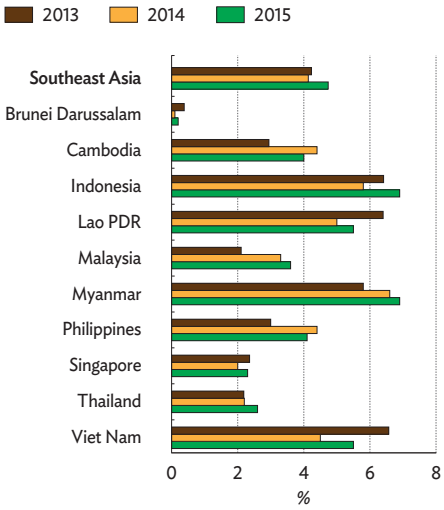
As anticipated, policy interest rates have been raised in Malaysia and the Philippines to tilt against inflation, with further monetary tightening expected there. Indonesia tightened in 2013 and has maintained the higher rates this year. Singapore has kept a firm monetary stance through a gradual appreciation of the Singapore dollar against a basket

3.1.10 GDP growth, Southeast Asia



Source: Asian Development Outlook database.

3.1.11 Inflation, Southeast Asia



Source: Asian Development Outlook database.

of currencies and with macroprudential measures. In Thailand and Viet Nam, though, the authorities cut rates in March 2014 in attempts to spur their economies.

Next year, growth in Southeast Asia is projected to accelerate to 5.3%, largely on recovery in Thailand from this year's slump and a pickup in Indonesia, supported by expected policy reform from the incoming government, but also on stronger exports across the subregion as the outlook improves for the major industrial economies. Growth is seen picking up in eight of the subregion's economies relative to this year, with investment strengthening in most. Nevertheless, growth forecasts for 2015 are shaved since April for half of the subregion.

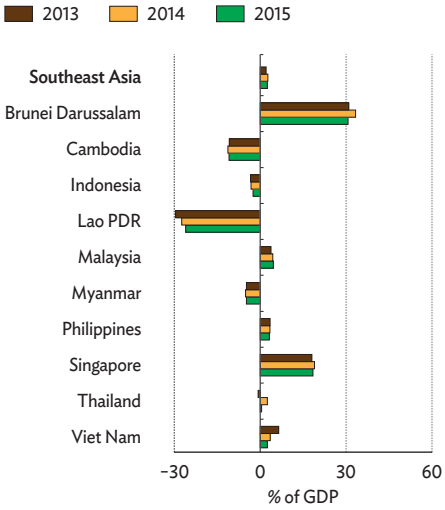
Headwinds in 2015 will include a likely tempering of growth in the PRC, a major trading partner for Southeast Asia; higher inflation, with subsidy reductions a factor in Indonesia, Malaysia, and Viet Nam; and, for some economies, tightening fiscal and/or monetary policies. Volatile global capital flows and tightening liquidity are risk factors for the subregion as the US winds down monetary stimulus.

Inflation in Southeast Asia is now put at 4.1% in 2014, down slightly from April's forecast and close to the outcome in 2013 (Figure 3.1.11). Inflation forecasts are reduced for half the economies, as good harvests and steady global fuel prices have helped to contain inflation. Viet Nam's performance is notable because it has tamped down inflation since 2011 from nearly 19% to a projected 4.5% this year.

Indonesia is expected to raise administered fuel prices in 2015, temporarily propelling inflation there to 6.9%, well above the *ADO 2014* projection. Inflation is forecast to edge up from this year's rate in another seven economies. Consequently, subregional inflation next year is seen at 4.7%, compared with 4.0% previously forecast.

Southeast Asia's aggregate current account surplus is forecast to rise to 2.7% of combined GDP this year, revised from 2.5% in *ADO 2014* as Thailand is now expected to record a current account surplus instead of a deficit, primarily because imports have slumped (Figure 3.1.12). Malaysia's current account surplus will be larger than previously projected owing to a strong export performance, but Indonesia's deficit is narrowing more gradually than anticipated in April partly because prices for its export commodities have been low. The subregional current account surplus next year is projected to narrow to 2.5% of combined GDP, revised down by 0.4 percentage points from April. Indonesia's deficit in 2015 is now seen slightly wider than in *ADO 2014*. Thailand's surplus is expected to fall as imports rebound more quickly than exports.

3.1.12 Current account balance, Southeast Asia



Source: Asian Development Outlook database.

Country highlights

Brunei Darussalam

Oil and gas production fell by 10.3% in the first 3 months of 2014 from a year earlier, recording the third consecutive quarter of double-digit contraction. Hydrocarbon output was disrupted by shutdowns and maintenance of production facilities through the first half of this year. The rest of the economy, comprising mainly services, construction, and manufacturing, expanded by 3.1% in the first quarter, the latest for which data are available.

3.1.22 Selected economic indicators, Brunei Darussalam (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	1.1	1.1	1.2	1.2
Inflation	0.5	0.1	0.6	0.2
Current acct. bal. (share of GDP)	44.0	33.3	46.0	30.7

Source: ADB estimates.

Lower production in the oil and gas sector, which dominates this economy, shrank GDP by 3.3% in the first quarter, following contraction by a revised 1.8% in 2013. Assuming some recovery in hydrocarbon production, forecasts are retained for slight economic growth this year and next.

The consumer price index fell by 0.1% in the first 7 months, primarily on declines in prices for food, clothing, and footwear. Price controls and government subsidies suppress inflation in this economy. Forecasts for inflation are lowered from those in *ADO 2014*.

Merchandise exports, mainly oil, liquefied natural gas, and methanol, fell in the first half by 9.1%, and imports dropped by a sharp 18.4%. The trade surplus shrank by 5.4% to $4.2 billion. Current account surpluses will remain substantial, though lower than previously foreseen.

Cambodia

Trade and tourism slowed in the first half. Shipments of garments and footwear rose by 14.5% to $2.8 billion, compared with a 17.0% gain a year earlier, and growth in total merchandise exports moderated to 20.0% from 27.0% in the first half of 2013. Imports also decelerated, to 6.7% from 24.7%.

Tourism grew at a more gradual pace, largely because tourist arrivals to neighboring Thailand declined. Tourist arrivals to Cambodia rose by 5.2% to 2.2 million in the first half of 2014, against a 19.1% rise in the year-earlier period. Other available data show that growth in credit to the private sector was 12.0% year on year in June 2014, well below the expansion rate of a year earlier.

Political tensions that followed last year's Cambodian national elections have abated in recent months, and labor unrest in the garment industry eased after the minimum monthly wage for garment workers was raised in February this year. These developments are expected to lift investor confidence. This *Update* retains the *ADO 2014* forecast that GDP growth will ease to 7.0% this year before picking up in 2015.

Inflation increased to 4.9% in June 2014 and averaged 4.4% in the first 6 months, driven mainly by higher food prices. A tightening of customs duty collections late in 2013 put some upward pressure on prices for imports. Inflation is now projected to be higher than previously expected. Current account forecasts are retained from April. Gross official reserves at midyear were $3.9 billion, cover for 3.8 months of imports of goods and services.

3.1.23 Selected economic indicators, Cambodia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.0	7.0	7.3	7.3
Inflation	3.5	4.4	3.5	4.0
Current acct. bal. (share of GDP)	–11.3	–11.3	–10.9	–10.9

Source: ADB estimates.

Indonesia

Government policies to restrain domestic demand and to rein in inflation and the current account deficit have kept the economy subdued this year. The slowdown is sharper than anticipated, mainly owing to weakness in exports, particularly commodities, as well as deceleration in fixed investment and government spending. GDP growth at 5.2% in the first half was the slowest since 2009. Private consumption remained robust, helped by receding inflation, good harvests, and spending related to parliamentary and presidential elections.

While growth forecasts are trimmed from *ADO 2014*, optimism about timely reform by the incoming government and a better outlook for

3.1.24 Selected economic indicators, Indonesia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.7	5.3	6.0	5.8
Inflation	5.7	5.8	4.8	6.9
Current acct. bal. (share of GDP)	–2.9	–3.2	–2.0	–2.5

Source: ADB estimates.

exports next year suggest that growth will accelerate by 0.5 percentage points in 2015.

Inflation ebbed in the first 8 months as the impact of a hike in administered fuel prices in June 2013 faded and the good harvests kept food price inflation low. For 2014 as a whole, inflation is now seen averaging 5.8%, slightly above the earlier forecast. The new government is expected to reduce fuel subsidies in 2015, which should free considerable budget funds for infrastructure and social development, though it will temporarily push inflation to 6.9%, above the earlier projection.

A larger trade surplus resulted in the first half as imports declined more steeply than exports, but after taking into account income and trade in services the current account recorded a deficit equal to 3.1% of GDP. Large inflows of foreign direct and portfolio investment kept the balance of payments in surplus. International reserves rose, and the rupiah appreciated against the US dollar. This *Update* projects that current account deficits will narrow through the forecast period, but not as much as foreseen in April.

Lao People's Democratic Republic

Resource development continues to support growth despite a fiscal squeeze that is constraining government expenditure. Foreign investment in mining and hydropower remains robust, and investment has increased in special economic zones in Vientiane and Savannakhet. The production of copper rose by 6.7% and of silver by 29.3% in the first half. Gold production, by contrast, fell by a quarter because the Sepon mine stopped gold production last December.

Tourism has slowed this year. Visitor arrivals rose by 8% to 1.1 million in the first quarter, about half the rate of increase seen a year earlier, primarily because tourism fell in Thailand.

Fiscal problems that forced the government into last year's delays on payments for wages and utilities have eased somewhat in 2014, but substantial delays remain on public infrastructure projects. That is expected to constrain spending on new projects for several years to come. The government cancelled a cost-of-living allowance for the civil service at the start of FY2014 (ended 30 September 2014) and postponed some infrastructure projects. For FY2015, the government has stopped a planned third hike in civil service wages in as many years, directed banks to curb lending for public infrastructure, and said it would put greater emphasis on repaying debts than on starting new projects.

In this context, economic growth is still expected to ease to 7.3% in 2014, from a revised 7.9% in 2013. The forecast for growth in 2015 is trimmed to 7.4%, reflecting the persistent fiscal difficulties. Forecasts of current account deficit are retained from April. International reserves remain low. Moderating domestic demand has eased pressure on prices, with inflation slowing to 4.8% in the first 8 months. Inflation forecasts are revised down by half a percentage point from *ADO 2014*.

3.1.25 Selected economic indicators, Lao PDR (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.3	7.3	7.5	7.4
Inflation	5.5	5.0	6.0	5.5
Current acct. bal. (share of GDP)	–27.4	–27.4	–26.0	–26.0

Source: ADB estimates.

Malaysia

A rebound in exports coupled with buoyant private consumption and private investment drove economic growth of 6.3% in the first

3.1.26 Selected economic indicators, Malaysia (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.1	5.7	5.0	5.3
Inflation	3.2	3.3	3.5	3.6
Current acct. bal. (share of GDP)	4.1	4.4	4.6	4.6

Source: ADB estimates.

half, which exceeded expectations. Exports benefited from stronger demand in industrial economies for electronics and electrical products. Growth in employment and wages helped to propel private consumption. Private fixed investment expanded at double-digit rates, but public sector fixed investment fell, largely reflecting government efforts to tackle the fiscal deficit.

The pace of growth is seen moderating in the second half of 2014 and into 2015, a result of base effects and tightening fiscal and monetary policies. The central bank raised its policy interest rate in July this year, and further increases are expected. Nevertheless, growth this year and next is now projected to top the forecasts in *ADO 2014*.

Higher inflation this year—accelerating to 3.3% in the first 8 months—has stemmed from solid growth in domestic demand and government decisions in 2013 to reduce subsidies, hike power tariffs, and raise the tax on tobacco. The upward trend is seen continuing in 2015 when the government plans to further reduce subsidies and replace current sales and services taxes with a broader 6.0% tax on goods and services from April 2015. Inflation forecasts are edged up from those in April.

The projection for the current account surplus in 2014 is raised since April in light of a strong performance in the first half, when a larger trade surplus and narrower deficits in services, income, and transfers produced a current account surplus equal to 6.9% of GDP. The financial account, by contrast, recorded net outflows in the first half.

Myanmar

This economy is on track to grow by 7.8% in both FY2014 (ending 31 March 2015) and in FY2015. Growth is supported by rising investment propelled by improved business confidence, commodity exports, rising production of natural gas, buoyant tourism, and credit growth—all complemented by the government's ambitious structural reform program.

Inflation increased to average 6.0% in the first quarter of FY2014 and is still seen at 6.6% for the full fiscal year, rising slightly in FY2015. Factors contributing to inflation include a boost to public sector wages, higher electricity tariffs, and rising property prices in cities. Exports have performed reasonably well so far this year, bolstered by exports of oil and gas, and imports have remained strong. This *Update* retains forecasts of current account deficits of about 5% of GDP.

Provisional results of the 2014 national census put the country's population at 51.4 million, compared with previous estimates of about 60 million. The new figure will require recalculation of per capita indicators. In the area of economic reform, the government has liberalized the telecommunications sector and it plans to issue licenses to a number of shortlisted foreign banks to enter the market in a move that is expected to improve efficiency in the banking sector. Myanmar's application to join the global Extractive Industries Transparency Initiative was accepted in July, marking a step forward to improved accountability in the governance of oil, gas, and minerals.

Risks to the outlook come from ethnic and sectarian tensions, vulnerability to bad weather, and the possibility that reform momentum may slow in the lead-up to general elections scheduled for late 2015.

3.1.27 Selected economic indicators, Myanmar (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.8	7.8	7.8	7.8
Inflation	6.6	6.6	6.9	6.9
Current acct. bal. (share of GDP)	−5.1	−5.1	−4.8	−4.8

Source: ADB estimates.

Philippines

Recovery in exports and expanded private consumption and investment generated GDP growth of 6.0% in the first half. Government expenditure decelerated sharply and public construction fell, partly reflecting cautious spending by government agencies amid concerns over the misuse of government funds.

Slightly stronger economic growth is projected through the rest of this year and in 2015 on expectations that post-typhoon reconstruction accelerates, government fiscal disbursement improves, and exports benefit from brighter prospects in the major industrial economies. Nevertheless, growth forecasts are trimmed since April owing to the unexpectedly low government spending coupled with higher inflation and associated monetary tightening.

Inflation accelerated to 4.9% in August as the impact of typhoons on food supplies pushed up prices. Rising inflation and strong growth in liquidity prompted the monetary authorities to raise policy interest rates in July and again in September, and to increase reserve requirements for banks. Inflation is now projected at 4.4% this year, the highest in 3 years, and the forecast for 2015 is also edged up.

Higher remittances from overseas Filipinos together with increases in exports of goods and services will underpin current account surpluses this year and next. However, the current account forecasts are trimmed since April as imports are projected to rise significantly when reconstruction speeds up.

3.1.28 Selected economic indicators, Philippines (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.4	6.2	6.7	6.4
Inflation	4.3	4.4	4.0	4.1
Current acct. bal. (share of GDP)	3.4	3.2	3.2	2.8

Source: ADB estimates.

Singapore

Economic growth decelerated to 2.4% year on year in the second quarter from 4.8% in the first, putting growth in the first half of this year at 3.6%. Manufacturing slowed sharply in April–June as electronics contracted and growth in transport engineering slowed. By contrast, growth held up well in most service industries, such as finance and insurance. A tight labor market is weighing on labor-intensive industries.

On the expenditure side, fixed investment fell for a third consecutive quarter, and growth in private consumption slowed to just 1.3% in the second quarter, though government consumption and public investment were stronger. The economy is expected to grow at a moderate pace for the rest of this year, supported mainly by externally oriented industries. Forecasts for growth this year and next are lowered from those in *ADO 2014*.

Moderation in housing and automobile costs brought inflation down to an unexpectedly low 1.6% in the first 7 months of this year, which prompts a downward revision in inflation forecasts from April. Expecting that core inflation will persist at 2.0%–3.0%, partly reflecting the tight labor market, the Monetary Authority of Singapore signaled a bias toward gradual currency appreciation to dampen underlying price pressures.

Domestic merchandise exports, excluding oil, continued to fall in the first half but at a slower pace than in 2013, while imports turned up after declining in 2013. Current account surpluses for 2014 and 2015 are now seen being slightly smaller than forecast in *ADO 2014*.

3.1.29 Selected economic indicators, Singapore (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.9	3.5	4.1	3.9
Inflation	3.0	2.0	2.9	2.3
Current acct. bal. (share of GDP)	19.1	19.0	18.6	18.4

Source: ADB estimates.

Thailand

Political gridlock and street protests that culminated in a military takeover of the government in May damaged business and consumer confidence in the first half, such that GDP contracted by 0.1%. Fixed investment dropped, and private consumption fell slightly. Tourist arrivals fell by 10.4% in the first half. Net external demand rose as imports of goods and services fell more than exports, which statistically moderated the decline in GDP caused by weak domestic demand.

The restoration of public spending programs that were blocked by political and legal challenges will stimulate the economy. A backlog of applications for investment privileges is being cleared, and a revised medium-term infrastructure program has been approved. Economic growth is expected to turn up by the end of 2014, though it will undershoot the *ADO 2014* forecast. A recovery in investment and better export performance is seen generating GDP growth next year at 4.5%.

Growth should get support from a reduction last March in the policy interest rate, decided in response to the economic contraction and modest inflation. Over the first 8 months, inflation averaged 2.2%, and it is expected to stay around this rate for the rest of 2014, a touch below the previous forecast. Next year, inflation is still seen rising to 2.6% as domestic demand strengthens.

The steep decline in imports contributed to a turnaround in the trade balance and generated a large current account surplus in the first half. A current account surplus is now projected for the year as a whole, instead of a small deficit previously anticipated. Exports will pick up in 2015 in line with better growth in the major industrial economies, and tourism will recover from a contraction this year, but imports will also rebound, narrowing the current account surplus in 2015.

3.1.30 Selected economic indicators, Thailand (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.9	1.6	4.5	4.5
Inflation	2.4	2.2	2.6	2.6
Current acct. bal. (share of GDP)	−0.1	2.5	0.5	0.5

Source: ADB estimates.

Viet Nam

GDP growth of 5.2% in the first half was a modest increase over the corresponding period of the 2 previous years, but it fell short of expectations. Growth in credit was anemic, and efforts to reform state-owned banks made only slow progress. A maritime territorial dispute with the PRC in May sparked protests in Viet Nam, some of which damaged foreign-owned factories. Tourist arrivals from the PRC fell, and trade between the two countries was disrupted.

To spur the economy, the central bank lowered interest rates last March, and more recently the government directed financial institutions to step up efforts to meet the target for credit expansion. While these moves are likely to have a positive impact, economic growth forecasts for this year and next are shaved from those in *ADO 2014*. Growth is still seen picking up in 2015, assuming better performance in the major industrial economies, some recovery in the domestic property market, and higher household consumption.

3.1.31 Selected economic indicators, Viet Nam (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.6	5.5	5.8	5.7
Inflation	6.2	4.5	6.6	5.5
Current acct. bal. (share of GDP)	4.1	3.5	3.0	2.5

Source: ADB estimates.

Inflation ebbed to 4.7% in the first 8 months of this year, the lowest since 2003. That was a result of lackluster domestic demand, ample food supplies, and relatively steady global fuel prices. Inflation forecasts are lowered from April for both 2014 and 2015.

External accounts showed solid growth in exports and imports in the first half, with further robust gains in shipments of high-tech products such as mobile phones. Large surpluses in the current and capital accounts allowed a rebuilding of international reserves to the equivalent of about 3 months of imports. Substantial current account surpluses are projected for this year and next, though smaller than foreseen in April.

The Pacific

Subregional assessment and prospects

Growth in the Pacific subregion is now projected at 5.3% in 2014, down from 5.4% forecast in *ADO 2014* to reflect damage caused by torrential rains in Solomon Islands, and weaker-than-expected economic indicators for Palau and Timor-Leste early this year.

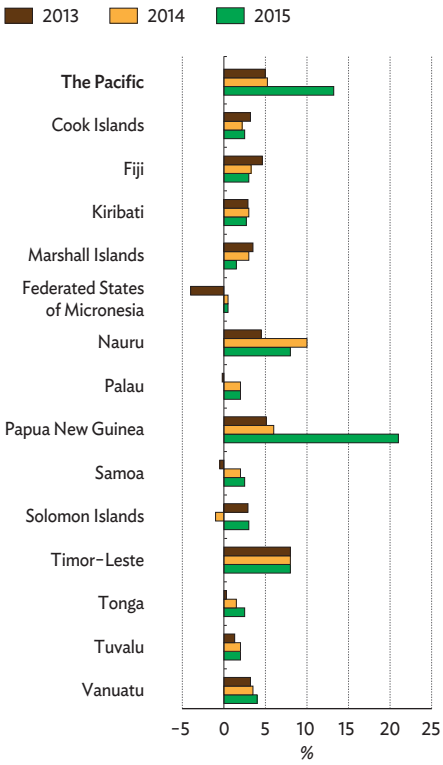
The Solomon Islands' economy is now expected to contract by 1.0% in 2014, not expand by 3.0% as previously forecast, because of storm damage and related flooding in Honiara and provinces neighboring the capital. Torrential rain affected over 50,000 people, killing 22 and leaving 9,000 homeless. It caused extensive damage to transport and other public infrastructure and to private property, disrupting agriculture and gold production. In Timor-Leste, slower business expansion and private sector credit growth early in 2014 prompt lower GDP growth forecasts for 2014 and 2015. In Palau, disappointing construction activity and tourist arrivals prompt a downward revision to this year's growth forecast.

Indicators suggest stronger growth in Fiji this year than previously forecast. Fiji's progress toward restoring democracy, with the successful conduct of national elections in September, appears to have boosted business confidence. Associated economic reintegration is expected to spur growth and, given the country's central position in the Pacific, generate positive spillovers for growth across the subregion.

In 2015, growth in the subregion is now expected to soar to 13.2%—just 0.1 percentage point below the *ADO 2014* forecast. The sharp increase in subregional growth largely reflects a one-time surge as Papua New Guinea (PNG) has its first full year of liquefied natural gas exports. However, the outlook for the Pacific excluding the larger resource-exporting economies of PNG and Timor-Leste remains modest, with growth averaging only 2.8%.

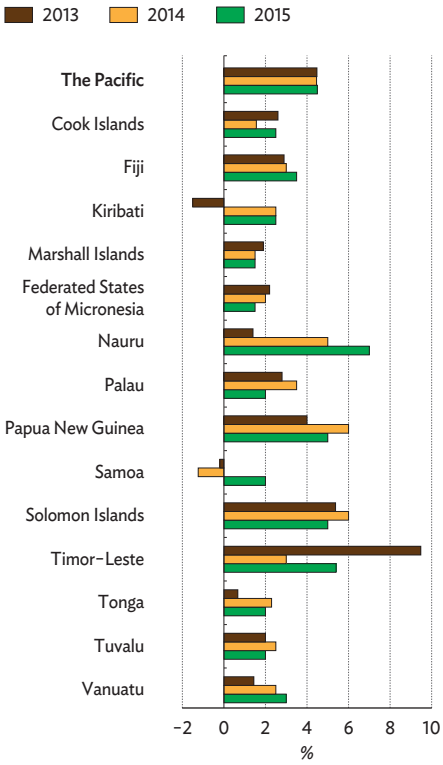
Projections for subregional inflation are revised down to 4.5% in both 2014 and 2015—1.4 percentage points lower for 2014 and 0.6 lower for 2015 than projected in *ADO 2014*. Inflation in Timor-Leste, which has been lower than expected, prompts the downward adjustment. In January 2013, Timor-Leste adopted an improved methodology for measuring inflation, including changes in the way it collects and processes data. Meanwhile, the sustained appreciation of the US dollar against the currencies of Timor-Leste's key trading partners, and

3.1.13 GDP growth, the Pacific



Source: Asian Development Outlook database.

3.1.14 Inflation, the Pacific

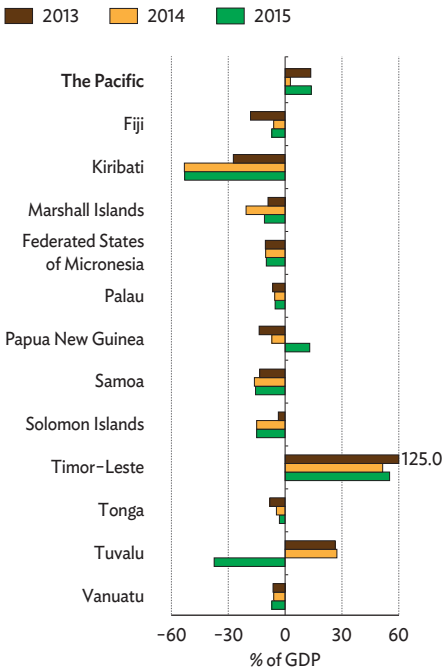


Source: Asian Development Outlook database.

declining international prices for rice and other food have lowered prices for imports from non-US markets.

Returns from offshore petroleum operations in PNG and Timor-Leste will drive near-term trends in the subregion's current account position. While most Pacific economies, particularly the smaller ones, regularly run current account deficits that are often large relative to GDP, Timor-Leste's large petroleum royalties have created surpluses for the subregion as a whole in recent years.. The Pacific's current account surplus is projected to narrow from the equivalent of 13.4% of combined GDP in 2013 to just 2.8% in 2014 as Timor-Leste's petroleum revenues rapidly decline—the Bayu-Undan oil field is now projected to be depleted by 2021 (4 years ahead of earlier expectations). Income from PNG's exports of liquefied natural gas, however, is expected to boost the subregional surplus back to 13.7% in 2015.

3.1.15 Current account balance, the Pacific



Source: Asian Development Outlook database.

Fiji

Fiji continues to grow solidly, and the economy remains on track for a fifth consecutive year of expansion. The GDP growth projection for 2014 has been revised up by half a percentage point to 3.3%, based on strong growth in the first half in visitor arrivals and export earnings—particularly from sugar and mineral water. Growth is expected to remain robust, but is seen to ease slightly as sharp increases in consumption and investment expenditures in 2013 are likely to moderate. The 2015 growth projection is maintained at 3.0%, but this is subject to significant upside and downside risks. Reduced uncertainty following the September elections is seen to boost investment and tourism, and the overall economy is expected to strengthen with reintegration and renewed engagement with development partners. However, factors seen to temper growth in 2015 include: ongoing dry weather conditions that are expected to persist into next year and lower output of agricultural goods besides sugar; and possible fiscal tightening after recent expansions in public expenditure.

Revised estimates show that the economy grew by 4.6% in 2013 as it rebounded from the impact of Tropical Cyclone Evan, which hit tourism and agriculture. Growth was broad-based, led by service sectors such as finance, insurance, and transport and storage; and supported by greater construction and manufacturing activity. Lending for investment doubled in 2013, as construction picked up, mainly on tourism and infrastructure projects.

Consumption remained strong in the first 5 months of 2014, as evidenced by higher net value-added tax collection, which rose by 6.5% over the period. Imports of consumption goods, mainly vehicles, rose by 15.6% in the same period. Personal remittances increased by 13.2% year on year in the second quarter, boosting consumption expenditure.

The tourism sector—Fiji's main source of foreign exchange—continues to perform strongly. Visitor arrivals increased by 4.0% year on year, with 4.6% more visitors from Australia and 11.6% more from New Zealand. Together, these two main markets account for over 60% of visitors to Fiji. Sugar production has improved recently, likely aided by government investments in new technology that improved mill efficiency. During the first 6 weeks of the annual sugar-crushing season, mills

3.1.32 Selected economic indicators, Fiji (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.8	3.3	3.0	3.0
Inflation	3.0	3.0	3.5	3.5
Current acct. bal. (share of GDP)	−6.1	−6.0	−7.1	−7.0

Source: ADB estimates.

recorded a 48.8% increase in output. On the other hand, gold production continued to decline, falling by 9.3% from the first half of 2013.

Despite higher growth, inflationary pressures remain subdued. Inflation to June 2014 was running at 0.7% year on year, restrained by declining international commodity prices. However, annual average inflation is expected to remain at the Reserve Bank of Fiji's target of 3.0% as recent dry weather could affect food supply and economic activity could pick up after the elections.

The current account deficit widened in the second quarter as imports rose and exports were flat. Foreign reserves declined from $1.7 billion in May 2014 to $1.6 billion in June, the equivalent of 4.4 months of imports. However, the current account deficit for the full year is still expected to narrow sharply from 2013 on expected increases in remittances and tourism receipts in the second half.

Medium-term challenges to Fiji's growth outlook remain, as the International Monetary Fund assessed the country's "potential GDP growth rate" (an estimate of the highest real GDP growth rate sustainable over the long term) to be only about 2.5%. The assessment suggests that, despite the positive growth outlook in the near term, investment and policy reforms are needed to address supply-side capacity constraints and improve productivity. A particular priority will be to institute further structural reforms to improve the country's growth potential.

Papua New Guinea

This *Update* confirms the *ADO 2014* forecast that GDP growth will rise to 6.0% in 2014 and soar to a record 21.0% in 2015, driven by exports of liquefied natural gas (LNG) through the country's new pipeline. LNG exports commenced this year, but 2015 will be the first full year of production. Growth outside of the mining and petroleum sectors is expected to continue to slow to just 1.6% in 2014. The strong growth achieved outside of resource extraction in recent years—largely spillover from LNG pipeline construction—has dissipated. Construction is forecast to contract by 6.4% in 2014, while activity in transport and logistics, wholesale and retail trade, and financial services appears likely to slide from the highs recorded over the past 3 years.

The outlook for agriculture is supported by improved international prices for PNG's main agricultural exports in the first half of 2014. Coffee prices jumped by 57% from December 2013 to June 2014. Prices for other major agricultural exports have consolidated earlier gains, with copra rising by 10% in the first half of the year and cocoa by 12%. On the downside, the production response to these higher prices has likely been constrained by the unexpected sharp appreciation of the PNG kina in July 2014, as well as by structural constraints like weak transport and logistics networks, a cocoa pod bora infestation, and aging coffee and tea plantations that require replanting.

The Treasury Department's midyear economic and fiscal outlook highlights the intensifying fiscal pressures facing the government. Although capital expenditure was 19.0% below budget in 2013, weaker-than-expected revenue collection and spending over budget on

3.1.33 Selected economic indicators, Papua New Guinea (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.0	6.0	21.0	21.0
Inflation	6.5	6.0	5.0	5.0
Current acct. bal. (share of GDP)	–7.0	–7.0	13.0	13.0

Source: ADB estimates.

recurrent items caused a budget deficit equal to 7.6% of GDP, well above the targeted deficit of 6.5%.

Likewise, weaker than expected revenue collections—particularly from mining and petroleum taxes—have led the government to revise their budget deficit projection for 2014 from 5.9% of GDP to 6.9%. As a result, public debt is now expected to rise to 37.1% of GDP by the end of 2014, up from 22.0% at the end of 2011. This debt exceeds the government's debt ceiling target of 35% established in its 2013 Medium-Term Debt Strategy, which had already revised the government's previous ceiling of 30% of GDP.

High government expenditure, combined with the kina weakening against most major currencies during the fourth quarter of 2013 and the first half of 2014, have contributed to reemerging inflation. Consumer prices rose by 2.9% in the last quarter of 2013 and are expected to increase by 6.0% by the end of 2014, less than forecast in *ADO 2014*.

The current account deficit continues to narrow from 13.7% of GDP in 2013 and is expected to turn into a surplus in 2015, as envisioned in *ADO 2014*. The commencement of LNG exports in 2014, as well as expanding production of gold and nickel at a new mine, will drive the improvement in the external balance.

Over the past decade, the strong performance of PNG's economy outside mining and petroleum has seen formal employment grow by an average of 6% per year. This has almost doubled the size of the private sector workforce and created new opportunities for an emerging middle class. However, as construction on the PNG LNG Project ends, and as growth derives more from mining and petroleum exports, new structural reforms to enhance productivity in other sectors must be prioritized to ensure that formal employment continues to expand.

Solomon Islands

Heavy rain in April caused damage and severe flooding across Guadalcanal, including Honiara, and parts of Isabel and Malaita provinces. The economic outlook for 2014 now sees GDP contracting by 1.0%, rather than growing by 3.0% as forecast in *ADO 2014*. The storm severely damaged roads, bridges, and water and sewerage systems, and destroyed agriculture output. As flooding from the storm hit the country's major economic and population center and left thousands of people displaced, it caused much greater economic upheaval than other natural disasters that have hit the Solomon Islands in recent decades.

Flooding obstructed access to Gold Ridge, the only commercial gold mine in the country, causing the operator to halt production. The mine operator evacuated all personnel, and vandalism and looting were reported. Production at the mine has yet to resume. The mine operator laid off its local personnel and has entered into negotiations for the possible transfer of mine ownership to the government. This raises the risk of prolonged disruption to operations. Prior to the cyclone, gold production had increased by over 50% year on year in the first quarter of 2014.

For other commodities, year-on-year production performance has been mixed. Logging output increased by 2.7% in the first half of 2014,

3.1.34 Selected economic indicators, Solomon Islands (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.0	–1.0	3.0	3.0
Inflation	5.5	6.0	5.0	5.0
Current acct. bal. (share of GDP)	–6.0	–15.0	–10.0	–15.0

Source: ADB estimates.

and exports of round logs—largely from provinces unaffected by the cyclone—also increased. Palm oil exports were nearly flat over the first 4 months of the year as exports of crude palm oil fell by 0.3% and of palm kernel oil increased by 1.7%. Fish catch surged by more than 60% by volume in the first 5 months of 2014.

Growth is expected to recover to 3.0% in 2015, despite long-term concerns in the mining sector that pose a risk to the near-term outlook. Supply bottlenecks prompt an upward revision to the 2014 inflation projection. Inflation accelerated from 2.9% year on year in January to 7.2% in June, driven by food price rises from supply disruptions caused by the floods. The restoration of supply links and declining international commodity prices are expected to drive inflation in 2015 back down to the *ADO 2014* forecast.

Solomon Islands' current account ran a small deficit equal of 0.3% of GDP in the first quarter of 2014, driven by its trade deficit. This deficit is forecast to widen in 2014 and 2015, exceeding *ADO 2014* forecasts, as exports of commodities (particularly gold) decline and capital imports increase for investment projects and flood-damage reconstruction.

Timor-Leste

Non-oil GDP, which is GDP excluding the direct value of activities in the extraction of crude petroleum and natural gas, is now projected to grow by half a percentage point less than earlier forecast for 2014 and 2015, as sluggish growth in credit to the private sector suggest slower business expansion. The inflation projection for 2014 is slashed by more than two-thirds, in light of early inflation outcomes, and is cut for 2015 as well. However, there is risk of higher inflation as rising government spending is expected to put upward pressure on prices toward the end of 2014.

Increased government spending is providing strong stimulus to the economy. Actual expenditures in the first 8 months of 2014 were 34.9% higher than in the same period of 2013, with all classes of spending increasing: capital investments by 41.7%, salaries and wages 14.3%, goods and services 34.1%, and transfer payments 33.7%.

Credit to the private sector grew more slowly in the first quarter than in recent quarters, and contracted slightly in the second quarter, suggesting that the pace of business expansion has slowed. Revisions to recent business activity surveys confirm the dominant role of the construction and retail sectors in Timor-Leste's nonpetroleum economy. In 2012, these sectors accounted for 68% of value added by the formal private sector excepting agriculture. Both sectors rely heavily on demand traced to government spending. The government has approved an indicative budget that allows for total expenditures of $1.3 billion in 2015—$200 million less than in the 2014 budget. However, previous years have seen actual budgets exceed their initial fiscal envelopes by substantial margins.

Royalties from offshore oil production and taxes in the first half of 2014 totaled $1.1 billion, or 75% of the government's forecast for the whole year. This, and the return on investment from past savings, brought the Petroleum Fund balance to $16.6 billion or $13,800 per capita. The government has now achieved its objective of investing

3.1.35 Selected economic indicators, Timor-Leste (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	8.5	8.0	8.5	8.0
Inflation	9.5	3.0	9.0	5.4
Current acct. bal. (share of GDP)	47.0	51.5	50.3	55.1

Source: ADB estimates.

40% of fund assets in equities, with the remainder invested in high-quality bonds.

With a correction to earlier reporting, spending on imports declined by 13.1% year on year in the first half of 2014. Increased spending on food, fuel, and vehicle imports was more than offset by lower spending on construction materials and other goods. Export earnings in the first half of the year were flat ahead of the June–October coffee harvest.

Following nearly 3 years of double-digit inflation, consumer price rises have slowed significantly since the last quarter of 2013, averaging just 1.3% in the first 2 quarters of 2014. An improved methodology for measuring inflation was introduced in January 2013 along with changes in how data are collected and processed. These changes likely contributed to the reported decline in inflation, but it is not possible to quantify this using published data. Exogenous factors have also contributed to price stability. The sustained appreciation of the US dollar against the currencies of Timor-Leste's key trading partners, and declining international prices for rice and other food items have lowered import costs.

3.1.36 Selected economic indicators, Marshall Islands (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.0	3.0	1.5	1.5
Inflation	1.5	1.5	1.5	1.5
Current acct. bal. (share of GDP)	–20.6	–20.6	–10.9	–10.9

Source: ADB estimates.

North Pacific economies

Economic indicators suggest that GDP growth this year in the Republic of the Marshall Islands (RMI) and the Federated States of Micronesia (FSM) remains on track to meet *ADO 2014* projections. Growth in Palau this year is expected to be slower than forecast because construction has fallen short of expectations and the completion of major tourist infrastructure is delayed. As these economies, particularly RMI and FSM, are small and dominated by the public sector, economic performance generally tracks public capital expenditure.

In FY2014 (ends 30 September 2014 in all three North Pacific economies), RMI's economy is expected to grow by 3.0% as previously delayed infrastructure projects are implemented with funding from development partners. The growth rate is expected to fall by half in FY2015 as construction projects wind down.

Economic growth in FSM is expected to remain sluggish at 0.5% in FY2014, as forecast in *ADO 2014*. A lack of major public infrastructure projects, and weak private investment and business activity dim prospects for stronger growth in the near term. Unutilized funds from the US under the Compact of Free Association for infrastructure projects reached over $140 million. Sluggish private sector growth is attributed to an unfavorable business environment. Attempts to improve this through tax reform have been delayed by opposition from two of the four states.

In Palau, the growth forecast for FY2014 is revised down by 1.0 percentage point as construction and tourism were both weaker than expected. In the aftermath of Cyclone Haiyan, which struck the country in November 2013, the government reallocated intended budget savings of $1.5 million to reconstruction. However, reconstruction projects have suffered implementation delays. One indicator of this is the issuance of earthmoving permits in the first 3 quarters of FY2014. Although 42.5% more permits were issued, roughly half came only in the third quarter.

3.1.37 Selected economic indicators, Micronesia, Fed. States of (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	0.5	0.5	0.5	0.5
Inflation	2.0	2.0	1.5	1.5
Current acct. bal. (share of GDP)	–9.6	–10.3	–9.3	–9.9

Source: ADB estimates.

3.1.38 Selected economic indicators, Palau (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.0	2.0	2.0	2.0
Inflation	2.5	3.5	2.0	2.0
Current acct. bal. (share of GDP)	–9.3	–5.5	–7.4	–5.3

Source: ADB estimates.

A 21.7% drop in building permits issued in the first 3 quarters of FY2014 similarly reflects reconstruction delays.

Palau reports some improvement in the tourism sector, which plays a dominant role in the economy. Visitor arrivals rose by 7.6% year on year in the first 3 quarters of FY2014 as flights from Hong Kong, China and Taipei,China increased. However, growth remained below the double-digit expansion seen from FY2010 to FY2012.

Relatively low and stable inflation is expected in RMI and FSM, in line with *ADO 2014* forecasts, and expectations that international commodity prices will remain soft. The inflation forecast for Palau is now 1.0 percentage point higher than previously forecast for FY2014, as consumer prices rose by 4.0% in the first 3 quarters of FY2014, partly driven by higher tobacco taxes, medical costs, and school fees. Inflation is still expected to ease to 2.0% in FY2015.

Imports of the three North Pacific economies from the US were down in the first 3 quarters of FY2014. Despite higher food imports, the value of FSM's imports from the US fell by 23.0% year on year, mainly on a 42.0% drop in imports of machinery, transport equipment, and manufactured goods. Imports by RMI from the US were slightly lower, down by 0.3% year on year, in the first 9 months of FY2014. This was despite a massive import bill in June—over 78% of which was tied to the importation of two ships for interisland transport. Before June, lower fuel imports drove declines in import costs.

Increased imports of machinery, vehicles, and steel needed for reconstruction pushed Palau's imports up by 23.4% year on year in the first 3 quarters of FY2014. The bulk of these imports came in the first quarter of the fiscal year, particularly in December 2013. Imports of food and related products also increased over the same period.

The current account balance forecast for RMI remains unchanged from *ADO 2014*. The surge in the current account deficit from 9.0% of GDP in FY2013 reflects the importation of the two ships. FSM's current account deficit is still expected to narrow on increases in fishing license revenue, albeit by slightly less than forecast previously. By contrast, Palau's current account deficit is now seen to narrow more quickly in FY2014 on rising tourism receipts.

South Pacific economies

Growth expectations remain largely in line with *ADO 2014* forecasts for the economies of the Cook Islands, Samoa, Tonga, and Vanuatu.

In the Cook Islands, growth in FY2014 (ended 30 June 2014) is estimated to have moderated by 1.0 percentage point from FY2013 on lower than anticipated growth in tourism receipts and a decline in infrastructure spending. Tourist arrivals rose by 1.6% in FY2014, 1.8 percentage points less than in FY2013. A contraction in the number of visitors from New Zealand—the largest source market—was offset by relatively strong growth in visitors from other markets. Arrivals from Australia, the country's second most important market, are expected to remain buoyant. Growth is still projected to accelerate to 2.5% in FY2015, on the assumption that tourism growth will revert to long-term trends.

Samoa's economy is estimated to have grown by 2.0% in FY2014 (ended 30 June 2014), reversing a 0.5% decline the year before as

3.1.39 Selected economic indicators, Cook Islands (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.2	2.2	2.5	2.5
Inflation	2.5	1.6	2.5	2.5
Current acct. bal. (share of GDP)	–	–	–	–

Source: ADB estimates.

the economy recovered from Tropical Cyclone Evan with the aid of reconstruction financed by development partners, a rebound in agriculture (particularly taro production), and temporary stimulus from spending associated with the country's hosting of the United Nations Third International Conference on Small Island Developing States in early September. Economic growth in Samoa is forecast to accelerate by half a percentage point in FY2015 as forecast in *ADO 2014*. Post-cyclone rehabilitation, rising remittance inflows, hotel construction and renovations, and preparations for the 2015 Commonwealth Youth Games are seen to drive growth higher.

As forecast in *ADO 2014*, growth in Tonga's economy is estimated to have accelerated to 1.5% from a meager 0.3% in FY2013 (ended 30 June 2013) as agriculture (particularly squash, watermelon, and yam production), tourism, and wholesale and retail trade helped the economy recover quickly following Cyclone Ian in January 2014. In the first half of FY2014, tourist receipts rose by an inflation-adjusted rate of 19.1% year on year, tracking a rise in visitor arrivals. Remittance inflows were almost flat, growing by only 0.8%. The FY2015 growth forecast is upgraded by half a percentage point on the improving outlook for agricultural production and exports, rising tourist arrivals, increased private sector credit and retail business, and stimulus from post-cyclone reconstruction and recovery efforts financed by development partners.

Rising growth forecasts for Vanuatu are maintained. Tourist arrivals increased by 1.6% year on year in the first quarter of 2014 as arrivals from Australia and New Zealand—the largest source markets—remained steady from a year earlier. This is an early indication that modest growth in tourism will likely be sustained this year. The government started construction on a number of large infrastructure projects this year, which is expected to significantly boost growth over the next 3–5 years. Although the government plans to quadruple its infrastructure spending from 2014 to 2016, this *Update* maintains growth forecasts that are slightly lower than those of the government because of concerns that limited capacity may constrain infrastructure project implementation.

Declining international food and fuel prices have generally kept inflation in the South Pacific economies below *ADO 2014* projections. In the Cook Islands, inflation slowed by 1.0 percentage point from the government's revised 2.6% estimate for FY2013, mainly because housing and transport prices declined. The *ADO 2014* forecast of higher inflation in the Cook Islands in FY2015 is supported by the outlook for strengthening growth.

In Samoa, deflation deepened to 1.2% from 0.2% year on year in FY2013, contrary to 2.0% inflation projected in *ADO 2014*, as international commodity prices declined, and domestic food supplies and the tala exchange rate held steady. These declines more than compensated for the inflationary effects of a 3.0% wage increase for public sector workers, and higher housing, alcohol, and transport prices. The forecast for 2.0% inflation in FY2015 is maintained in light of the improving growth outlook, particularly for construction and tourism.

In Tonga, inflation in FY2014 is estimated to have been 0.3 percentage points higher than projected in *ADO 2014* because of cyclone-related food and fuel supply disruptions, and reconstruction on

3.1.40 Selected economic indicators, Samoa (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.0	2.0	2.5	2.5
Inflation	2.0	–1.2	2.0	2.0
Current acct. bal. (share of GDP)	–16.2	–16.2	–15.6	–15.6

Source: ADB estimates.

3.1.41 Selected economic indicators, Tonga (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	1.5	1.5	2.0	2.5
Inflation	2.0	2.3	2.0	2.0
Current acct. bal. (share of GDP)	–3.7	–4.6	–3.2	–3.0

Source: ADB estimates.

3.1.42 Selected economic indicators, Vanuatu (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.5	3.5	4.0	4.0
Inflation	2.5	2.5	3.0	3.0
Current acct. bal. (share of GDP)	–6.0	–6.0	–7.0	–7.0

Source: ADB estimates.

the Ha'apai island group. Inflation is expected to ease slightly in FY2015 as international fuel and food prices continue to moderate.

For Vanuatu, the inflation forecasts are unchanged and remain within the government target range of 2.0%–3.0% in 2014 and 2015, despite the effect of infrastructure spending on domestic demand and prices in the near term.

South Pacific economies are expected to continue to run current account deficits in FY2014 and FY2015. The estimated FY2014 current account deficit in Samoa is in line with the 18.1% year on year increase in the trade deficit. This arose from an 8.1% decline in merchandise exports and a 13.2% increase in merchandise imports, largely tied to the importation of construction machinery and materials for post-cyclone reconstruction. Samoa's current account deficit is still projected to narrow slightly in FY2015 with a slowdown in construction imports.

This *Update* revises Tonga's current account forecast toward a wider deficit in FY2014, reflecting a larger trade deficit more than offsetting higher remittance and tourism receipts. However, a narrower deficit is expected in FY2015 as the outlook improves for exports, remittances, and disaster-related grants.

Forecasts for Vanuatu's current account are unchanged. The first 4 months of 2014 saw the trade deficit narrow by 13.8% of GDP year on year as merchandise exports (mainly copra and other coconut products) soared by 48.1% and merchandise imports declined by 7.3%. In 2015, rising imports related to ongoing and planned construction funded by foreign direct investment and through development partner assistance are expected to push up the current account deficit by 1.0 percentage point.

3.1.43 Selected economic indicators, Kiribati (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.0	3.0	2.0	2.7
Inflation	2.5	2.5	2.5	2.5
Current acct. bal. (share of GDP)	–36.2	–53.2	–31.3	–53.0

Source: ADB estimates.

Small island economies

The growth forecasts for the three small island economies of the Pacific are largely unchanged from *ADO 2014* projections. Kiribati's economic growth in 2014 is fueled by public spending on projects financed by development partners, and subsequent spillover effects on wholesale and retail sales. Further, the steady pace of reform to state-owned enterprises is expected to spur private sector growth. A value-added tax was introduced on 1 April to help enhance revenue mobilization. Growth is still expected to moderate in 2015, as work on infrastructure projects winds down, but less than forecast in *ADO 2014*.

In Nauru, rising government revenues and increased consumer purchasing power from the liquidation of the Nauru Phosphates Royalties Trust and the distribution of proceeds to landowners suggest strong growth in FY2014 (ended 30 June 2014) and FY2015. Recurrent government expenditures have recently tracked rising revenues—mostly related to the regional processing center on Nauru for people seeking asylum in Australia. Government revenues in FY2014 excluding external grants are estimated at A$99.5 million, which is more than 3 times higher than before the reopening of the center in 2012. To raise revenues, the Government of Nauru introduced an A$6,000 fee for a 1-year business visa in February 2014. Sustaining recent levels of recurrent expenditure may be a challenge once the center approaches full capacity and revenues plateau. To prepare for this, the government

3.1.44 Selected economic indicators, Nauru (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	10.0	10.0	8.0	8.0
Inflation	5.0	5.0	7.0	7.0
Current acct. bal. (share of GDP)	–	–	–	–

Source: ADB estimates.

is working with development partners to establish a trust fund to be financed with revenues from the center and phosphate exports. The government has set aside A$5 million in its revised FY2014 budget as an initial contribution.

In Tuvalu, growth is still seen to improve from the government's revised estimate of 1.3% in 2013, stimulated by construction for the airport upgrade funded by development partners and by knock-on increases in retail sales.

Inflation forecasts for the three small island economies remain unchanged despite a weakening Australian dollar (the official currency for all three). In Kiribati, higher spending related to construction is expected to drive inflation to 2.5% in 2014 and 2015 following 2 years of deflation (revised to –1.5% for 2013). In Nauru, inflation rose to 5.3% year on year in the first quarter of 2014 on price hikes for alcohol and tobacco. Payments to landowners following the liquidation of the Nauru Phosphates Royalties Trust are expected to increase incomes and intensify inflationary pressures. Inflation in Tuvalu is still expected to increase by half a percentage point in 2014 as economic activity strengthens, before returning to 2.0% in 2015 as international commodity prices fall.

High revenues from fishing license fees enabled Kiribati and Tuvalu to achieve budget surpluses equal to 10% and 26% of GDP, respectively, in 2013. These unexpectedly high revenues helped the Government of Kiribati to shore up its Revenue Equalization Reserve Fund with deposits totaling A$10 million. In 2012, Kiribati cleared its expensive commercial debt, which had restrained expenditure. However, despite this fiscal consolidation, stabilizing the reserve fund balance in per capita terms remains a challenge.

Kiribati's current account deficit is now projected to soar to 53.2% of GDP in 2014 and 53.0% in 2015, well above *ADO 2014* forecasts, because of unforeseen imports of capital equipment and construction materials for infrastructure projects funded by development partners. In Tuvalu, the current account is now expected to show a surplus equivalent to 27.3% of GDP in 2014 with revenues from fishing licenses and fish exports through joint ventures with Asian companies, but is still expected to cross into deficit in 2015 on higher imports for projects. Nauru does not report its balance of payments, but income from phosphate exports and inflows related to the regional processing center suggest a strengthening position.

3.1.45 Selected economic indicators, Tuvalu (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.0	2.0	2.0	2.0
Inflation	2.5	2.5	2.0	2.0
Current acct. bal. (share of GDP)	–9.6	27.3	–10.5	–37.4

Source: ADB estimates.

Bangladesh

As economic reform took hold, and despite political disruption prior to national elections, growth and exports beat projections. Inflation was slightly below forecast, and the current account posted another surplus in place of the expected deficit. For next year, this *Update* edges up the growth projection, now projects a current account surplus, and retains the inflation forecast. A higher growth trajectory needs stronger revenues, more infrastructure and human resource spending, spurred private investment, and a solution to the power deficit.

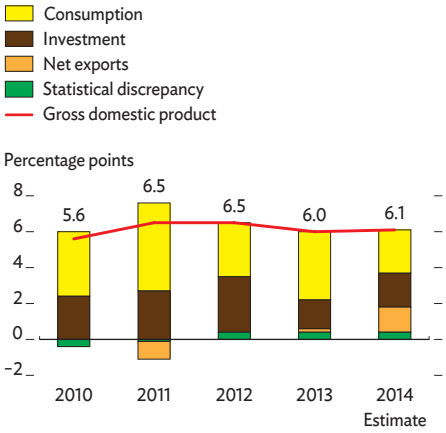
Updated assessment

GDP growth in FY2014 (ended 30 June 2014) is provisionally estimated by the authorities at 6.1% (Figure 3.2.1), which is higher than the projection of 5.6% in *Asian Development Outlook 2014* (ADO 2014), released in April this year. The outcome is also a touch higher than the 6.0% expansion in FY2013. Growth in investment contributed, as stronger public investment rose to 7.3% of GDP in FY2014 from 6.6% a year ago, offsetting a decline in private investment to 21.4% from 21.8%. Net exports markedly bolstered GDP growth, as expansion in export volume was stronger than that of imports. Consumption grew only moderately on weaker worker remittances.

Private investment is held down by infrastructure and skills deficits, and by a continued weak investment climate. The World Economic Forum's *Global Competitiveness Report 2014–2015* ranked Bangladesh infrastructure at 127 out of 144 countries surveyed. Its ranking was 125 for higher education and training, and 131 for institutions. Although power generation capacity has expanded in recent years in part through small private providers, power shortages intensified, as growing demand outpaced supply. In the World Bank's *Doing Business 2014*, Bangladesh ranked last among 189 countries on electricity delivery. Political unrest ahead of the January 2014 national elections further dampened investor confidence. Public investment remains below budgeted targets because of weak implementation capacity in line agencies. Despite advantages of location and abundant low-cost labor, foreign direct investment remains low.

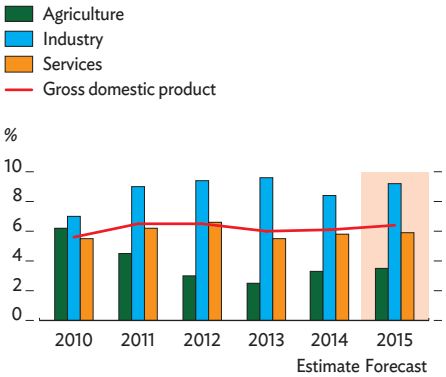
On the supply side, agriculture grew briskly by 3.3% in FY2014, up from 2.5% in the previous year (Figure 3.2.2). Helped by good weather and continued government support, crops, horticulture, forestry, and fishing all performed better. Services growth edged up to 5.8%, mainly on increased exports. Supply disruptions and weaker domestic demand caused by political unrest slowed industry growth to 8.4% in FY2014

3.2.1 Demand-side contributions to growth



Note: Years are fiscal years ending on that year's 30 June.
Source: Bangladesh Bureau of Statistics. 2014. *National Accounts Statistics.* June.

3.2.2 GDP growth by sector



Note: Years are fiscal years ending on that year's 30 June.
Sources: Bangladesh Bureau of Statistics. 2014. *National Accounts Statistics.* June; ADB estimates.

This chapter was written by Mohammad Zahid Hossain, Shamsur Rahman, Md. Golam Mortaza, and Barun K. Dey of the Bangladesh Resident Mission, ADB, Dhaka.

from 9.6% a year earlier. Manufacturing growth slowed to 8.7% from 10.3%, reflecting weaker domestic goods production even as garment production strengthened. Expansion in electricity output also slowed to 8.2% from 9.7%. However, the pace of construction picked up to 8.6% from 8.0%, reflecting higher government development spending.

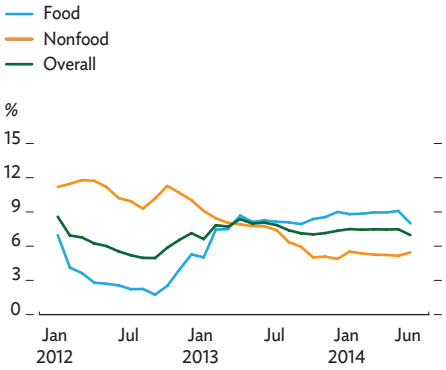
Year-on-year inflation slowed from 8.1% in June 2013 to 7.0% in October on a decline in food prices as rice supplies rose following a good *boro* (winter) harvest (Figure 3.2.3). Thereafter until May 2014, inflation hovered close to 7.5% year on year as food prices were elevated by supply disruptions during political unrest before the elections in January 2014, and even for several months later as traders tried to recoup losses. Nonfood inflation declined, reflecting consumer demand weakened by the fall in remittances and political uncertainty. Annual inflation averaged 7.4% in FY2014, up from 6.8% a year earlier. However, inflation in June 2014 at 7.0% year on year was a percentage point lower than a year earlier because food prices dropped markedly that month.

The money supply grew by 16.1% in June 2014, decelerating from 16.7% in June 2013 and lower than the FY2014 monetary program target of 17.0% (Figure 3.2.4). Private credit growth slowed to 12.3% in June 2014, compared with the FY2014 program target of acceleration to 16.5%, as low credit demand reflected political uncertainty and subdued private investment. Another factor was tighter loan approval procedures aimed at improving credit quality. Corporations are allowed to augment domestic bank credit with limited borrowing from foreign sources, and counting this foreign borrowing raises private credit growth to 15.7% in FY2014 from 12.9% a year earlier. Growth in net credit to the government declined to 6.7% in June 2014 from 20.1% in June 2013 as the government is limiting bank financing of the budget under its medium-term economic reform program. Reflecting progress in this effort, both private and official capital inflows have increased in the past 2 years, and net foreign assets have become a larger factor in monetary expansion.

In the face of inflationary pressures, the central bank kept its main policy (repo) rate unchanged at 7.25% during FY2014. The call money rate declined from 7.2% in June 2013 to 6.2% in June 2014, as liquidity pressures in the banking system eased on a strong balance of payments and a consequent buildup of foreign exchange reserves. Treasury bill rates also declined because of higher demand from banks as private sector lending slowed. Banks' average lending rate eased to 13.1% in June 2014 from 13.6% a year earlier. The deposit rate fell by a greater margin, thus widening the interest rate spread to 5.3 percentage points in June 2014 from 5.2 in June 2013.

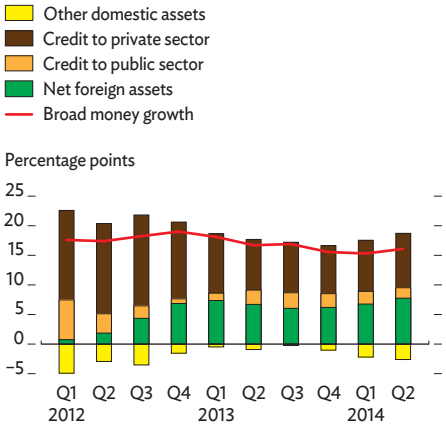
Budget revenues grew by 10.4% in FY2014, falling below the target of 19.9%. Growth in taxes on imports was weak at 2.8%, as imports of consumer goods were modest and the larger share of imports were items subject to low duties such as industrial raw materials, capital goods, and food grains. Domestic indirect tax receipts grew by 11.8%, while income tax receipts rose by 15.6%. As a share of GDP, revenues strengthened to 11.6% in FY2014 from 10.7% in the previous year, while total spending stood at 16.0%, limiting the budget deficit to 4.4% of GDP. Domestic sources financed close to 70% of the deficit, and foreign sources the balance.

3.2.3 Monthly inflation



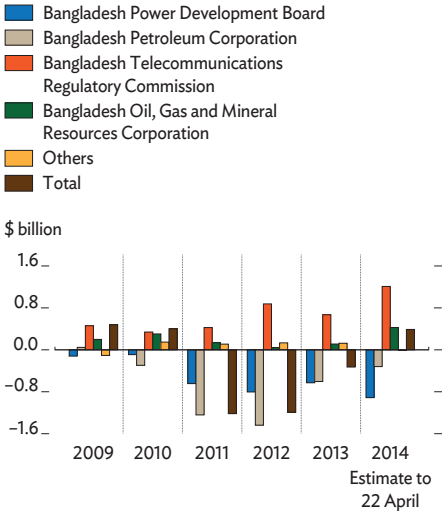
Source: Bangladesh Bank. 2014. *Monthly Economic Trends.* July. http://www.bangladesh-bank.org

3.2.4 Contributions to broad money growth



Sources: Bangladesh Bank. 2014. *Monthly Economic Trends.* August. http://www.bangladesh-bank.org; ADB estimates.

3.2.5 Profits and losses at state-owned enterprises



Note: Years are fiscal years ending on that year's 30 June.
Source: Ministry of Finance. *Bangladesh Economic Review 2014.*

The 48 nonfinancial state-owned enterprises earned a net profit of $388.9 million in FY2014 to 22 April 2014, reversing a $328.5 million loss in FY2013 (Figure 3.2.5). The turnaround reflected large profits of $1.2 billion earned by the Bangladesh Telecommunications Regulatory Commission (from fees collected on the newly launched third-generation mobile broadband service and second-generation license renewal fees) and $425.3 million earned by the Bangladesh Oil, Gas, and Mineral Resources Corporation (from expanded gas and condensate production and production sharing contracts that have largely completed cost recovery). Bangladesh Petroleum Corporation almost halved its loss to $320.4 million from $604.6 million a year earlier, but this was offset as the Bangladesh Power Development Board loss expanded to $912.6 million from $628.8 million in the previous year. These two losses together equal $1.2 billion, or 0.7% of GDP in FY2014.

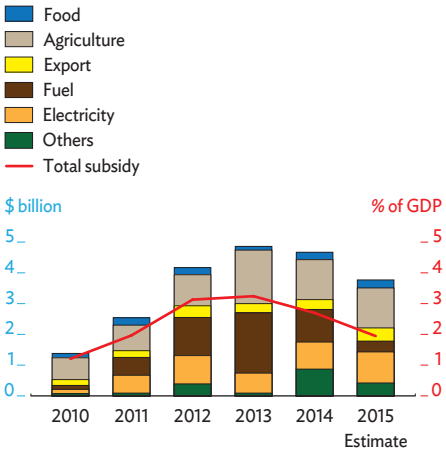
The government is trying to cut such losses and reduce subsidies, which have been rising in recent years. Subsidy-related spending declined marginally in FY2014 to $4.1 billion (2.4% of GDP) from $4.2 billion (2.8% of GDP) a year earlier (Figure 3.2.6). The government succeeded in trimming the fuel subsidy, which includes retiring some earlier loans, to $0.9 billion (0.5% of GDP) from $1.7 billion (1.1% of GDP) in the previous year. Despite periodic upward adjustments to power tariffs, power subsidies rose to $0.8 billion (0.5% of GDP) from $0.6 billion (0.4% of GDP) in FY2013, as costly rental power plants using diesel and furnace oil expanded operations. Agriculture subsidies on fertilizer, diesel, and farm electricity declined in FY2014 to $1.2 billion (0.7% of GDP) from $1.5 billion (1.0% of GDP) a year earlier. Despite this decline, agriculture remained the largest recipient of subsidy spending in FY2014.

Exports grew by 12.0% in FY2014, up from 10.7% in FY2013 (Figure 3.2.7). After notching up 21.2% in the first quarter, export growth slowed to 16.6% in the first half and further to 12.9% in the first 3 quarters. Despite some disruption to domestic supply chains from political unrest, garment exports—accounting for about four-fifths of total export earnings—grew by 13.8% in FY2014, outpacing 12.7% expansion in FY2013 and reflecting continued strong demand mainly from the European Union. Other exports grew by 3.1%, maintaining the relatively slow pace of the previous 2 years.

Imports grew by 8.9% in FY2014, a sharp rise from 0.8% growth in the previous year (Figure 3.2.8). All import categories recovered from low levels in the previous year, with food grains, raw materials for the garment industry, and other imports (mainly other intermediates) recording strong advances.

Remittances fell to $14.2 billion, a 1.6% decline from FY2013 and the first decline since FY2001. One factor was the large drop in overseas job placements, especially to the Middle East, and another was higher transaction costs caused by prolonged political unrest. Remittances declined by 8.5% in the first half of FY2014 but rose by 5.6% in the second half. The number of overseas jobs for Bangladeshi workers declined by 7.3% in FY2014, yet greatly improved on the 36.2% plunge in FY2013 (Figure 3.2.9). Remittances from Saudi Arabia fell by 18.6%, the United Arab Emirates by 5.1%, Kuwait by 6.7%, and the United Kingdom by 9.1%. Remittances from the US rose by 24.9% and from Malaysia by 6.7%.

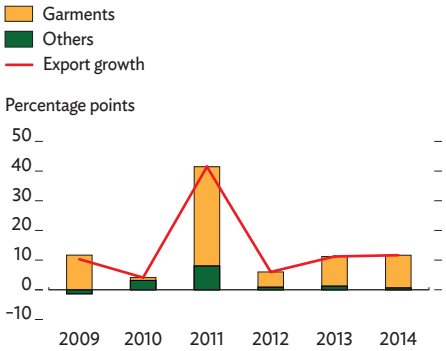
3.2.6 Government subsidies



Note: Years are fiscal years ending on that year's 30 June.

Sources: Ministry of Finance. *Medium Term Macroeconomic Policy Statement from 2014–15 to 2016–17*; ADB estimates.

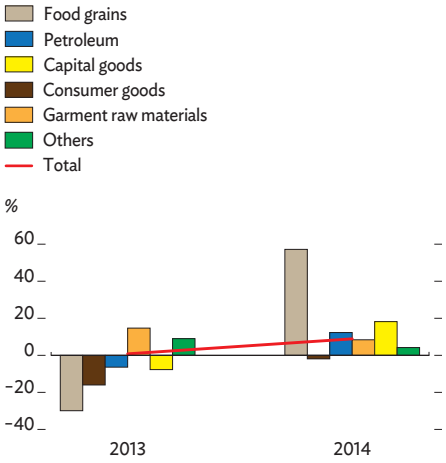
3.2.7 Contributions to export growth



Note: Years are fiscal years ending on that year's 30 June. High export growth in 2011 largely reflects an increase in cotton prices by more than 40%.

Sources: Export Promotion Bureau; ADB estimates.

3.2.8 Growth in imports and components



Note: Years are fiscal years ending on that year's 30 June.

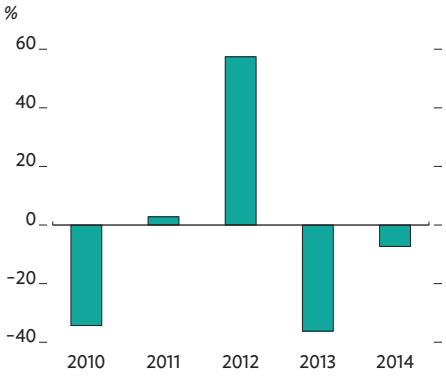
Source: Bangladesh Bank. http://www.bangladesh-bank.org

The trade deficit narrowed marginally to $6.8 billion in FY2014 from $7.0 billion a year earlier, as exports grew more strongly than imports. Despite a lower trade deficit, the reduction in remittances and a higher services deficit narrowed the current account surplus to $1.5 billion (0.9% of GDP) from the $2.4 billion surplus (1.6% of GDP) in FY2013.

Despite the lower current account, larger capital and financial inflows pushed the overall balance of payments up to a surplus of $5.5 billion in FY2014 from $5.1 billion in FY2013. The central bank's gross foreign exchange reserves rose sharply to $21.5 billion at the end of June 2014 (coverage for 5.9 months of imports) from $15.3 billion a year earlier (Figure 3.2.10).

The Bangladesh taka held steady against the dollar in FY2014, appreciating marginally by 0.2%. Because domestic inflation outpaced that of trading partners, the real effective exchange rate rose by 5.6%, indicating some loss in export competitiveness (Figure 3.2.11).

3.2.9 Overseas employment growth



Note: Years are fiscal years ending on that year's 30 June.
Source: Bangladesh Bank. 2014. *Monthly Economic Trends.* July. http://www.bangladesh-bank.org

Prospects

Forecasts for FY2015 are based on several assumptions: The central bank will maintain its cautious monetary policy stance with a view to containing inflation. The government will raise fuel and electricity prices to cut subsidies and keep current spending within the budget target to safeguard spending on infrastructure and human resources development. It will also attain targeted budget revenue and foreign financing and strengthen project implementation. Finally, political stability will be maintained, and weather will be favorable.

GDP growth in FY2015 is now projected at 6.4%, slightly higher than the ADO 2014 forecast, as exports and remittances are expected to perform better than projected earlier. Moreover, the government is seen stepping up project implementation and private investment will likely pick up on postelection political stability.

Industry growth is expected to improve to 9.2% on higher exports and stronger domestic demand supported by a rise in remittances. The central bank's priority in channeling more credit to small and medium-sized enterprises and to agro-industries should contribute to higher production. Agricultural growth should edge up to 3.5% with continued policy support, as should services output to 5.9% with higher growth in industry and agriculture, a pickup in external trade, and a rise in domestic demand.

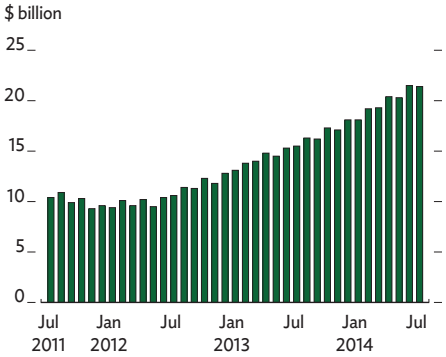
Ongoing reform aims to lay the foundation for growth that is stronger, inclusive, and environmentally sustainable. To attract foreign and domestic investors, create jobs, and spur growth, the government plans to set up five economic zones capable of providing one-stop service. The introduction of alternative dispute resolution for income tax, value-added tax, and customs duties should reduce the administrative burden and cost of paying taxes. Efforts under way to automate the administration of the judicial system will shorten delays in enforcing contracts, and similar efforts for the processing of exports and imports will speed trade across borders. These measures are expected to improve the business environment.

3.2.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.6	6.1	6.2	6.4
Inflation	7.5	7.4	6.5	6.5
Current acct. bal. (share of GDP)	−0.5	1.0	−1.5	1.5

Source: ADB estimates.

3.2.10 Foreign exchange reserves



Source: Bangladesh Bank. 2014. *Major Economic Indicators, Monthly Update.* July. http://www.bangladesh-bank.org/

Fiscal reform seeks to encourage voluntary compliance by simplifying and automating the tax payment system and by curbing the discretionary power of tax officials. Progress has been made in implementing the Value Added Tax and Supplementary Duty Act, 2012. In view of the new law's target implementation date of 1 July 2015, a set of draft regulations has been formulated. A taxpayer education program will be launched, and online registration is expected to commence on 1 January 2015. A computerized tax network system will be set up nationwide. To make customs administration more efficient, the Asycuda World clearance system of the Automated System for Customs Data has been introduced at all major customs houses, promising within a year a paperless customs management system operating throughout the country.

The FY2015 budget targets 19.3% growth in tax revenue, to lift the tax-to-GDP ratio by 0.5 percentage points to 10.1% (Figure 3.2.12). The budget aims to boost tax revenue largely through ongoing administrative reform. Fully attaining this large growth in tax collection, which is higher than growth in nominal GDP, may be a challenge unless discretionary tax measures are adopted.

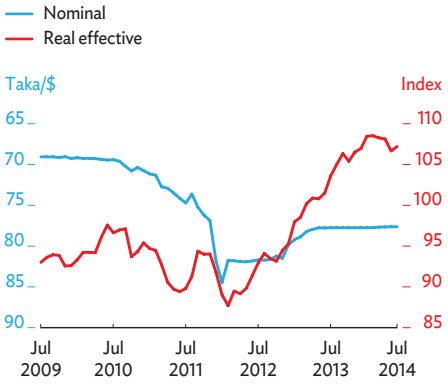
Public expenditure, both current and under the Annual Development Program, is budgeted to grow by 15.9%, with current spending rising by 14.3% and the program projected to expand by about one-third. Fully implementing such a substantial increase could be difficult, however, in view of continuing limits on staff capacity. The budget deficit target is set at 4.4% of GDP, the same as in FY2014, with 64% of deficit financing from domestic sources and balance foreign. While domestic borrowing is assumed to rise modestly by 5.6%, a steeper rise of 30.7% in net foreign borrowing is planned.

In its monetary policy statement for the first half of FY2015, issued in late July, the central bank said it would continue to use a ceiling on net domestic assets as the main operating target toward attaining monetary policy objectives. A 15.5% increase in bank credit to the private sector envisaged in the monetary program is expected to accommodate anticipated demand for investment and trade finance. To help contain inflation, the central bank kept its main policy rate unchanged at 7.25%. However, in June 2014 it raised the cash reserve requirement by 50 basis points to absorb part of the excess bank liquidity stemming from the increase in foreign exchange reserves in previous months. The central bank is continuing to improve the performance of state-owned commercial banks by monitoring performance as set out in memorandums of understanding with each bank board.

This *Update* retains the *ADO 2014* projection of 6.5% for average inflation in FY2015, the same rate as in the central bank's Monetary Policy Statement (Figure 3.2.13). Price pressures are expected to soften with easing supply constraints, a better crop outlook, a supportive monetary policy, and a large public stock of food grains. Lower food prices on the international market and stable oil prices will contribute.

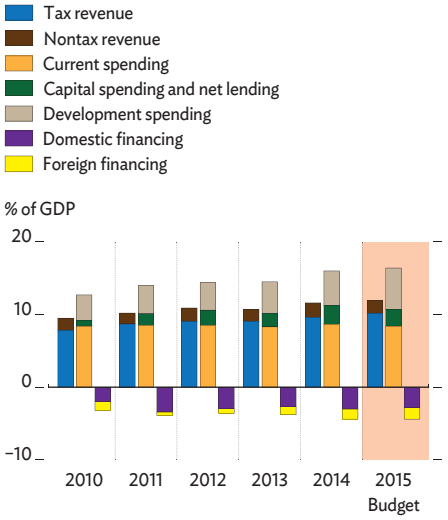
Import growth is projected to be higher in FY2015, at 15.0%, with expected economic improvement and rising investment after the elections. Petroleum imports will rise to fuel the additional small

3.2.11 Exchange rates



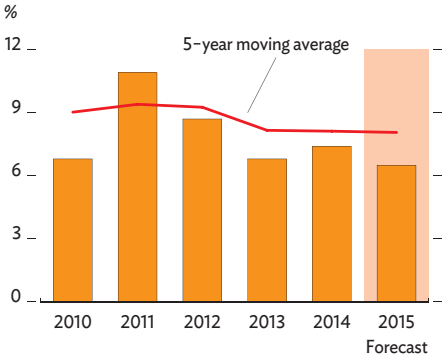
Source: Bangladesh Bank. 2014. *Economic Trends*. July. http://www.bangladesh-bank.org/

3.2.12 Fiscal indicators



Note: Years are fiscal years ending on that year's 30 June.
Source: Asian Development Outlook database.

3.2.13 Annual inflation



Note: Years are fiscal years ending on that year's 30 June.
Sources: Bangladesh Bank. 2014. *Monthly Economic Trends*. July. http://www.bangladesh-bank.org; ADB estimates.

3.2.1 Progress marked in garment industry reform

Progress has been made in improving safety standards and worker rights in the Bangladesh garment industry under the National Tripartite Plan of Action that was established following two large industrial disasters: the Tazreen factory fire in 2012 and the Rana Plaza building collapse in 2013. By the end of July 2014, inspections under the plan had occurred in 1,784 of the 3,716 factories targeted, and 24 had been closed by the government. The inspections, which cover structural integrity and fire and electrical safety, are undertaken by two groups of international buyers—the Alliance and the Accord—in coordination with the government and the International Labour Office of the United Nations. They are expected to be completed by the end of 2014.

The Bangladesh Labour Act, 2006 was amended in July 2013 to stiffen workplace safety requirements and facilitate greater trade union activities. About 150 garment factory unions have been registered. A minimum monthly wage hike to $67 from $38, as recommended by the Minimum Wage Board established by the government, has been implemented since 1 December 2013.

Casualties in the Rana Plaza collapse and their families received financial assistance from the Prime Minister's Relief and Welfare Fund and payments from the Bangladesh Garment Manufacturers' and Exporters' Association. Contributions from international garment companies to the Rana Plaza Donors Trust Fund have reached $15 million but not the targeted $40 million. Out of this fund, injured workers and the dependents of deceased workers receive advance payments of Tk50,000, which uninjured workers receive as one-time payments.

power plants needed to improve electricity supply, as will imports of capital machinery and industrial raw material as industrial production picks up. Food grain imports will rise to maintain adequate public stocks. Export growth is projected to be higher, at 13.0%. Improvements in wages, working conditions, and labor rights—and in building and safety standards—will enhance buyers' confidence in the Bangladesh garment industry and boost exports (Box 3.2.1).

Remittance growth is expected to accelerate to 7.0% in FY2015, continuing the strengthening trend seen in the second half of FY2014. Improved remitting systems, lowering costs to sending remittances, and a more settled political environment should help boost inflows. With higher remittances offsetting a larger trade deficit, the current account balance is expected to achieve a surplus in FY2015 equal to 1.5% of GDP.

Several downside risks could upset projections. Inability to mobilize sufficient revenue and foreign financing would affect Annual Development Program implementation and might fuel inflation if replaced by pricier bank borrowing. Renewed political unrest could dampen investor confidence and impede economic activity. Unfavorable weather is a perennial risk.

People's Republic of China

Selective stimulus measures and improved export performance supported GDP growth in the second quarter from a moderated start earlier in the year. With the economy on track to hit government's targets, GDP growth projections remain unchanged. The inflation forecast is revised down for 2014 in light of unexpectedly mild price pressures but remains unchanged for 2015 in anticipation of plans to liberalize administered prices.

Updated assessment

GDP growth in the People's Republic of China (PRC) moderated from 7.7% year on year in the fourth quarter of 2013 to 7.4% in the first quarter of 2014, dragged down by fiscal tightening, weak export growth, and decelerating real estate investment. Rising interest rates, stricter regulation of nonbank financial services, tightened financing conditions for developers and investors, and overinvestment in previous years dampened real estate activity. Growth picked up to 7.5% in the second quarter (Figure 3.3.1) as the government accelerated spending on infrastructure and social housing and eased monetary policy, mainly through liquidity support and lower regulatory reserve requirements for lending to small- and medium-sized enterprises and to rural areas. Some local governments (in the PRC meaning as high as provincial) started relaxing home purchase restrictions introduced in recent years to cool housing demand. They restored the right of nonresidents to buy housing (or granted resident status to home buyers), eased down-payment requirements, increased land supply, offered tax breaks, waived administrative fees, established loan guarantee schemes, or capped mortgage rates.

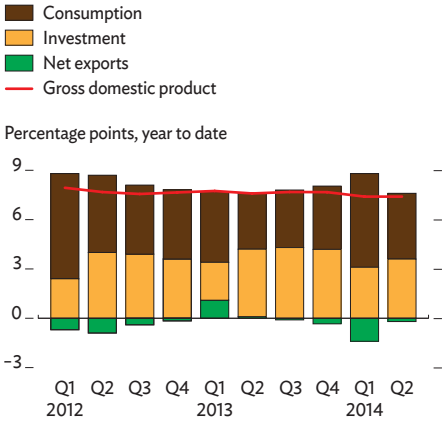
Several key activity indicators suggest that growth weakened in the third quarter of 2014. These include industrial value added, retail sales, freight and passenger traffic, energy production, the purchasing managers' indexes for manufacturing and services, and consumer confidence. However, the government is deploying limited stimulus to prevent a sharper economic downturn and associated social problems, and to ensure that GDP reaches its growth target of 7.5% in 2014.

Investment contributed 3.6 percentage points to GDP growth in the first half of 2014, down from 4.1 in the first half of 2013 (Figure 3.3.2). Stronger external demand made a positive contribution to GDP growth in the second quarter, but the contribution of net exports remained negative at –0.2 percentage points in the first half of 2014. Consumption contributed 4.0 percentage points, supported by strong real income growth of 9.8% year on year in the first half of 2014, a noteworthy

3.3.1 Economic growth

Source: National Bureau of Statistics.

3.3.2 Demand-side contributions to growth



Source: National Bureau of Statistics.

This chapter was written by Jurgen Conrad and Jian Zhuang of the People's Republic of China Resident Mission, ADB, Beijing.

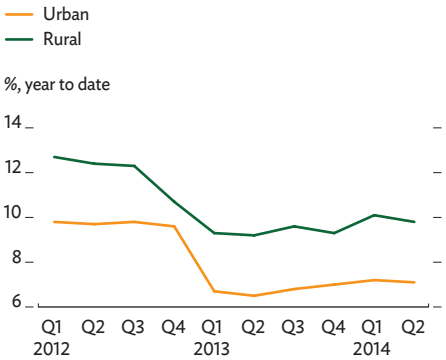
acceleration from 8.1% in 2013. Household income continued to increase more quickly in rural areas than in urban (Figure 3.3.3), but the rural–urban income gap remained essentially the same as in 2013, with urban household income at 2.8 times that of rural households.

On the supply side, the secondary sector (including mining, manufacturing, utilities, and construction) grew by 7.4% year on year in the first half of 2014, slightly up from 7.3% in the first quarter. Decelerating property market activity dampened demand for housing-related items, machinery, and construction materials, curbing heavy industry production. However, this effect was increasingly compensated by accelerated investment in infrastructure, particularly railway construction under government programs. Similarly, service sector growth accelerated from 7.8% in the first quarter of 2014 to 8.0% in the first half, driven by such structural factors as urbanization and income growth, as well as by policy measures, including tax reform and business deregulation. This helped maintain labor market stability, as services are more labor intensive than industry. The primary sector (mainly agriculture) grew by 3.9% on improved weather, up from 3.0% in the first quarter. In relative terms, during the first half of 2014 the share of industry in nominal GDP grew to 46.0% and that of services to 46.6%, pushing the share of the primary sector down to 7.4% (Figure 3.3.4).

Price pressures remained moderate. Core inflation (which ignores food and energy) eased slightly from 1.8% year on year in December 2013 to 1.6% in August 2014—about the same rate maintained since late 2011 despite strong credit growth. Headline consumer price inflation eased from 2.5% in December 2013 to 2.0% in August 2014 (Figure 3.3.5). Despite fluctuation month by month that was driven by volatile food prices and reflected base effects, inflation has not breached the government's ceiling of 3.5% for 2014. Producer price deflation moderated from 1.4% in December 2013 to 1.2% in August 2014. The index—heavily weighted toward industrial input—has been falling since March 2012 because of subdued commodity prices and excess capacity in such industries as steel and cement. However, recent increases in global prices for metals are now mitigating producer price deflation in the PRC.

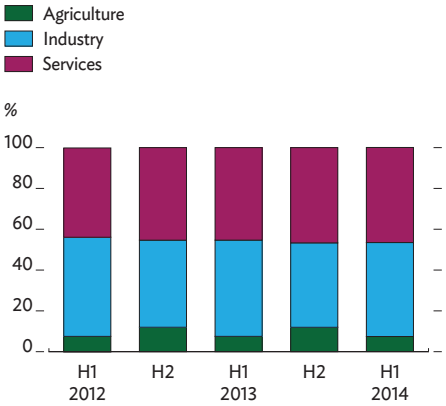
Reversing budgetary tightening at the beginning of 2014, which partly explained weaker economic activity at that stage, the government began accelerating expenditure in March with the aim of spurring economic growth. The acceleration was in line with the government objective to distribute expenditure more evenly over the year to avoid the heavy back-loading of the past. Expenditure growth of 6.0% year on year in the first 2 months of 2014 became 13.9% in the first 8 months of the year, substantially outpacing the nominal GDP growth rate (Figure 3.3.6). The acceleration of local government expenditure growth was particularly strong. However, consolidated budget revenue growth over the same periods declined from 11.1% to 8.3% on account of shortfalls in all main revenue categories. The consolidated budget surplus of local and central governments in the first half of 2014 fell to 2.0% of GDP, lower than the 3.6% reported a year earlier, helping to stimulate economic activity. Little is known about the extent of the government's off-budget spending, but indications are that it declined in early 2014 and subsequently picked up again. In summary, the

3.3.3 Growth of per capita urban and rural incomes



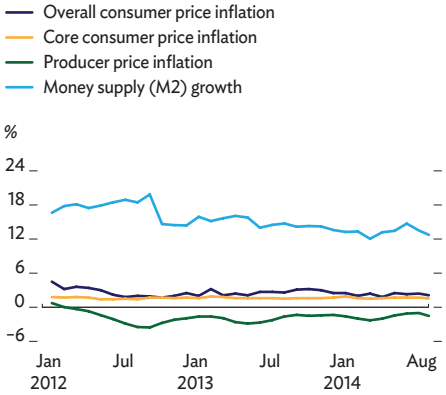
Source: National Bureau of Statistics.

3.3.4 Share of sectors in nominal GDP



Source: National Bureau of Statistics.

3.3.5 Money and prices



Sources: National Bureau of Statistics; People's Bank of China.

PRC fiscal stance was contractionary in early 2014, but it became more accommodative in later months as the budgetary surplus declined and off-budget expenses likely grew.

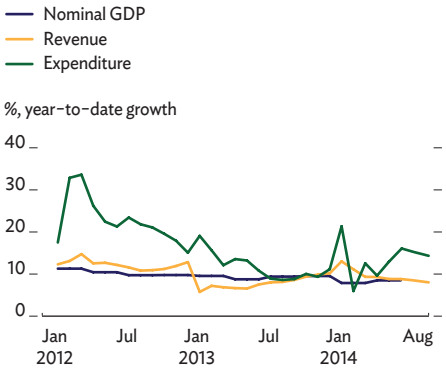
In an effort to streamline borrowing by local governments and improve its transparency, the State Council announced in June 2014 that 10 provincial governments would directly issue a total of CNY109 billion in bonds in 2014 under a trial program. Although restrained to a quota set by the State Council, these local governments are able to choose bond underwriters and let markets set the interest rate based on credit appraisals. This announcement followed a 2011 pilot that allowed the governments of Guangdong, Shanghai, Shenzhen, and Zhejiang to issue bonds, an initiative later expanded to include Jiangsu and Shandong. Beijing, Jiangxi, Ningxia, and Qingdao joined the program in June 2014. The pilot is an important part of a broader initiative to strengthen the debt management framework for local governments. Over time, developing subnational bonds markets will help to curb local governments' off-budget borrowing.

The trend appreciation of the renminbi vis-à-vis the US dollar, driven by strong foreign exchange inflows and productivity gains, was interrupted in late February 2014 as the People's Bank of China, the central bank, intervened, mainly injecting renminbi liquidity through open market operations. The objective was to discourage speculative capital inflows. Unexpected renminbi depreciation and worsened exchange rate volatility ensued, which weakened the renminbi to a real effective exchange rate last seen in early 2013. Since then, moderate appreciation has set in again (Figure 3.3.7).

With reduced foreign exchange inflows, broad money (M2) growth decelerated to 12.1% year on year at the end of March 2014 from 13.6% at the end of 2013. Subsequently, in response to weaker GDP growth, the central bank moved to support credit growth, mainly by cutting reserve requirements for local banks and a few national banks. It also issued to some banks quotas for relending to micro and small businesses and to rural areas and provided the China Development Bank with additional funds to support social housing and railway construction. These developments, together with the base effect of weak credit growth in June 2013, caused the M2 growth rate to reach 14.7% year on year by the end of June 2014, before declining again to 12.8% by the end of August. Over the first half of 2014, the money supply grew by 13.3%, which was 4.8 percentage points above nominal GDP growth. This compared favorably with a gap of 6.6 percentage points in the same period last year. Thus, while M2 growth still outpaces nominal GDP, some progress has been made toward making credit less prominent as a driver of economic growth.

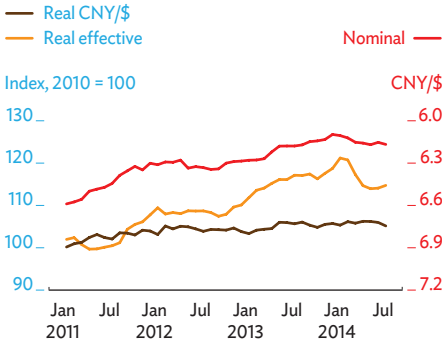
Credit growth outside the banking sector is on a declining trend this year (Figure 3.3.8). Net issuance of trust loans, entrusted loans, and bankers' acceptances was down 9.3% year on year in the first half of 2014. This trend reflects tighter controls on local government financing vehicles, reduced demand for credit from property developers, and institutional investors' heightened awareness of risk. Stricter regulatory requirements for trust companies and interbank market participants also played a critical role. Prudential regulation for trust companies was

3.3.6 Fiscal indicators and nominal GDP



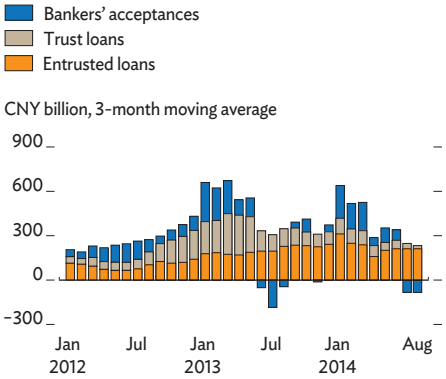
Sources: Ministry of Finance; National Bureau of Statistics.

3.3.7 Exchange rates



Sources: Bank for International Settlements; State Administration of Foreign Exchange; ADB estimates.

3.3.8 New loans from shadow banks



Sources: People's Bank of China; ADB estimates.

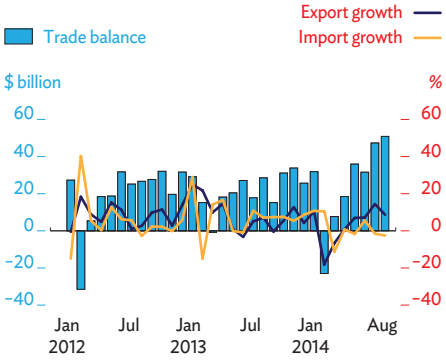
substantially tightened in January and April 2014. This was followed in May by a comprehensive package of regulations for the interbank market, which limited the scope for regulatory arbitrage and thus made financing through trust loans, bankers' acceptances, and other nonbank financial products less attractive. Bond issuance was very weak in the first 2 months of the year but has recovered since March, owing mainly to placements by local governments directly or through their financing vehicles.

In sum, as expected in *ADO 2014*, the PRC has made further progress in strengthening financial sector regulation and controlling local government debt, with due regard for the trade-off between debt reduction and growth.

Lackluster external demand constrained exports in the first quarter of 2014, but export growth rebounded to 4.9% year on year in the second quarter on revived demand. The resulting growth rate of 0.9% year on year in the first half understates export growth, as the base for its calculation was inflated by over-invoicing in the first quarter of 2013. Moreover, the current assessment of export momentum may underestimate the potential effects of a revival of external demand, a weakened renminbi, and improving terms of trade. Nevertheless, export performance so far does not augur well for attaining the government's export growth target of 7.5% for 2014.

Import growth slowed to 1.3% in the second quarter from 2.0% in the first, as weakness in construction and a regulatory crackdown on the use of metals as loan collateral appear to have weighed on industrial commodities in terms of both import volume and price. The net result of strong external demand was a trade surplus soaring from $16.6 billion in the first quarter of 2014 to $85.9 billion in the second quarter, which was 30.8% higher than the surplus recorded in the second quarter of 2013 (Figure 3.3.9). Nevertheless, the PRC's current account surplus narrowed to $79.2 billion in the first half of 2014 from $98.4 billion a year earlier, as deficits in services and transfers further widened and the surplus in the income balance shrank. Net inflows of foreign direct investment grew to $94.0 billion in the first half of 2014, even higher than the $77.5 billion recorded in the same period of 2013, but other net capital inflows declined somewhat. The overall surplus in the balance of payments reached $160.8 billion in the first half of 2014, down from $203.6 billion recorded in the first half of 2013.

3.3.9 Trade indicators



Source: General Administration of Customs.

Prospects

The GDP growth forecast for 2014 remains unchanged at 7.5%, as the government can be expected to sustain targeted policy interventions in the second half of 2014 to offset continued weakness in the property sector (following strong growth in the second half of 2013) that could lead to lower investment growth than foreseen in *ADO 2014*. Consumption growth will remain robust, however, driven by more equitable income growth and higher social spending. However, weak August industrial production, property, investment, and retail indicators underscore a clear downside risk.

3.3.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	7.5	7.5	7.4	7.4
Inflation	2.6	2.4	3.0	3.0
Current acct. bal. (share of GDP)	2.0	2.2	1.9	2.1

Source: ADB estimates.

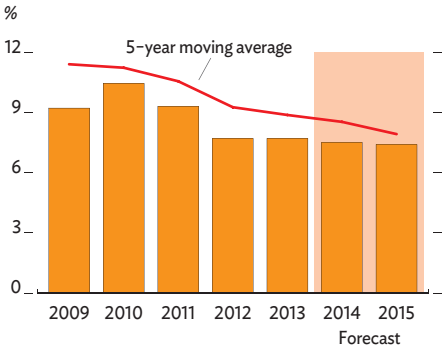
The growth forecast for 2015 also remains unchanged at 7.4% (Figure 3.3.10). Although the economy will be buffeted by headwinds from a shrinking workforce, by government efforts to rein in credit growth, and by a slowing property sector in which past overinvestment may depress future outlays, economic growth will be buttressed by continued stimulus, rising external demand, and resilient domestic consumption. The labor market should stay healthy, as growth in labor-intensive services is expected to outpace that of manufacturing and construction.

More fundamentally, sooner or later the government will have to give the economy more room to find its new normal growth rate after decades of double-digit expansion, particularly in light of considerable uncertainty regarding the rate of potential growth and the degree of resource misallocation in the economy. The best way forward is to let market forces play a larger role, as called for by the Third Plenum of the 18th Central Committee of the Communist Party of the PRC in November 2013. It would be consistent with this objective for the government to move from setting a point target for GDP growth to setting a target range, and to use stimulus sparingly as long as social stability is maintained.

To enable more sources of sustainable growth, the government has started implementing structural reform outlined by the plenum. Milestones already announced or implemented in 2014 include further developing the regulatory framework for the Shanghai free trade zone as a testing ground for service sector development and liberalizing the financial sector and capital account, doubling the daily trading band of the renminbi, and opening a new window for capital transfers by connecting the stock exchanges in Shanghai and Hong Kong, China. The government has adopted State Council directives on capital market development, announced the unification of urban and rural pension systems, and adopted a new urbanization plan and a blueprint for household registration reform. First steps toward strengthening the fiscal position of local governments have been endorsed in the annual state budget, followed by an enhanced pilot program of local government bond issuance, a fiscal reform blueprint, and the revision of the budget law. An improved institutional framework for enforcing environmental norms has been introduced, and a new environmental protection law enacted. The objective of these reforms is to support high and sustainable growth over the long term.

As the National People's Congress announced in March 2014 that the PRC fiscal stance would remain largely unchanged, the government is expected to adhere to its fiscal expenditure target for 2014. This implies that accelerated spending over the second and third quarters of 2014 will be followed by deceleration toward year-end. However, the government also announced that it will let automatic stabilizers work—which means it will not try to make up for lower budget revenues resulting from domestic demand being weaker than expected. The consolidated budget deficit for the whole year will thus likely exceed the indicative target of 2.1% of GDP in 2014. Another increase in the deficit is expected in 2015 as more off-budget activities are brought on budget. However, efforts to reduce local governments' off-budget spending will likely be rolled

3.3.10 GDP growth



Source: Asian Development Outlook database.

out over a longer period than assumed in *ADO 2014*, as weakness in the real estate sector is prompting the government to prioritize short-term stability and as public debt overall is still low by international norms.

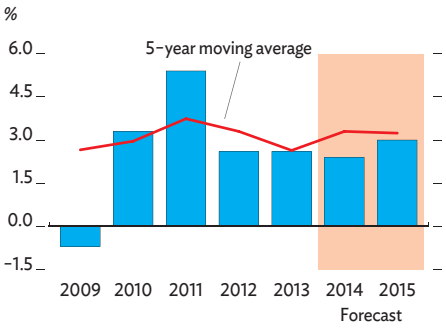
Monetary policy still needs to strike a balance that mitigates financial risks stemming from high credit growth in the past while simultaneously maintaining support for sustainable economic growth. As targeted monetary easing has accelerated credit growth since March 2014, monetary policy will likely lean toward tightening again in 2015 in line with the repeatedly expressed view of central bank officials that the PRC needs financial deleveraging. This should ultimately bring growth in the money supply closer to nominal GDP growth. The government is expected to further widen the exchange rate band of the renminbi against the US dollar over the forecast period to enable it to cope better with capital flows, which will increase over time in line with the government objective to gradually open the capital account.

As moderating economic activity early in 2014 keeps price pressures in check, consumer price inflation is forecast to remain subdued at 2.4% on average, well below the ceiling of 3.5% and a bit less than forecast in *ADO 2014*. This figure factors in inflation accelerating toward the end of the year as administered prices are increased in line with the government's plans to reform prices for energy, water, and other utilities. With continued reform of administered prices and producer price inflation reentering positive territory, headline inflation will be pushed up further to 3.0% in 2015, as previously forecast (Figure 3.3.11). Volatile food prices harbor risks to this inflation forecast.

As global commodity prices are forecast to decline further, foreign trade will likely continue to benefit from improved terms of trade. In addition, economic recovery in developed economies should have a sustained positive impact on trade. Both developments, combined with the recent renminbi weakening, will likely generate high trade surpluses in the rest of 2014 and a slight increase in the current account surplus (Figure 3.3.12), not the small decline previously forecast. Trade surpluses should ease again in 2015 with import growth accelerating from a low base and likely renminbi appreciation in line with expected persistent surpluses in the balance of payments, but the current account surplus may nevertheless start shrinking again.

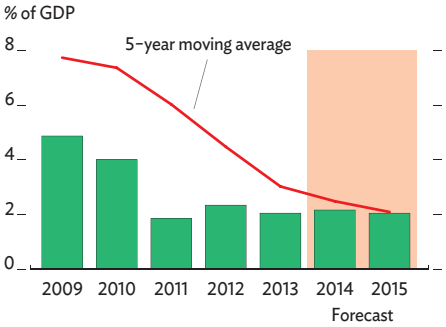
The principal domestic risks to the forecast stem from uncertainty regarding the ability of the government to fine-tune measures to control the ongoing correction in the real estate sector and so avoid a rapid buildup of fiscal and financial strains. Focusing stimulus on smaller cities where the oversupply of property is concentrated seems appropriate. Demand for real estate in big cities remains healthy, and homeowners carry little debt. However, as debt will be higher in 2014 than anticipated in *ADO 2014*, a broad stimulus that further spurs credit growth and local government debt may necessitate retrenchment later in the year, undermining growth in 2015 and beyond. This scenario remains unlikely, though, as the government's commitment to ultimately moving away from credit-driven growth is strong, its ability to manage an orderly correction in the real estate sector is not in doubt, and demand for housing from both the rising middle class and migrant workers remains strong.

3.3.11 Inflation



Source: Asian Development Outlook database.

3.3.12 Current account balance



Source: Asian Development Outlook database.

India

A new government elected in May with a strong mandate has outlined wide-ranging reform to revive the economy after 2 years of slow growth and stagnant investment. Improved economic performance will likely come gradually, though, as it will take time to institute difficult structural reforms, and for inflation and fiscal pressures to ebb. This *Update* edges up projected growth in FY2015 as it trims the forecasts for the current account deficit and inflation in this year and next.

Updated assessment

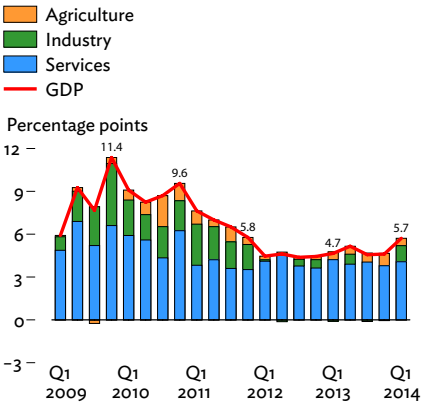
Macroeconomic challenges identified by *ADO 2014* in April persist. The formation of a new government that is widely viewed as friendly to investment is expected to provide a fillip to the investment cycle, as are moves to improve project implementation. However, limited monetary and fiscal policy headroom and a delayed and spatially uneven monsoon are likely to be a drag on growth. Consumer inflation has eased from record highs but remains elevated. Measures to reduce the current account deficit and entice capital inflows have, however, significantly assuaged external pressures.

After growth fell short of 5.0% for 2 consecutive years, economic activity picked up in the first quarter of FY2014 (ending 31 March 2015) to 5.7%, the highest in 9 quarters (Figure 3.4.1). Analysis shows an upturn in domestic demand, led by investment and government spending. Overall consumption growth was buoyed by government consumption, which grew by 8.8% on election-related expenditure and as pent-up spending was released following fiscal tightening in the last quarter of FY2013 to stay within the targeted fiscal deficit (Figure 3.4.2). By contrast, growth in private consumption slowed to 5.6% from a spurt in the previous quarter. High interest rates and inflation have undermined consumer confidence and inhibited consumer spending in the past 2 years.

Growth in fixed investment rose sharply to 7.0%, the fastest pace in 9 quarters. Greenfield investment will likely take time, but the project management group formed in 2013 facilitated the upturn in capital expenditure by unclogging existing investment projects' fund flow to the tune of 5% of GDP.

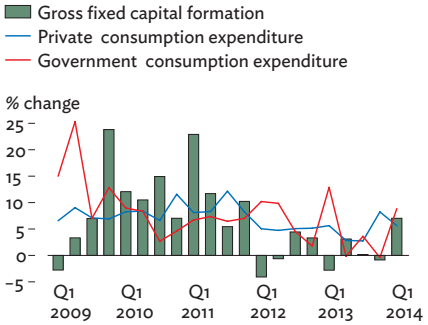
Agricultural output grew by 3.8% in the first quarter of FY2014 as a good monsoon and higher sown area in FY2013 produced a bountiful winter crop. However, an 18% shortfall in the southwest monsoon to August 2014 disrupted the sowing of the summer crop. With irrigation serving only 35% of the arable area, Indian agriculture continues to depend heavily on monsoon rains.

3.4.1 Supply-side contributions to growth



Note: Years are fiscal years. Q1 refers to data for April–June.
Source: CEIC Data Company (accessed 8 September 2014).

3.4.2 Domestic demand components



Note: Years are fiscal years. Q1 refers to data for April–June.
Source: CEIC Data Company (accessed 8 September 2014).

This chapter was written by Abhijit Sen Gupta and Nidhi Kapoor of the India Resident Mission, ADB, New Delhi.

Industry grew by 4.2%, its highest rate in more than 2 years (Figure 3.4.3). The upturn was led by revived manufacturing, which grew by 3.5% after contracting in three of the previous four quarters. After contracting in most of FY2013, capital goods production picked up sharply in the first quarter of FY2014, which bodes well for future investment. Basic and intermediate goods also experienced robust growth, though the production of consumer durables contracted. Mining witnessed a turnaround after 2 years of declines, clocking growth at 2.7%. Construction grew at a healthy rate as a late monsoon allowed building activity to carry on longer than usual. A low base helped electricity and other utilities to grow by 10.2%.

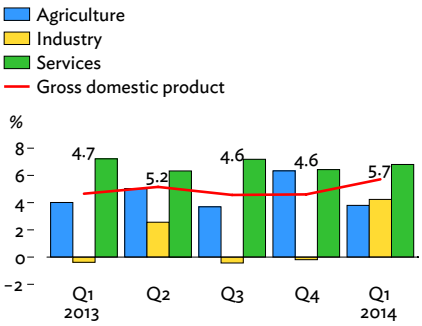
Growth in the service sector moderated a bit to 6.8% in the first quarter of FY2014 from a year earlier. Expansion in trade, hotels, transport, and communication services, which together account for a quarter of GDP, declined to 2.8%, reflecting subdued consumer spending. By contrast, financial and business services registered robust expansion at 10.4% on better deposit mobilization. Community, social, and personal services grew by 9.1% as government spending was buoyed by pent-up demand from earlier quarters and election outlays.

Despite several inflationary factors including a temporary surge in global prices for crude oil, an increase in rail freight rates, and a weak monsoon, inflation continued to track lower in the first months of FY2014. Year-on-year consumer inflation averaged 8.1% during April to July, below the FY2013 average of 9.5%, as did wholesale inflation at 5.6% versus 6.0% (Figure 3.4.4). A base effect, subdued corporate pricing power, tight monetary policy, and sluggish consumer demand combined to temper inflation. Food inflation, the major contributor to overall consumer inflation, continued its trend decline, apparently little affected by a weak monsoon. The decline reflected moderate increases in procurement prices for the second successive year and government efforts to check food inflation that included selling food stocks on the open market, cracking down on hoarding, encouraging imports, removing incentives for export, and imposing restrictions on the trading of certain commodity futures to curb speculation.

After raising key policy rates by 25 basis points in January 2014, the Reserve Bank of India, the central bank, has since maintained the status quo despite some moderation of inflation (Figure 3.4.5). The central bank's reluctance to lower rates is explained by continuing risks to its policy of reining in consumer inflation to 8.0% by January 2015 and to 6.0% a year later. Risks include uncertainty over the monsoon and its distribution, higher oil prices, unfavorable exchange rates stemming from geopolitical tensions, and hikes in administered prices for kerosene, cooking gas, and urea fertilizer. To boost credit to the private sector and improve the transmission of monetary policy, the central bank lowered the statutory liquidity ratio—the ratio of government-approved securities to total deposits that banks are required to maintain—by 100 basis points to 22% in the second quarter of FY2014.

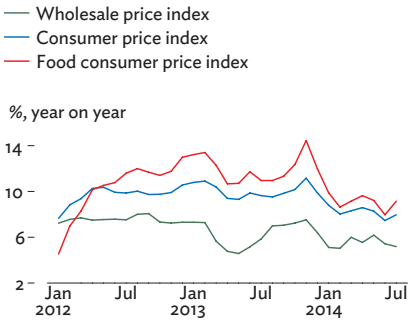
Banks' asset quality continued to deteriorate in FY2013. Nonperforming loans increased to 4.1% of all loans in March 2014, and restructured loans edged up to 5.9%, bringing the percentage of stressed loans to 10.0% (Figure 3.4.6). Banks increasingly used asset

3.4.3 Sectoral GDP growth



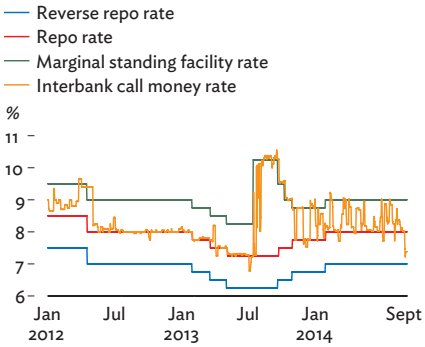
Note: Years are fiscal years. Q1 refers to data for April–June.
Source: CEIC Data Company (accessed 8 September 2014).

3.4.4 Inflation



Sources: CEIC Data Company (accessed 8 September 2014); ADB estimates.

3.4.5 Policy interest rates



Source: Bloomberg (accessed 8 September 2014).

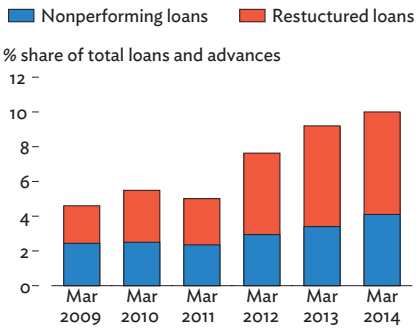
restructuring companies in FY2013 to resolve troubled loans. Domestic credit grew by 13.2% in the first quarter of FY2014, significantly less than the previous 4-year average of about 18%. Growth in credit to infrastructure development fell to about 15% while credit to industry also slowed. The slowdown in infrastructure and industry credit stems from structural bottlenecks on investment sentiment, slow consumer demand, the weakening financial positions of some large corporations, the lack of new project starts, and banks becoming cautious in lending as more loans turn sour.

Revised data indicate that the central government's budget deficit equaled 4.6% of GDP in FY2013. The target is to reduce it further to 4.1% in FY2014. Data for the first 4 months of FY2014 point to a buildup of fiscal pressures—and to the April to July deficit exceeding 61% of the target for the whole of FY2014, primarily because revenues grew by 14.2%, below the targeted growth of 18.6%. The collection of corporate tax and excise and customs duties was lower than in FY2013 because industrial activity was subdued and merchandise imports contracted. Expenditure contracted by 3.3%, against targeted expansion by 12.9%, despite payouts for subsidies carried over from FY2013. Like in previous years, the burden of expenditure compression fell mostly on growth enhancing capital expenditure, which declined by 8.1%. In contrast, current expenditure fell by only 2.5%.

The improvement in the external sector from measures initiated in mid-2013 continued in the first quarter of FY2014. The current account deficit was a comfortable 1.7% of GDP, higher than in the previous 3 quarters but well below the 4.8% recorded in the first quarter of FY2013 (Figure 3.4.7). The trade deficit shrank to $34.6 billion from $50.5 billion in the first quarter of FY2013. Imports contracted by 6.5% as gold imports, which had caused very high trade deficits, fell by more than half from the year-earlier quarter to $7.8 billion as various import curbs were imposed. While oil imports increased marginally by 4.1% in this period, imports other than gold and oil remained flat, reflecting subdued industrial activity. The reduction in gold imports prompted the authorities to relax some of the restrictions imposed in mid-2013. A weaker currency and an uptick in demand from the industrial economies helped exports grow by 10.6% in the first quarter of FY2014. Export growth was buoyed by petroleum products, engineering goods, and readymade garments. However, the net invisible surplus was 6.6% lower because service exports increased only modestly and interest and dividend payments rose.

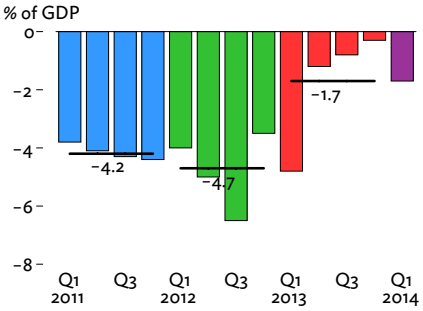
Robust capital inflows continued in response to steps taken in 2013 to encourage them, the improved macroeconomic outlook, and the formation of a new government in May 2014. Net inflows from foreign institutional investors in the first quarter of FY2014 exceeded $12.4 billion, while inflows of net foreign direct investment were $8.3 billion. Trends in deposits by nonresident Indians and external commercial borrowing also remained robustly favorable. Strong capital flows helped the central bank to recoup reserves it had lost in mid-2013 meeting portfolio outflows and stabilizing the currency during a turbulent period for global capital markets. By the end of August 2014, the central bank had rebuilt its reserves to $319 billion, up by $43 billon from a year

3.4.6 Nonperforming and restructured loans



Source: Reserve Bank of India. http://www.rbi.org.in

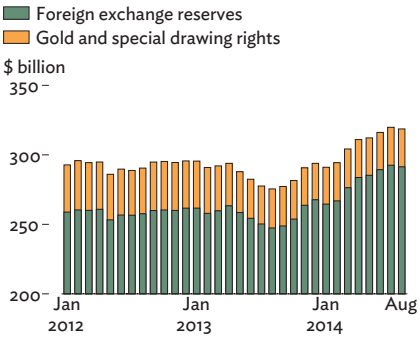
3.4.7 Current account balance



Note: Years are fiscal years. Q1 refers to data for April–June. Lines are annual ratios.

Source: CEIC Data Company (accessed 08 September 2014).

3.4.8 International reserves



Source: CEIC Data Company (accessed 8 September 2014).

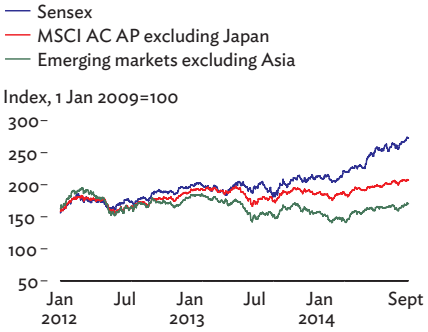
earlier (Figure 3.4.8). Moreover, a short position of $32 billion built up from September to December 2013, when the central bank introduced the concessional swap facility for nonresident Indian depositors, was fully covered by the end of June 2014. Reflecting the improved reserves position and the narrower current account deficit, the rupee appreciated in nominal terms from its August 2013 low to stabilize at about Rs60 to the US dollar. The real effective exchange rate also appreciated after August 2013, but it and the nominal rate remain below levels that have prevailed in recent years (Figure 3.4.9).

Stock market prices were buoyed by the election of a new government perceived to be decisive and friendly to business, and by some increase in corporate profitability, moving sharply higher by 26% in the first 8 months of 2014, and outpacing indexes for developing Asia and other emerging markets (Figure 3.4.10). The rise in stock prices was also driven by strong inflows of foreign capital as equities remained a favored asset class for foreign institutional investors. Equity market inflows were positive for 12 consecutive months.

3.4.9 Exchange rate

Source: Bloomberg (accessed 8 September 2014).

3.4.10 Stock price indexes



Source: Bloomberg (accessed 8 September 2014).

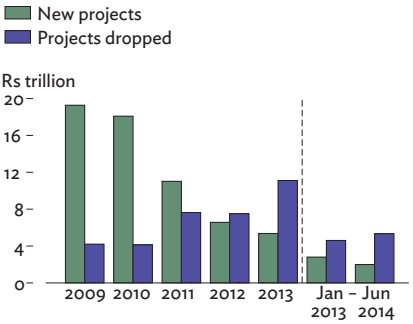
Prospects

ADO 2014 forecasts for this year and next assumed improved global growth momentum, a favorable monsoon, further fiscal consolidation, and some progress in resolving structural bottlenecks. This *Update* takes into consideration somewhat slower growth in the industrial countries and a deficient monsoon in June and July, but also some progress on structural reform and the boost to confidence engendered by the new government.

Revived investment is needed to jumpstart economic growth, but announcements of new projects continued to be depressed in the first half of 2014 (Figure 3.4.11). Recent measures such as easing environmental and forest clearances for mines, roads, power stations, and irrigation systems, and expanding the monitoring role of the project monitoring group, will help speed the implementation of projects in the pipeline. The government has proposed labor reforms to improve the investment climate, the proposal now awaiting parliamentary approval. These initiatives are likely to invigorate the investment cycle, mostly in the second half of FY2014 and in FY2015. However, spurring sustainable growth requires bolder reform that addresses land-acquisition issues to balance the needs of industry with those of landowners, streamlining regulations and business processes to lighten the burden of compliance, and instituting a uniform goods and services tax.

Manufacturing shows encouraging trends that are likely to provide an uptick to industry. The HSBC India manufacturing purchasing managers' index reached in July 2014 its highest level in 17 months, though it moderated slightly in August (Figure 3.4.12). The recent pickup was driven by output and other current indicators and by such forward indicators as domestic and export orders. While input prices have continued to rise, output prices have eased, indicating compressed margins. Another positive signal has come from the central bank's business expectation index in the first quarter of FY2014, which reached its highest level in 6 quarters (Figure 3.4.13). The improvement

3.4.11 New projects and projects shelved



Note: Years are calendar years.
Source: Centre for Monitoring Indian Economy.

reflected better sentiment on production, order books, exports, capacity utilization, and profit margins.

Improved global economic prospects and a cheaper currency are likely to continue to boost financial, telecom, and other tradable services. The new financial inclusion scheme to extend bank accounts, insurance, and credit to more households is likely to bolster growth in deposits and financial services. Improved business activity and new orders helped the purchasing managers' index rise from May to August 2014, after nearly a year of declines.

Positive developments are offset by slow growth in agriculture following a disappointing monsoon, with cumulative rainfall to August still 18% below normal. Summer crop sowing picked up but continued to be 6.3% lower than last year. Lackluster agriculture growth in the second and third quarters of FY2014 will likely subdue spending by rural consumers—an impact statistically exacerbated by a high base in FY2013. Significantly slower growth in agriculture could shave 50–75 basis points off GDP growth.

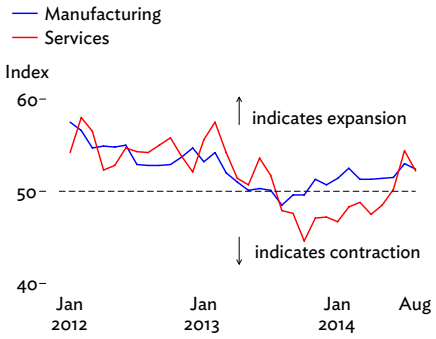
Policy headroom to stimulate economic growth is limited. Consumer inflation is expected to hold at about 8% in early 2015, above the central bank's target of 6% by January 2016, which makes monetary easing in the rest of 2014 unlikely. Similarly, fiscal headroom is constrained by the target to trim the federal budget deficit to 4.1% of GDP in FY2014, spelling the likely curtailment of the strong growth in government consumption and community, social, and personal services that drove economic growth in the first quarter.

On balance, growth is projected at 5.5%, unchanged from the *ADO 2014* forecast. The revival of the investment cycle, the possible easing of interest rates in mid-2015, and improved growth in the industrial economies is expected to boost growth in FY2015 to 6.3%, higher than the *ADO 2014* forecast of 6.0%.

The trend toward price stability is likely to continue in light of central bank monetary policy to tame inflation and the government's ability to deploy a large grain stockpile to counter lackluster harvests. However, fruit and vegetable prices can still cause inflation as they are prone to variable harvests and speculation. Some signs of a late recovery in the monsoon augur well for winter crops and could ease price pressures. Apart from the weak monsoon, inflation could worsen if oil prices rise or exchange rate movements turn unfavorable because of geopolitical tensions, or if businesses' pricing power strengthens as aggregate demand and confidence pick up. Higher global oil prices or a weakening currency would require further monthly price hikes for diesel, following price adjustments in the past 2 years that have nearly raised prices to cost recovery with a view to ending losses at government-owned oil distributors and consequent subsidies.

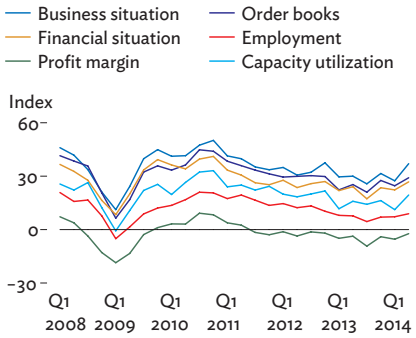
On balance, consumer inflation is expected to average 8.1% in FY2014 and moderate to 7.2% in FY2015. These forecasts assume continued measures to tame food inflation, modest hikes in support prices for farmers, and moderating rural wage growth. Wholesale price inflation—which excludes services, has a smaller food component, and was earlier the target of monetary policy—is forecast to average 5.7% in

3.4.12 HSBC Markit India purchasing managers' indexes



Source: Bloomberg (accessed 8 September 2014).

3.4.13 Industrial outlook survey



Note: Years are fiscal years. Q1 refers to data for April–June.
Source: Reserve Bank of India. http://www.rbi.org.in

3.4.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.5	5.5	6.0	6.3
Inflation	6.0	5.7	5.8	5.5
Current acct. bal. (share of GDP)	-2.5	-2.3	-2.8	-2.5

Source: ADB estimates.

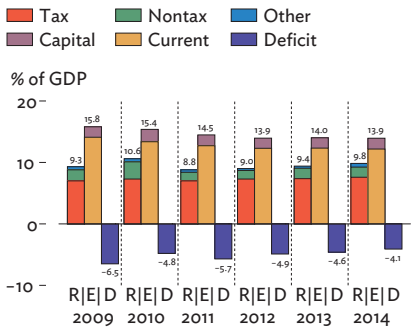
FY2014 and 5.5% in FY2015, in both cases 0.3 percentage points lower than forecast in *ADO 2014*.

The new government presented a revised FY2014 budget in July that aims to reduce the fiscal deficit to 4.1% in FY2014 (Figure 3.4.14). Estimates are a bit optimistic, especially on the revenue side. The ratio of gross tax revenue (including the provincial share in federal taxes) to GDP is projected at 10.6%. This factors in a 17.7% increase in gross tax collection to boost tax buoyancy—or the ratio of collection growth over GDP growth—to 1.4, which is much higher than historical experience and will be a challenge to achieve without a major change in tax structure. In particular, the budget envisages excise duty and customs taxes growing by more than 15.0%, vastly outpacing growth at 1.7% for excise duty and 5.9% for customs taxes in FY2013. The growth rates for these taxes were held down by tepid industrial activity, and a recovery in tax revenue would depend on a revival in industry. Equaling 0.5% of GDP, estimated revenue from asset sales is significantly higher than achieved in recent years. While current strength in the stock market is conducive to achieving this target, selling assets is not a sustainable strategy for shrinking the deficit. Subsidies are estimated to be 2.0% of GDP as an increase in the food subsidy offsets a decline in the petroleum subsidy. The budget speech called for the early implementation of the goods and services tax but without a specific timeframe.

A weaker currency and modestly improved growth momentum in the industrial economies is likely to boost exports, which are expected to grow by 7% in FY2014. At the same time, imports are likely to expand by 8% as domestic activity picks up and restrictions on gold imports are somewhat liberalized. However, with continuing limits on gold imports, lower inflation, and measures to foster savings through financial instruments, growth recovery poses little risk of higher current account deficits. Record deficits were witnessed during periods of low growth, and significantly more comfortable deficits during periods of high growth. The FY2014 current account deficit is likely to be 2.3% of GDP, a tad less than the *ADO 2014* forecast of 2.5%. In FY2015, the current account deficit is expected to widen slightly to 2.5%, again slightly less than the earlier forecast of 2.8%, on account of imports growing by 10% as industry and investment revive, and with further relaxation of import curbs. Exports are also expected to pick up and grow by 10% as partner countries further consolidate their growth momentum.

Improved macroeconomic indicators and further liberalization of the capital account will likely ensure that capital flows can easily finance the current account deficit and add to reserves. However, India needs to ensure that the current account deficit is financed by a mix of flows that is stable. The share of the current account deficit financed by stable foreign direct investment dropped from 85% in FY2004–FY2008 to 38% in FY2008–FY2013. Attracting more foreign direct investment will require tackling structural impediments to ensure a good investment climate.

3.4.14 Federal budget indicators



R = Revenue; E = Expenditure; D = Deficit financing.

Note: Years are fiscal years.

Source: Ministry of Finance. Union Budget 2014-15. http://indiabudget.nic.in

Indonesia

Southeast Asia's biggest economy has been more subdued than foreseen in *ADO 2014*, largely because of weak exports. Inflation has decelerated, as anticipated, and the current account deficit is narrowing gradually. While GDP growth will undershoot earlier forecasts, the economy is still seen picking up in 2015. An expected reduction in fuel subsidies should free considerable public funds for investment in development, though the move will temporarily worsen inflation.

Updated assessment

GDP growth decelerated further to 5.2% in the first half of 2014, the slowest since 2009, after the government acted last year to restrain domestic demand and to rein in inflation and the current account deficit (Figure 3.5.1). The slowdown has been sharper than anticipated, mainly owing to weakness in exports as several major export markets grew less quickly than expected.

Private consumption, accounting for almost 60% of GDP, grew by a robust 5.6% in the first half and made the biggest contribution to GDP growth from the demand side. Consumption received a boost from election-related spending, as Indonesia held parliamentary elections in April of this year and presidential elections in July. Decelerating inflation and good harvests supported consumer confidence and farmers' incomes, but tighter credit hurt sales of consumer durables such as automobiles.

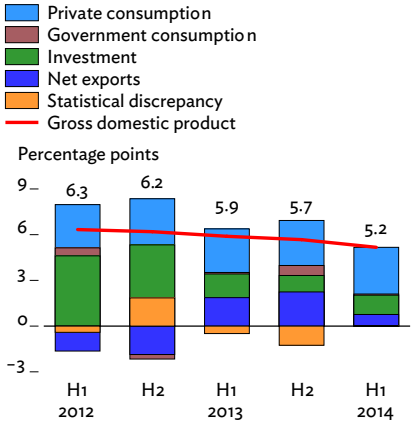
Government consumption grew by a meager 1.1%, reflecting a pattern of slow budget disbursement in the first half of the year, as well as cuts in government spending to cope with revenue collection below budget and persistently rising energy subsidy costs.

Supported by higher foreign direct investment (FDI), fixed investment increased by 4.8% and contributed 1.2 percentage points to GDP growth. The increase came mainly from investment in buildings, which rose by 6.6%, while investment in machinery and equipment rose by just 3.0% and investment in transport equipment fell by 8.1%. Growth in fixed investment has slowed in the past 2 years (Figure 3.5.2).

As exports of goods and services slipped in volume terms by 0.7% in the first half and import volumes fell by 3.0%, net external demand added to GDP growth, though by much less than the year before.

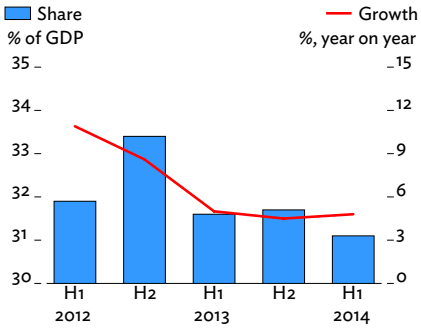
From the supply perspective, services and manufacturing remained the primary growth drivers. Growth in services at 6.3% moderated from 2013, but the sector still contributed more than half of the rise in GDP. Hotel and transport services expanded at a faster rate than in the corresponding period last year, and communications maintained rapid expansion.

3.5.1 Demand-side contributions to growth



Sources: Asian Development Outlook database; CEIC Data Company (accessed 1 September 2014).

3.5.2 Fixed investment



Sources: Asian Development Outlook database; CEIC Data Company (accessed 1 September 2014).

This chapter was written by Edimon Ginting and Priasto Aji of the Indonesia Resident Mission, ADB, Jakarta.

Growth in manufacturing decelerated to 5.1%, but construction grew by a solid 6.6%. Mining shrank by 0.2%, partly a result of declining crude oil extraction and a ban on exports of unprocessed mineral ores that came into effect in January 2014. Industry as a whole recorded growth of 4.4%, which lifted GDP by 1.7 percentage points.

Agriculture grew by 3.3% to make a small addition to GDP. Food crops benefited from good weather, but output from plantations, mainly natural rubber and palm oil, slowed on soft global demand for these commodities.

Inflation abated from 8.2% year on year in August 2013 to 4.0% in August 2014, as the impact of fuel price hikes in June 2013 subsided (Figure 3.5.3). Good rice harvests helped to hold food price inflation to 1.8% in August. Increases in electricity tariffs from May 2014, the first of several planned for this year, added some upward pressure to inflation. In the first 8 months of 2014, inflation averaged 6.6%.

In this context, Bank Indonesia kept its policy interest rate unchanged at 7.5% after having raised it by 175 basis points between June and November 2013 to counter inflation and a widening current account deficit. Commercial bank interest rates rose moderately in the first half and growth in credit eased to 16.6% year on year in June 2014 from 21.6% at the end of 2013. The rate of increase in broad money supply (M2) was 13.1% in June, little changed from the end of last year.

Declining food price inflation and a slight increase in employment helped to trim poverty incidence to 11.3% in March 2014 from 11.4% a year earlier.

In the trade accounts, merchandise exports fell in US dollar terms by 2.3% in the first half, weighed down by subdued demand from major trading partners and soft prices for export commodities including coal and rubber (Figure 3.5.4). The ban on shipping out unprocessed mineral ores also dented exports. Merchandise imports fell in US dollars by 4.4%, led by raw materials and capital goods.

The trade surplus nearly tripled in the first half from a year earlier to $2.9 billion as imports fell more steeply than exports. Still, deficits in services trade and in the income account produced a current account deficit of $13.3 billion, equal to 3.1% of GDP (Figure 3.5.5).

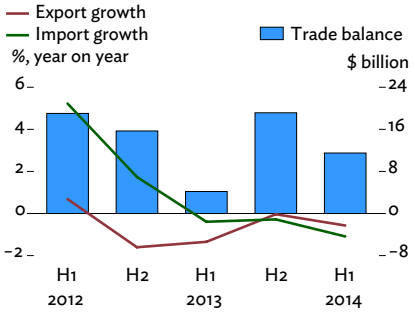
FDI was relatively buoyant at $10.5 billion, and portfolio investment inflows rose sharply to $16.8 billion in the first half. The Jakarta Stock Exchange index of share prices climbed by 20.2% in the first 8 months of this year, during which yields on government bonds declined. Foreign investors increased their holdings of government bonds by $7.3 billion in January–August. These large inflows more than offset the current account deficit to keep the balance of payments in surplus. Gross international reserves rose in the first 8 months by $11.8 billion to $111.2 billion, or cover for 6.3 months of imports and government debt payments (Figure 3.5.6). The Indonesian rupiah appreciated by 4.1% against the US dollar in the first 8 months, after depreciating by 19.5% in 2013.

Fiscal policy provided limited support to economic growth in the first half. The budget deficit for January–June was estimated at 0.7% of GDP, slightly wider than a year earlier. Moderating economic activity and lower imports hurt government revenue while outlays on subsidies continued to increase.

3.5.3 Policy and inflation rates

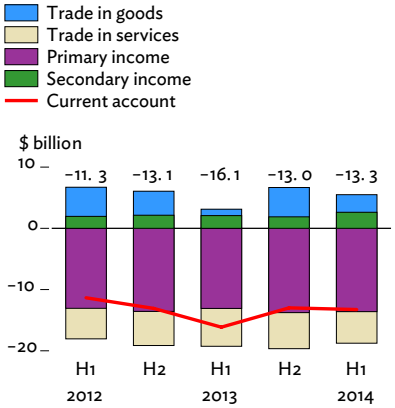
Sources: Asian Development Outlook database; CEIC Data Company (accessed 3 September 2014).

3.5.4 Trade indicators



Sources: Asian Development Outlook database; CEIC Data Company (accessed 10 September 2013).

3.5.5 Current account components



Sources: Asian Development Outlook database; CEIC Data Company (accessed 3 September 2014).

Prospects

Projections for 2014 and 2015 assume that the new government, which takes office in October 2014, will implement the major policies outlined during the elections: improving the investment climate, reforming the bureaucracy, and accelerating infrastructure development. The forecasts further assume the government will mitigate the impact on food prices from dry weather likely with El Niño late this year.

The government has responded to subdued growth, weaker revenue collection, and rising subsidy costs with a revised budget for 2014 that lifts the deficit target to 2.4% of GDP from 1.7% in the original budget. Changes include a $3.5 billion cut in line ministries' spending and a small increase in capital outlays. The revised budget is expected to provide modest support for economic growth in the second half. Spending on fuel and electricity subsidies remains high at 18.6% of total central government spending, including its transfers to the regions, even though fuel prices were raised in 2013, access to subsidized fuel got new restrictions, and electricity prices were hiked this year.

A budget proposed for 2015 aims for a deficit of 2.3% of GDP, similar to this year. That would require reducing capital outlays by 3.0% from 2014. The proposed budget does not reduce spending on fuel subsidies, but the incoming government is expected to revise it to cut the subsidies in 2015. This move would make more budget funding available for infrastructure and social investment.

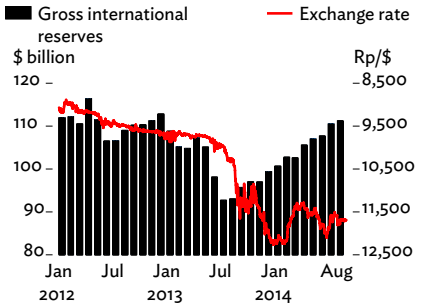
Monetary policy is likely to remain focused on taming inflation and the current account deficit, which will dampen economic growth. Inflation is expected to trend down through 2014 but turn up again next year, assuming the government does reduce subsidies and raise fuel prices. Flexibility in the rupiah exchange rate will help to facilitate external adjustments and improve resilience under potential volatility in global financial markets.

Growth in private consumption is projected to remain robust. Lower inflation is supporting consumption this year, and the government is expected to use cash transfers to compensate low-income groups for higher fuel prices next year. Consumer confidence rose in the latest Bank Indonesia survey (Figure 3.5.7).

Private investment is seen improving over the forecast period, benefiting from positive sentiment that arises from successful national elections and expectations that the new government will reform policy. Growth in investment loans remains high at 30.0% despite tighter monetary policy. FDI increased by almost 25% in the first half, and stronger inflows would help to diversify the country's exports and finance the current account deficit. Encouragingly, the government has cleared the way for FDI in infrastructure. Steps to simplify business procedures and address infrastructure bottlenecks are anticipated from the new government.

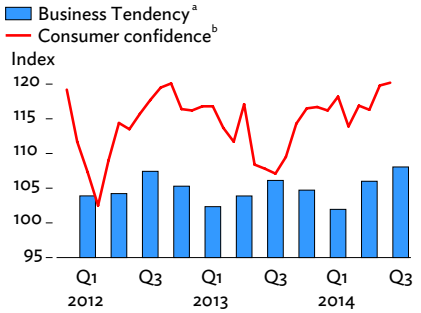
Mining will get a lift as some exports of partly processed ore resume in the second half following negotiations between mining companies and the government. Nevertheless, merchandise exports have been weaker than expected this year, with a further decline registered in July's customs data. Exports are projected to pick up in 2015 on better economic performance in the major industrial economies.

3.5.6 Gross international reserves and exchange rate



Sources: Asian Development Outlook database; CEIC Data Company; Bloomberg (both accessed 9 September 2014).

3.5.7 Consumer and business confidence indexes



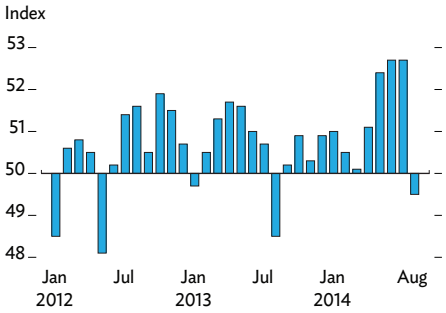
[a] From a quarterly Statistics Indonesia survey of business executives.

[b] From a monthly Bank Indonesia survey of households.

Note: A score above 100 means that respondents are optimistic and vice versa.

Source: CEIC Data Company (accessed 5 September 2014).

3.5.8 HSBC manufacturing purchasing managers' index



Source: Bloomberg (accessed 9 September 2014).

Manufacturing could face headwinds in the near term. The manufacturing purchasing managers' index for August 2014 showed worsening business conditions in this sector for the first time in 12 months, as output and new orders both contracted (Figure 3.5.8). Manufacturing will strengthen next year on improved domestic and external demand.

As the economy is more subdued than foreseen in April, the growth forecasts are trimmed from *ADO 2014* (Figure 3.5.9). Growth is projected to accelerate by 0.5 percentage points in 2015 on the better outlook for the major industrial economies, which will spur exports and investment, and on expectations of timely policy reform from the new administration.

This *Update* projects the current account deficit will narrow this year and next, but not to the extent forecast in *ADO 2014* owing to weaker demand for exports and soft global commodity prices. The balance of payments will remain in surplus, supported by FDI and portfolio inflows.

Inflation is seen averaging 4.2% in the second half of this year, coming off a high base set when fuel prices jumped in June 2013. For 2014 as a whole, inflation will likely average 5.8%, the forecast nudged up since April because of additional increases in electricity tariffs and some likely upward pressure on food prices from the anticipated dry weather late in 2014.

Next year, inflation is projected to average 6.9%, assuming the government increases fuel prices by 30%–50%. The inflationary impact of the expected cut in fuel subsidies is estimated at 1.5–2.5 percentage points. This is smaller than the impact of the 2013 fuel price rise but enough to put inflation above Bank Indonesia's 3.0%–5.0% target range for next year.

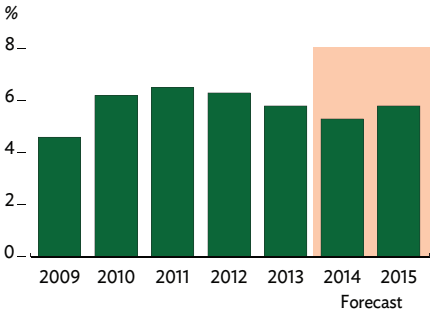
Risks to the outlook come from uncertainty over recovery in export markets and a potential reversal of capital flows to emerging markets triggered by the eventual rise in US interest rates. Indonesia still depends on portfolio inflows to finance its current account deficit, but a more flexible exchange rate and market-driven adjustments to bond yields have improved the country's resilience under volatility in global financial markets. Supply side reforms to support larger FDI inflows and improve competitiveness would further mitigate the country's vulnerabilities in the medium term.

3.5.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.7	5.3	6.0	5.8
Inflation	5.7	5.8	4.8	6.9
Current acct. bal. (share of GDP)	–2.9	–3.2	–2.0	–2.5

Source: ADB estimates.

3.5.9 GDP growth



Source: Asian Development Outlook database.

Malaysia

Rebounding exports joined buoyant private consumption and investment to drive strong economic growth in the first half of 2014. Though seen moderating from the first-half pace, growth will beat *ADO 2014* projections for 2014 and 2015 made last April. The forecast for this year's current account surplus is also revised up. Inflation has quickened, prompting the authorities to raise interest rates. Fiscal policy is tightening to curtail the budget deficit.

Updated assessment

Economic growth accelerated to 6.3% in the first half of 2014, exceeding earlier projections and actual growth in the corresponding period of the 3 previous years (Figure 3.6.1).

Exports of goods and services rebounded in volume terms by 8.3% in the first half from a 3.9% contraction a year earlier. Imports of goods and services also recovered, but by a more moderate 5.5%, so net external demand contributed significantly to GDP growth.

Domestic demand excluding stocks, grew by 6.5%, still robust but decelerating from last year as public spending slowed, reflecting efforts by the government to rein in its fiscal deficit and the absence of election-related spending seen in 2013.

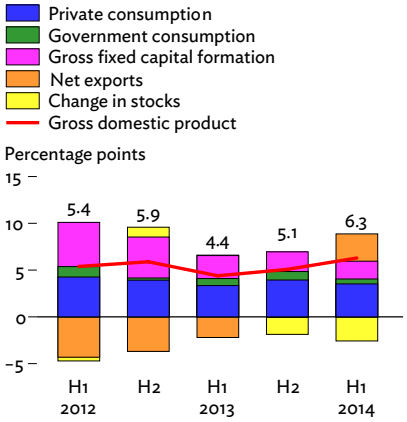
Private consumption made the biggest demand-side contribution to GDP growth as it rose by 6.8%, slightly more quickly than a year earlier. Consumption spending was underpinned by a firm labor market, rising wages, and government cash transfers. Employment increased by 4.7% in the 12 months to May 2014, easing the unemployment rate to 2.9%. In contrast to buoyant private consumption, growth in government consumption expenditure slowed to 4.4%.

Private fixed investment, expanding at a rapid 13.0%, focused on housing, service expansion, and export-oriented manufacturing. However, public sector investment fell by 4.9%, causing total fixed investment to decelerate to 6.8% (Figure 3.6.2). Inventories declined sharply in the first half.

By sector, services expanded by 6.3% to contribute most of the increase in GDP from the supply side. In particular, communications grew by 10.0%, spurred by demand for data communications, and wholesale and retail trading grew by 9.2% owing to the strong private consumption and external trade. Another relatively high-growth subsector was real estate and business services.

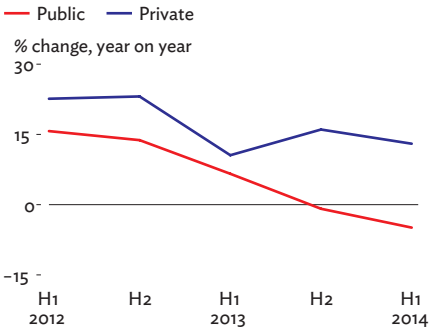
Industry also grew by 6.3% in the first half. Recovery in export-oriented electronics and electrical products drove a 7.1% increase in manufacturing—a much better performance than a year earlier. The production of electronics and electrical products climbed by 15.3%,

3.6.1 Demand-side contributions to growth



Sources: Haver Analytics; Bank Negara Malaysia. 2014. *Monthly Statistical Bulletin. July.* http://www.bnm.gov.my (accessed 1 September 2014).

3.6.2 Fixed investment growth



Sources: Haver Analytics; Bank Negara Malaysia. 2014. *Monthly Statistical Bulletin. July.* http://www.bnm.gov.my (accessed 1 September 2014).

This chapter was written by Gary Krishnan of the Southeast Asia Department, ADB, Manila.

with a sharp increase in semiconductors. Manufacturing oriented toward the domestic consumer market was also buoyant.

Construction expanded by 14.3%, powered by house building in the Klang Valley, Johor, and Penang and by new commercial buildings in Kuala Lumpur, one of which is a 100-story complex. Major civil engineering projects under construction include power plants, roads, and the Klang Valley mass rapid transport system.

As the production of natural gas and crude oil started to turn up only late in the first half, the rise in mining output was modest. Agricultural output rose by 4.6%, making a small contribution to GDP growth. Palm oil production picked up, but natural rubber output was again held back by weak global rubber prices.

Inflation quickened to average 3.3% year on year in the first 8 months of 2014 (Figure 3.6.3). Upward pressure on prices stemmed from the solid domestic demand and government decisions last year to reduce subsidies for fuel and sugar, raise the tax on tobacco, and hike electricity tariffs.

Commenting on its decision to raise interest rates in July this year, Bank Negara Malaysia, the central bank, said inflation was expected to remain above its long-run average owing to higher domestic costs. Also, the rate increase aimed "to mitigate the risk of broader economic and financial imbalances." Monetary officials have been concerned about household debt, which climbed to the equivalent of 86.8% of GDP last year from 60.0% in 2008, and about speculation in property. The increase in the policy rate by 25 basis points, to 3.25%, was the first rise since May 2011.

Growth in the broad money supply (M3) decelerated to 5.7% year on year in July 2014 from 8.3% a year earlier. Net lending to businesses also slowed, by about 1 percentage point to 7.2% in July, and growth in loans outstanding to households eased to a still-vigorous 11.1%.

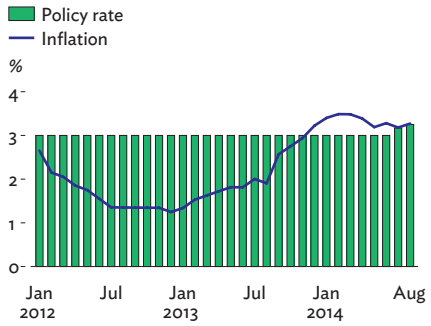
Government efforts to curtail the budget deficit narrowed the fiscal gap to 3.7% of GDP in the first half of 2014 from 4.1% a year earlier, largely through higher revenue. On the spending side, the government reduced development outlays but it increased operating expenditure. Federal government debt edged up to 53.0% of GDP.

Malaysia's external trade accounts have strengthened after a slump in 2013, reflecting stronger demand for its manufactured goods and some of its commodities. The value of merchandise exports rose by 5.2% in US dollar terms in the first half of 2014 from a year earlier (Figure 3.6.4). Shipments of semiconductors and other electronics increased, as did exports of crude oil, liquefied natural gas, and palm oil. Malaysia expanded exports to the People's Republic of China, the euro area, India, Japan, the Republic of Korea, and the US—all markets that had shrunk for the country's products in the first half of 2013.

Merchandise imports rose in US dollar terms by just 1.6%, with increased purchases of consumer goods and signs of a pickup in capital goods imports late in the first half.

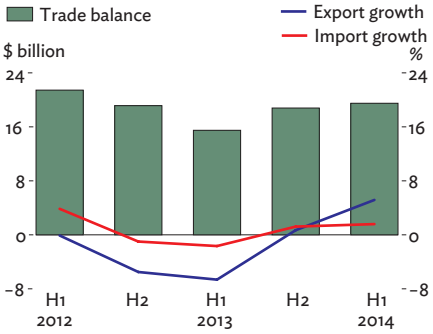
Consequently, the trade surplus rose by almost 26% to $19.5 billion in the first 6 months. After taking into account narrower deficits in services, income, and transfers, the current account surplus more than doubled to $11.0 billion, equivalent to 6.9% of GDP.

3.6.3 Inflation and interest rate



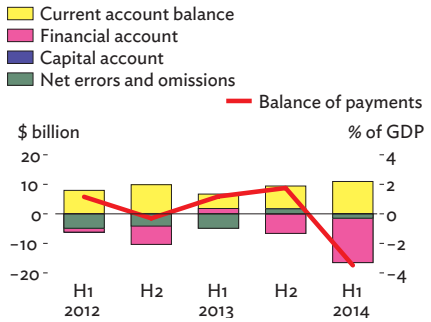
Source: Haver Analytics; Bank Negara Malaysia. 2014. Monthly Statistical Bulletin. July. http://www.bnm.gov.my (accessed 18 September 2014).

3.6.4 Merchandise trade indicators



Source: Haver Analytics (accessed 2 September 2014).

3.6.5 Balance of payments indicators



Sources: Haver Analytics; Bank Negara Malaysia. 2014. *Monthly Statistical Bulletin. July.* http://www.bnm.gov.my (accessed 11 September 2014).

The financial account posted net outflows of $15.0 billion, partly because residents of Malaysia increased investment abroad. This pushed the balance of payments into deficit by $5.5 billion, reversing a small surplus a year earlier (Figure 3.6.5). International reserves totaled $132.0 billion in August 2014, cover for 9.0 months of retained imports.

Higher interest rates and generally favorable economic news supported 1.4% appreciation of the Malaysian ringgit against the US dollar from the end of 2013 to mid-September this year, after 6.6% depreciation in 2013.

Malaysia's local currency bond market has grown to become the biggest in Southeast Asia on the strength of significantly greater participation by nonresident investors. The government has redefined national external debt more broadly to include nonresident holdings of ringgit-denominated debt securities, as well as nonresident deposits and some other items. Under the new definition, external debt came to 67.9% of GDP at mid-2014. Just over half of the external debt is long term. The short-term portion is covered 1.2 times by international reserves.

3.6.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.1	5.7	5.0	5.3
Inflation	3.2	3.3	3.5	3.6
Current acct. bal. (share of GDP)	4.1	4.4	4.6	4.6

Source: ADB estimates.

Prospects

Economic growth is expected to moderate year on year in the second half of 2014 from the first half, largely reflecting a high base brought about by a pickup in growth in the second half of 2013. Nevertheless, this Update raises the forecast for full-year 2014 growth to 5.7% in light of the unexpectedly strong outcome in the first half and good prospects for the second half (Figure 3.6.6).

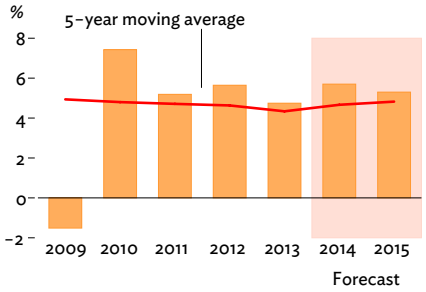
Growth momentum is expected to ease further next year. Anticipated strengthening in the major industrial economies, particularly the US, should generate further export gains, but domestic demand will moderate on firmer fiscal and monetary stances. GDP growth is forecast at 5.3% in 2015, a bit higher than the April forecast.

Private consumption softened in the second quarter of this year from the first and is expected to moderate through the forecast period. While consumption spending will be supported by the firm labor market, wage increases, and government cash transfers, it faces headwinds from higher inflation and rising interest rates. Consumers may be more sensitive than in the past to rising interest rates because household debt has climbed and most housing mortgages have variable rates linked to market rates.

Government plans to repair its fiscal position could dampen growth in consumption. Steps include further reducing subsidies for fuel, food, and government services and implementing a 6.0% goods and services tax scheduled to start in April 2015. This tax will replace the current sales and service taxes and apply to a broad range of consumer items, though the government intends to compensate lower-income households with cash transfers and will reduce individual and corporate income taxes.

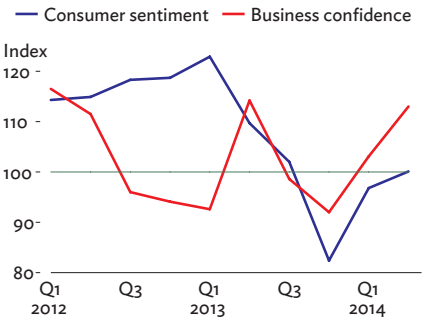
Consumer sentiment was neutral at midyear after registering improvement during the first half, according to surveys conducted by the Malaysian Institute of Economic Research (Figure 3.6.7).

3.6.6 GDP growth



Source: Asian Development Outlook database.

3.6.7 Business and consumer confidence indexes



Note: Above 100 indicate improvement in business conditions and rising consumer confidence.

Source: Haver Analytics (accessed 3 September 2014).

Government spending will be restrained by the need for fiscal tightening. The authorities aim to narrow the fiscal deficit from 3.9% of GDP in 2013 to 3.5% this year and to 3.0% in 2015. More details will become available in October 2014, when the government unveils its budget for next year. It targets a balanced budget by 2020.

Fixed investment will be sustained by the Economic Transformation Program, which was launched in 2010 and involves a pipeline of projects in the public and private sectors to upgrade and expand infrastructure and industry toward generating additional well-paid jobs. The goal is to lift Malaysia into the ranks of high-income economies by 2020. Among the major projects getting under way is the Pengerang Integrated Complex in Johore, near Singapore, which involves building an oil refinery, petrochemical plants, a power generator, and a liquefied natural gas terminal over 5 years at a cost estimated at $27 billion.

Improved demand from major industrial economies will fuel investment in Malaysia's export-oriented manufacturing. However, a number of factors will temper the growth in investment next year, primarily higher domestic funding costs, an expected tightening of credit globally, and the fiscal constraints.

Domestic monetary policy has become less accommodating with the increase in interest rates this year and macro-prudential measures taken over the past 2 years to curb growth in household debt and property speculation. With inflation forecast to move higher in 2015, further monetary tightening is expected.

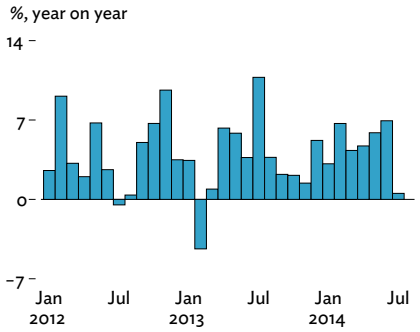
Data available for July suggest the current half year started on a relatively subdued note. Industrial production decelerated sharply in July (Figure 3.6.8). Imports for the month fell year on year, and exports clearing customs grew at the slowest pace so far in 2014. The leading index of economic activity compiled by the government in June suggested that the economy would grow moderately in the months ahead.

Inflation is now forecast to average 3.3% this year, accelerating to 3.6% in 2015 when the goods and services tax comes into effect and subsidies are further trimmed (Figure 3.6.9). The periodic weather phenomenon El Niño could hurt food production later this year and so put upward pressure on prices.

The recovery in exports at a time of modest growth in imports generated an unexpectedly high current account surplus in the first half of 2014. Growth in exports will likely slow a little in the second half and imports will pick up to supply manufacturing industries and investment projects. Current account surpluses of 4.4%-4.6% of GDP are now projected for this year and next (Figure 3.6.10).

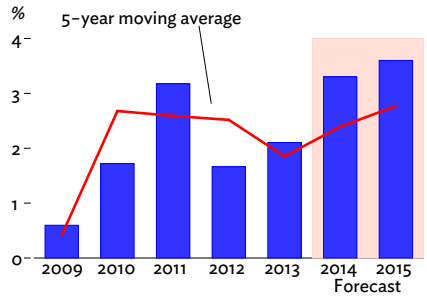
Domestic risks to the outlook center on the impact of fiscal and monetary tightening, including consumers' responses to rising interest rates. Higher interest payments will test households' ability to service debt. The accumulation of household debt moderated last year but was still strong at 11.7%. The notable risk from outside of Malaysia is the potential for volatile global capital flows.

3.6.8 Industrial production growth



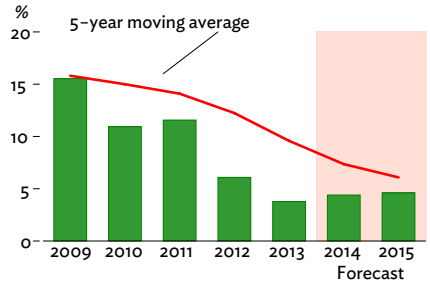
Sources: Haver Analytics; Bank Negara Malaysia. 2014. *Monthly Statistical Bulletin. July.* http://www.bnm.gov.my (accessed 3 September 2014).

3.6.9 Inflation



Source: Asian Development Outlook database

3.6.10 Current account balance



Source: Asian Development Outlook database.

Pakistan

In recent years Pakistan has endured low growth, chronic power deficits, and large fiscal and external imbalances. Economic reforms initiated in the past year contributed to improved economic conditions. Growth edged up, the budget deficit shrank, foreign exchange reserves strengthened, and a sovereign bond issue enhanced policy credibility. However, several years of concerted national commitment will be required to eliminate electricity shortages and effect the structural reforms necessary to achieve high and inclusive growth.

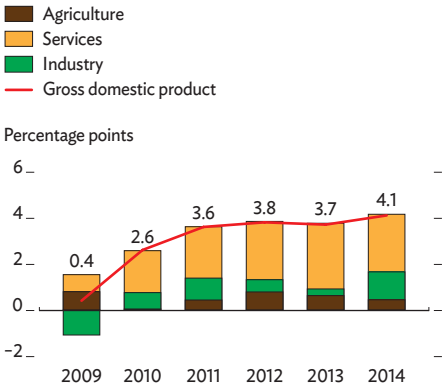
Updated assessment

Preliminary estimates place GDP growth at 4.1% in FY2014 (ended 30 June 2014), up from 3.7% in FY2013 (Figure 3.7.1) and higher than the 3.4% projected in *ADO 2014*. The upturn came from improved industrial performance: a pickup in construction by 11.3%, continued growth in large-scale manufacturing at 4.0%, and electricity supply improved by 3.7% owing largely to the government's clearance of intra-industry debt. Growth in large-scale manufacturing reflected higher production of fertilizer, electronics, chemicals, and leather, while textile production marginally declined. More proactive policies on energy allocation and management adopted during the year helped industry grow. However, electricity and gas shortages will continue to limit growth and drain public finances for several more years, until further governance reform and new investment take effect.

Growth in services slipped to 4.3% in FY2014 from 4.9% a year earlier largely because growth in the finance and insurance subsector and in general government services markedly slowed. Consumption expenditure picked up, however, boosting wholesale and retail trade. Agriculture growth slipped to 2.1% from 2.9%, reflecting bad weather in areas that produce such minor crops as pulses and potatoes, as well as weaker growth in livestock, the latter of which accounts for 56% of agricultural production. These developments outweighed strong expansion of 3.7% in major crops underlined by bumper harvests of rice, sugarcane, wheat, and maize—but not cotton, which suffered a small decline.

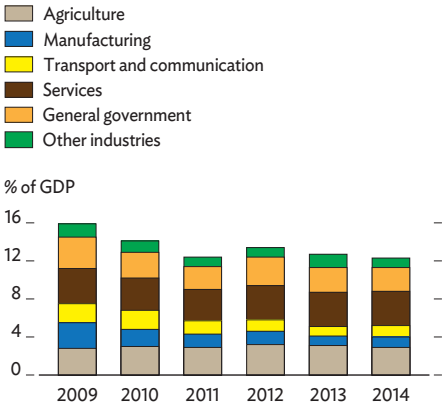
Private consumption remained the largest contributor to growth in FY2014 at 4.6 percentage points, helped by stronger remittances and improved rural incomes from major crops. The contribution of investment was a low 0.2 percentage points. A 0.5% increase in gross fixed capital formation came from a 17.3% expansion in general government investment, as private and public enterprise investment fell by 2.6%. The ratio of fixed investment to GDP continued to decline,

3.7.1 Supply-side contributions to growth



Note: Years are fiscal years ending on 30 June of that year.
Source: Ministry of Finance. *Pakistan Economic Survey 2013–14.* http://www.finance.gov.pk

3.7.2 Gross fixed capital formation



Note: Years are fiscal years ending on 30 June of that year.
Source: Ministry of Finance. *Pakistan Economic Survey 2013–14.* http://www.finance.gov.pk

This chapter was written by Sharad Bhandari and Farzana Noshab of the Pakistan Resident Mission, ADB, Islamabad.

falling to 12.4% from 12.6% in FY2013 (Figure 3.7.2). Private and public enterprise investment in the various production sectors slipped to 9.9% of GDP. Net exports turned negative, subtracting 0.7 percentage points from GDP as import growth outpaced export.

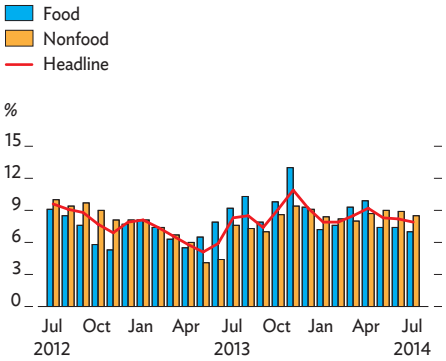
Consumer price inflation accelerated to an average of 8.6% in FY2014 from 7.4% in the previous year. Year-on-year inflation was volatile, rising to 10.9% in November 2013, falling to 7.9% in January 2014, picking up again to 9.2% in April, and then falling again to 8.2% in June (Figure 3.7.3). This largely tracked food inflation made volatile by short supplies of perishable items. Food inflation averaged 9.0% in FY2014 but ended the year at 7.4%. Following the increase in electricity tariffs in October 2013, nonfood inflation stabilized at around 9%, averaging 8.3% for the full year.

The consolidated government budget deficit was contained at 5.5% of GDP in FY2014, down from an average of 8.0% over the past 3 years. The improvement was mainly from a significant increase in nontax revenues and a provincial cash surplus of 0.3% of GDP as provinces spent less on development—a measure for fiscal consolidation along with reduced power subsidies. Total expenditure declined to 19.8% of GDP in FY2014 from 21.4% in FY2013. Current expenditure was 0.5% above the budgetary target for the year, reflecting overruns on subsidies and interest payments. Subsidies were lower than in the previous year, by 0.3% of GDP, but surpassed the budgetary target by 0.4% of GDP notwithstanding significant power tariff increases during the year to bring income closer to cost recovery. Savings from tariff increases were partly offset by larger power supplies that necessitated commensurate subsidy increases, turning a plus for the economy into a minus for the budget. Interest payments increased by a marginal 0.1% of GDP to 4.5%, as interest rates on short-term domestic debt were higher than estimated. The consolidated public sector development program was compressed to PRs865 billion (3.4% of GDP) from the budgeted PRs1,155 billion, and provincial development spending was reduced to nearly 30% below budget, or by 0.7% of GDP.

Tax revenues fell short of their FY2014 target by 4.0%. Federal Board of Revenue tax collection continued to be lower than targeted for another year because planned tax measures could not be fully implemented. Nontax revenues were 4.3% over the budgeted amount, reflecting the one-time receipt of $1.5 billion from Saudi Arabia for project development and $1.1 billion from the auction of the 3G/4G mobile telecommunications spectrum in the last quarter, as well as a large profit remittance from the State Bank of Pakistan (the central bank).

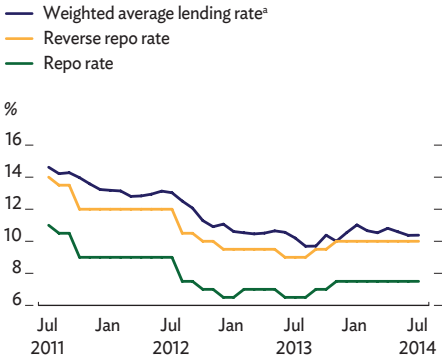
Responding to inflation and pressures on the exchange rate in the first half of FY2014, the central bank increased its main policy rate in September and November by a cumulative 100 basis points to 10% (Figure 3.7.4). It kept the policy rate unchanged in the second half of FY2014, even as inflationary expectations eased and the currency appreciated. Large foreign inflows during this period allowed the government to reduce budgetary borrowing from the central bank, which dropped to PRs197 billion in FY2014 from PRs507 billion in

3.7.3 Inflation



Source: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk (accessed 25 August 2014).

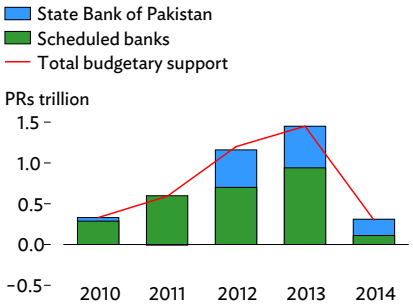
3.7.4 Interest rates



[a] On gross disbursements, the amounts disbursed by banks either in Pakistan rupees or in foreign currency against loans during the month. It includes loans repriced, renewed, or rolled over during the month. In case of running finance, the disbursed amount means the maximum amount received by the borrower at any point during the month.

Source: CEIC Data Company (accessed 28 August 2014).

3.7.5 Budget borrowing from banks



Note: Years are fiscal years ending on 30 June of that year.

Source: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk (accessed 3 September 2014).

FY2013, while borrowing from commercial banks plunged to PRs106 billion from PRs940 billion in FY2013 (Figure 3.7.5).

Net credit to the private sector increased to PRs383 billion in FY2014, reversing net retirement of PRs19 billion a year earlier. Demand for credit from private business strengthened with increased industrial activity that reflected improved confidence in the economy and better energy supply. Consumer and trade finance increased to meet higher domestic demand.

The current account deficit equaled 1.2% of GDP in FY2014, marginally up from 1.1% in FY2013 despite strong 13.7% growth in remittances from workers overseas (Figure 3.7.6). The trade deficit widened by 7.7% as imports grew by 3.8%, reversing a decline of 0.5% in FY2013, and export growth remained modest at 1.5% (Figure 3.7.7). It is too early to gauge the benefits from preferential access to the European Union under Generalized System of Preferences Plus status, effective from 1 January 2014. Exports of textiles, which account for somewhat over half of exports, grew by 6.4%, reversing declines of 1.8% and 0.6% in the previous 2 years. However, textiles appear to be the only export category to post a significant gain. The services account deficit widened, as inflows from the Coalition Support Fund were lower than in FY2013.

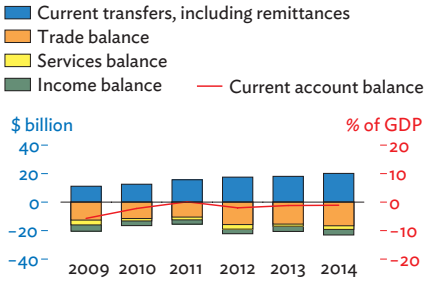
Capital and financial inflows were very strong in the second half of FY2014 with two notably successful eurobond placements, the one-off receipt of $1.5 billion from Saudi Arabia, and disbursements of program loans from multilateral agencies. After 7 years without access to international capital markets, the government placed $2 billion in dollar-denominated eurobonds, half maturing in 5 years and the other half in 10 years, in offers that were substantially oversubscribed. Reflecting the large capital inflows, net liquid official reserves swelled to $9.1 billion at the end of June 2014 from a low of $3.2 billion the previous January (Figure 3.7.8). Nevertheless, reserves remained low at the end of the fiscal year, cover for only 2.2 months of imports of goods and services. Along with the increase in reserves, the Pakistan rupee appreciated to PRs97.5 to the dollar in March 2014 and broadly stabilized at this rate to the end of FY2014. This followed depreciation of about 6% in the first 7 months of the year—and preceded a fall to PRs102.6 in early September 2014 in response to demonstrations that began in August. In real effective exchange rate terms, the rupee appreciated by 5.6% in FY2014, with possible adverse implications for export competitiveness.

Prospects

Projections for FY2015 assume that the government will make satisfactory progress on its economic agenda to reform the energy sector and state-owned enterprises, rationalize import tariffs, and improve the business climate.

Energy reforms include moving toward market-based pricing and improving system governance, efficiency, and sustainability. A major power tariff revision was made in October 2013, and a further increase is planned for FY2015. The government has developed a plan to sell shares of some listed public sector enterprises in capital markets and is prioritizing others for restructuring before privatization. The first

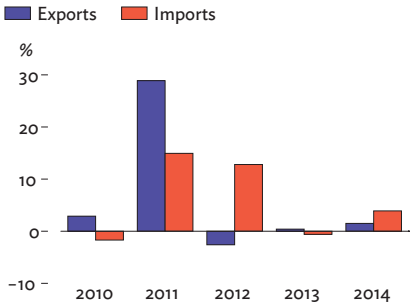
3.7.6 Current account components



Note: Years are fiscal years ending on 30 June of that year.

Source: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk (accessed 3 September 2014).

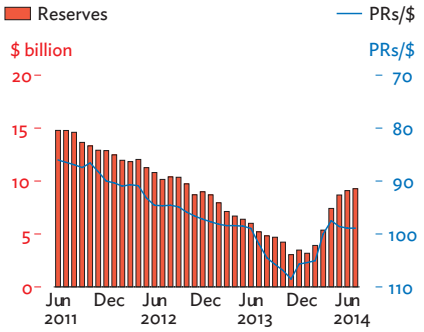
3.7.7 Exports and imports growth



Note: Years are fiscal years ending on 30 June of that year. The large expansion of exports in FY2011 largely reflects a surge in cotton prices.

Source: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk (accessed 3 September 2014).

3.7.8 Foreign reserves and exchange rate



Sources: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk; CEIC Data Company (both accessed 28 August 2014).

transaction was the sale of United Bank shares, successfully completed in May 2014. In addition, investors and consumers may take heart from efforts to reduce maximum tariff rates, remove statutory concessions and exemptions, and institute a simpler tariff system with fewer slabs.

Security concerns, political demonstrations, and the effects of flooding in September 2014 pose downside risks. The government's Vision 2025 articulates a long-term development strategy and identifies political stability, security, and the rule of law as key enablers to achieve sustained and inclusive growth led by the private sector.

GDP growth projected at 4.2% in FY2015 reflects some easing of fiscal consolidation and increased allocations for public sector development spending. Continuing reform and an improving security environment would further boost business confidence and foster private investment. The prospect of strong growth in manufacturing depends on further progress in easing energy shortages.

The consolidated budget for FY2015 targets further trimming the deficit to 4.9% of GDP from 5.5% estimated for FY2014 through reduced expenditure (Figure 3.7.9). This projected decline in the deficit assumes a provincial cash surplus equal to 0.9% of GDP. The budget envisages current expenditures increasing by only 1.6% from the estimated outturn in FY2014. While most major categories of spending increase by double digits, including a 10% increase in salaries and pensions and a 15% increase in interest payments, large savings are expected from a 37% drop in subsidies, equal to 0.6% of GDP, achieved mainly by cutting untargeted power subsidies (Figure 3.7.10). Containing subsidies will be a challenge given overruns in recent years, and success will depend on implementing power sector reforms to raise tariffs enough to meet costs, improve collection, reduce leakage, and invest in generation, transmission, and distribution systems. Power tariff increases in FY2014 helped reduce subsidies, but savings were partly offset by subsidies to cover improved supply.

The Public Sector Development Program is slated to increase by 36%. The budget plan makes more resources available for public investment and, in particular, social protection, for which allocations have been increased by 38% to PRs97.1 billion from PRs70.0 billion in FY2014. Total expenditure is budgeted to increase by only 1.1% in absolute terms, bringing it down to 19.5% of GDP from 19.8% in FY2014.

On the revenue side, the FY2015 budget includes measures to expand the tax base by removing exemptions and concessions, penalizing non-filers, rationalizing tax rates, and reducing tax leakage through better administration. These measures are expected to generate additional revenue equal to 0.8% of GDP. Federal Board of Revenue tax collection is projected to increase to 9.7% of GDP from 9.0% in FY2014 (Figure 3.7.11). However, tax increases will be offset by a 24.0% drop in nontax revenue, which was buoyed in FY2014 by the one-off receipt of $1.5 billion from Saudi Arabia and large proceeds from the auction of the 3G/4G spectrum. As a result, budget revenues are expected to increase only marginally in FY2015 to equal 14.5% of GDP, up from 14.3% in FY2014.

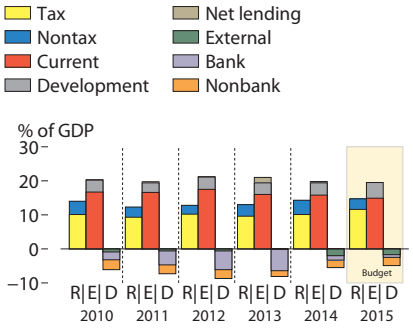
The budget assumes that its deficit will be substantially financed by domestic sources providing credit equal to 3.2% of GDP, with a high

3.7.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	3.4	4.1	3.9	4.2
Inflation	9.0	8.6	9.2	8.2
Current acct. bal. (share of GDP)	-1.4	-1.2	-1.3	-1.3

Source: ADB estimates.

3.7.9 Fiscal performance

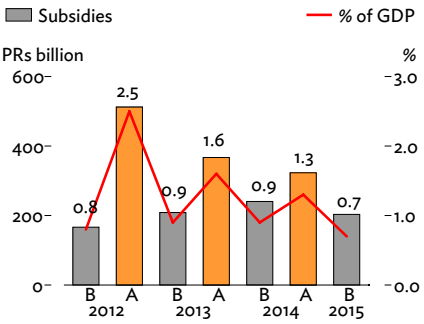


R = revenue, E = expenditure, D = deficit financing.

Notes: Years are fiscal years ending on 30 June of that year. Data refer to consolidated federal and provincial governments. Net lending includes statistical discrepancy. Nonbank includes privatization proceeds.

Source: Ministry of Finance. *Pakistan Economic Survey 2012–13.* http:// www.finance.gov.pk

3.7.10 Total subsidies



B = budget, A = actual.

Note: Years are fiscal years ending on 30 June of that year.

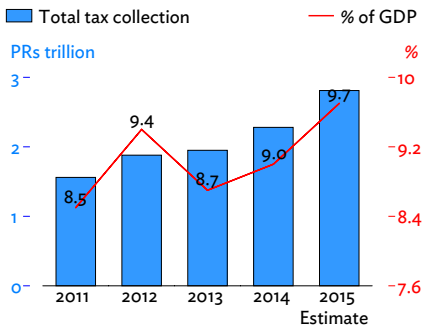
Source: State Bank of Pakistan. Economic Data. http:// www.sbp.org.pk (accessed 3 September 2014).

share of nonbank borrowing (2.4% of GDP) and financing from external resources (1.7% of GDP) that includes funds raised on international capital markets, multilateral program lending, and privatization proceeds. Accordingly, the budget aims to reduce domestic bank borrowing to PRs228 billion from PRs303 billion in FY2014, with no borrowing from the central bank. In connection with presenting the FY2015 budget, the government set out a debt-management strategy outlining various ways to achieve debt sustainability over the medium term, in addition to fiscal consolidation. At the end of FY2014, public debt was estimated to equal 64% of GDP, continuing to breach the 60% ceiling specified under the Fiscal Responsibility and Debt Limitation Act, 2005.

Consumer price inflation is expected to average 8.2% in FY2015, slightly down from 8.6% in FY2014. A business and consumer sentiment survey in May 2014 found inflationary expectations had steadied, apparently reflecting improved exchange rate stability and much lower domestic borrowing for budgetary support as development partners help finance the government's economic program. While the increase in public sector salaries and some increase in electricity tariffs will exert upward pressure on prices, declining international commodity prices and a relatively stable exchange rate should help contain inflation. On the supply side, food prices will remain a key determinant of inflation as in recent years. The central bank intends to stay vigilant on monetary policy and keep inflation in a range of 7.5%–8.5%.

Continued strong inflows of remittances are expected to help limit the current account deficit to 1.3% of GDP in FY2015. Manufacturing should benefit from better electricity supply, allowing a boost in textile production. With access to the European Union under the Generalized System of Preferences Plus, exports are projected to increase by 4.0%. Imports are projected to advance by 5.0%, a rate essentially unchanged from FY2014, reflecting a marginal increase in growth, easing prices for oil and other commodities, and continued stagnation in private investment. The current account deficit is expected to be financed by continued modest flows of private direct and portfolio investment, sustained multilateral and bilateral lending to support the government's economic reform program, and planned government borrowing from international capital markets.

3.7.11 Federal Board of Revenue tax collection



Note: Years are fiscal years ending on 30 June of that year.
Source: State Bank of Pakistan. Economic Data. http://www.sbp.org.pk (accessed 1 Aug 2014)

Philippines

Robust growth in the first half of 2014 was fueled by private consumption and investment coupled with a recovery in exports. Growth is seen quickening in 2015, though earlier forecasts for both this year and next are trimmed to take into account a slowdown in government spending and steady tightening of monetary policy. Inflation will be slightly above the earlier projections.

Updated assessment

Recovery in exports and sustained increases in private consumption and private investment generated 6.0% economic growth in the first half of 2014, moderating from a year earlier mainly because government spending has barely grown this year (Figure 3.8.1).

Private consumption contributed most of the increase in GDP, rising by 5.6% on higher remittances from overseas Filipinos and increased employment. Remittances rose by 6.2% to $12.7 billion, a sharp 14.5% gain in peso terms. Employment increased by 2.8% in the 12 months to July, or by 1.1 million new jobs, outpacing growth in the workforce over that period.

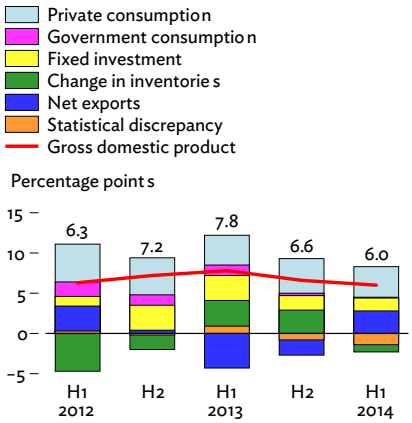
Growth in government consumption, by contrast, braked hard to 0.9% from 11.1% a year earlier (Figure 3.8.2). The slowdown came off a high base in 2013, which was an election year, but also reflects cautious spending by government agencies amid concerns about the misuse of government funds. Since last November, the Supreme Court has declared unconstitutional the government's Priority Development Assistance Fund and some provisions of its Disbursement Acceleration Program.

Growth in fixed investment was dragged down by a fall in government construction. Private construction grew, but at a more moderate pace than last year. Encouragingly, investment in equipment maintained double-digit expansion. Fixed investment overall grew by 7.6%, half the rate of a year earlier.

Exports of goods and services reversed a contraction in the first half of 2013 to rebound in volume terms in the same period of this year, benefiting from a pickup in demand from major markets including the euro area, US, and Japan. Imports of goods and services also recovered, but at a comparatively slower pace. This generated a significant contribution to GDP growth from net external demand.

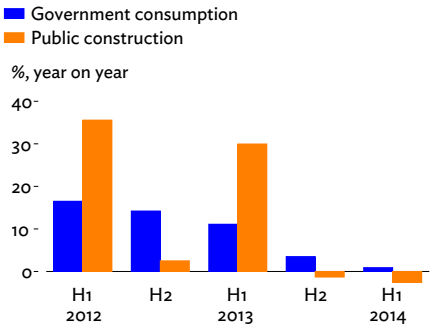
From the production side, services and manufacturing were the major growth drivers. The service sector, accounting for over half of GDP, grew by 6.4%, slightly behind the year-earlier pace but still generating almost two-thirds of GDP growth. Key contributors were retail trading, finance and real estate services, business process outsourcing, and tourism.

3.8.1 Demand-side contributions to growth



Source: CEIC Data Company (accessed 15 September 2014).

3.8.2 Growth in real government spending



Source: CEIC Data Company (accessed 15 September 2014).

This chapter was written by Joven Balbosa and Teresa Mendoza of the Philippines Country Office, ADB, Manila.

Industry expanded by 6.6%, having moderated from 10.9% growth a year earlier. Buoyant private consumption and rising external demand supported manufacturing, which grew by 8.8%. Gains were seen in food and drinks manufacturing, textiles, furniture, communications equipment, machinery, and chemicals. Construction slowed sharply, as noted above, but mining output rose.

Bad weather disrupted agriculture early in the year before a modest recovery in rice harvests lifted agricultural output by 2.2% in the first 6 months. Typhoon Rammasun hit important crop-growing areas in July this year, 9 months after Super Typhoon Haiyan devastated agriculture and infrastructure in parts of the Visayas in November 2013. Poor performances were recorded for fisheries, coconuts, livestock, and poultry.

Despite the modest recovery in rice production, these storms and supply bottlenecks contibuted to food price inflation of 8.7% year on year in August 2014 and overall inflation of 4.9% (Figure 3.8.3). A Manila city ordinance restricting cargo trucks with the aim of easing traffic congestion disrupted port and cargo deliveries, adding to pressure on prices. In the first 8 months of 2014, inflation averaged 4.4%.

With inflationary pressures gaining momentum, Bangko Sentral ng Pilipinas, the central bank, raised policy interest rates by 50 basis points between July and September this year, to 4.0% for the overnight borrowing rate and 6.0% for the overnight lending rate. The policy rates had been at record lows for almost 2 years.

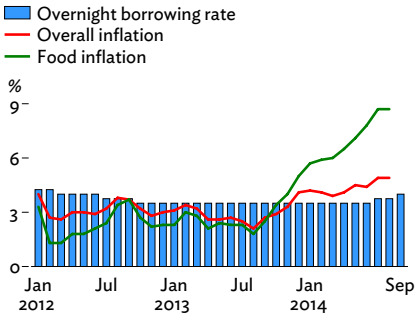
Liquidity growth remained high, though decelerating. The pace of increase in broad money (M3) eased to 18.3% year on year in July from 38.0% in January (Figure 3.8.4). To drain excess liquidity, the central bank raised the reserve requirement for banks twice and increased the interest rate on its special deposit account in June and again in September. Nevertheless, credit to the private sector expanded by 20.1% in July, accelerating from 16.5% at the end of last year.

Subdued government spending and higher revenue nearly halved the budget deficit to P55.7 billion in the first 7 months. Expenditure, excluding interest, rose by 8.0%, though this undershot the target. Tax revenue rose by 11.5%, helped by stronger enforcement. The fiscal deficit shrank to 0.9% of GDP in the first half, well under the full-year target of 2.0% of GDP and narrower than last year's actual deficit of 1.4%.

In the trade accounts, merchandise exports rebounded in the second quarter, narrowing the trade deficit in that period. For the first half, exports in US dollar terms grew by 0.3%. Increases were recorded in exports of minerals, machinery, wood manufactures, garments, fruit, and processed food and beverages, but shipments of electronics declined. Imports in US dollar terms rose by 3.6% in the first half, with increases in capital and consumer goods. After accounting for higher inflows of remittances and earnings from business process outsourcing, the current account surplus narrowed to $3.9 billion, or 2.9% of GDP (Figure 3.8.5). Net outflows in the financial account, mainly of portfolio investment, put the balance of payments in deficit by $4.1 billion.

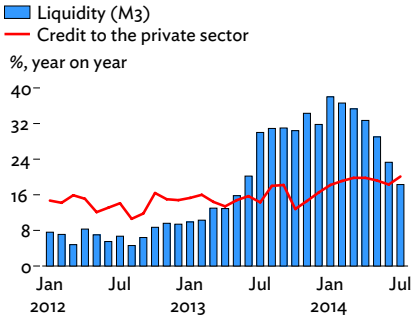
Gross international reserves at $80.9 billion in August 2014 provided 11 months of cover for imports of goods and services and income payments. The peso depreciated slightly against the US dollar from the end of 2013 to late-September this year.

3.8.3 Inflation and policy rates



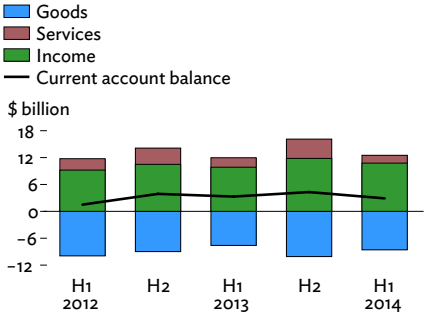
Source: CEIC Data Company (accessed 15 September 2014).

3.8.4 Domestic liquidity



Sources CEIC Data Company (accessed 15 September 2014).

3.8.5 Current account components



Source: CEIC Data Company (accessed 22 September 2014).

Prospects

Slightly stronger growth is projected through the rest of this year and in 2015 on expectations that post-typhoon reconstruction accelerates, government fiscal disbursement improves, and exports benefit from brighter prospects in the major industrial economies. However, unexpectedly low government spending coupled with higher inflation and associated monetary tightening prompt revised forecasts trimmed to 6.2% for this year and 6.4% for 2015 (Figure 3.8.6).

Consumer spending, supported by large remittance inflows and accounting for two-thirds of GDP, will continue to fuel economic growth, though there are signs that higher inflation is starting to bite. The rate of increase in consumer spending eased to 5.3% in the second quarter from about 6% in the preceding 3 quarters.

Indicators of private investment are favorable, and surveys by Bangko Sentral ng Pilipinas find that business sentiment is generally positive. Foreign direct investment, though low by regional standards, jumped by 77% in the first half of 2014 to $3.6 billion (Figure 3.8.7). It almost doubled in 2013 to $3.8 billion from an average of about $2 billion in 2008–2012. Standard & Poor's and Japan-based Rating & Investment this year raised their long-term credit ratings on the Philippines by a notch from the minimum investment grade BBB– to BBB. Fitch and Moody's upgraded the Philippines in 2013 to investment grade.

Private construction, while moderating from the rapid pace of recent years, is projected to expand through the forecast period. The issuance of building permits rose by 11.2% year on year in the second quarter as both residential and nonresidential approvals increased.

Growth in private investment will mitigate weak government spending. Outlays on public infrastructure undershot the target in the first 7 months of this year. Government expenditure excluding interest remained weak in July, declining by 16.7% year on year. The outlook assumes that steps taken by the authorities to address administrative bottlenecks will accelerate fiscal disbursement from late in 2014.

Fiscal policy is expected to be more supportive of economic growth in 2015. The government's proposed 2015 budget increases spending by 15.1% over the budget for 2014, with increases for social services, infrastructure, and investment in agriculture, tourism, and manufacturing. Social programs include the expansion of health insurance and conditional cash transfers for poor families. The 2015 budget proposes a deficit of 2.0% of GDP, which would exceed this year's expected deficit outcome.

Reconstruction in areas hit by severe typhoons is expected to speed up by the end of this year. In July 2014, the government approved post-typhoon rehabilitation plans for the provinces of Cebu, Iloilo, Leyte, Eastern Samar, and Western Samar and for the city of Tacloban, covering most of the cities and municipalities hit by Typhoon Haiyan. A master plan for recovery and rehabilitation from that typhoon was submitted to the President in August 2014. It involves outlays of about $4 billion for infrastructure, resettlement, social services, and restoring livelihoods.

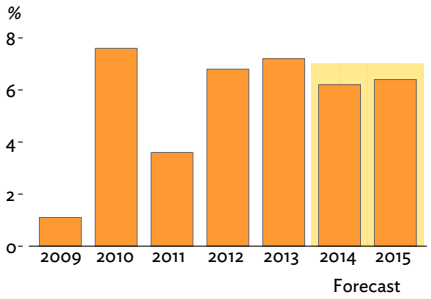
This Update nudges up forecasts for inflation owing to the higher outturn in the first 8 months of this year, expected dry weather from El Niño that could hurt food production late this year, and pending

3.8.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	6.4	6.2	6.7	6.4
Inflation	4.3	4.4	4.0	4.1
Current acct. bal. (share of GDP)	3.4	3.2	3.2	2.8

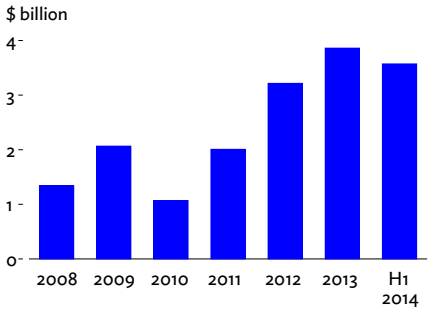
Source: ADB estimates.

3.8.6 GDP growth



Source: Asian Development Outlook database.

3.8.7 Foreign direct investment net inflows



Source: CEIC Data Company (accessed 15 September 2014).

petitions for increases in utility charges. The government has increased rice imports to ease prices of the staple and is improving irrigation facilities to counter drought. Inflation is now forecast to average 4.4% in 2014, the highest in 3 years, and 4.1% in 2015, as some of the temporary factors pushing up prices this year abate (Figure 3.8.8).

Monetary policy is expected to tighten further as inflation is near the upper end of the central bank's 2014 target range of 3.0%–5.0%. In raising its policy rates, the central bank said the favorable outlook for domestic demand allows scope for measured adjustments in policy rates without hurting growth. Special deposit accounts and overnight borrowing still had rates below inflation after being raised by 50 basis points between June and September.

The recovery in exports and higher remittances will underpin current account surpluses (Figure 3.8.9). Merchandise exports posted double-digit growth in July, when demand for semiconductors improved. With imports projected to accelerate as reconstruction picks up, forecasts for current account surpluses are trimmed from April.

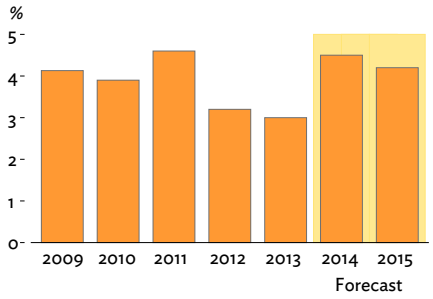
Volatility in global capital flows is a risk to the outlook, though better economic fundamentals have improved the economy's resilience. The current account has been in surplus since 2003 and the ratio of external debt to GDP declined to 21.5% in 2013. Most of the debt is medium to long term. Fiscal and debt consolidation has provided more flexibility to respond to downturns. Government debt as a share of GDP has declined since 2009 to equal 49.2% in 2013 (Figure 3.8.10). Banks' nonperforming loans are in the low single digits, and capital adequacy ratios are above regulatory and international standards.

The most pressing national challenges are to improve infrastructure, attract more investment to generate better jobs, and further reduce poverty, which at 24.9% in the first half of last year was down 3.0 percentage points from the same period in 2012.

Despite strong GDP growth averaging 6.3% since 2010, job generation is insufficient. Underemployment remains high at 18.3% of those employed because new jobs are largely part time or informal. A stronger manufacturing sector as well as further expansion of tourism and other service industries would create more and better-paid employment. Manufacturing currently provides only 8.3% of all jobs.

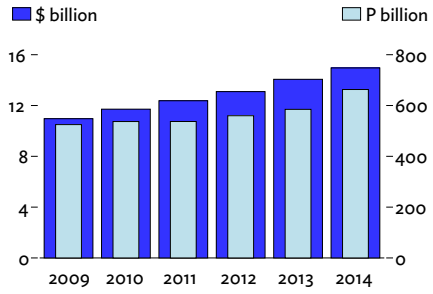
Fixed investment has increased in recent years and was 20.9% of GDP in the first half of 2014, but this still trails peer economies in Asia. Accelerating infrastructure development, especially in the regions, would support productivity, job creation, and poverty reduction. Recent policy changes to stimulate investment include liberalizing aviation policy, opening further to foreign banks, and implementing road maps for manufacturing sector development. The government plans policy to strengthen competition, enhance the regulatory framework for public–private partnership, further develop capital markets, and increase access to finance. Such initiatives can make the country more competitive, support small and medium-sized enterprises, raise investment in the regions, especially in the south, and help it prepare for subregional economic integration.

3.8.8 Inflation



Source: Asian Development Outlook database.

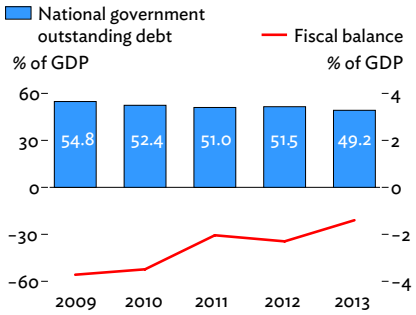
3.8.9 Personal remittances



Note: Data refer to Jan-July of each year.

Source: CEIC Data Company (accessed 15 September 2014).

3.8.10 Fiscal indicators



Source: Asian Development Outlook database.

Thailand

Political disruptions dented confidence and domestic demand in the first half of 2014, causing GDP to contract. The economy is expected to grow in the second half but still undershoot the *ADO 2014* forecast for the year. This *Update* projects an upturn in growth next year, based on stronger domestic and external demand. Inflation is modest and expected to remain so. The current account this year is now seen in surplus, largely owing to a slump in imports.

Updated assessment

The economy contracted by 0.1% the first half of 2014 as prolonged political tensions and street protests culminated in a military takeover of the government in May (Figure 3.9.1). GDP fell by 0.5% year on year in the first quarter before recovering by 0.4% in the second. Ahead of the coup, protesters blocked attempts to complete national elections, leaving the government in a caretaker role and therefore restricted in its ability to borrow, spend, or implement policy.

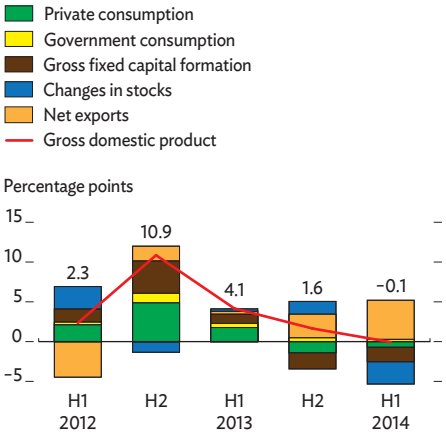
Political disruptions and government paralysis eroded confidence and undermined consumption, investment, and government spending through the second half of 2013 and into the first half of 2014. Private consumption fell by 1.4% in the first 6 months of this year, weighed down by depressed consumer confidence. Also, incomes in rural areas were hurt by lower prices for agricultural products and delays in government payments to farmers under the rice support program. Illustrating the weakness in consumer spending, sales of motorcycles fell by almost 20% in the first half.

Private fixed investment slid by 7.2% in January–June 2014, reflecting the political uncertainty that caused companies to postpone decisions, as well as weak domestic and external demand (Figure 3.9.2). Some major private investments were held up because the Board of Investment could not approve investment privileges during the caretaker administration.

Government fixed investment dropped by 11.3% owing to restrictions on the caretaker government. Planned public sector water-management projects against flooding were stalled by legal challenges, and a proposed $67 billion transport infrastructure package was ruled unconstitutional by the Constitutional Court. Government consumption expenditure rose by 3.0%, but this was the lowest rate of increase in 3 years.

Exports of goods and services declined 0.6% by volume in the first half due to a fall in services exports, including tourism. Exports of goods rose slightly in volume terms, subdued by anemic growth in the major industrial economies. Imports of goods and services fell sharply, by 8.9%

3.9.1 Demand-side contributions to growth



Source: National Economic and Social Development Board. http://www.nesdb.go.th (accessed 30 August 2014).

3.9.2 Gross fixed capital formation

Source: National Economic and Social Development Board. http://www.nesdb.go.th (accessed 30 August 2014).

This chapter was written by Luxmon Attapich of the Thailand Resident Mission, ADB, Bangkok.

in volume terms, reflecting lower demand for capital equipment and inputs for manufacturing, coupled with lackluster private consumption. Consequently, net external demand rose, which moderated the decline in GDP caused by weak domestic demand.

On the production side of the economy, agriculture and services expanded modestly, but a 2.2% drop in industrial output caused GDP to contract. Manufacturing declined by 2.1% in the first half. Automobile output, which soared in 2012 and early 2013 on a temporary tax rebate for car purchases, fell off those high levels during the first few months of this year. The production of electrical appliances suffered from soft demand at home and abroad. Construction shrank by 7.5% owing to damaged confidence, the slow disbursement of government spending, and skilled labor shortages.

In the service sector, expansion in telecommunications and insurance helped to offset contraction in wholesale and retail trade and in hotels and restaurants, enabling services as a whole to grow by 1.8%. Tourist arrivals fell by 10.5% to 11.8 million in the first half, reflecting the impact of the street protests and subsequent military intervention (Figure 3.9.3).

Agriculture and fisheries also grew by 1.8% as the output of palm oil, sugar, maize, and rice increased. Disease afflicting shrimp aquaculture continued to hurt fisheries production, but there were signs of this problem easing.

The drop in imports contributed to a turnaround in Thailand's trade and current accounts, converting last year's deficits into surpluses. The value of merchandise imports slumped by 13.3% to $98.9 billion in the first 6 months (Figure 3.9.4). The value of merchandise exports fell slightly, by 0.1% to $111.5 billion, owing to soft demand in major markets and lower prices for export commodities including rice and natural rubber. Exports to the People's Republic of China fell by 4.3%, and those to Australia and Japan also contracted.

These developments during January–June produced a large merchandise trade surplus of $12.6 billion. After accounting for a surplus in transfers as well as deficits in services and income, the current account recorded a surplus of $8.8 billion, equal to 4.7% of GDP. Capital and financial accounts registered net outflows of $7.2 billion as substantial outflows of portfolio investment offset inflows of foreign direct investment. The balance of payments, after errors and omissions, showed a small deficit at midyear. International reserves stood at $169.4 billion in July 2014, covering 10.2 months of imports of goods and services.

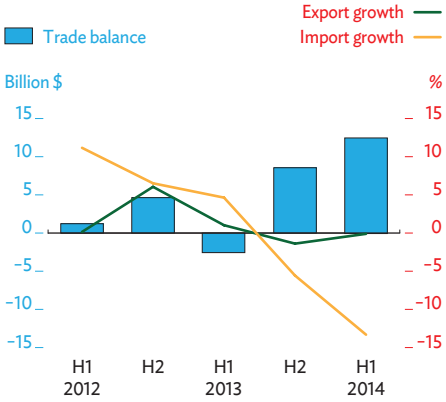
Fluctuations in the Thai baht were largely responses to political developments. The currency weakened to a 3-year low against the US dollar early this year before recovering to appreciate by 3.0% over the first 8 months. Inflation edged up to 2.6% year on year in May 2014, mainly owing to higher prices for food and cooking gas. It subsided from June through August to average a modest 2.2%in the first 8 months (Figure 3.9.5).

Responding to the economic contraction in the first quarter, the Bank of Thailand cut its policy interest rate in March by 25 basis points to 2.0%, following reductions totaling 50 basis points in 2013. However, demand for credit remained subdued, and banks were cautious

3.9.3 Tourism indicators

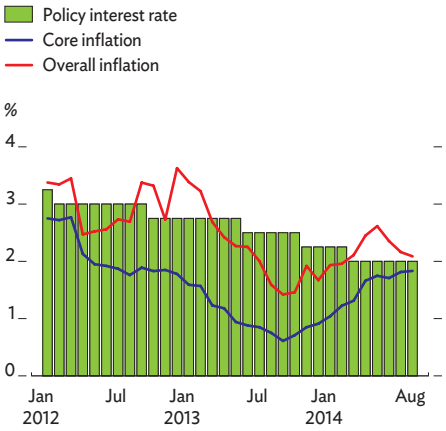
Source: Bank of Thailand. http://www.bot.go.th (accessed 30 August 2014).

3.9.4 Trade indicators



Source: Bank of Thailand. http://www.bot.go.th (accessed 30 August 2014).

3.9.5 Inflation and policy interest rate



Sources: Bloomberg; CEIC Data Company (both accessed 4 September 2014).

in lending, such that growth in credit to the private sector halved to 6.8% year on year in June 2014 from a year earlier.

With the government constrained by political and legal issues from implementing fiscal policy, disbursements fell to 68% of the budgeted amount in the first 3 quarters of FY2014 (ended 30 September 2014). Only 49% of the capital budget was disbursed in that period. The fiscal deficit, including budget and off-budget items, narrowed to an estimated 0.6% of GDP in FY2014 from 2.0% in FY2013. Public debt rose by 2.3 percentage points to a manageable 46.6% of GDP over the 12 months to June 2014.

3.9.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	2.9	1.6	4.5	4.5
Inflation	2.4	2.2	2.6	2.6
Current acct. bal. (share of GDP)	−0.1	2.5	0.5	0.5

Source: ADB estimates.

Prospects

The interim government led by the military is expected to hold power until a new constitution is drafted and general elections are held, possibly in late 2015. Economic policy steps taken by the military administration since May include paying rice farmers $2.9 billion that was overdue for rice acquired under the previous government's rice support program, resuming approvals of investment privileges, and preparing a national budget for the fiscal year starting in October 2014.

In place of the previous government's transport infrastructure proposal, the military administration approved an ambitious 8-year infrastructure plan that could involve investing more than $76 billion in railways, roads, ports, and airports. Investment in 2015 will include mass transit rail lines in Bangkok and rail upgrades. Funding sources are expected to be the national budget, public–private partnerships, and possibly listed infrastructure investment funds.

Current reconsideration of water-management investment plans will likely yield a revised program of projects to mitigate flooding.

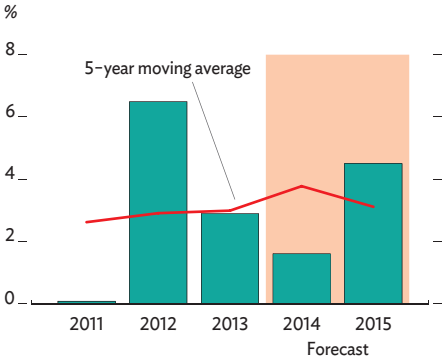
Economic growth is expected to turn up by the end of 2014, partly reflecting a low base effect from a slump in the fourth quarter of 2013, when political unrest intensified. However, the forecast for full-year growth is revised down to 1.6% owing to the disappointing performance so far this year. Data available for July show the index of manufacturing fell for a 16th consecutive month, and both exports and imports declined year on year.

Next year, the economy is still forecast to grow by 4.5% as private and public investment recovers and exports benefit from the improved outlook for the major industrial countries (Figure 3.9.6).

Consumer confidence has turned up since May, which will translate into higher private consumption (Figure 3.9.7). A scheduled increase in salaries for government workers from April 2015 will contribute to stronger private consumption next year. Still, unless the authorities resort to fiscal measures to stimulate spending, the pace of recovery in private consumption is likely to be muted by factors including high household debt, which equaled 79.4% of GDP in the first quarter of 2014.

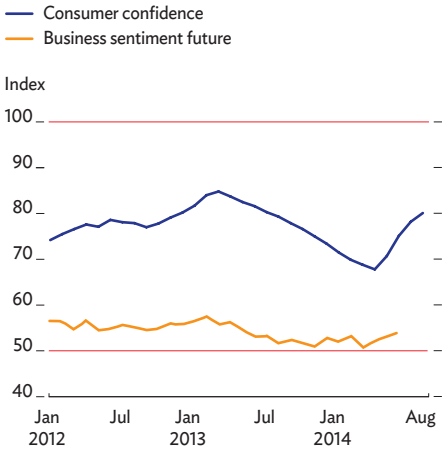
Private investment is expected to recover since business sentiment has improved (Figure 3.9.7). The resumption of investment approvals will help, as will a decision by the military government to encourage lending to small and medium-sized enterprises with low interest rates and credit guarantees from state financial institutions.

3.9.6 GDP growth



Source: Asian Development Outlook database.

3.9.7 Consumer confidence and business sentiment indexes



Note: A reading of less than 100 for consumer confidence and less than 50 for business sentiment denotes a deterioration.

Source: Bank of Thailand. http://www.bot.or.th (accessed 30 August 2014).

Stronger economic growth forecast for the major industrial countries next year will also support investment in Thailand's export-oriented manufacturing.

The restoration of public spending programs that were blocked by political and legal challenges will stimulate the economy. The budget for FY2015, starting in October 2014, increases spending by 2.0% from the FY2014 budget and provides for a deficit of up to B250 billion, equal to 1.9% projected GDP. The disbursement rate is expected to increase in FY2015 from low rates in 2014. Capital expenditure in the FY2015 budget is up by 17.9% from the last budget, and some projects in the infrastructure package should get under way. Further, the Ministry of Finance is preparing an economic stimulus package to propose to the new cabinet.

The previous government's costly support program for rice farmers ended this year, and the new administration is considering other options. For now, farmers are able to borrow at low interest rates from the state-owned Bank for Agriculture and Agricultural Cooperatives, and to obtain crop insurance to manage production risks.

With the policy interest rate at 2.0%, the lowest since January 2011, monetary policy is set to stimulate growth. Demand for credit will likely pick up from the subdued pace of the first half (Figure 3.9.8). The Bank of Thailand is expected to start to nudge the policy interest rate up when economic recovery gains traction and stirs inflation in 2015.

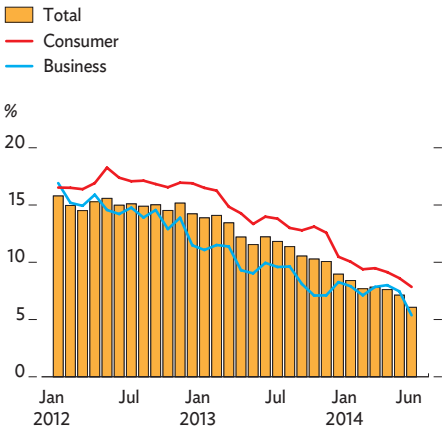
Inflation is seen averaging 2.2% this year, slightly below the earlier forecast. A restructuring of domestic fuel pricing in August 2014 resulted in lower prices for gasoline and a slight increase in the price of diesel. Electricity tariffs will be kept steady through the end of 2014. A phased reduction of the subsidy on cooking gas was put on hold this year but is expected to resume in 2015. As domestic demand strengthens next year, inflation is forecast to rise to average 2.6% (Figure 3.9.9).

Merchandise exports grew slightly in June, but the improvement was not sustained in July. The export performance for 2014 as a whole will fall short of expectations in *ADO 2014*. Exports are projected to strengthen in 2015 as demand improves from the major industrial economies. Inbound tourism is seen recovering through the forecast period, particularly after martial law is lifted.

The slump in imports and turnaround in the current account in January–June point to a current account surplus for 2014, instead of the small deficit previously anticipated. Imports will rise in 2015, in line with recovery in domestic demand. The trade surplus is projected to fall, narrowing the current account surplus next year (Figure 3.9.10).

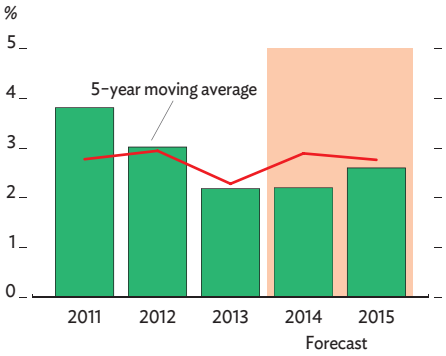
Domestic risks to the outlook for this year and next could come from delays in the infrastructure investment program or from high household debt. Although household debt has eased in 2014 from over 82% in 2013, the portion of debt in arrears of 3 months or more has jumped by half. The Bank of Thailand warned in August that the rate of new debt creation still outpaced growth in incomes. Financial pressures on households will likely rise when interest rates start to move higher. At mid-2014 the ratio of nonperforming loans to households was 2.5%, up from 2.2% at the end of 2013.

3.9.8 Credit growth



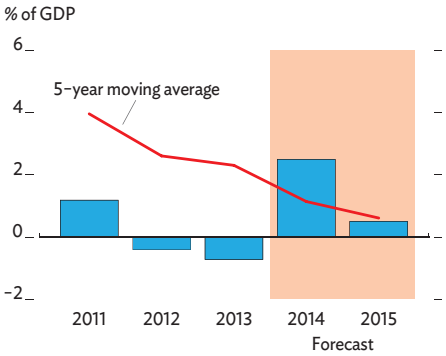
Source: Bank of Thailand. http://www.bot.go.th (accessed 4 September 2014).

3.9.9 Inflation



Source: Asian Development Outlook database.

3.9.10 Current account balance



Source: Asian Development Outlook database.

Viet Nam

Soft domestic demand confines economic growth below its long-term trend and suggests that outcomes this year and next will fall slightly short of earlier forecasts. Efforts to reform banks and state-owned enterprises remain fitful, hindering growth. On the positive side, inflation is unexpectedly low, current account surpluses are substantial, and foreign reserves are being rebuilt.

Updated assessment

GDP growth at 5.2% in the first half of 2014 showed a modest increase over the corresponding period of the 2 previous years but remained below its long-term trend owing to soft domestic demand and persistent structural weaknesses (Figure 3.10.1).

A maritime territorial dispute between Viet Nam and the People's Republic of China (PRC) flared in May 2014, when the PRC moved an offshore oil rig into contested waters. That sparked protests in Viet Nam and damage to foreign-owned factories, which prompted the temporary evacuation of PRC nationals and some other Asians. Tourism from the PRC fell sharply. Viet Nam's exports to the PRC and imports of factory inputs from there also were disrupted and the market rate of the Viet Nam dong slipped.

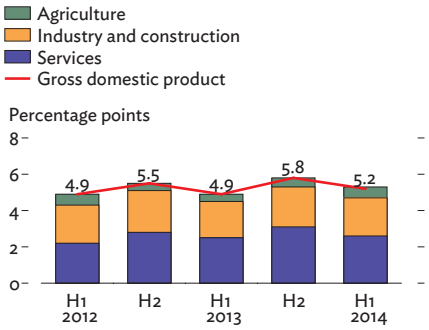
The PRC is Viet Nam's biggest trading partner, accounting for 19.0% of total trade, and the main source of tourists. Tensions eased when the oil rig was moved out of contested waters in July. Tourist arrivals from the PRC were down by 30.0% year on year in August, though arrivals to Viet Nam from all markets rose by 12.2% in the first 8 months of this year.

By sector, services expanded by 6.0% in the first 6 months and generated half of GDP growth. Services related to information and communication, wholesale and retail trade, and real estate posted stronger growth than a year earlier, while others including banking and finance and hotels slowed. Industry grew by 5.3%, with the important manufacturing subsector expanding by 7.9%. However, the construction subsector was subdued, as the property market remained slack and government spending constrained.

Agriculture and fisheries recorded growth of 3.0%, well above the year-earlier pace. Fisheries performed strongly, expanding by 5.9% with favorable weather and improved productivity in the industry.

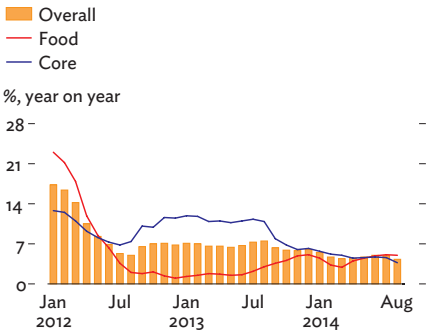
From the demand side, private consumption picked up to grow by 5.0% in the first half of 2014, reflecting slightly better economic conditions and some improvement in consumer confidence. Investment grew by a modest 3.9%. Domestic investment was sluggish, with growth

3.10.1 Supply-side contributions to growth



Source: General Statistics Office of Viet Nam.

3.10.2 Inflation



Source: General Statistics Office of Viet Nam.

This chapter was written by Dominic Mellor, Chu Hong Minh, and Nguyen Luu Thuc Phuong of the Viet Nam Resident Mission, ADB, Ha Noi.

in credit still weak, but foreign direct investment was buoyant. Net exports of goods and services contributed to GDP growth.

Inflation subsided to average 4.7% in the first 8 months of this year, the lowest since 2003, due to lackluster domestic demand, good food supplies, and relatively steady global fuel prices (Figure 3.10.2). The State Bank of Viet Nam (SBV), the central bank, cut policy interest rates by 50 basis points in March 2014, taking the refinancing rate down to 6.5% and the discount rate to 4.5%. Banks subsequently lowered lending and deposit rates.

However, lower interest rates did little for lending in the face of muted demand for credit, a more cautious attitude toward lending by commercial banks, and weakness in the banking system. Credit increased by an estimated 5.8% year to date in the first 8 months. In August, year-on-year credit growth was estimated at 12.0% (Figure 3.10.3).

Easing inflation and a gradual rebuilding of international reserves provided support for the Viet Nam dong, which remained within its official trading band except for a brief period in May and June (Figure 3.10.4). The SBV devalued the dong by 1.0% against the US dollar by adjusting the reference rate in June 2014, the first change since a similar devaluation in June 2013.

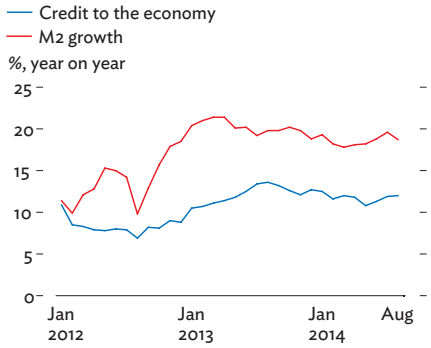
On the fiscal front, the government aims to restrain spending and lift revenue to curb the fiscal deficit. In the first 6 months of this year, budget revenue and grants rose slightly to equal 24.8% of GDP while expenditure stayed at 27.7%. The budget deficit narrowed to 3.0% of GDP from 4.1% a year earlier.

External accounts and international reserves improved in the first half. Merchandise exports rose by an estimated 15.5% on a balance-of-payments basis and in US dollar terms. Customs data show that exports of textiles increased by 18.0%, and of mobile phones and accessories by 17.0%, while exports of rice, tea, and cassava declined. Measured the same way, imports rose by 11.4%, led by raw materials and other inputs for manufacturing. The trade surplus climbed to an estimated $6.1 billion, contributing to a current account surplus estimated at 6.9% of GDP (Figure 3.10.5).

Net disbursement of foreign direct investment rose by 11.3% to about $3.5 billion in the first 6 months, though registered commitments fell sharply, foreshadowing a slowdown in future inflows. The capital account was estimated to be in surplus by $5.3 billion at midyear, pushing up the balance of payments surplus. Gross international reserves rose to the equivalent of about 3 months of imports of goods and services, improving on import cover of less than 2 months of goods and services in early 2012.

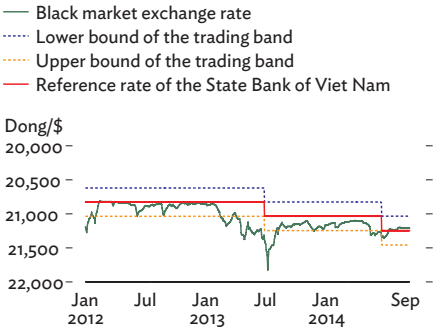
The prevalence of banks' nonperforming loans (NPLs) continues to constrain growth in credit. NPLs as measured by the SBV rose to an estimated 4.2% of total lending at mid-2014 from 3.6% at the end of 2013 (Figure 3.10.6). The figure would be much higher under international accounting and provisioning standards. After some delays the SBV implemented regulations in June this year directing banks to raise standards on loan classification and provisioning closer to international best practice, though the deadline for some requirements was further extended to 2015.

3.10.3 Credit and money supply growth



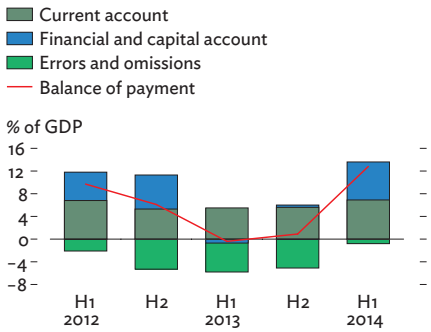
Sources: State Bank of Viet Nam; ADB estimates.

3.10.4 Exchange rate



Sources: State Bank of Viet Nam; ADB observations.

3.10.5 Balance-of-payments indicators



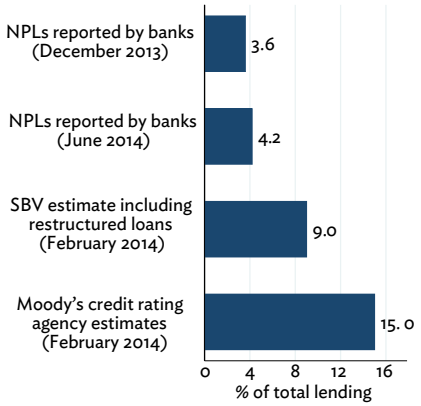
Source:s State Bank of Viet Nam; ADB estimates.

The Viet Nam Asset Management Company, established by the government in 2013 to acquire, restructure, and sell NPLs, had purchased about $2.5 billion of bad debt by June 2014. That included estimated purchases of $700 million in the first half of this year, just 15% of the full-year target. This performance raised concerns over the efficacy and financial capacity of the asset management company.

Progress has been achieved on restructuring state-owned enterprises (SOEs). In the first 7 months, 76 state firms, most of them small, were restructured. Of these, 55 were partly privatized with at least half their equity sold to the private sector. However, only limited headway was made on selling shares in large SOEs. The government has an ambitious target to partly privatize another 356 SOEs by the end of 2015.

In July 2014, Moody's Investors Service raised Viet Nam's credit rating by one notch to B1 with a stable outlook. The rating agency said the upgrade reflects the country's improved macroeconomic stability, stronger balance of payments, and easing contingent risks from banks.

3.10.6 Nonperforming loans



NPL = nonperforming loan, SBV = State Bank of Viet Nam.
Sources: State Bank of Viet Nam; Moody's Rating Agency.

Prospects

Growth in the first half of 2014 fell short of expectations, and there is little room for fiscal and monetary stimulus in the year ahead. This Update shaves the growth forecasts from ADO 2014 to 5.5% in 2014 and to 5.7% for 2015 (Figure 3.10.7).

Viet Nam offered tax breaks and loans to help bring factories damaged in the May protests back to full production. Still, industry and tourism have been bruised. A decline in the manufacturing purchasing managers' index from May to August this year indicated that growth in factory production lost some momentum in that period (Figure 3.10.8).

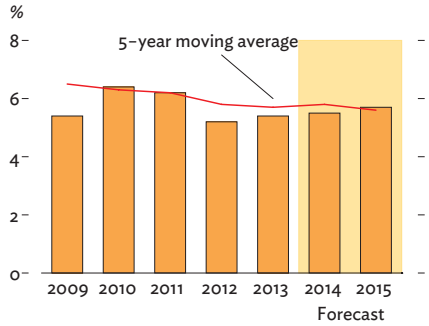
The government has directed financial institutions to step up efforts to meet the target of 12.0%–14.0% for credit growth, which is expected to spur lending during the second half, though the target may still be missed. Impaired balance sheets, concerns over NPLs, and the lack of systems to assess credit quality still weigh on the banks. As for policy interest rates, there is limited scope for reductions after cuts totaling 850 basis points over the past 3 years.

Additional government spending is constrained by the fiscal deficit, which is expected to exceed 5.0% of GDP this year as measured by the government or an estimated 6.5% under international standards, and by sluggish revenue growth caused in part by reductions in corporate tax rates and import tariffs.

Expectations for slightly higher economic growth in 2015 are based on three assumptions: improved performance in the major industrial economies including the US, which will benefit Viet Nam's exports and capital inflows; a modest recovery in the property market supported by government measures to stimulate lending for housing and declines in interest rates; and higher private consumption lifted by more benign inflation and, next year, higher minimum salaries for government workers.

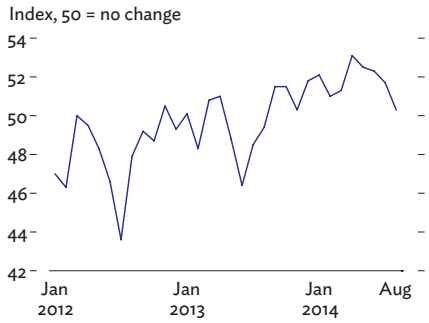
In light of the inflation outcome in the first 8 months of 2014, and with economic growth seen below its potential, forecasts for year-

3.10.7 GDP growth



Source: Asian Development Outlook database.

3.10.8 Purchasing managers' index



Source: HSBC.

average inflation are lowered to 4.5% for this year and 5.5% for next year (Figure 3.10.9). Inflation has declined steadily from 18.6% in 2011. It is expected to pick up moderately next year in part due to increases in government administered prices for fuel, electricity, and healthcare.

Substantial current account surpluses are still projected for both years, though smaller than earlier forecast. While exports will continue to expand, imports are expected to rise at an even faster pace through the rest of the forecast period. The current account has been in surplus since 2011.

Gross government debt, including government-guaranteed debt, is projected to reach 57% of GDP this year, up from 50% since 2011 (Figure 3.10.10). Public external debt, about half of total public debt, has declined slightly over the past 3 years as a percentage of GDP. The external debt is mostly lent by development partners on concessional terms, which keeps debt-servicing costs and rollover risks contained.

Public domestic debt, on the other hand, has increased rapidly, and projected fiscal deficits could push it higher. The government's debt-service payments are estimated to consume 15% of its revenue. Moreover, the size of the government's contingent liabilities from state-owned banks and enterprises is unclear because of their opaque accounting practices.

To address these issues the government has adopted a medium-term debt management program and tighter controls on new debt guarantees. This program requires raising government revenue to reduce debt accumulation while safeguard social and infrastructure spending. Higher revenue will be achieved by broadening the tax base, tightening tax administration, and requiring SOEs that have been partly privatized to pay dividends to the government. Civil service reform could make the government more efficient and reduce its running costs. Improving financial performance at state-owned banks and SOEs would also make a major contribution to curbing public debt.

Although progress in reducing NPLs remains slow, the SBV and the banks are moving ahead on several fronts. Among nine weak banks identified for a first phase of restructuring, eight have been restructured or merged, and the other one will likely be sold to a foreign bank. Another six or seven banks look likely to change hands through merger or acquisition. The SBV has intensified inspections to categorize bad debts at the banks and to estimate their provisioning for NPLs. Commercial banks have raised their provisions and are paying more attention to credit quality.

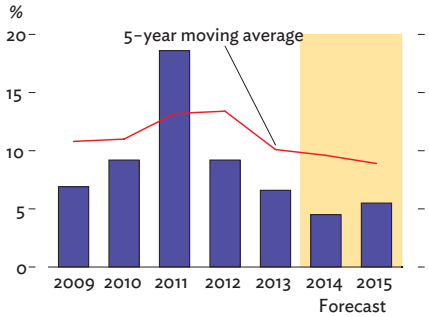
For its part, the government has broadened the role of the SBV's Banking Supervision Agency and encouraged the agency to gradually adopt risk-based supervision of banks in line with best international practice. At least 10 commercial banks are expected to adopt Basel II principles on capital and risk management next year but will need to build their capacity to handle the new standards.

3.10.1 Selected economic indicators (%)

	2014		2015	
	ADO 2014	*Update*	*ADO 2014*	*Update*
GDP growth	5.6	5.5	5.8	5.7
Inflation	6.2	4.5	6.6	5.5
Current acct. bal. (share of GDP)	4.1	3.5	3.0	2.5

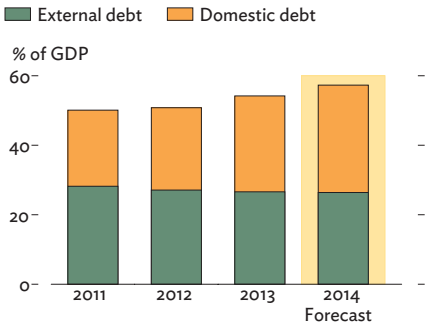
Source: ADB estimates.

3.10.9 Inflation



Source: Asian Development Outlook database.

3.10.10 Public debt



Sources: Ministry of Finance; ADB estimates.

Statistical appendix

Statistical notes and tables

The statistical appendix presents selected economic indicators for the 45 developing member economies of the Asian Development Bank in three tables: gross domestic product (GDP) growth, inflation, and current account balance as a percentage of GDP. The economies are grouped into five subregions: Central Asia, East Asia, South Asia, Southeast Asia, and the Pacific. The tables contain historical data for 2011–2013 and forecasts for 2014 and 2015.

The data are standardized to the degree possible to allow comparability over time and across economies, but differences in statistical methodology, definitions, coverage, and practices make full comparability impossible. The national income accounts section is based on the United Nations System of National Accounts, while the data on balance of payments are based on International Monetary Fund accounting standards. Historical data are obtained from official sources, statistical publications, and databases, as well as from documents of the Asian Development Bank, International Monetary Fund, and World Bank. Projections for 2014 and 2015 are generally Asian Development Bank estimates based on available quarterly or monthly data, though some projections are from governments.

Most countries report by calendar year, but South Asian countries other than the Maldives and Sri Lanka report all variables by fiscal year. Regional and subregional averages are provided in the three tables.

The averages are computed using weights derived from gross national income (GNI) in current United States dollars following the World Bank Atlas method. The GNI data for 2011–2012 are obtained from the World Bank's World Development Indicators Online. Weights for 2012 are carried over to 2015. The GNI data for the Cook Islands and Tuvalu are estimated using the Atlas conversion factor. As Myanmar and Nauru have no GNI data, they are excluded from the computation of all subregional averages and totals.

The following paragraphs discuss the three tables in greater detail.

Table A1: Growth rate of GDP (% per year). The table shows annual GDP growth rates valued at constant market price, constant factor cost, or basic price. GDP at market price is the aggregation of value added by all resident producers at producers' prices including taxes less subsidies on imports plus all nondeductible value-added or similar taxes. Constant factor cost measures differ from market price measures in that they exclude taxes on production and include subsidies. Basic price

valuation is the factor cost plus some taxes on production, such as those on property and payroll, and less some subsidies, such as those on labor but not on products. Most countries use constant market price valuation. Fiji, India, Pakistan, and Sri Lanka use constant factor cost, and the Maldives and Nepal use basic price. The series for Timor-Leste includes only GDP generated outside the offshore petroleum industry.

Table A2: Inflation (% per year). Data on inflation rates are period averages based on consumer price indexes, except for India, which reports the wholesale price index. The consumer price indexes of the following countries are for a given city or group of consumers only: Afghanistan for Kabul, Cambodia for Phnom Penh, the Maldives for Malé, the Marshall Islands for Majuro, Solomon Islands for Honiara, Timor-Leste for the Dili region, and Nepal for urban consumers.

Table A3: Current account balance (% of GDP). The current account balance is the sum of the balance of trade in merchandise, net trade in services, factor or primary income, and transfers or secondary income. The values reported are divided by GDP at current prices in United States dollars. For Cambodia, the Lao People's Democratic Republic, and Viet Nam, official transfers are excluded from the current account balance.

Table A1 GDP growth (% per year)

Subregion/Economy	2011	2012	2013	2014		2015	
				ADO 2014	Update	ADO 2014	Update
Central Asia	6.8	5.6	6.5	6.5	5.6	6.5	5.9
Armenia	4.7	7.2	3.5	4.6	3.8	5.0	4.6
Azerbaijan	0.1	2.2	5.8	5.0	5.0	4.8	4.8
Georgia	7.2	6.2	3.2	5.5	5.5	6.0	5.5
Kazakhstan	7.5	5.0	6.0	6.0	4.5	6.4	5.2
Kyrgyz Republic	6.0	−0.1	10.5	6.5	4.0	5.5	4.5
Tajikistan	7.4	7.5	7.4	6.0	6.0	5.8	5.8
Turkmenistan	14.7	11.1	10.2	11.0	10.8	10.0	11.5
Uzbekistan	8.3	8.2	8.0	8.0	7.6	7.8	7.1
East Asia	8.2	6.6	6.7	6.7	6.7	6.7	6.7
China, People's Rep. of	9.3	7.7	7.7	7.5	7.5	7.4	7.4
Hong Kong, China	4.8	1.5	2.9	3.5	2.5	3.6	3.2
Korea, Rep. of	3.7	2.3	3.0	3.7	3.7	3.8	3.8
Mongolia	17.5	12.4	11.7	9.5	6.0	10.0	7.5
Taipei,China	4.2	1.5	2.1	2.7	3.4	3.2	3.3
South Asia	6.4	4.6	4.7	5.3	5.4	5.8	6.1
Afghanistan	7.2	11.9	3.3	3.5	2.5	4.5	3.8
Bangladesh	6.7	6.2	6.0	5.6	6.1	6.2	6.4
Bhutan	10.1	6.5	4.2	6.0	6.0	6.8	6.8
India	6.7	4.5	4.7	5.5	5.5	6.0	6.3
Maldives	6.5	1.3	3.7	4.5	4.5	5.4	5.4
Nepal	3.8	4.5	3.5	4.5	5.2	4.7	4.6
Pakistan	3.6	3.8	3.7	3.4	4.1	3.9	4.2
Sri Lanka	8.3	6.3	7.3	7.5	7.5	7.5	7.5
Southeast Asia	4.8	5.7	5.0	5.0	4.6	5.4	5.3
Brunei Darussalam	3.4	0.9	−1.8	1.1	1.1	1.2	1.2
Cambodia	7.1	7.3	7.2	7.0	7.0	7.3	7.3
Indonesia	6.5	6.3	5.8	5.7	5.3	6.0	5.8
Lao People's Dem. Rep.	7.8	7.9	7.9	7.3	7.3	7.5	7.4
Malaysia	5.2	5.6	4.7	5.1	5.7	5.0	5.3
Myanmar	5.9	7.3	7.5	7.8	7.8	7.8	7.8
Philippines	3.7	6.8	7.2	6.4	6.2	6.7	6.4
Singapore	6.1	2.5	3.9	3.9	3.5	4.1	3.9
Thailand	0.1	6.5	2.9	2.9	1.6	4.5	4.5
Viet Nam	5.9	5.2	5.4	5.6	5.5	5.8	5.7
The Pacific	9.4	6.1	5.0	5.4	5.3	13.3	13.2
Cook Islands	1.0	4.4	3.2	2.2	2.2	2.5	2.5
Fiji	2.7	1.8	4.6	2.8	3.3	3.0	3.0
Kiribati	2.7	2.8	2.9	3.0	3.0	2.0	2.7
Marshall Islands	0.6	3.2	3.5	3.0	3.0	1.5	1.5
Micronesia, Fed. States of	1.8	0.1	−4.0	0.5	0.5	0.5	0.5
Nauru	3.8	4.9	4.5	10.0	10.0	8.0	8.0
Palau	5.2	5.5	−0.2	3.0	2.0	2.0	2.0
Papua New Guinea	11.3	7.7	5.1	6.0	6.0	21.0	21.0
Samoa	1.4	2.7	−0.5	2.0	2.0	2.5	2.5
Solomon Islands	10.6	4.8	2.9	3.0	−1.0	3.0	3.0
Timor-Leste	14.4	7.8	8.0	8.5	8.0	8.5	8.0
Tonga	2.9	0.8	0.3	1.5	1.5	2.0	2.5
Tuvalu	8.5	0.2	1.3	2.0	2.0	2.0	2.0
Vanuatu	1.2	1.8	3.2	3.5	3.5	4.0	4.0
Average	7.4	6.1	6.1	6.2	6.2	6.4	6.4

Table A2 Inflation (% per year)

Subregion/Economy	2011	2012	2013	2014		2015	
				ADO 2014	*Update*	*ADO 2014*	*Update*
Central Asia	8.9	5.1	6.0	9.0	7.6	7.4	7.0
Armenia	7.7	2.6	5.8	4.5	4.5	4.0	4.0
Azerbaijan	7.9	1.1	2.4	4.0	4.0	3.5	3.5
Georgia	8.5	–0.9	–0.5	4.0	4.0	5.0	5.0
Kazakhstan	8.3	5.1	5.8	11.5	8.7	8.8	7.7
Kyrgyz Republic	16.6	2.8	6.6	7.0	9.8	6.0	9.8
Tajikistan	12.4	5.8	5.0	5.5	6.5	6.0	6.0
Turkmenistan	5.3	5.3	6.6	6.7	5.8	6.2	6.0
Uzbekistan	12.8	12.1	12.1	11.0	11.0	10.0	10.0
East Asia	5.0	2.6	2.4	2.5	2.4	2.9	2.9
China, People's Rep. of	5.4	2.6	2.6	2.6	2.4	3.0	3.0
Hong Kong, China	5.3	4.1	4.3	3.8	3.8	3.7	3.7
Korea, Rep. of	4.0	2.2	1.3	2.1	2.0	2.5	2.4
Mongolia	9.2	14.3	10.4	11.0	13.5	8.0	9.5
Taipei,China	1.4	1.9	0.8	1.1	1.4	1.3	1.5
South Asia	9.5	7.8	6.2	6.4	6.1	6.2	5.9
Afghanistan	11.8	6.2	7.4	6.8	6.2	7.1	6.6
Bangladesh	10.9	8.7	6.8	7.5	7.4	6.5	6.5
Bhutan	8.6	10.2	8.8	10.2	9.6	8.5	8.5
India	8.9	7.4	6.0	6.0	5.7	5.8	5.5
Maldives	11.3	10.9	4.0	5.0	4.0	4.8	4.8
Nepal	9.6	8.3	9.9	10.0	9.1	9.5	9.5
Pakistan	13.7	11.0	7.4	9.0	8.6	9.2	8.2
Sri Lanka	6.7	7.9	6.9	5.0	5.0	6.0	6.0
Southeast Asia	5.5	3.8	4.2	4.3	4.1	4.0	4.7
Brunei Darussalam	0.1	0.1	0.4	0.5	0.1	0.6	0.2
Cambodia	5.5	2.9	2.9	3.5	4.4	3.5	4.0
Indonesia	5.3	4.0	6.4	5.7	5.8	4.8	6.9
Lao People's Dem. Rep.	7.6	4.3	6.4	5.5	5.0	6.0	5.5
Malaysia	3.2	1.7	2.1	3.2	3.3	3.5	3.6
Myanmar	2.8	2.9	5.8	6.6	6.6	6.9	6.9
Philippines	4.6	3.2	3.0	4.3	4.4	4.0	4.1
Singapore	5.2	4.6	2.4	3.0	2.0	2.9	2.3
Thailand	3.8	3.0	2.2	2.4	2.2	2.6	2.6
Viet Nam	18.7	9.1	6.6	6.2	4.5	6.6	5.5
The Pacific	8.5	4.2	4.5	5.9	4.5	5.1	4.5
Cook Islands	0.6	2.8	2.6	2.5	1.6	2.5	2.5
Fiji	7.3	3.4	2.9	3.0	3.0	3.5	3.5
Kiribati	1.5	–3.0	–1.5	2.5	2.5	2.5	2.5
Marshall Islands	5.4	4.3	1.9	1.5	1.5	1.5	1.5
Micronesia, Fed. States of	4.6	5.8	2.2	2.0	2.0	1.5	1.5
Nauru	–3.5	–0.5	1.4	5.0	5.0	7.0	7.0
Palau	2.6	5.4	2.8	2.5	3.5	2.0	2.0
Papua New Guinea	8.4	2.2	4.0	6.5	6.0	5.0	5.0
Samoa	3.1	6.2	–0.2	2.0	–1.2	2.0	2.0
Solomon Islands	7.4	5.9	5.4	5.5	6.0	5.0	5.0
Timor-Leste	13.2	10.9	9.5	9.5	3.0	9.0	5.4
Tonga	6.0	3.3	0.7	2.0	2.3	2.0	2.0
Tuvalu	0.5	1.4	2.0	2.5	2.5	2.0	2.0
Vanuatu	0.9	1.4	1.4	2.5	2.5	3.0	3.0
Average	5.9	3.7	3.4	3.6	3.4	3.7	3.7

Table A3 Current account balance (% per year)

Subregion/Economy	2011	2012	2013	2014		2015	
				ADO 2014	Update	ADO 2014	Update
Central Asia	6.9	3.2	2.4	2.9	2.7	3.5	3.1
Armenia	–11.1	–11.1	–8.0	–8.7	–8.7	–8.0	–8.0
Azerbaijan	25.7	21.4	16.7	16.0	16.0	15.0	15.0
Georgia	–12.7	–11.4	–5.9	–8.0	–8.5	–7.5	–7.5
Kazakhstan	5.4	0.5	0.1	0.6	0.6	2.3	1.9
Kyrgyz Republic	–6.1	–15.1	–14.1	–15.7	–14.5	–15.1	–15.1
Tajikistan	–4.8	–1.5	–1.4	–2.1	–2.1	–2.3	–2.3
Turkmenistan	2.0	0.0	–3.3	2.0	0.2	2.0	1.5
Uzbekistan	5.7	2.7	3.7	4.7	3.9	3.6	2.8
East Asia	2.3	2.9	3.0	2.8	3.0	2.7	2.9
China, People's Rep. of	1.9	2.3	2.1	2.0	2.2	1.9	2.1
Hong Kong, China	5.6	1.6	2.1	3.5	3.5	3.5	3.5
Korea, Rep. of	1.6	4.2	6.1	4.1	4.1	4.0	4.0
Mongolia	–31.5	–32.6	–27.4	–20.0	–12.5	–15.0	–15.0
Taipei,China	9.0	10.7	11.7	12.3	13.5	12.5	13.2
South Asia	–3.7	–4.2	–1.4	–2.2	–2.0	–2.6	–2.1
Afghanistan	3.1	3.8	2.9	1.7	1.7	1.2	0.9
Bangladesh	–1.5	–0.4	1.9	–0.5	1.0	–1.5	1.5
Bhutan	–29.8	–21.3	–25.0	–28.6	–24.8	–26.4	–29.9
India	–4.2	–4.7	–1.7	–2.5	–2.3	–2.8	–2.5
Maldives	–19.8	–14.8	–10.1	–21.8	–10.5	–22.1	–10.8
Nepal	–0.9	4.9	3.4	3.6	4.7	3.7	4.5
Pakistan	0.1	–2.1	–1.1	–1.4	–1.2	–1.3	–1.3
Sri Lanka	–7.8	–6.6	–2.0	–2.6	–2.6	–3.5	–3.5
Southeast Asia	5.3	2.5	2.1	2.5	2.7	2.9	2.5
Brunei Darussalam	52.4	33.5	31.0	44.0	33.3	46.0	30.7
Cambodia	–7.0	–10.0	–10.8	–11.3	–11.3	–10.9	–10.9
Indonesia	0.2	–2.8	–3.4	–2.9	–3.2	–2.0	–2.5
Lao People's Dem. Rep.	–15.8	–28.5	–29.5	–27.4	–27.4	–26.0	–26.0
Malaysia	11.6	6.1	3.8	4.1	4.4	4.6	4.6
Myanmar	–2.1	–4.4	–4.8	–5.1	–5.1	–4.8	–4.8
Philippines	2.5	2.8	3.5	3.4	3.2	3.2	2.8
Singapore	22.3	17.6	18.1	19.1	19.0	18.6	18.4
Thailand	1.2	–0.4	–0.7	–0.1	2.5	0.5	0.5
Viet Nam	0.2	5.8	6.5	4.1	3.5	3.0	2.5
The Pacific	42.3	30.8	13.5	2.3	2.8	13.4	13.8
Cook Islands	–	–	–	–	–	–	–
Fiji	–5.7	–1.5	–18.3	–6.1	–6.0	–7.1	–7.0
Kiribati	–32.3	–26.3	–27.3	–36.2	–53.2	–31.3	–53.0
Marshall Islands	–9.0	–8.1	–9.0	–20.6	–20.6	–10.9	–10.9
Micronesia, Fed. States of	–17.4	–12.0	–10.4	–9.6	–10.3	–9.3	–9.9
Nauru	–	–	–	–	–	–	–
Palau	–4.1	–5.0	–6.6	–9.3	–5.5	–7.4	–5.3
Papua New Guinea	–1.3	–14.9	–13.7	–7.0	–7.0	13.0	13.0
Samoa	–4.9	–11.2	–13.4	–16.2	–16.2	–15.6	–15.6
Solomon Islands	–7.4	–0.2	–3.6	–6.0	–15.0	–10.0	–15.0
Timor-Leste	212.1	221.5	137.0	47.0	51.5	50.3	55.1
Tonga	–9.3	–6.9	–8.0	–3.7	–4.6	–3.2	–3.0
Tuvalu	–36.5	24.9	26.4	–9.6	27.3	–10.5	–37.4
Vanuatu	–8.4	–6.4	–6.4	–6.0	–6.0	–7.0	–7.0
Average	1.9	1.7	2.1	1.9	2.1	1.9	2.0

Asian Development Outlook 2014 Update

Asia in Global Value Chains

Developing Asia is maintaining steady growth momentum. Despite recovery in the major industrialized economies falling short of expectations, the region is on track to meet its favorable forecasts as policy stabilizes investment in the People's Republic of China and signs emerge of a long-awaited turnaround in India.

Inflation is held in check across most regional economies by benign international commodity prices, subdued domestic demand, and prudent policy. Even if global liquidity tightens earlier in 2015 than anticipated, its effect on developing Asia should be modest.

Asian Development Outlook 2014 Update reviews global value chains and how these cross-border production networks have enhanced income and employment in East and Southeast Asia. It considers what policy makers can do to encourage their improvement and spread to other parts of Asia and the Pacific.

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to approximately two-thirds of the world's poor: 1.6 billion people who live on less than $2 a day, with 733 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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ASIAN DEVELOPMENT BANK
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org