

Sustaining Resilience

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List of Abbreviations

AEC	ASEAN Economic Community
ALMP	active labor market policies
ANAPEC	National Agency for the Promotion of Employment and Skills (Morocco)
ASEAN	Association of Southeast Asian Nations
bbl	barrel
BPS	Statistics Indonesia
CAIT	Climate Analysis Indicators Tool
CCAP	Climate Change Action Plan
CO ₂	carbon dioxide
CPI	Consumer Price Index
EDMEs	Emerging Market and Developing Economies
eop	end of period
EPS	Employment Permit System (Republic of Korea)
ESMAP	Energy Sector Management Assistance Program
EU	European Union
FDI	foreign direct investment
FX	foreign exchange
GDP	gross domestic product
GEP	growth elasticity of poverty
GFC	global financial crisis
GST	general sales tax
Gt	billion tons
GTAP	Global Trade Analysis Project
GW	gigawatts
IBRD	International Bank for Reconstruction and Development
ICORs	incremental capital-output ratios
ICRG	International Country Risk Guide
ICT	information and communications technology
IEA	International Energy Agency
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IPM	integrated pest management
LCU	local currency unit

LNG	liquefied natural gas
META	Model for Electricity Technology Assessment
MJ/kWh	megajoules per kilowatt hour
MOU	memorandums of understanding
MRA	mutual recognition agreements
tCO ₂ -e	metric tons of carbon dioxide equivalent
NBS	National Bureau of Statistics (China)
NCDs	noncommunicable diseases
OPEC	Organization of the Petroleum Exporting Countries
PEOS	Pre-Employment Orientation Seminar (the Philippines)
PMI	Purchasing Managers' Index
PNA	Parties to the Nauru Agreement
PPP	purchasing power parity
RAICES	Research and Scientists Abroad (Argentina)
REI	real estate investment
Q3	third quarter
Q4	fourth quarter
q/q	quarter-on-quarter
R&D	research and development
REI	real estate investment
REs	real estate loans
RERF	Kiribati's sovereign wealth fund
SAAR	Seasonally Adjusted Annual Rate
SEZ	Special Economic Zone
SOEs	state-owned enterprises
SPGs	South Pacific Games
tCO ₂ -e	tonnes of carbon dioxide equivalents
TCP	Tropical Cyclone Pam
TFP	total factor productivity
TTF	Tuvalu Trust Fund
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value-added tax
WBG	World Bank Group
WTO	World Trade Organization
yoy	year-over-year

List of Abbreviations continued

Regions, World Bank Classification and Country Groups

ASEAN+3	ASEAN plus China, Japan, and the Republic of Korea
ASEAN-4	ASEAN plus Indonesia, Malaysia, the Philippines, and Thailand
ASEAN-5	ASEAN plus Indonesia, Malaysia, the Philippines, Thailand, and Vietnam
EAP	East Asia and Pacific

ECA	Europe and Central Asia
LAC	Latin America and the Caribbean
MENA	Middle East and North Africa
MNA	Middle East and North Africa
PICs	Pacific Island Countries
SAR	South Asia
SSA	Sub-Saharan Africa
SST	Sub-Saharan Africa

Country Abbreviations

CHN	China
FJI	Fiji
FSM	Federation States of Micronesia
IDN	Indonesia
KHM	Cambodia
KIR	Kiribati
KOR	Korea, Rep.
LAO	Laos People's Democratic Republic
MHL	Marshall Islands
MNG	Mongolia
MMR	Myanmar

MYS	Malaysia
PHL	Philippines
PNG	Papua New Guinea
RMI	Republic of Marshall Islands
SGP	Singapore
SLB	Solomon Islands
THA	Thailand
TON	Tonga
TUV	Tuvalu
USA	United States
VNM	Vietnam
VUT	Vanuatu

Currency Units

\$A	Kiribati
B	Thai baht
CR	Cambodian riel
D	Vietnamese dong
F\$	Fiji dollar
K	Myanmar kyat
K	Papua New Guinea kina
Kip	Lao PDR

\$NZ	New Zealand
₱	Philippine peso
RM	Malaysian ringgit
RMB	Chinese renminbi
Rp	Indonesian rupiah
SIS	Solomon Islands dollar
Tog	Mongolia
US\$	Timor-Leste
US\$	United States

Preface and Acknowledgments

The *East Asia and Pacific Economic Update* is a joint product of the World Bank Office of the Chief Economist, East Asia and Pacific Region, and the Macroeconomic and Fiscal Management Global Practice, prepared in collaboration with the Poverty and Equity Global Practice, the Development Prospects Group, and the Finance and Markets Global Practice. The report was supervised by Nikola Spatafora, under the guidance of Sudhir Shetty (Chief Economist, East Asia and Pacific Region).

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Preface continued

Throughout the report, geographic groupings are defined as follows:

East Asia and Pacific comprises Developing East Asia and Pacific, and the Newly Industrialized Economies.

Developing East Asia and Pacific comprises Cambodia, China, Indonesia, Lao People's Democratic Republic (PDR), Malaysia, Mongolia, Myanmar, Papua New Guinea, the Philippines, Thailand, Timor-Leste, Vietnam, and the Pacific Island Countries.

The **Pacific Island Countries** comprise Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Palau, Samoa, the Solomon Islands, Tonga, Tuvalu, and Vanuatu.

The **Newly Industrialized Economies** comprise Hong Kong SAR, China; the Republic of Korea; Singapore; and Taiwan, China.

The **ASEAN** member countries comprise Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

The **ASEAN-4** comprise Indonesia, Malaysia, the Philippines, and Thailand.

The **ASEAN-5** comprise Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

This report is based on data available through March 24, 2017, inclusive.

Executive Summary

The global economy has shown signs of dynamism in the six months since the previous *East Asia and Pacific Economic Update*. Sustained expansion in the United States, the Euro Area, and Japan has been accompanied by better-than-expected growth in the United Kingdom and in some emerging market commodity exporters. This recovery in activity has led to a pickup in global trade and a gradual increase in commodity prices. While policy uncertainty following the U.S. elections triggered a bout of financial volatility, market conditions stabilized quickly. Monetary policy has started tightening in the United States, but remains loose in other advanced economies.

Growth in developing East Asia and Pacific (EAP) continues to be resilient and in line with previous expectations. Already robust domestic demand has been supported by some pickup in external demand and the gradual recovery in commodity prices. Fiscal deficits in the major regional economies widened in 2016, prompting some adjustment toward the end of the year in Indonesia and Malaysia. Monetary policies remained accommodative, and credit continued to grow rapidly in most major economies. Inflation is edging up and producer prices are rising quickly as commodity prices increase. Capital outflows intensified toward end-2016 leading to depreciation pressures, but financial markets have since recovered.

The growth outlook for 2017–19 remains broadly positive across the region. China is expected to continue its gradual transition to lower, more sustainable growth. In the rest of the region, growth is projected to pick up moderately. Continued buoyancy in domestic demand, including public and increasingly private investment, will be supported by gradually strengthening external demand. Global growth and commodity prices are projected to continue recovering slowly, while global financial conditions tighten gradually. Inflationary pressures should remain contained.

China's growth moderation and rebalancing are expected to continue. Growth is projected to continue easing steadily, to 6.5 percent in 2017 and 6.3 percent in 2018–19. The real estate sector is expected to cool in response to policy tightening, while exports rise moderately. Productivity-oriented reforms, such as reducing excess capacity and leverage in the corporate sector, including state-owned enterprises, will gradually advance the rebalancing of China's economic structure.

In the other large developing economies in the region, growth is projected to pick up slightly. The Philippines will benefit from increases in public infrastructure spending, a recent uptick in private investment, continued credit expansion, and growth in remittances. In Indonesia, growth will rise as commodity prices firm, and credit growth continues to respond to loose monetary policy. In Malaysia, the moderate recovery reflects income-support measures, increased infrastructure spending, and rising exports. In Vietnam, activity will increase as the impact of the 2016 drought dissipates, and in line with favorable market sentiments and continued strong FDI flows. Thailand is expected to benefit from improved confidence following the royal transition, large public investment projects, and robust tourism, although continued weak productivity growth will keep growth modest.

The smaller regional economies are generally expected to continue to benefit from rapid growth in their neighbors and higher commodity prices. Activity will be boosted by fiscal expansion, agricultural reforms, and continued buoyancy of tourism in Cambodia; increases in the generation and exports of power in Lao PDR; and

rising infrastructure spending and foreign investments in Myanmar. In Mongolia, growth will stagnate in 2017, partly reflecting efforts to reduce public debt to sustainable levels, but will recover thereafter with macroeconomic stabilization, structural reforms, and the likely expansion of mining investments. In Papua New Guinea, growth will gradually recover as several mining and petroleum prospects come on stream. In Timor-Leste, the elections later this year will slow some public investment projects. Most Pacific Island Countries will benefit from recent trends in fisheries and tourism, and expanding opportunities for migration and connectivity.

Poverty has continued to decline in most countries and is projected to fall further, consistent with sustained growth and rising labor incomes. The number of extreme poor has fallen to 2 percent of the region's population, although this proportion rises to about 10 percent if the threshold is one of moderate poverty. And, across much of the region, the bottom 40 percent of the population has enjoyed relatively fast income growth. Nevertheless, challenges remain. In countries such as Lao PDR and Myanmar, a significant percentage of the population remains poor. In Mongolia and Papua New Guinea, recent economic setbacks may have reversed gains. And in many countries the public perception is that inequality is high and rising, with income and wealth increasingly concentrated at the very top of the distribution, and everyone else facing an uneven playing field.

Nevertheless, global and regional vulnerabilities mean that the positive prospects for the region are subject to large risks. First, financial sectors in the large regional economies could be tested by external and domestic shocks. External financial conditions may tighten faster than anticipated, leading to significant capital outflows and renewed financial volatility. As a result, the servicing and rollover of debt, particularly short-term, foreign-currency-denominated debt, would become more challenging. Nevertheless, generally robust reserves provide a cushion against short-term volatility. Domestically, rapid credit growth is raising financial vulnerabilities among households and corporates, particularly in China, Malaysia, and Thailand. That said, banks in the region generally remain relatively well capitalized. Second, the region, being extremely open, is particularly vulnerable to a slowdown in international trade, stemming, for instance, from mounting protectionist pressures. The United States has withdrawn from the proposed Trans-Pacific Partnership, which could cause Vietnam and to a lesser extent Malaysia to miss out on gains from expanded trade and investment. Antiglobalization sentiment has also been picking up in some other advanced economies. Finally, fiscal deficits are expected to remain elevated in several countries, in some cases posing risks to fiscal sustainability.

Elevated global policy uncertainty places a premium on macroeconomic prudence. The risks that the region continues to face, related to the availability and cost of external financing and to the prospects for global trade growth and export demand, strengthen the case for a continued focus on addressing key macroeconomic vulnerabilities. Policy makers should retain their emphasis on maintaining sustainable medium-term fiscal frameworks, standing ready to adjust accommodative monetary policies, and addressing corporate and financial vulnerabilities.

Across the region's large economies, mobilizing additional revenues will create space for measures to support growth and foster inclusion, while ensuring that risks to fiscal sustainability remain low. Given broadly robust domestic demand and the prospects for a gradual increase in external demand, there is little rationale for additional fiscal stimulus at this time. In contrast, efforts to broaden the tax base and improve tax administration can yield significant gains. In China, increasing the clarity of government and state-owned enterprise (SOE) finances, as well as strengthening fiscal discipline and hardening budget constraints for subnational governments and public-benefit SOEs, will help moderate growth in public investment and place public finances

on a more sustainable path. A broadening of the tax base, especially at the local level to lower the dependence of revenues on land sales, and improvements in VAT administration can make room to reform labor taxation and streamline fees levied on businesses. In Malaysia, there is significant scope to broaden the base for personal income tax, and to reduce exemptions from the general sales tax. In the Philippines, continued rapid growth will hinge on how well the government manages the large increase in public expenditure. In Vietnam, there is an urgent need to strengthen the credibility of the medium-term fiscal framework.

Some smaller commodity-exporting economies need to focus on lowering threats to fiscal solvency. In Mongolia, fiscal consolidation, including more progressive taxation and greater rationalization and better targeting of expenditures, remains the main priority as part of stabilization. In Lao PDR, elevated public debt is generating vulnerability to shocks. Efforts are required to boost declining revenues and contain expenditure. In Myanmar and Papua New Guinea, limited sources of financing again call for fiscal prudence. In general, while many countries have announced fiscal consolidation plans, these have been lacking in detail. A focus on implementing a combination of revenue measures (involving increases in tax rates, adjustments to the generous, untargeted tax exemptions, a strengthening of property and natural resource taxation, and improved tax administration) and expenditures measures (targeting both the level and the efficiency of spending) would be appropriate.

Much of the region also may need to adjust accommodative monetary policies. While the increase in consumer prices has so far proved moderate, the more rapid pickup in producer prices and the projected recovery in commodity prices suggest that pressures will intensify, albeit from a low base. If external financing conditions tighten more rapidly than anticipated, this will place regional exchange rates under pressure, and again call for domestic monetary tightening. Some of the smaller economies are already facing significant pressures, and should consider a combination of greater exchange rate flexibility and monetary tightening.

In China, reforms of the corporate sector, including restructuring of SOEs, and measures to bring credit growth under control are critical to reducing vulnerabilities. Reforms to address excess industrial capacity, including closures of outdated production facilities and strict controls on new projects, have been initiated and remain key tasks for the authorities. They could be usefully complemented by measures to enhance SOEs' corporate governance and efficiency. The rapid expansion of credit increases the risk of disorderly deleveraging. A continued gradual tightening of financial discipline, and increased tolerance for insolvencies and bankruptcies, remain appropriate. Strengthening social transfers and active labor market policies will help mitigate any adverse impacts.

Elsewhere in the region, rapid credit growth and sizable external debt could catalyze the buildup and transmission of risks; improvements in supervision and prudential regulation will be required. Credit growth remains elevated across much of the region, including Cambodia, Lao PDR, the Philippines, Myanmar, and Vietnam. The policy response must involve efforts to strengthen regulation and supervision in line with international good practice. Arrangements for resolving nonperforming loans also need to be improved. As total debt stocks continue increasing, macroprudential regulation will prove increasingly important.

Sustaining medium-term growth and promoting inclusion will require efforts across a range of areas. Several economies have been experiencing trend slowdowns in both productivity and, in particular, investment growth. While the precise causes differ across countries, the underlying drivers of this trend include weaknesses in the institutional environment and investment climate, rising private debt burdens, weak growth prospects in

advanced economies, and negative terms-of-trade shocks. Sustaining robust growth over the medium term will involve addressing a range of bottlenecks so as to increase the impact of public investment on productivity, and help crowd in both domestic and foreign private investment. This issue of the *East Asia and Pacific Economic Update* discusses three broad reform areas: improving the quality of public expenditure, responding to potential global protectionist pressures through greater regional integration, and dealing with the rising threat of agricultural pollution.

Across the region, improving the quality of public spending can bring benefits. While all countries can gain, it is especially critical in economies with limited fiscal space, because it will help ensure that needed fiscal adjustments do not affect the most vulnerable or the delivery of key public services. In China, current revenue and expenditure mismatches at the local level result in wide disparities in welfare expenditure and social service provision. Lower infrastructure spending, combined with a reallocation of funds from distortionary agricultural support programs, can help free up resources. If combined with complementary sectoral reforms, these resources can help finance a consolidated, streamlined social protection system, more equitable educational spending, and improved access to health services for the poor. In Indonesia, more efficient spending on education and agriculture will allow for a reallocation toward underfunded programs with greater development impact, including infrastructure, health, and social assistance. In Malaysia, priorities include improving the targeting of social protection, maintaining support for infrastructure development, and increasing the quality of education to address skills constraints. In Myanmar, limited fiscal space must be refocused toward capital expenditure, including on critical energy and transport infrastructure, and toward currently underfunded social protection. Across the region, both urban and rural poor remain vulnerable to higher food prices. Boosting agricultural productivity and enhancing logistics (including through improvements in irrigation and transport infrastructure, more effective agricultural research, stronger land titling, and greater competition) will require both policy and expenditure reforms geared to ensuring better value for money. Together, these measures can help reduce food prices and boost the incomes of the poor.

Developing EAP could benefit significantly from further deepening regional integration, especially in services trade, which remains subject to significant restrictions. Several initiatives, including the Regional Comprehensive Economic Partnership, the evolving ASEAN Economic Community, and the various ASEAN+3 initiatives, provide an opportunity to advance regional integration. Such agreements will provide greater benefits to the region if they cover all trade, in both goods and services, do not discriminate against nonmembers, and feature functioning dispute resolution mechanisms. Lowering barriers to labor mobility within ASEAN could yield significant gains, including by reinforcing the impact of measures to liberalize trade and investment. Specific policy priorities for labor-sending and labor-receiving countries include strengthening regulation of international recruitment agencies, and providing comparable protection to migrant and local workers; introducing mutual recognition of qualifications, and increasing the portability of social protection benefits; and adjusting quantity restrictions on migration regularly, based on economic needs.

The agricultural sector's increasingly adverse environmental footprint needs attention across the region. Agricultural activities are affecting soil and water quality in many countries, with increasingly serious consequences for human health and biodiversity, and increasingly the productivity of agriculture itself. This particularly threatens the poor, whose livelihoods are especially dependent on natural resources, and who lack the means to cope with environmental shocks. So far, policy responses have typically occurred late, lacked the required scale, and ultimately failed to tackle distorted incentives. Indeed, agricultural pollution is often encouraged by current public

expenditure programs, including subsidies and regulations favoring the livestock industry, and direct or indirect fertilizer subsidies. Looking ahead, agricultural agencies must increasingly focus on health and environmental outcomes, including by giving greater weight to resource conservation, and redefining food security in terms of micronutrient content and diversity as well as caloric and protein availability. Similarly, health and environmental agencies must bring agriculture more fully into their fold, to help curb the rise of chronic disease.

In the Pacific Island Countries, maintaining fiscal sustainability needs to remain a focus along with policy reforms in selected sectors, which could prove transformational over the medium term. For fiscal sustainability, efforts to shore up revenues, contain unproductive spending while boosting critical expenditures on health and education, and build up buffers against shocks need to be sustained. There are also opportunities to accelerate growth and boost employment over the longer term. On tourism, promising options include tapping into the Chinese and retiree market, increasing the number of luxury resorts, and encouraging cruise ships to base in the Pacific. Increases in labor mobility, through the expansion of existing agreements and the negotiation of new agreements, complemented by investments in workers' human capital, could also generate substantial benefits. Higher mobile and internet penetration, complemented by a conducive business environment and the development of a skilled workforce could boost productivity. And income from fisheries could be significantly increased, without threatening the sustainability of the fisheries stock, by broadening participation in cooperative agreements to include East Asian countries with major fishing grounds, such as the Philippines and Indonesia, and ensuring compliance with robust catch limits.

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Part I. Recent Developments and Outlook

I.A. Recent Developments

Growth in developing East Asia and Pacific continues to be resilient and in line with previous expectations. Already robust domestic demand has been supported by some pickup in external demand, and a gradual recovery in commodity prices. In China, growth moderated slightly, but with some strengthening toward the end of 2016. The other large economies, including, in particular, the Philippines and Vietnam, generally solidified their performance in the second half of 2016 and the start of 2017. Among the smaller economies, performance has been more mixed: Cambodia continued to grow rapidly, while Mongolia and Papua New Guinea slowed sharply. Fiscal deficits in the major regional economies widened in 2016, prompting some adjustment toward the end of the year in Indonesia and Malaysia. Monetary policies remained accommodative, and credit continued to grow rapidly in most major economies. Inflation is edging up and producer prices are rising rapidly as commodity prices increase. Capital outflows intensified toward end-2016, leading to depreciation pressures, but external financial conditions have stabilized in 2017. Poverty rates have continued to decline, driven by rapid growth in labor incomes, and across much of the region the bottom 40 percent of the population has enjoyed relatively fast income growth. Despite this, in many countries the public perception is that inequality is high and rising.

Growth in developing East Asia and Pacific remains resilient, also supported with some recovery in the external environment in the second half of 2016 and early 2017

The global economy showed signs of dynamism in the second half of 2016, which have been sustained in early 2017 (Box I.A.1). Global growth accelerated to 2.5 percent and industrial production rose by 4.8 percent in Q4 2016; the global composite Purchasing Manager's Index (PMI) continues to rise. The sustained, albeit relatively slow, expansion in the United States, the Euro Area, and Japan has been accompanied by better-than-expected growth in the United Kingdom and in some emerging market commodity exporters, including Brazil and the Russian Federation. This recovery in activity has led to a pickup in global trade: while growth in global goods trade fell to a postcrisis low of 1.2 percent for 2016 as a whole, trade flows strengthened in the second half of the year, with the trend continuing into 2017. Commodity prices, after stabilizing in the first half of 2016, gradually recovered, benefiting commodity exporters; that said, commodity prices remain low by historical standards.

External financial conditions were more volatile, but have recently stabilized. The U.S. Federal Reserve, in widely anticipated moves, raised interest rates by 25 basis points in December 2016, and again in March 2017. In addition, U.S. long-term interest rates rose sharply following the U.S. elections, reflecting market expectations of strengthening activity. In response, markets in Emerging Markets and Developing Economies (EMDEs) reacted nervously, with capital flowing out, especially from China, and significant currency volatility. However, other advanced economies' central banks maintained loose monetary conditions. Financial flows have steadied since. Emerging market bond spreads have narrowed since November 2016, and currencies have recovered. Capital inflows have resumed, with EMDE bond issuance activity starting 2017 at a record pace.

Box I.A.1. Recent Global Developments

The global economy is recovering following its weakest postcrisis performance in 2016. Global growth is estimated to have fallen to 2.3 percent in 2016, amid stalling global goods trade, weak investment, and heightened policy uncertainties (Figure BI.A.1.1). However, growth appears to have accelerated in the second half of the year. Activity continued to firm in the first months of 2017, with the global composite Purchasing Managers' Index (PMI) reaching a multiyear high in early 2017, reflecting particularly strong performance in the United States, China, and Russia (Figure BI.A.1.2).

Figure BI.A.1.1. Global GDP growth

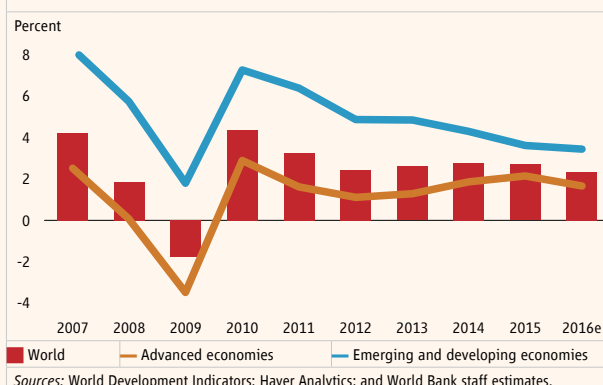


Figure BI.A.1.2. Global industrial production growth and manufacturing PMI

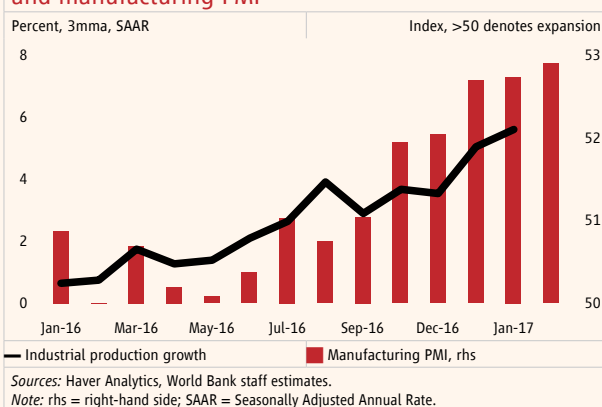


Figure BI.A.1.3. Regional GDP growth, 2007–16

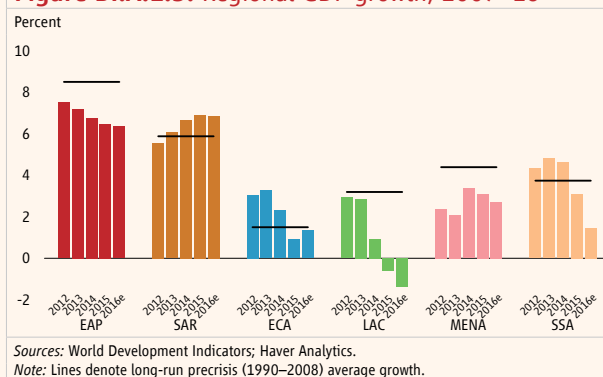
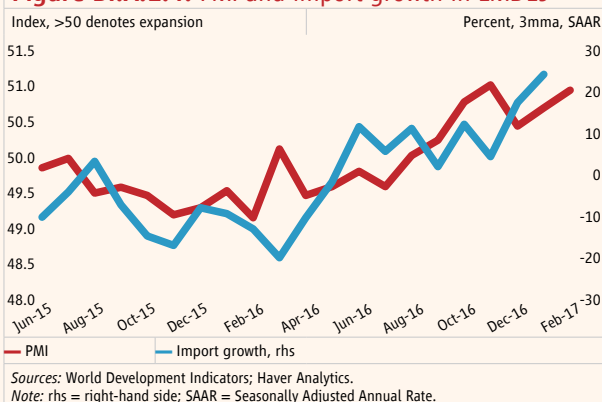


Figure BI.A.1.4. PMI and import growth in EMDEs



Growth in advanced economies is strengthening. In the United States, growth rose to near 2 percent in Q4 2016. Domestic demand was sustained amid increased confidence and stabilization of investment. In the Euro Area, growth strengthened at the start of 2017. Manufacturing activity and goods exports have been buoyed by strengthening internal and external demand. In Japan, recent data suggest growth stabilizing around 1 percent. Exports have started to pick up, labor markets are tight, but consumption remains subdued due to weak wage growth.

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Activity in Emerging Market and Developing Economies (EMDEs) is accelerating, following an estimated 3.4 percent growth in 2016. A modest increase in commodity prices and improved confidence underpin a recovery in commodity exporters following two consecutive years of anemic growth (Figure BI.A.1.3). Recent industrial production, PMI, and trade data all point to tentative signals of a solid rebound in economic activity in EMDEs (Figure BI.A.1.4). Median Consumer Price Index inflation is picking up as rising inflation in commodity importers offsets easing price pressures in commodity exporters. Adopting a longer perspective, developing countries in East Asia and Pacific and in South Asia continue to prove their resilience—their real GDP is now well above precrisis levels (Figure BI.A.1.5).

Figure BI.A.1.5. GDP across developing regions: cumulative change, 2007–16

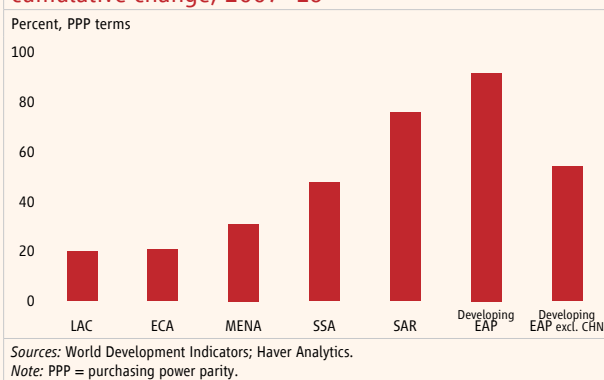
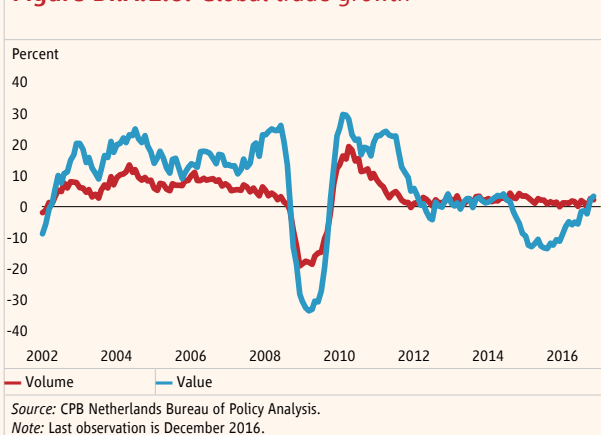


Figure BI.A.1.6. Global trade growth



Global trade is showing growing momentum. Global goods trade growth fell to a postcrisis low of 1.2 percent in 2016 as a whole (Figure BI.A.1.6). Services trade was more resilient throughout 2016, supported by the relative strength of global consumer spending. Trade growth began to strengthen in the second half of the year, however, expanding by 2.3 percent in Q3 (q/q SAAR) and an estimated 4.6 percent in Q4. The positive momentum appears to have continued in 2017, as export orders reached their highest levels in nearly six years in January. Protectionist pressures have increased, but are unlikely to have been the key factor behind recent weakness in global trade. The rate at which new trade-restrictive measures are imposed has not increased significantly above the post-2009 average, although there is some evidence that it is higher than in the period before the global financial crisis, and new trade-facilitating measures are being introduced at a slower rate (WTO 2016).

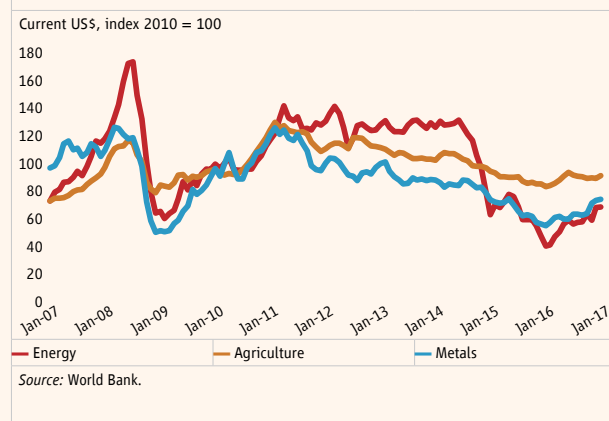
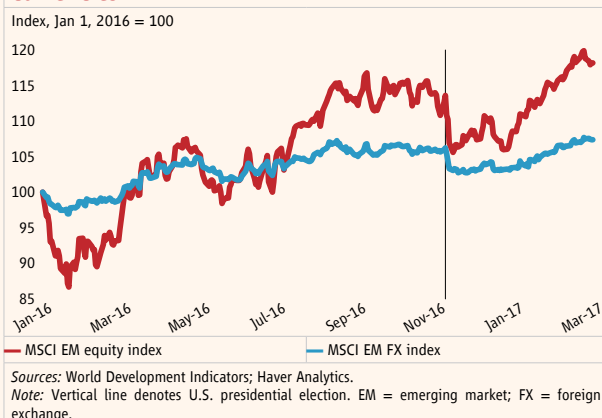
Commodity prices are continuing to recover slowly. Prices of most commodities continued to rise in January 2017 from their lows in early 2016 (Figure BI.A.1.7). The recent uptick in oil prices has been supported by the agreement between some OPEC and non-OPEC producers to limit output during the first half of this year.

Global financing conditions tightened at end-2016, but have since stabilized. U.S. long-term interest rates rose sharply following the U.S. elections in early November 2016, but have plateaued in recent weeks. In both the Euro Area and Japan, policy rates remain at historic lows, and central banks remain committed

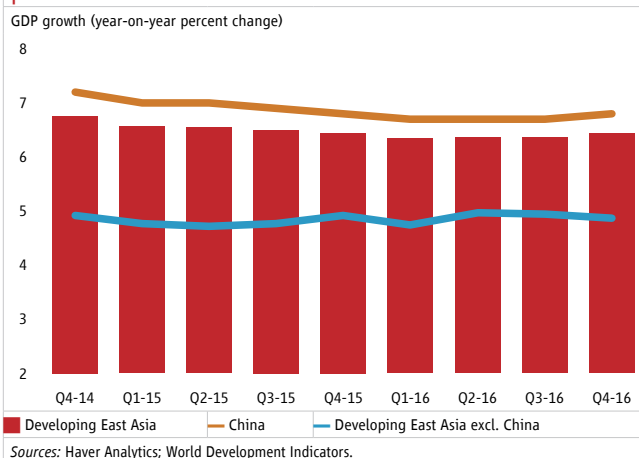
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to quantitative easing—Japan’s “yield curve control” program aims to stabilize the 10-year government bond yield at zero percent. However, in some Euro Area countries, the combination of rising inflation, rising risk premia from upcoming political events, and renewed banking sector concerns have driven up long-term yields.

Figure BI.A.1.7. International commodity prices**Figure BI.A.1.8. Emerging market stocks and currencies**

EMDE financial markets have performed well recently. The markets rebounded in early 2017 after a turbulent spell in late 2016. Capital inflows to EMDE bond and equity mutual funds have resumed after sharp outflows in late 2016. EMDE equities recently surpassed 2016 highs, reflecting some unwinding of U.S. dollar appreciation, stabilization of U.S. bond yields, and a pickup in commodity prices (Figure BI.A.1.8). And emerging market sovereign bond spreads have tightened since their most recent high in mid-November, to levels last seen in late 2014.

Figure I.A.1. Growth in developing EAP continued to prove resilient

Growth in developing East Asia and Pacific (EAP) continued to prove resilient, as already robust domestic demand was supported by some pickup in external demand and a recovery in commodity prices. In China, growth moderated slightly in 2016 to 6.7 percent, but with some strengthening of activity toward the end of the year and the start of 2017 (Figure I.A.1). The rebalancing of the economy was muted, as growth was increasingly driven by investment, with fiscal and monetary policies providing continued accommodation. In the rest of the region as a whole, growth increased marginally to 4.9 percent. Growth picked up in the Philippines and Thailand, and exceeded previous projections in Mongolia and Vietnam, although

Myanmar saw a slowdown. Overall, developing EAP accounted for around 40 percent of global growth in 2016. Adopting a longer perspective, growth in the region has been particularly resilient: since 2007, regional output has increased by 90 percent, more than in any other region. Furthermore, developing EAP maintains its long track record of remarkable success in reducing poverty, driven largely by continued increases in labor incomes (Box I.A.2).

In addition to China, the other large economies also generally solidified their performance in the second half of 2016 and the start of 2017. In *Vietnam*, GDP growth picked up by more than 1 percentage point in the second half of 2016, to reach 6.7 percent (year-over-year) in Q4 2016 (Figure I.A.2). Manufacturing exports expanded, and the impact of the drought at the start of the year dissipated. In the *Philippines*, after six quarters of acceleration, GDP growth rate moderated to a still very high 6.6 percent in Q4 2016. Higher public capital spending crowded in private investments; robust remittances, credit growth, and low inflation supported private consumption; and electronic exports proved buoyant. On the production side, both industry and services recorded strong growth, while systemic issues continue to weigh on agricultural performance. In *Indonesia*, growth weakened slightly in the second half of the year to around 5 percent, as efforts to meet the deficit target led to a scaling back of government consumption. In *Malaysia*, GDP growth held up as rising minimum wages and civil servants' salaries supported private consumption, improving prospects for commodities strengthened business sentiments and investments, and a diversified export base helped the country benefit from the pickup in global trade. In *Thailand*, growth accelerated in the first half of 2016 but slowed slightly in the second half, as the mourning period for the late king weighed on domestic demand. The manufacturing PMI has been broadly consistent with these trends, pointing to robust expansion in the Philippines, continued confidence in China and Vietnam, lackluster performance in Indonesia, a bottoming-out in Malaysia, and modest expansion in Thailand (Figure I.A.3).

Figure I.A.2. Growth performance remains robust across the region's large economies

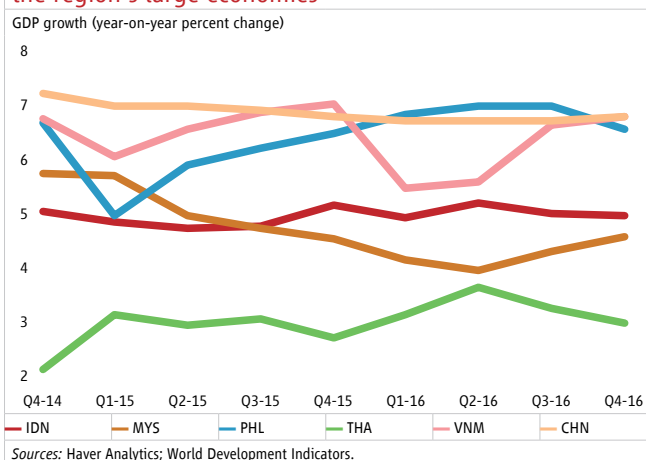
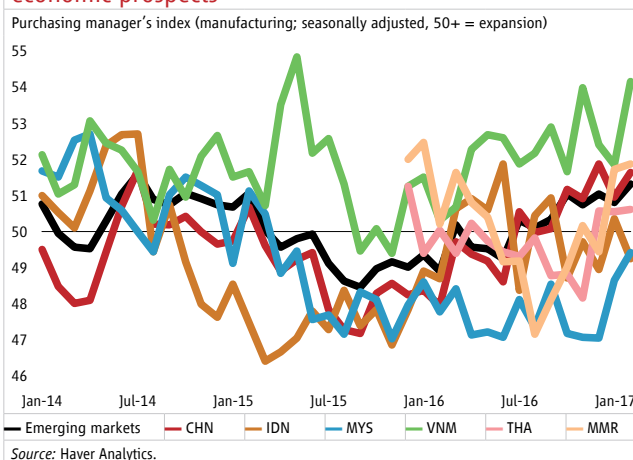


Figure I.A.3. Managers generally feel upbeat about economic prospects



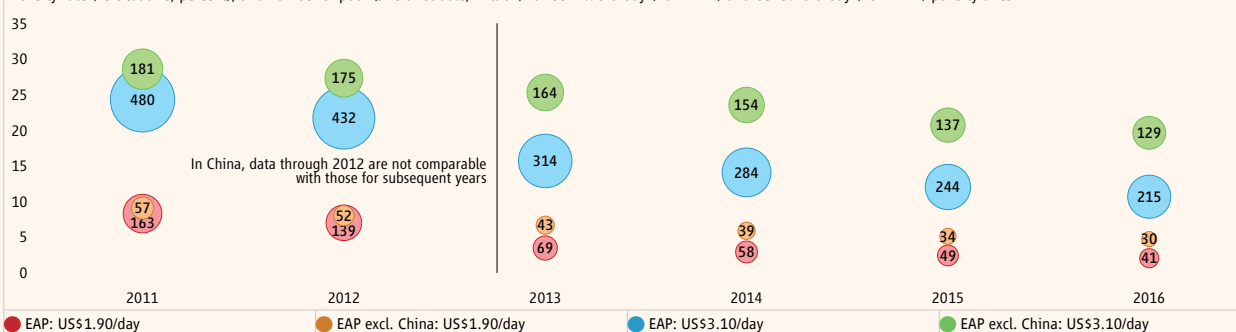
Among the smaller economies, performance has been more mixed. The recovery in commodity prices provided opportunities for commodity exporters. However, in some of these countries, fiscal challenges constrained public spending, and natural resource sectors continued to be affected by difficulties including resource depletion. In *Myanmar*, growth slowed to 6.5 percent, as flooding took a toll on agriculture, gas production declined, and domestic demand was affected by uncertainty regarding the new administration's policies and by currency volatility.

Box I.A.2. Poverty in Developing East Asia and Pacific

Developing EAP maintains its record of successful poverty reduction. In 2016, the share of the region's population living in extreme poverty (below the international poverty line of US\$1.90 a day in 2011 purchasing power parity [PPP] terms) is estimated to have decreased to 2.0 percent, or excluding China, to 4.6 percent (Figure BI.A.2.1). The share of the region's population living in moderate poverty (below the US\$3.10-a-day line in 2011 PPP terms) also fell, from 14 percent in 2014 to less than 11 percent in 2016. Poverty has recently started declining also in the Philippines, after a decade of relatively slow progress.

Figure BI.A.2.1. The prevalence of poverty has continued to decline across the region

Poverty rate (vertical axis, percent), and number of poor (size of bubble, million) for US\$1.90-a-day (2011 PPP) and US\$3.10-a-day (2011 PPP) poverty lines



Sources: World Bank East Asia and Pacific Team for Statistical Development; PovCalNet.

Note: The most recent household survey used for actual estimates vary from 2006 in Kiribati to 2015 in Indonesia and the Philippines. Estimates prior to 2015 are: (i) derived directly from household survey data; (ii) China 2013 is a survey break and data are not comparable with previous years (iii) interpolated between existing surveys; or (iv) extrapolated based on per-capita GDP growth and historical estimates of the growth elasticity of poverty (GEP), but China, Papua New Guinea and Pacific Island countries based on neutral growth distribution. For 2016 onwards, estimates are projected based on projected per-capita GDP growth and the GEP, and are hence preliminary and subject to revision.

In China, data through 2012 are not comparable with those for subsequent years, owing to a change in the survey methodology which acted to lower reported poverty, and may account for nearly half of the reported decrease in the poverty headcount between 2012 and 2013. In late 2012, separate urban and rural household surveys were replaced with a single national household survey, which uses stratified, multi-stage sampling methods. There were significant changes in the collection of information from migrants (now treated as part of the urban population when measuring aggregate disposable income), and the treatment of net taxes and transfers in rural areas; and rents from home ownership are now imputed. This latter factor in particular may have had a substantial effect on reported poverty.

In *Mongolia*, output is estimated to have expanded by 1.0 percent in 2016 (almost a full percentage point above earlier expectations), largely as a result of a Q4 2016 recovery in mining output and exports. Still, macroeconomic imbalances remain significant and the authorities have recently reached a tentative agreement with development partners on a program of fiscal, monetary, and structural reforms to be supported by a substantial external financing package. In *Papua New Guinea*, output growth moderated, reflecting partly the maturing of the liquefied natural gas (LNG) sector (a large project came on stream in 2015), but also a halt in production at two mines, as well as cash shortages affecting government spending. In *Timor-Leste*, nonoil output expanded at a faster pace in 2016, benefiting from higher government spending, improved agriculture outturns, and some growth in tourism, albeit from a low base. However, oil production continues to decline as existing oil fields are depleted. In *Lao PDR*, growth remained high, driven by continued expansion of the power sector. However, it fell below historical averages, as the continuation of the moratorium on mining licenses led to flat mining output, and fiscal difficulties limited the government's contribution to economic activity. Among small commodity importers, *Cambodia* continued to expand rapidly, as agriculture recovered from the drought in the previous year, and FDI and garment exports remained resilient. In contrast, GDP growth in *Fiji* declined to 2 percent as cyclone Winston affected key sectors, including agriculture and tourism.

Exports show early signs of recovery across much of the region

The gradual strengthening of global economic activity led to a slight pickup in regional exports, although domestic demand continues to drive growth. In China, the contribution of net exports to growth turned negative in the first half of 2016, but has since been trending up (Figure I.A.4). In the Philippines, in the second half of the year, exports held up while import growth moderated (Figure I.A.5). In Thailand, net exports contributed positively to growth in 2016, although import growth has been gradually recovering. In Indonesia, net exports' contribution to growth declined in the first three quarters of 2016; however, in the last quarter, exports grew for the first time in over two years. In Malaysia, net export demand added around 0.5 percentage points to GDP growth in the second half of the year, more than at any time over the preceding two years. Across the smaller economies, net export demand contributed to growth in Cambodia and Lao PDR, as exports increased while imports remained contained in Papua New Guinea, as well.

Figure I.A.4. Domestic demand continued to drive growth

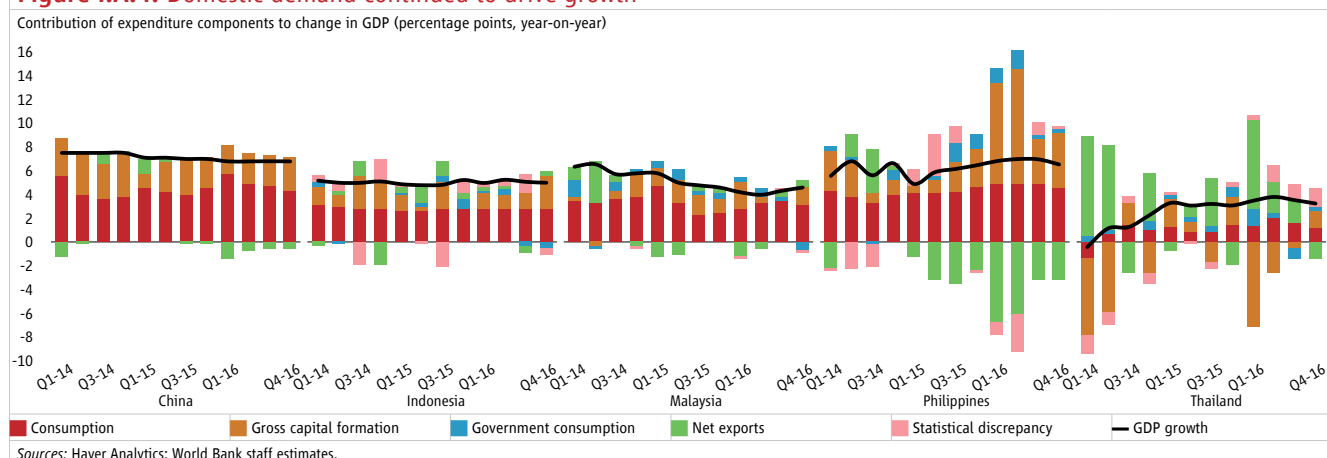
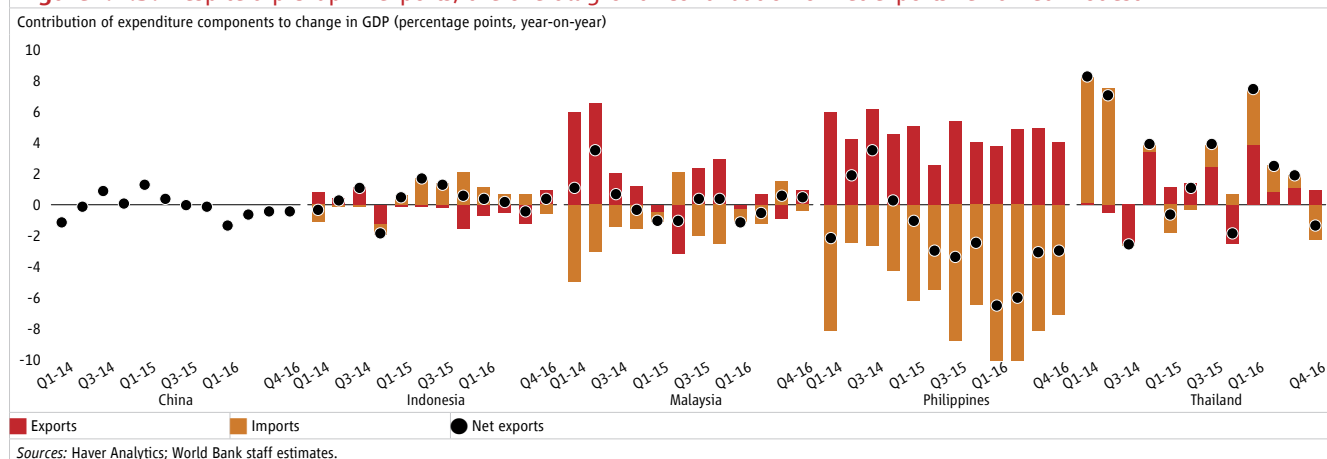
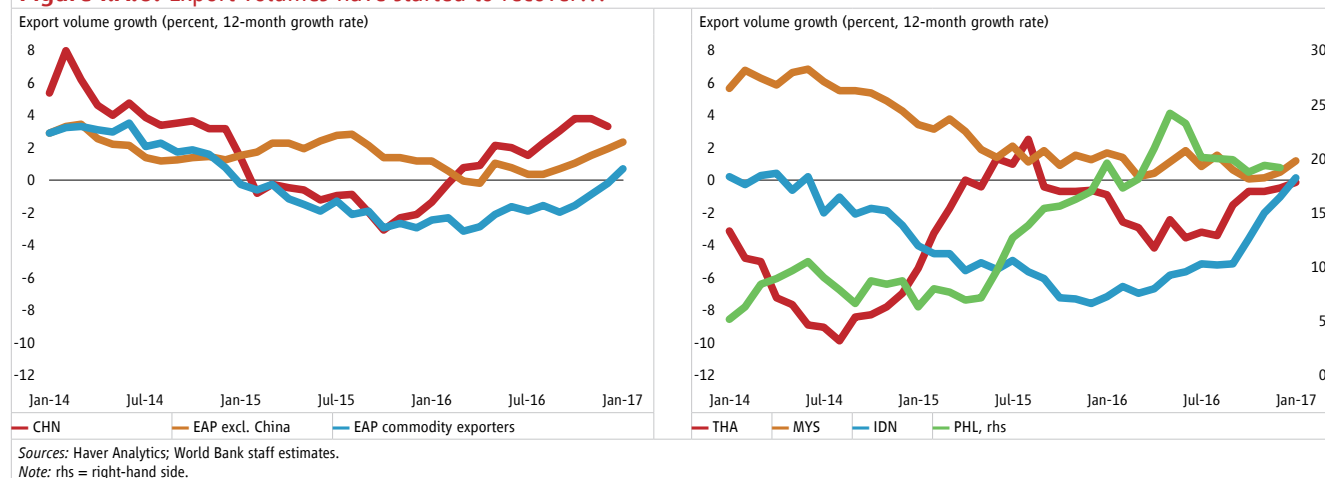


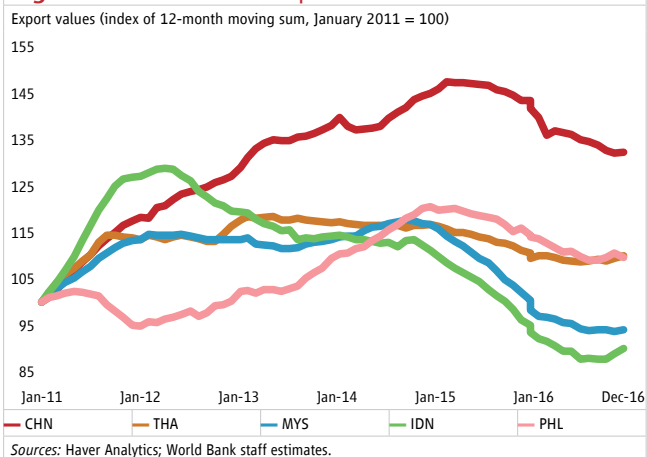
Figure I.A.5. Despite a pickup in exports, the overall growth contribution of net exports remained modest



Growth in both export volumes and values has been gradually recovering, following a disappointing performance in 2015 and the first half of 2016. The export recovery has been largely in line with projections, reflecting firming activity in high-income economies and in large EMDEs. In China, export volumes for goods

Figure I.A.6. Export volumes have started to recover...

have gradually recovered (Figure I.A.6), in turn leading to increased intermediate imports from the rest of the region. In particular, in commodity exporters, growth in export volumes bottomed out in the last part of 2016. Export values have also started to increase (Figure I.A.7), with commodity exporters benefiting from increased prices for oil, copper, and other commodities. In Indonesia, which experienced a contraction of export volumes through mid-2016, exports rebounded strongly in Q4 2016 and continue to accelerate in the first two months of 2017. In Malaysia, where export growth held up relatively well, reflecting the strong performance of manufactured goods exports (particularly electrical and electronics), a modest recovery of oil and gas shipments is providing an additional boost to exports. In the Philippines, export growth remains strong, buoyed by electronics, including semiconductors. In Thailand, the export stagnation eased in late 2016, but performance remains weak, reflecting ongoing competitiveness challenges. Export volumes from Cambodia are strengthening as garment exports continue to rise; however, export values eased, as depreciating currencies among the main competitors pushed export prices down. In Lao PDR, exports have been rebounding in 2016, reflecting the coming on stream of new capacity in the power sector, recent success in attracting export-oriented FDI in manufacturing of parts and components, and the recovery in copper prices. In Myanmar, exports contracted due to lower gas production and the impact of the floods. Export volumes declined in Papua New Guinea and Timor-Leste owing to reductions in copper and oil production, respectively. However, Mongolian commodity exports benefited from expanded production at one large copper mine, and continued weakness in China's coal sector.

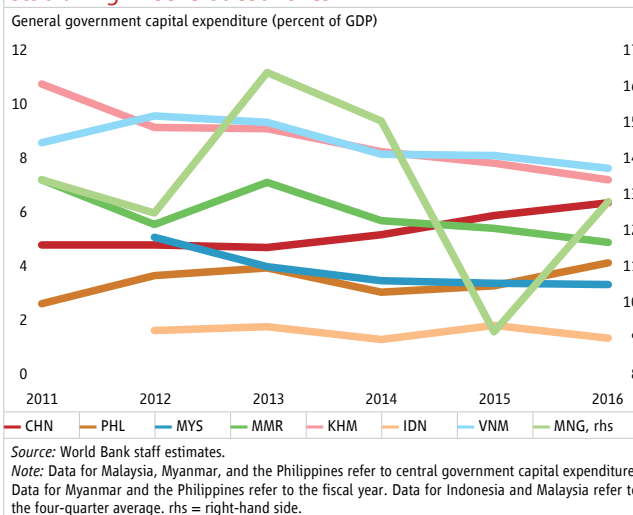
Figure I.A.7. ...as have export values

Domestic demand across much of the region was buoyant, reflecting accommodative macroeconomic policies and tight labor markets

Private consumption in the large economies remained buoyant throughout 2016 and in early 2017. Consumption growth accelerated in the Philippines and remained rapid in Indonesia, Malaysia, and Vietnam. In China, combined private and public consumption¹ contributed around 5 percentage points to growth in 2016, almost a full percentage point more than the 2013–15 average (Figure I.A.4). Labor markets are tight across most of these countries: China created a record 13.1 million jobs in 2016, and unemployment has been declining in Indonesia and the Philippines. Further boosts in purchasing power came, in Malaysia, from the hike in the minimum wage and civil servants' salaries; in the Philippines, from the expansion in social protection and conditional cash transfer program, and from robust remittances. In contrast, in Thailand, private consumption enjoyed some recovery at the start of 2016 but subsequently slowed, while public consumption grew toward the end of the year but at a modest pace. In Mongolia, macroeconomic uncertainty and the partial reversal of expansionary measures limited demand.

Investment broadly continued to hold up, supported by stabilizing public capital expenditure and improved business sentiment. Over the past few years, developing EAP has been spared the relatively sharp fall in investment growth experienced by other regions (Box I.C.3). And, more recently, regional investment is showing signs of a modest recovery, although private investment in particular remains sluggish in a few countries, most notably Thailand and, until recently, Indonesia. In China, infrastructure spending accelerated in the second half of the year; the contribution of investment to growth rose to 2.8 percentage points of GDP in the last quarter, still below the 2013–15 average. In the Philippines, investment growth remains robust, reflecting a strong public infrastructure push (Figure I.A.8) and an upbeat private sector. In Vietnam, investment growth accelerated to 9.7 percent in 2016, supported by record FDI levels. In Malaysia, private investment was strong as sentiment gradually improved, while public capital spending tapered in the second half of the year. Conversely, in Indonesia, investment grew sharply in the first half of 2016 but subsequently decelerated, as the fiscal adjustment undertaken to meet the deficit target disproportionately affected capital spending. In Thailand, underexecution of public spending contributed to the overall mediocre performance of investment. In Myanmar and Mongolia, investment has also been sluggish, reflecting impediments in the business environment and macroeconomic uncertainty. In Lao PDR, investments, including in larger power sector projects, moderated.

Figure I.A.8. Government capital expenditure is stabilizing in several countries



Fiscal deficits in the major regional economies widened in 2016, prompting some adjustment toward the end of the year in Indonesia and Malaysia (Figure I.A.9). In China, the fiscal deficit widened in 2016 by 1 percentage point of GDP, to 3.7 percent, partly reflecting higher infrastructure spending. In the Philippines, the

¹ Data are not available on a quarterly basis for private and public consumption separately.

deficit increased from 0.9 percent of GDP in 2015 to 2.4 percent of GDP in 2016, largely the result of increased capital expenditure on roads, education, and health. Deficits widened in Thailand as well, also reflecting subdued revenue collection, and in Vietnam. In Indonesia, the widening deficit triggered a sharp adjustment in Q4 2016, containing the 2016 deficit to 2.5 percent of GDP, slightly below the 2015 level. Similarly, in Malaysia, the deficit widened in the first half of 2016, but subsequently narrowed as current nonsalary expenditures were tightened, and revenues were boosted by the improved collection of general sales tax and dividend payment from the national oil company.

Figure I.A.9. After widening earlier, fiscal deficits in some of the large economies started to stabilize toward end-2016

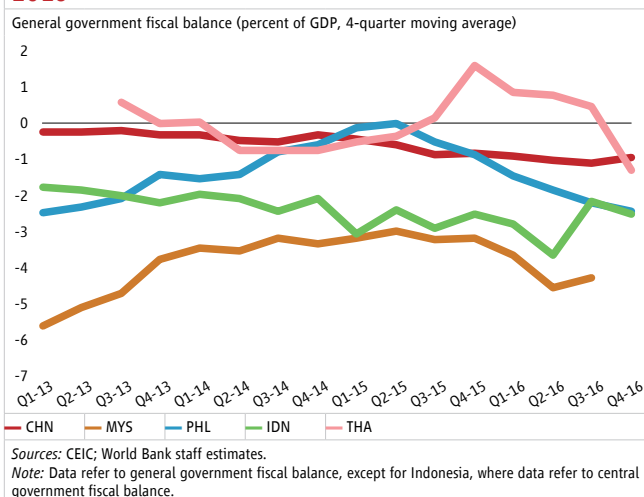
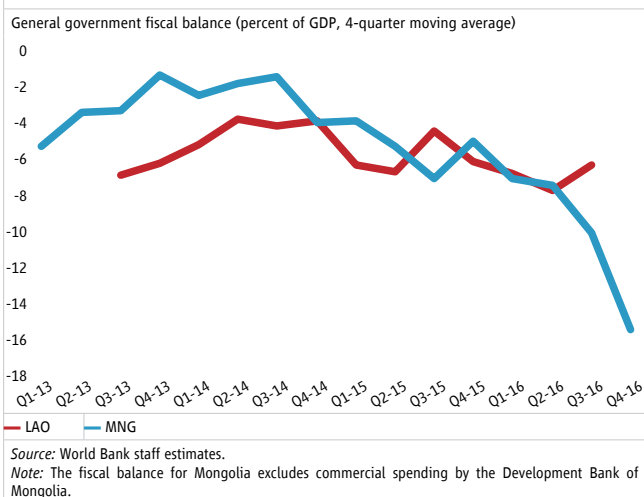


Figure I.A.10. The fiscal positions in Mongolia and Lao PDR are particularly challenging



There are large, rising deficits across the smaller economies. In Mongolia, in particular, the deficit more than doubled in 2016, reflecting both large election-related expenditures on policy lending and other programs, and weak revenues (Figure I.A.10). In Lao PDR, despite some recovery in revenues in the second half of 2016, the fiscal position for the year deteriorated significantly, as natural resource revenues declined. Resource revenues have fallen and deficits increased in Myanmar and Papua New Guinea as well. In Timor-Leste, a large structural deficit has opened up, as the impact of declining petroleum production has been compounded by low world energy prices. The deficit increased, to a lesser degree, in Cambodia, caused mainly by a rising wage bill.

Monetary conditions in many countries remain accommodative, supported by still relatively benign inflationary conditions. China began to gradually tighten monetary policy in early 2017 to moderate credit growth and cool property markets, although monetary conditions remain accommodative. In Vietnam, there were no changes in the main monetary policy instruments, but significant unsterilized foreign exchange purchases drove interbank rates below 1 percent toward the end of the year, subsequently prompting some efforts to tighten liquidity. Malaysia ended the easing cycle in July 2016, including due to the increased volatility of the exchange rate in the second half of the year. In the Philippines, following rate cuts in Q2 2016, the benchmark interest rate remained unchanged. Indonesia, however, lowered policy rates by 25 basis points in October 2016, as inflationary pressures remained low, credit growth was modest, and reserve cover improved (Figure I.A.11). And, in Thailand, the policy rate remained at 1.5 percent as the authorities tried to support the sluggish economy. Among the

smaller economies, Lao PDR further lowered the inflation-linked interest rate caps on kip deposits and loans in August 2016, and Cambodia recently introduced interest rate caps for microfinance. Mongolia, facing significant pressures on the exchange rate, sharply tightened monetary policy in August 2016, and only partly reversed the tightening later in the year. With inflation picking up slightly, real interest rates have been declining, and in some cases are close to zero or even negative. In most countries, they remain significantly below their long-term average (Figure I.A.12).

Figure I.A.11. Policy rates have been stable or decreased across most countries

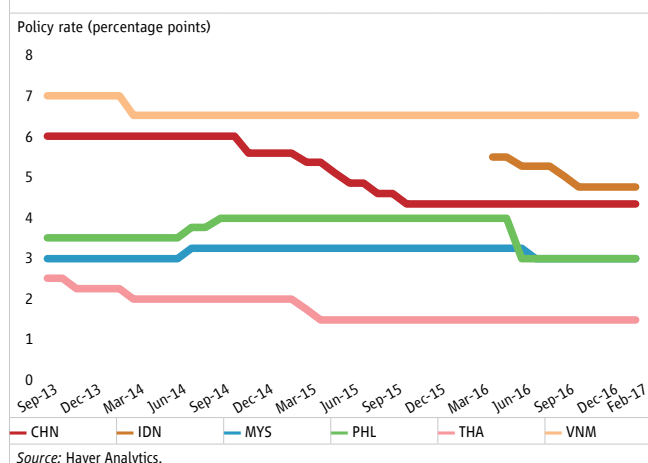
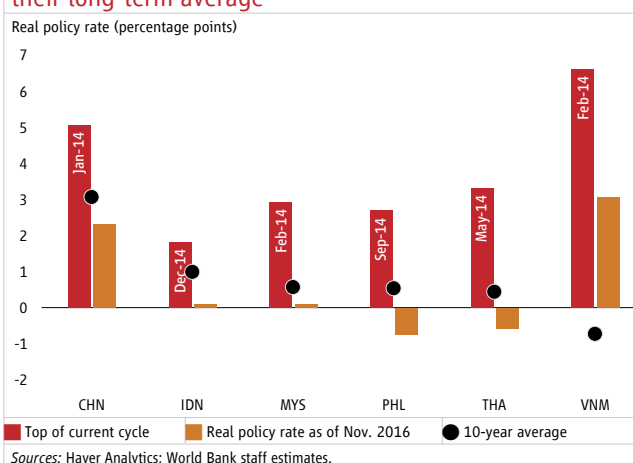
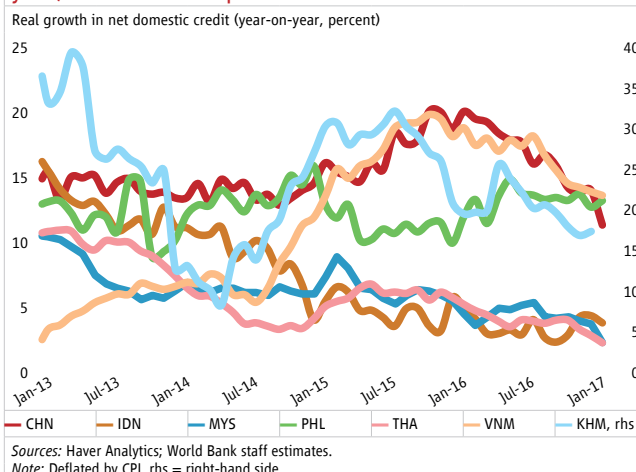
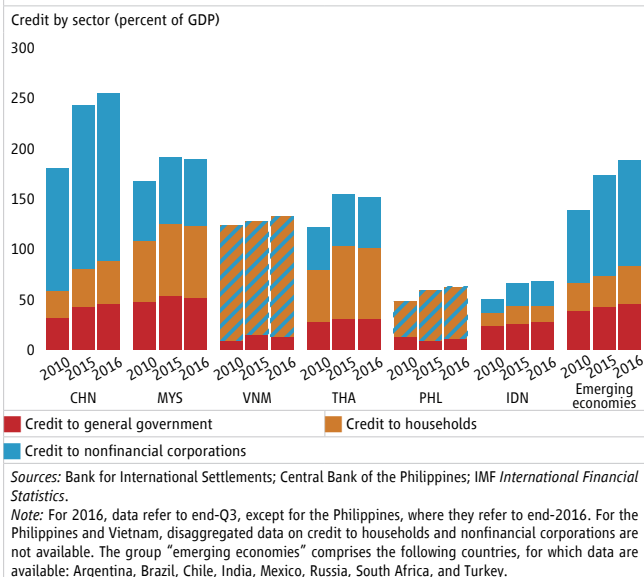


Figure I.A.12. Real interest rates in large economies have been declining, and in most cases are significantly below their long-term average



Private sector credit growth is moderating slightly, but debt stocks remain elevated

Following several years of rapid expansion, real credit growth has moderated over the past year, but remains rapid. Since 2010, credit growth has been relatively high across most large regional economies, but particularly so in China, Malaysia, the Philippines, and Thailand, and more recently in Vietnam (Figure I.A.13). In China, continued robust real credit growth in the second half of 2016 prompted a tightening of monetary policy in early 2017, in an effort to lower risks in the financial sector. Despite this, credit growth remains strong. Growth in real credit appears to have moderated in Vietnam and stabilized in the Philippines. Still, in both countries, the pace of credit expansion remains high, at well above 10 percent year-over-year. In contrast, mixed business sentiment in Indonesia, and lackluster economic performance and high debt in Thailand, kept real credit growth below 5 percent, despite cuts in policy rates in the former and a prolonged period of low rates in the latter. Real credit growth remains below 5 percent in Malaysia, as well. Credit growth has been especially rapid in some smaller economies in recent years; however, there, too, credit expansion appears to be moderating. In Cambodia, the real growth rate of domestic credit declined to around 17 percent, from around 20 percent at the start of 2016. Similarly, a small deceleration was recorded in Lao PDR to 15 percent. In contrast, real credit growth accelerated in Myanmar to around 25 percent by the end of 2016.

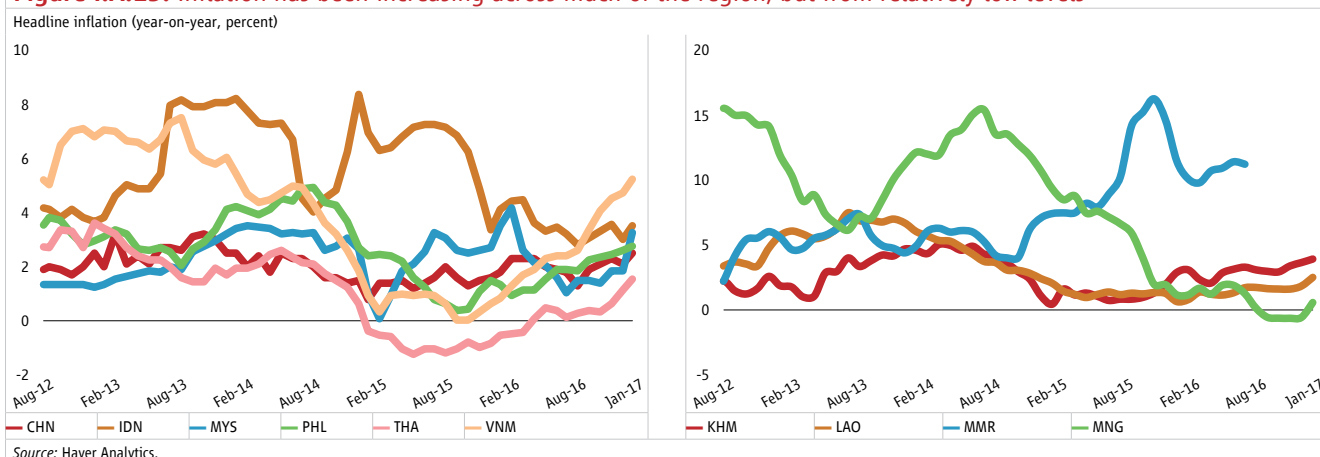
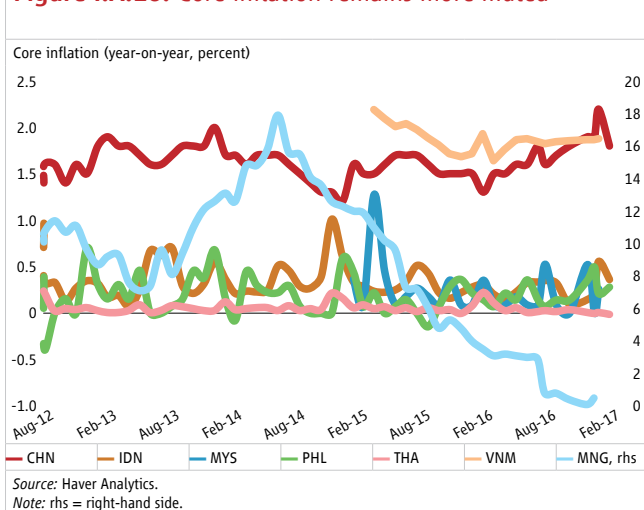
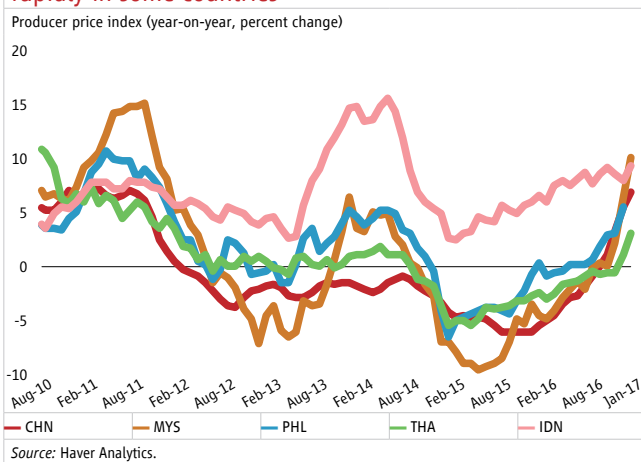
Figure I.A.13. Credit growth has slowed over the past year, but remains rapid**Figure I.A.14. The stock of private sector debt remains elevated in several economies**

The stock of private sector debt remains elevated in several economies. The total debt stock exceeds 250 percent of GDP in China, and 150 percent of GDP in Malaysia and Thailand (Figure I.A.14). In China, nonfinancial corporate debt has grown particularly rapidly, to over 160 percent of GDP; a large share of this is concentrated in infrastructure and real estate. In Malaysia and Thailand, household debt exceeds 70 percent of GDP.

Inflation is edging up, and producer prices are rising rapidly

Inflation has been increasing across much of the region in response to robust domestic demand and recovering commodity prices, but remains below historical values. Inflation remains stable in China. However, in Vietnam, consumer prices rose relatively quickly in recent months, including owing to hikes in administrative prices (Figure I.A.15). Consumer price inflation has also been steadily accelerating in the Philippines (to 3.3 percent in February 2017) and more recently Indonesia (to 3.8 percent in February 2017). In Thailand, inflation increased to 1.1 percent in early 2017, reflecting higher food and fuel prices. Similarly, inflation is increasing among the smaller economies. It accelerated rapidly in Myanmar, also reflecting the currency depreciation, and edged upward in Cambodia and Lao PDR, reflecting increases in food prices and, in Lao PDR, also fuel prices. In Mongolia, inflation dropped sharply during 2016, but has been increasing more recently. In general, available measures of core inflation remain more muted (Figure I.A.16).

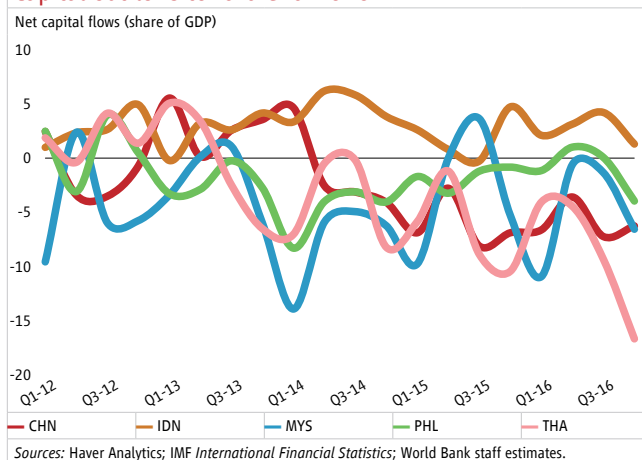
Producer prices have been increasing rapidly in some countries, reflecting rising commodity and materials prices and reduced excess capacity (Figure I.A.17). Producer prices across much of the region fell during most of 2015–16. However, producer price inflation has now reached around 10 percent in Indonesia and Malaysia, 7 percent in China, 6 percent in the Philippines, and 4 percent in Thailand; producer prices also stopped falling in Vietnam in early 2017.

Figure I.A.15. Inflation has been increasing across much of the region, but from relatively low levels**Figure I.A.16. Core inflation remains more muted****Figure I.A.17. Producer prices have been increasing rapidly in some countries**

Renewed capital outflows toward the end of 2016 led to exchange rate depreciations, but external financial conditions have stabilized in 2017

Capital flows proved volatile in the aftermath of the U.S. elections and the increase in U.S. policy rates. During 2016, China again saw large capital outflows, reflecting uncertainty and the growing role of Chinese corporates as outbound investors, only partially offset by further liberalization of domestic bond and stock markets (Box I.A.3). Outflows intensified at end-2016 but may have moderated slightly since the start of 2017. Similarly, capital outflows intensified in Malaysia and Thailand, and to a lesser extent the Philippines, in the second half of 2016 (Figure I.A.18). In contrast, capital inflows appear to have held up in Indonesia, as residents repatriated foreign assets owing to the tax amnesty, and in Vietnam. Portfolio flows exhibited roughly similar trends.

Figure I.A.18. Most of the region experienced significant capital outflows toward end-2016



FDI inflows proved more resilient across the region. In China, FDI inflows moderated and FDI outflows increased in 2016 (Figure I.A.19), reflecting declining returns, including owing to rising labor costs and expectations of further volatility. However, outward FDI declined sharply in early 2017, reflecting new restrictions. Net FDI inflows reached record levels in Vietnam, and further accelerated in Indonesia, Malaysia, and the Philippines (Figure I.A.20).

Financial markets also saw increased volatility toward end-2016, but have since recovered. Equity and bond markets rallied until the third quarter of

Figure I.A.19. In China, declining returns lowered FDI inflows and increased outflows

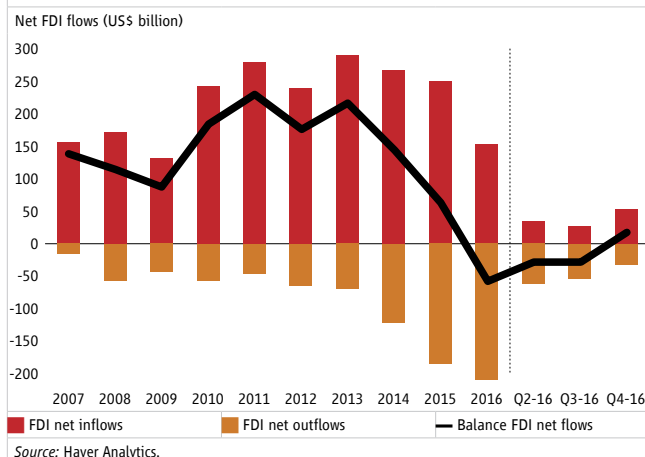


Figure I.A.20. Net FDI flows in most of the rest of the region have been robust

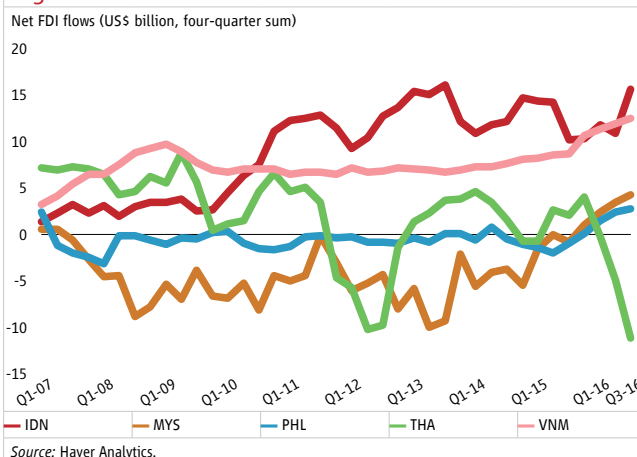


Figure I.A.21. Financial markets saw increased volatility since end-2016, but have since recovered

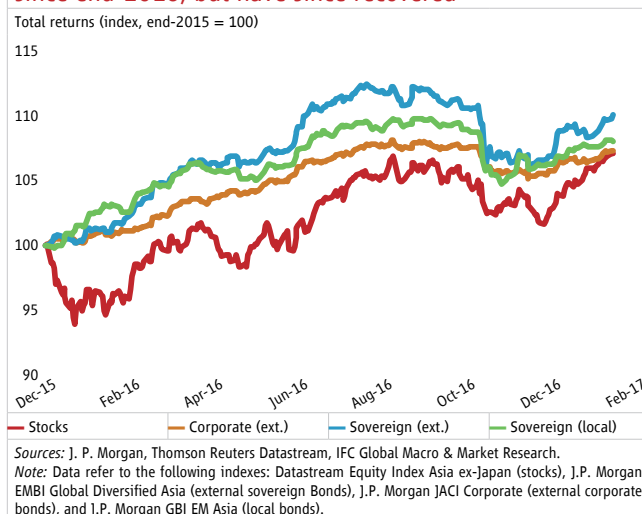


Figure I.A.22. Stock Prices

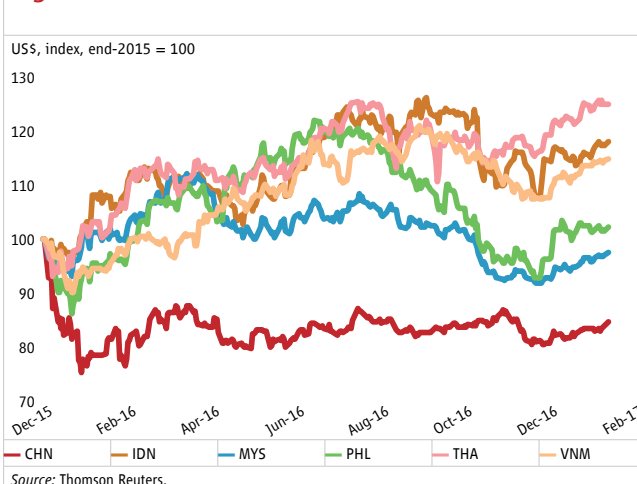
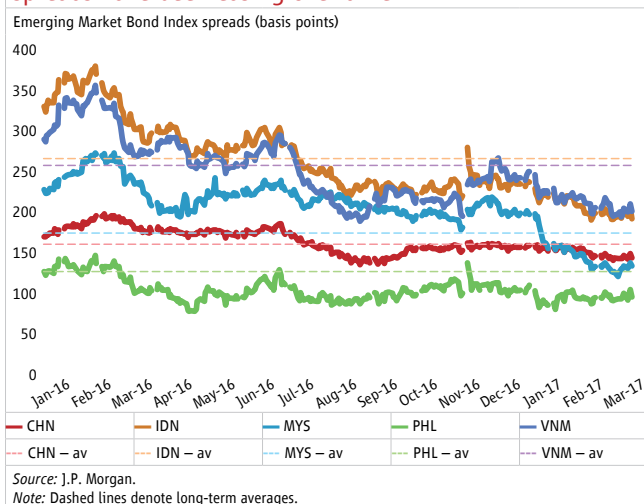
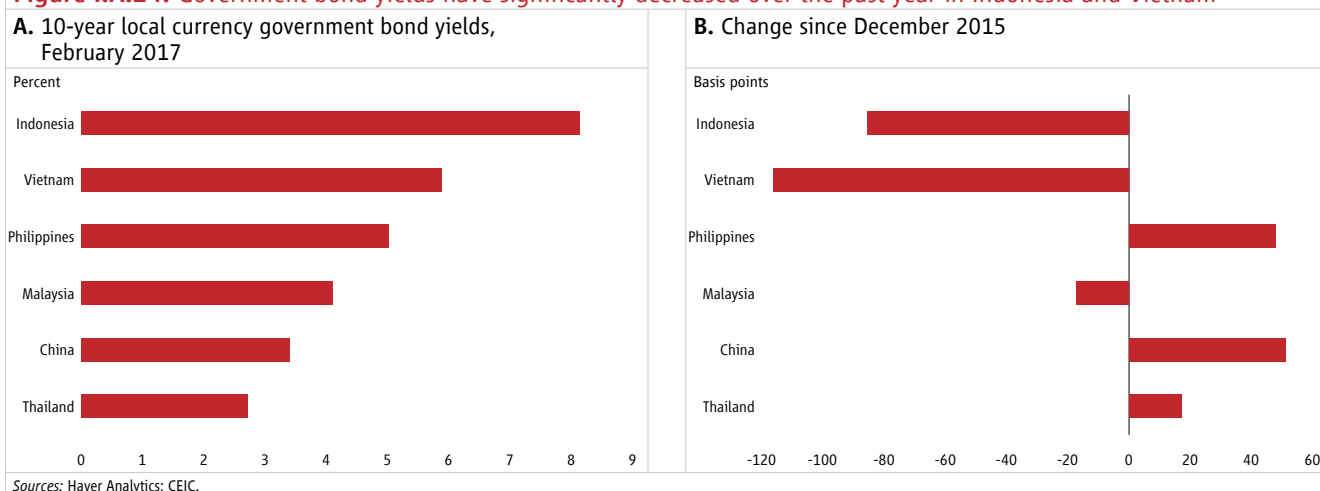


Figure I.A.23. External corporate and sovereign risk spreads have been easing over time



2016 as concerns about the Chinese economy eased and commodity markets recovered (Figure I.A.21). Stocks in Indonesia, the Philippines, Thailand, and Vietnam registered the largest gains. However, regional stock indexes fell by an average 6.5 percent in Q4 2016, again reflecting the outcome of the U.S. elections and the subsequent increase in U.S. interest rates. Equity markets have since recovered their losses and reached all-time highs in early 2017, climbing by almost 30 percent since late January, supported by the continued firming up in commodity prices, the stabilization of the U.S. dollar, and expectations of faster growth in the United States (Figure I.A.22). Likewise, bond markets have been recovering since late 2016. Corporate and sovereign risk spreads, on a

Figure I.A.24. Government bond yields have significantly decreased over the past year in Indonesia and Vietnam



declining trend by mid-2016, peaked temporarily in November 2016. However, they have since declined and are below their longer-term average levels (Figure I.A.23). Similarly, local-currency government bond yields are significantly below their end-2015 values in Indonesia and Vietnam, reflecting continued capital inflows, although they are somewhat higher in China and the Philippines (Figure I.A.24).

Exchange rates also depreciated in late 2016, again with some recovery since. Dollar exchange rates depreciated across much of the region in the second half of 2016 (Figure I.A.25). China, Indonesia, the Philippines, and Malaysia were significantly affected, reflecting their exposure to global trade prospects and to capital flows. In response, Malaysia tightened currency regulations.² Vietnam experienced depreciation despite a trade surplus and strong FDI inflows, as the authorities built up reserves. Mongolia and Myanmar saw the sharpest depreciations, as

² The authorities reinforced rules against offshore currency trading, required exporters to convert at least 75 percent of their export proceeds to local currency, and adopted measures to deepen onshore financial markets to ensure liquidity in domestic financial markets. The Central Bank has been proactively communicating these measures to investors and market players.

sluggish commodity prices and lowered FDI prospects weighed on their external position. Still, several countries, including China and Indonesia, saw some appreciation against the U.S. dollar in early 2017. In trade-weighted (nominal and real) terms, both China and the Philippines have depreciated sharply since end-2015, but Indonesia and Thailand have appreciated (Figure I.A.26), in line with capital flows. Countries with more rigid exchange rate arrangements, usually de jure or de facto pegs again the U.S. dollar (including Cambodia, Lao PDR, Fiji, Papua New Guinea, Samoa, and Tonga), saw trade-weighted appreciation. In some cases, including Lao PDR and Papua New Guinea, significant pressures emerged on foreign exchange reserves.

Figure I.A.25. U.S. dollar exchange rates depreciated in late 2016, with some recovery since

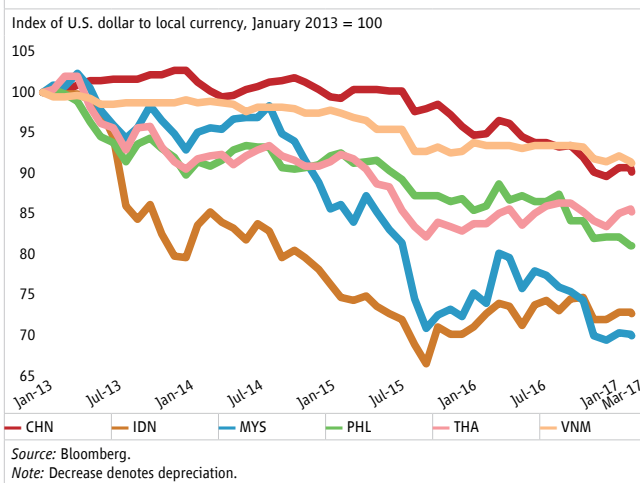
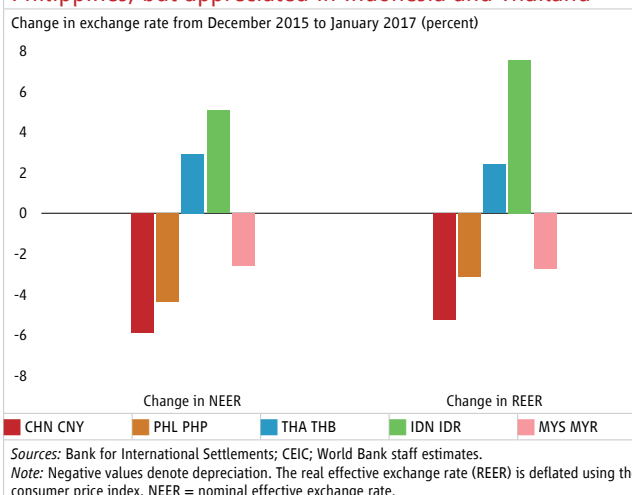
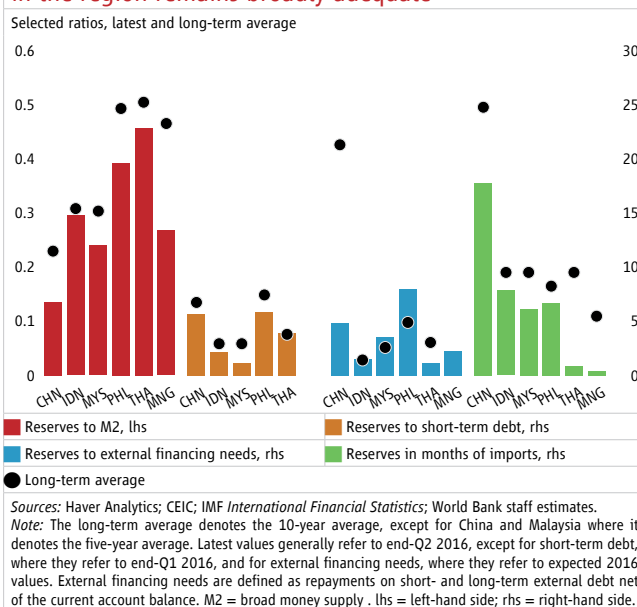


Figure I.A.26. Trade-weighted exchange rates have depreciated over the past year in China, Malaysia, and the Philippines, but appreciated in Indonesia and Thailand



Reserve coverage across the region is in general broadly adequate, although below longer-term averages. (Figure I.A.27). In Malaysia, foreign exchange reserves fell below the 100 percent of short-term debt benchmark in 2015 and 2016, reflecting significant interventions in the face of market pressures. Still, reserve cover in terms of monetary aggregates and imports remains adequate. China saw a large decline in reserves, to below US\$3 trillion at end-2016, and reserves also declined in the Philippines. However, cover in terms of the various monetary aggregates, imports, and short-term debt servicing remains comfortable. Indonesia, the Philippines, Thailand, and Vietnam all saw increases in reserves as their external performance improved; in all these countries, except Vietnam, reserve coverage is above generally accepted thresholds. Among the smaller economies and Pacific Island Countries, reserves also remain broadly adequate,

Figure I.A.27. Reserve coverage for the major economies in the region remains broadly adequate

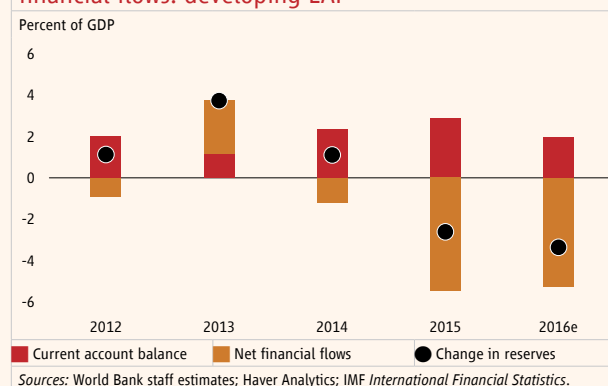


with a few exceptions. Reserves increased to above standard benchmarks in Cambodia, but they lie below standard benchmarks in Lao PDR, Myanmar, and Papua New Guinea.

Box I.A.3. Capital Flows across Developing EAP¹

Capital flows to developing EAP have in general decreased and become more volatile since 2013, reflecting changing external and domestic conditions. Major external factors included monetary policy normalization in the United States, the sharp decline and current recovery of commodity prices, heightened political uncertainty in major economies, and elevated geopolitical tensions. Key domestic factors included the slowdown in regional growth, including, in particular, in China, against the backdrop of sizable domestic vulnerabilities; the pace of exchange rate and capital account liberalization in China; accommodative monetary policies in the majority of regional emerging markets; and episodes of political and policy uncertainty in several major economies.

Figure BI.A.3.1. Balance of payments and net financial flows: developing EAP



In general, developing EAP has performed better than most other developing regions in terms of domestic factors. Nevertheless, these developments as a whole have acted to reduce expected returns in the region relative to high-income economies, and led to net capital outflows and heightened volatility of flows since 2014 (Figure BI.A.3.1). In addition, international investors have been increasingly differentiating between individual emerging economies based on economic fundamentals, including their track record and prospects for economic growth, macroeconomic and political stability, credibility of economic policies, and domestic and external vulnerabilities.

The external financial conditions facing developing EAP improved in early 2017, following turbulence in late 2016. The region continued experiencing net capital outflows in 2016, driven by sharp outflows from China, Malaysia, Thailand, and to a lesser extent, the Philippines (Figure BI.A.3.2, panels A and B). Net outflows intensified in Q4 2016, as the U.S. presidential election, and the expectation of a faster pace of monetary policy normalization by the U.S. Federal Reserve, affected investors and led to renewed global financial volatility. Since the start of 2017, as the U.S. dollar appreciation was partially unwound and U.S. bond yields stabilized, capital flows into regional bonds and equities have resumed.² Regional stock prices recently surpassed 2016 highs, and sovereign bond spreads have tightened since their most recent mid-November 2016 high. Currencies and assets in commodity-exporting Indonesia and Malaysia have benefited from the continued recovery in commodity prices.

¹ Prepared by Ekaterine Vashakmadze and Luan Zhao.

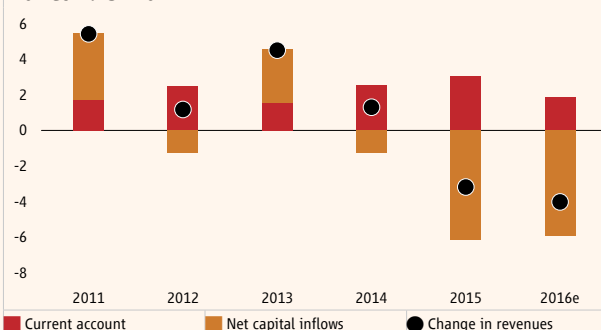
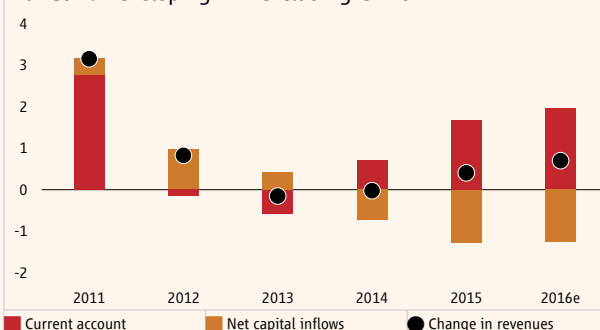
² Both the Philippines and Thailand, where official data are available on a monthly basis, registered sharp improvements in their balance of payments during January–February 2017.

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(Box I.A.3 continued)

Figure BI.A.3.2. Balance of payments and net capital flows

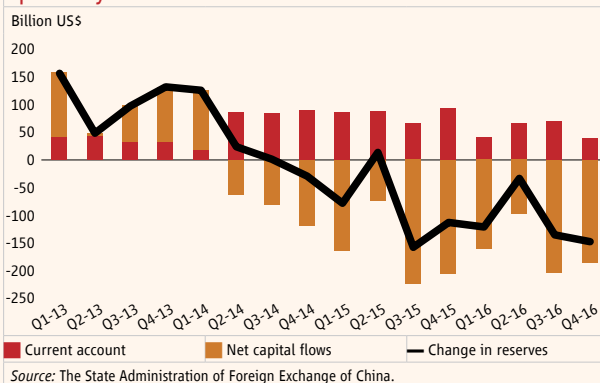
Percent of GDP

Panel A. China**Panel B. Developing EAP excluding China**

Sources: World Bank staff estimates; Haver Analytics; IMF International Financial Statistics.

China

In China, weakening growth and increased interest differentials with the United States, combined with gradual exchange rate and capital account liberalization, have been accompanied by large capital outflows, depletion of foreign reserves, and currency depreciation. Capital outflows in 2016 (5.8 percent of GDP) were almost as large as in 2015, resulting in a sharp decline in foreign exchange reserves (Figure BI.A.3.3).³ The outflows had moderated in early 2016, but resumed in the second half of the year, reflecting a sharp increase in net FDI outflows in Q3 and the outcome of the U.S. elections in Q4.

Figure BI.A.3.3. Balance of payments: China, quarterly

Source: The State Administration of Foreign Exchange of China.

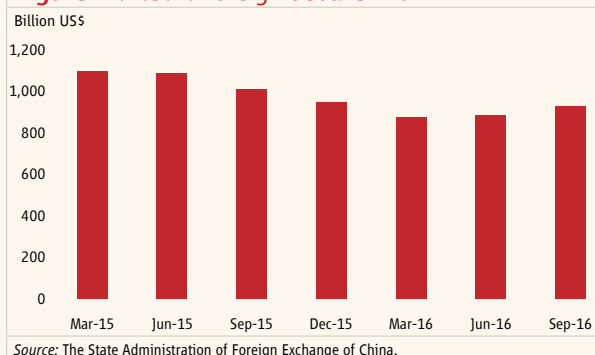
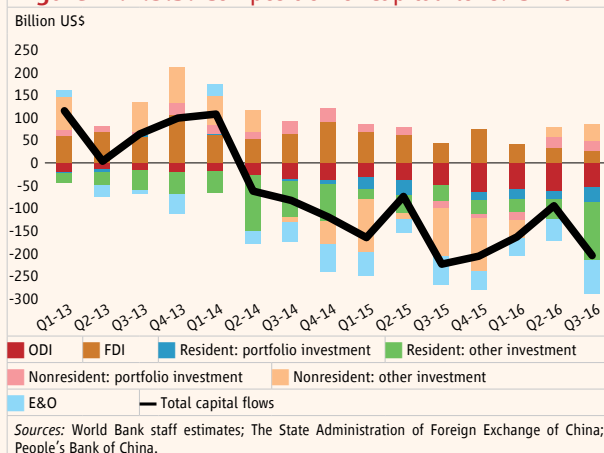
The composition of capital outflows has changed significantly over time. In 2015, repayment of corporate external debt accounted for a large share of outflows. In 2016, this was no longer a key driver of capital outflows; indeed, external debt has increased since Q2 2016 (Figure BI.A.3.4). Conversely, in 2016 outbound FDI exceeded inward FDI for the first time (Figure BI.A.3.5). Outward FDI has nearly tripled since 2013, boosted by the government's "going out" strategy. At the same time, inward FDI has declined sharply, including through a reduction in reinvested profits, reflecting weaker investment returns and concerns about currency depreciation. Relatedly, overseas bank lending, including trade credits, has surged since Q2, partly

³ Foreign exchange reserves decreased in 2016 by US\$444 billion according to balance-of-payments data, and US\$320 billion according to central bank data. This discrepancy may reflect valuation effects due to changes in exchange rates and interest rates, and possible currency swap transactions between the central bank and domestic banks.

(continued)

(Box I.A.3 continued)

reflecting financing to facilitate overseas investments and acquisitions. Meanwhile, net portfolio outflows eased, as domestic bond and stock markets were further opened up.

Figure BI.A.3.4. Foreign debt: China**Figure BI.A.3.5. Composition of capital flows: China**

The authorities accelerated their intervention in foreign exchange markets to curb intensified downward pressure on the renminbi. Gross foreign exchange reserves fell sharply in the second half of 2016, although at a slower pace than in 2015. Reflecting these interventions, in the second half of 2016 the renminbi remained broadly stable against the target currency basket, although it depreciated by 4.3 percent against the U.S. dollar.

Capital controls were tightened toward end-2016, in response to the large capital outflows. New restrictions were imposed on outward investment and overseas acquisition, reversing the easing measures introduced in previous years.⁴ As a result, outward FDI eased in Q4 2016, and there were net FDI inflows in December 2016 and January 2017, after eight consecutive months of net outflows. Since early 2017, overall capital inflows have also increased.⁵ Nevertheless, the long-term effect of such controls remains unclear, as uncertainty about instability in capital account regulations and their enforcement has arguably been an important motivation for capital outflows. In addition, a tightening of restrictions usually fails to reduce net outflows as it provokes a sizable decline in gross inflows from foreign investors (Long 2017; Ma et al. 2016; Saborowski et al., 2014).

⁴ Individuals are now required to provide more stringent reporting on the intended purpose of demanded foreign currency not used for capital account transactions. Regulators have also increased scrutiny of foreign firms repatriating profits out of China.

⁵ Gross foreign exchange reserves rose by US\$6.9 billion in February 2017, the first increase since June 2016. The increase, net of valuation effects, was estimated at US\$23.3 billion. Given a weaker trade balance, this implies lower capital outflows.

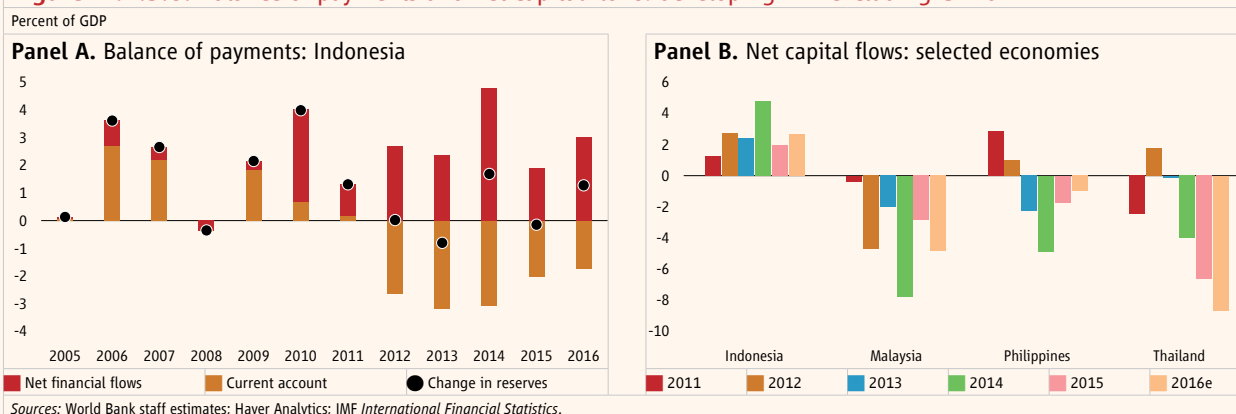
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(Box I.A.3 continued)

Indonesia, Malaysia, and Thailand

Indonesia continued to benefit from net capital inflows in 2016, notwithstanding a brief reversal toward end-2016. Indonesia has in general enjoyed sizable net capital inflows since 2010 (Figure BI.A.3.6, panel A). FDI accounted for about half of total capital inflows; portfolio inflows, in particular, to local currency government bonds, have also been sizable. During most of 2016, macroeconomic stability was reflected in continued capital inflows. FDI and portfolio inflows by nonresidents decreased in the second half of the year; in particular, after the U.S. election in November, portfolio investment turned negative. However, this was partly offset by residents reducing foreign assets holdings and repatriating funds as a result of the tax amnesty (IMF 2017; Tiftik and Farmham 2017).

Figure BI.A.3.6. Balance of payments and net capital flows: developing EAP excluding China



In Malaysia, net capital outflows in Q4 2016 were driven by portfolio outflows by nonresidents. Conversely, FDI inflows increased, channeled largely into the manufacturing sector, particularly the electrical & electronic and petrochemical industries, and into services, including finance and insurance. Outward FDI also increased, mainly in mining, telecommunication, and wholesale and retail trade.

Thailand continued to witness significant capital outflows in 2016 (Figure BI.A.3.6, panel B). FDI inflows remained subdued, given policy uncertainty and potential changes to investment promotion regimes. Resident capital outflows increased, largely accounted for by outward FDI, and reflecting policy measures to liberalize outflows and diversify investment opportunities.⁶ Thai asset markets were generally less affected by global turbulence than regional peers.

⁶ Foreign exchange regulations were relaxed in early 2016.

Recent developments in the Pacific Island Countries

Most small Pacific Island Countries (PICs) are experiencing moderate to strong growth, driven by stimulus from public and donor-funded investments, reconstruction from recent natural disasters, and relatively strong tourism receipts and remittances. In Tonga, growth benefited from improved weather and from construction for the South Pacific Games. In Samoa, growth accelerated, also due to the start of operations of a new fish processing plant. Reconstruction spending following Cyclone Pam boosted economic activity in Tuvalu and Vanuatu, with the upgrade of the airport runway in Vanuatu providing additional tourism opportunities. Improved weather, stronger tourism, and remittances supported growth in the Federated States of Micronesia, Kiribati, and the Marshall Islands. In Nauru, the Australian Regional Processing Center, together with construction activities related to the upgrading of the port, continues to support demand. Growth stagnated in Palau, also reflecting a government decision to limit the number of charter flights on the islands to reduce pressure on the infrastructure.

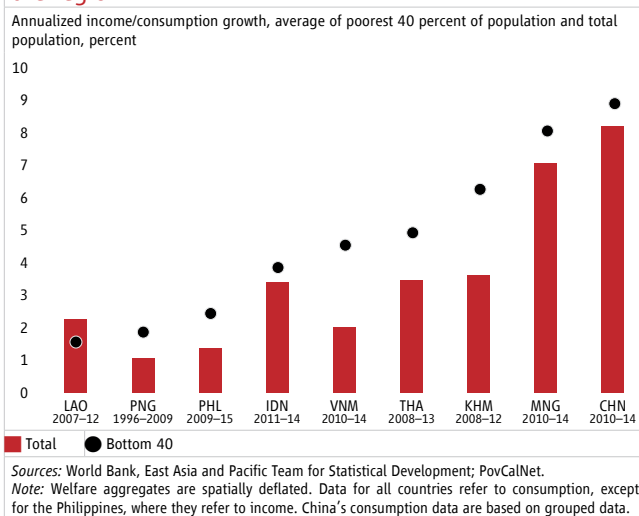
Regional fisheries continue to boost public finances in many PICs. Record tuna catches, and the introduction of the “vessel-day scheme” (a regional agreement that establishes the minimum price of a vessel day and limits the total number of vessel days sold) continued to deliver large budget windfalls in Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, and Tuvalu. Several of these countries placed part of the surpluses into sovereign wealth funds, to finance the budget in future years. In Samoa, fiscal consolidation accelerated, as domestic revenues increased and expenditure was contained, in part due to the winding down of cyclone reconstruction efforts. In contrast, the budget deficit further increased in Fiji in 2016, with the cyclone recovery program expected to add around 2.1 percentage points of GDP to spending. Similarly, the deficit is estimated to have increased in Tonga, where lower-than-expected development grants, and higher spending on cyclone reconstruction and wages, more than offset robust revenues. In Vanuatu, a large budget deficit is expected in 2016, reflecting the start of a number of reconstruction projects.

Poverty and inclusiveness: sustained progress, but challenges remain

Poverty rates have continued to decline in most countries, and are also now falling in the Philippines. In general, sustained reductions in poverty rely on rapid growth in labor incomes among the poor, although public transfers can also make a significant contribution (Box I.A.4). In Indonesia, continued reductions in poverty reflect sustained economic growth and low unemployment. In Cambodia and Vietnam, reductions in poverty largely reflect a structural transformation, with robust growth of employment in secondary and tertiary sectors compensating for stagnant incomes in agriculture. In China, while growth slowed in 2016, the economy created more jobs than in previous years. Further declines in unemployment were recorded in Indonesia, the Philippines, and the Solomon Islands. Livelihoods also benefited from higher public transfers (in Indonesia, Malaysia, and the Philippines), and from public investment focused on lagging regions and critical services (in Malaysia, Thailand, and the PICs). In contrast, in Mongolia, weak growth is having a disproportionate impact in labor-intensive sectors, including manufacturing and services. Similarly, in Papua New Guinea, the sharp growth slowdown resulted in a contraction of employment in nonresource sectors.

The bottom 40 percent of the population has enjoyed relatively fast income growth across much of the region, with the exception of Lao PDR (Figure I.A.28). New surveys also indicate that inequality is starting to decrease in several countries, including the Philippines. In China, there is a growing consensus that inequality has either leveled off or declined in recent years, after growing rapidly for several decades.³ Despite this, in many countries the public perception is that inequality is high and rising, with income and wealth increasingly concentrated at the very top of the distribution, and everyone else facing an uneven playing field.

Figure I.A.28. The bottom 40 percent of the population has enjoyed relatively fast income growth across much of the region



³ There is a growing consensus that this development has been underpinned by the policy focus on supporting growth in rural areas, recently urbanized areas, and small and medium-sized cities, and by the expansion of social protection programs in rural areas, and possibly the greater enforcement of minimum wage regulations.

Box I.A.4. Poverty and Jobs in East Asia¹

Over the last two decades, poverty has decreased dramatically across most of developing East Asia. Between 1990 and 2013, the number of people in the region living in extreme poverty fell by over 920 million. Over that period, many countries have enjoyed rapid economic growth, supported by increases in agricultural productivity, structural transformation, growth in exports, increasing integration into global value chains, and a generally favorable business environment.² These macroeconomic trends correlate at the microeconomic level with increased economic opportunities for households.

At the household level, two main factors explain changes in living standards: labor and nonlabor incomes. Labor incomes depend on the number of household members that are able to work, the number that actually work, and the incomes they earn from that work. The number of members that can potentially work in a household depends on type of family and the life-cycle stage of its members; the larger the share of able-bodied adults, the larger the household's potential labor income. However, potential workers earn labor incomes for the family only if they actually have a job. And the magnitude of these labor incomes depends on how much they earn (be it in salary work, farming, or their own business) for their hours of work. In contrast, nonlabor incomes do not involve current labor market participation. Examples include public transfers, such as pensions, cash transfers, unemployment insurance, and other forms of social security and social assistance; rents from real estate; and interest and dividends received from ownership of financial assets.

The relative importance of each of the above factors for recent poverty reduction is analyzed across a sample of developing EAP countries. Countries are chosen based on data availability. The surveys used cover the Philippines during 2009–15, Thailand during 2007–13, and Mongolia and Vietnam during 2010–14.³ These surveys contain information on individual wages and employment, as well as other sources of income such as farming, returns to financial and real estate assets, and public transfers.

Poverty rates declined over time in all the countries under study. Poverty is defined as household income per capita falling below the global poverty line of US\$3.10-a-day at 2011 purchasing power parity (PPP) prices.⁴ In general, reported poverty levels are lower using this global poverty line than the official national poverty lines (put differently, the global poverty line is lower than the national poverty lines), with the exception of the Philippines. However, the direction of changes over time is the same regardless of the specific poverty line adopted (Table BI.A.4.1). As a caveat, these surveys may not capture very recent

1 Prepared by Samuel Freije-Rodriguez, Xubei Luo, and Judy Yang.

2 See the forthcoming World Bank report, *Richer and Fairer: An East Asian Miracle for the 21st Century*.

3 In all countries, official household surveys are used: in Mongolia, the Household Socio-Economic Survey; in the Philippines, the Family Income and Expenditure Survey; in Thailand, the Household Socio-Economic Survey; and in Vietnam, the Household Living Standard Survey.

4 The analysis adopts this global definition of poverty, rather than official national poverty lines, for two reasons: this approach allows for cross-country comparisons; and decomposing changes in poverty changes into the impact of different income sources requires poverty to be defined in terms of income. Official poverty estimates vary in terms of both the poverty threshold, and the welfare aggregate used to define the threshold. In particular, poverty is computed using consumption in Mongolia, Thailand, and Vietnam, but income in the Philippines. And the official poverty line, in 2011 PPP terms, equaled, in Mongolia, US\$5.79 in 2014; in the Philippines, US\$3.00 in 2015; in Thailand, US\$6.25 in 2013; and in Vietnam, US\$3.44 in 2014.

(continued)

(Box I.A.4 continued)

developments; in particular, the pace of poverty reduction in Mongolia may have decelerated in 2016, owing to the macroeconomic crisis and the consequent slowing of growth. Since the time spanned by the surveys differs across countries, the analysis focuses on the annualized percentage point change in poverty. As discussed, this is then split into the labor and nonlabor income components. In turn, the labor income component is split into demographic, employment, and labor income per employed adult components.⁵

Table BI.A.4.1. Poverty rates and changes for selected EAP countries

Percentage of total population

	<i>Mongolia 2010–14</i>	<i>Philippines 2009–15</i>	<i>Thailand 2007–13</i>	<i>Vietnam 2010–14</i>
Using global poverty line (US\$3.10-a-day, 2011 PPP)				
Initial	23.7	31.0	9.3	13.0
Final	14.5	24.8	3.1	10.2
Change	-9.2	-6.1	-6.1	-2.8
Using national poverty line				
Initial	38.8	26.3	20.0	20.7
Final	21.6	21.5	10.9	13.5
Change	-17.2	-4.8	-9.1	-7.2

Source: World Bank staff estimates.

Reductions in poverty are larger where the labor incomes of the poor have increased faster. In particular, in Mongolia, relatively rapid growth in labor incomes, stemming from rising employment rates, wages, and farm incomes, accounted for a 2.2 out of the total 2.3 percentage points annualized reduction in poverty (Figure BI.A.4.1, red bars in all panels, referring to employment rates, and blue bars, referring to labor incomes per employed adult). In the other countries, poverty fell more slowly—by an annualized 1 percentage point in the Philippines and Thailand, and 0.7 percentage points in Vietnam. But, similarly, a large share of the total poverty reduction was accounted for by growing farm incomes and wages in Thailand, and by growing wages (offsetting a fall in farm incomes) in the Philippines and Vietnam.

Demographics have had a noticeable impact on poverty. In the Philippines, and to a lesser extent in Thailand and Vietnam, the aggregate dependency ratio has been falling in recent years, so that demographics has helped reduce poverty (Figure BI.A.4.1, green bar in all panels). In contrast, in Mongolia, a rising dependency ratio acted to increase poverty.⁶

5 Formally, household income per capita (Y_{pc}) may be decomposed as follows (see Paes de Barros et al. 2006):

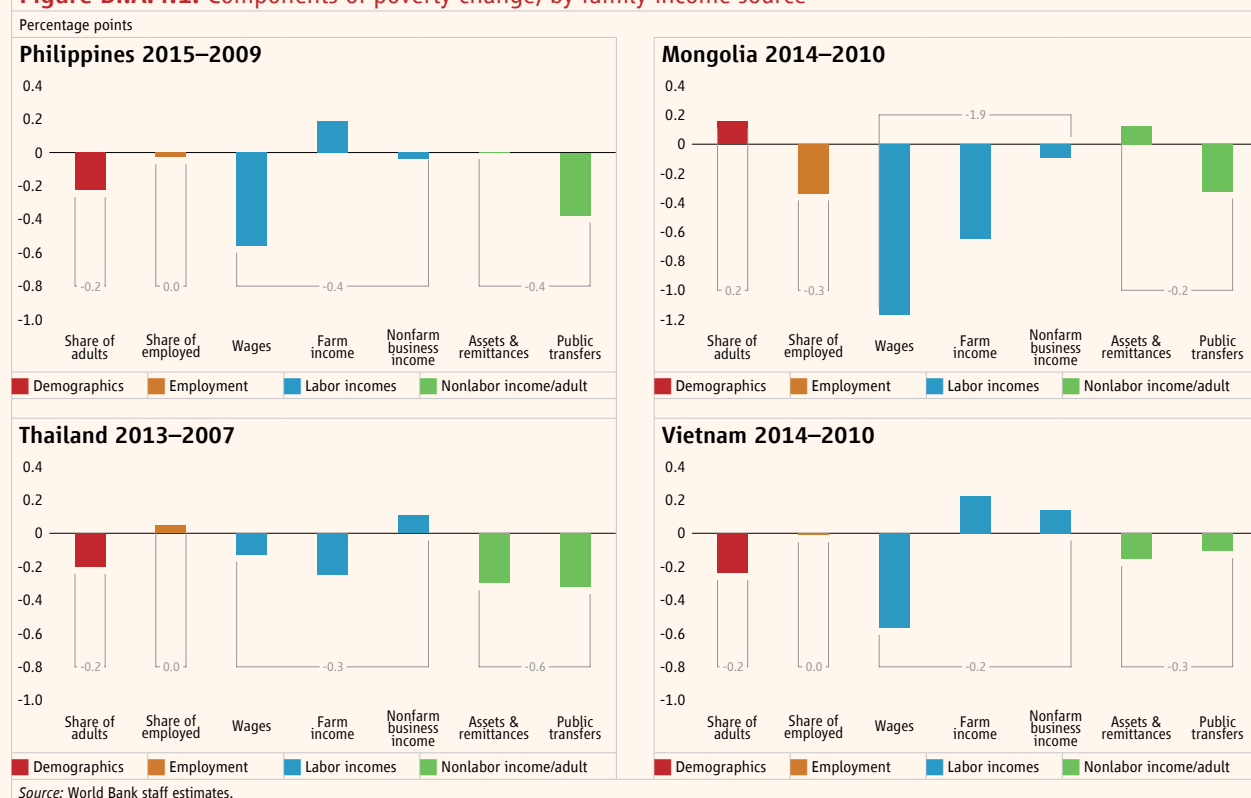
$$Y_{pc} = n_A/n [n_E/n_A (\sum_{i \in A}^n y_i^L) + 1/n_A \sum_{i \in A}^n y_i^{NL}],$$

where (n_A/n) denotes the share of adults in a household, which is multiplied by income per adult; and income per adult is further decomposed into the amounts reflecting labor earnings (y_i^L) and nonlabor earnings (y_i^{NL}). To compute contributions to the change in poverty, counterfactual distributions are calculated by replacing the value of a component in the initial period with its corresponding value in the final period. Since panel data are not available, households are sorted by their income per capita, and relative household ranks are assumed constant. The decomposition is implemented using the method developed by Azevedo, Nguyen, and Sanfelice (2012), where the cumulative effect of each component is calculated across all paths in every possible order, and then averaged.

6 The dependency ratio fell from 40.5 to 36.5 percent in the Philippines, from 29.9 to 28.2 percent in Thailand, and from 33.7 to 29.8 percent in Vietnam, during 2005–15. It increased in Mongolia from 30.8 to 32.3 percent during 2010–15.

(continued)

(Box I.A.4 continued)

Figure BI.A.4.1. Components of poverty change, by family income source

In most countries, public transfers have also made a significant contribution to poverty reduction. They account for a 0.4 percentage point annualized reduction in poverty in the Philippines, and 0.3 percentage points in Mongolia and Thailand (Figure BI.A.4.1, second green bar in all panels). Only in Vietnam is the impact of transfers small compared to other drivers of poverty reduction.

In Mongolia, the commodity boom and government programs have had a significant impact on poverty reduction. Real wages outside agriculture grew by 28 percent, driven by labor productivity growth. Earnings in agriculture rose by an even faster 77 percent, reflecting higher livestock prices and a move by many households into the production of animal byproducts, subsidized under a government incentive scheme. The various transfers programs, including cash transfers for children, mothers, and the elderly, have also contributed to a large share of the welfare improvement among low-income families. With the end of the commodity boom, there is now a need for significant fiscal adjustment, and for major reforms in the design of these programs to ensure their sustainability.

In the Philippines, higher wages as well as transfers played a key role in poverty reduction. Wages in manufacturing and services, especially for low-skilled workers, grew rapidly, in line with sectoral labor productivity. This compensated for slow productivity growth in agriculture, which has particularly affected small producers. The large impact of transfers is partly due to recent improvements in the coverage,

(continued)

(Box I.A.4 continued)

targeting, and monitoring of social programs. However, looking ahead, further poverty reductions will hinge on reducing unemployment (among the highest in the region, hovering around 6 to 7 percent during 2010–15), particularly among the young.

In Thailand, farm incomes played a key role in poverty reduction. The importance of farm income partly reflects structural problems: a slowdown in nonagricultural employment growth and the stalling of structural transformation, combined with the struggle within agriculture to move labor from low- to higher-productivity jobs. Rising farm incomes largely reflect the impact of increases in agricultural prices rather than productivity; as agricultural prices fall back again, a process that has already started, the impact on poverty will no longer be favorable. Private transfers, consisting mainly of remittances, are also an important source of income: over one-fifth of Thai households have migrants, with the highest proportions being from poor households and disadvantaged regions.

In Vietnam, nonagricultural jobs have been the main drivers of poverty reduction. The secondary and tertiary sectors grew almost twice as fast as the agricultural sector over the period (about 6 percent and 3 percent a year, respectively). The poor obtain a relatively high share of income from farming, but their agricultural income per capita is lower than that of other groups. And, over the sample period, incomes from farming increased only for those in the top 40 percent of the income distribution.

Ultimately, further sustained reductions in poverty will rely on rapid growth in labor incomes among the poor. Public transfers and remittances play an important role in sustaining a minimum welfare, and compensating for unforeseen shocks. But further increases in the standard of living, leading to the eradication of poverty and the reduction of vulnerability, require gains in employment and real earnings, whether through wages, farm incomes, or business incomes. Moreover, increases in labor earnings, linked to gains in labor productivity, will become even more critical as East Asian countries age, dependency ratios rise, and the favorable demographic conditions of the past dissipate.

References

Azevedo, Joao Pedro, Minh Cong Nguyen, and Viviane Sanfelice. 2012. *Adecomp: Stata module to estimate Shapely Decomposition by Components of a Welfare Measure*. Statistical Software Components S457562, Boston: Boston College Department of Economics.

Paes de Barros, Ricardo, Mirela de Carvalho, Samuel Franco, and Rosane Mendonca. 2006. "Uma análise das principais causas da queda recente na desigualdade de renda brasileira". *Economica* 8(1).

I.B. Outlook and Risks

Global growth and commodity prices are projected to recover slowly, while global financial conditions tighten gradually. Growth in developing East Asia and Pacific is expected to remain resilient, as continued buoyancy in domestic demand, including public and increasingly private investment, is supported by strengthening external demand. China is expected to continue its gradual transition to lower, more sustainable growth. In the rest of the region, growth is expected to increase moderately. Poverty will continue to fall across most of the region, reflecting rising labor incomes and low unemployment. Nevertheless, global and regional vulnerabilities mean that the positive prospects for growth and poverty reduction in the region in this base case are subject to significant risks. A sharp global financial tightening and rising financial vulnerabilities among households and corporates may test countries with elevated external debt, or high and rising private sector leverage. Significant slowdowns in world trade, whether stemming from mounting global protectionist pressures or from unanticipated weakness in global activity, could adversely affect most of the region. Fiscal deficits are expected to remain elevated in several countries, in some cases posing risks to fiscal sustainability.

Growth is expected to moderate in China, but pick up slightly in the rest of the region

Global growth and commodity prices are projected to recover slowly, while global financial conditions tighten gradually (Box I.B.1). Global growth is projected to increase from 2.3 percent to 2.7 percent in 2017, driven by some acceleration in advanced economies and a more robust pickup in developing economies. Monetary policy is expected to continue normalizing in the United States, reflecting the pickup in activity, and remain accommodative in other advanced economies. Capital flows to the region are projected to remain relatively stable. Oil prices are expected to edge upward, but are unlikely to return to historical highs, given uncertainty regarding whether recent cuts in oil production will be maintained, as well as the potential flows of shale oil; similarly, well-stocked global food markets, and the considerable spare capacity in the mining and metal industry, will limit increases in other commodity prices.

Growth in developing East Asia and Pacific (EAP) is expected to remain resilient during 2017–19, as continued buoyancy in domestic demand is supported by gradually strengthening external demand. The outlook remains more positive than for other regions, with the exception of South Asia. China's gradual transition to slower but more sustainable growth is projected to continue (Table I.B.1). In the large ASEAN economies, growth is expected to pick up slightly. In several countries, activity will also be supported by increased government spending, especially on infrastructure projects. Commodity exporters will benefit from the projected recovery in commodity prices.

China's growth moderation and rebalancing are expected to continue in the medium term. Growth is projected at 6.5 percent in 2017, reflecting somewhat stronger net exports than in 2016 but a moderation in the real estate sector following tightening policy measures. Growth is expected to further moderate to 6.3 percent

in 2018–19, as economic rebalancing gradually continues in response to productivity-oriented reforms, such as reducing excess capacity and leverage in the corporate sector, including state-owned enterprises.¹

Table I.B.1. East Asia and Pacific: GDP growth projections

Percent change from a year earlier, unless otherwise noted

	2015	2016	Forecast			Change from Oct. 2016 ^a (percentage points)		
			2017	2018	2019	2016	2017	2018
Developing EAP	6.5	6.4	6.2	6.1	6.1	0.0	0.0	0.1
China	6.9	6.7	6.5	6.3	6.3	0.0	0.0	0.0
Dev. EAP excl. China	4.8	4.9	5.0	5.1	5.2	0.1	0.0	0.0
Developing ASEAN	4.8	4.9	5.0	5.1	5.2	0.0	0.0	-0.1
Indonesia	4.9	5.0	5.2	5.3	5.4	-0.1	-0.1	-0.2
Malaysia	5.0	4.2	4.3	4.5	4.5	0.0	0.0	0.0
Philippines	5.9	6.8	6.9	6.9	6.8	0.4	0.7	0.7
Thailand	2.9	3.2	3.2	3.3	3.4	0.1	0.1	0.0
Vietnam	6.7	6.2	6.3	6.4	6.4	0.2	0.0	0.1
Cambodia	7.0	6.9	6.9	6.9	6.7	-0.1	0.0	0.0
Lao PDR	7.4	7.0	7.0	6.8	7.2	0.0	0.0	0.0
Myanmar	7.3	6.5	6.9	7.2	7.3	-1.3	-1.5	-1.1
Mongolia	2.2	1.0	-0.2	1.9	8.0	0.9	-2.1	-1.7
Fiji	3.6	2.0	3.7	3.5	3.3	-0.4	-0.2	-0.2
Papua New Guinea	6.8	2.4	3.0	3.2	3.4	0.0	0.0	0.0
Solomon Islands	3.3	3.0	3.3	3.0	3.0	0.0	0.0	0.0
Timor-Leste ^b	4.3	5.1	4.0	5.0	6.0	0.1	-1.5	-1.0
Assumptions about the external environment:^c								
World	2.7	2.3	2.7	2.9	2.9	0.0	0.0	0.0
Advanced economies	2.1	1.7	1.8	1.8	1.7	0.2	0.1	0.0
Emerging and developing economies	3.5	3.4	4.2	4.6	4.7	-0.1	-0.2	-0.1
Crude oil (spot, US\$/barrel)	51	43	55	60	61	-0.2	2.0	0.0
Nonenergy commodities (index, 2010 = 100)	82	80	83	84	85	1.3	1.9	0.7
Food (index, 2010 = 100)	91	92	93	94	95	1.3	-0.3	-0.3

Sources: World Bank data and staff estimates.

Note: a. World Bank East Asia and Pacific Economic Update, October 2016 (World Bank 2016a); b. Nonoil GDP.; c. Global growth forecasts represent preliminary working assumptions. Commodity price forecast drawn from the World Bank Commodity Markets Outlook, January 2017 (World Bank 2017a).

In the other large developing economies in the region, growth is projected to pick up moderately. In the *Philippines*, growth expectations have been revised upward sharply, to 6.9 percent in 2017–18, reflecting increases in public infrastructure spending, a recent uptick in private investment, continued credit expansion, and growth in remittances. In *Indonesia*, growth is projected to rise to 5.2 percent in 2017 and 5.4 percent in 2019, as commodity prices firm, credit growth continues to respond to loose monetary policy, and the impact of fiscal consolidation dissipates over time.² In *Malaysia*, growth is expected to edge up to 4.3 percent in 2017 and 4.5 percent by 2018. Domestic demand will benefit from a stable labor market, income support measures, and higher infrastructure spending; exports will again benefit from rising commodity prices and recovery in growth in advanced economies. In *Vietnam*, growth will recover to 6.3 percent in 2017, as the impact of the 2016 drought

¹ In 2017, targets call for production capacity to be cut by 50 million tons for steel and 150 million tons for coal.

² Projections have been revised downward slightly since October 2016, reflecting marginally lower growth in 2016 than expected, and weak retail sales in January 2017.

Box I.B.1. Global Outlook and Risks¹

Global growth is expected to strengthen in 2017. After reaching a postcrisis low of 2.3 percent in 2016, global growth is expected to increase to a moderate 2.7 percent in 2017, mainly driven by stronger growth in Emerging Market and Developing Economies (EMDEs), as obstacles to activity among commodity exporters gradually diminish (Figure BI.B.1.1). Among advanced economies, growth is projected to recover modestly, from 1.7 percent in 2016 to 1.8 percent in 2017. These forecasts do not incorporate the effects of policy proposals by the new U.S. administration, as their precise content remains uncertain.

Figure BI.B.1.1. Global GDP growth

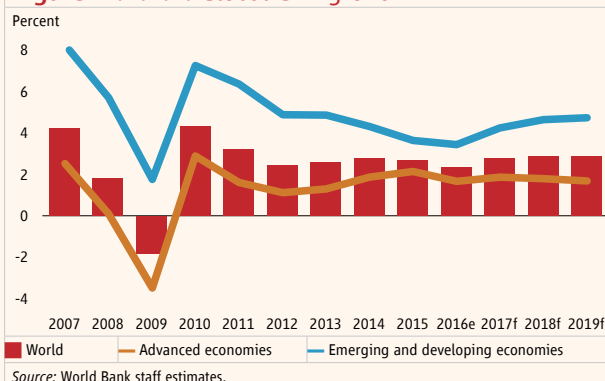
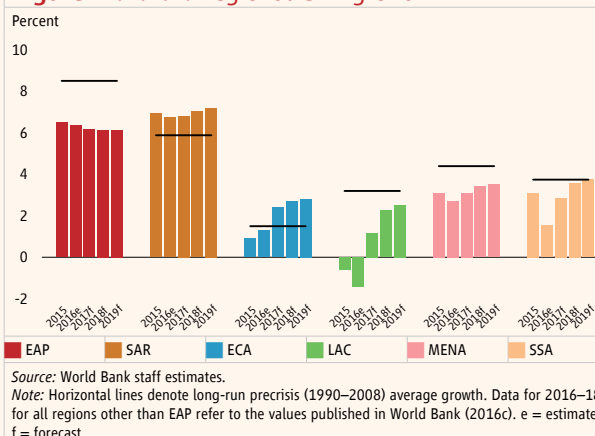


Figure BI.B.1.2. Regional GDP growth



EMDE growth is expected to accelerate to 4.2 percent in 2017, from 3.4 percent in 2016. With commodity prices gradually recovering, growth among commodity-exporting EMDEs is projected to average 2.3 percent in 2017 after two consecutive years of near stagnation, still significantly below historical averages. In contrast, growth in commodity-importing EMDEs is expected to remain broadly stable at 5.6 percent. The growth divergence between commodity exporters and importers is projected to narrow, but regions with a large number of commodity exporters, such as Latin America and the Caribbean and Sub-Saharan Africa, will continue to underperform in 2017 (Figure BI.B.1.2). In contrast, regions dominated by large commodity-importing economies, such as East Asia and Pacific and South Asia, are projected to continue to experience solid growth this year. Growth in low-income countries is expected to recover from 4.7 percent in 2016 to 5.6 percent in 2017, as the external environment is expected to improve gradually, with commodity prices increasing moderately from low levels, and global trade regaining some momentum.

Global trade is projected to grow faster than global output in 2017. The recovery in global trade growth will be supported by stronger import demand from major advanced economies, and a diminished drag from weak import demand in commodity-exporting EMDEs. However, structural impediments to trade, including maturing global value chains and uncertainty about trade policies in the United States, will continue to weigh on the medium-term outlook.

¹ Growth forecasts are based on *Global Economic Prospects January 2017: Weak Investment in Uncertain Times* (World Bank 2017b). Commodity price forecast are drawn from *Commodity Markets Outlook January 2017* (World Bank 2017a).

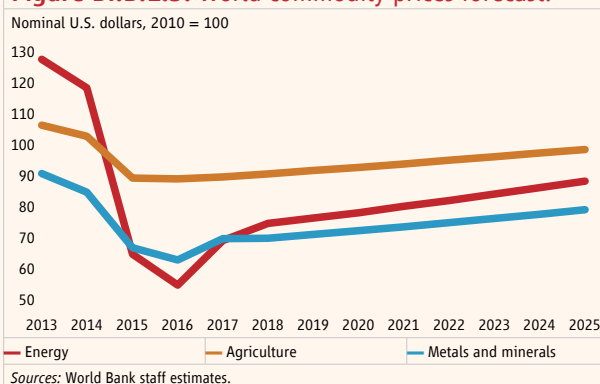
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(Box I.B.1 continued)

Energy and nonenergy commodity price indexes are projected to increase by 26 percent and 3 percent, respectively, in 2017. These increases represent slight upward revisions from the October 2016 forecasts. Oil prices are expected to average US\$55 per barrel in 2017, up from US\$43 per barrel in 2016 (Figure BI.B.1.3). The increase largely reflects the agreements among some Organization of the Petroleum Exporting Countries (OPEC) producers and non-OPEC producers to limit output in the first half of 2017. Prices are projected to increase to US\$60 per barrel in 2018 assuming a balanced market and no additional OPEC supply restraint. Average metal and mineral prices are projected to rise by 11 percent in 2017, the first increase in six years, as a result of supply constraints, including closures of large lead and zinc mines and stronger-than-expected demand from China. Overall agricultural prices are expected to remain stable in 2017, but the outlook varies across individual commodities depending on supply conditions. Small increases are expected for oils and agricultural raw materials, owing to adverse weather affecting supplies from East Asia. These will be offset by a small decline in grains prices, given favorable growing conditions in Central Asia, Europe, and North America.

Monetary policy normalization, improved growth prospects, and elevated policy uncertainty in advanced economies are likely to weigh on capital flows to EMDEs in 2017. The United States is expected to increase interest rates at a moderate pace in 2017 and 2018, following two earlier hikes implemented in this tightening cycle. The tightening cycle could gather pace if fiscal stimulus were undertaken in the United States, although this is not assumed in the baseline projections absent additional details. In Japan, the Central Bank has committed to expanding its monetary base and maintaining policy rates at record-low levels until inflation exceeds 2 percent for a sustained period. However, rising inflation could lead to a slow unwinding of large asset purchase programs earlier than expected. Overall, aggregate capital inflows to EMDEs are expected to remain subdued, affecting local currencies and assets. Capital outflows from China—the key driver of aggregate outflows in EMDEs—should continue to ease, reflecting tighter capital controls and heightened foreign exchange interventions. Relatively attractive valuations should support portfolio inflows to EMDE, but FDI is likely to remain weak. Higher oil and commodity prices could partly offset the negative impact for commodity exporters. This outlook is conditioned on an improved EMDE growth outlook and a gradual tightening of global financing conditions.

Although the external environment is expected to gradually improve for EMDEs, the range of possible outcomes has widened significantly given ongoing policy uncertainties, and there are still significant risks to global growth. Political developments in 2016—most notably, the U.S. presidential elections and the U.K. Brexit referendum—have heightened policy uncertainty, and their effect may be compounded by upcoming elections in several European countries. This and other risks, including in particular financial market disruptions amid tighter global financing conditions, may be amplified over the medium term by mounting protectionist tendencies, slower potential growth, and elevated vulnerabilities in some EMDEs. However, any fiscal stimulus in major economies, such as the United States, could lead to stronger-than-expected global growth, improving the outlook.

Figure BI.B.1.3. World commodity prices forecast.

dissipates, and in line with favorable market sentiments and continued strong FDI flows. In *Thailand*, activity is expected to benefit from improved confidence following the adoption of the new constitution and the royal transition, large public investment projects, and robust tourism, although continued weak productivity will cap growth at 3.4 percent even in 2019.

The smaller regional economies are generally expected to continue to benefit from rapid growth in their neighbors and higher commodity prices. In *Cambodia*, growth will remain around 6.9 percent, as stronger fiscal expansion, agricultural reforms, and continued buoyancy of tourism offset a slight moderation in construction and garments. *Lao PDR* also enjoys a strong outlook, as increases in electricity generation and exports offset the impact of the envisaged fiscal consolidation. In *Myanmar*, growth is projected to accelerate as infrastructure spending (in power, transportation, and communications) rises, and delayed foreign investment commitments are unlocked in response to strengthened macroeconomic stability and progress on structural reforms. In *Mongolia*, growth will stagnate in 2017, partly reflecting efforts to reduce public debt to sustainable levels, before staging a modest recovery in 2018. A strong rebound is projected starting in 2019, reflecting successful macroeconomic stabilization, structural reforms, and the likely expansion of mining investments. Similarly, in *Papua New Guinea*, growth will gradually recover as a number of mining and petroleum prospects come on stream. In *Timor-Leste*, the elections later this year will slow some public investment projects; however, nonoil growth will recover in outer years, as the impact of falling oil production is cushioned by large withdrawals from the sovereign wealth fund.

Poverty will continue to fall across most of the region, reflecting rising labor incomes and low unemployment

Extreme and moderate poverty, already low in developing EAP compared to other developing regions, is projected to continue falling across most countries, consistent with sustained or gradually increasing growth (Table I.B.2). In China, continued robust growth, the shift to more labor-intensive services, buoyant job creation and wages, and falling income inequality will continue driving poverty reduction. In the Philippines, as the economic and social reforms of the new development plan are implemented, reductions in poverty and inequality are projected to continue or even accelerate. Likewise, in Indonesia, poverty is expected to continue falling, although at a slightly slower pace.

Prospects for poverty reduction are in some cases being strengthened by propoor policies. Indonesia boosted its conditional cash transfer program in 2016, and similar measures are expected in Malaysia. In Thailand, the public investment program is being

Table I.B.2. Poverty is projected to continue falling across most countries

	2016	2017	2018	2019
Poverty, US\$1.90-a-day (2011 PPP): Estimates and projections				
Developing EAP				
Poverty rate (%)	2.0	1.7	1.5	1.3
Number of poor (millions)	41	35	31	27
Developing EAP excluding China				
Poverty rate (%)	4.7	4.2	3.7	3.3
Number of poor (millions)	30	27	25	22
Poverty, US\$3.10-a-day (2011 PPP): Estimates and projections				
Developing EAP				
Poverty rate (%)	10.6	9.5	8.4	7.6
Number of poor (millions)	215	193	173	156
Developing EAP excluding China				
Poverty rate (%)	19.6	18.5	17.5	16.5
Number of poor (millions)	129	123	118	112

Sources: World Bank East Asia and Pacific Team for Statistical Development; PovCalNet.

Note: The most recent household income and expenditure surveys vary from 2006 in Kiribati to 2015 in Indonesia. Estimates are extrapolated based on per capita GDP growth and historical estimates of the growth elasticity of poverty. PPP = purchasing power parity.

increasingly focused on less well-off regions. In Lao PDR and Timor-Leste, continued investments in basic infrastructure, including roads, electrification, irrigation, and water and sanitation, aim to improve access to services and opportunities for income generation.

However, the outlook for poverty reduction remains mixed in a few countries and among some groups. In Mongolia, the recent decreases in poverty may decelerate or even reverse in the short term, reflecting the sharp growth slowdown and high unemployment. But the medium-term outlook remains more positive, assuming successful macroeconomic stabilization and the projected recovery in commodity prices. Vulnerability to weather shocks remains a challenge for faster poverty reduction among the region's rural, agricultural poor.

Domestic demand will support growth, with a rising contribution from exports, across much of the region

Private consumption will remain buoyant, supported by tight labor markets and higher public transfers. Overall, private consumption will account for more than 40 percent of all growth, or 60 percent in the region excluding China (Figure I.B.1). Private consumption growth is expected to stabilize at around 7 percent in China, the Philippines, and Vietnam, 6 percent in Malaysia, and above 5 percent in Indonesia. Robust labor markets will put upward pressure on wages: unemployment is currently at its lowest level since at least 2012 in China, Indonesia, the Philippines, and Vietnam, and remains low in Malaysia and Thailand. As a result, monthly earnings have been trending upward in Indonesia and Vietnam, although pressures remain more subdued in Malaysia and Thailand. Increases in social transfers, and growing remittances, will also continue supporting household incomes.

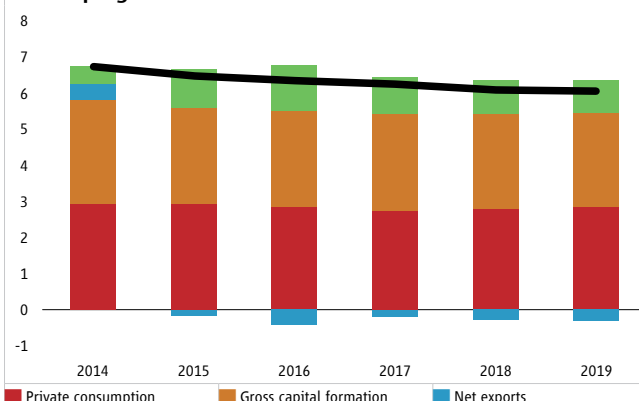
The outlook for public consumption varies, reflecting countries' different policy choices. Public consumption growth is expected to accelerate in Cambodia, Malaysia, and the Philippines, where the 2017 budgets all envisage increases in public sector wages, and in Indonesia. In contrast, public consumption growth is projected to decelerate in Mongolia, consistent with efforts to narrow the large fiscal imbalance and support macroeconomic stabilization, and in Lao PDR and Vietnam.

Investment growth will moderate in China and Vietnam but increase in most of the rest of the region, as governments embark upon ambitious public investment projects, and businesses benefit from continued low interest rates and improved sentiment. In China, investment growth is expected to moderate, as the authorities attempt to contain the buildup in debt and reduce excess capacity. In the region excluding China, the contribution of investment to growth is expected to rise from 1.8 percentage points in 2016 to 2.4 percentage points in 2019, reflecting a scale-up of public investment, as well as robust private investment underpinned by broadly sound fundamentals and in some cases ongoing structural reforms. In recent years, a number of economies, including Cambodia, Malaysia, Myanmar, and Vietnam, have seen a decline in capital expenditure and as a result, a number of developing EAP countries, including Indonesia, the Philippines, Thailand, and Fiji, may be underinvesting in infrastructure (Asian Development Bank 2017). Looking ahead, the authorities in several countries have announced ambitious plans to increase capital expenditure and address infrastructure bottlenecks. Investment is projected to grow especially rapidly in the Philippines, where the authorities are embarking upon a multiyear infrastructure program of about US\$160 billion (approximately half of 2016 GDP) (Figure I.B.2). In Thailand, the 2017 budget

Figure I.B.1. Domestic demand will support growth, with at most a modest contribution from net exports, across the region as a whole...

Contribution of expenditure components to GDP growth (percentage points)

Developing EAP



Source: World Bank staff estimates.

Developing EAP excluding China

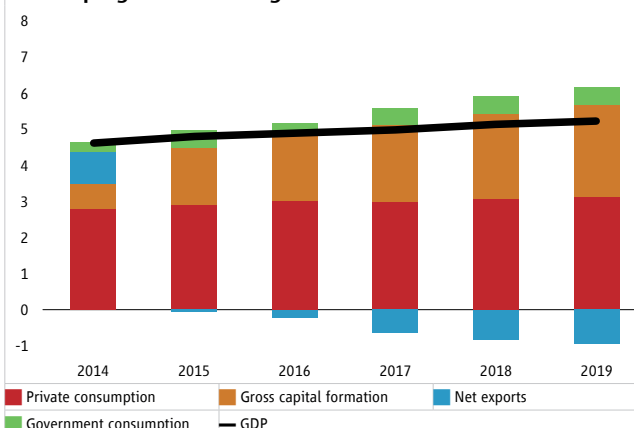
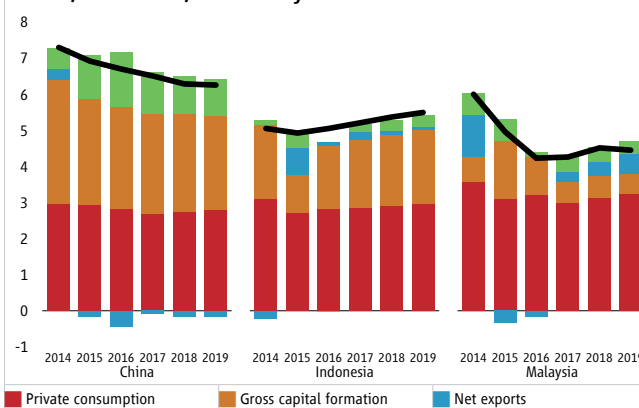


Figure I.B.2. ...across most large economies

Contribution of expenditure components to GDP growth (percentage points)

China, Indonesia, and Malaysia



Source: World Bank staff estimates.

Philippines, Thailand, and Vietnam

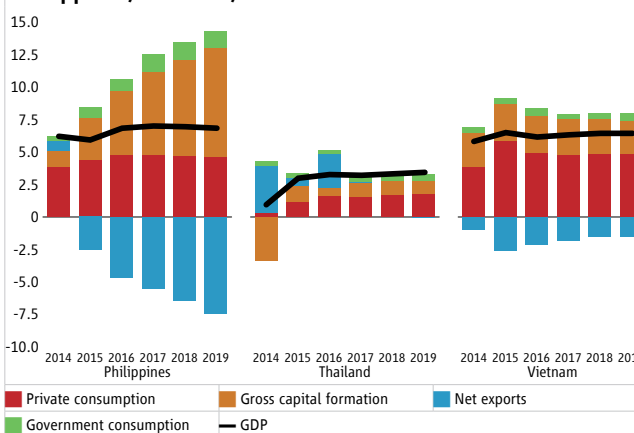
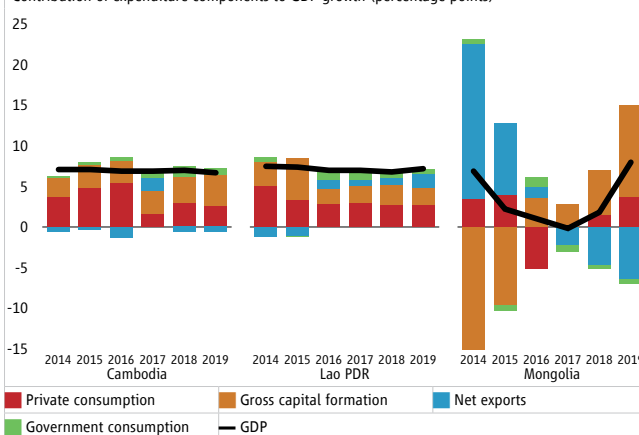


Figure I.B.3. ...and in the smaller economies

Contribution of expenditure components to GDP growth (percentage points)



Source: World Bank staff estimates.

significantly increases capital expenditure, including investments directed to economically lagging regions, and the long-delayed recovery in private investment is expected to firm up. In Malaysia, the budget envisages several large infrastructure projects, including roads and high-speed railways, to complement robust private investment. Significant but more moderate increases are projected in Indonesia and Lao PDR. In Mongolia, investment growth is expected to recover over time, conditional on macroeconomic stabilization, given the

projected pickup in commodity prices and strong prospects for mining FDI. In Vietnam, in contrast, fiscal tightening will contribute to lower investment growth.

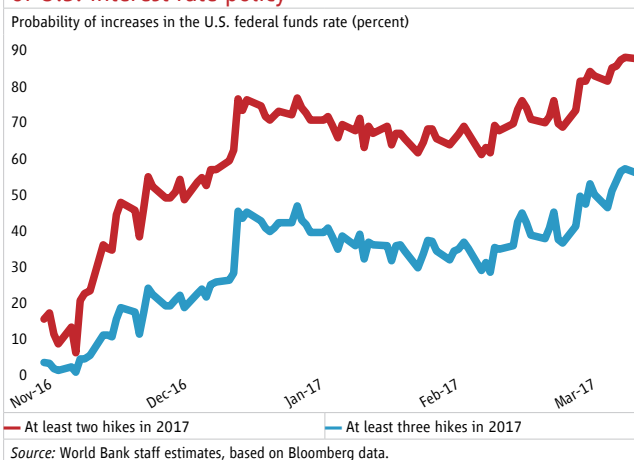
Exports are projected to gradually recover across most of the region; in some countries, rising domestic demand will also significantly boost imports. Regional manufacturing exporters are expected to benefit from the pickup in global demand, and commodity exporters from firming commodity prices (Figure I.B.1, Figure I.B.2, and Figure I.B.3). At the same time, robust domestic demand, and the region's strong participation in global value chains, will also boost imports. This effect will be particularly pronounced in the Philippines, given its investment push and buoyant consumption, as reflected in the accounting contribution of net exports to growth. In Thailand, the export potential remains limited by continued productivity weakness. In China, however, exports are expected to recover over the medium term, while the ongoing rebalancing limits import growth. In Vietnam, export performance will remain robust, building on strong FDI inflows. In Malaysia, commodity exports are expected to grow over time. In Cambodia, export growth will be underpinned by a resilient garment sector and emerging diversification into other manufacturing products. In Lao PDR, electricity exports will grow over time, partly offset by depletion of deposits at the country's two large mines.

In some commodity exporters, production bottlenecks could limit the supply response to recovering commodity prices. In Myanmar, natural gas exports will be affected by capacity constraint. In Papua New Guinea, petroleum exports will be affected by similar concerns, and mining exports by production disruptions at two mines, with knock-on effects on consumption and investments. In Mongolia, recently announced mining projects will require time to develop. In Timor-Leste, oil resources are being rapidly depleted.

The normalization of monetary policy in advanced economies may test the region's resilience, especially in countries with elevated external debt, or high and rising private sector leverage

Global financial conditions may tighten faster than anticipated, with significant implications for capital flows and financial volatility. In the United States, the expected pace of monetary policy normalization was recently revised upward, in response to the strength in U.S. labor markets and the expectation of fiscal stimulus from the new administration (Figure I.B.4). Further sharp increases are possible, and/or the term premium on long-term interest rates may increase, if inflationary pressures emerge. This could have significant repercussions, especially for the large, financially integrated regional economies. Such shocks would be associated with reduced capital inflows or indeed capital outflows from the region, U.S. dollar appreciation against regional currencies, and likely

Figure I.B.4. Markets are expecting a faster normalization of U.S. interest rate policy



increased volatility and risk premia in financial markets, as seen in the immediate wake of the U.S. election and the late-2016 increase in U.S. policy rates. As a result, debt-service burdens and debt-rollover risks would increase, especially for unhedged borrowers with short-term, foreign-currency-denominated debt. Malaysia, and to a significantly lesser extent Indonesia, Thailand, and Vietnam, have sizable external debt stocks (Figure I.B.5); in Indonesia, Malaysia, and Thailand, a significant amount of debt is denominated in foreign currency, including in U.S. dollars (World Bank 2016b); and, in Malaysia and Thailand, a significant share of external debt is short term (Figure I.B.6). Still, generally robust reserves provide a cushion against short-term volatility.³

Figure I.B.5. Malaysia, and to a significantly lesser extent Thailand and Indonesia, have sizable external debt stocks

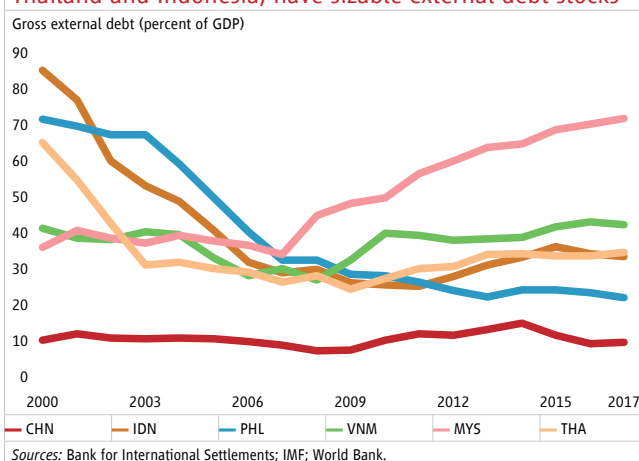


Figure I.B.6. In Malaysia and Thailand, a significant share of external debt is short term

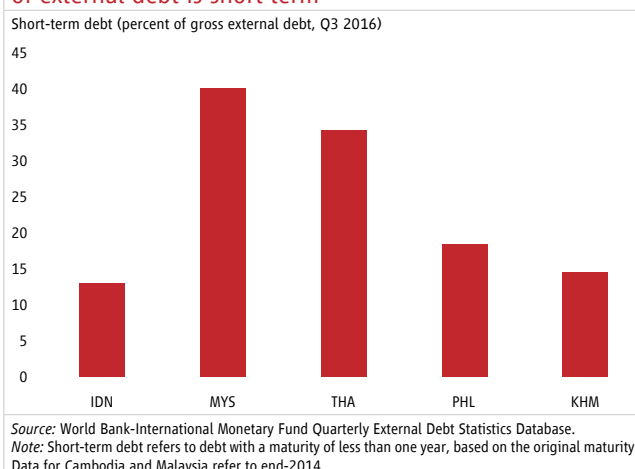


Figure I.B.7. Debt service ratio of private nonfinancial sector

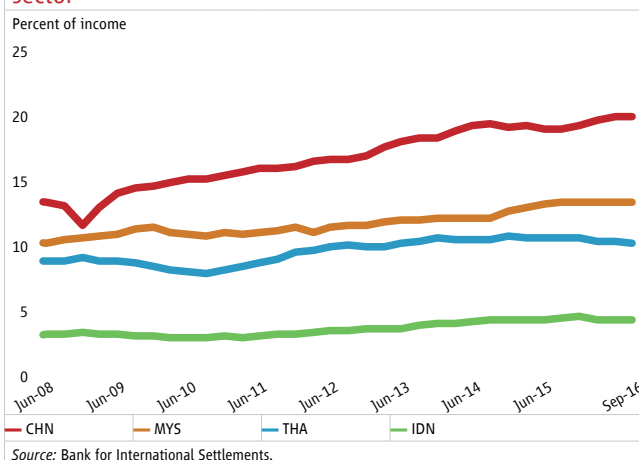


Figure I.B.8. Interest coverage ratio of listed firms



Across the large economies, these concerns are reinforced as rising corporate and household debt has already led to a gradual deterioration in debt-servicing capacity. In turn, this has raised the risk of financial

³ In Malaysia, several additional factors mitigate risks. In particular, most corporate debt takes the form of trade credits and intercompany loans, in most cases hedged by export earnings. Relatedly, loans of RM100 million (approximately US\$23 million) and above require central bank approval, and must be adequately hedged or supported by foreign currency receivables.

stress, which could spill over to banks. Debt service ratios for the private nonfinancial sector have been rising steadily over the past five years (Figure I.B.7), and are now particularly high in China, Malaysia, Thailand, and probably Vietnam. Likewise, interest coverage ratios (the ratios of available company earnings to current interest payments) have weakened significantly over the past five years in several countries, suggesting a deterioration in the financial health of corporates (Figure I.B.8).

The rise in real estate prices across much of the region is also raising financial vulnerabilities, although these risks still appear manageable, in part because of recent corrective measures. The rapid growth of credit for real estate transactions has pushed up property prices and increased household indebtedness across many regional economies. There is a risk that sharp downward corrections in real estate prices will lead to a large deterioration in banks' asset quality, and a reduction in their profitability and lending capacity. Indeed, in recent decades, boom-bust patterns in property prices have frequently led to systemic banking crises, whose resolution can prove extremely costly.⁴ In response to rising vulnerabilities, some countries have been introducing macroprudential measures. Partly as a result, the trend of rising credit and prices has moderated over the past year (Box I.B.2).

Figure I.B.9. Return on assets in the banking sector

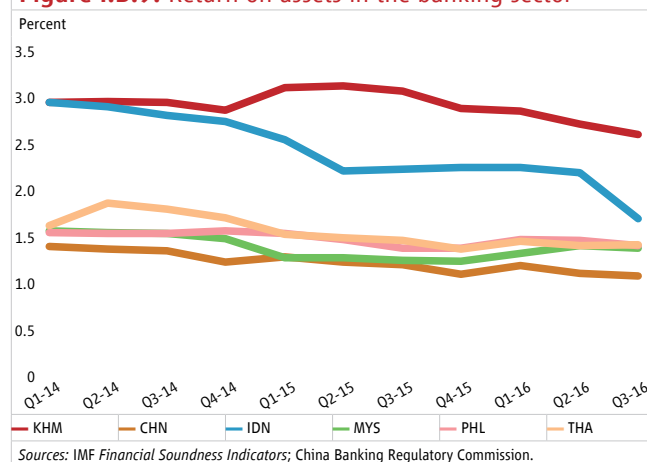
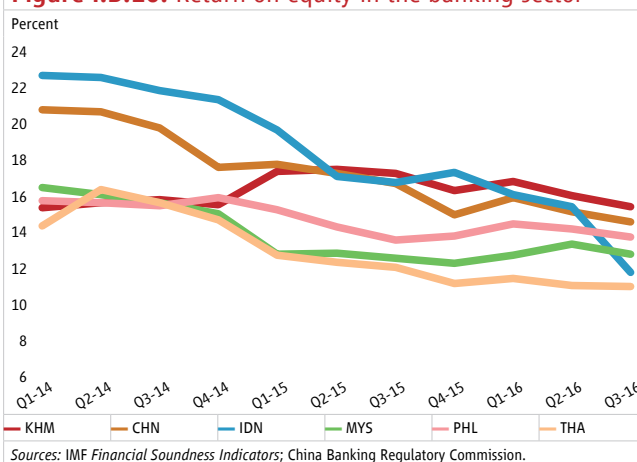


Figure I.B.10. Return on equity in the banking sector



Overall, the region's banks are relatively well capitalized, but vulnerabilities are increasing. Banking systems are facing an increasingly difficult operating environment, characterized by lower bank profitability, deteriorating asset quality, and potential liquidity risks. Banks' profitability is steadily decreasing across most of the region (Figure I.B.9 and Figure I.B.10). This partly reflects a steady increase in nonperforming loans (NPLs) (Figure I.B.11); reported NPL levels remain generally low by global standards, but whether these data accurately reflect the true extent of the deterioration in asset quality is in question in several countries.⁵ Further, bank lending margins are being squeezed as yield curves flatten worldwide. In response, banks in Indonesia, Malaysia, the Philippines, and Thailand are increasingly turning to very short-term wholesale funding, including interbank and money market financing, but this exacerbates maturity mismatches and increases exposure to interest rate risk. In China, smaller regional banks have been relying heavily on shadow banking products for liquidity, and could be

⁴ For instance, in Ireland, in the wake of the post-GFC deflation of the housing-price bubble, the public bailout of banks amounted to 40 percent of the country's GDP.

⁵ Including Vietnam, with a significant backlog of unresolved legacy nonperforming assets, and to a lesser extent China, with increasingly frequent instances of corporate distress, especially in highly indebted sectors with excess capacity.

significantly affected by the tightening of regulations on these instruments. That said, banks in the region are in general relatively well capitalized, with most of the larger economies already meeting Basel III capital requirements (Figure I.B.12),⁶ and well positioned to meet other Basel III requirements, including minimum liquidity standards.⁷

Figure I.B.11. Nonperforming assets are steadily increasing across the region

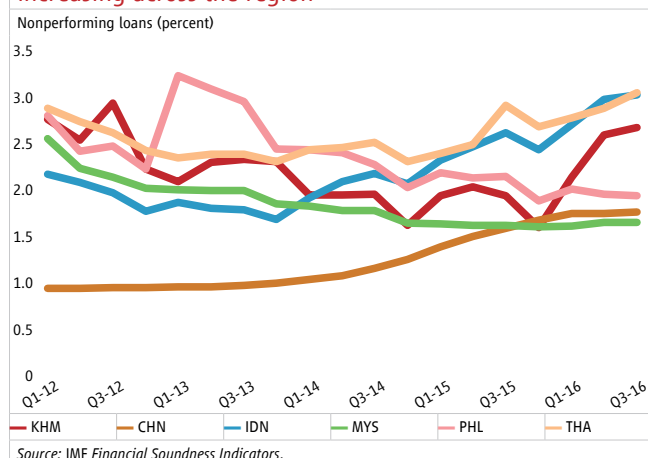


Figure I.B.12. Banks in the region are in general well capitalized

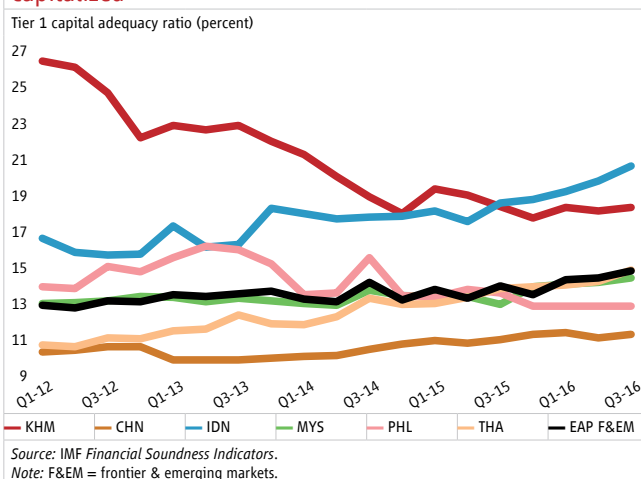


Table I.B.3. Banking resilience: estimated impact of shocks due to U.S. monetary policy tightening and depreciation against the U.S. dollar

	China	Indonesia	Malaysia	Philippines
	Shock – baseline (percentage points)			
Return on assets (percent)	-0.35	-0.09	-0.09	-0.01
Nonperforming loans (percent)	0.39	0.05	0.10	0.17
Loans / deposits (percent)	1.11	—	0.88	1.62
Memo: GDP growth (percent)	0.5	0	2.2	-0.3

Sources: Haver Analytics; IMF International Financial Statistics; national central banks; and World Bank staff estimates.

Note: Estimates based on a Bayesian VAR comprising eight variables:

- Domestic block: GDP, credit growth, exchange rate vs. U.S. dollar, domestic policy rate, nonperforming loans, loans/deposits, return on assets.
- External block: U.S. policy rate.

The following shocks are applied simultaneously:

- U.S. monetary policy shock: U.S. policy rate increases by 300 basis points.
- Exchange rate depreciation shock: 20 percent depreciation of local currency vs. U.S. dollar.

Domestic monetary policy is allowed to respond to the U.S. monetary policy tightening. The model is estimated using quarterly data for Q1 2006 – Q3 2016, detrended using an HP filter. — = not available.

Illustrative, model-based resilience tests suggest that financial systems in the region are broadly resilient to shocks, but there exist risks. Simulations indicate that even large shocks to U.S. monetary policy, combined with large exchange rate depreciations, would exert significant but in general manageable effects on banking sectors (Table I.B.3). The largest strains would emerge in China, with particularly sharp increases in nonperforming loans and decreases in profitability. And the need for caution is heightened by uncertainties about the current level of nonperforming assets, and the potential for distress at the level of individual banks to affect the rest of the financial system. In Malaysia, despite large open foreign exchange positions, negative impacts appear to be dampened by the banking sector's significant buffers.

⁶ Comprising a 6 percent minimum Tier 1 capital, a 2.5 percent capital conservation buffer, and an up to 2.5 percent countercyclical capital buffer.

⁷ Yao 2016.

Box I.B.2. The Real Estate Sector and Risks to Financial Stability¹

Low interest rates and ongoing residential shortages, due to rapidly rising real incomes, have driven up housing prices in several large regional economies in recent years, although the upward trend generally moderated in 2016. Regional banks have provided plenty of capital to the real estate sector at favorable conditions. Real housing prices have increased significantly since 2010 in several countries, in particular Malaysia, but also the Philippines and Thailand (Figure BI.B.2.1). In Indonesia, in contrast, growth in residential property prices has trended down over the past three years, reflecting the moderation of the credit boom. In China, house prices have generally been rising fast in large (“Tier 1”) cities, but much more slowly in the smaller (“Tier 2” and “Tier 3”) cities (Figure BI.B.2.2), reflecting stronger demand for, and lower supply of, housing in the large cities.²

Figure BI.B.2.1. Real housing prices

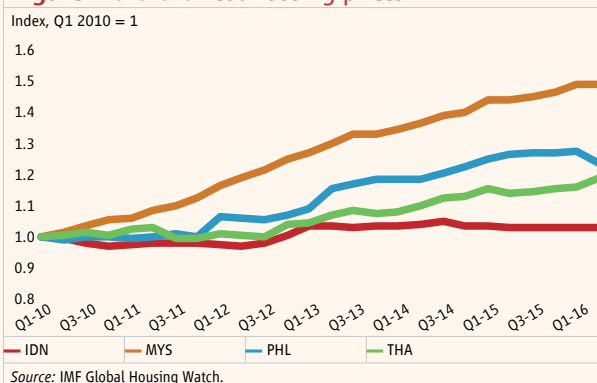


Figure BI.B.2.2. Real housing prices, China

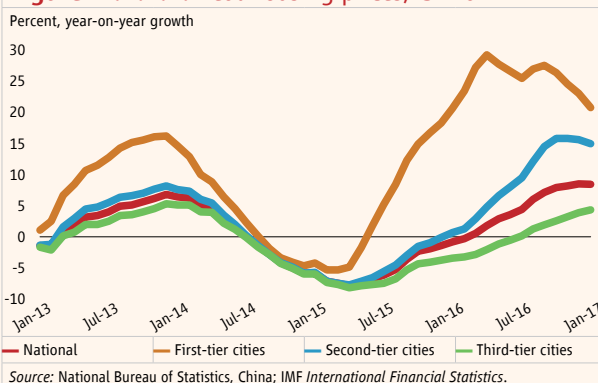
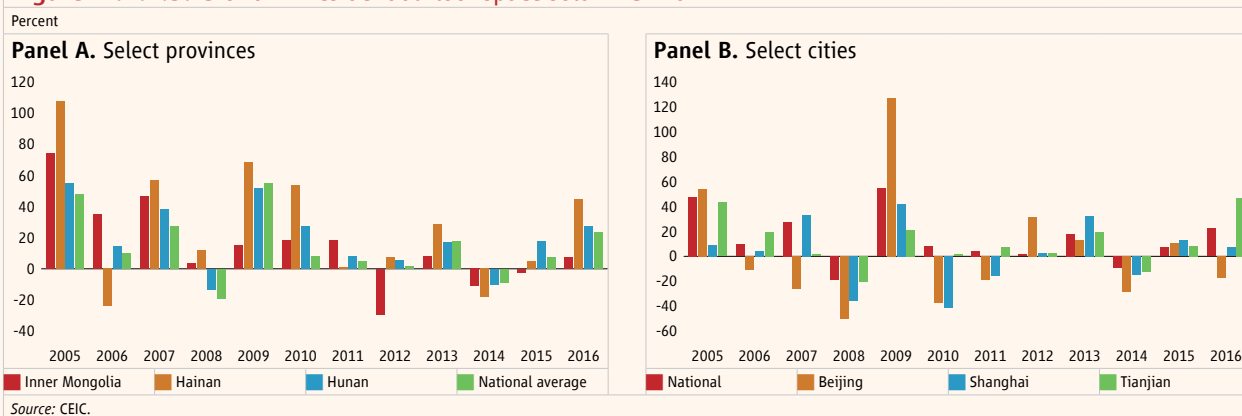


Figure BI.B.2.3. Growth in residential floor space sold in China



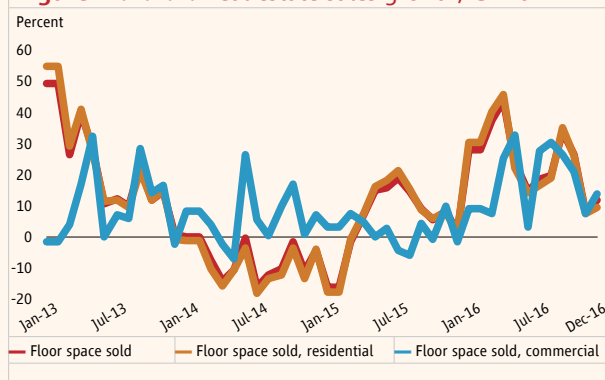
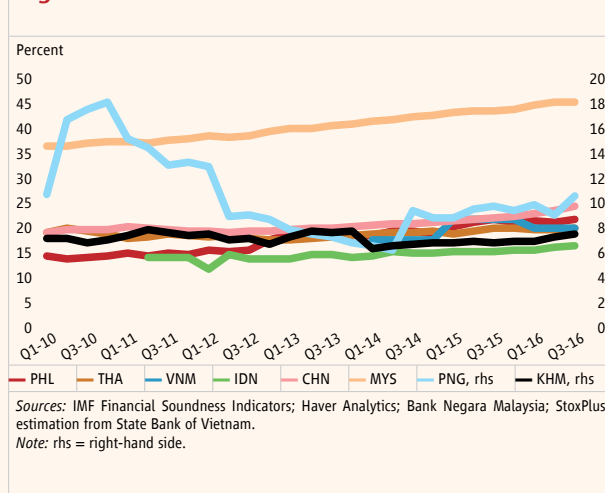
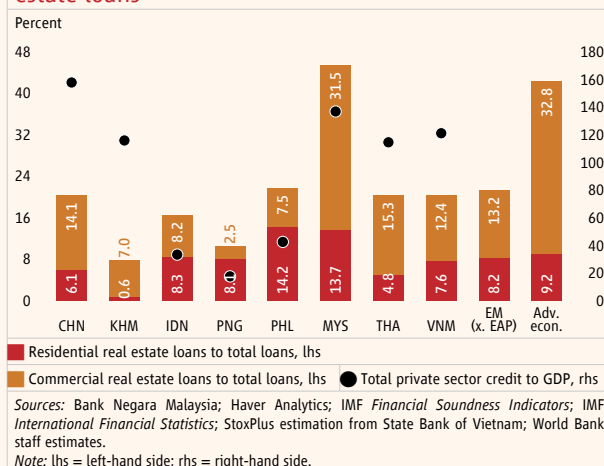
¹ Prepared by Ana Maria Aviles and Radu Tatu.

² Large cities have experienced much faster population growth, reflecting significant inflows of migrants attracted by greater availability of jobs. At the same time, in large cities a significant scarcity of land has slowed the construction of new buildings since 2005, whereas in smaller cities land supply is continuing to grow.

(continued)

(Box I.B.2 continued)

Real estate sales are volatile. In China, there have been significant swings over time in sales of residential floor space (Figure BI.B.2.3, Panel A), especially at the level of individual cities (panel B), and in overall real estate sales (Figure BI.B.2.4). In Indonesia, property sales have also experienced significant volatility over the past five years (Figure BI.B.2.5).

Figure BI.B.2.4. Real estate sales growth, China**Figure BI.B.2.5. Real estate sales growth, Indonesia****Figure BI.B.2.6. Real estate loans to total loans****Figure BI.B.2.7. Commercial and residential real estate loans**

The banking sector's exposure to real estate continues to increase, but at a moderate pace. Over the past two years, real estate loans (RELs) have accounted for a rising share of total banking loans across much of the region, and now constitute more than 20 percent of total loans in China, Malaysia, Thailand, and Vietnam (Figure BI.B.2.6). The majority of RELs are directed toward residential rather than commercial loans, in all countries except the Philippines and Indonesia (Figure BI.B.2.7). These trends are in line with the experience of other emerging markets.³ Banking sector risk is mitigated because the prices of residential

³ Overall, RELs account for 21 percent of total loans in emerging markets, and 42 percent of total loans in advanced economies. RELs for residential purposes account for 60 percent of RELs in emerging markets, and almost 80 percent of RELs in advanced economies.

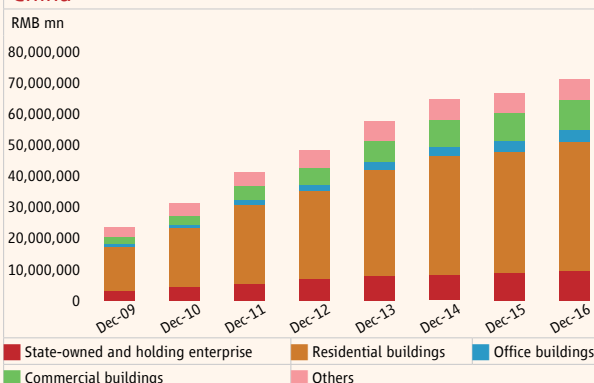
(continued)

(Box I.B.2 continued)

real estate, best viewed as a durable good rather than an investment asset, are in general less volatile than those of commercial property, which is more responsive to short-term macroeconomic conditions.

Real estate in the region is increasingly viewed as an attractive investment opportunity, further supporting prices. Continued low interest rates, and an increasing pool of institutional investors searching for yield, are boosting real-estate purchases in large metropolitan areas. Overall, there seems to be a strong preference among international investors for emerging market destinations (PwC and ULI 2016). In fact, China became the largest market for real estate investors in East Asia and Pacific during 2016, overtaking Japan and Australia (Real Capital Analytics 2016). Real estate investment (REI) in China tripled during 2009–16, although growth has moderated since 2014 (Figure BI.B.2.8). Most of it is focused on residential buildings. The Philippines has also seen a significant increase in REI over the past four years.⁴

Figure BI.B.2.8. Real estate investment by sector, China



Source: CEIC.

Note: Real estate investment includes investment by real estate development companies, commercial buildings, construction companies, and other real estate development units in buildings (including residential buildings, factory buildings, warehouses, hotels, guesthouses, holiday villages, office buildings, and the complementary service facilities and land development projects, such as roads, water supply, water drainage, power supply, heating, telecommunications, land leveling, and other infrastructure). It excludes simple land transactions.

A more detailed examination of country-level trends also suggests broadly manageable risks. In Malaysia, banks are considerably exposed to real estate, which accounts for approximately half of total loans. However, growth in loans and housing prices moderated in 2016, and the deceleration is expected to continue in 2017.⁵ Residential transactions account for about two-thirds of total real estate transactions, and risks are mitigated by households' financial capacity—aggregate household assets are about twice as large as household debt. Further, financial institutions are relatively well capitalized. In the Philippines, the rapid expansion of the real estate sector over the past four years reflects still low rates of home ownership and limited alternative investment opportunities. Commercial RELs increased by 117 percent, and residential RELs by 80 percent, between Q1 2013 and Q3 2016. As a result, real estate prices have been rising rapidly in Metro Manila. Buyers from China probably also contribute, at least in the high-end condo market.⁶ So far, nonperforming RELs have been decreasing.⁷ In Vietnam, growth in real estate loans to households and developers is moderating. However, real estate developers are focusing on high-end real estate projects, which currently yield large profit margins, creating a risk of potential oversupply in the medium term. In contrast, residential housing for low- and middle-income households remains limited.⁸

⁴ Between Q1 2013 and Q3 2016, REI financed by debt securities increased by 91 percent, and REI financed by equity securities by 107 percent.

⁵ Property Buying Sentiment Index, prepared by Financial Times Confidential Research.

⁶ Foreigners are not allowed to buy houses.

⁷ Gross nonperforming commercial RELs decreased from 3.2 percent to 1.4 percent of total loans, and gross nonperforming residential RELs from 3.2 percent to 2.9 percent of total loans, between Q1 2013 and Q3 2016.

⁸ Vietnam Association of Real Estate.

(continued)

(Box I.B.2 continued)

Across much of the region, macroprudential measures have been introduced to mitigate potential risks associated with the expansion of credit to the real estate sector. In Malaysia, measures already introduced to rein in excessive property market speculation include stringent loan requirements for housing loans, and a 70 percent loan-to-value ratio cap on third-home purchases. In Vietnam, to curb the growth of real-estate business loans, caps have been imposed on loan-to-deposit ratios (80 to 90 percent, depending on the type of bank) and on the share of long-term loans financed using short-term deposits (60 percent in 2016, 50 percent in 2017, and 40 percent in 2018). In China, mortgage loans have been rising quickly until recently,⁹ leading to growing household leverage. To cool the property market, local governments in more than 20 cities rolled out tightening measures during the fall of 2016. Policies have included raising mortgage down payments, tightening loan-to-value limit, and posting home purchase restrictions, especially for citizens without a local household registration. Several cities have also introduced measures to control land prices, including imposing caps on land auction prices.

Indonesia, however, has gone in the opposite direction, with the authorities recently implementing a number of measures to support real estate activity. These measures include cutting the key interest rate, giving tax incentives to Indonesian real estate investment trusts, easing restrictions on individual foreign ownership,¹⁰ increasing the maximum loan-to-value ratio, and increasing the threshold for luxury property tax. A tax amnesty was also expected to lead to repatriation of assets and to their investment in real estate assets.¹¹

In Mongolia, real estate led to significant financial vulnerabilities. Mongolia's real estate market emerged after the privatization of the housing sector in the late 1990s, and in tandem with the rapid expansion of Ulaanbaatar over the last two decades. Housing construction has been a major driver of growth since the early 2000s, reflecting high housing demand,¹² and the sector has been supported by the authorities through various programs. The mortgage program funded by the Central Bank was one of the key contributors to a 30 percent price jump for quality houses between 2012 and 2013; the nontargeted program allowed middle-income borrowers to refinance previous mortgages or buy second homes.¹³ However, housing prices began to fall at end-2014 as economic growth slowed significantly, and continued dropping through January 2017. As a result, the banking sector's nonperforming loans increased sharply.¹⁴ Looking ahead, and within the framework of a reform program to be supported by development partners, the authorities will consider transferring the housing mortgage loan program out of the central bank and restructuring it, which will help tackle the distortions in the system.

9 Household loans, mostly mortgages, accounted for 90 percent and 71 percent of total new bank loans in, respectively, July and August 2016.

10 In early 2015 foreigners were allowed to buy luxury real estate properties. In December 2015 foreigners were allowed to own landed houses for up to 80 years.

11 In June 2016, the government passed a Tax Amnesty Law giving taxpayers the opportunity to pay a certain amount of tax to have their outstanding tax liabilities (including penalties and interest charges) forgiven. As repatriated assets must be invested in Indonesia in defined instruments and stay at least three years in the country, the real estate market is expected to be one of the main beneficiaries of this measure.

12 Over half of Ulaanbaatar's population lives in the so-called Ger Districts with limited or no access to basic urban services, and one of the government's Millennium Development Goals is to house 67 percent of the population in proper dwellings by 2020.

13 At present, mortgages extended under this program account for over 77 percent of total mortgage loans outstanding, and borrowers under this program account for over 73 percent of all mortgage borrowers.

14 From 5 percent in 2014 to 7 percent in 2015 and over 9 percent at end-2016.

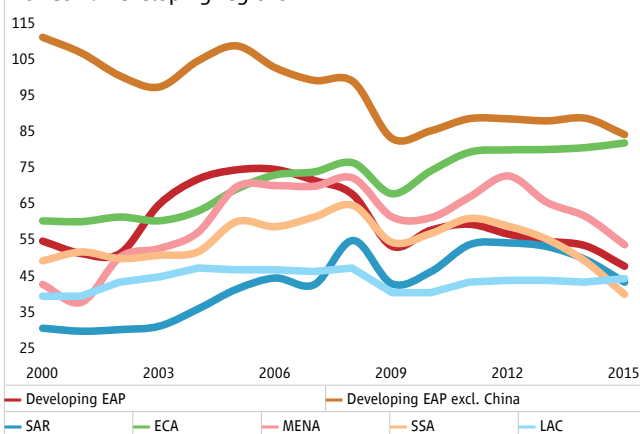
A sharp slowdown in world trade or in China could significantly affect the region

Developing EAP is extremely open, and could therefore prove particularly vulnerable to a slowdown in international trade. The region is significantly more open to trade than South Asia or Latin America and the Caribbean (Figure I.B.13, panel A). Among the large economies, trade openness is particularly high in Malaysia, Thailand, and Vietnam (panel B). Advanced economies, including the United States and the European Union, account for a significant share of the trade of several countries (including Cambodia, China, Malaysia, Thailand, and Vietnam), and in particular constitute a critical source of final demand for the region's exports (World Bank 2016b). This significantly raises the region's vulnerability to a slowdown in trade, whether stemming from trade restrictions or from unanticipated weakness in global activity. Among key concerns, the change in administration in the United States has brought in expectations of mounting protectionist pressures, including potential unilateral measures to tackle perceived currency manipulation and other unfair trading practices, especially vis-à-vis countries with which the United States runs large trade deficits.⁸ Illustrating such risks, the withdrawal of the United States from the Trans-Pacific Partnership could cause Vietnam and to a lesser extent Malaysia to miss out on gains from expanded trade and investment (World Bank 2016a). Any new U.S. trade restrictions would have a particularly significant impact on countries whose direct trade links with the United States are sizable or that are deeply integrated into regional value chains, including China, Malaysia, the Philippines, and Vietnam. Antiglobalization sentiment has also been picking up in other advanced economies holding elections this year, including France, Germany, and the Netherlands. Again, the recent recovery in economic activity in the European Union could be dented by a disorderly Brexit, or by the outcome of the upcoming elections. Compounding risks, disruptions to world trade would also likely affect capital flows; and more tense international economic relations could lead to more complex geopolitical relations.

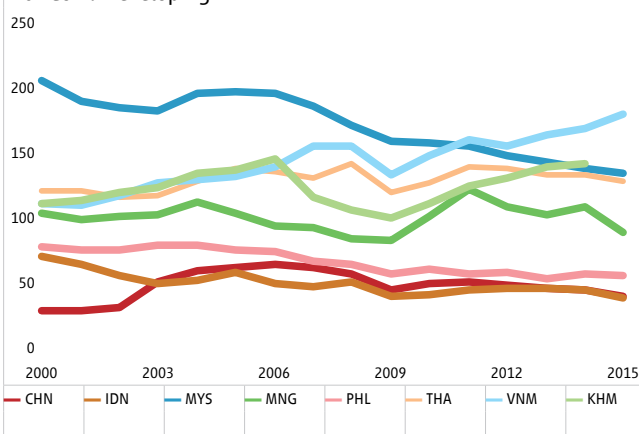
Figure I.B.13. Much of developing EAP displays significant trade openness

Exports plus imports (percent of GDP)

Panel A. Developing regions



Panel B. Developing EAP



Sources: IMF World Economic Outlook; World Bank staff estimates.

Note: Trade openness is defined as total exports and imports of goods and services, as a ratio to GDP.

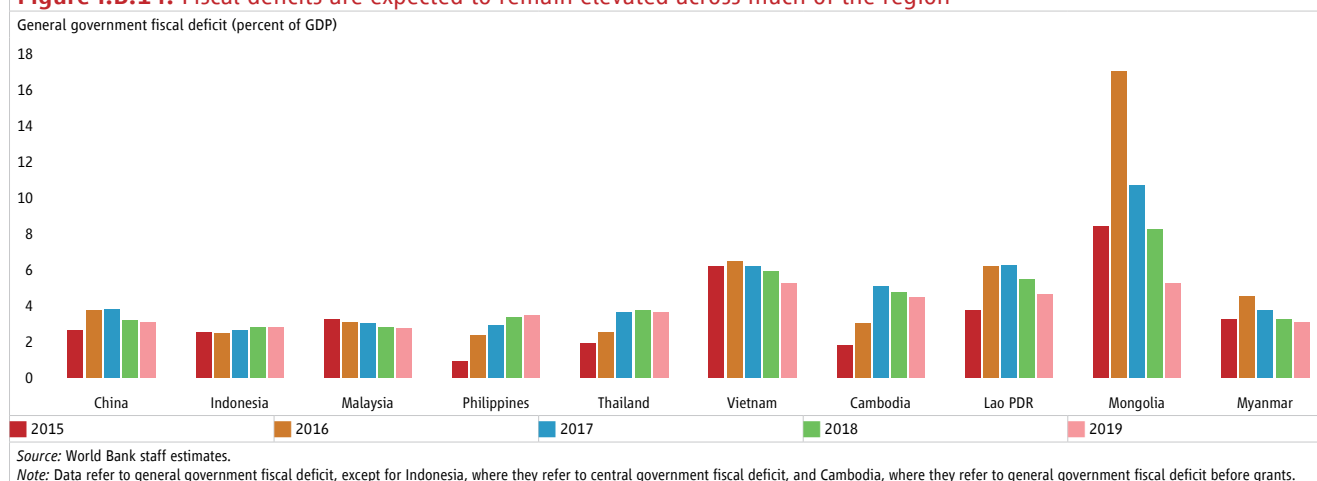
⁸ The new administration's 2017 Trade Policy Agenda explicitly indicates a commitment to "focusing on bilateral negotiations rather than multilateral negotiations ... Renegotiating and revising trade agreements ... Strictly enforcing U.S. trade laws to prevent the U.S. market from being distorted by dumped and/or subsidized imports" (<https://ustr.gov/about-us/policy-offices/press-office/reports-and-publications/2017/2017-trade-policy-agenda-and-2016>).

In China, the ongoing slowdown constitutes a short-term risk to growth in the rest of the region, but rebalancing will also generate medium-term opportunities for several lower-income countries. China accounts for a large and rising share of demand for goods and services from the rest of the region, both to meet its own final demand and as inputs into further exports. It exerts a critical influence on world commodity prices, especially for metals. Financial links, especially through outward FDI, are also growing rapidly. As a result, China's orderly, gradual slowdown to date has been an important factor behind the region's continued strong growth resilience. However, if the slowdown in activity were to prove faster than anticipated, spillovers to other countries could prove significant (World Bank 2016b). At the same time, the ongoing transformation in China's economic structure opens up new export opportunities for its trade partners. In particular, it will create space for other countries to expand their production of labor-intensive manufactures, and to meet China's growing demand for agricultural commodities and for services. Reaping these opportunities will, however, require countries to adjust their production and export structures, which will in turn require reforms to ensure that labor and product markets are more flexible (Box I.B.3).

Fiscal deficits are expected to remain elevated in several countries, in some cases posing risks to fiscal sustainability

Fiscal deficits are expected to widen or remain elevated in a number of countries in 2017. In China, the consolidated fiscal deficit is projected to expand slightly (to around 3.8 percent of GDP) as recent tax measures (including tax breaks and lower pension contribution rates) adversely affect collections (Figure I.B.14). Among the other large economies, the increase in the deficit will be particularly marked in Thailand as a number of large infrastructure projects are launched. A stronger expansion is also projected in the Philippines, largely reflecting increased expenditure. More limited fiscal expansion is expected in Indonesia, where higher capital expenditure will be partially offset by tax reforms and higher commodity revenues. Similarly, deficits will increase or remain elevated in Cambodia and Lao PDR, reflecting rising public sector wages in the former and high infrastructure spending in the latter. Both countries have announced plans to lower deficits over the medium term, but have not spelled out details of the policies that might underpin such adjustment. In Timor-Leste, a large structural deficit

Figure I.B.14. Fiscal deficits are expected to remain elevated across much of the region

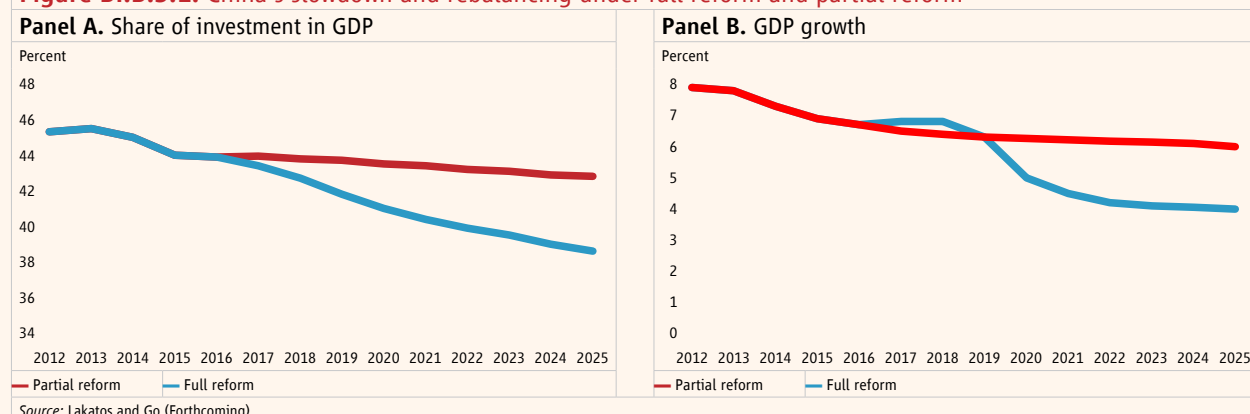


Box I.B.3. The Long-Run Impact of China's Rebalancing on Developing East Asia and Pacific¹

China's ongoing reform process will lead to a rebalancing of its economic structure, and slower but more sustainable growth, with potentially significant repercussions for the rest of developing EAP. The goal of these reforms is to reorient the economy toward consumption, services, and higher-value-added activities, so as to reverse the recent slowdown in productivity growth. Given China's central role in the global economy, this structural transformation will have a significant impact on world trade flows and prices. In turn, this will affect its trading partners, including in the region, both directly, and indirectly as other trading partners adjust and reallocate resources.

The implications of China's rebalancing for other countries in developing EAP are analyzed by contrasting outcomes under "full reform" with those under "partial reform." *Full reform* is characterized by more pronounced rebalancing, and results in faster long-run productivity growth. Specifically, the full reform scenario assumes significant rebalancing from investment toward consumption (Figure BI.B.3.1, Panel A) and from industry toward services. GDP growth decelerates only modestly, to 6 percent by 2025 (Panel B). In contrast, the *partial reform* scenario assumes greater emphasis on policies that maintain short-run growth above potential, and less on rebalancing toward consumption and services. As a result, GDP growth, after rising initially, decelerates rapidly to 4 percent by 2025.² In contrast, and for reference, a continuation of the current economic model, with GDP growth around 6.5 percent and limited or no rebalancing toward consumption or services, would require implausibly rapid productivity growth, pointing to the difficulty of sustaining current growth rates without continued reforms.

Figure BI.B.3.1. China's slowdown and rebalancing under full reform and partial reform



The focus of the analysis is on long-run responses to Chinese policy reforms rather than on short-run impacts, and it assumes that other economies are flexible enough to adjust their production and export structure in response to China's rebalancing. The analysis is based on a dynamic general

¹ Prepared by Csilla Lakatos and Delfin S. Go, based on Lakatos and Go (Forthcoming).

² The full reform scenario roughly corresponds to the "baseline," and the partial reform scenario to the "no-reform scenario," considered in IMF (2015).

(continued)

(Box I.B.3 continued)

equilibrium model that captures trade links across countries and sectors.³ It goes beyond short-run cyclical effects to capture long-run responses of supply, demand, and trade to changes in relative prices. It allows for China's production structure to shift toward higher-value-added manufactures and services, and for the import intensity of China's consumption to increase in response to rebalancing. It also allows other economies to adjust to China's structural transformation by reallocating resources. In contrast, econometric and input-output studies tend to capture short-run effects, as they implicitly assume that the sectoral composition and import intensity of consumption and investment remain constant.

In general, the deepening of the ongoing reforms in China affects other countries through trade links, changes in world prices, and terms-of-trade effects. By 2025, output, household consumption, and even investment in China are significantly higher under full reform than under partial reform.⁴ Increased consumption acts to increase China's demand for other countries' exports, and in particular puts upward pressure on prices of agricultural commodities and food products (Figure BI.B.3.2, Panel A). At the same time, and as set out in the "Made in China 2025" plan, China aims to upgrade its manufacturing sector toward high-value-added manufactures, including by targeting the development of sectors such as robotics, aerospace, new-energy vehicles, and advanced transport equipment. The increase in China's supply of machinery and transport equipment exerts a downward pressure on their world prices. Cheaper imports of these capital goods improve the terms of trade of countries that are net importers and act to boost their domestic investment. In addition, diminishing supply in China of low-value-added manufactures, such as textiles and apparel, acts to increase their world prices.

Overall, across most of developing EAP, full reform leads to terms-of-trade gains, and increases in exports and consumption. In economies that specialize in the production of low-value-added manufactures including textiles and apparel, such as Cambodia and Vietnam, or low-tech electrical and electronic items, such as Malaysia and the Philippines, firms benefit from higher world prices (Figure BI.B.3.2, Panel B) and expand domestic supply and exports (Panel C). Conversely, the fall in the price of capital goods boost imports of these products, with a positive overall effect on total imports. Consumption rises across developing EAP, by up to 0.6 percent (Panel D), reflecting overall terms-of-trade gains.

The analysis highlights how developing EAP countries that can respond to the new sources of demand in China will gain the most from China's structural transformation. Overall, the magnitude of the output effects is limited, with output falling by a maximum of 0.1 percent (Panel E). Put differently, in aggregate terms, the impact of reforms is felt mainly within China, with only limited trade spillovers to the rest of the region. But there is variation across developing EAP. Underlying all this, as China upgrades

3 The analysis uses LINKAGE, a dynamic, multiregion, multisector, multifactor computable general equilibrium model (van der Mensbrugghe 2011, 2013). It relies on the Global Trade Analysis Project (GTAP) 9.1 global trade database for 2011. The simulations are based on an aggregation corresponding to 14 regions and 12 sectors (agriculture, energy, food products, textiles and apparel, chemicals, metals, transport equipment, electronics, machinery, other manufactures, utilities, and services). Projections for key macroeconomic variables, including GDP, the current account, and investment, are based on the IMF *World Economic Outlook*. See Lakatos and Go (Forthcoming) for details.

4 With full reform, output is approximately 14 percent higher, which reinforces the positive impact of rebalancing on consumption, and more than offsets its negative impact on investment.

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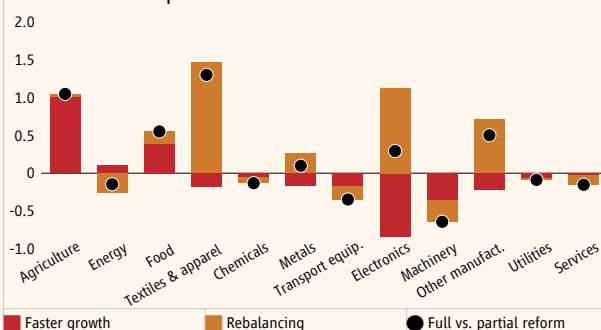
(Box I.B.3 continued)

its production structure, other countries adjust their own supply structures to dampen any initial adverse impact. Exporters of low-value-added and low-tech manufactures, including Cambodia, Vietnam, Malaysia, and the Philippines, stand to benefit from supplying the excess demand in both Chinese and international markets (Panel F). On a cautionary note, the required inter-sectoral reallocation may imply significant distributional impacts, particularly in the short run.

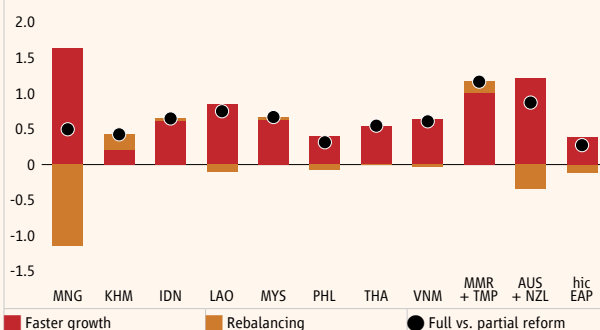
Figure BI.B.3.2. The impact of full reform in China on developing EAP, in 2025

Relative to partial reform, percent

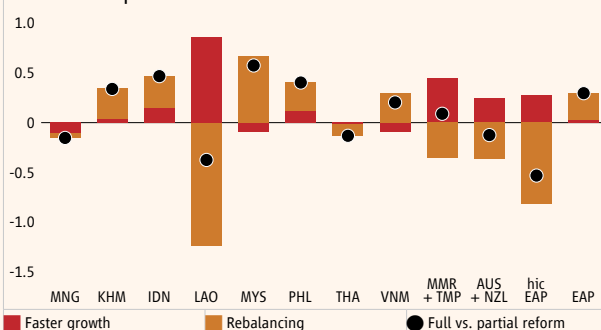
Panel A. World prices



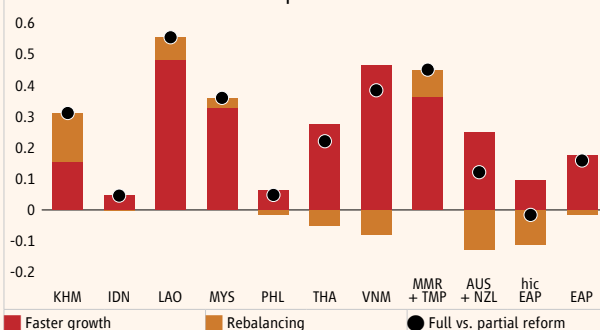
Panel B. Terms of trade



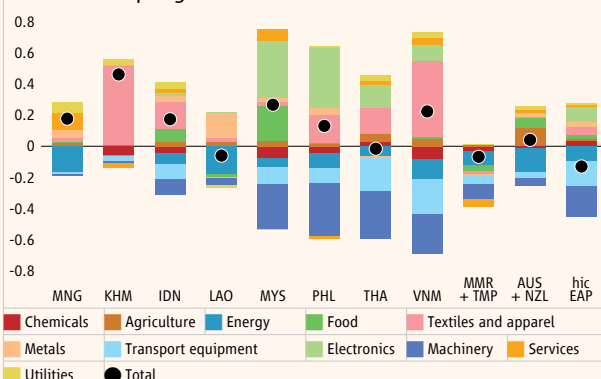
Panel C. Exports



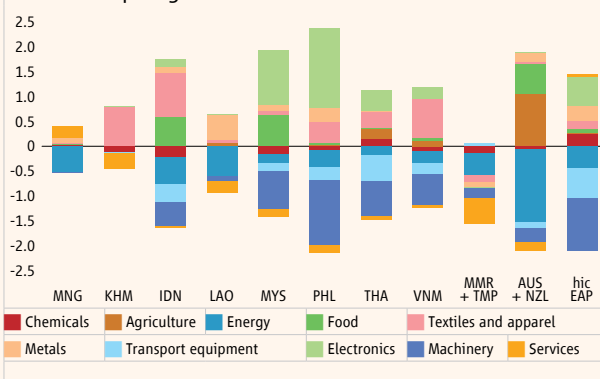
Panel D. Household consumption



Panel E. Output growth



Panel F. Export growth



Source: Lakatos and Go (Forthcoming).

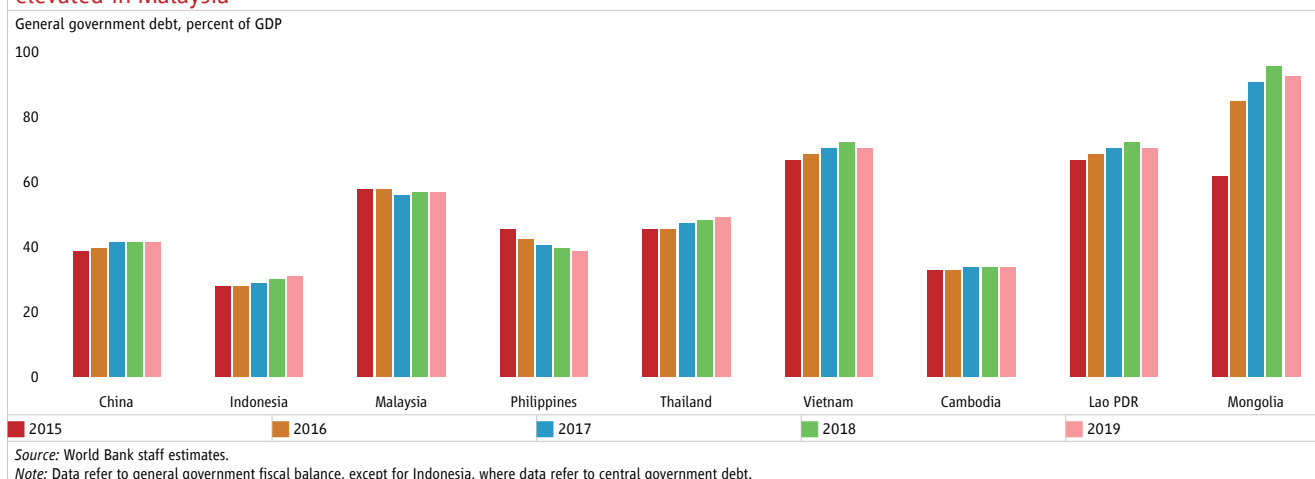
Note: "Full vs partial reform" denotes the overall impact of full reform, which is decomposed into "faster growth" (the impact of higher GDP, holding constant the consumption share), and "rebalancing" (the additional impact from changes in the consumption share). See Lakatos and Go (Forthcoming) for details.

has emerged and is projected to widen over time (from 24 percent of GDP in 2016 to 30 percent of GDP in 2017, with further increases afterward), reflecting the exhaustion of its oil reserves. Its large sovereign wealth fund can finance this deficit in the medium term, but is being steadily depleted.

A few countries, however, are expected to take some early steps toward fiscal consolidation. In Vietnam, the deficit is projected to decline to 5.3 percent of GDP by 2019, although the implementation of previously announced consolidation measures remains lackluster. In Malaysia and Myanmar, fiscal deficits are also expected to decline, with some support from higher commodity prices, as well as comprehensive reforms to tax policy and administration and to public financial management in Myanmar. In Mongolia, the deficit ballooned to 17 percent of GDP in 2016, but is expected to decline sharply as the country implements its ambitious adjustment program with support from its development partners. Similarly, in Papua New Guinea, a fiscal adjustment program, targeting both revenues (including through removal of exemptions and higher fees) and expenditures, is projected to lower the deficit over time.

Rapid growth will generally help contain debt burdens, but there are exceptions. Widening deficits in Cambodia, China, Indonesia, and the Philippines will have a minor impact on debt-to-GDP ratios (Figure I.B.15), given rapid growth and (with the exception of Cambodia and to a lesser extent the Philippines) the relatively limited magnitude of the expansion. In Malaysia, public debt is expected to remain stable, reflecting the offsetting impact of relatively low deficits and the elevated initial debt level. In Papua New Guinea, fiscal consolidation is expected to help place public debt on a downward trajectory. In Thailand, in contrast, the expansionary fiscal stance could see public debt increase to 49 percent of GDP by 2019, although threats to fiscal sustainability remain low. And, in Lao PDR and Vietnam, public debt is expected to stabilize only once the planned consolidation efforts are more advanced. In Vietnam, concerns are amplified by the banking sector's unresolved impaired assets, which could eventually translate into significant liabilities for the public sector. In Mongolia, approval and implementation of an adjustment program supported by the international financial institutions will prove critical to restoring debt sustainability, including meeting the large external debt repayments due over the coming year.

Figure I.B.15. Government debt is projected to rise rapidly in Mongolia and, to a lesser degree, Vietnam, and remain elevated in Malaysia



The diverse fiscal outlooks across the region are reflected in varying credit risk assessments. The region is characterized by the full spectrum of credit ratings, including strong investments grades (in China and Malaysia), as well as speculative grades (in Mongolia and Papua New Guinea). Ratings were in several cases revised downward in the first half of 2016, but have since stabilized, reflecting (actual or planned) reform programs. In particular, Mongolia's credit rating was maintained, following repeated earlier downgrades, in the wake of the announcement of the stabilization and reform program. Indonesia's credit outlook was improved from "stable" to "positive". And the most recent IMF-World Bank Debt Sustainability Analyses, for most of the countries where they have been carried out, indicate low risks to public debt sustainability, albeit with significant exceptions; in particular, there are moderate risks in Timor-Leste and Vietnam, and high risks in Lao PDR and Mongolia.

The outlook for the Pacific Island Countries is positive, but they remain especially vulnerable to shocks

The outlook for the Pacific Island Countries (PICs) is positive, given recent trends in fisheries and tourism, and expanding opportunities for migration and connectivity. Fishing license fees will contribute significantly to government revenues and domestic demand, although in a few countries they are expected to decrease from recent peaks, reflecting changes in the climate cycle. Tourism is expected to benefit from the expansion of capacity in several economies. The implementation of public infrastructure projects, including in ICT, could see the subregion's potential growth rate increase as the impact of remoteness and distances is lowered. Recent agreements that expand access for PIC workers to labor markets in Australia, New Zealand, and other economies could enhance job opportunities. Over the longer term, fully exploiting these opportunities could increase long-term growth rates for most PICs by 0.7 to 1 percentage points (Box I.B.4). Inflationary pressures should remain contained, given the gradual and limited recovery in commodity prices.

However, PICs are especially vulnerable to natural disasters, climate change, and terms-of-trade shocks. Nearly every year, at least one country is hit by a major natural disaster; vulnerability will remain high even with an increased policy focus on disaster risk management. In the long run, many PICs are also highly vulnerable to sea level rise. Shocks to world commodity prices significantly affect livelihoods across the PICs, because they are highly dependent on imports, and face transportation costs that are both large and heavily influenced by oil prices.

Box I.B.4. What is Possible in the Pacific in 2040?¹

The combination of extreme remoteness, small size, geographic dispersion, and environmental fragility severely limits the range of economic opportunities for many of the Pacific Island Countries (PICs). As a consequence, a number of PICs have seen only limited increases in per capita incomes over the past 25 years.

The World Bank has launched a program of research and dialogue on long-term economic opportunities and challenges in the Pacific, titled *Pacific Possible*. This assesses whether fully exploiting available opportunities and dealing effectively with major threats could lead to significantly better growth outcomes over the next 25 years.² Opportunities in tourism, labor mobility, the knowledge economy, fisheries, and deep sea mining are considered. It also examines the impact of two risks that could undermine development gains over the next 25 years if not managed well: noncommunicable diseases (NCDs), which are already affecting the lives of many Pacific Islanders; and climate change and natural disasters, to which the PICs are heavily exposed.

For each of the opportunities, *Pacific Possible* develops an “opportunity scenario” in which the PICs and their development partners intervene (for instance, through policy changes) to exploit the available opportunity. It then estimates the potential gain in per capita incomes, employment, and government revenue compared with baseline projections, which typically reflect historical trends.

Opportunities

Tourism will provide the main opportunity to accelerate growth and generate employment for many countries, with the potential for an additional 1 million tourist arrivals in the region by 2040. Increasing the Chinese market, increasing the number of luxury resorts, capturing more of the retiree market, and basing cruise ships in the Pacific could lead to an additional 1 million tourists on top of the approximately 3 million tourists who are expected to arrive in 2040 under the baseline, business-as-usual projections. In Vanuatu, Samoa, and Palau, tourism opportunities could potentially increase per capita incomes by more than 20 percent, with employment 7 percent, 19 percent, and around 50 percent (respectively) higher than the 2040 baseline. In Fiji and Tonga, per capita incomes and employment could rise by about 10 percent relative to the 2040 baseline.

Additional labor mobility opportunities would generate substantial benefits for the labor-receiving and labor-sending countries, and for the migrants themselves. *Pacific Possible* estimates that new access agreements between the PICs and Australia and New Zealand (including an Australia-New Zealand

¹ Prepared by Kim Alan Edwards and Robert Utz.

² The countries included in this study are the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu, and Vanuatu. See also World Bank (2016c), Box I.C.3, “Boosting Growth and Shared Prosperity in the Small Pacific Island Countries”.

(continued)

(Box I.B.4 continued)

Atoll Access Agreement and a Pacific Access Category for Australia), new Pacific caregiver programs, and access to new labor markets such as Canada and the Republic of Korea, could generate additional income of about US\$13 billion for about 240,000 additional permanent migrants (a 30 percent increase in migrants compared with the 2040 baseline).³ Workers from Fiji, Papua New Guinea, Samoa, and Tonga would be likely to benefit most. Labor-sending countries would benefit from remittances and incomes earned by seasonal workers, which by 2040 could lead to an increase in per capita incomes of more than 10 percent for Kiribati and Tonga and of more than 5 percent for the Solomon Islands and Vanuatu.

Improved internet access and connectivity could translate into additional income of about US\$1.5 billion and an additional 150,000 jobs by 2040. In recent years, the PICs have liberalized telecoms markets and invested heavily in fiber optic cable connections. This creates the basis for significant increases in mobile and internet penetration over the next 25 years, which could improve productivity; enhance the quality and attractiveness of existing services, for example, in tourism, education, and health; and create new market opportunities such as business process outsourcing. The larger PICs are most likely to benefit from ICT-enabled opportunities, provided they develop an adequately skilled workforce and a conducive business environment. Pursuing these opportunities could add more than 10 percent to per capita incomes and around 6 percent to employment in Fiji, and around 2 to 4 percent to per capita incomes and employment in Papua New Guinea, Samoa, Tonga, Vanuatu, and the Solomon Islands.

Fisheries could generate more than US\$300 million in additional revenue by 2040, raising revenues by more than 40 percentage points of GDP in Kiribati and Tuvalu, and significantly boosting incomes in these countries and in the Federated States of Micronesia. Among other measures, broadening participation in the vessel day scheme to include major resource owners such as the Philippines and Indonesia, ensuring compliance with robust catch limits to maintain valuable tuna fisheries stocks, allowing easier access to and trading of vessel days, and gradually moving from a vessel-based to a catch-based system, could by 2040 yield more than US\$300 million in additional public revenue, without an increase in catch levels or threats to the sustainability of the fisheries stock.⁴ In Kiribati and Tuvalu, this could translate into an increase in per capita incomes of close to 40 percent, while the Federated States of Micronesia could see an increase of around 20 percent.

Deep sea mineral mining still entails significant uncertainty and knowledge gaps with regard to economic viability and to social, cultural, and environmental impacts. While several countries have granted deep sea mining exploration permits, no commercial deep sea mining operation is yet up and running, and there remain significant uncertainties around the potential of the resource, the technological requirements, and environmental and social impacts. A precautionary approach is required to ensure that

³ All U.S. dollar values in this Box are expressed in 2015 constant US\$.

⁴ The current purse-seine vessel day scheme implemented in 2009 by the Parties to the Nauru Agreement (PNA) works similarly to a "cap-and-trade" scheme for fishing. Each year, the PNA countries (the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, the Solomon Islands, and Tuvalu) set the total catch limit needed to maintain a healthy fish stock, and translate that catch limit into individual vessel fishing days, which are allocated to and sold by individual countries.

(continued)

(Box I.B.4 continued)

cost-effective measures are taken to minimize environmental impacts, even if uncertainty remains as to the potential for damage.

Effects on income, employment, and government revenue

Exploiting these opportunities could increase the long-term average annual growth rate for most PICs by 0.7 to 1 percentage points, resulting in incomes that are about 20 to 30 percent higher in 2040 compared to projections based on historical trends (Figure BI.B.4.1). For Vanuatu, Samoa, and Palau, tourism would be the main driver of higher growth, while fisheries would support higher growth in Kiribati, Tuvalu, and the Federated States of Micronesia. Fiji and Tonga have multiple opportunities to achieve higher growth, including tourism, labor mobility, and ICT-enabled opportunities. Papua New Guinea and the Solomon Islands are projected to receive relatively modest increases in economic growth from the specific opportunities discussed in *Pacific Possible*, but will likely have alternative drivers of growth over the next 25 years (for example, in natural resources). The Marshall Islands shows few growth opportunities, reflecting the special challenges faced by atoll nations, and the fact that its additional gains from fisheries are likely to be more modest than for Kiribati and Tuvalu.⁵

Figure BI.B.4.1. Growth in real income per capita^a: opportunity scenarios, 2015–40

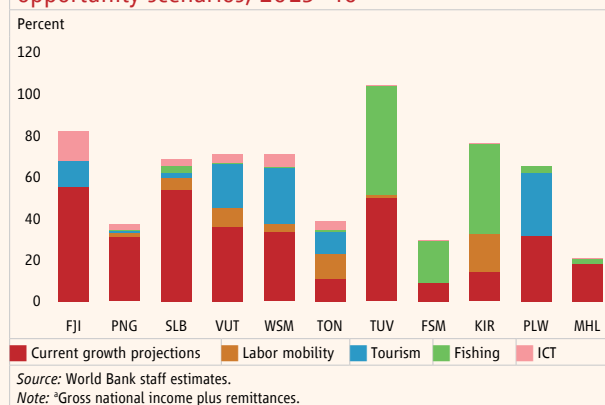
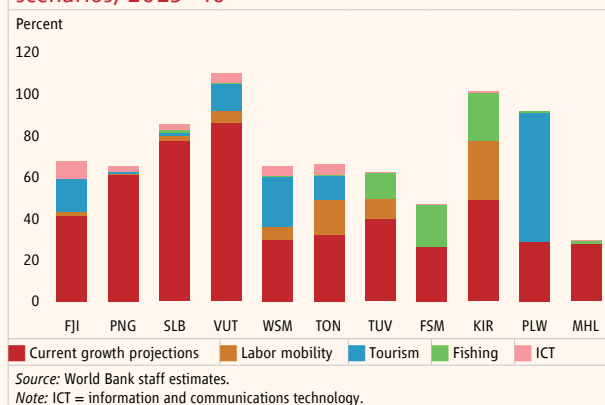


Figure BI.B.4.2. Employment growth: opportunity scenarios, 2015–40



Tourism, labor mobility, and ICT-enabled opportunities can boost job growth in the Pacific (Figure BI.B.4.2). Tourism and ICT-enabled opportunities could directly create up to 280,000 new jobs. The increases to national income created by opportunities in fisheries and labor mobility (through increased government revenues and remittances) would also boost domestic demand and employment. Moreover, enhancements to labor mobility schemes could create up to 240,000 opportunities for migration (not shown in Figure

⁵ While the Marshall Islands already has open access to the U.S. labor market, they could potentially make better use of this access through education and skills development, which would allow migrants to access higher-paying jobs (opportunities in these areas were not fully explored by *Pacific Possible*).

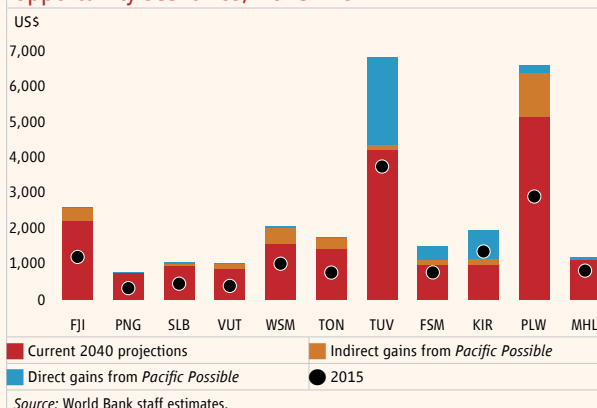
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Bl.B.4.2) and hence reduce pressures in domestic labor markets.

Development assistance will remain important for many PICs to be able to deliver an adequate level of public services. *Pacific Possible* estimates the resource requirements that would enable the PICs to achieve human development outcomes and infrastructure levels comparable to the average for small states. Fisheries revenues and income gains from the other *Pacific Possible* interventions have the potential to significantly boost available government revenue in some countries (Figure Bl.B.4.3). But even with these increased revenues, adequate funding of public services will remain difficult in the North Pacific countries, Papua New Guinea, the Solomon Islands, and Vanuatu. Improving public financial and investment management systems can ensure that scarce resources are used efficiently and on projects with high returns. Nevertheless, aid will remain a critical part of the ongoing collaboration between PICs and their development partners to fill structural financing gaps.

Figure Bl.B.4.3. Domestic revenues per capita: opportunity scenarios, 2015–40



Risks to the outlook

Economic costs of natural disasters are already high for most PICs—on average between 0.5 and 6.6 percent of GDP is lost annually—and climate change will increase vulnerabilities. There is, however, deep uncertainty around the future speed and intensity of climate change. The annual costs of coastal adaptation and adaptation of infrastructure to changes in rainfall and temperature alone are estimated to vary from between 1 and 2 percent of 2040 GDP in Samoa to between 12 and 24 percent of GDP in Kiribati and the Marshall Islands (with the ranges depending on scenarios for temperature, rainfall, and sea levels). International climate finance is thus critical to ensure that climate financing needs do not crowd out human development and infrastructure funding.

The economic burden of NCDs in the Pacific is already high compared with other middle-income countries, and is increasing over time, especially as incomes rise. The PICs could lose between 3 and 10 percent of GDP by 2040 if no action is taken. Apart from continuing to strengthen the evidence base on NCDs, priorities include instituting measures to reduce the consumption of unhealthy foods, tobacco, and alcohol (including through taxes and regulation), and improving the efficiency and impact of their health spending.

I.C. Policy Considerations

Global policy uncertainty remains high, strengthening the case for an emphasis on macroeconomic prudence, addressing critical vulnerabilities, and maintaining medium-term fiscal balances that are seen as sustainable. Among the region's large economies, mobilizing additional revenues will create the space to sustain growth and foster inclusion, while ensuring that risks to fiscal sustainability remain low. In Lao PDR, Mongolia, and some Pacific Island Countries, policies need to focus on reducing threats to fiscal solvency. Most countries may need to start considering adjusting their accommodative monetary policies as inflation approaches target levels, and given potential pressures on capital flows and exchange rates. China should address risks stemming from an overleveraged corporate sector and poorly performing state-owned enterprises. Across the region, containing risks from rapid credit growth requires improvements in supervision and prudential regulation. The longer-term challenge for the region lies in sustaining rapid growth while ensuring greater inclusion. To that end, countries must increase productivity, successfully manage a scale-up of public investment, and attract private investment. Reallocating public spending toward capital expenditures and underfunded sectors, including health and social protection, and increasing the efficiency of such expenditure can bring benefits. Boosting regional integration, including by enhancing labor mobility, can partly mitigate the impact of potential global protectionist tendencies. And, as the region becomes more prosperous and its environmental footprint grows, efforts to reduce agricultural pollution can make growth more sustainable.

Elevated global policy uncertainty places a large premium on macroeconomic prudence

The risks that the region continues to face, related to the availability and cost of external financing, and to the prospects for global trade growth and export demand, strengthen the case for a continued focus on addressing key macroeconomic vulnerabilities. The baseline scenario projects robust domestic private demand and recovering external demand. Nevertheless, global financial conditions could tighten more rapidly than anticipated, triggering renewed financial volatility and amplifying the risks from high domestic leverage. And protectionist pressures in advanced economies could have a large impact on the region, given its trade openness. Policy makers should therefore retain their emphasis on maintaining sustainable medium-term fiscal frameworks, standing ready to adjust accommodative monetary policies, and addressing corporate and financial vulnerabilities.

▸ Maintaining sustainable medium-term fiscal frameworks

Across the region's large economies, mobilizing additional revenues will create space for measures to sustain growth and foster inclusion, while ensuring that risks to fiscal sustainability remain low. Given broadly robust domestic demand and the prospects for a gradual increase in external demand, there is little rationale for additional fiscal stimulus at this time. In contrast, efforts to broaden the tax base and improve tax administration can yield significant gains. In China, increasing the clarity of government and state-owned enterprise (SOE) finances, as well as strengthening fiscal discipline and hardening budget constraints for subnational

governments and public-benefit SOEs, will help moderate growth in public investment and place public finances on a more sustainable path.¹ A broadening of the tax base, especially at the local level to lower the dependence of revenues on land sales, and improvements in VAT administration can make room to reform labor taxation and streamline fees levied on businesses. In Indonesia, the 2017 budget introduced more realistic assumptions. However, tax collections remain relatively weak, after adjusting for the one-off impact of the tax amnesty. Meeting the 2017 deficit target may therefore require further measures with respect to tax policy (beyond the implemented increases in tobacco excises) and administration. In Malaysia, there is significant scope to broaden the base for personal income tax, and to reduce exemptions from the general sales tax. The Philippines could build on the existing package of tax reforms, focused on eliminating VAT exemptions and increasing excises on fuels and automobiles. Further, the economy's continued rapid growth will hinge on how well the government manages the large increase in public expenditure. In Vietnam, where public debt is expected to breach the legally prescribed ceiling of 65 percent of GDP, there is an urgent need to strengthen the credibility of the medium-term fiscal framework.

Some smaller commodity-exporting economies need to focus on lowering threats to fiscal solvency.

In Mongolia, fiscal consolidation, including more progressive taxation and greater rationalization and better targeting of expenditures, remains the main priority as part of stabilization. In Lao PDR, elevated public debt is generating vulnerability to shocks. Efforts are required to boost revenues, on a declining trend in recent years, and contain expenditure. In Myanmar and Papua New Guinea, limited sources of financing again call for fiscal prudence, despite somewhat lower public debt. In Myanmar, prudence will also require refraining from monetizing the deficit. In general, while many countries have announced fiscal consolidation plans, these have been lacking in detail. A focus on implementing a country-specific mixture of revenue measures (involving increases in tax rates, adjustments to the generous, untargeted tax exemptions, a strengthening of property and natural resource taxation, and improved tax administration) and expenditure measures (targeting both the level and efficiency of spending) would be appropriate.

› **Standing ready to adjust accommodative monetary policies**

Much of the region also may need to adjust accommodative monetary policies. While the increase in consumer prices has so far proved moderate, the more rapid pickup in producer prices and the projected recovery in commodity prices suggest that pressures will intensify, albeit from a low base. In Indonesia, which lowered policy rates by 150 basis points during 2016, the monetary easing cycle likely needs to be placed on hold. Similarly, in the Philippines, policies must be ready to adjust to rising inflationary pressures.

If external financing conditions tighten more rapidly than anticipated, this will place regional exchange rates under pressure, and again call for domestic monetary tightening. The expected pace of U.S. monetary policy normalization has already increased sharply over the past months, and could do so again, leading to renewed capital outflows. The large, financially integrated economies of Malaysia, and to a lesser degree Indonesia and Thailand, remain relatively exposed to exchange rate risk, potentially affecting both corporates and banks. Relatedly, short-term volatility could increase again, although foreign exchange reserves in general appear broadly

¹ The government work report recently presented to the National People's Congress proposes steps in that direction.

adequate. In China, continued liberalization of the exchange rate and domestic financial markets may help stem capital outflows and increase the effectiveness of the monetary transmission mechanism.

Some of the smaller economies are already facing significant exchange rate pressures. In Papua New Guinea and Myanmar, in particular, a combination of greater exchange rate flexibility (Box I.C.1) and monetary tightening appears warranted. Similarly, Lao PDR should make greater use of the flexibility in the existing exchange rate regime and consider monetary tightening in case credit growth continues to accelerate. Given the limited effectiveness of monetary policy in several smaller economies, these measures may need to be supported by greater fiscal adjustment. In Mongolia, macroeconomic stabilization will require continued monetary policy tightness and exchange rate flexibility. Conversely, in dollarized Cambodia, the adjustment to any further U.S. dollar appreciation and the implied loss in competitiveness would require strong demand management.

▸ Addressing corporate and financial vulnerabilities

In China, reforms of the corporate sector, including restructuring of SOEs, and measures to bring credit growth under control are critical to reducing vulnerabilities. Reforms to address excess industrial capacity, including closures of outdated production facilities and strict controls on new projects, have been initiated and, as emphasized in the 2017 government work report, remain key tasks for the authorities. They could be usefully complemented by measures to enhance SOEs' corporate governance and efficiency. Relatedly, the rapid expansion of credit increases the risk of disorderly deleveraging with steadily decreasing returns. A continued gradual tightening of financial discipline, and increased tolerance for insolvencies and bankruptcies, including of SOEs, would assist financial markets in allocating resources efficiently. Monetary policy started tightening in early 2017, but further adjustments may be required,² and better regulation and supervision of shadow banking activities remains important. Strengthening social transfers and active labor market policies, and facilitating migration to areas where new jobs are created, will help mitigate any adverse impact on livelihoods and economic activity. In addition, mortgage debt is rising rapidly, albeit from a low base, and needs to be monitored carefully.

Elsewhere in the region, rapid private sector credit growth and sizable external debts could catalyze the buildup and transmission of risks; improvements in supervision and prudential regulation are required. Credit growth remains elevated across much of the region, including Cambodia, Lao PDR, the Philippines, Myanmar, and Vietnam. The policy response must involve efforts to strengthen regulation and supervision in line with international best practice. Arrangements for resolving nonperforming loans also need to be improved.³ As total debt stocks continue increasing, macroprudential regulation will prove increasingly important. In Vietnam, where strong external positions have been used to build up reserves, greater sterilization and refraining from the use of administrative credit targets will also help temper credit growth.

² The authorities also disclosed in October 2016 guidelines for a pilot debt-equity swap program for corporates, which aims to address high leverage. However, it is yet unclear whether these efforts are having any material impact.

³ In the above economies, the recovery rate in dealing with bankruptcies rarely exceeds 20 percent, compared to the EAP average of 33.9 percent. And Vietnam needs to address the banking system's significant legacy nonperforming assets.

Ensuring sustained growth and greater inclusion

Sustaining medium-term growth and promoting inclusion will require efforts across a range of areas. Regional GDP has already recovered well above its precrisis level, and short-term prospects are encouraging. However, several economies have been experiencing trend slowdowns in both productivity (Box I.C.2) and, in particular, investment growth (Box I.C.3). This deceleration has occurred at much lower levels of income per capita than characterized the earlier generation of fast-growing economies in East Asia. While the precise causes differ across countries, the underlying drivers of this trend include weaknesses in the institutional environment and investment climate, rising private debt burdens, weak growth prospects in advanced economies, and negative terms-of-trade shocks. Sustaining robust growth over the medium term will involve addressing a range of bottlenecks, so as to increase the impact of public investment on productivity, and help crowd in both domestic and foreign private investment. This issue of the *East Asia and Pacific Economic Update* discusses three broad reform areas: improving the quality of public expenditure, responding to potential global protectionist pressures through greater regional integration, and dealing with the rising threat of agricultural pollution.

▸ Improving the quality of public expenditure

Across the region, improving the quality of public spending can bring benefits. While all countries can gain, this agenda is especially critical in economies with limited fiscal space, as it will help ensure that needed fiscal adjustments do not affect the most vulnerable or the delivery of key public services.

In China, significant improvements in access to and quality of public services can be achieved through reform of public finances. Current revenue and expenditure mismatches at the local level result in wide disparities in welfare expenditure and social service provision. Lower infrastructure spending, combined with a reallocation of funds from distortionary agricultural support programs, can help free up resources. If combined with complementary sectoral reforms, these resources can help finance a consolidated, streamlined social protection system, more equitable educational spending, and improved access to health services for the poor.

A number of economies need to both improve service delivery and sustain infrastructure spending.⁴ In Indonesia, more efficient spending on education and agriculture will allow for a reallocation toward underfunded programs with greater development impact. The 2017 budget represents a step in the right direction, with its emphasis on sustaining higher allocations for infrastructure, health, and social assistance, and improving the targeting of energy subsidies and social programs. In Malaysia, priorities include improving the targeting of social protection, maintaining support for infrastructure development, and increasing the quality of education to address skills constraints. In Myanmar, limited fiscal space must be refocused toward capital expenditure, including on critical energy and transport infrastructure, and toward currently underfunded social protection.

Public investments and broader reforms can have a significant impact on agricultural productivity and food prices, with important implications for poverty. Across the region, both urban and rural poor remain vulnerable to higher prices, especially for rice and other staple foods. Price stabilization policies have often been

⁴ In the World Economic Forum 2016–17 *Global Competitiveness Report* (World Economic Forum 2016), only three countries in developing EAP rank higher than 50th in the world for quality of infrastructure.

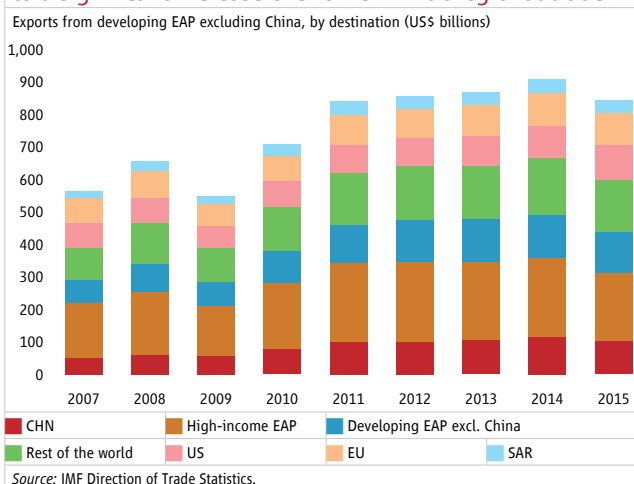
ineffective in containing prices. Measures to boost agricultural productivity and enhance logistics (including through improvements in irrigation and transport infrastructure, more effective agricultural research, stronger land titling, and greater competition) are more likely to be effective in reducing food prices and boosting the incomes of the poor (Box I.C.4).

Greater infrastructure expenditure must be accompanied by a focus on ensuring value for money, and tackling underlying legal and regulatory barriers to project implementation (World Bank 2016b). Improved project planning and implementation systems, including procurement regulations, will boost the productivity of public investment and increase its fiscal multiplier effects. There is significant scope in most countries to strengthen investment appraisal and planning processes, and bolster interagency collaboration and coordination on investment projects. In Thailand, reform of public investment management should address the history of challenges with respect to the timely implementation of large infrastructure projects.

► Boosting regional integration to offset greater global protectionism

Developing EAP could benefit significantly from further deepening regional integration. Greater regional integration, including within ASEAN, has already led to a significant increase over time in intraregional trade (Figure I.C.1). Indeed, intraregional trade in general exceeds the values predicted by a simple gravity model (Table I.C.1). Nevertheless, there are opportunities to increase integration, especially in services trade, which remains subject to significant restrictions across most of the region. Opening up markets, harmonizing standards, and streamlining the business environment would significantly boost the productivity of service industries, as well as manufacturing which relies critically on service inputs (ASEAN Secretariat and World Bank 2015).

Figure I.C.1. Greater regional integration has already led to a significant increase over time in intraregional trade



Several initiatives provide an opportunity to advance regional integration. The United States has withdrawn from the proposed Trans-Pacific Partnership. However, alternative regional platforms are being discussed to advance developing EAP's trade integration. Such agreements will provide greater benefits to the region if they cover all trade, in both goods and services, do not discriminate against nonmembers, and feature functioning dispute resolution mechanisms. In particular, faster progress on the Regional Comprehensive Economic Partnership (comprising the 10 ASEAN members, China, Japan, Korea, Australia, New Zealand, and India) could help sustain the integration agenda, provided it addresses such issues as nontariff barriers. The evolving ASEAN Economic Community could also help promote further liberalization of goods, services, and capital markets. And additional gains might be available from the various ASEAN+3 initiatives, which involve China, Japan, and Korea.

Significant gains could arise from lowering barriers to labor mobility within ASEAN.

The free mobility of skilled labor constitutes a key pillar of the envisaged economic integration under the ASEAN Economic Community. Nevertheless, existing policies to facilitate such mobility are likely to have a limited impact. Further, the focus on skilled labor does not cover the majority of ASEAN migrants. Broader measures to reduce the costs of labor mobility, both across borders and domestically across regions and sectors, will increase aggregate gains from migration, while minimizing any negative impact on the domestic labor force. Greater labor mobility would also reinforce the impact of measures to liberalize trade and investment. In this context, policy reforms are required in both labor-sending and labor-receiving countries. Specific priorities include: strengthening regulation of international recruitment agencies, and providing comparable protection to migrant and local workers; introducing mutual recognition of qualifications, and increasing the portability of social protection benefits; and adjusting quantity restrictions on migration regularly, based on economic needs (Chapter II.A, “Boosting Labor Mobility in the ASEAN Economic Community”).

Table I.C.1. Exports to rest of developing EAP

Excess of actual over predicted values, 2010–15 (percent of predicted values)	
China	8
Indonesia	36
Malaysia	15
Philippines	97
Vietnam	17
Mongolia	-23

Sources: World Bank staff estimates using IMF Direction of Trade Statistics, CEPIL, and IMF *World Economic Outlook* data.

Note: Estimates are based on the following gravity model:

$$\ln Trade_{ijt} = A_i + B_1 \ln(y_i, y_j) + B_2 \ln(GDP/Pop)_i + B_3 \ln(GDP/Pop)_j + \Gamma_1 \ln Dist_{ij} + \Gamma_2 Contig_{ij} + \Delta_1 ComLang_{ij} + \Delta_2 Colony_{ij} + \Delta_3 Col45_{ij} + \Delta_4 CurCol_{ij} + \Delta_5 SameCountry_{ij} + T_t + \sum_{ijk} \epsilon_{ijk}$$

where the subscripts i and j denote countries; the subscript t the year; $Trade$ the bilateral trade between two countries; GDP total GDP; Pop population; $Dist$ the bilateral distance between the two countries' capitals; $Contig$ whether the countries share a border; $ComLang$ whether they share a common language; $Colony$ whether they have ever had a colonial link; $Col45$ whether they had a common colonizer after 1945; $CurCol$ whether they currently have a colonial relationship; and $SameCountry$ whether they were/are part of the same country. The sample includes all available countries during 1990–2015.

Seizing broader opportunities to expand international trade can also provide significant payoffs. The WTO's Trade Facilitation Agreement (TFA) came into force in February 2017. Full implementation of the TFA is expected to lower trade costs in Asia by 14 percent (ad valorem tariff equivalent), with significant gains for Vietnam, Cambodia, Thailand, and Malaysia (World Trade Organization 2015). Relatedly, economies in South Asia are expected to expand rapidly in the next few years, and developing EAP may be able to benefit from penetrating these fast-growing markets, and helping the region diversify risks.

► Dealing with the rising threat of agriculture pollution

The agricultural sector's increasingly adverse environmental footprint needs attention across the region.

The aggregate cost of local environmental degradation exceeds 1 percent of GDP across most of the region.⁵ Much of this reflects the impact of agriculture on soil quality, water quality, and deforestation, with increasingly serious consequences for human health and biodiversity, and increasingly the productivity of agriculture itself (chapter II.B, “Tackling Farm Pollution in Developing East Asia”). This particularly threatens the poor, whose livelihoods are especially dependent on natural resources, and who lack the means to cope with environmental shocks. So far, policy responses have typically occurred late, lacked the required scale, and ultimately failed to tackle incentives that distort farming practices and the broader structure of farming. Indeed, agricultural pollution is often encouraged by current public expenditure programs, including subsidies and regulations favoring the livestock industry, and direct or indirect fertilizer subsidies. Looking ahead, agricultural agencies must increasingly

⁵ Exceptions include Fiji, Malaysia, and the Philippines. Data refer to 2013. Source: World Bank staff estimates based on the costs of (a) forest depletion (*World Development Indicators*); (b) greenhouse gas emissions from fossil fuels (*World Development Indicators*), with damage estimated at US\$20 per ton of carbon; (c) greenhouse gas emissions/removal from forestland, cropland, and grassland (FAOSTAT Database), with damage estimated at US\$20 per ton of carbon; and (d) various pollution, environmental, and hygiene risks (IHME 2013), with damage calculated as the loss of expected lifetime earnings due to premature death.

focus on health and environmental outcomes, including by giving greater weight to resource conservation, and redefining food security in terms of micronutrient content and diversity as well as caloric and protein availability. Similarly, health and environmental agencies must bring agriculture more fully into their fold, to help curb the rise of chronic disease.

► An agenda for the Pacific Island Countries

In the Pacific Island Countries (PICs), maintaining fiscal sustainability, while preserving and increasing allocations for critical sectors, remains a critical challenge. The fiscal position of many PICs remains vulnerable, despite recent fiscal surpluses, as both revenue and expenditure are subject to large and frequent shocks. To ensure fiscal sustainability, reforms need to shore up revenues, contain unproductive spending while boosting critical expenditures on health and education, and build up buffers against shocks.

Policy reforms in selected sectors may prove transformational over the medium term. *Tourism* provides major opportunities to accelerate growth and boost employment. To maximize its benefits, PICs need to tap more into Chinese tourism, increase the number of luxury resorts, capture more of the retiree market, and encourage cruise ships to base in the Pacific. Increases in *labor mobility*, through the expansion of existing and the negotiation of new agreements, complemented by investments in workers' human capital, could generate substantial benefits. Increases in *mobile and internet penetration*, complemented by a conducive business environment and the development of a skilled workforce could boost productivity; enhance the quality and attractiveness of existing services, including tourism, education, and health; and create new market opportunities, including business process outsourcing. And income from *fisheries* could be significantly increased, without threatening the sustainability of the fisheries stock, by broadening participation in the "vessel-day scheme" cooperative agreements to include East Asian countries with major fishing grounds, such as the Philippines and Indonesia; ensuring compliance with robust catch limits; allowing easier access to, and trading of, vessel days; and gradually moving to a catch-based scheme (Box I.B.4).

Box I.C.1. Exchange Rate Regimes in Developing East Asia and Pacific

Exchange rate management has been a focus of significant attention in developing EAP since the 1997–98 Asian financial crisis. With the passage of time, there is now greater consensus on the ultimate causes of the crisis.¹ In particular, the inflexibility of exchange rate regimes appears to have amplified shocks in several of the affected countries: once the crisis was triggered, the decision to defend currencies ultimately led to significant losses in output and reserves. Relatedly, market overreaction and herding behavior meant that even neighboring countries that were widely regarded as having broadly adequate exchange rate frameworks proved vulnerable to contagion.

Regional currencies could now be again put to the test as global financial condition tighten. The region has already been facing significant capital outflows, reflecting the modest global financial tightening that has already occurred, but also perceived economic and political risks (Box I.A.3). It is therefore important to analyze to what extent exchange rate regimes are contributing to imbalances, as evidenced by sharp real exchange rate appreciation or misalignment, and whether countries have sufficient buffers to support the selected regime. The analysis here abstracts from the broader issue of the optimal exchange rate regime for developing EAP.²

Developing EAP countries use a wide range of exchange rate regimes, which cover the spectrum of available options. Most countries engage to some degree in exchange rate intervention. Nevertheless, three broad groups may be identified, drawing on IMF classifications:

- **Flexible exchange rates.** Indonesia, the Philippines, and Thailand all have floating exchange rate regimes (Table I.C.1). Similarly, Malaysia's regime is characterized as "other managed arrangement," but it is generally regarded by analysts and the authorities as lying on the flexible end of the managed exchange rate spectrum.³ All these countries were tightly pegged to the U.S. dollar prior to the Asian financial crisis (Indonesia had a crawling peg). They were significantly affected by the crisis and, over time, have generally moved away from using the exchange rate as an anchor for monetary policy, and toward inflation targeting. In addition, Mongolia has had a floating exchange rate regime since 2009, and Myanmar can be included in this group following its exchange rate reforms of 2012. In all countries, the authorities do intervene to dampen day-to-day volatility in their currencies, but allow them to move substantially over longer periods (Klyuev 2016). For instance, in response to the recent appreciation of the U.S. dollar, the authorities intervened to limit fluctuations in Mongolia, Myanmar, the Philippines, and to a lesser extent, Thailand. But the currency still depreciated in most countries, most strongly in Mongolia and Myanmar.

1 Key drivers likely included the premature liberalization of capital markets, combined with exchange-rate policies that dramatically reduced perceived volatility. See Corsetti, Pesenti, and Roubini (1999) and Woodrow Wilson International Center for Scholars: Asia Program (2007) for a fuller discussion.

2 The existing literature in general discusses the choice of exchange rate regime in terms of the importance of an independent monetary policy, the degree of exchange rate risk, and the need for a nominal anchor for monetary policy. Among important arguments for flexibility, exchange rate volatility is often found to have at most small adverse effects on trade and on investment (Frankel 1999). Further, even fixed exchange rates are in many cases unable to provide a tight anchor for the price level (Williamson 1999).

3 www.thestar.com.my/business/business-news/2015/08/14/no-peg-no-controls.

(continued)

(Box I.C.1 continued)

- **Less flexible exchange rates.** Cambodia, China, Lao PDR, and Vietnam all have a “stabilized arrangement” or “other managed arrangement.” The authorities are heavily involved in setting the exchange rate, and intervene frequently to keep the currency within predetermined ranges. In several cases, the countries are either de jure or de facto anchoring or pegging to the U.S. dollar or a basket of currencies. For instance, over the past year, China intervened significantly to prop up the currency after it came under pressure from large capital outflows. In Lao PDR, foreign exchange has been rationed, resulting in the emergence of a 3 to 5 percent parallel exchange rate premium. Cambodia and Vietnam, however, intervened by purchasing excess foreign currency as strong inflows resulted in appreciation pressures.
- **Fixed exchange rates.** The Pacific Island Countries typically either lack their own currency, and instead use the U.S. dollar or Australian dollar, or have hard pegs.⁴

Exchange rate policies are supported by a relatively frequent use of capital-flow management measures across the region, particularly in the large economies. In general, developing EAP has less open financial accounts than other regions, with a broad increase in capital-flow management measures since the 2000s (IMF 2014). In 2013, Indonesia and Thailand were most open to capital flows; China, Malaysia, Myanmar, the Philippines, and Vietnam all had significantly more controls in place.⁵ In Malaysia, while central bank interventions recently moderated, the authorities tightened currency regulations.⁶ China, after some liberalization of bond and stock markets during 2016, intensified restrictions on outward investments in early 2017.

Countries with flexible exchange rates have in general experienced less real appreciation over the past few years.⁷ It is well documented that East Asian economies in general have focused on maintaining competitive exchange rates: their “fear of appreciation” is manifested in a willingness to allow depreciations, but reluctance to allow appreciations (Rajan 2012). Indeed, among countries with flexible exchange rates, only Indonesia has recently experienced significant real appreciation. Appreciating trends in the Philippines and Myanmar peaked in early 2015 and mid-2016, respectively, but have since been reversed. Mongolia has experienced a rapid loss in the value of its currency, following the rapid appreciation through 2012 and the sharp decline in commodity prices since. Conversely, among economies with less flexible or fixed exchange rates, Cambodia, Lao PDR, Papua New Guinea, the Solomon Islands, and Vietnam have all seen continued real appreciation. That said, in China, developments since the second half of 2015 have reduced the extent of appreciation. And there is no significant appreciation pressure in Fiji, Samoa, or Tonga.

4 No separate legal tender in Kiribati, the Marshall Islands, the Federated States of Micronesia, Palau, and Tuvalu. Hard pegs in Fiji, Samoa, the Solomon Islands, and Tonga.

5 Countries may be classified as “open” when on average they have capital controls on less than 10 percent over the sample period (1995–2013), and do not have any years in which there are controls on more than 20 percent of their transactions subcategories. Countries may be classified as “walls” when they have capital controls on more than 70 percent of their transactions subcategories over the sample period, and do not have any years in which there are controls on more than 60 percent of their transactions subcategories. Countries have “gates” when they are neither open nor walls. During 1995–2013, all the large regional economies had walls or gates, and none were open (Fernandez et al. 2015).

6 The authorities reinforced rules against offshore currency trading, required exporters to convert at least 75 percent of their export proceeds to local currency, and adopted measures to deepen onshore financial markets to ensure liquidity in domestic financial markets.

7 Appreciation of the exchange rate is not necessarily a sign of unsustainable policies. Countries can cope with the appreciation provided there are sufficient productivity gains. However, prolonged real appreciations can be a signal of misalignment and imbalances.

(continued)

(Box I.C.1 continued)

Experience from across the region suggests that significant exchange rate misalignments can be avoided with either flexible or fixed exchange rate regimes, provided these regimes are consistent with the overall macroeconomic policy stance. Economies with flexible exchange rates have proved broadly successful at avoiding misalignments, with the exchange rate typically assessed as in line with fundamentals or moderately undervalued (Table I.C.1). The only exceptions are Myanmar, where the evidence points to only moderate overvaluation, and Mongolia. Conversely, a number of countries with less flexible or fixed exchange rates have also been able to avoid the build-up of imbalances. In particular, in China, Vietnam, and most PICs, there is no clear evidence of misalignment. And in Cambodia and the Solomon Islands there is only moderate overvaluation. In contrast, Lao PDR and Papua New Guinea continue to have overvalued exchange rates. And managed exchange rate regimes may be able to avoid overvaluation, but at the cost of contributing to the build-up of risks in other sectors. For instance, in Cambodia, China, and Vietnam, unsterilized foreign exchange intervention likely fueled rapid credit growth.

Table BI.C.1.1. Exchange rate regimes

<i>Country</i>	<i>Exchange rate arrangement</i>	<i>Comment</i>	<i>Degree of misalignment^a date of IMF Article IV report</i>
Cambodia	Other managed arrangement	US\$ as anchor for monetary policy	Moderately overvalued (10.1 percent to 5.7 percent above equilibrium value) (November 2016)
China	Other managed arrangement		Broadly in line with fundamentals (4.1 percent above to 1.5 percent below equilibrium value) (August 2016)
Fiji	Conventional peg		Moderately overvalued (14.4 percent above to 3 percent below equilibrium value) (February 2016)
Indonesia	Floating		Broadly in line with fundamentals (0.5 percent above to 6.2 percent below equilibrium value) (February 2017)
Kiribati	No separate legal tender		No assessment (September 2016)
Lao PDR	Stabilized arrangement	De facto anchor to US\$	Overvalued (38.3 percent to 20.1 percent above equilibrium value) (January 2017)
Malaysia	Other managed arrangement		Moderately undervalued (1.4 percent above to 30.7 percent below equilibrium value) (May 2016)
Marshall Islands	No separate legal tender		Broadly in equilibrium (July 2016)
Micronesia	No separate legal tender		
Mongolia	Floating		Overvalued (14 percent to 11 percent above equilibrium value) (April 2015)
Myanmar	Other managed arrangement		Moderately overvalued (17 percent to 5.8 percent above equilibrium value) (February 2017)
Palau	No separate legal tender		Broadly in equilibrium
Papua New Guinea	Craw-like arrangement	De facto anchor to US\$	Overvalued (28.5 percent above to 46 percent below equilibrium value) (January 2017)

(continued)

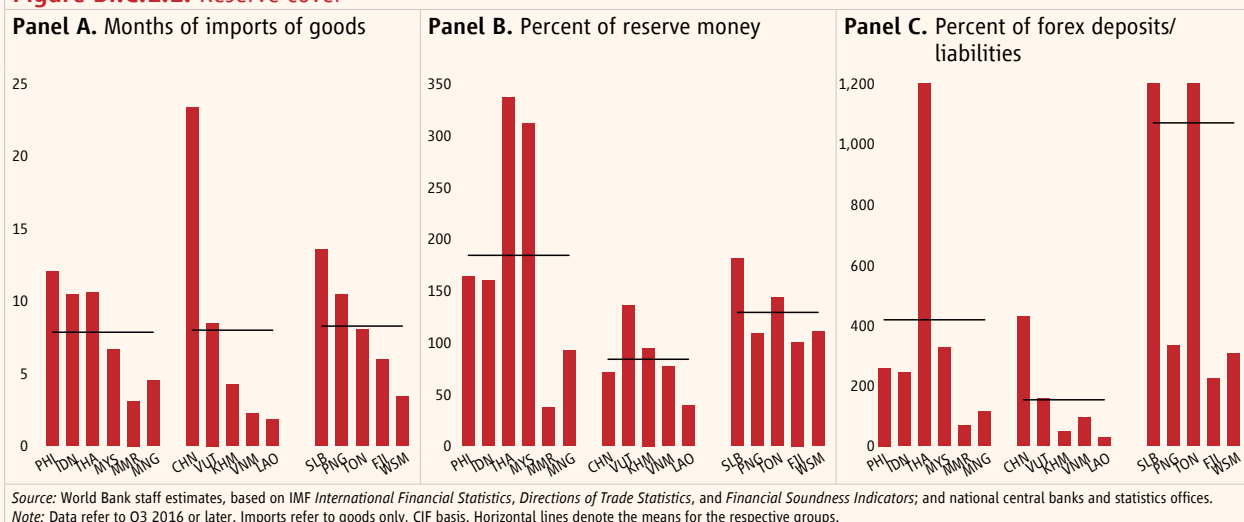
(Box I.C.1 continued)

Table BI.C.1.1. Exchange rate regimes

Country	Exchange rate arrangement	Comment	Degree of misalignment ^a date of IMF Article IV report
Philippines	Floating		Broadly in line with fundamentals (24.5 percent above to 7.7 percent below equilibrium value) (September 2016)
Samoa	Conventional peg		No significant misalignment (18.8 percent above to 17.5 percent below equilibrium value) (July 2015)
Solomon Islands	Conventional peg	De facto anchor to a composite	Moderately overvalued (17 percent above to 12 percent below equilibrium value) (March 2016)
Thailand	Floating		Broadly in line with fundamentals (3.1 percent above to 2.9 percent below equilibrium value) (June 2016)
Timor-Leste	No separate legal tender		No assessment (June 2016)
Tonga	Pegged exchange rate within horizontal bands	De facto anchor to a composite	Broadly in line with fundamentals (2.2 percent above equilibrium value) (June 2016)
Tuvalu	No separate legal tender		No evidence of misalignment (October 2016)
Vanuatu	Other managed arrangement	Other	Broadly in line with fundamentals (7.9 percent to 2.4 percent above equilibrium value) (October 2016)
Vietnam	Stabilized arrangement	De facto anchor to the US\$	No evidence of misalignment (22.9 percent above to 11.2 percent below equilibrium value) (July 2016)

Sources: IMF AREAER database; IMF Article IV staff reports; World Bank staff estimates.

Note: a. The range of reported values for the degree of misalignment reflects the estimates produced by different modeling approaches.

Figure BI.C.1.1. Reserve cover

(continued)

(Box I.C.1 continued)

Reserve buffers are generally comfortable across the region, regardless of the exchange rate regime. Among countries with flexible exchange rates, reserve cover in months of imports significantly exceeds standard benchmarks in the Philippines, Thailand, Indonesia, and Malaysia (Figure I.C.2, panel A). However, similarly strong reserve cover exists in countries with less flexible exchange rates, such as China and Vanuatu, or with pegs, such as Fiji and Tonga. Conversely, the countries with relatively limited reserve cover are equally diverse, including some with flexible exchange rates, such as Myanmar, and others with less flexible or fixed exchange rates, such as Lao PDR, Samoa, and Vietnam.⁸ Again, reserves are relatively low as a share of reserve money (panel B) or of foreign currency liabilities (panel C) in economies with both flexible exchange rates, such as Mongolia, and less flexible exchange rates, such as Cambodia.

Ultimately, the presence and extent of imbalances depends not only on the exchange rate regime per se, but on the coherence of the overall macroeconomic framework; exchange rate flexibility per se is no panacea. Among the large regional economies that were affected by the Asian financial crisis, greater exchange rate flexibility has helped preserve competitiveness and maintain adequate reserves. Looking ahead, if the U.S. dollar continues appreciating, such flexibility may help maintain trade competitiveness, without leading to unmanageable debt servicing costs. Nevertheless, similar outcomes can be achieved with less flexible exchange rate arrangements, if these are combined with disciplined fiscal and monetary policies (Baig 2001). And several countries in developing EAP, including, in particular, Cambodia and China, have indeed been able to avoid imbalances through such discipline. But in other countries, such as Lao PDR and Papua New Guinea, significant real appreciation and low reserve buffers suggest that the exchange rate regime is not properly aligned with their fiscal and monetary policies. If the U.S. dollar continues strengthening, these countries risk further erosion of competitiveness and difficulties in maintaining their exchange rate regime.

⁸ Vietnam, however, has recently seen a significant increase in reserves.

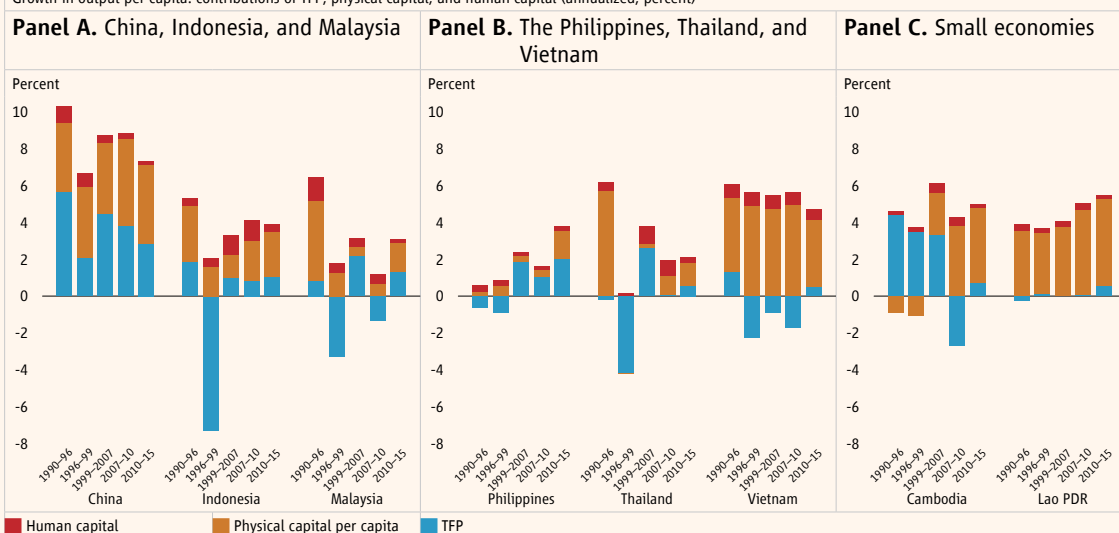
(Box I.C.1 continued)

Box I.C.2. Productivity Trends in Developing East Asia and Pacific¹

In developing EAP, there is some evidence of a productivity slowdown, but with no consistent pattern across countries or over time. Total factor productivity (TFP) measures the efficiency with which factors of production are used to produce goods and services, and plays a key role in explaining differences in income levels across countries.² Across the large regional economies, aggregate TFP growth fell sharply with the 1997–98 Asian financial crisis (Figure BI.C.2.1, panels A and B). It subsequently broadly recovered, but fell again during the global financial crisis (GFC). Since then, it has continued decelerating in China, and remains well below pre-GFC levels in Thailand and to a lesser extent Malaysia. In contrast, TFP growth has returned to pre-GFC levels in the Philippines and Indonesia, and is rising in Vietnam. Among the small economies, TFP growth is well below pre-GFC levels in Cambodia, and remains low in Lao PDR (panel C).

Figure BI.C.2.1. Total factor productivity growth

Growth in output per capita: contributions of TFP, physical capital, and human capital (annualized, percent)



Source: World Bank staff estimates, based on data from the Penn World Tables, World Development Indicators, and National Statistical Offices.

Note: Estimates based on growth accounting decomposition. An aggregate Cobb-Douglas production function is assumed, with physical capital, labor, and human capital as inputs. Physical capital is estimated using the perpetual inventory method. Human capital is estimated based on average years of schooling and Mincer rates of return to education. This decomposition measures the proximate sources of growth, but TFP levels, and their differences across sectors, ultimately affect output growth also by changing the incentives to accumulate both physical and human capital.

Similarly, the pace of structural transformation has decelerated in some but not all countries, broadly in line with aggregate productivity trends. The reallocation of labor toward sectors enjoying higher productivity (“static reallocation”) or faster productivity growth (“dynamic reallocation”), and in particular from agriculture toward manufacturing, construction, and non-traditional services, was for extended periods an important channel underpinning aggregate productivity gains in the region.³ However, this transformation

¹ Prepared by Geno Najdov and Nikola Spatafora, with inputs from the Enterprise Analysis Unit.

² Hsieh and Klenow 2010.

³ McMillan and Rodrik 2011

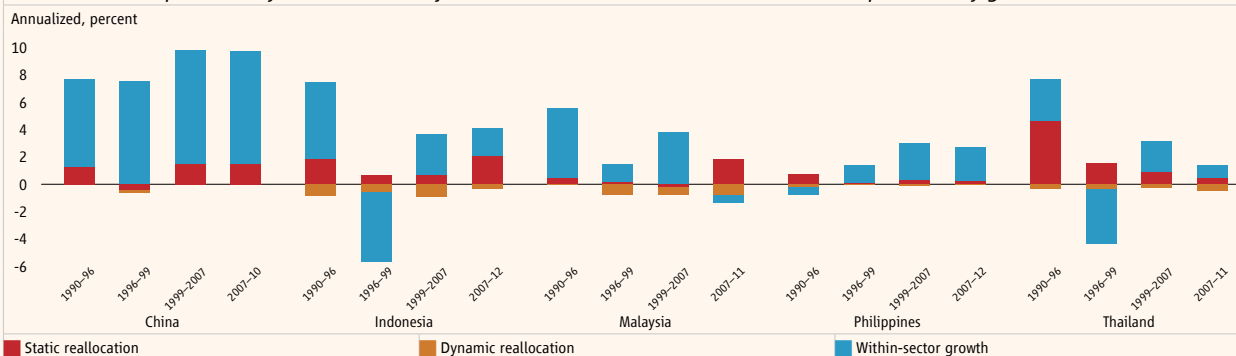
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(Box I.C.2 continued)

has stalled in Thailand, and its pace remains weak in Malaysia and the Philippines since the Asian financial crisis (Figure BI.C.2.2). In contrast, the pace of labor reallocation is increasing in Indonesia, and remained robust in China through 2010. In Vietnam, detailed studies suggest that intersectoral reallocation continues to account for approximately half of labor productivity growth, with no signs of a slowdown.⁴

Figure BI.C.2.2. Intersectoral labor reallocation

Growth in labor productivity: contributions of intersectoral reallocation and within-sector productivity growth



Source: World Bank staff estimates, based on data from the Groningen Growth and Development Centre 10-Sector Database; www.rug.nl/ggdc/productivity/10-sector.

Note: Aggregate labor productivity growth is decomposed as follows:

where P and p denote, respectively, economy-wide and sectoral labor productivity; Θ denotes sectoral employment shares; the subscripts i and t refer, respectively, to the sector and year; and the Δ operator denotes changes over time. The first term on the right-hand side captures the impact of within-sector productivity growth; the second and third terms capture the impact of structural reallocation, that is, shifts toward sectors with higher initial productivity ("static reallocation," the second term), or higher productivity growth ("dynamic reallocation," the third term) (de Vries et al. 2015). The analysis employs data on value added at constant prices, and on employment, for the following 10 sectors: agriculture, hunting and forestry, and fishing; mining and quarrying; manufacturing; electricity, gas, and water supply; construction; wholesale and retail trade, hotels, and restaurants; transport, storage, and communications; finance, insurance, real estate, and business services; government services; and community, social, and personal services. Data are available for the following periods: China, 1952–2010; Indonesia, 1961–2012; Malaysia, 1975–2011; the Philippines, 1971–2012; and Thailand, 1960–2011.

Large productivity differences across firms suggest that resource misallocation may have a significant impact on aggregate productivity. Additional insights may be gained from the firm-level productivity data in the World Bank *Enterprise Surveys*. Much of the following discussion focuses on labor productivity, since estimating TFP at the firm level is challenging.⁵ Average labor productivity in both manufacturing and services is in general correlated with output per capita. But several regional economies, including China, Malaysia, the Philippines, and Vietnam, are characterized by significant differences in productivity across firms, in both manufacturing (Figure BI.C.2.3, panel A) and services (panel B).⁶ The continued survival of a large number of underperforming firms may be indicative of capital-, labor-, or product-market distortions constraining relatively more efficient producers.⁷ These differentials might reflect differences across firms in the capital intensity and technology intensity of production, as measured by the ratio of sales to labor costs (panels C and D).

4 McCaig and Pavcnik 2013

5 Among the key technical difficulties, differences across firms in TFP are likely to be correlated with firms' choice of inputs, as well as with the (typically unmeasured) price deflators for firms' inputs and outputs.

6 For a more detailed analysis of Malaysia, see *Malaysia Economic Monitor: The Quest for Productivity Growth*, World Bank, Washington, DC, December 2016.

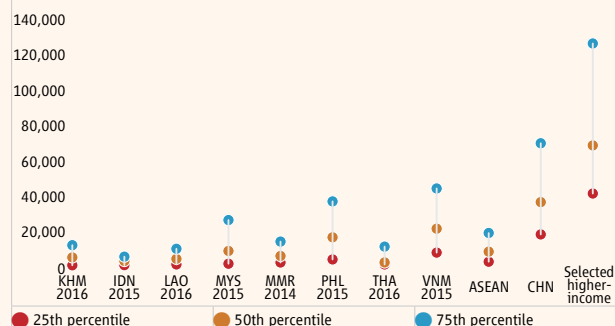
7 For an analysis of misallocation in manufacturing see Hsieh and Klenow (2009), and in agriculture see Restuccia and Santaaulalia-Llopi (2017).

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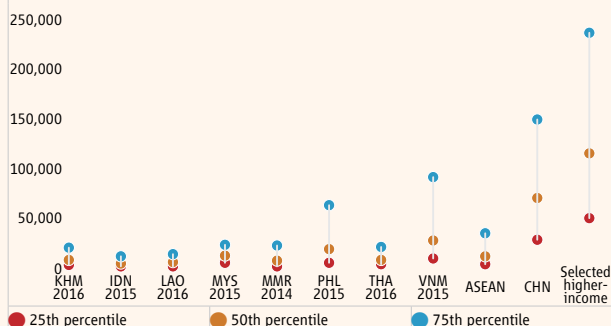
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Figure BI.C.2.3. Labor productivity, firm level**Panel A. Sales per worker, in manufacturing**

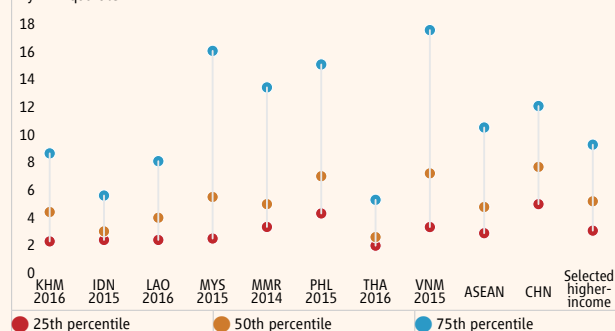
By firm quartile (2009 US\$)

**Panel B. Sales per worker, in services**

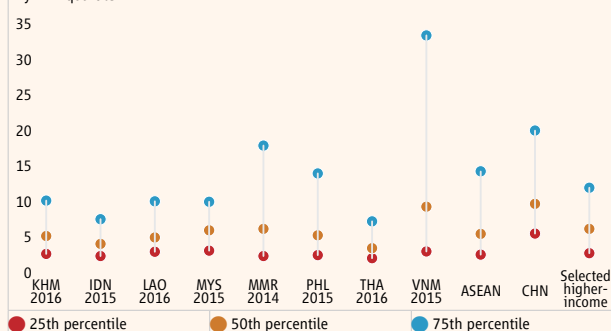
By firm quartile (2009 US\$)

**Panel C. Sales to total labor costs, in manufacturing**

By firm quartile

**Panel D. Sales to total labor costs, in services**

By firm quartile



Source: World Bank Enterprise Surveys.

Note: "Selected higher-income" includes Chile, the Czech Republic, Estonia, Hungary, Israel, Latvia, Mexico, Poland, the Slovak Republic, Slovenia, Sweden, and Turkey.

Table BI.C.2.1. Reported constraints to firm-level productivity in developing EAP

<i>Constraint</i>	<i>Percentage of firms identifying it as the biggest constraint</i>	<i>Countries where it ranks among the top five constraints</i>
Practices of the informal sector	16.0	Cambodia, China, Indonesia, Lao PDR, Malaysia, Philippines, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vietnam, Vanuatu
Access to finance	11.5	Cambodia, China, Fiji, Indonesia, Lao PDR, Micronesia, Mongolia, Myanmar, Philippines, Samoa, Timor-Leste, Vanuatu, Vietnam
Tax rates	10.9	China, Fiji, Indonesia, Lao PDR, Malaysia, Micronesia, Mongolia, Philippines, Samoa, Solomon Islands, Thailand, Tonga, Vietnam
Political instability	10.4	Cambodia, Fiji, Indonesia, Malaysia, Mongolia, Papua New Guinea, Thailand, Timor-Leste, Tonga
Corruption	8.8	Mongolia, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste, Tonga
Access to land	7.0	Myanmar, Papua New Guinea, Solomon Islands
Inadequately educated workforce	6.9	Cambodia, China, Micronesia, Lao PDR, Myanmar, Samoa, Solomon Islands, Tonga, Vietnam, Vanuatu

(continued)

(Box I.C.2 continued)

Table BI.C.2.1. Reported constraints to firm-level productivity in developing EAP

Constraint	Percentage of firms identifying it as the biggest constraint	Countries where it ranks among the top five constraints
Electricity	6.3	Lao PDR, Micronesia, Myanmar, Philippines, Thailand, Vanuatu
Transportation	4.7	Cambodia, China, Micronesia, Thailand, Vietnam
Business licensing and permits	4.1	Indonesia, Mongolia, Malaysia, Timor-Leste
Labor regulations	3.4	Fiji, Myanmar, Thailand
Tax administration	3.3	Malaysia
Crime, theft, and disorder	2.7	Fiji, Papua New Guinea, Samoa, Timor-Leste, Vanuatu
Customs and trade regulations	2.7	None
Courts	1.2	None

Firm-level productivity is significantly influenced by several aspects of the business environment.

In general, a wide range of factors is correlated with firm-level productivity; whether there is a causal link is less clear. That said, formal-sector firms across the region repeatedly refer to specific key constraints to their activities, including access to finance, tax rates, political instability, corruption, an inadequately educated workforce, and competition from the informal sector (Table BI.C.2.1). And, indeed, labor productivity is lower among firms that self-report such constraints, or that can be objectively identified as being affected by them (see, for instance, Figure BI.C.2.4, panels A, B, C, and D).

Quantitatively, addressing shortages of skills and infrastructure can significantly improve firm performance. In Malaysia, firms that find adequate labor more easily are 16 percent more productive (Figure BI.C.2.5). In that context, not just education systems but also firm-level training programs have an impact.⁸ Firms that offer formal training opportunities are 23 percent more productive in Malaysia, 30 percent more productive in Cambodia, and 130 percent more productive in Myanmar. Again, improving infrastructure yields a significant payoff: in Malaysia, firms that do not experience power outages are 50 percent more productive.

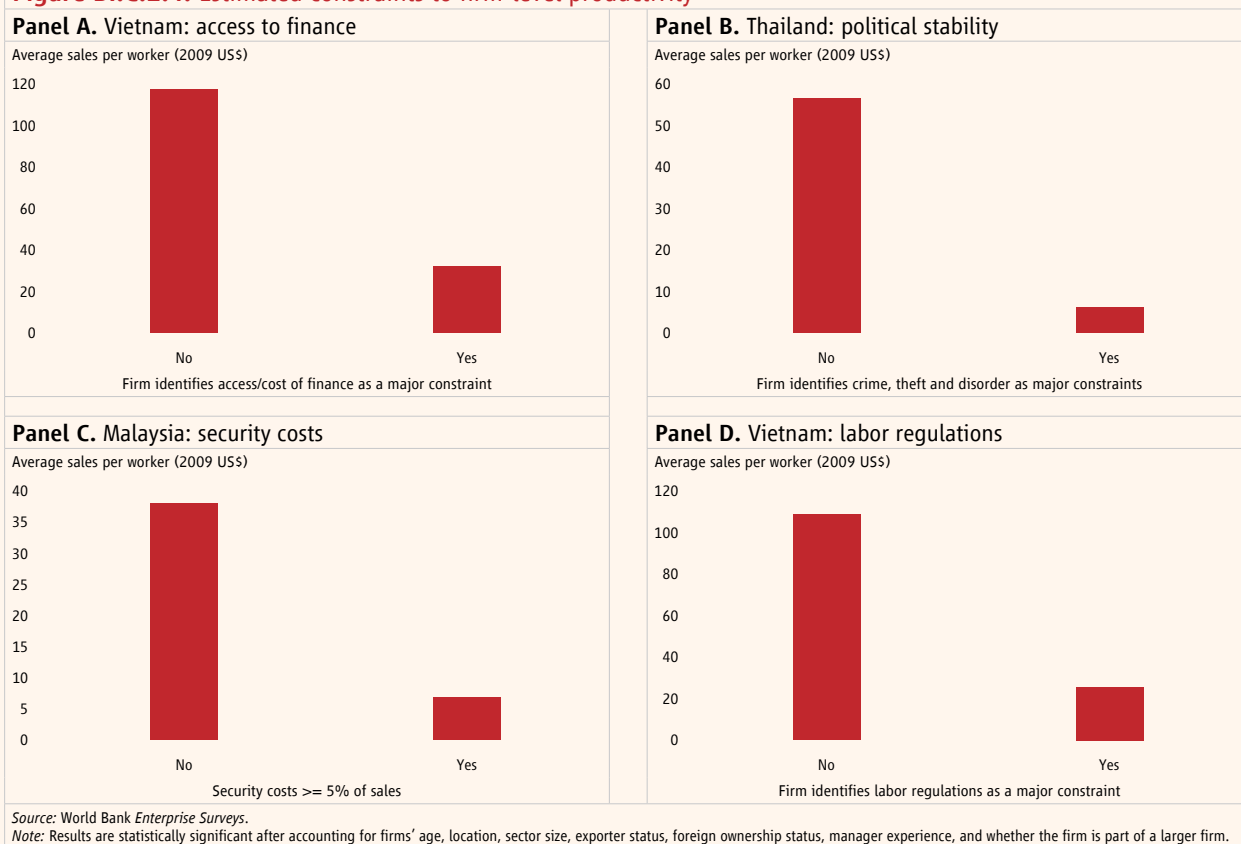
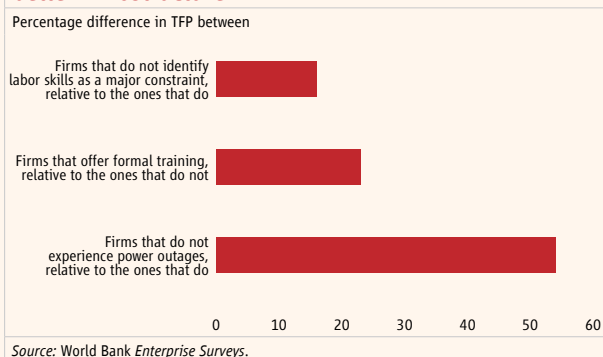
Likewise, productivity is associated with easier access to credit, especially among small and medium enterprises (SMEs), and with focus on innovation. Firms that are not financially constrained expand employment much more rapidly in the Philippines (Figure BI.C.2.6, Panel A), and enjoy higher labor productivity in Vietnam (Panel B). Access to credit is especially challenging for SMEs and for longer-term financing. However, it could be boosted by measures to strengthen creditor and property rights, improve credit information systems, and enhance financial supervision and regulation.⁹ Again, innovative firms are more productive. In Vietnam, firms that invest in formal R&D create three times more jobs, and see much faster sales growth (Figure BI.C.2.7).

⁸ For an analysis of education systems and skill development strategies in developing EAP, see World Bank, *East Asia and Pacific Economic Update, October 2014: Enhancing Competitiveness in an Uncertain World*, chapter II.A, "Moving from Education to Skills in East Asia and Pacific."

⁹ For an analysis of the potential for technological change to boost financial inclusion, and the policy changes required to fully reap this opportunity, see World Bank, *East Asia and Pacific Economic Update, October 2016: Reducing Vulnerabilities*, chapter II.B, "How Will Technology Disrupt Financial Services in East Asia and Pacific?"

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(Box I.C.2 continued)

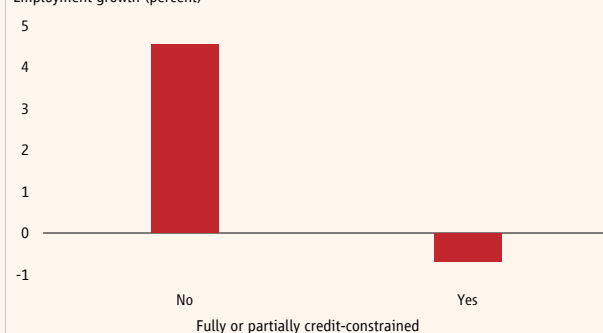
Figure BI.C.2.4. Estimated constraints to firm-level productivity**Figure BI.C.2.5. In Malaysia, productivity is higher among firms that can more easily find the required skills, offer training opportunities, and have access to better infrastructure**

(continued)

(Box I.C.2 continued)

Figure BI.C.2.6. Easier access to credit can increase productivity**Panel A. Philippines: employment growth and credit constraints**

Employment growth (percent)

**Panel B. Vietnam: labor productivity and credit constraints**

Average sales per worker (2009 US\$)

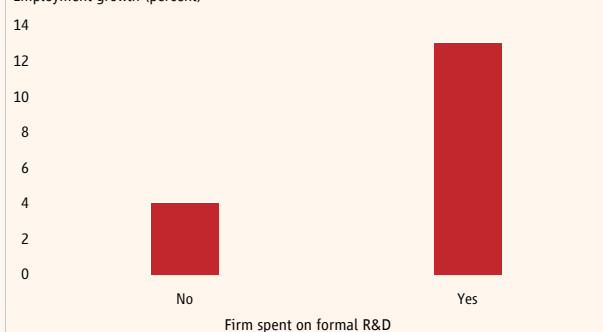


Source: World Bank Enterprise Surveys.

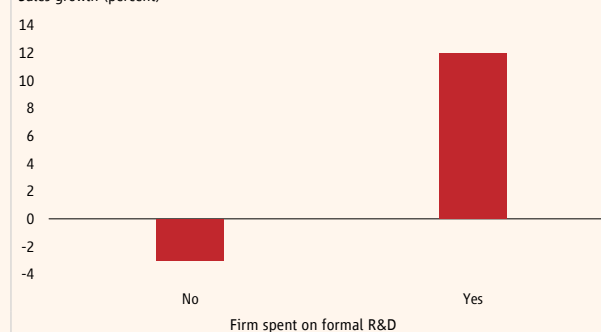
Note: Firms are defined as fully credit-constrained if they cannot obtain any form of external financing. They typically fall into two categories: (a) those that applied for a loan and were rejected; and (b) those that did not apply either because of unfavorable terms and conditions, or because they did not think their application would be approved. Firms are defined as partially credit-constrained if they have external financing but (a) were discouraged from applying for a loan from a financial institution; or (b) applied for a loan that was partially approved or rejected. For an analysis of the impact of these financial constraints, see Kuntchev et al. (2014).

Figure BI.C.2.7. More R&D spending is associated with greater job creation and faster sales growth in Vietnam**Panel A. Employment growth and R&D expenditure**

Employment growth (percent)

**Panel B. Sales growth and R&D expenditure**

Sales growth (percent)



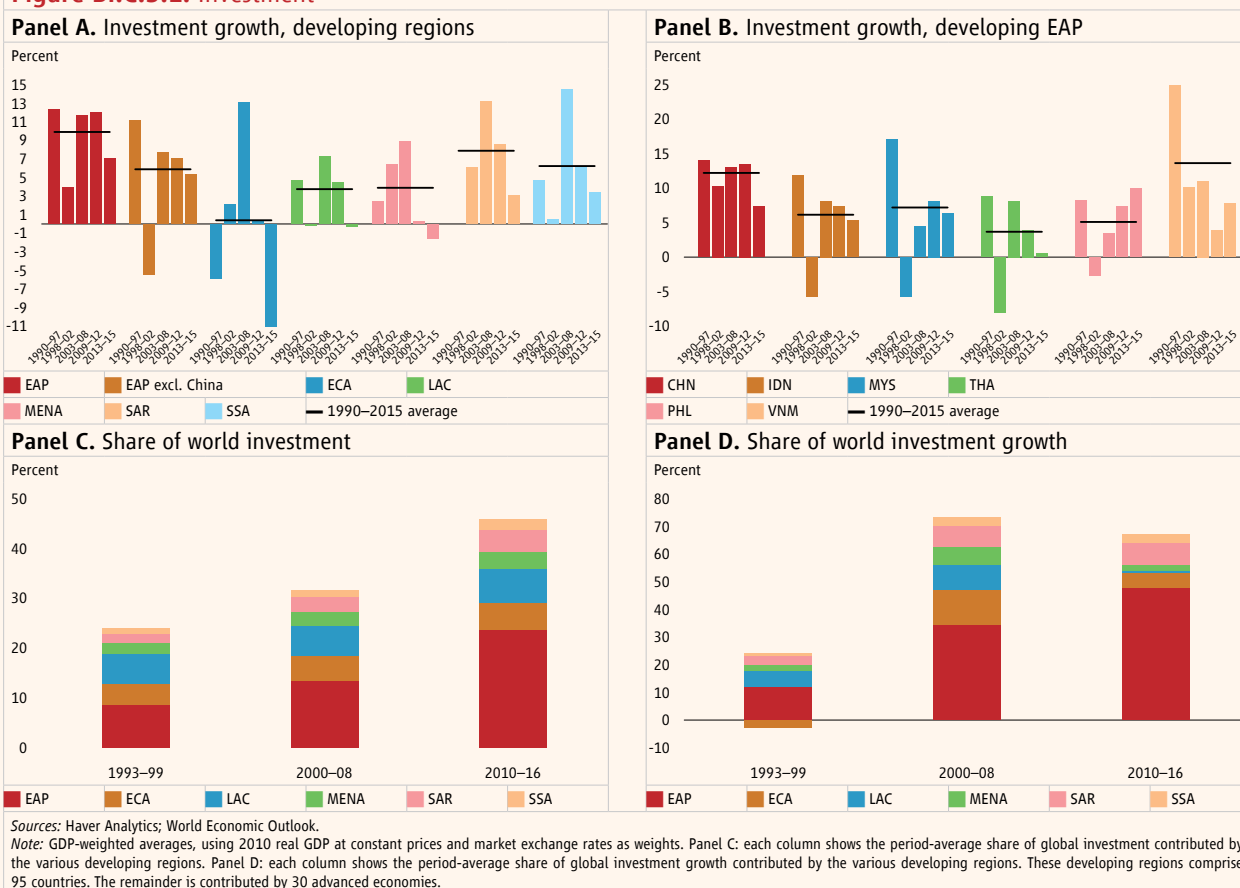
Source: World Bank Enterprise Surveys.

Box I.C.3. The Investment Slowdown in Developing East Asia and Pacific¹

Long-term investment trends in developing EAP

Investment rates in developing EAP since the 1997–98 Asian financial crisis have been significantly higher than in other developing regions (Figure BI.C.3.1, panels A and B). Developing EAP accounted for almost 20 percent of global investment, and more than 40 percent of global investment growth, during 2000–16 (panels C and D). These high investment rates led to a rapid accumulation of physical capital and expansion of productive capacity, and contributed to the region's rapid GDP growth. In China and Vietnam, investment was the main source of GDP growth, accounting for about half of GDP growth between 2004 and 2010. In the rest of the region, investment growth contributed about 1.3 percentage points, or about one-quarter of the 4.9 percent annual GDP growth during the same period. The high investment levels reflect rapid growth in private investment, which proved resilient to shocks.

Figure BI.C.3.1. Investment

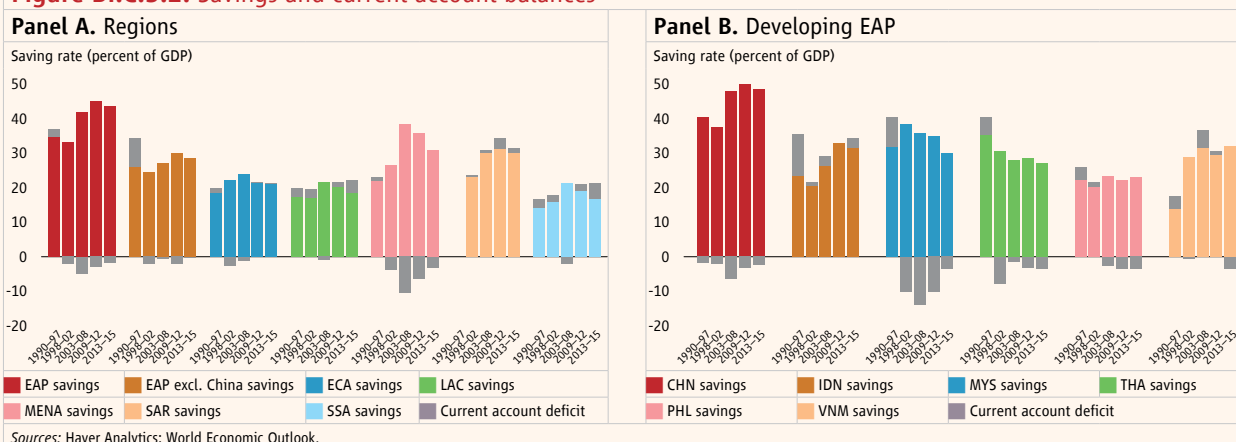
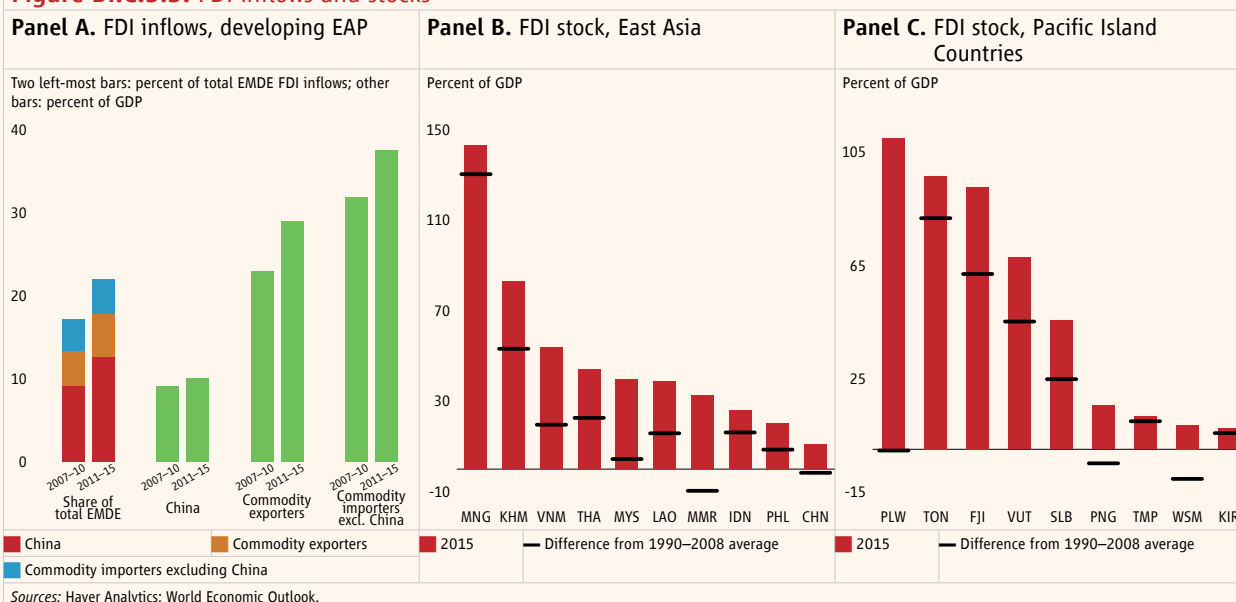


¹ Prepared by Ekaterine Vashakmadze with research assistance provided by Trang Nguyen and Liwei Liu. The analysis draws on *Global Economic Prospects January 2017: Weak Investment in Uncertain Times* (World Bank 2017b).

(continued)

(Box I.C.3 continued)

Investment in developing EAP was largely supported by high domestic saving rates, but foreign capital also played an important role. Domestic savings in developing EAP have been significantly higher than in other developing regions (Figure BI.C.3.2). East Asia is the only developing region in which savings have consistently exceeded investment, making it a net exporter of capital: since the Asian crisis of 1997–98, the region has recorded current account surpluses averaging around 4 percent of GDP. That said, foreign capital played an important role in various key aspects of investment growth in developing EAP, including transfer of new technologies and know-how, formation of human resources, integration in global markets, increase of competition, and firms' development and reorganization (Moura and Forte 2010). Developing EAP has been successful in attracting a large share of global FDI in the postcrisis period (Figure BI.C.3.3, panel A). FDI stocks were significant in both large and small economies (panels B and C).

Figure BI.C.3.2. Savings and current account balances**Figure BI.C.3.3. FDI inflows and stocks**

(continued)

(Box I.C.3 continued)

Investment trends since 2010

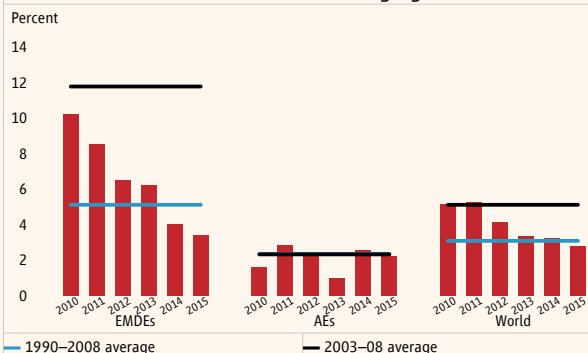
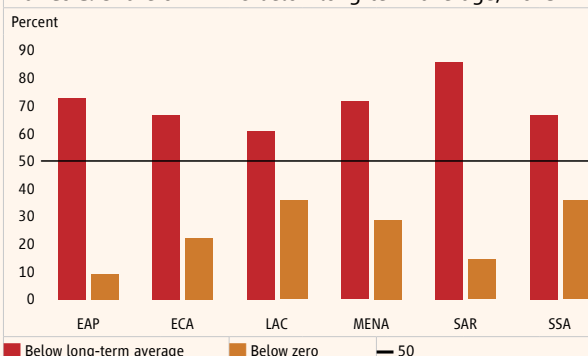
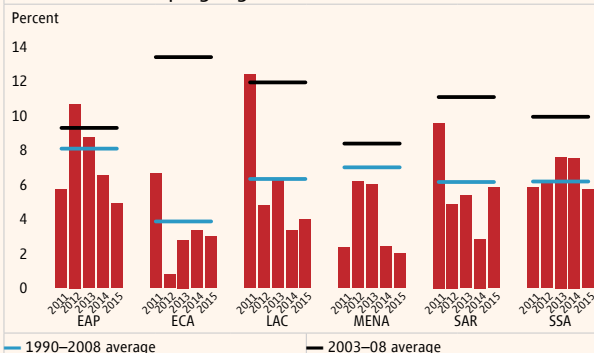
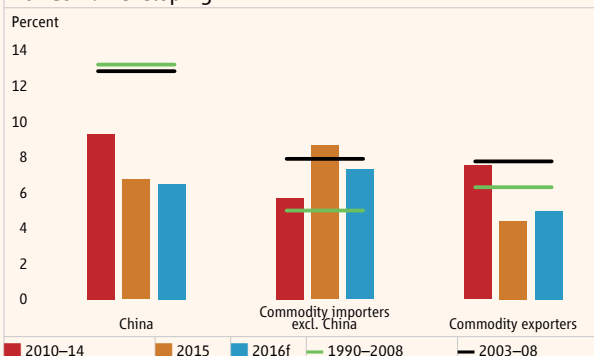
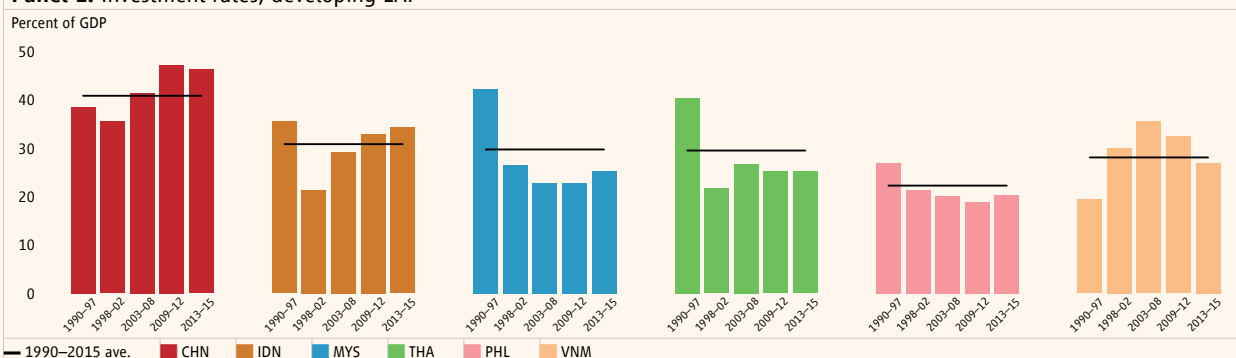
In Emerging Markets and Developing Economies (EMDEs) as a whole, investment growth has slowed sharply since 2010. Investment growth declined from 10 percent in 2010 to 3.4 percent in 2015 (Figure BI.C.3.4, panels A, B, and C). The slowdown affected most economies: in 2015, investment growth was below its long-term average in more than 60 percent of EMDEs, the largest share over the past quarter century outside serious global downturns. Postcrisis investment weakness affected both public investment, which accounted for 31 percent of investment during 2010–15, and private investment. In all regions except Sub-Saharan Africa, public investment growth has slowed steadily from elevated levels during the global financial crisis to below long-term averages. This slowdown partly reflected increasing financing constraints as fiscal space eroded with crisis-related fiscal stimulus and slowing postcrisis growth. Following a postcrisis rebound in 2010, private investment growth also slowed sharply and remained below the long-term average in more than half of all EMDEs. Developments have varied widely across regions, however, reflecting the presence of commodity importers or exporters, the degree of political stability, and spillovers from key trading partners and investors. Since 2010, investment growth has declined particularly sharply, and in some cases even proved negative, in regions with a large number of commodity exporters, notably in Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa.

Investment growth in developing EAP has steadily declined, but less so than in developing economies as a whole, and its pace has stabilized since 2015. Regional investment growth declined from 12.1 percent in 2010 to 6.5 percent on average in 2015–16. The slowdown affected most regional economies, and was particularly pronounced in China (Figure BI.C.3.4, panels D and E). It reflected decelerating public and private investment growth, as the coordinated fiscal stimulus following the global financial crisis was unwound. As a result, in many developing EAP economies, investment and savings rates have peaked well before their incomes reached advanced economy levels, in contrast with the experience of the current high-income East Asian economies. China is an exception: its investment rate and the contribution of its investment to growth remain elevated, exceeding 40 percent in 2016 (Figure BI.C.3.5, panel A). In commodity exporters in the region, investment growth slowed particularly sharply during 2012–14. Since 2015, investment growth has stabilized or begun to recover in several countries (Figure BI.C.3.5, panels B and C). Overall, investment growth in developing EAP was approximately twice as high as in other developing regions during 2013–16.

Much of the regional investment decline is accounted for by decreases in construction investment and, to a lesser extent, machinery and equipment investment. Construction investment accounts for well over half of total investment (of which around one-third is residential construction investment). Machinery and equipment investment spending has had a less pronounced cycle. The small “other investment” category, which is mainly breeding livestock and intangibles, has been broadly constant at around 1 percent of GDP.

(continued)

(Box I.C.3 continued)

Figure BI.C.3.4. Investment growth**Panel A. Advanced Economies & Emerging Markets****Panel C. Share of EMDEs below long-term average, 2015****Panel B. Developing regions****Panel D. Developing EAP****Panel E. Investment rates, developing EAP**

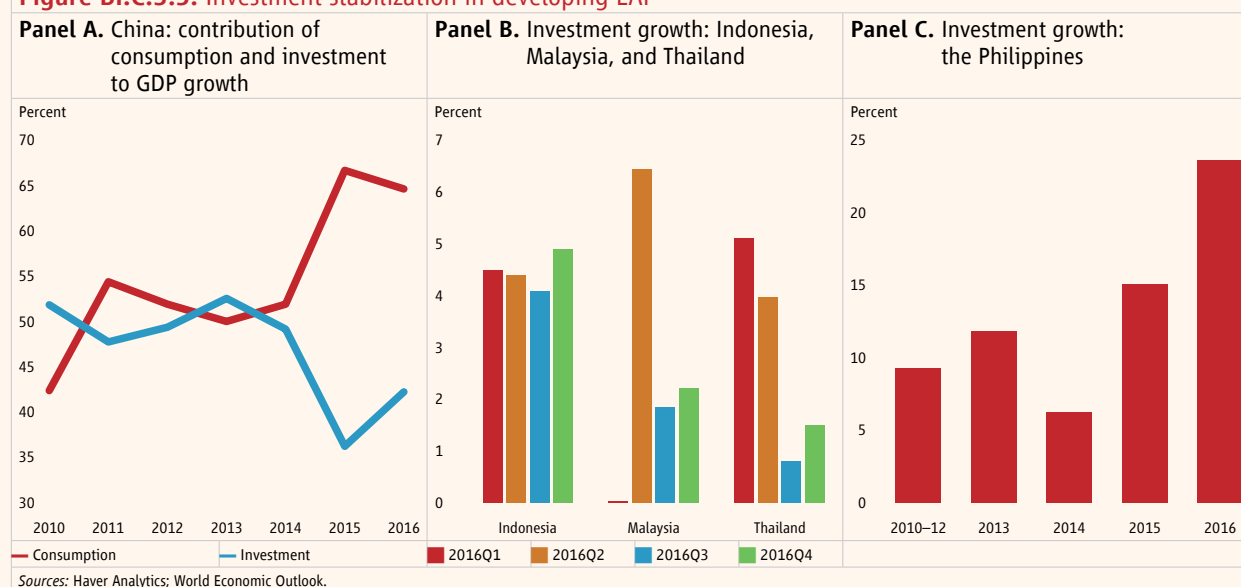
Sources: Haver Analytics; World Economic Outlook.

Key drivers of postcrisis investment slowdown in developing EAP

Overall, investment weakness since 2010 in EMDEs as a group has been largely driven by terms-of-trade shocks (for commodity exporters); slowing FDI inflows and weak growth prospects in advanced economies (for commodity importers); and rapidly rising private debt burdens, political risk, and weaknesses in the institutional environment and investment climate (for all EMDEs). In oil exporters,

(continued)

(Box I.C.3 continued)

Figure BI.C.3.5. Investment stabilization in developing EAP

the oil price decline from 2014 onward accounted for about half of the investment slowdown during 2011–15. In commodity importers, slowing FDI inflows accounted on average for more than half of the investment slowdown. Rising private debt burdens have had increasingly adverse effects on investment, as the impact of a large “debt-overhang”² is compounded by an environment with weak growth prospects. High or rising political uncertainty, as measured by the International Country Risk Guide’s political risk index, may have accounted for one-tenth of the investment slowdown since 2011: when firms are uncertain about future demand or policies, they may not be willing to commit to irreversible physical investment.³ The institutional and regulatory environment remains critical: postcrisis, private investment recovered faster in countries with more developed financial market infrastructure, and with generally better governance.⁴

In developing EAP, and especially in China, slowing investment growth partly represents a correction from high precrisis investment growth and the immediate postcrisis fiscal and monetary stimulus. China and several ASEAN countries experienced rapid credit growth in the postcrisis period. Large debt stocks now continue to weigh on investment growth in China, Malaysia, Mongolia, Papua New Guinea, and Thailand. Relatedly, investment efficiency, as measured by incremental capital-output ratios (ICORs), has been deteriorating until recently. In China, ICORs were particularly high, reflecting large investment in infrastructure and real estate.

² Elevated debt can discourage investment because many of the benefits of investment will then flow to the creditors of leveraged firms rather than to their owners. In addition, high debt may reflect misallocation of capital to less innovative firms.

³ Alesina and Perotti 1996; Julio and Yook 2012.

⁴ Qureshi, Diaz-Sanchez, and Varoudakis 2015.

(continued)

(Box I.C.3 continued)

Regional commodity exporters have been significantly affected by terms-of-trade declines, and regional commodity importers by policy tightening. In large commodity exporters (Indonesia and Malaysia), investment was significantly affected by two factors: the decline in commodity prices (especially raw materials, fertilizers, metals, and minerals) from their early-2011 peaks; and related policy tightening, particularly in response to financial volatility during the 2013 “Taper Tantrum.” In smaller, more heavily commodity-dependent economies, including Mongolia and Papua New Guinea, investment contracted as FDI for mining-sector projects declined, and as domestic policies again tightened sharply in response to balance-of-payments stress. Regional commodity importers other than China, until 2015, faced investment headwinds from tight monetary, fiscal, and prudential policies that were designed to contain the previous rapid credit growth. Their effects were compounded by political uncertainty in Thailand, and delays in investment project approvals in the Philippines.

The more recent stabilization of investment in the region broadly reflects stabilizing commodity prices, reduced policy tightening, and lower political uncertainty. Investment has been encouraged by stabilizing commodity prices (for commodity exporters); more accommodative policies, amid low inflation and benign global financial conditions; and buoyant FDI. In Thailand, investment growth is recovering amid improved confidence. Public investment has accelerated particularly sharply in the Philippines, and in China it has offset the continued moderation of private investment.

Box I.C.4. Food Prices and the Poor in Indonesia and the Philippines¹

The poor are vulnerable to higher prices, especially for rice and other staple foods. With low and vulnerable incomes, and a limited ability to smooth consumption out of savings, the poor are particularly susceptible to sharp increases in the cost of living. The poor spend more on food than on anything else—it makes up 60 percent of total consumption in Indonesia and up to 70 percent in the Philippines (Figure BI.C.4.1). Within food consumption, rice is the main staple of both countries and by far the highest single expenditure, representing around 15 to 20 percent of all consumption for the extreme and moderate poor.² Moreover, rice prices in both countries are considerably higher than world prices. The price in the Philippines is twice that in Thailand and Vietnam, while Indonesian prices are around a third higher than world prices.

Figure BI.C.4.1. Poor Indonesians and Filipinos spend 60 to 70 percent of all consumption on food, with rice the main staple

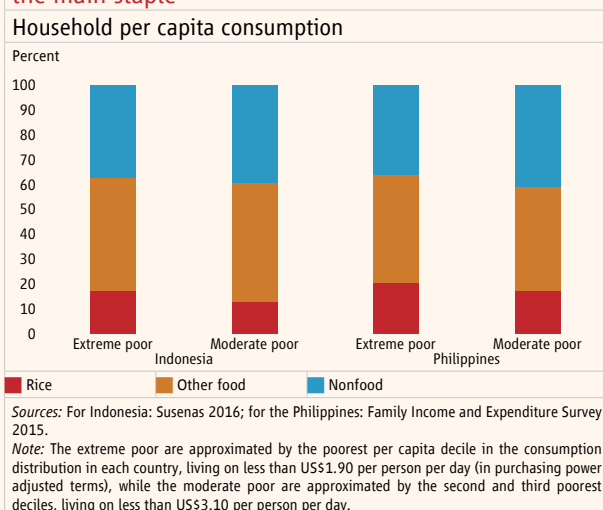


Figure BI.C.4.2. Soaring rice prices in 2006 saw poverty rise in Indonesia by nearly 2 percentage points, the only increase in the past 17 years



As a consequence, the poverty rate is sensitive to food price increases. For example, in 2006, the national poverty rate increased by nearly 2 percentage points in Indonesia, the first such increase since the Asian Financial Crisis, and the only increase in the last 17 years (Figure BI.C.4.2). This was largely attributed to a 33 percent increase in rice prices due to an import ban.³ Moreover, the slowing of poverty reduction in Indonesia in recent years has been due in part to continued high food price inflation.⁴ In the Philippines, during the 2008–09 food price crisis, the 35 to 40 percent increase in rice prices was seen as driving the

¹ Prepared by Matt Wai-Poi and Kevin Chua.

² In both countries, the poorest decile of household per capita consumption roughly represents the extreme poor (living on less than US\$1.90-a-day PPP), and the next two deciles the moderate poor (living on less than US\$3.10-a-day PPP).

³ World Bank (2006).

⁴ *Indonesia Economic Quarterly*, World Bank, October 2015 and March 2016.

(continued)

(Box I.C.4 continued)

2.5 percentage point increase in poverty.⁵ A 10 percent increase in food prices in the Philippines has been estimated to lead to a 2.7 percentage point increase in poverty.⁶

Higher food prices affect both urban and rural households. The urban poor and vulnerable are affected by higher food prices when supplies are tight. However, most rural households are also affected, even those with some farming income. Most poor households are net rice consumers; even poor farmers generally consume more rice than they produce. This is true in both Indonesia⁷ and the Philippines.⁸ In fact, due to the larger number of rural households living just above the poverty line compared to urban areas, poverty during the 2007–08 food price crisis increased by 5.2 percentage points in rural areas, higher than the 4.5 percentage point increase in urban areas.⁹

In Indonesia, rice-price stabilization policies have been relatively ineffective in containing price increases. A ban on rice imports led directly to the food price crisis of 2006 and the consequent increase in poverty. Imports have since resumed, conducted solely by the government logistics agency, which uses imports to supplement purchases from local producers to maintain rice stocks. The agency then conducts market operations, releasing stocks into local markets when rice prices are high, according to a set formula. However, market operations have been relatively small (equivalent to less than 1 percent of rice production), are often conducted with delays, and have been through large traders who may not pass lower prices onto consumers. Consequently, they have historically proved ineffective at containing prices.¹⁰ Further, the way market operations are conducted often provides signals to the market, which contribute to price volatility. Informed traders watch government stocks and import announcements, often choosing to restrict sales in the expectation that prices will rise in the short term.¹¹

In the Philippines, over the past decades, a policy focus on rice self-sufficiency has led to an inadequate rice supply, and domestic rice prices significantly greater than world prices. Rice imports are controlled by the National Food Authority.¹² Restrictions on, and the mistiming of, imports have caused several price hikes;¹³ in general, low rice stocks are clearly associated with increases in rice prices (Figure BI.C.4.3). At the same time, substantial but poorly planned and executed government investments have

5 Reyes et al. 2009.

6 ADB 2008.

7 Three-quarters of the poor are net consumers of rice in Indonesia. Almost one-third of rice farmers and two-thirds of all farmers were net consumers of rice in 2004 (World Bank *Indonesia Economic Quarterly*, March 2015).

8 Manzano and Prado 2014; World Bank, Washington (2015b).

9 Fujii 2013. Similarly, Reyes et al. (2009) find that rural poverty is significantly more sensitive to food price increases than urban poverty.

10 World Bank (2015a); World Bank (2016f).

11 World Bank (2015a).

12 Private sector traders may apply for rice import permits and be allowed to import rice, but with a collective limit of 805,200 metric tons per year, and subject to 35 percent tariffs.

13 For instance, in 2014, domestic rice prices increased owing to importation lags, even as world rice prices fell.

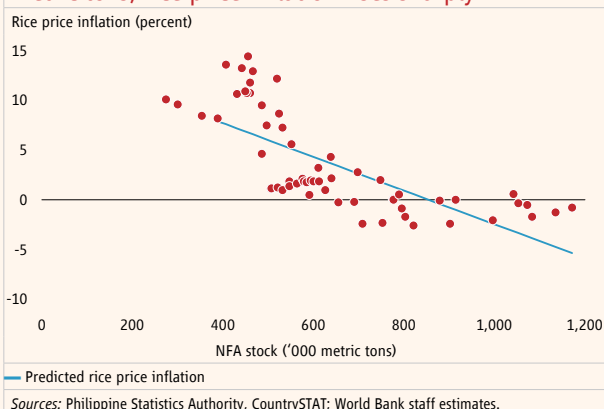
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(Box I.C.4 continued)

failed to boost domestic supply, while attempts to protect farmers by buying rice at high prices remain poorly targeted.¹⁴

However, import and stock management has improved in the last two years, which has effectively contained rice prices. Both countries have improved rice stock management, in part through higher and timelier imports. In the Philippines, total imports reached 1.5 million tons in 2015.¹⁵ This supplemented existing stocks to keep prices from increasing as they had the year before. Indonesia imported 1.5 million tons between October 2015 and March 2016, and channeled 177,000 tons through market operations. As a consequence, rice and food price inflation remained relatively low, and March 2016 saw the first significant reduction in poverty in three years.¹⁶ However, this recently improved effectiveness in rice stabilization relies upon continued political commitment. Nationalist economic sentiments and arguments to increase self-sufficiency through import restrictions remain common in the public discourse. A return to lower imports (or poorer import timing) owing to changes in leadership or in views would put the new price stability at risk.

Figure BI.C.4.3. When the Philippines' National Food Authority rice stocks drop below around 600,000 metric tons, rice price inflation rises sharply



Inflation remains moderate but has recently been increasing in the Philippines and Indonesia, with risks for poverty. In the Philippines, food prices have been rising at around 3.5 percent (year-on-year), driven in part by higher rice prices (Figure BI.C.4.4). Continued food-price increases could threaten the poor.¹⁷ In Indonesia, food-price inflation remains lower than in recent years, owing to substantially lower rice price inflation. However, increases in regulated prices (electricity and government services) and the gradual recovery of global commodity prices are driving inflation higher (Figure BI.C.4.5).¹⁸ If significant food price inflation also materializes, this could have significant adverse effects on poverty.

To meet growing rice demand and help contain prices, a liberalization of rice imports should be complemented by measures to boost agricultural productivity and enhance logistics. The world rice market is relatively thin: only 6 to 7 percent of total global rice production is traded internationally.¹⁹ This leaves importing countries vulnerable to aggregate shocks in regional exporters such as Vietnam and

¹⁴ For a fuller discussion, see World Bank (2016f).

¹⁵ Reflecting partial liberalization of private-sector rice imports via the "Minimum Access Volume" scheme in 2015.

¹⁶ World Bank (2016g).

¹⁷ For instance, World Bank staff estimates indicate that food price inflation of 5 percent, assuming 3 percent nonfood price inflation, could result in a 0.7 percentage points increase in poverty.

¹⁸ World Bank (2015a).

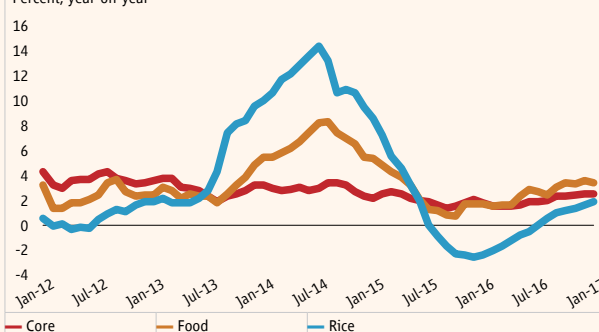
¹⁹ World Bank, (2015a).

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Figure BI.C.4.4. Food price inflation has been increasing in the Philippines, driven by higher rice prices, although overall price increases remain moderate**Philippines**

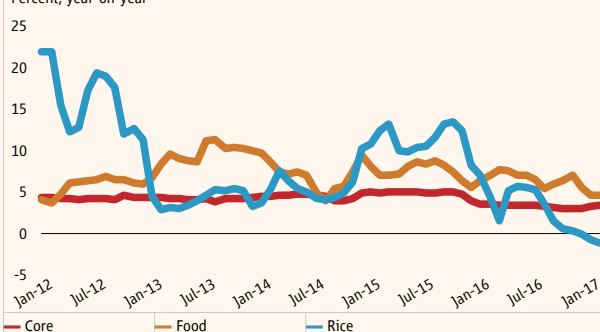
Percent, year-on-year



Source: Philippines Statistics Authority.
Note: y-o-y = year-over-year.

Figure BI.C.4.5. In Indonesia, both food and rice price inflation remains lower than in recent years, but increases in regulated prices have caused inflation to increase**Indonesia**

Percent, year-on-year



Source: Statistics Indonesia.
Note: y-o-y = year-over-year.

Thailand. However, in both Indonesia and the Philippines, there is significant scope to both raise domestic agricultural productivity and lower the cost of transportation; this will help to both lower food prices and boost incomes. Specifically, Indonesian farm productivity is low for several reasons.²⁰ Farms are smaller than in Thailand and the Philippines, making them less efficient and impeding mechanization; Indonesia is characterized by higher labor intensity than China, India, the Philippines, Thailand, or Vietnam. Productivity is also restricted by poor infrastructure (including irrigation, water resources, and road access to market), low use of high-yielding seeds, low agricultural research spending, and limited titling (needed for bank loan collateral). In the Philippines, the rice supply chain has high milling, drying, and transportation and storage costs, reflecting insufficient investments in roads and postharvest facilities, policy distortions, and a lack of competition.²¹

At the same time, effective social protection is needed for times of shock. In addition to improved productivity and logistics, effective social protection programs are needed to protect the poor and vulnerable from food price shocks in times of domestic or international natural disasters. Domestic and imported supplies of rice and other foods can easily be disrupted by droughts, floods, and other climate events. Ensuring that poor and vulnerable households have a safety net in times of high food prices remains critical, particularly in urban areas where the recent migrants and other urban poor often lack the strong informal coping mechanisms relied upon in rural areas, such as borrowing from friends and family.

²⁰ World Bank (2015a).

²¹ World Bank (2016g).

References

- ADB (Asia Development Bank). 2008. *Food Prices and Inflation in Developing Asia: Is Poverty Reduction Coming to an End?* Manila: Asia Development Bank.
- Alesina, A., and R. Perotti. 1996. "Income Distribution, Political Instability, and Investment." *European Economic Review* 40 (6): 1203–28.
- ASEAN Secretariat and World Bank. 2015. *ASEAN Services Integration Report*. Washington, DC: ASEAN Secretariat and World Bank.
- Asian Development Bank. 2017. *Meeting Asia's infrastructure needs*. Mandaluyong City: Asian Development Bank.
- Azevedo, Joao Pedro, Minh Cong Nguyen, and Viviane Sanfelice. 2012. *Adecomp: Stata module to estimate Shapely Decomposition by Components of a Welfare Measure*. Statistical Software Components S457562, Boston: Boston College Department of Economics.
- Baig, T. 2001. *Characterizing Exchange Rate Regimes in Post-Crisis East Asia*. International Monetary Fund Working Paper.
- Bruegel. 2017. "Real effective exchange rates for 178 countries: A new database," January 2017 update. Bruegel. <http://bruegel.org/2012/03/real-effective-exchange-rates-for-178-countries-a-new-database/>.
- Corsetti, G., P. Pesenti, and N. Roubini. 1999. "What Caused the Asian Currency and Financial Crisis?" *Japan and the World Economy* 11 (3): 305–73.
- de Vries, G. J., M. P. Timmer, and K. de Vries. 2015. "Structural Transformation in Africa: Static Gains, Dynamic Losses." *Journal of Development Studies* 51 (6): 674–88.
- Fernandez, A., Klein, W. M., Rebucci, A., Schindler, M., & Uribe, M. 2015. *Capital Control Measures: A New Dataset*. Washington, D.C.: International Monetary Fund.
- Frankel, A. J. 1999. No Single Currency Regime Is Right For All Countries Or At All Times. *NBER Working Paper Series, Working Paper 7338*.
- Fujii, Tomoki. 2013. "Impact of Food Inflation on Poverty in the Philippines." *Food Policy* 39 (C): 13–27.
- Hsieh, Chang-Tai, and Peter J. Klenow. 2009. "Misallocation and Manufacturing TFP in China and India". *Quarterly Journal of Economics* 124 (4): 1403–48. <https://doi.org/10.1162/qjec.2009.124.4.1403>.
- . 2010. "Development Accounting". *American Economic Journal: Macroeconomics* 2 (1): 207–23. www.aeaweb.org/articles.php?doi=10.1257/mac.2.1.207.
- IHME (Institute for Health Metrics and Evaluation). 2013. *Global Burden of Disease Study 2013*. Institute for Health Metrics and Evaluation, University of Washington, Seattle Washington. <http://ghdx.healthdata.org/global-burden-disease-study-2013-gbd-2013-data-downloads-full-results>.
- IMF (International Monetary Fund). 2014. *Regional Economic Outlook: Asia and Pacific, April 2014*. Washington, D.C.: International Monetary Fund.
- . 2015. "People's Republic of China: Staff Report for the 2015 Article IV Consultation." International Monetary Fund, Washington, DC.
- . 2017. "Indonesia: Selected Issues; IMF Country Report No. 17/48." International Monetary Fund, Washington, DC, February.
- Julio, B., and Y. Yook. 2012. "Political Uncertainty and Corporate Investment Cycles." *Journal of Finance* 67 (1): 45–83.

- Klyuev, Vladimir. 2016. "Evolution of the Exchange Rate Behavior in the ASEAN-5 Countries." International Monetary Fund, Washington, DC.
- Kuntchev, Veselin, Rita Ramalho, Jorge Rodríguez-Meza, and Judy S. Yang. 2014. "What Have We Learned from the Enterprise Surveys Regarding Access to Credit by SMEs?" Mimeo. Washington, DC: World Bank.
- Lakatos, Csilla, and Delfin S. Go. Forthcoming. "The impact of changing China on East Asia." World Bank, Washington, DC.
- Long, Chen. 2017. "Containing Capital Outflows." Gavekal Dragonomics, Beijing, February.
- Ma, Gene, Emre Tiftik, Yuanliu Hu, and Donghe Li. 2016. "China Spotlight: PBOC's Epic Battle Over Capital Outflows." Institute of International Finance, Washington, DC.
- Manzano, G., and S. Prado. 2014. "Distributional impact of the 2008 rice crisis in the Philippines." In *Trade policies, household welfare and poverty alleviation: Case studies from the virtual institute academic network*. New York and Geneva: United Nations Conference on Trade and Development (UNCTAD).
- McCaig, Brian, and Nina Pavcnik. 2013. "Moving out of Agriculture: Structural Change in Vietnam". NBER Working Paper No. 19616.
- McMillan, Margaret S., and Dani Rodrik. 2011. "Globalization, Structural Change and Productivity Growth". NBER Working Paper No. 17143.
- Moura, R., and R. Forte. 2010. The Effects of Foreign Direct Investment on the Host Country Economic Growth - Theory and Empirical Evidence. Universidade do Porto, Faculdade de Economia do Porto in its series FEP Working Papers number 390.
- Myers, S. 1977. "Determinants of Corporate Borrowing." *Journal of Financial Economics* 5: 147–175.
- Paes de Barros, Ricardo, Mirela de Carvalho, Samuel Franco, and Rosane Mendonca. 2006. "Uma análise das principais causas da queda recente na desigualdade de renda brasileira". *Economica* 8 (1): 117–147.
- Real Capital Analytics. 2016. "Global Capital Trends." <https://www.rcanalytics.com/>.
- PwC and ULI (Pricewaterhouse Coopers and Urban Land Institute). 2016. *Emerging Trends in Real Estate® – Asia Pacific 2017*. Washington, DC: Pricewaterhouse Coopers and Urban Land Institute.
- Qureshi, Z., J. L. Diaz-Sanchez, and A. Varoudakis. 2015. "The Post-Crisis Growth Slowdown in Emerging Economies and the Role of Structural Reforms." *Global Journal of Emerging Market Economies* 7 (2): 179–200.
- Rajan, S. R. 2012. *Management of Exchange Rate Regimes in Emerging Asia*. Review of Development Finance.
- Restuccia, Diego, and Raul Santaaulalia-Llopis. 2017. "Land Misallocation and Productivity". NBER Working Paper No. 23128.
- Reyes, C., A. Sobrevinas, J. Bancolita, and J. de Jesus. 2009. "Analysis of the Impact of Changes in the Prices of Rice and Fuel on Poverty in the Philippines." Discussion Paper Series No. 2007–07, Philippines Institute for Development Studies, Manila.
- Saborowski, Christian, Sarah Sanya, Hans Weisfeld, and Juan Yopez. 2014. "Effectiveness of Capital Outflow Restrictions, IMF Working Paper No. 8, International Monetary Fund, Washington, DC, January.
- Stiglitz, E. J. 2002. *Capital Market Liberalization and Exchange Rate Regimes: Risk Without Reward*. The Annals of the American Academy of Political and Social Science.
- Tiftik, Emre, and Scott Farmham. 2017. "IIF Capital Flows Tracker – Climbing Out of a Hole." Institute of International Finance, Washington, DC, March.
- van der Mensbrugghe, D. 2011. "LINKAGE Technical Reference Document: Version 7.1." World Bank, Washington, DC.

- . “Modeling the Global Economy— Forward Looking Scenarios for Agriculture.” In *Handbook of Computable General Equilibrium Modeling*, edited by P. B. Dixon and D. W. Jorgenson. Amsterdam: North Holland, pp. 933–94.
- Williamson, J. 1999. Future Exchange Rate Regimes for Developing East Asia: Exploring the Policy Options. *Asia in Economic Recovery: Policy Options for Growth and Stability*.
- Woodrow Wilson International Center for Scholars: Asia Program. 2007. *Ten years after: Revisiting the Asian financial crisis*. Washington, DC: Woodrow Wilson International Center for Scholars.
- World Bank. 2006. *Making the New Indonesia Work for the Poor*. Washington, DC: World Bank.
- . 2014. “Chapter II.A. Moving from Education to Skills in East Asia and Pacific.” In *East Asia and Pacific Economic Update, October 2014: Enhancing Competitiveness in an Uncertain World*. Washington, DC: World Bank.
- . 2015a. *Indonesia Economic Quarterly*. Washington, DC: World Bank, March.
- . 2015b. *Philippines Economic Update*. Washington, DC: World Bank, October.
- . 2016a. *East Asia and Pacific Economic Update, October 2016*. Washington, DC: World Bank.
- . 2016b. *East Asia and Pacific Economic Update, April 2016: Growing Challenges*. Washington, DC: World Bank.
- . 2016c. *Global Economic Prospects*. Washington, DC: World Bank, January.
- . 2016d. “Chapter II.B. How Will Technology Disrupt Financial Services in East Asia and Pacific?” In *East Asia and Pacific Economic Update, October 2016: Reducing Vulnerabilities*. Washington, DC: World Bank.
- . 2016e. *Malaysia Economic Monitor: The Quest for Productivity Growth*. Washington, DC: World Bank, December.
- . 2016f. *East Asia and Pacific Economic Update*. Washington, DC: World Bank, April.
- . 2016g. *Indonesia Economic Quarterly*. Washington, DC: World Bank, October.
- . 2017a. *Commodity Markets Outlook – Investment Weakness in Commodity Exporters*. Washington, DC: World Bank, January.
- . 2017b. *Global Economic Prospects: Weak Investment in Uncertain Times*. Washington, DC.
- World Economic Forum. 2016. *The Global Competitiveness Report 2016–2017*. Geneva: World Economic Forum.
- WTO (World Trade Organization). 2015. *World Trade Report 2015: Speeding up trade: benefits and challenges of implementing the WTO Trade Facilitation Agreement*. Geneva: World Trade Organization.
- . 2016. “Overview of Developments in the International Trading Environment.” World Trade Organization, Geneva.
- Yao, Walter. 2016. “Why Asian Banks are Well Positioned for Basel III.” *Pacific Exchange Blog*. www.frbsf.org/banking/asia-program/pacific-exchange-blog/why-asian-banks-are-well-positioned-for-basel-iii.

Part II. Medium-Term Development Agenda

II.A. Boosting Labor Mobility in the ASEAN Economic Community¹

Greater trade integration among ASEAN countries will create significant new economic opportunities. The ability of both high- and low-skilled workers to move freely across ASEAN countries will be an important determinant of whether these new opportunities are in fact seized. Existing commitments by ASEAN member states to facilitate international labor mobility are limited in scope, and progress putting them into action has likewise been limited. As a result, significant barriers to labor mobility persist, reflecting weaknesses in the migration systems of both migrant-receiving and migrant-sending countries. Immigration regimes frequently do not reflect economic needs; information asymmetries among recruitment agencies, migrants, and employers result in high recruitment costs; entry and exit requirements are time-consuming and costly; and information about overseas employment opportunities is often lacking. To boost labor mobility, migrant-receiving countries should work toward migration systems that are responsive to economic needs. Sending countries should balance protection for migrant workers with the needs of economic development, support the reintegration of returning workers, and strengthen connections to diasporas. And greater coordination is required between receiving and sending countries. Specific measures to support this agenda include developing national migration strategies to guide policy making, shortage lists to inform immigration restrictions and link them to economic needs, predeparture orientation programs, better oversight of recruitment agencies, a combination of sanctions and incentives to encourage return migration, and more comprehensive and flexible bilateral labor agreements.

Economic integration and international labor mobility

Economic integration in ASEAN has the potential to spur economic growth in the region. ASEAN has been working toward regional integration for several decades through a series of agreements designed to tie the economies of member states more closely together. In part due to these efforts, intraregional tariffs have declined significantly and intraregional trade has increased to account for about a quarter of the region's world trade (Figure II.A.1). However, regional integration is not complete. Nontariff barriers remain an issue (OECD 2016), and trade in services is still constrained by restrictive policies (ASEAN Secretariat and World Bank 2015). Removing the remaining barriers to integration would significantly boost GDP, exports, and total employment (Figure II.A.2; ILO and ADB 2014). Further integration would also hasten structural change in several countries.

The ability of workers to move freely across countries and access newly created jobs will be an important determinant of whether the new economic opportunities created by integration are in fact seized. Reaping the full benefits of economic integration in ASEAN will require significant shifts in employment across countries and sectors. Conversely, barriers to labor mobility, which reduce the ability of workers to react to economic changes, will erode the positive effects of integration and diminish welfare. This chapter focuses on barriers to *international* labor mobility, such as rigid immigration systems or high international recruitment costs, which can dissuade

¹ Prepared by Mauro Testaverde and Harry Moroz.

potential migrants from moving abroad or lead to undocumented migration. Barriers to domestic labor mobility² are largely beyond the scope of the analysis, although they interact with and reinforce barriers to international mobility, and in addition make it more difficult for domestic workers to adjust to the entry of immigrant workers.

Figure II.A.1. Intra regional trade in ASEAN, 1990–2014

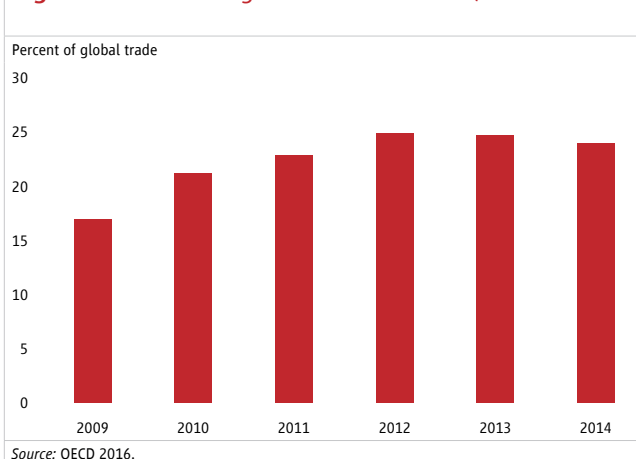


Figure II.A.2. Change in GDP in ASEAN with deeper integration

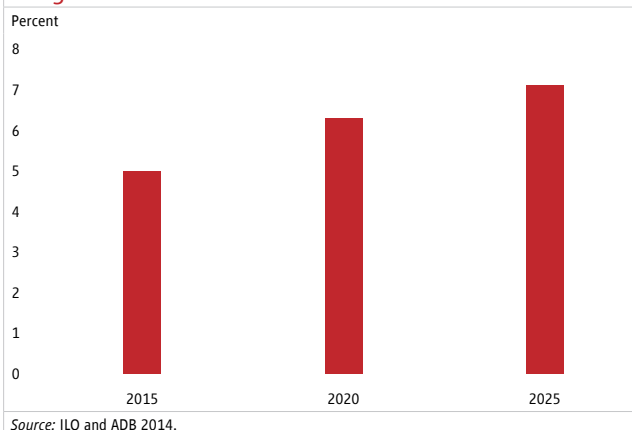
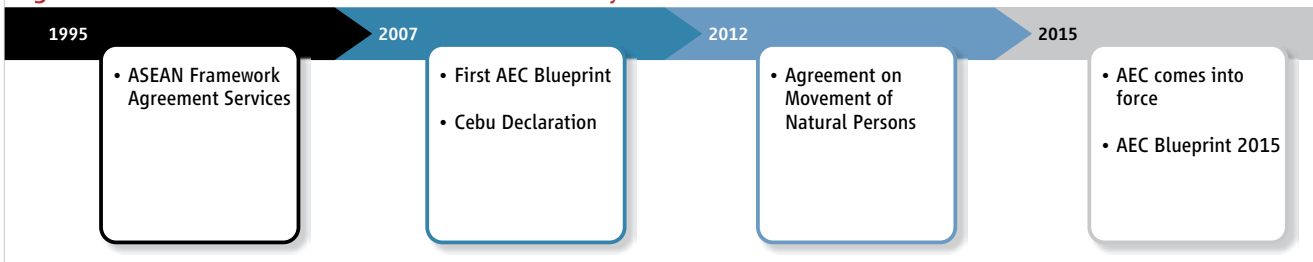


Figure II.A.3. ASEAN's actions to facilitate labor mobility



The commitments made by ASEAN member states to facilitate labor mobility, as part of efforts to promote deeper regional integration, have been limited in scope. The most ambitious efforts have targeted high-skilled workers, partly in recognition that their mobility is critical to services integration. The 1995 ASEAN Framework Agreement on Services provided for the temporary movement of skilled professionals across borders, in line with the World Trade Organization General Agreement on Trade in Services Mode 4 provisions, with mobility-related commitments later collected in the ASEAN Agreement on Movement of Natural Persons (Figure II.A.3). One of the five pillars of the AEC, which envisions deeper economic integration and trade within ASEAN through the creation of a single market, is the free movement of skilled workers along with the free movement of goods, services, and investment and the freer flow of capital. In laying out the vision for the AEC in 2003, ASEAN member states pledged to “facilitate movement of business persons, skilled labor and talents,” and then laid out specific actions for doing so in the 2007 AEC Blueprint, such as facilitating the issuance of visas and employment passes for ASEAN professionals and skilled workers. In contrast, efforts to facilitate the mobility of low-skilled workers have been much more limited. The 2007 Declaration on the Protection and Promotion of the Rights of Migrant Workers (the Cebu Declaration) set out the obligations of migrant-receiving countries, including promoting fair employment; of

² Stemming for instance from time-consuming job searches; skills mismatches that occur when worker’s skills are not perfectly transferable across firms, occupations, or sectors; and rigid employment policies such as employment protection regulations.

sending countries, including regulating recruitment; and of ASEAN itself, including data sharing, capacity building, and developing an instrument for the protection and promotion of migrant workers' rights.³

There has been limited progress putting into action these commitments to facilitate labor mobility. ASEAN member states have formulated mutual recognition agreements (MRAs) in seven professions and a framework agreement in an eighth. The MRAs take steps toward the creation of regional certification authorities and of processes for professionals to work abroad. Many ASEAN countries have made progress in areas like recruitment, migrant orientation programs, and complaints mechanisms for low-skilled workers. However, progress has been limited and barriers to international labor mobility remain. The MRAs only cover an estimated 5 percent of employment in ASEAN (Batalova, Shymonyak, and Sugiyarto 2017). Host country immigration and regulatory restrictions remain in place even where MRAs have been implemented. For example, Thailand bans migrants from working in 39 occupations including engineering, accounting, and architecture, which are covered by MRAs. The Cebu Declaration remains unratified in member states and is not binding (Martin and Abella 2014; Asia-Pacific RCM Thematic Working Group 2015).

The implications of labor mobility for worker welfare

Lowering barriers to mobility would increase the welfare gains enjoyed by workers in ASEAN countries following economic integration. Models of trade integration can be expanded to recognize that adjustments to trade shocks can be disrupted by the costs workers face when trying to move across countries, sectors, and occupations (Hollweg et al. 2014). This expansion permits exploration of how worker outcomes are affected by barriers workers face to moving in response to the new economic opportunities created by integration. When barriers to mobility are relaxed for skilled workers, as the AEC currently envisions, economic modeling shows that trade integration has a substantially larger positive effect across all ASEAN countries than if skilled workers continue to face high barriers to movement (Figure II.A.4).⁴ In ASEAN, the effect of enhanced trade integration on welfare is 14 percent higher if such barriers are reduced. When barriers to mobility are reduced for *all* workers in ASEAN, the positive effects of trade integration are even higher across ASEAN countries (Figure II.A.5). In ASEAN, the effect of enhanced trade integration on welfare is 29 percent higher if barriers to mobility for all workers are reduced rather than those for high-skilled workers alone.⁵ These results suggest that further trade integration without reducing barriers to mobility would leave significant welfare gains unrealized.

Welfare gains from improved mobility can manifest themselves in a variety of ways. Welfare is typically measured using employment, wages, and other variables such as the potential to move to different jobs for higher wages, which impact a worker's well-being. The growing body of literature on the impacts of migration on workers

³ The ASEAN Forum on Migrant Labor promotes implementation of the Cebu Declaration.

⁴ Enhanced trade integration within ASEAN is modeled as the removal of remaining intraregional tariffs, the liberalization of nontariff barriers in goods and services, and the introduction of advanced trade facilitation measures. The model underpinning these simulations, unlike standard trade models, does not assume that workers can change jobs without friction: mobility between countries, sectors, and occupations is possible but costly.

⁵ ASEAN is a diverse region, characterized by significant cross-country differences in technologies and productivity. As a result, international trade and migration are likely to prove complementary. That is, the gains from trade between ASEAN countries are likely to increase when migration is liberalized. And, conversely, flows of workers across borders in ASEAN are likely to continue even as trade integration proceeds. Indeed, two other globally important regional trade blocs that included mobility-liberalizing provisions, the European Union and the North American Free Trade Agreement, both experienced increases in international migration following integration, although these increases were temporary.

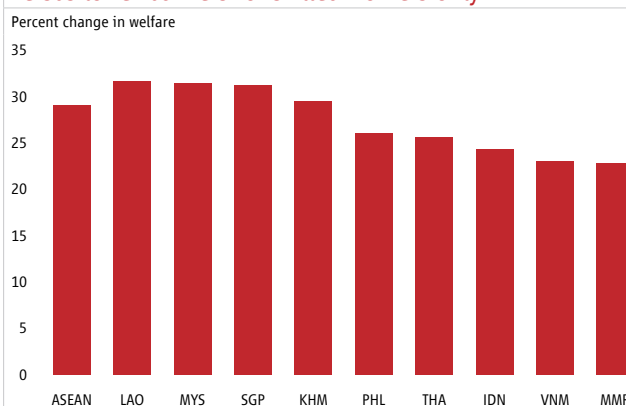
offers concrete examples of how labor mobility can impact welfare. This literature can help illustrate what improved welfare means for workers and provide evidence of its potential implications for countries.

Figure II.A.4. Estimated change in welfare under trade integration: lower barriers to mobility for high-skilled workers versus no reduction in barriers



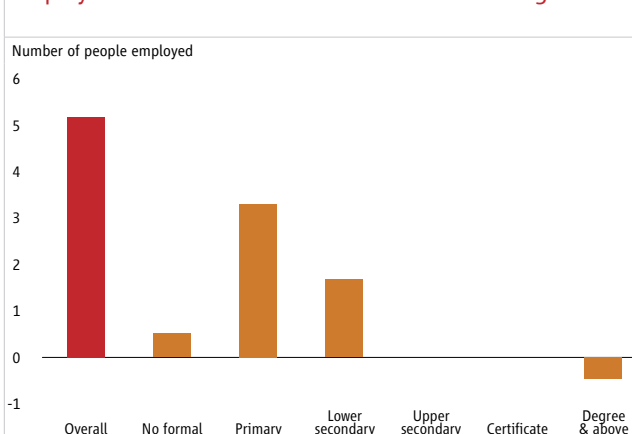
Source: Hollweg 2016.

Figure II.A.5. Estimated change in welfare under trade integration: lower barriers to mobility for all workers versus lower barriers for skilled workers only



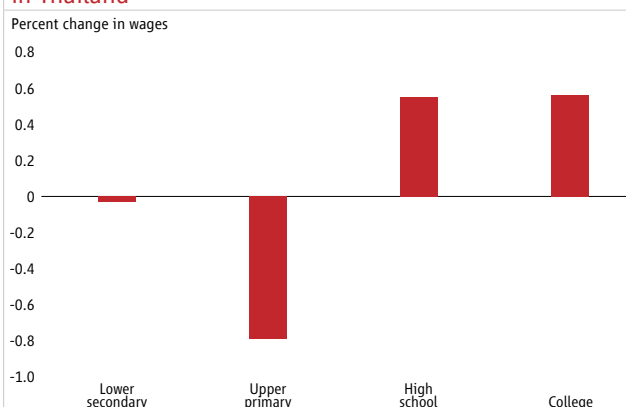
Source: Hollweg 2016.

Figure II.A.6. Change in the number of Malaysians employed in a state due to the arrival of 10 immigrants



Source: del Carpio et al. 2015.

Figure II.A.7. Wage impacts of doubling the size of the immigrant workforce in five immigrant-intensive provinces in Thailand



Source: Lathapipat 2014.

Migration generally improves the welfare of workers in migrant-receiving countries through positive, though small, impacts on employment and wages. Most evidence globally finds that migration has small impacts on the labor market outcomes of locals. Docquier, Özden, and Peri (2014) finds that immigration to OECD countries in the 1990s had positive, but small, impacts on wages and employment. Results are generally small in East Asian countries, as well (Ahsan et al. 2014). In Malaysia, immigration to a given state has been found to increase the employment of local workers. An additional 10 immigrants in a state results in the employment of an additional 5 locals in that state as Malaysian workers relocate (Figure II.A.6). Impacts on wages are small and positive for local workers but larger and negative for existing migrants (Özden and Wagner 2016). These results suggest that cheaper immigrant workers lower production costs, which results in expansions of output that in turn require expansions of employment.

However, migration can negatively affect the welfare of certain groups of workers in destination countries, particularly the low skilled. The positive impacts of immigration on employment found in Malaysia are smaller for the least educated locals who, unlike the more highly educated, compete directly with immigrants. Similarly, the impact of immigration on wages is small and positive for local workers overall but negative for local workers with at most primary education. In Thailand, doubling the size of the immigrant workforce in five provinces would increase the wages of local workers with high school and college education by about half a percent but decrease them for less-educated workers (Figure II.A.7).

Domestic barriers to mobility shape how migration impacts the welfare of workers in destination countries. Local workers who face rigid labor markets and have a difficult time switching jobs, firms, and geographic locations have trouble taking advantage of and adjusting to the presence of immigrant workers. In Europe, there is evidence that immigration to more rigid labor markets characterized by high firing costs, rigid wages, and high business entry costs results in more job losses among locals than immigration to more flexible labor markets (Angrist and Kugler 2003). The disruptive effects of rigid labor markets on adjustment to immigration were also found in Germany in the 1990s, although there it was existing migrants who suffered employment losses due to rigid wages (D'Amuri, Ottaviano, and Peri 2010).

Migrants themselves benefit significantly from migration, as do the recipients of their remittances. Migrating workers gain because of the large wage differentials between source and destination countries.⁶ And their remittances boost the budgets of recipient households in migrant-sending countries, relax credit constraints, act as insurance against shocks, and help smooth consumption.

Out-migration generally improves the welfare of workers in sending countries. The out-migration of significant numbers of migrant workers from sending countries can result in a contraction of labor supply, which reduces competition and increases the wages of non-migrant workers who remain in the source country. A 10 percent decrease in workers in a given skill group in Mexico from out-migration increased average wages by about 4 percent (Mishra 2007); similar increases have been found in Poland, Moldova, Puerto Rico, and Honduras (Mishra 2014).

Concerns about “brain drain” are often overstated; “brain circulation” may more accurately describe the process of high-skilled emigration. Source countries frequently worry that “brain drain”, that is, the departure of high-skilled workers for employment abroad, has negative effects. These include the fiscal burden of paying for training that is ultimately used abroad, and depletion of the human capital behind technological upgrading, adaptation, and ultimately economic growth. However, standard analyses may significantly overestimate the extent of brain drain: for instance, almost half of African-born doctors who practice in the United States were trained outside their country of birth, and many African doctors migrate after years of service in their home country (Özden and Philipps 2015). Further, high-skilled emigration may incentivize human capital formation by increasing the perceived returns to migration and encouraging stayers to invest more in education (Beine, Docquier, and Rapoport 2008). In addition, migrants who return may earn a wage premium compared to nonmigrants, while those who remain abroad can reduce the costs of transferring knowledge, ideas, and capital, resulting in broader impacts on trade and FDI flows and even on political institutions (Docquier and Rapoport 2012).

⁶ For instance, average monthly wages in 2013 amounted to US\$119 in Lao PDR but US\$3,546 in Singapore (in 2005 purchasing power parity terms; ILO and ADB 2014).

International migration can also have broader positive impacts on economies. The impact of international mobility on economic growth is important because it determines whether those who gain from migration can compensate those who lose out (Felbermayr and Kohler 2009). In Malaysia, simulations find that a 10 percent net increase in low-skilled immigrant workers increases real GDP by 1.1 percent (Ahsan et al. 2014). The migrants keep salaries low, reducing domestic prices and production costs and increasing export growth, with the result that unskilled employment and profits increase, which leads to increased investment and demand for (mostly Malaysian) skilled workers. Research in Thailand finds that removing migrants from the labor force would reduce GDP by 0.75 percent. Tight labor markets and some skills complementarity between the skills of local and migrant workers are important factors explaining these results. More general research has found that immigration into countries with high income and/or net inward migration, including Brunei Darussalam, Malaysia, and Singapore, does not impact economic growth in the same decade but has positive long-run impacts on the growth in GDP per capita, likely due to increases in total factor productivity (Brunow, Nijkamp, and Poot 2015).

Barriers to labor mobility in ASEAN

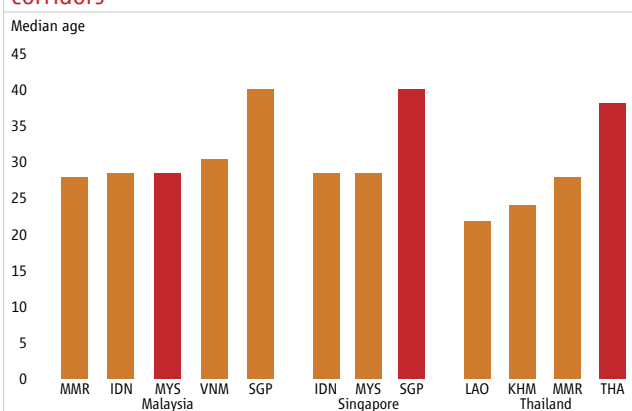
ASEAN's diverse levels of economic development attract workers to seek employment abroad. ASEAN countries vary significantly in their economic development. This is reflected, as mentioned, in large wage differentials among countries, which mean that migrants can seek out more highly paid jobs by moving across borders. Indeed, ASEAN's main immigration magnets are the high-income countries of the region—Singapore, Malaysia, and Thailand—while the region's low-income countries tend to be senders of migrants. Migration from countries with lower GDPs per capita to countries with higher GDPs per capita dominates ASEAN's major migration corridors (Table II.A.1). An additional factor in the movement of people for employment in ASEAN is the different rates of population aging in the region. Working-age populations in Singapore, Thailand, and, to a lesser extent, Malaysia will shrink in the coming decades, creating employment opportunities for migrants from countries with younger populations. In 2015, Singapore and Thailand had much older median ages than all of the main countries from which they received migrants (Figure II.A.8).

Table II.A.1. Migrant stocks and GDP per capita in ASEAN's major migration corridors in 2015

<i>Origin</i>	<i>Destination</i>	<i>Percent of ASEAN migration</i>	<i>Destination to Origin GDP per capita</i>
Indonesia	Malaysia	16	2.4
Myanmar	Malaysia	4	5.1
Vietnam	Malaysia	1	4.5
Singapore	Malaysia	1	0.3
Malaysia	Singapore	16	3.2
Indonesia	Singapore	2	7.7
Myanmar	Thailand	29	3.1
Lao PDR	Thailand	14	2.9
Cambodia	Thailand	12	4.7

Sources: UN 2015a; World Development Indicators.

Figure II.A.8. The median age in ASEAN's major migration corridors



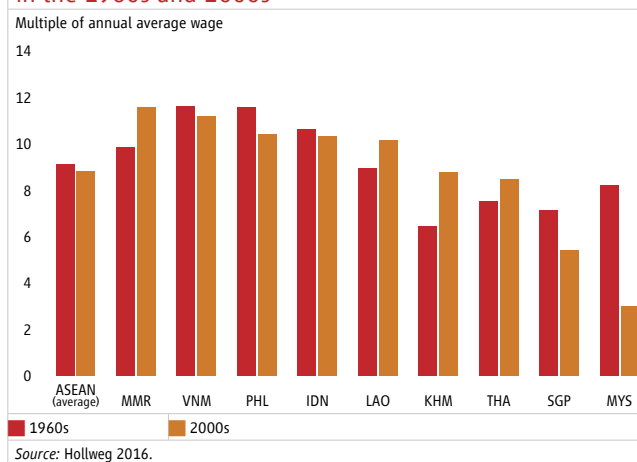
Source: UN 2015b.

However, barriers to labor mobility prevent some people from moving while leading others to seek out informal channels. The poorest households may not be able to migrate because of the costliness of international migration. Indeed, there is evidence of an inverse “U-shaped” relationship between migration and wealth, with the least wealthy households unable to finance migration and the wealthiest households unwilling to migrate because of the high opportunity costs of doing so (McKenzie and Rapoport 2007). When barriers to mobility using formal migration processes are too high, migrants seek out informal channels using informal labor brokers to pass borders unofficially, entering countries to work with nonwork visas, and overstaying employment passes. Undocumented migration is significant in ASEAN, though data limitations and the difficulty of defining undocumented migration make an accurate assessment difficult. The long and porous borders between Thailand and Cambodia, Lao PDR, and Myanmar, and between Malaysia and Indonesia, make these receiving countries particularly susceptible to undocumented migration. About 60 percent of migration from Cambodia, Lao PDR, and Myanmar to Thailand is undocumented and around half of the migrant population in Malaysia is undocumented (Huguet 2014; World Bank 2015).

International labor mobility costs capture and quantify the barriers to labor mobility that may prevent some migrants from moving and lead others to choose informal channels. Labor mobility costs quantify the costs from restrictive migration policies, documentation costs, and recruitment fees, as well as the cost of job searches and rigid employment policies. The overall costs faced by workers moving internationally can be approximated by comparing observed wage differences between jobs, a measure of their attractiveness, with data on actual job flows.⁷ For instance, a country with very high wages but few workers observed moving to work in it implies very high labor mobility costs. In other words, labor mobility costs can be estimated by comparing how well workers are able to respond to signals—high wages—of economic opportunity.

ASEAN countries that have more developed migration systems and that have made more efforts to lower barriers with the world have lower international labor mobility costs. International labor mobility costs have declined over time in Singapore and Malaysia and are quite low relative to other ASEAN countries (Figure II.A.9). This reflects in part the openness of these countries’ economies to globalization and in part their efforts to develop migration systems to fill labor market shortages. Thailand, in contrast, also receives many migrants but has a much less developed migration system, high levels of undocumented migration, and high international labor mobility costs. ASEAN’s predominantly migrant-sending countries often have restrictions on immigrants, including high-skilled ones, which is reflected in their higher mobility costs. Given the nature of the estimation, comparing labor mobility costs across countries is more informative than focusing on absolute magnitudes.⁸

Figure II.A.9. International labor mobility costs in ASEAN in the 1960s and 2000s



⁷ This measure of labor mobility costs does not attempt to estimate all the costs faced by individual workers, but rather estimates them indirectly.

⁸ While point estimates facilitate comparisons across countries, each of these estimates represents the midpoint of a range of estimates.

High international mobility costs in ASEAN have important consequences for how workers can respond to economic changes. Workers in ASEAN face costs at least several times their average annual wage to move abroad for employment; as a result, they may forego large potential wage gains (Hollweg et al. 2014).

Policies to decrease labor mobility costs

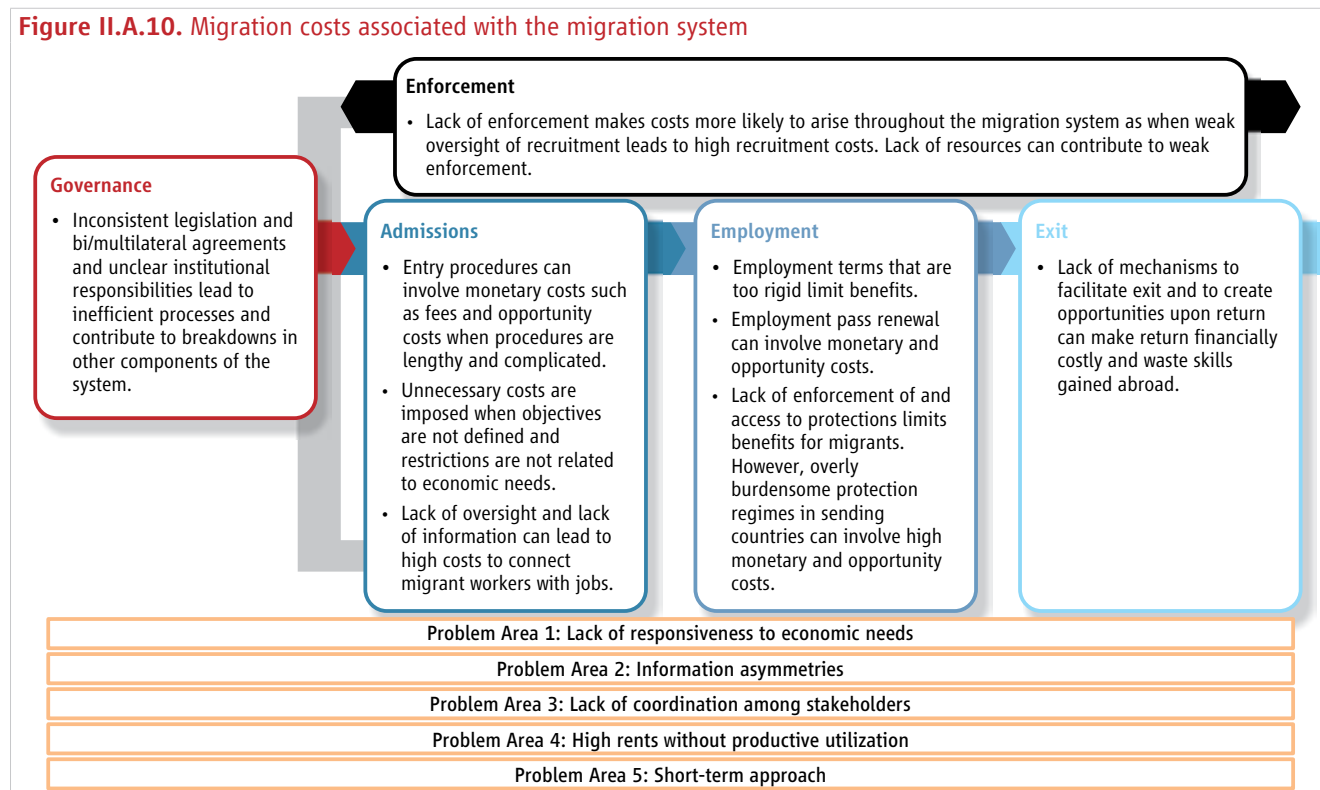
Weaknesses in ASEAN migration systems result in higher international mobility costs. Migration systems seek to reconcile the often conflicting demands of receiving countries that need both low- and high-skilled migrants to fill labor shortages, of employers in receiving countries that use migrants to fill shortages but whose objective is profit maximization rather than economic growth, of sending countries that benefit from remittances and reduced unemployment, and of migrants themselves who benefit from employment opportunities and higher wages. The migration system can generally be broken down into the legal and institutional framework organizing the system; the rules that govern the admissions, employment, and return of migrant workers; and the enforcement of those rules. Weaknesses and breakdowns in the migration system can be grouped into five major problem areas which increase the cost for migrants of seeking employment abroad (Figure II.A.10):

- Migration systems frequently have *difficulty responding to economic needs*. Restrictions on the number of migrants a country can receive are often not aligned with economic needs. For instance, the foreign worker levy that Malaysia uses to control the number of immigrant workers has been left unadjusted for significant periods, such as between 1999 and 2005, 2005 and 2009, and 2011 and 2016. When changes to the levy have been announced, employers frequently express surprise, which has twice led to adjustments to the policies after their public announcement.
- *Information asymmetries* exist among migrants, employers, and recruitment agencies. Though efforts have been undertaken in migrant-sending countries to increase the information available to migrants and to regulate the recruitment industry, migrants remain dependent on recruitment agencies and informal labor brokers, which means that recruitment costs remain high. For instance, in Indonesia, labor brokers, which are unregulated, often play an important role in identifying and providing information to potential migrants, which can drive up costs and subject migrants to abuse.
- Relatedly, employers and recruitment agencies are able to exploit information asymmetries to *extract rents from the migration system*. Labor brokers can capture a significant portion of the difference in wages between sending and receiving countries simply for connecting employers and migrant workers (Ahsan et al. 2014).
- There is a *lack of coordination* among sending and receiving countries, employers, trade unions and workers, and migrants. As a result, entry procedures are often cumbersome, and include redundant documentation requirements from multiple agencies. Though some bilateral agreements have been formulated to coordinate migration between sending and receiving countries, those agreements frequently suffer from weaknesses such as lack of transparency and lack of input from employers and migrants. In the case of Thailand's memorandums of understanding (MOUs) with Cambodia, Lao PDR, and Myanmar,

the formal migration channels created by the MOUs were overly bureaucratic and very time-consuming for migrants (ILO 2015).

- Finally, both sending and receiving countries tend to focus on the *short-term* benefits and costs of migration. Thailand, in particular, has struggled to formulate a long-term migration strategy, instead using regularizations of undocumented migrants as a de facto migration policy. In recent years, sending countries have begun to give more consideration to the employment and development impacts of emigration. However, programs to support returning migrants and to connect with diasporas are in their infancy.

Figure II.A.10. Migration costs associated with the migration system



ASEAN countries can implement policies to reduce the labor mobility costs arising from weaknesses in each component of the migration system. The appropriate policies will vary across countries, depending on whether they send or receive migrants, the maturity of their migration management system, and their level of development. Nevertheless, the following broad principles apply.

▸ Governance

ASEAN countries should consider developing national migration strategies to guide policy making in both the short and long term. Such a strategy can provide clarity to employers and other labor market stakeholders in primarily receiving countries about the official view on immigrant workers and how policy is likely to impact their numbers and characteristics. The plan can also acknowledge potential negative impacts of immigration on some

workers and clarify efforts to assist those who are made worse off. In primarily sending countries, migration strategies can elaborate on how policy makers plan to balance protections for migrants while they are abroad with efforts to link out-migration to economic development. In both sending and receiving countries, the national migration strategy should be comprehensive in covering all aspects of migration, organizing institutional responsibilities, and coordinating migration policy with employment, education, and skill strategies.

Bilateral agreements are important tools for increasing cooperation between sending and receiving countries. These agreements can provide the basis for sending and receiving countries to reconcile interests and align their legislative and institutional frameworks. Stakeholder engagement, transparency, and monitoring and evaluation are important components of good bilateral agreements and MOUs. The success of an agreement depends on its ability to adjust to emerging labor market needs, continued engagement between sending and receiving country representatives, and the complementarity of national migration and employment frameworks (KNOMAD 2014). Model employment contracts, wage protection measures such as mechanisms for automatic deposit of wages into migrant's bank accounts, transparency about the contents of MOUs, involvement of public employment services in sending and receiving countries, inclusion of gender-specific issues, and concrete implementation and evaluation measures are all good practices in bilateral agreements and MOUs (Wickramasekara 2015). These practices can lower migration costs by improving the information available to migrant workers, particularly about their contracts, working conditions, and rights.

► Admissions

The admissions process should be transparent with entry paths that are clearly differentiated. Application processes that are confusing and opaque create inefficiencies, increase migration costs, and lead to doubts about the integrity of the admissions process. Transparency helps ensure that both employers and migrants understand eligibility requirements and selection criteria for entry. Systems allowing employers and migrant workers to track their application status can increase confidence and allow for adjustments when bottlenecks are discovered. New Zealand has used an "Expression of Interest" system to select qualified migrants from a pool of migrants who have registered their interest and meet a set of baseline requirements. The system has helped eliminate backlogs of applicants through the initial screening and periodic expirations of registrations (Bedford and Spoonley 2014). Clearly differentiated admissions entry paths can target different types of workers. Singapore, for instance, has three well-defined entry streams for lower-, middle-, and higher-skilled workers that rely on salary and education requirements to distinguish workers of different skill levels. These entry streams then work with employment terms, as the more stringent entry requirements also afford more beneficial employment terms.

Shortage lists can be used to improve the responsiveness of the admissions system to economic needs. Shortage lists are used to determine which potential immigrants should be allowed entry. These lists are data- and stakeholder-driven and seek to identify labor market shortages through quantitative and qualitative evidence including labor force surveys, administrative data about immigration admissions, employer surveys, and stakeholder consultations. Using data to identify labor market shortages creates a feedback loop between the immigration system and the labor market to target migrant workers to the occupations in which they are most needed. The lists also reassure the public that policy makers are closely monitoring the labor market and immigration. Shortage lists can expedite the entry process by circumventing the need for employers to advertise jobs in a labor market test.

This means that applications to hire foreign workers can be processed more quickly, and both migrants and their employers have more certainty about how the needs of the migration system are determined. Malaysia has recently begun using a Critical Occupations List to identify sought-after, hard-to-fill, and strategic occupations that will be used to inform immigration and human resource development policies.

Better regulation of the recruitment industry is important to reduce labor mobility costs and improve protections for migrants. Additional licensing requirements can help ensure that recruitment agencies provide quality services to migrant workers, though this depends on available capacity and resources. Good practices include the requirement for recruitment agencies in the Philippines to attend a Pre-licensing Orientation Seminar prior to receiving a license, and a Continuing Agency Education Seminar for license renewal. Australia's Office of Migration Agents Registration Authority regulates and oversees migration agents, but also provides services to migrants such as helping them identify an agent, advising them on fees, and processing complaints (World Bank 2017). Finally, sending countries may consider requiring licensed agencies to agree to joint and several liability for claims made by migrants against employers, as occurs in the Philippines.

Increased information can help reduce the information asymmetries faced by migrant workers while also improving oversight of recruitment agencies. Strategies to improve migrants' access to information include public employment services to provide potential migrants with job opportunities abroad, and training courses that provide detailed information about migration procedures and employment abroad. The Republic of Korea's Employment Permit System (EPS) has a user-friendly website with information available to foreign workers in their native language. The Philippines provides a listing of job opportunities available abroad through the job advertising site JobStreet.com.⁹ The Philippines' Pre-Employment Orientation Seminar (PEOS) includes modules on working overseas, job search, illegal recruitment, allowable fees and the minimum provisions of the employment contract, and country-specific information. The PEOS is mandatory for potential migrants, but the course can be completed online at no cost. The Moroccan National Agency for the Promotion of Employment and Skills (ANAPEC) promotes the employment of skilled individuals and registers foreign employers and Moroccan youth for job matching. Users of recruitment agencies can also be allowed to evaluate the agencies, with the evaluations made public. Singapore has announced a system to allow employers of foreign domestic workers to rate employment agencies on their performance in explaining the application process, providing advice, and selecting a worker. A more comprehensive system would also permit the worker to rate the agency. Recruitment agencies can be awarded publicly for their effectiveness, as the Philippines does, or even receive expedited processing of licenses or waiver of license renewal obligations. An evaluation of the impact of providing information about the quality of recruitment agencies to potential migrants is currently in process in the Philippines (Bazzi et al. 2015).

► Employment

Employment terms can be used alongside entry paths to differentiate migrants by skill and productivity. Migrant-receiving countries can offer more generous employment terms to more highly skilled migrants including lengthier employment passes and the ability to bring dependents. But in general, allowing migrants, whether low- or high-skilled, to change employers can ensure that rigid terms do not limit productivity by preventing better matches between employers and workers. Rigid employment terms also make migrants vulnerable to mistreatment

⁹ See <http://poea.jobstreet.com.ph/>.

by employers, who can revoke their employment pass. Both Singapore and Malaysia have a type of employment pass that is not employer-specific, though in both countries the pass is available to only very highly skilled migrants. Finally, the renewal of employment passes should be a fast and easy process. Renewal requirements should be minimal and subject to rigorous cost-benefit analysis. To expedite renewal of employment passes, a trusted employer scheme could be created to limit renewal steps for previously compliant firms or for those whose profile makes them unlikely to violate employment or recruitment procedures.

Sending countries have a significant role to play both in protecting migrants while they are employed abroad and in assisting them in the migration process. Sending countries may consider providing predeparture loans to migrant workers, particularly poorer and low-skilled ones, who may not be able to migrate because of high migration costs. Source-country actions to facilitate migration, including reducing information, job search, and documentation costs, do not seem to increase international migration (Beam, McKenzie, and Yang 2015). However, there is some evidence that easing financial constraints may generate additional migration (Angelucci 2015; Bryan, Chowdhury, and Mobarak 2014).

Orientation programs can also improve migrant workers' experience abroad. Evidence on the impact of these trainings is limited (McKenzie and Yang 2015). The Philippines is generally lauded for its commitment to increasing the knowledge of migrant workers. Some good practices identified with the Philippines' orientation programs are the involvement of local government partners, the inclusion of NGOs to incorporate a rights perspective, developing orientation programs for recruiters, and providing migration information at the local level (Asis and Agunias 2012). Use of a standardized curriculum and oversight of implementation to ensure that all migrants undertake orientation seem to be important elements of success.

Offering orientation programs to migrant workers after their arrival at the destination may help reinforce knowledge gained during predeparture training; financial literacy training may also be useful. The Philippines' Post-Arrival Orientation Seminar (PAOS) provides information about rights, responsibilities, and assistance in some destination countries. Financial literacy programs can improve financial knowledge, though the design of these programs and their targeted beneficiaries are particularly important. A pilot program providing financial literacy training to migrant domestic workers in the Greater Malang area and the Blitar District of East Java in Indonesia had a positive impact on financial awareness and knowledge, budgeting, and savings, but no increase in the quantity or frequency of remittances (Doi, McKenzie, and Zia 2014). Notably, effects were most pronounced when both the migrant and their family members received training. Awareness of mandatory migrant insurance increased significantly.

► Exit

Sanctions and incentives can work together to encourage the voluntary departure of migrants. In addition to incentives for employers to encourage on-time return as Singapore and Malaysia do, wages might also be withheld from migrants or deposited in a compulsory savings scheme until they return to their source country. In Korea, employers are required to enroll in Departure Guarantee Insurance and workers to enroll in Return Cost Insurance. Similarly, Canada's Seasonal Agricultural Workers Program requires workers to contribute to a compulsory savings scheme that is available only upon a worker's return to the source country. However, withholding funds increases

the risk for migrant workers who are vulnerable to unscrupulous employers who allow their work status to expire (OECD 2013). Positive incentives for return also exist. This type of incentive includes tax rebates, guarantees of future employment, or assistance with transportation, medical examinations, and document preparation (OECD 2013). EPS workers in Korea can receive free vocational training and job counseling during employment, job matching services with Korean employers in home countries, and access to returnee networks that Korea has created to expand job opportunities.

Sending-country policies to engage with and incentivize the return of their diasporas can generate numerous benefits for home countries. Diaspora engagement policies help construct diaspora networks, which circulate ideas, technology, and even capital (Dickerson and Özden forthcoming). Programs such as Argentina's Research and Scientists Abroad (RAICES), Thailand's Reverse Brain Drain project, and Ethiopia's Diaspora Volunteer Program seek to create links with talented members of the diaspora to assist in the host country.

Sending countries at times support the reintegration of return migrants, though there is little evidence these programs are effective. Source countries can offer reintegration benefits to returning migrants. These can include active labor market policies to help migrants find jobs or start businesses upon return. In general, there is little evidence of the effectiveness of reintegration programs. In the Philippines, which has a suite of reintegration programs, challenges for returning migrants include insufficient resources, lack of expertise, and an inhospitable economic or investment climate (Battistella 2004). However, McKenzie and Yang (2015) describe several concerns about the effectiveness of reintegration programs, including questioning why the programs should be targeted at return migrants, in particular.

► Enforcement

Effective enforcement of immigration laws requires coordination among agencies, efforts beyond border enforcement alone, and leveraging data. Ensuring that immigrants do not enter and work without proper documentation requires more than border control which, while effective in some cases, is also costly, particularly along long borders like Thailand's borders with Lao PDR and Myanmar. Interior enforcement measures that target employers to ensure they are using documented labor and treating immigrant workers appropriately can be effective. Agencies charged with managing labor migration, which often hold data on employers of migrant workers and on those workers, and agencies charged with border enforcement, which hold data on the exit and entry of migrants, can leverage that knowledge to undertake joint enforcement efforts. Systems that are synchronized across agencies can assist with assessing risk and tracking noncompliance through the development of risk-based monitoring to guide enforcement. In low-capacity environments, coordination is even more important to ensure that limited staff and resources are leveraged to the best extent possible.

► Country-specific priorities

Destination countries should work toward migration systems that are responsive to economic needs, and consistent with domestic policies and human capital levels.

- With low levels of undocumented migration and a sophisticated system of productivity-linked entry paths, **Singapore** will need to continue to work to build public trust in the migration system and improve protections for migrant workers.
- With high levels of undocumented migration but a less sophisticated admissions system than Singapore, **Malaysia** will need to work to make its immigration system more responsive to economic needs and work to collaborate more closely with both employers and sending countries.
- With high levels of undocumented migration, **Thailand** will need to work to formalize its large population of undocumented migrants, rationalize entry procedures that are costly and time-consuming, and rethink immigration policies such as levies and a repatriation fund, which exist only in law but not in practice, undermining the credibility of the migration system.
- As **Brunei Darussalam** seeks to encourage private sector employment among locals, it will need to ensure that a relatively complex system of quotas and levies based on geography, sector, and employer supports this goal while also meeting economic needs.

Sending countries should work to balance protection for migrant workers with the needs of economic development while also supporting the reintegration of returned workers and connections to diasporas.

- The **Philippines** has a highly developed support system for migrant workers. However, the country must continue to evaluate and improve its services for migrants.
- **Indonesia** will need to improve coordination among agencies responsible for managing labor migration. Exit procedures for migrant workers will also need to be streamlined to encourage documented migration.
- **Vietnam** will need to evaluate its current policies for incentivizing out-migration to determine whether they are meeting the country's needs. While the intention of these policies is laudable, other reforms are also necessary including review of recruitment agencies' frequent and at least tacitly sanctioned practice of requiring migrant workers to pay a security deposit to guarantee their return, which is frequently not repaid. A national migration strategy could help guide reforms.
- Lower-capacity **Cambodia**, **Lao PDR**, and **Myanmar** should continue considering how migration can fit into their economic development strategies, shaping programs to make out-migration less costly and to create connections with diasporas to facilitate the transfer of knowledge and capital. These countries can look to the experience of the Philippines to develop institutions serving migrants and services such as predeparture orientation programs.

References

- Ahsan, Ahmad, Manolo Abella, Andrew Beath, Yukon Huang, Manjula Luthria, and Trang Van Nguyen. 2014. *International Migration and Development in East Asia and the Pacific*. Washington, DC: World Bank.
- Angelucci, Manuela. 2015. "Note: Migration and Financial Constraints: Evidence from Mexico." *The Review of Economics and Statistics* 97 (1): 224–228.
- Angrist, Joshua D., and Adriana D. Kugler. 2003. "Protective or Counter-Productive? Labour Market Institutions and the Effect of Immigration on EU Natives." *The Economic Journal* 113 (488): F302–F331.
- ASEAN Secretariat and World Bank. 2015. *ASEAN Services Integration Report*. Washington, DC: ASEAN Secretariat and World Bank.
- Asia-Pacific RCM Thematic Working Group on International Migration including Human Trafficking. 2015. *Asia-Pacific Migration Report 2015: Migrants' Contribution to Development*. Bangkok: International Organization for Migration, Regional Office for Southeast Asia.
- Asis, Maruja M. B., and Dovelyn Rannveig Agunias. 2012. "Strengthening Pre-Departure Orientation Programmes in Indonesia, Nepal and the Philippines." Migration Policy Institute, Washington, DC.
- Bazzi, Samuel, Lisa Cameron, Simone Schaner, and Firman Witoelar. 2015. "Empowering Female Migrant Workers to Access Quality Overseas Placement Services in Indonesia." American Economic Association's registry for randomized controlled trials (RCT). <https://www.socialscienceregistry.org/trials/630/history/3714>.
- Batalova, Jeanne, Andriy Shymonyak, and Guntur Sugiyarto. 2017. *Firing Up Regional Brain Networks: The Promise of Brain Circulation in the ASEAN Economic Community*. Manila: Asian Development Bank.
- Battistella, Graziano. 2004. "Return Migration in the Philippines: Issues and Policies." In *International Migration: Prospects and Policies in a Global Market*, edited by Douglas S. Massey and J. Edward Taylor. Oxford: Oxford University Press.
- Beam, Emily A., David McKenzie, and Dean Yang. 2015. "Unilateral Facilitation Does Not Raise International Labor Migration from the Philippines." *Economic Development and Cultural Change* 64 (2): 323–368.
- Bedford, Richard, and Paul Spoonley. 2014. "Competing for Talent: Diffusion of an Innovation in New Zealand's Immigration Policy." *International Migration Review* 48 (3): 891–911.
- Beine, Michel, Frédéric Docquier, and Hillel Rapoport. 2008. "Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers." *The Economic Journal* 118 (528): 631–652.
- Brunow, Stephan, Peter Nijkamp, and Jacques Poot. 2015. "The Impact of International Migration on Economic Growth in the Global Economy." *Handbook of the Economics of International Migration* 1B: 1027–1075.
- Bryan, Gharad, Shyamal Chowdhury, and Adhmed Mushfiq Mobarak. 2014. "Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh." *Econometrica* 82 (5): 1671–1748.
- D'Amuri, Francesco, and Giovanni Peri. 2011. "Immigration, Jobs and Employment Protection: Evidence from Europe Before and During the Great Recession." *Journal of the European Economic Association* 12 (2): 432–464.
- D'Amuri, Francesco, Gianmarco I. P. Ottaviano, and Giovanni Peri. 2010. "The labor market impact of immigration in Western Germany in the 1990s." *European Economic Review* 54 (4): 550–570.
- del Carpio, Ximena, Çağlar Özden, Mauro Testaverde, and Mathis Wagner. 2015. "Local Labor Supply Responses to Immigration." *The Scandinavian Journal of Economics* 117 (2): 493–521.

- Dickerson, Sarah, and Caglar Ozden. Forthcoming. "Return Migration and Diaspora Engagement." In *Handbook on Migration and Globalization*, edited by Anna Triandafyllidou. Cheltenham, United Kingdom: Edward Elgar Publishing.
- Docquier, Frédéric, and Hillel Rapoport. 2012. "Globalization, Brain Drain, and Development." *Journal of Economic Literature* 50 (3): 681–730.
- Docquier, Frédéric, Çağlar Özden, and Giovanni Peri. 2014. "The Labour Market Effects of Immigration and Emigration in OECD Countries." *The Economic Journal* 124 (579): 1106–1145.
- Doi, Yoko, David McKenzie, and Bilal Zia. 2014. "Who you train matters: Identifying combined effects of financial education on migrant households." *Journal of Development Economics* 109 (C): 39–55.
- Felbermayr, Gabriel J., and Benjamin Jung. 2009. "The pro-trade effect of the brain drain: Sorting out confounding factors." *Economics Letters* 104 (2): 72–75.
- Felbermayr, Gabriel J., and Wilhelm Kohler. 2009. "Can International Migration Ever be Made a Pareto Improvement?" In *The Integration of European Labour Markets*, edited by Ewald Nowotny, Peter Mooslechner, and Doris Ritzberger-Grünwald. Cheltenham, United Kingdom: Edward Elgar Publishing., pp. 32–50.
- Hollweg, Claire. 2016. "Labor mobility and labor market integration in ASEAN." World Bank, Washington, DC.
- Hollweg, Claire, Daniel Lederman, Diego Rojas, and Elizabeth Ruppert Bulmer. 2014. *Sticky feet: How labor market frictions shape the impact of international trade on jobs and wages*. Washington, DC: World Bank.
- Holumyong, Charnpor, and Sureeporn Punpuing. 2014. "A Cost-Benefit Analysis of the Legal Status of Migrant Workers in Thailand." In *Managing International Migration for Development in East Asia*, edited by Richard H. Adams and Ahmad Ahsan. Washington, DC: World Bank, pp. 263–282.
- Huguet, Jerrold W. 2014. "Thailand Migration Profile." In *Thailand Migration Report 2014*, edited by Jerrold W. Huguet. Bangkok: United Nations Thematic Working Group on Migration in Thailand, pp. 27–43.
- ILO (International Labour Organization). 2015. "Review of the effectiveness of the MOUs in managing labour migration between Thailand and neighbouring countries." International Labour Organization, Bangkok.
- ILO and ADB (International Labor Organization and Asia Development Bank). 2014. *ASEAN Community 2015: Managing integration for better jobs and shared prosperity*. Bangkok: International Labor Organization and Asia Development Bank.
- ILO and KNOMAD (International Labour Organization and Global Knowledge Partnership on Migration and Development). 2015. "Migration Cost Survey: Vietnamese Workers in Malaysia." International Labour Organization, Bangkok.
- Kaplan, David, Daniel Lederman, and Raymond Robertson. 2013. "Worker-Level Adjustment Costs in a Developing Country: Evidence from Mexico." Unpublished manuscript, International Trade Department, Poverty Reduction and Economic Management, World Bank, Washington, DC.
- KNOMAD (Global Knowledge Partnership on Migration and Development). 2014. "Technical Workshop on Review of Bilateral Agreements Low-skilled Labor Migration: Summary," Katmandu, Nepal, December 1–2.
- Lathapipat, Dilaka. 2014. "The Effects of Immigration on the Thai Wage Structure." In *Managing International Migration for Development in East Asia*, edited by Richard H. Adams and Ahmad Ahsan. Washington, DC: World Bank, 111–135.
- Martin, Philip, and Manolo Abella. 2014. "Reaping the economic and social benefits of labour mobility: ASEAN 2015." Asia-Pacific Working Paper Series, International Labour Organization, Bangkok.
- McKenzie, David, and Dean Yang. 2015. "Evidence on Policies to Increase the Development Impacts of International Migration." *World Bank Research Observer* 30 (2): 155–192.

- McKenzie, David, and Hillel Rapoport. 2007. "Network effects and the dynamics of migration and inequality: Theory and evidence from Mexico." *Journal of Development Economics* 84 (1): 1–24.
- Mishra, Prachi. 2007. "Emigration and wages in source countries: evidence from Mexico." *Journal of Development Economics* 82 (1): 180–199.
- . 2014. "Emigration and wages in source countries: a survey of the empirical literature." In *International Handbook on Migration and Economic Development*, edited by Robert E. B. Lucas. Cheltenham: Edward Elgar Publishing: 241–266.
- OECD (Organization for Economic Cooperation and Development). 2013. *International Migration Outlook 2013*. Paris: OECD Publishing.
- . 2016. *Economic Outlook for Southeast Asia, China and India: Enhancing Regional Ties*. Paris: OECD Publishing.
- Özden, Çağlar, and David Phillips. 2015. "What really is Brain Drain? Location of Birth, Education, and Migration Dynamics of African Doctors." Working Paper 4, Global Knowledge Partnership on Migration and Development, Washington, DC.
- Özden, Çağlar, and Mathis Wagner. 2016. "Immigrant versus Natives? Displacement and Job Creation." Unpublished manuscript, World Bank, Washington, DC.
- UN (United Nations). 2015a. *Trends in International Migrant Stock: The 2015 Revision*. United Nations database, POP/DB/MIG/Stock/Rev.2015.
- . 2015b. *World Population Prospects: The 2015 Revision*. Department of Economic and Social Affairs Population Division, DVD Edition. New York: United Nations.
- Wickramasekara, Piyasiri. 2015. "Bilateral Agreement and Memoranda of Understanding on Migration of Low Skilled Workers: A Review." International Labour Organization, Geneva.
- World Bank. 2014. *East Asia Pacific at Work: Employment, Enterprise, and Well-being*. Washington: DC: World Bank.
- . 2015. *Malaysia Economic Monitor: Immigrant Labour*. World Bank: Kuala Lumpur.
- . 2016. "Indonesia's Global Workers: Juggling Opportunities and Risks." World Bank, Washington, DC.
- . 2017. "Sending Country Systems." World Bank, Washington, DC.

II.B. Tackling Farm Pollution in Developing East Asia¹

In developing East Asia, more intensive agricultural practices have been successful in increasing food availability and the output of agricultural raw materials, but have also resulted in serious pollution problems that have adversely affected the environment, human health, and the productivity of agriculture itself. This pattern of highly productive yet highly polluting agriculture is playing out with consequences that remain poorly understood by most policy makers and the public. Agriculture is often portrayed as a victim of industrial and urban pollution, and this is indeed the case. However, certain farming practices have also become a leading source of soil, air, and water pollution in the most intensively farmed parts of these countries. While a range of policy instruments is available to guide farming practices in directions that will lessen their environmental footprint, most public intervention in this area has tended to be more reactive than preventive and, in many cases, inadequate in scale. In many instances, the implementation of sound pollution control programs has also come up against the impact of broader incentive structures that do not rank environmental outcomes prominently. Governments therefore need to make agricultural pollution a higher policy priority in order to reduce the costs of intensive farming. In addition, more multipronged and evidence-based strategies will be needed to exploit the technical, market, and structural opportunities to control and, more importantly, prevent pollution from intensive farming.

The benefits of agricultural intensification

Agricultural intensification, that is, technological upgrading and the increased use of inputs, has boosted agricultural productivity in developing East Asia and provided a solid footing for its growth. Across much of the region, agricultural output has expanded rapidly, even as the share of agriculture in GDP has fallen with these economies' structural transformation. For instance, during 1990–2011, agricultural value added in China

Figure II.B.1. Prevalence of food inadequacy in selected countries, 1990–2016

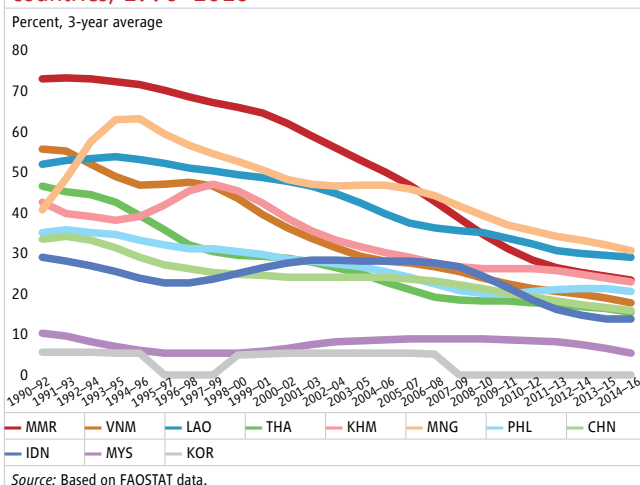
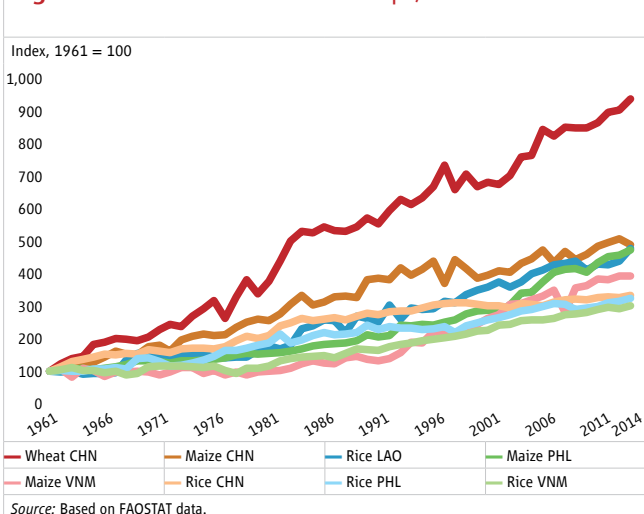


Figure II.B.2. Yields of selected crops, 1961–2014



¹ Prepared by Emilie Cassou, Steven Jaffee, and Jiang Ru. This chapter is based on a regional study on agricultural pollution, which focuses primarily on China, the Philippines, and Vietnam, while drawing insights from experiences outside the region. The findings from this study will be made available by June 2017.

and Vietnam grew by, respectively, 4.3 percent and 3.9 percent per year on average. Regional agriculture has contributed to plummeting rates of hunger, even though serious nutritional challenges remain. Since 1990, the prevalence of food inadequacy has more than halved in China and decreased by nearly 70 percent in Vietnam. Similar trends can be observed across the region (Figure II.B.1). This achievement has rested centrally on the region's ability to multiply its production of grains (Figure II.B.2) despite being land-constrained. In the space of 60 years, for example, China's grain output increased fivefold—a doubling on a per capita basis—even though land devoted to farming remained remarkably stable (Figure II.B.3). Greater use of inputs, irrigation, and mechanization have played major parts in cereals output growth by helping to improve yields, and often by allowing producers to grow more crops per year on a given plot of farmland.

Figure II.B.3. Trends in cereals production, yield, and harvested areas in China, the Philippines, and Vietnam, 1961–2013

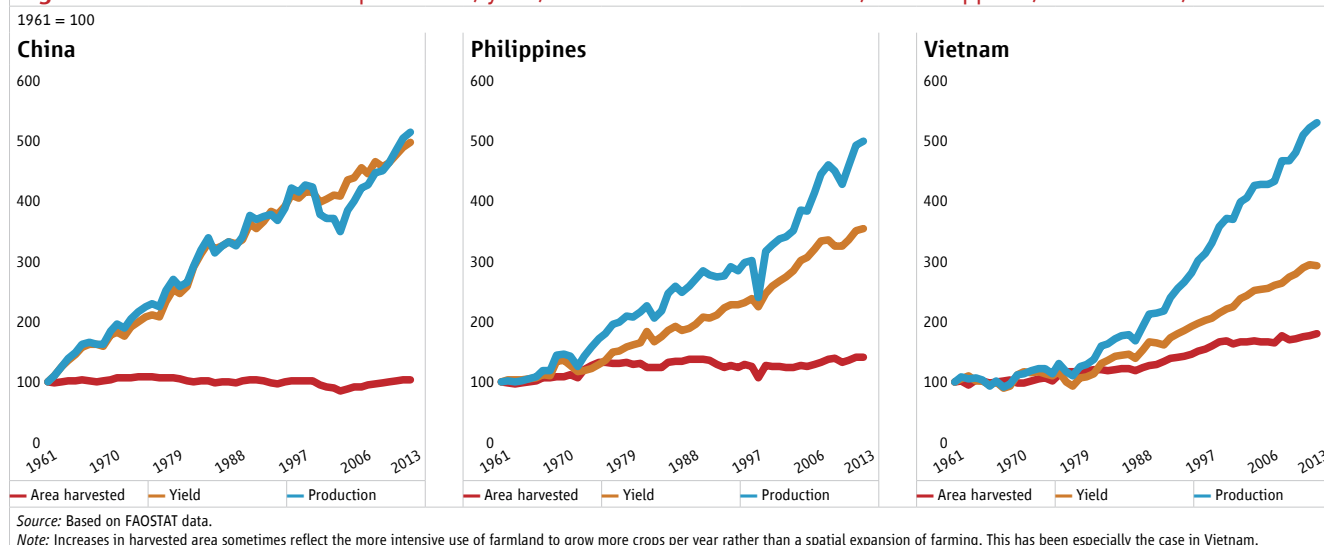
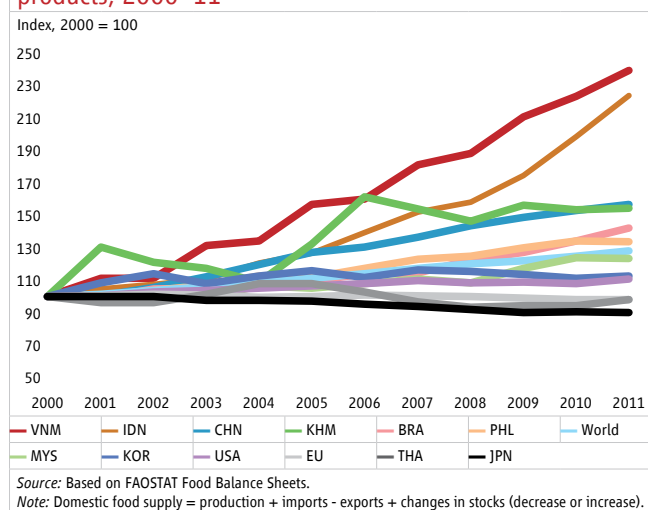


Figure II.B.4. Domestic food supply of all animal products, 2000–11



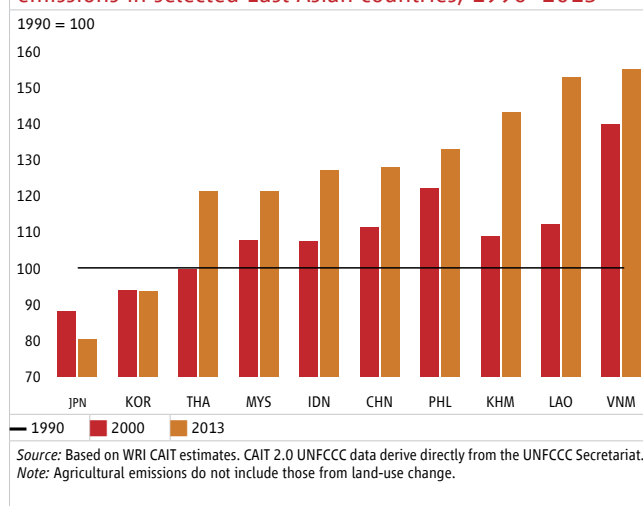
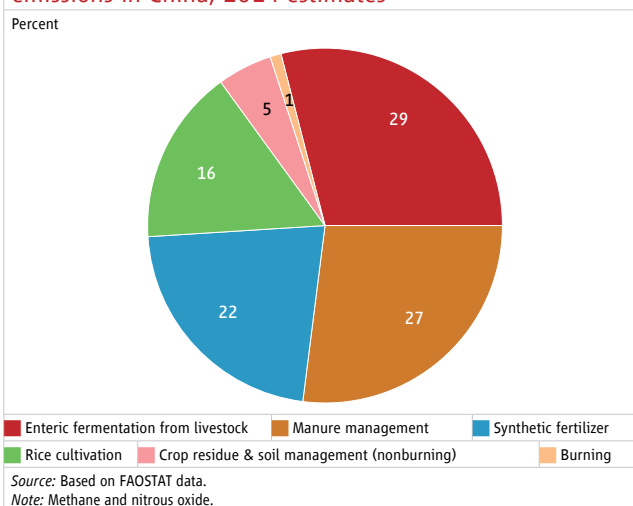
Agriculture has also proven responsive to rapid changes in people's food preferences and budgets, especially to exploding demand for animal products (Figure II.B.4). Animal production has kept up by expanding in space, but also by industrializing. The enormous expansion of aquaculture has rested on both phenomena. Between 1990 and 2014, China's aquaculture output increased from less than 10 million tons to nearly 60 million tons. Over that same period, Vietnam's aquaculture output rose from less than 200,000 tons to nearly 3.5 million tons (a 1,650 percent increase in approximately 25 years). The expansion of agricultural output has also enabled several countries in the region to become major exporters of a broad range of agricultural commodities.

Significance of agriculture as a polluter

Despite the above contributions, the breadth and severity of pollution problems to which agricultural development has given rise may challenge the sector's ability to remain a positive force in economic growth, livelihood provision, and social stability. Evidence suggests that intensive farming operations have become a major source of water, soil, ambient air, and climate pollution in China, Vietnam, and the Philippines.

- **Water.** Farming operations have significantly contributed to the contamination of both surface water and groundwater in parts of the region, with pollutants ranging from nutrients to organic matter, pesticides, and other toxic chemicals. In the Philippines, for example, livestock and other farms have been the largest contributors of organic matter pollution in the monitored waterbodies of Manila Bay and Laguna Lake (EMB 2014). China's first national pollution survey found that, in 2007, agriculture was the leading source of surface water quality impairment with respect to nutrients and organic pollutants. Consistent with this, agriculture has been the leading cause of eutrophication in China's lakes and in the Yellow and South China Seas (Strokal et al. 2014). In northern China, farming activities have also led to serious nitrate contamination of groundwater (Zhang et al. 2013a).
- **Soil.** One major form of soil pollution is acidification, a natural process that can be accelerated by such farming practices as irrigation, fertilization, and the removal of crop residues from farmland. Soil acidification can, in turn, favor the loss of soil nutrients as well as crops' absorption of heavy metals. In China, the rate at which soils acidified between the 1980s and 2000s is one that would take hundreds of years to materialize under natural conditions (Zhang et al. 2013b).
- **Air.** Ambient air quality impairment is a major concern in many of East Asia's densely populated metropolitan areas, and agriculture is known to be implicated. Fine particle and other emissions from agricultural burning, improper manure storage, and fertilizer and pesticide use contribute to air pollution and related disease. Ammonia releases from agricultural sources were recently shown to be detracting from urban air quality in Chinese cities (Gu et al. 2014; Liu et al. 2013). Open burning of agricultural residues has also been tied to an abundance of fine particulate matter in certain cities on a seasonal basis (Zhang and Cao 2015). In Indonesia, fire has been a prominent means of clearing land to grow oil palm, from which lucrative commodities are derived. The resulting haze has badly affected air quality in both rural and urban areas.
- **Climate.** Furthermore, farming activities—especially livestock rearing, excess fertilizer use, and rice irrigation—are the second-largest source of greenhouse gas emissions in China, Vietnam, and the Philippines, before even counting emissions related to agriculture-driven land-use change (Figure II.B.5 and Figure II.B.6) (based on WRI CAIT 2016). Changes in farming practices will be needed for countries to meet their international commitments to climate change mitigation.²

² By one estimate, Indonesian fires—which are predominantly agriculture-driven—emitted an estimated 1,750 million metric tons of carbon dioxide equivalent (MtCO₂-e) in 2015, close to the 1,800 MtCO₂-e that Indonesia reported in its Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) (World Bank 2016a; <http://pubdocs.worldbank.org/en/643781465442350600/Indonesia-forest-fire-notes.pdf>).

Figure II.B.5. Change in agricultural greenhouse gas emissions in selected East Asian countries, 1990–2013**Figure II.B.6. Breakdown of agricultural greenhouse gas emissions in China, 2014 estimates**

Adverse impacts of farm pollution

Changing farming patterns and practices represent a growing concern for human and wildlife health, and agricultural productivity. Though evidence linking intensive farming practices to these is incomplete, impacts can be inferred from the levels of pollution being observed based on well-understood impact pathways.

From a health perspective, drinking water contamination is a key concern in the region, as are the development of drug-resistant microbes, food contamination, and poor air quality. In China, agriculture bears substantial responsibility for the fact that in 2014, over 61 percent of monitored groundwater sources and nearly 29 percent of monitored rivers were found to be unfit for human contact, and that 39 percent of major lakes and reservoirs failed to meet drinking or bathing water standards (China Ministry of Environmental Protection 2015). In Vietnam, livestock farms are reported to be seriously detracting from the safety of drinking water supplies to Ho Chi Minh City,³ and this is also likely to be the case for Hanoi and Manila, given the intensity of livestock production in their peri-urban areas. Groundwater pollution has been less well studied, but pesticides used in rice fields have been shown to compromise the safety of groundwater extracted from wells in Vietnam (Chau et al. 2015). Farm workers and rural populations are the most exposed to pesticide poisoning (Dasgupta et al. 2007; Nguyen 2016). Meanwhile, a large body of evidence has tied pesticide exposure to elevated rates of chronic disease such as different types of cancers, birth defects, and several types of neurodegenerative and reproductive disorders (Mostafalou and Abdollahi 2013). Exposure to chemicals in plastics, an issue of particular relevance in China, may also have some of these chronic health effects.⁴ Nitrates in drinking water from animal feces and fertilizer also increase the risk of various health problems (Naidenko, Coc, and Bruzelius 2012; Morales-Suarez, Llopis-Gonzalez, and Tejerizo-Perez 1995; Gulis, Czompolyova, and Cerhan 2002).

³ According to the city's environmental protection department, as reported in the press (www.haisontq.com/tin-tuc-su-kien/tin-tuc/613-nuoc-thai-tu-chan-nuoi-lam-o-nhiem-song.html).

⁴ Notably carcinogenic and endocrine-disrupting effects (Colborn, vom Saal, and Soto 1993).

For wildlife and ecosystems on the front lines of exposure, the health effects of agricultural pollutants can be even more severe than for people. Mass fish kills are a common occurrence in aquaculture operations in the Philippines, with over 300 incidents recorded just between 2005 and 2014 (Cuvin-Aralar, Ricafort, and Salvacion forthcoming). In China, 30 to 40 percent of monitored surface waters are polluted to an extent that has been associated with biodiversity losses elsewhere. Pollinator collapse, such as that which has occurred on a wide scale in fruit-tree-growing parts of Western China, along with recorded instances of fish kills, illustrate how agricultural pollution is threatening the survival of critical populations or species on which humans depend.

Agricultural productivity is also adversely impacted. Soil fertility and crop yields are at risk when fertilizer losses, field burning, and the use of plastic ground covers, irrigation, and other farming activities result in soil acidification, salinization, warming, and other disturbances. In southern China, where a full 65 percent of agricultural soils have become severely acidified, fertilizer use has been both a cause and response to soil acidification, fueling a vicious cycle of degradation (Zhang et al. 2013b). Soil acidification has also likely accelerated the uptake of industrial heavy metal pollution by food crops, creating a human health hazard and leading to the rejection of these crops by markets. The loss of pollination and biological control services has already saddled farmers with heavy labor and pesticide costs, notably in China's fruit-growing regions. And drug resistance in confined livestock and aquaculture operations may open new pathways for pandemics that would adversely affect these industries.

The available, although still limited, evidence suggests that the economic costs of farm pollution are high. One research team, for instance, estimated that China's excessive emissions of nitrogen, related to the production of staple food, cost the country 1.4 percent of annual GDP (close to US\$49 billion) during 2001–10 (Xia and Yan 2016). In Indonesia, forest fires tied in large part to the conversion of land for oil palm production cost an estimated US\$16.1 billion in 2015, more than the value added by palm oil production in 2014 (US\$12 billion) (World Bank 2016a).

Sources of pollution from farming practices

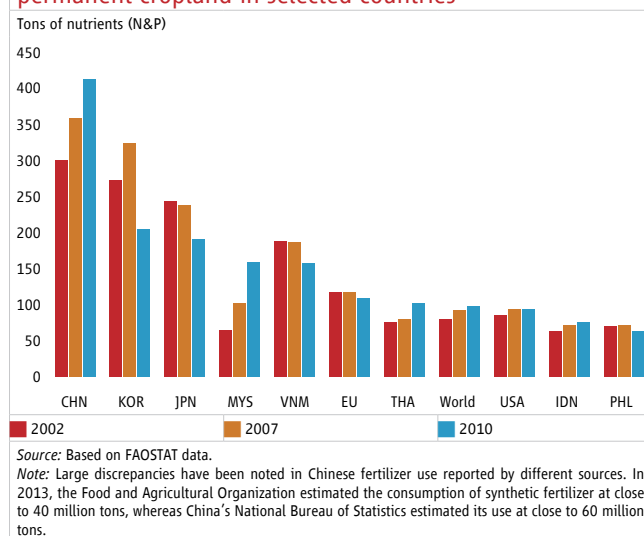
These practices relate to the management of both inputs and outputs in crop and animal agriculture, including the examples below.

Poor livestock waste management. The dumping of untreated manure and feces-laden waste and wastewater from livestock and aquaculture operations into the environment is a rampant, often uncontrolled, and expanding problem, as is its improper storage. For example, an estimated 36 percent of animal waste generated in Vietnam is directly dumped into the environment without treatment (Dinh forthcoming), and up to 80 percent of animal waste is disposed of in this manner in some parts of the Philippines (Catelo, Narrod, and Tiongco 2008).

Improper use of feed, drugs, other growth enhancers, and other chemicals in aquaculture and livestock breeding. Reliance on feeds and supplements is a key feature of industrial animal agriculture on both large and small scales, and gives rise to pollution in several ways. Aquaculture operations lose most of the feed (or fertilizer) they add to their waters, and nutrient pollution has become particularly problematic in the open systems that have come to dominate the subsector, as these entail the release rather than the recycling of excess nutrients.

Furthermore, the prophylactic and growth-enhancing use of drugs, hormones, and heavy metals is now a standard practice in the livestock and aquaculture industries in the three studied countries, despite being dominated by smallholders. Over 45 antibiotics are widely used in Vietnamese livestock and aquaculture production (Dương and Nguyen 2015; Kim et al. 2013; Thinh et al. 2015; Tu et al. 2006). In the Philippines, reproductive hormones have been used for years in many different forms of aquaculture (Cuvin-Aralar, Ricafort, and Salvacion forthcoming). Aquaculture operations are also treated with large numbers of potentially harmful chemicals including persistent, toxic compounds (Nguyen et al. 2015; Tu et al. 2006).

Figure II.B.7. Fertilizer use per hectare of arable and permanent cropland in selected countries

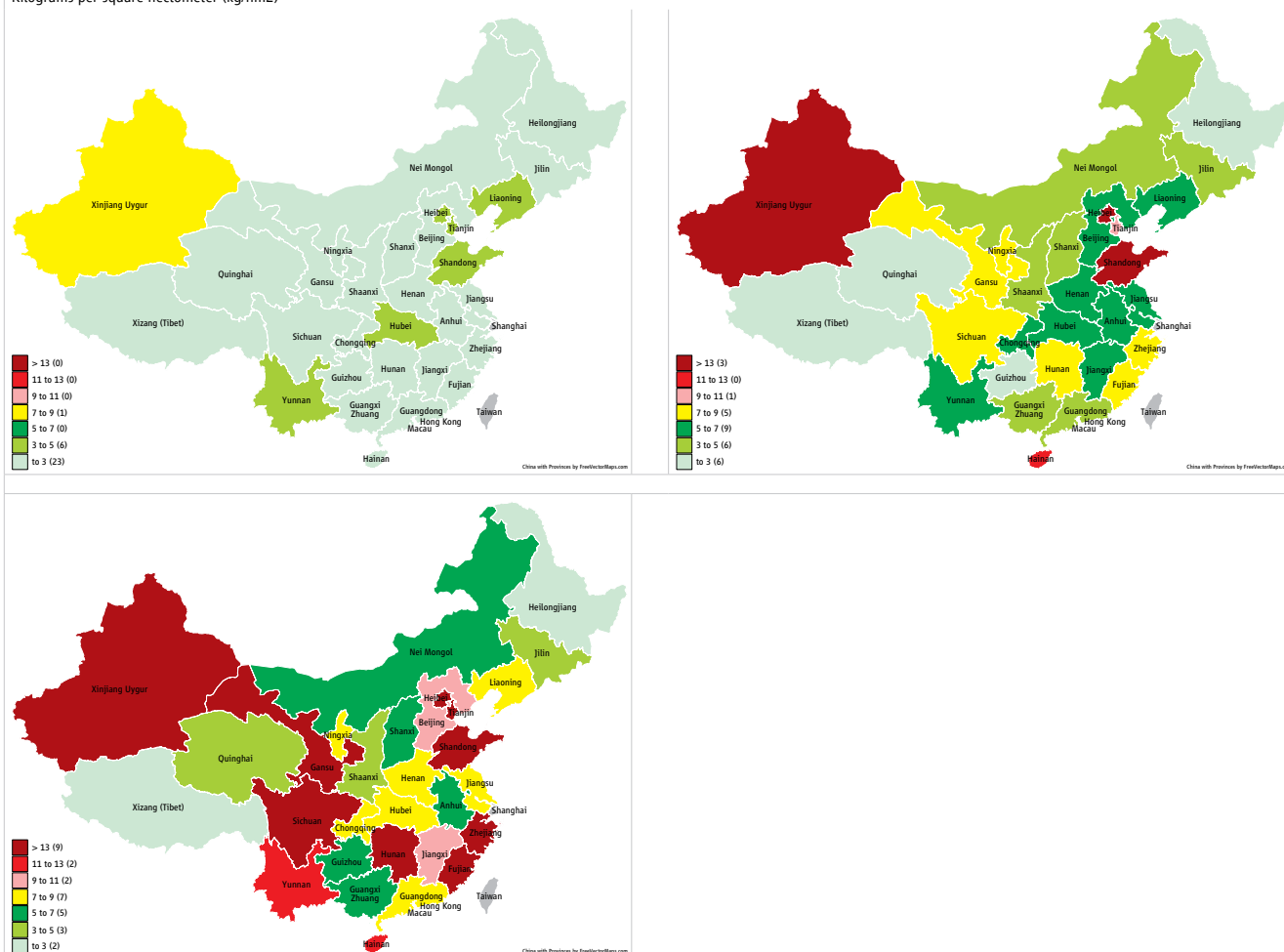


Excessive or improper fertilizer and pesticide use.

The region now features some of the heaviest fertilizer users globally, both in absolute terms and per unit of land (Figure II.B.7). The majority of these fertilizers are not taken up by the targeted plants but instead disperse through the air, soil, and water. In China's intensive grain-producing areas, there is potential for cutting nitrogen applications by 30 to 60 percent without harming yields (Chen et al. 2014; Ju et al. 2009; Wu Liang 2014; Zhang et al. 2013b); and similar "triple win" opportunities for yields, incomes, and the environment have been identified in relation to the use of fertilizer (and water) to grow coffee in Vietnam's Central Highlands (Amarasinghe et al. 2015; Technoserve 2013). Pesticide use has soared in China and parts of Vietnam. Some of the most toxic pesticides remain in use and nonnegligible volumes of counterfeit and obsolete pesticides are thought to be in circulation, though China, the region's largest user of pesticides, has made strides on both accounts.

Improper disposal of plastics. Another emerging concern is the use and improper disposal of agricultural plastics, many after only a single growing season. This is a particular concern in China, where the use of plastic film "mulch" has transformed and enabled the expansion of vegetable and cotton production in the country's cold and arid regions. In China, plastic film use grew more than 150-fold between 1982 and 2014 in area terms, and 200-fold in tonnage terms (Figure II.B.8) (Yan 2015; *China Rural Statistical Yearbook* 2015). The use and disposal of plastics is associated with many concerns relating namely to soil fertility, food safety and health, and the protection of wildlife.

Open burning. In many parts of the region, maize, rice, and wheat residues are systematically burned for the sake of expedience and labor savings. Time and labor scarcity, the lack of market channels for straws and husks, and certain agronomic beliefs are among the factors thought to contribute to this practice.

Figure II.B.8. The spread of plastic mulch in China, 1991, 2001, and 2011Kilograms per square hectometer (kg/hm²)

Source: China Rural Statistical Yearbook 1992, 2002, 2012.

Note: Red, orange, and yellow shading correspond to the most intensive use of agricultural plastics (in kilograms per square hectometer).

Structural and policy drivers of farm pollution

Demographic growth and a societal focus on output and yield growth, shaped in part by policy, have favored development approaches that regard the environment as a resource for exploitation. Direct and indirect fertilizer subsidies (as those in Indonesia, Vietnam, and China—China's are undergoing reform—and, formerly, in the Philippines), preferential input loans, extension messages, and product advertising have helped cement a widespread belief among farmers that applying more fertilizer always results in higher yields. This has contributed to the overuse of fertilizer. Specialization in crop agriculture, the simplification of agroecosystems, and the move to monoculture—favored by investment in irrigation infrastructure and extension messages, and sometimes inflexible land-use policies—have accelerated farms' loss of natural predators and fertility, increased their susceptibility to pests and disease, and driven a greater reliance on synthetic chemicals to address these. The

expansion of irrigated agriculture, a centerpiece of public investment in agriculture in several countries, has also unwittingly contributed to agrochemical runoff, soil salinization, and rice-related greenhouse gas emissions.

The sector's high degree of responsiveness to the emerging demands of urbanizing populations has resulted in a more polluting mix of products and practices, and a greater proximity of populations to agricultural sources of pollution. The rise of animal agriculture, including the surge in confined pig and fish farms, in response to the growth in demand for animal products, has led to increased pollution. The clustering of agricultural activities and their increasing juxtaposition with dense population centers has increased human exposure to the sector's ever concentrating set of pollutants. Chinese agriculture's response to rising demand for fruit and vegetables in a water-scarce environment has most recently driven plastic, nutrient, and pesticide pollution concerns.

Pollution has, so far, been a major downside of the rapid intensification of production. In a region bent on leap-frogging as a development strategy, the uptake of pesticides and other chemicals in farming has happened so fast in East Asia that it has sometimes outpaced awareness of their dangers on the part of either farmers or regulators, the latter's capacity to regulate them, and the adoption of safe handling techniques. Importing aquaculture species bred for intensive farming has been a quick way to develop a high-output seafood industry—yet one that has increased the risk of genetic contamination, disease, and biodiversity loss. Some of East Asia's aquaculture activities have developed around potentially invasive species such as trout, Chinese carps, and tilapia, which can represent a threat to the health and survival of native species.

Limited space for agriculture and the continued dominance of small farm size has challenged producers' and regulators' capacity to moderate pollution. Limited space for farming has detracted from sound environmental management in some cases. In animal farming, for example, cramped conditions have dissuaded producers from devoting space to waste treatment facilities, especially in light of limited opportunities for market reward and the weak enforcement of waste management regulations. The small size (and limited capacity and resources) of most livestock and aquaculture operations, taken individually, has also possibly dissuaded regulators from imposing more stringent waste management requirements or even just scrutiny over these, even though they generate vast amounts of pollution aggregately. Meanwhile, farmers with limited land are increasingly having to seek off-farm income opportunities to make ends meet, and this sometimes leaves them with insufficient time for judicious farm management practices.

However, where consolidation is occurring and industrial farms are emerging, the pollution situation is not always improving. The large, industrial operations that are in fact emerging in the livestock and aquaculture sectors, especially in China and Vietnam, have a mixed record in terms of cleaning up the industry through the use of more sophisticated waste management techniques. Similarly, croplands that have been given over to large players are not always the most exemplary, perhaps because with market dominance and economic strength comes political influence and regulatory capture.

Current approaches and why they are falling short of expectations

Recognizing the above challenges, governments in the region have started reacting to various degrees. In China, and to a growing extent in Vietnam, the harmful side effects of agricultural intensification have come to light and started to drive changes in policy. China has gone the furthest down this path as the heavy costs of rampant pollution have turned the matter into a simmering public concern. Within the region, China has probably established the most extensive cadre of agriculture-sector-specific laws, regulations, and incentive programs to monitor, prevent, and control pollution. In Vietnam, many government efforts to limit and control agricultural pollution are also underway as its effects are being felt ever more widely.

Still, government interventions remain largely reactive and experimental. In the Philippines, where agricultural pollution is of lesser severity overall, or rather more localized, the government has put in place fewer agriculture-specific laws and programs. In all three countries, meanwhile, laws to prevent and control pollution are commonly ignored, and incentive programs are sometimes too weak. In Vietnam, for example, this applies to both laws and incentive programs intended to improve the management of livestock waste. And various successful incentive and demonstration programs have yet to surmount the challenges of sustainability and scale-up. This, for example, will be the next step for Vietnam's "One Must Five Reductions" approach,⁵ now that it has demonstrated that rice, incomes, and the environment can benefit when farmers manage inputs and resources more judiciously.

Most recently, China and Vietnam have started to embrace a more balanced set of agricultural policies that not only place greater emphasis on environmental sustainability but also link it to emerging and long-standing priorities of agricultural policy such as food quality, competitiveness, yield performance, and food security. In fact, judging from the Sustainable Agricultural Development Plan it adopted in 2015, China may now be turning a corner in starting to address the issue more strategically, with greater attention to prevention and to taking successful approaches to scale. To date, the above logic has not been the norm in the three countries, however, and socializing this way of thinking to see it through is likely to be challenging. This points to the need not only for efforts on the legal, technical, and economic fronts, but also for institutional reforms encompassing the incentives, culture, and priorities of regulators. Adequate public sector funding, as well as market participation, will also help mobilize and sustain adequate resources for such things as monitoring, enforcement, and various forms of subsidy (for sustainable agriculture).

Toward an effective strategy: Curbing agricultural pollution will require the public sector to set priorities, effectively compel and motivate farmers, back innovation and learning, and influence the sector's structure and growth trajectory from farm to table

Though imperfect, evidence supports a number of priority areas in which more and better policy intervention is needed. As noted, the data and knowledge gaps surrounding agricultural pollution and its effects on the region are profound. Nonetheless, enough is understood to point to a number of farming patterns that are making critical

⁵ Developed by the International Rice Research Institute in collaboration with the An Giang Department of Agriculture and Rural Development, this approach calls for farmers to use certified seeds (the "one must"), while reducing the use of four production inputs (seed, water, pesticides, and chemical fertilizers) and postharvest losses (the "five reductions").

contributions to the region's pollution woes, and to define a number of priorities. A rank ordering of priorities would differ among countries but, overall, attention needs to be given, among other things, to:

- Promoting more “precise,” less wasteful use of **fertilizers**, thereby cutting farmers' expenses and reducing the range of adverse environmental effects associated with fertilizer losses.
- Drastically cutting back on the prophylactic, veterinary use of **antibiotics** in animal agriculture, the commercial benefits of which may be far overshadowed by the costs of drug resistance.
- Reducing and better managing the organic byproducts of farming—**animal wastes and crop residues**—including by deriving value from these (for instance, as nutrient resources for crop production).
- Professionalizing the use of **pesticides** and promoting the use of low-toxicity, low-residue, and high-efficiency control agents.
- Promoting the reuse and recycling of **plastics** as well as alternative technologies, especially for use in cold, dry, and other conditions in which plastics have revolutionized farming.

In relation to each of these areas, a variety of technical solutions exist. In various parts of the region, for example, nutrient management tools, including ones that bypass soil testing, have proven effective at reducing fertilizer use along with waste and imbalances. Soil testing kits and laboratories, formula and slow-release fertilizer, smaller or redesigned chemical containers, and micro-irrigation can also improve fertilizer dosing and reduce waste. Although it has faced challenges scaling up—namely due to small farm size—integrated pest management (IPM) has empowered some farmers to reduce the use of pesticides, especially the most toxic ones, by using the most toxic ones as a last resort, and favoring reliance on prevention and biological controls. Simple protective gear, if it is worn, can reduce farm worker exposure when chemical spraying is deemed necessary.

In many cases, farmers need public sector support to adopt technologies and practices that make mitigation a possibility, at least in the near term. In some cases, public sector intervention may only be needed initially to overcome the hurdles of switching. For example, the World Bank-supported Guangdong Agricultural Pollution Control Project in China is promoting a new type of housing for pigs that enables their wastes to be composted on premise, making the wastes more valuable and easier to repurpose as fertilizer on cropland. Together with automatic feeding, cooling, and ventilation systems, these improvements in waste management are also helping to create a healthier environment for pigs and reduce reliance on antibiotics, hormones, and heavy metals. The same project is also promoting no-till farming practices to retain crop residues in the field, conserve water, and limit fertilizer and pesticide runoff.

Governments have a wide range of policy instruments at their disposal to promote greener farming practices (Box II.B.1). Many of these are already being used in the region, sometimes on an experimental scale. Typically, governments will need to develop multipronged programs that use combinations of these instruments, including “sticks” and “carrots”, to send clear signals to farmers and facilitate effective responses. This is especially the case where smallholders dominate, and command-and-control regulations will mostly be too costly to enforce. In parts of the sector that have become more consolidated (for instance, for large livestock facilities), command-

and-control regulation may be appropriate. Yet experience shows that additional measures are needed to motivate industry to comply and improve program cost-effectiveness. A combination of interventions, sequenced smartly, can be the key to achieving results.

A strategy that effectively addresses and prevents agricultural pollution will need to extend beyond the agricultural sector itself, and this calls for greater integration of agricultural, environmental, and health policy. At the highest strategic level, health and environmental outcomes can become a central focus of

Box II.B.1. Examples of public sector instruments that can be used to address agricultural pollution

Mandates relating to the management of wastes

- Requirements relating to the treatment of waste and wastewater in animal production.
- Restrictions on the open burning of residues.

Zoning, size, and environmental rules linked to farm licensing

- Restrictions on livestock rearing within a certain radius of sensitive areas such as residential and water source protection areas.
- Fast-track licensing for investments meeting high environmental management standards.

Fiscal measures and other incentives tied to improved farming practices and environmentally beneficial investments

- Taxation of manure generation exceeding certain levels.
- Subsidies for efficient pesticide application and straw residue management machinery.
- Grants or other subsidies for biogas and other biomass energy facilities.
- Grants/loans for enterprises offering products and services that support greener food and agriculture.

Funding of scientific research with a public good focus

- Low-emission (methane) rice production.
- Recyclable or biodegradable plastics.
- Alternative animal therapeutics.
- Precision and cellular agriculture.

Information, education, and training

- Health and environmental awareness-raising campaigns.
- Support for grassroots, farmer-led movements related to sustainable agriculture.
- Model farms demonstrating best management practices.

Investments in measurement systems and capacity

- Investments in assets and people to carry out technical monitoring of air, soil, water, and food pollution.
- Economic valuation of costs and benefits of environmentally friendly agricultural production practices.
- Development of decision tools that help policy makers take action on the basis of technical evidence.

agricultural agencies, and agricultural productivity goals can be defined without losing sight of these. This may mean taking a long view on yield enhancement that gives more weight to resource conservation. Agriculture's contribution to food security may also come to be as much about its contributions to micronutrient content and diversity as to caloric and protein availability. Concretely, this means that the measurement of agricultural sector performance needs a rethink.⁶ Health and environmental agencies can also bring agriculture more fully into their fold. A greater orientation toward agriculture and food production will help ministries of health and environment to more effectively curb the rise of chronic disease, and to maintain a productive resource base supportive of food security and industry.

At the operational level, public resources can be redeployed more coherently, in ways more consistent with reining in agricultural pollution. Certain uses of public resources are fueling rather than mitigating avoidable forms of agricultural pollution, and these can be redeployed if addressing pollution becomes a high enough priority. Examples include subsidies and preferential regulatory dispositions supporting the expansion of the livestock industry, and direct or indirect fertilizer subsidies. Other uses of resources that have a more neutral or indirect effect on agricultural pollution (such as farmer income support, and investments in irrigation infrastructure, tree replanting, and so forth) also represent a missed opportunity in that they could be leveraged in ways that support greener farming systems.

Also at the operational level, developing programs that cut across levels of government, sectors, and administrative boundaries is often necessary to achieve environmentally significant results across all kinds of farms and landscapes. This is acknowledging the fact that environmental challenges do not necessarily respect political boundaries, thus calling for multistakeholder, multilevel, “landscape approaches”.

Translating this vision or orientation into effective and sustainable action requires investments in different kinds of knowledge and continuous learning. The needs range in tangibility, going from investments in hardware all the way to the building of technical capacity, the funding of research, the development of decision tools, and consensus building among policy, science, and finance communities around impact indicators. For example, investments in information technology (and training) to lower the costs of monitoring and enforcement can help improve program targeting and bring mandatory measures into the mix of policies. Investments to generate more multidisciplinary evidence on the physical and socioeconomic impacts of farming structures and practices—and on the effectiveness of different interventions—will help guide prioritization efforts as well as course corrections during implementation.

To get ahead of pollution—to control and prevent it effectively—governments also need to anticipate and help shape structural change in the sector, from farm to table. Even if government intervenes effectively to bring about the adoption of existing mitigation technology, and effectively stimulates technical innovation, there is a limit to what technical solutions can achieve within existing production systems. In other words, structural solutions are also needed to avert certain path dependencies, effect change at scale, and achieve deeper shades of green (Box II.B.2). In this respect, industry growth represents a one-time opportunity to develop the food system more sustainably. The case for this is especially true in the aquaculture, livestock, and horticulture subsectors, since they are growing particularly rapidly. It is also true with respect to consumer food products and diets, as these are rapidly changing along with incomes, lifestyles, and food marketing channels.

⁶ See World Bank (2016b) for a broader view of this in the context of Vietnam.

In general, examining tradeoffs will be central to determining what structural changes are desirable or needed in the region. Farm consolidation and industrialization, for example, have pluses and minuses when it comes to the control of pollution. On the one hand, a sector with fewer, more formal players is easier to monitor and regulate. It may also have a higher technical and financial capacity to innovate and reduce its footprint. On the other hand, concentration can result in volumes of waste that have the potential to be hugely polluting, and it may not be economically viable to manage these in nonpolluting ways. To take another example, the consumption of animal products is highly valued in the region, as evidenced by the boom in their consumption, despite their high resource intensity and the many health risks these products carry.

Box II.B.2. What are some of the aspects of farm sector development that the public sector might influence?

- The number of animals per operation and their spatial density.
- The spatial distribution of agricultural activities over the territory; and at the local level, the clustering of operations, especially aquaculture and livestock farms.
- Farm consolidation, or the ability of small farms to operate as though they were larger ones.
- The extent of farm specialization, and the embrace of monoculture versus polyculture.
- Land available for agriculture versus other, nonagricultural uses.
- The mix of foods and agricultural raw materials that are produced.

Because they are seldom a focus of agricultural policy, it is important to highlight that changes in consumer product and diet choices, as shaped by political, economic, and cultural forces, can play a determinant role in directing how the sector and its pollution footprint develop. Consumers can be powerful in expressing preferences with their shopping baskets, whether through their choice of food groups or production characteristics. Even though agricultural pollution is tied to production systems, consumers can play a role in shaping these. Despite this, public sector efforts to mitigate and control pollution have only timidly tried to influence consumption patterns, or to enable greater consumer feedback in value chains.

Consumer sensitization can be effective if paired with measures to enhance the availability—and hence the production and marketing—of more benign food products. The promotion of diets centered on plant-based foods can have a particularly significant impact on the sector's development trajectory and footprint. Support for voluntary food standards along with traceability and certification systems are another way of expanding consumer choice. Economic incentives for marketers to embrace certified products can also help support consumer choice. Consumer awareness of agriculture's environmental footprint is often stimulated by their concerns for food safety, including the presence of chemicals, antibiotics, and various other contaminants in food.

Looking ahead: Tackling East Asia's agricultural pollution challenge is not only within reach, but also a business, economic, and leadership opportunity

Doing more to avoid pollution and the worst of its effects is within reach. Rapid change in the region bodes well for its ability to redirect farming—and the broader food sector—to a path of more durable and self-serving growth. East Asia's agricultural performance over the past 50 to 60 years also reflects its inclination for innovation, its willingness to embrace new technology, and its capacity for transformation. Moreover, the strength, plurality, and dynamism of regional food cultures can help provide the impetus that will be needed to green food production and propel these food cultures into the 21st century.

Furthermore, like every crisis, agricultural pollution can be treated as an opportunity. While farming may be at risk in parts of the region, far more is at stake than farming. And policy actions that will enable the public sector to act on agricultural pollution more decisively—consistent with the strategies outlined above—may have benefits that are felt more broadly. In particular, the public sector can position agriculture to thrive as a business and evolve competitively by being at the service of human and ecosystem health, and domestic market opportunities. Building domestically oriented capacity to control and prevent agricultural pollution specifically has the potential to help national food industries remain competitive domestically.

References

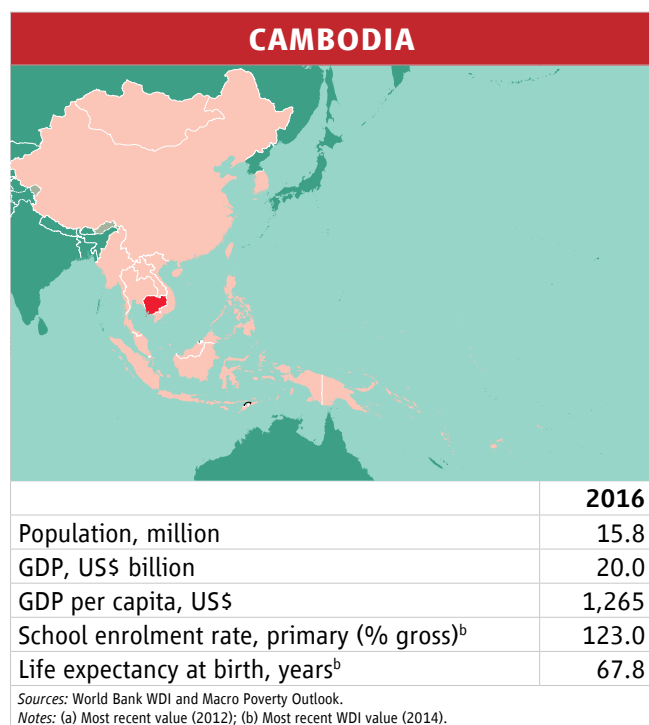
- Amarasinghe, U. A., C. T. Hoanh, D. D'haeze, and T. Q. Hung. 2015. "Toward sustainable coffee production in Vietnam: More coffee with less water." *Agricultural Systems* 136: 96–105. <http://dx.doi.org/10.1016/j.agsy.2015.02.008>.
- Bailey, R., F. Antony, and W. Laura. 2014. "Livestock—climate change's forgotten sector." Chatham House, London. https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20141203LivestockClimateChangeForgottenSectorBaileyFroggattWellesleyFinal.pdf.
- Bajželj, B., K. S. Richards, J. M. Allwood, P. Smith, J. S. Dennis, E. Curmi, and C. A. Gilligan. 2014. "Importance of food-demand management for climate mitigation." *Nature Climate Change* 4 (10): 924–929. doi:10.1038/NCLIMATE2353.
- Catelo, M. A. O., C. A. Narrod, and M. M. Tiongco. 2008. *Structural changes in the Philippine pig industry and their environmental implications*. Washington DC: International Food Policy Research Institute.
- Chau, N. D. G., Z. Sebesvari, W. Amelung, and F. G. Renaud. 2015. "Pesticide pollution of multiple drinking water sources in the Mekong Delta, Vietnam: evidence from two provinces." *Environmental Science and Pollution Research* 22 (12): 9042–9058. doi:10.1007/s11356-014-4034-x.
- Chen, X., Z. Cui, M. Fan, P. Vitousek, M. Zhao, W. Ma, Z. Wang, W. Zhang, X. Yan, J. Yang, and X. Deng. 2014. "Producing more grain with lower environmental costs." *Nature* 514 (7523): 486–489. doi:10.1038/nature13609.
- China Ministry of Environmental Protection. 2015. *2014 State of Environment Report*. Beijing: China Ministry of Environmental Protection.
- China Rural Statistical Yearbook*. 1992–2014. Beijing: China Statistics Press.
- Colborn, T., F. S. vom Saal, and A. M. Soto. 1993. Developmental effects of endocrine-disrupting chemicals in wildlife and humans. *Environmental health perspectives* 101 (5): 378. www.ncbi.nlm.nih.gov/pmc/articles/PMC1519860/pdf/envhper00375-0020.pdf.
- Cui, S., Y. Shi, P. M. Groffman, W. H. Schlesinger, and Y. G. Zhu. 2013. "Centennial-scale analysis of the creation and fate of reactive nitrogen in China (1910–2010)." *Proceedings of the National Academy of Sciences* 110 (6): 2052–2057. doi:10.1073/pnas.1221638110.
- Cuvin-Aralar, M. L. A., C. H. Ricafort, and A. Salvacion. Forthcoming. *An Overview of Agricultural Pollution in the Philippines: The Fisheries Sector*. World Bank, Washington, DC.
- Dasgupta, S., C. Meisner, D. Wheeler, K. Xuyen, and N. T. Lam. 2007. "Pesticide poisoning of farm workers—implications of blood test results from Vietnam." *International Journal of Hygiene and Environmental Health* 210 (2): 121–132. <http://dx.doi.org/10.1016/j.ijheh.2006.08.006>.
- Dinh, T. X. Forthcoming. *An Overview of Agricultural Pollution in Vietnam: The Livestock Sector*. World Bank, Washington, DC.
- Duong, Thị Toan, and Nguyen Văn Lưu. 2015. Tình hình sử dụng kháng sinh trong chăn nuôi lợn thịt, gà thịt ở một số trại chăn nuôi trên địa bàn tỉnh Bắc Giang. *Tạp chí Khoa học và Phát triển* 13 (5): 717–722.
- EMB (Environmental Management Bureau of the Philippines). 2014. *National Water Quality Status Report 2006–2013*. Quezon City: Department of Environment and Natural Resources.
- FAOSTAT. 2016. Food and Agricultural Organization, Rome.
- Greger, M. 2015. "The Great Protein Fiasco." <http://nutritionfacts.org/video/the-great-protein-fiasco/>.

- Gu, B., M. A. Sutton, S. X. Chang, Y. Ge, and J. Chang. 2014. "Agricultural ammonia emissions contribute to China's urban air pollution." *Frontiers in Ecology and the Environment* 12 (5): 265–266. doi:10.1890/14.WB.007.
- Gulis, G., M. Czompolyova, and J. R. Cerhan. 2002. "An ecologic study of nitrate in municipal drinking water and cancer incidence in Trnava District, Slovakia." *Environmental Research* 88 (3): 182–187. <https://doi.org/10.1006/enrs.2002.4331>.
- Hedenus, F., S. Wirsenius, and D. J. Johansson. 2014. "The importance of reduced meat and dairy consumption for meeting stringent climate change targets." *Climatic Change* 124 (1–2): 79–91.
- Ju, X. T., G. X. Xing, X. P. Chen, S. L. Zhang, L. J. Zhang, X. J. Liu, Z. L. Cui, B. Yin, P. Christie, Z. L. Zhu, and F. S. Zhang. 2009. "Reducing environmental risk by improving N management in intensive Chinese agricultural systems." *Proceedings of the National Academy of Sciences* 106 (9): 3041–3046. doi:10.1073/pnas.0813417106.
- Kim, D. P., C. Saegerman, C. Douny, T. V. Dinh, B. H. Xuan, B. D. Vu, N. P. Hong, and M. L. Scippo. 2013. "First survey on the use of antibiotics in pig and poultry production in the Red River Delta region of Vietnam." *Food and Public Health* 3 (5): 247–256. doi:10.5923/j.fph.20130305.03.
- Liu, X., Y. Zhang, W. Han, A. Tang, J. Shen, Z. Cui, P. Vitousek, J. W. Erisman, K. Goulding, P. Christie, and A. Fangmeier. 2013. Enhanced nitrogen deposition over China. *Nature* 494 (7438): 459–62. doi:10.1038/nature11917.
- Morales-Suarez-Varela, M. M., A. Llopis-Gonzalez, and M. L. Tejerizo-Perez. 1995. "Impact of nitrates in drinking water on cancer mortality in Valencia, Spain." *European Journal of Epidemiology* 11 (1): 15–21. doi:10.1007/BF01719941.
- Mostafalou, S. and M. Abdollahi. 2013. "Pesticides and human chronic diseases: evidences, mechanisms, and perspectives." *Toxicology and Applied Pharmacology* 268 (2): 157–177. <http://dx.doi.org/10.1016/j.taap.2013.01.025>.
- Naidenko, O., C. Cox, and N. Bruzelius. 2012. "Troubled Waters: Farm Pollution Threatens Drinking Water." Environmental Working Group, Washington, DC. http://static.ewg.org/reports/2012/troubled_waters/troubled_waters.pdf?_ga=1.212208084.1322552116.1490303150.
- Nguyen, Q. T., T. M. Phú, H. S. Ni, S. Quennery, D. T. Thanh Hương, T. P. Nguyen, P. Kestemont, and M.-L. Scippo. 2015. "Situation of Chemicals Used in Rice-Fish, Stripped *Pangasius* Cultured in Pond and Red Tilapia Cultured in Cage in Mekong Delta." *Can Tho University Journal of Science* Special issue on Aquaculture 2: 278–283 (in Vietnamese).
- Nguyen, T. T. 2016. "Pesticide use in rice farming and its impacts on climbing perch (*Anabas testudineus*) in the Mekong Delta of Vietnam." Doctoral thesis. Stockholm University Faculty of Science, Department of Physical Geography. Faculty of Fishery, Nong Lam University, Ho Chi Minh City, Vietnam. <https://su.diva-portal.org/smash/get/diva2:917234/FULLTEXT01.pdf>.
- Osorio, C. G., D. E. Abriningrum, E. B. Armas, and M. Firdaus. 2011. "Who Is Benefiting from Fertilizer Subsidies in Indonesia?" <http://documents.worldbank.org/curated/en/483961468039869443/pdf/WPS5758.pdf>.
- Stokal, M., H. Yang, Y. Zhang, C. Kroeze, L. Li, S. Luan, H. Wang, S. Yang, and Y. Zhang. 2014. Increasing eutrophication in the coastal seas of China from 1970 to 2050." *Marine Pollution Bulletin* 85 (1): 123–140. <http://dx.doi.org/10.1016/j.marpolbul.2014.06.011>.
- Sun, Z. C., Q. L. Yu, and H. A. N. Lin. 2015. "The Environmental Prospects of Cultured Meat in China." *Journal of Integrative Agriculture* 14 (2): 234–240. [https://doi.org/10.1016/S2095-3119\(14\)60891-1](https://doi.org/10.1016/S2095-3119(14)60891-1).
- Sutton, M. A., C. M. Howard, J. W. Erisman, G. Billen, A. Bleeker, P. Grennfelt, H. Van Grinsven, H. and B. Grizzetti. eds. 2011. *The European nitrogen assessment: sources, effects and policy perspectives*. New York: Cambridge University Press. www.nine-esf.org/ENA-Book.

- Technoserve. 2013. "A Business Case for Sustainable Coffee Production – Vietnam: An Industry Study by TechnoServe for the Sustainable Coffee Program." Report prepared for the *Sustainable Trade Initiative* (IDH). http://exchange.growasia.org/system/files/131206%20Vietnam_0.pdf.
- Thinh, N. Q., T. M. Phu, H. S. Ni, S. Quennery, D. T. T. Huong, N. T. Phuong, P. Kestemont, and M. L. Scippo. 2015. "Situation of Chemicals Used in Rice-Fish, Stripped *Pangasius* Cultured in Pond and Red Tilapia Cultured in Cage in Mekong Delta." *Can Tho University Journal of Science* Special issue on Aquaculture 2: 278–283 (in Vietnamese).
- Tú, H. T., T. P. Nguyen, F. Silvestre, C. Douny, C. T. Tảo, G. Maghuin-Rogister, and P. Kestemont. 2006. "Investigation on the Use of Drugs and Chemicals in Shrimp Farming and the Kinetics of Enrofloxacin and Furazolidone in Black Tiger Shrimp (*Penaeus monodon*)." *Can Tho University Journal of Science* Special issue on Aquaculture 2: 70–78 (in Vietnamese).
- Tuomisto, H. L. and M. J. Teixeira de Mattos. 2011. "Environmental Impacts of Cultured Meat Production." *Environmental Science & Technology* 45 (14): 6117–6123. doi:10.1021/es200130u.
- World Bank. 2016a. "The Cost of Fire: An Economic Analysis of Indonesia's 2015 Fire Crisis." Indonesia Sustainable Landscapes Knowledge Note: 1 (February). World Bank, Jakarta. <http://pubdocs.worldbank.org/en/643781465442350600/Indonesia-forest-fire-notes.pdf>.
- World Bank. 2016b. *Transforming Vietnamese Agriculture: Gaining More from Less. Vietnam Development Report*. Hanoi: World Bank.
- World Health Organization. 2011. "Guidelines for Drinking-water Quality." Fourth Edition. World Health Organization, Geneva. http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151_eng.pdf.
- WRI, CAIT (World Resources Institute, Climate Analysis Indicators Tool). 2016. "Climate Analysis Indicators Tool: WRI's Climate Data Explorer." Washington, DC: World Resources Institute, Washington, DC. <http://cait2.wri.org>.
- Wu, L. 2014. "Study on Agricultural Nitrogen Fertilizer Demand and Greenhouse Gas Emission Reduction Potential Based on Total Quantity Control in China." China Agricultural University, Beijing.
- Xia, L., and X. Yan. 2016. "Reactive nitrogen releases and greenhouse gas emissions during the staple food production in China and their mitigation potential." www.ini2016.com/pdf-papers/INI2016_Xia_Longlong.pdf.
- Yan, C. R. 2015. *Prevention and Control of Mulching and Residual Pollution in China [M]*. Beijing: Science Press.
- Zhang, Y. L. and F. Cao. 2015. "Fine particulate matter (PM_{2.5}) in China at a city level." *Scientific Reports* 5: 14884. doi:10.1038/srep14884.
- Zhang, W. F., L. Ma, G. Q. Huang, L. Wu, X. P. Chen, and F. S. Zhang. 2013a. "The Development and Contribution of Nitrogenous Fertilizer in China and Challenges Faced by the Country." *Scientia Agricultura Sinica* 46: 3161–3171.
- Zhang, W. F., F. S. Zhang, Y. X. Li, G. Q. Huang, and L. Wu. 2013b. *China Fertilizer Development Research Report*. Beijing: China Agricultural University Press.
- Zhao, F. J., Y. Ma, Y. G. Zhu, Z. Tang, and S. McGrath. 2015. "Soil Contamination in China: Current Status and Mitigation Strategies." *Environmental Science & Technology* 49 (2): 750–759.
- Zhou, Y., H. Yang, H. J. Mosler, and K. C. Abbaspour. 2010. "Factors affecting farmers' decisions on fertilizer use: A case study for the Chaobai watershed in Northern China." *Journal of Sustainable Development* 4 (1): 80–102. www.consiliencejournal.org/index.php/consilience/article/viewFile/44/43.

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Part III. Country Pages and Key Indicators



Summary

Growth slightly moderated to 6.9 percent in 2016 (Figure 1), and is projected to remain broadly unchanged until 2018. Moderation in garment exports was offset by improved agricultural production, while commodity prices remain depressed. Rural household diversification into non-farm sources of income (garment, services, remittances) could be a significant contributor to poverty reduction and shared prosperity in Cambodia in years to come. Downside risks include fallout from a rise in US interest rates and uncertainty in global trade.

Recent Developments

Growth is estimated to have slightly eased to 6.9 percent in 2016, compared with 7 percent in 2015, in a context of moderation in garment exports. Garment exports growth has moderated to 8.4 percent (in value terms) yoy, compared with 12.3 percent in 2015. Soaring

labor costs, driven in part by rising cost of living and U.S. dollar appreciation, and competition from other regional low-wage countries, particularly Myanmar, continue to exert downward pressures on garment exports.

Better weather conditions resulted in improved agricultural production, while tourist arrivals eased further. Rainy season rice production expanded to 7.3 million tons in 2016, an 8.9 percent increase. However, depressed agricultural commodity prices dampened agriculture exports. Due to limited success in diversification of tourist attraction sites beyond the Angkor Wat complex, growth in international arrivals decelerated further to 5 percent yoy in 2016, compared with 6.1 percent in 2015.

Rural households have increasingly diversified their livelihoods, tapping into both the rural off-farm economy and remittances to help sustain poverty reduction. Declining commodity prices, coupled with weather events in 2013 and 2015, resulted in a slowdown and stagnation in agricultural GDP in recent years. However, since 2012, households had already begun to diversify their incomes. By 2014, nonlabor transfer income and nonfarm wage income made up more than 54 percent of rural incomes compared to less than 31 percent in 2007. Thus, poverty is expected to have continued to decline, despite the stagnation in agriculture, which had driven poverty reduction until 2012.

Cambodia's external position improved due to continued low oil prices and contained imports growth with weaker demand for basic construction materials. The current account deficit (excluding official transfers) is estimated to have narrowed to 9.5 percent of GDP in 2016, compared with 10.6 percent in 2015, and continued to be mainly financed by FDI, which accounted for 10.2 percent of GDP. Gross international reserves accumulated further, reaching US\$6.4 billion (5.4 months of prospective imports) by end-2016, compared with US\$5.6 billion in 2015. The Cambodian

riel—U.S. dollar exchange rate remained broadly stable, hovering above CR 4,000 per U.S. dollar.

Credit growth has moderated. Broad money has increased, expanding at 17.9 percent yoy by end-2016, compared with 14.7 percent in 2015, thanks to rising foreign currency deposits. Domestic credit growth, however, has moderated to 25.8 percent yoy by end-2016, compared to 28.6 percent in 2015, partly as a result of introduced macroprudential measures. Improved confidence may have attracted private sector deposits, which accelerated to 19.3 percent yoy by end-2016, from 16.6 percent in 2015.

Inflation has further edged up, fueled in part by rising consumption. Inflation accelerated to 3.9 percent yoy by end-2016, compared with 2.8 percent at household consumption with rising wage continued. Strong domestic demand, led by household consumption with rising wages, continued.

An increase in public sector wages led to a modest fiscal deficit. In 2016, public outlay is estimated to have risen to 21.4 percent of GDP. Expenditure has been boosted by the rising wage bill, swelling to 7.4 percent of GDP in 2016, from 6.5 percent in 2015, while capital spending declined from 7.8 to 7.2 percent during the same period. Revenue collection remains strong, at an estimated 18.5 percent of GDP in 2016. The overall fiscal deficit (including grants) has, therefore, widened to 1.4 percent of GDP in 2016, compared with a fiscal balance in 2015. Cambodia's debt distress rating in the latest World Bank/IMF Debt Sustainability Analysis, conducted in 2016, remained low.

Outlook

Growth is projected to remain at 6.9 percent this year and next, but to decelerate slightly to 6.7 percent in 2019 (Table 2). While it is partly buoyed by rising government spending, some signs of moderation, particularly in the construction and garment sectors,

are emerging. Gradual expansion of the agricultural sector is anticipated, thanks to concerted efforts by all stakeholders, while modest improvements may be seen in the tourism sector, supported in part by newly established direct flights and several new initiatives to boost arrivals, such as "China Ready". In the medium term, the growth outlook remains favorable, underpinned by regional integration.

The rural nonfarm economy could be a significant contributor to poverty reduction and shared prosperity in Cambodia in years to come. Cambodia is similar to Vietnam, where livelihood diversification in rural areas contributed to poverty reduction and shared prosperity, and nonwage agricultural income in 2015 already constituted about 36 percent of incomes for the bottom 40 percent. This trend means that the rural nonfarm economy and remittances could be a significant contributor to poverty reduction and shared prosperity in Cambodia in years to come.

Downside risks to the outlook are mostly external and include fallout from a rise in U.S. interest rates, slower economic recovery in Europe, and uncertainty regarding global trade. Domestically, potential election-related uncertainty may occur in 2018.

Risks and Challenges

To improve growth prospects going forward, it is important to boost capital investment, which has been shrinking. Enhancing Public Investment Management is a prerequisite to ensure spending efficiency while boosting investments in progrowth and propoor sectors, such as physical infrastructure, irrigation, education and health. Capacity building at core and line agencies would also be needed.

Enhancing labor productivity is key to compensate for rapidly rising private sector wages. In the short run, it would be important to promote vocational and technical skills, while reducing energy costs to attract and

compete in high value-added and more sophisticated manufacturing. Investing now in further improvements in learning outcomes, coupled with increased secondary school attainment, will be the key for future success.

This, and effectively managing high vulnerability to shocks, are also key for promoting social economic mobility in Cambodia.

Figure 1. GDP growth, contributions to growth

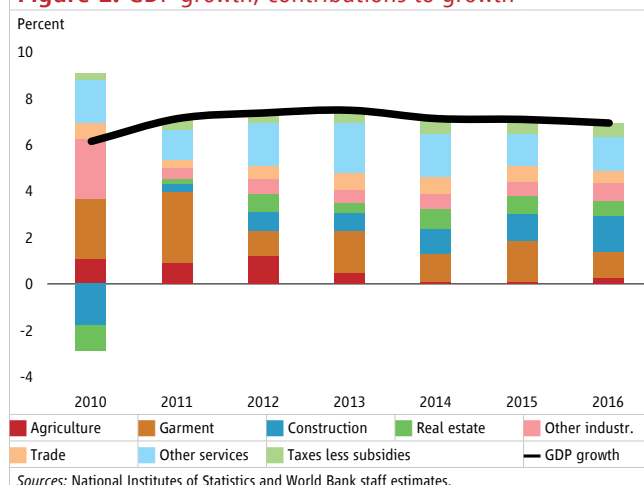
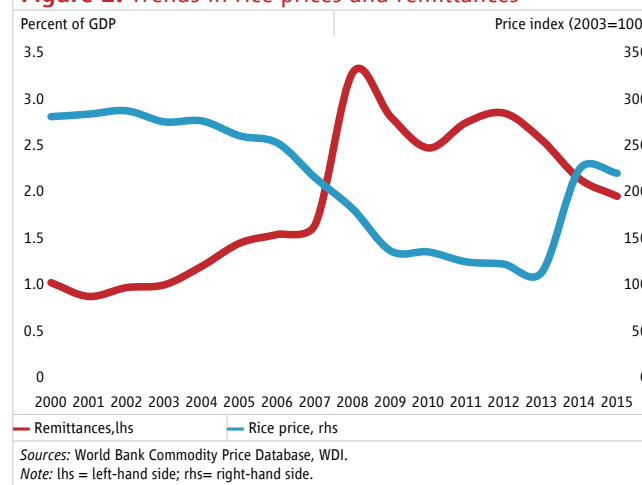
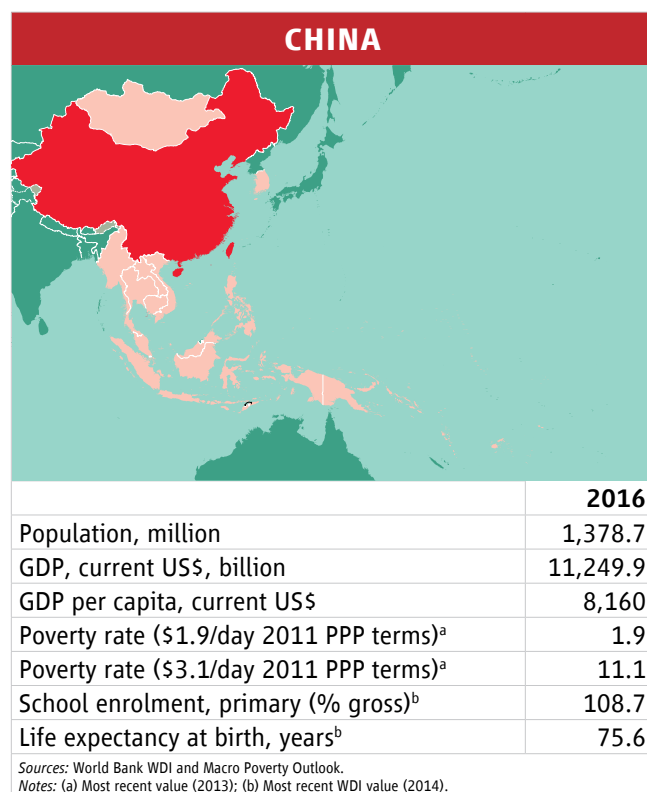


Figure 2. Trends in rice prices and remittances



CAMBODIA Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	7.1	7.0	6.9	6.9	6.9	6.7
Private Consumption	4.5	5.9	6.7	2.1	3.8	3.5
Government Consumption	2.4	4.4	5.7	13.2	18.5	10.8
Gross Fixed Capital Investment	9.1	10.6	10.1	9.8	11.5	12.5
Exports, Goods and Services	11.3	7.2	8.6	8.1	8.3	8.3
Imports, Goods and Services	10.1	6.5	8.6	5.8	7.9	7.9
Real GDP growth, at constant factor prices	6.9	6.9	6.8	6.8	6.8	6.6
Agriculture	0.3	0.2	1.2	1.0	0.8	0.7
Industry	9.8	11.7	10.4	9.8	8.9	8.8
Services	8.7	7.1	6.8	7.1	8.0	7.2
Inflation (Consumer Price Index)	1.7	1.3	3.5	3.7	4.2	5.2
Current Account Balance (% of GDP)	-11.3	-12.1	-10.5	-10.1	-9.8	-9.3
Financial and Capital Account (% of GDP)	14.6	14.2	13.6	12.0	11.0	10.8
Net Foreign Direct Investment (% of GDP)	10.0	9.1	10.2	9.4	7.7	6.5
Fiscal Balance (% of GDP)	-3.8	-1.9	-3.0	-5.1	-4.8	-4.5
Debt (% of GDP)	32.0	32.1	32.9	33.5	33.8	33.6
Primary Balance (% of GDP)	-3.1	-1.6	-2.6	-4.7	-4.4	-4.1

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.
Note: e=estimate and f = forecast.



Summary

China's GDP grew by 6.7 percent yoy in 2016, down from 6.9 percent in 2015. Fiscal stimulus and credit expansion supported economic activity. The growth moderation and rebalancing are expected to continue in the medium term. Despite the growth slowdown, poverty reduction is expected to continue, with the extreme poverty rate projected to decline to 0.4 percent by 2019. The trade-off between short-term growth and medium-term structural reform is one of the country's key challenges.

Recent Developments

China's transition to slower but structurally rebalanced growth continues. GDP expanded by 6.7 percent yoy in 2016, down from 6.9 percent in 2015. Economic activity was driven by domestic demand, including public investment, while net exports contributed negatively

to growth last year. Final consumption contributed 4.3 percentage points to GDP growth, more than in 2015, while investment contributed less (2.8 percentage points). Public spending also supported growth in 2016, with the consolidated fiscal balance recording a deficit of 3.7 percent of GDP, which was larger than the 2015 fiscal deficit of 2.7 percent. On the production side, economic activity was driven primarily by services (particularly real estate), which grew by 7.8 percent, while industry increased by 6.2 percent.

Growth in real household incomes and real consumption expenditures slowed in 2016 but remained robust, supporting poverty reduction. Growth in real income per capita in both urban and rural areas decelerated, with urban incomes growing by 5.6 percent and rural incomes by 6.2 percent. Higher CPI inflation, at 2.0 percent in 2016, up from 1.4 percent a year earlier, partly explains this slowdown. At the same time, job creation remained steady, with 13.1 million new jobs created in 2016, up from 12.5 million a year earlier. Growth in real consumption expenditures also declined but remained robust at 7.9 and 5.8 percent for rural and urban areas, respectively. As a result, poverty reduction continued. World Bank estimates suggest that the proportion of the population consuming less than US\$1.90 a day in 2011 PPP fell from 1.1 percent in 2015 to 0.8 percent in 2016. The poverty rate calculated using a US\$3.10 a day poverty line (in 2011 PPP) fell from 7.7 percent in 2015 to 6.2 percent in 2016.

Despite still strong trade and current account surpluses and a gross foreign reserve position of around US\$3 trillion, China continued to experience large capital outflows and downward pressures on the renminbi in 2016. By preliminary estimates, the current account surplus was US\$210.4 billion (1.9 percent of GDP) in 2016, and capital outflows reached US\$653.7 billion (5.8 percent of GDP), resulting in a loss of FX reserves of US\$443.6 billion. The magnitude of outflows was only slightly below the outflows of US\$674 billion observed in 2015. Improved communication of exchange rate policy helped to moderate capital outflows considerably

in mid-2016, although higher U.S. interest rates and a stronger U.S. dollar brought more outflows later in the year, and through January 2017. In the context of a balance of payments deficit, the renminbi depreciated by 6.8 percent against the U.S. dollar in 2016, although it remained relatively stable against a trade-weighted basket of currencies in the second half of the year.

Outlook

China's growth moderation and rebalancing are expected to continue in the medium term. GDP growth is projected at 6.5 percent in 2017, assuming somewhat stronger net exports than in 2016, as growth in the real estate sector slows following tightening policy measures. Growth is forecast at 6.3 percent in 2018 and 2019, as economic rebalancing is forecast to continue at a gradual pace. External factors affecting growth in the near term are highly uncertain. New risks have risen with respect to the international environment, particularly future trade policy.

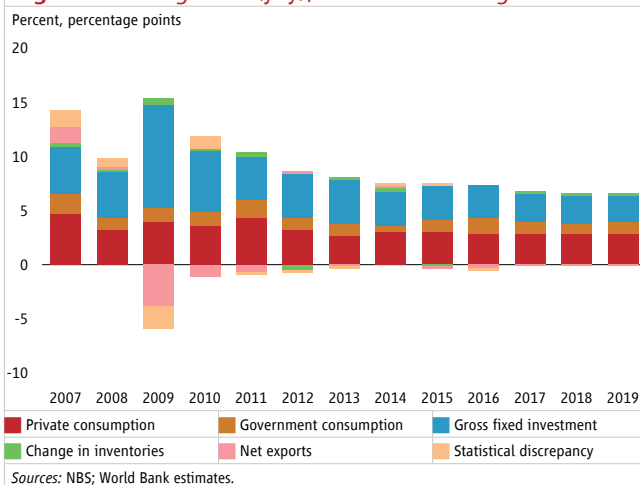
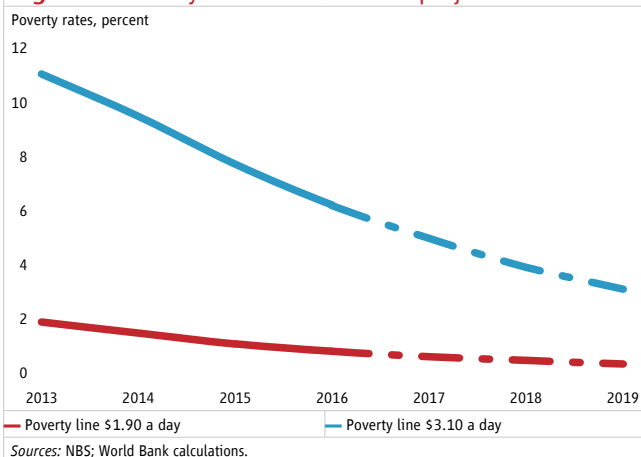
Given the positive medium-term growth outlook and only a gradual increase in projected consumer price inflation, poverty rates are expected to decline further. The share of the poor living on less than US\$1.90 a day would likely reach 0.4 percent, and those living on less than US\$3.10 a day reach 3.1 percent, by 2019.

Risks and Challenges

Financial stability risks associated with the rapid buildup in domestic debt, including by local governments, are a key near-term challenge. Credit to the government and private nonfinancial sector increased by 16.2 percent in 2016, up from an increase of 15.1 percent in 2015. Although credit expansion contributed to strong growth in 2016, corporate deleveraging could have an adverse impact on growth in the short term. Improved resource allocation and reduced financial vulnerabilities are critical for sustaining China's growth over the long

term. Balancing short-term demand management with medium-term reform remains a priority, which China's government has recognized as indicated, for example, in the conclusions of the Central Economic Work Conference, which took place at the end of 2016.

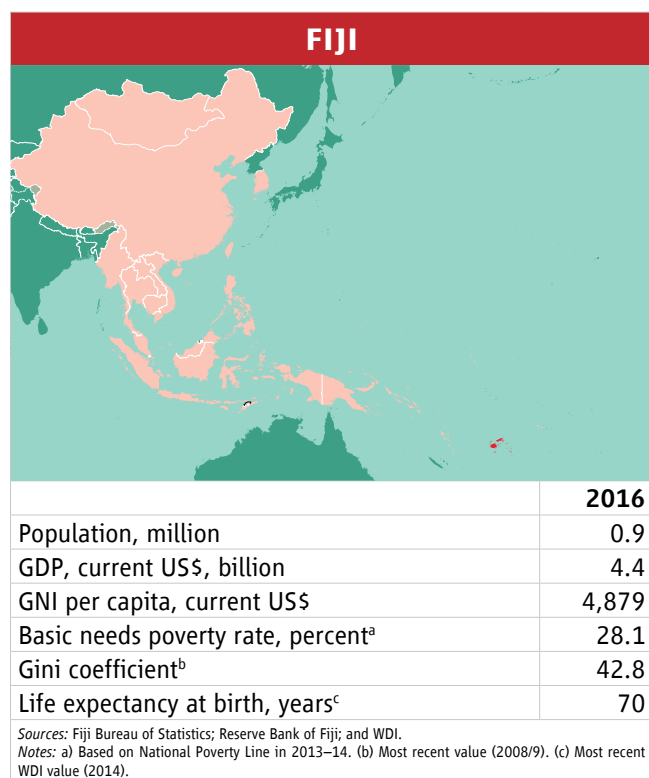
The main challenges to more inclusive growth are related to narrowing the persistent gap in the standards of living between rural and urban areas. The ratio of rural-to-urban disposable income has remained at 0.36 over the past three years. One way to address the remaining rural-urban income gap is to better target social assistance to the remaining poor who are more dispersed and harder to reach. Promoting equality of opportunity, for example, by increasing the quality of public services available to rural residents, migrants in urban areas, and those in poorer interior provinces, would also help make growth more inclusive.

Figure 1. GDP growth (yoy), contributions to growth**Figure 2. Poverty rates estimates and projections**

CHINA Selected Indicators	2014	2015	2016^e	2017^f	2018^f	2019^f
Real GDP growth, at constant market prices	7.3	6.9	6.7	6.5	6.3	6.3
Private Consumption	8.2	8.0	7.6	7.2	7.3	7.3
Government Consumption	4.3	9.3	11.4	8.1	7.3	7.2
Gross Fixed Capital Investment	6.9	6.8	6.2	5.9	5.7	5.5
Exports, Goods and Services	6.9	-12.2	-0.4	2.1	2.4	2.4
Imports, Goods and Services	6.2	-12.7	2.1	2.8	3.6	3.6
Real GDP growth, at constant factor prices	7.3	6.9	7.3	6.5	6.3	6.3
Agriculture	4.1	3.9	3.3	3.2	3.1	3.1
Industry	7.4	6.2	6.1	5.9	5.7	5.6
Services	7.8	8.2	9.3	7.7	7.4	7.3
Inflation (Consumer Price Index)	2.0	1.4	2.0	2.2	2.3	2.4
Current Account Balance (% of GDP)	2.6	3.0	1.9	2.0	2.1	2.1
Financial and Capital Account (% of GDP)	-1.6	-1.3	-0.4	-0.6	-0.7	-0.7
Net Foreign Direct Investment (% of GDP)	1.4	0.6	-0.5	-0.1	0.3	0.4
Fiscal Balance (% of GDP)	-0.9	-2.7	-3.7	-3.8	-3.2	-3.1
Debt (% of GDP)	38.1	38.0	39.2	40.7	40.9	41.0
Primary Balance (% of GDP)	0.6	-1.5	-2.7	-2.7	-2.0	-1.9
Poverty rate (\$1.9/day PPP terms) ^{a,b,c}	1.5	1.1	0.8	0.6	0.5	0.4
Poverty rate (\$3.1/day PPP terms) ^{a,b,c}	9.5	7.7	6.2	5.0	4.0	3.1

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

Notes: e = estimate. f = forecast. (a) Poverty data are projections using neutral distribution with pass through of 0.72, based on 2013 Survey data. (b) Years 2014 and 2015 are estimates.



Summary

Growth slowed to 2 percent in 2016 from output losses from last year's Cyclone Winston. Inflation more than doubled, also reflecting the cyclone-related supply shocks. Growth is expected to strengthen in 2017 as reconstruction activities gather pace and to remain above historical trend in the medium term. Downside risk to the outlook has risen, including heightened policy uncertainty in major advanced economies and potential disruptions in global financial markets. Restoring fiscal space and enabling private-sector-led growth are key to maintaining Fiji's inclusive growth.

Recent Developments

GDP growth slowed to 2 percent in 2016 from 5.3 and 3.6 percent in 2014 and 2015, respectively, mainly due to output losses in agriculture—a source of livelihood for poor households—from last year's Cyclone Winston. Softer growth in visitor arrivals (4.9 percent in the year to November compared to 7.9 percent in the same

period last year) and slow progress in reconstruction activities also contributed to the slowdown. Inflation rose to 6.8 percent in the year to January compared to 0.2 percent in the previous year, reflecting both the cyclone-related supply shortages in much of 2016 and higher duties on alcohol and tobacco (introduced in the August budget). Despite higher inflation, the Fiji dollar remained largely stable against the basket of currencies, and regained some ground against the U.S. dollar and the euro in the year to January (4 and 7 percent, respectively), while depreciating against the New Zealand dollar, the Australian dollar, and the Japanese yen (-7, -2, and -0.1 percent, respectively).

The external deficit remains elevated at around 6 percent of GDP, reflecting large structural deficits in the merchandise trade account. A large surplus in the services account (relating to tourism and transport) and continued strength in remittances, which rose by 10.2 percent in the year to January, are providing needed offsets. Foreign reserves remain adequate at F\$1,976 million at end-February, sufficient to cover 5.3 months of imports of goods and services.

The planned fiscal deficit for FY2016/17, announced in August, widened to 7.3 percent (4.7 percent in the national convention of including privatization receipt as revenue) from 3.5 percent (1.5 percent) from the previous comparable year, around 2.1 percentage points of which reflected cyclone-related spending. The actual ratio of fiscal deficit to GDP is likely to be contained despite slower-than-expected growth in the first four months of the fiscal year due to the under-execution of reconstruction spending.

Extreme poverty is rare in Fiji, but many people still live below national benchmarks for basic-needs poverty. Preliminary estimates from the 2013/14 Household Income and Expenditure Survey show a decline in the share of households with incomes below a basic-needs poverty line from 31 to 28 percent since 2008/09.¹

¹ The figures discussed here are income-based estimates produced by the Fiji Bureau of Statistics. The World Bank has not published the consumption based poverty measure using the 2013/14 survey.

Within this overall trend, rural poverty fell faster (from 43 to 37 percent) while urban poverty rose marginally (from 18 to 20 percent). Poverty rates are highest in the Northern and Eastern Divisions—areas that were hit hard by Winston—at 48 and 40 percent, respectively.

Outlook

Growth is expected to reach 3.7 percent this year as reconstruction activities gather pace, and remain above-trend over the forecasting period, supported by continued strength in consumption and public investment in infrastructure. Improved connectivity with Asian markets, especially the launch of direct flights to China and Singapore in 2017, should also support tourism. Inflation is expected to moderate as supply shortages ease and the impact of higher tobacco and alcohol duties are factored in. A modest increase in global oil prices and higher costs of imported raw materials more generally as global recovery takes hold will prevent a more significant moderation in inflation.

The external deficit will likely remain elevated from higher import demand for raw materials and capital equipment for reconstruction and infrastructure projects. The long-run decline in sugar exports is expected to accelerate this year, with the elimination of production quotas within the EU sugar market this September. This is widely expected to reduce both the prices and the quantity of sugar imported in the EU market, accelerating the ongoing exit of farmers from the sugar sector. External financing will remain a risk, but continued support from the donors (including the EU) and multilateral lenders will be forthcoming.

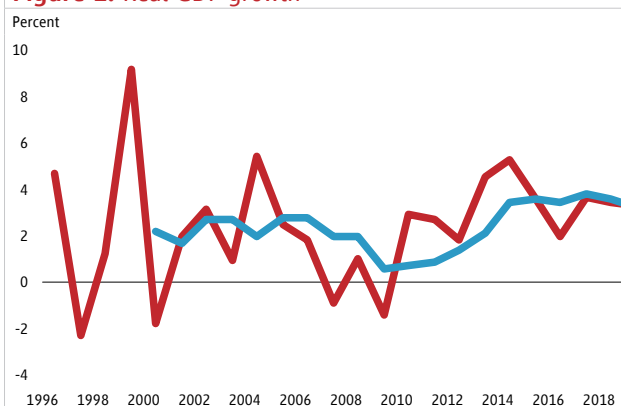
The fiscal deficit will likely remain elevated throughout the forecasting period, as the government accelerates the reconstruction effort while continuing to focus on spending on priority sectors—health, education, and infrastructure, the central elements of the previous two budgets—until the next election in 2018. The recently announced review of public sector wages, if it leads to large increases in the wage bill, will further challenge the path for fiscal consolidation.

Risks and Challenges

Downside risks to the outlook have increased compared to October. They include heightened policy uncertainty in major advanced economies, financial market disruptions, growth disappointments in major developed and emerging markets, and rising protectionist sentiments. Closer to home, Fiji remains vulnerable to extreme weather, and another major cyclone could undermine Fiji's ability to implement its recovery program effectively and risk delaying the timing of the needed fiscal consolidation.

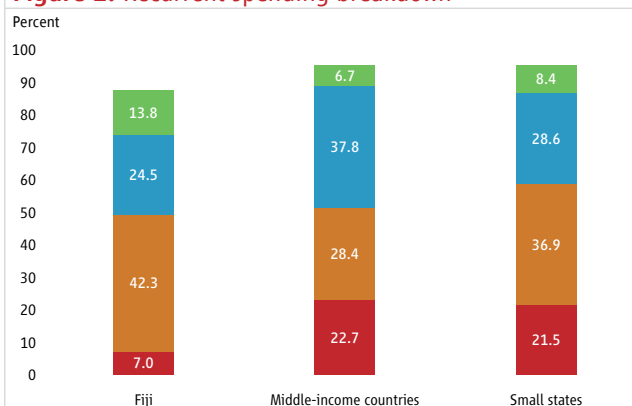
To reduce the impact of external shocks to the economy and protect the vulnerable, the government must build fiscal space. Although the annual budget estimates include three-year forecasts, the medium-term fiscal framework is not well developed and lacks credibility. The medium-term implications of the short-term policy initiatives of government are often not worked out. For example, the impact of the rapidly rising capital investment on operational expenditure has not been recognized, and the full impact of increases in subsidies (e.g., school fees, housing) and possible increases in civil service wages on the outer year forecasts have not been incorporated.

Encouraging private sector growth will require a more supportive business environment. Fiji's overall Doing Business ranking declined to 97 in 2017 from 84 in 2016, and its "distance to frontier" score deteriorated to 60.7 from 62.5. Fiji's worsening performance was due to deterioration in getting credit (due to closure of the credit bureau in 2016) and lack of progress in those areas where Fiji had already ranked low, including starting a business, getting permits, paying taxes, and registering property. Fiji scores particularly poorly in starting a business—159th of 190 countries—with 40 days required to start one.

Figure 1. Real GDP growth

— Real GDP growth — 5 period moving average

Source: World Development Indicators and staff estimates.

Figure 2. Recurrent spending breakdown

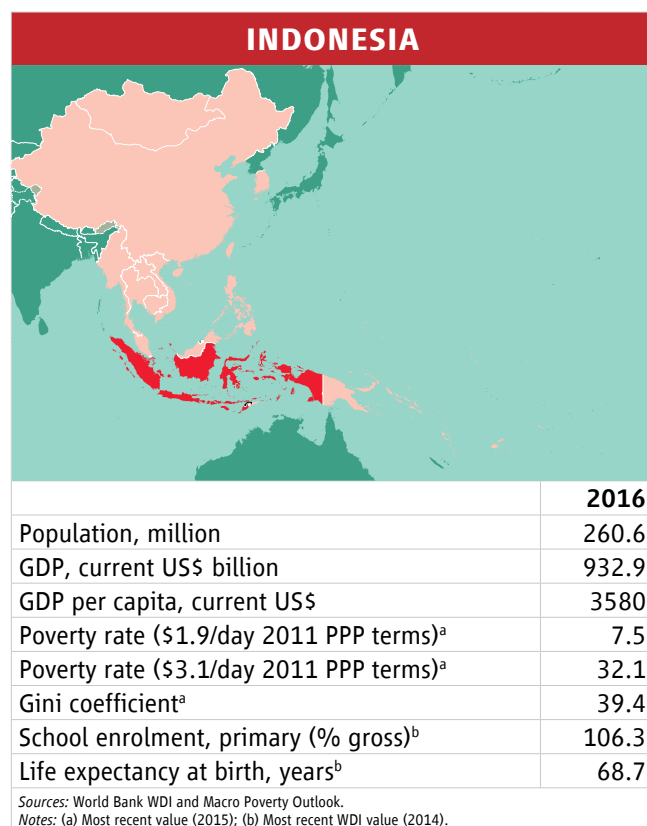
— Goods & services — Wages & salaries — Subsidies & transfers — Interest

Sources: Fiji Ministry of Economy, World Development Indicators, and staff calculations.

Fiji Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real gross domestic product	5.6	3.6	2.0	3.7	3.5	3.3
Exports, Goods and Services	6.9	-4.1	-9.5	3.9	3.4	3.0
Imports, Goods and Services	0.0	-11.2	-6.7	5.9	6.1	5.1
Agriculture	1.9	6.3	-9.7	3.7	2.3	1.5
Industry	1.2	2.2	1.7	5.6	3.1	2.3
Services	7.4	3.6	3.8	3.1	3.9	3.9
Inflation (Consumer Price Index)	0.1	1.6	3.9	3.0	2.9	2.9
Current Account Balance (% of GDP)	-7.6	-1.5	-3.4	-7.2	-7.0	-6.8
Fiscal Balance (% of GDP) ^a	-4.2	-4.6	-4.7	-5.6	-5.9	-5.0
Debt (% of GDP)	48.4	45.9	46.2	47.8	51.9	55.3

Sources: Fiji Bureau of Statistics, Reserve Bank of Fiji, World Development Indicators, and staff estimates.

Notes: e=estimate, f=forecast. (a) Fiji changed the government fiscal year from the calendar to the August–July fiscal year starting 2016.



Summary

With robust economic growth, a low current account deficit, and a conservative fiscal deficit, the fundamentals of the Indonesian economy are strong. Despite global policy uncertainty, GDP growth strengthened in 2016, on higher private consumption growth. The economic outlook continues to be positive, supported by a projected pickup in the global economy and recovering commodity prices, carrying both investment and exports. Unexpected changes in U.S. monetary policy, a protracted period of elevated domestic inflation, and weak fiscal revenues pose downside risks.

Recent Developments

Real GDP growth in Q4 2016 eased to 4.9 percent yoy from 5.0 percent in Q3, as government expenditure continued contracting and import growth rebounded.

The decline in government expenditure, 4.0 percent, was the largest since Q1 2010, in part due to base effects of strong expenditure growth in Q4 2015. Meanwhile investment growth rose and export growth turned positive after eight quarters of contraction, in line with stronger commodity prices. Despite heightened global policy uncertainty, economic growth edged up to 5.0 percent in 2016 as a whole, from a revised 4.9 percent in 2015. A stable rupiah, record low inflation, and declining unemployment and soaring real wages lifted private consumption. In contrast, falling government expenditure and weaker investment growth weighed on overall economic growth for the year.

While Tax Amnesty revenue increased overall revenue collections, non tax amnesty revenue collection weakened in 2016. In contrast, fiscal policy credibility was enhanced by cuts in government expenditure, along with the more achievable revenue targets in the 2017 budget, which bolstered investor confidence. The fiscal deficit was 2.5 percent of GDP in 2016, lower than expected and down from the 2.6 percent in 2015.

The external sector also strengthened with the current account deficit narrowing to a five-year low of 0.8 percent of GDP in Q4 2016, from 1.9 percent in Q3 2016, largely due to an improvement in manufacturing exports. For 2016 as a whole, the current account balance as a share of GDP narrowed to 1.8 percent from 2.0 percent in 2015, also a five-year low.

The official poverty rate fell by 0.4 percentage points between September 2015 and September 2016 to 10.7 percent. This suggests the slight uptick in the pace of poverty reduction seen between March 2015 and March 2016 has continued, off the back of stronger GDP growth, contained inflation, and the lowest core rate of unemployment since 2012. However, this decline is still lower than the rates of poverty reduction achieved between 2007 and 2011, which averaged 1.1 percentage points annually.

Outlook

With all expenditure components expected to firm, real GDP growth is projected to edge up to 5.2 percent in 2017, and climb to an average of 5.4 percent in 2018–19. Household consumption growth is projected to gain as a stable rupiah buoys consumer confidence. Private investment growth is also poised to increase as the effects of monetary easing in 2016 and recent economic reforms gain traction. At the same time, as commodity prices continue to strengthen and lift fiscal revenues and external demand, government spending and exports are likely to rebound from their contractions in 2016. While GDP growth rates in the medium term are projected to surpass those of recent years, they are significantly lower than those seen immediately following the financial crisis, as the economy rebounded from the global downturn. Continued structural reforms are therefore necessary to further enhance the economy's potential growth.

Consumer price inflation is expected to jump from 3.5 percent in 2016 to 4.3 percent in 2017, due to hikes in electricity tariffs and vehicle registration fees, after which, inflation is projected to temper as the effects of the price hikes dissipate.

The fiscal balance is projected to gradually widen over the forecasting horizon, from 2.6 percent in 2017 to 2.8 percent in 2018–19. Higher public expenditures, partly due to renewed efforts to boost public infrastructure investment, are expected to be partially offset by revenue growth, in light of stronger GDP growth and dividends from administrative and tax policy reforms.

Nevertheless, poverty reduction is projected to be somewhat sluggish. Despite strengthening growth and contained inflation (and the slight increase in poverty reduction in 2016 in the official BPS statistics), the pace of poverty reduction according to the World Bank's PPP-adjusted poverty lines is forecast to continue to slow. Extreme poverty is expected to decline by an average of

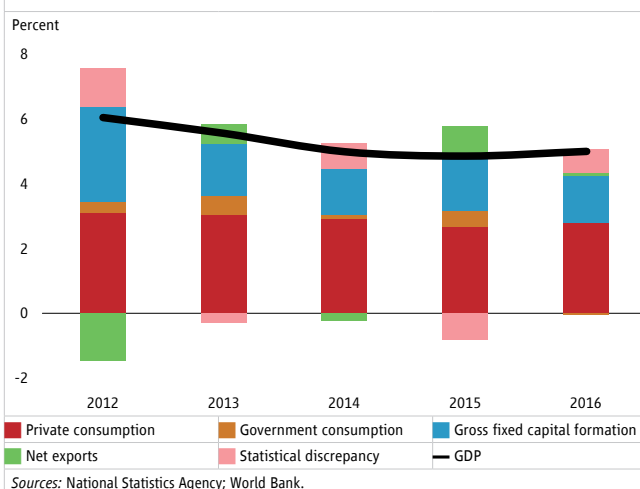
0.8 percentage points per year between 2014 and 2018. Over the same period, moderate poverty is projected to fall 2.6 percentage points on average per year.

Risks and Challenges

Risks to the outlook are tilted to the downside. The U.S. Federal Reserve is expected to proceed with monetary normalization and gradually raise the Fed Funds Rate in the coming years. Should the Fed hike interest rates more rapidly than expected, taper-tantrum-like capital outflows from emerging markets could occur as investors rapidly reevaluate and rebalance portfolios to maximize expected gain. Volatility in financial and capital markets could weigh on growth of the Indonesian economy in the medium term. In addition, surprise outcomes from the series of upcoming elections in Europe, could further add to global political and policy uncertainty.

A protracted period of elevated inflation poses a key downside risk to consumption growth. Should inflation remain higher and longer than expected, consumer spending may be dampened, resulting in lower output growth. In addition, Bank Indonesia may be compelled to act by tightening monetary policy, which would also cool investment growth. At the same time, weak fiscal revenues continues to pose a downside risk, if the pace of reform slows and lower collection constrains fiscal spending and much needed infrastructure investment.

Income inequality remains a key policy challenge. Although the Gini coefficient fell in 2015-2016, the bottom 40 percent of the income distribution saw their share of total consumption decline marginally, suggesting that growth has not been equitably distributed, and that the poor and vulnerable are at risk of being left behind.

Figure 1. Despite global policy uncertainty, Indonesia's GDP growth strengthened in 2016**Figure 2.** Distribution of national consumption in Indonesia. Inequality has fallen, but bottom 40 consumption has dropped

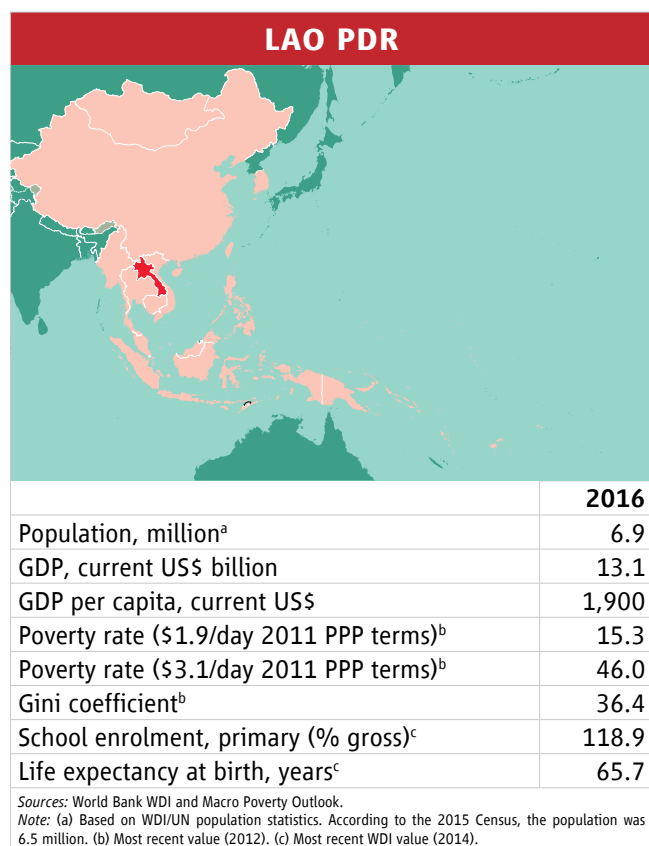
	March 2015	March 2016	Δ 2015–16
Top 20	48.25	46.89	-1.36
Middle 40	34.65	36.09	1.44
Bottom 40	17.1	17.02	-0.08

Sources: National Socioeconomic Survey (SUSENAS).

INDONESIA Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	5.0	4.9	5.0	5.2	5.3	5.4
Private Consumption	5.3	4.8	5.0	5.1	5.2	5.3
Government Consumption	1.2	5.3	-0.1	2.8	3.8	4.0
Gross Fixed Capital Investment	4.4	5.0	4.5	5.7	6.0	6.2
Exports, Goods and Services	1.1	-2.1	-1.7	2.0	2.4	2.8
Imports, Goods and Services	2.1	-6.4	-2.3	1.0	2.0	2.5
Real GDP growth, at constant factor prices	5.0	4.2	5.1	4.6	5.3	5.4
Agriculture	4.2	3.8	3.3	3.7	3.9	4.0
Industry	4.2	3.0	3.9	4.5	5.2	5.3
Services	6.0	5.5	6.8	5.0	5.8	6.0
Inflation (Consumer Price Index)	6.4	6.4	3.5	4.3	3.8	3.8
Current Account Balance (% of GDP)	-3.1	-2.0	-1.8	-1.8	-1.9	-2.0
Financial and Capital Account (% of GDP)	3.3	2.1	3.1	3.1	2.9	3.0
Net Foreign Direct Investment (% of GDP)	1.7	1.2	1.6	1.8	1.8	1.9
Fiscal Balance (% of GDP)	-2.1	-2.6	-2.5	-2.6	-2.8	-2.8
Debt (% of GDP)	24.7	27.4	27.9	29.0	29.5	30.2
Primary Balance (% of GDP)	-0.9	-1.2	-1.0	-1.0	-1.2	-1.1
Poverty rate (\$1.9/day PPP terms) ^{a,b,c,d}	8.3	7.5	6.5	5.6	4.8	4.1
Poverty rate (\$3.1/day PPP terms) ^{a,b,c,d}	36.7	32.1	29.9	27.7	25.6	23.6

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

Notes: e = estimate, f = forecast. All fiscal figures are for the central government. (a) Calculations based on EAPPOV harmonization, using 2011-SUSENAS and 2015-SUSENAS. (b) Projection using annualized elasticity (2011–2015) with pass-through = 1 based on GDP per capita in constant LCU. (c) Actual data: 2014, 2015. Nowcast: 2016. Forecast are from 2017 to 2019. (d) Period for elasticities set 2011–2015, rather than the shared prosperity years (2011–14), due to recent changes in the collection of the national socio-economic survey (SUSENAS).



Summary

Economic growth moderated in 2016 but remained robust. A marked increase in power sector contribution and some from the manufacturing sector was partly offset by slight moderation in construction, flat mining output, and stable public spending. With natural resources driving growth, poverty reduction in Lao PDR has been slower compared to peers. Growing electricity exports and lower oil prices improved the external balance; however, the low commodity prices affected fiscal revenues and widened the deficit, which kept public debt elevated.

Recent Developments

The Lao economy is estimated to have grown at around 7 percent in 2016, a slight moderation from

7.4 percent in 2015. A marked increase in the power sector contribution and certain dynamism in the manufacturing sector were partly offset by slight moderation in construction, flat mining output, and stable public spending. Power exports increased by about 70 percent following the start of operations of the 1,878 MW Hongsa Lignite plant, while export of parts and components, mostly from the Special Economic Zones (SEZs), continued to increase. Low commodity prices and lower ore grade in one of the mines kept mining output flat. Inflation in 2016 remained low at 1.8 percent on average due to low fuel prices, while core inflation averaged 1.1 percent.

Natural resources remain a major driver of growth, hence the pace of poverty reduction continues to be less than proportionate to the rate of economic growth. However, there are signs the relationship between poverty reduction and growth is beginning to strengthen, with recent expansion of some labor-intensive sectors (trade, tourism and some manufacturing). For instance, the 8.7 percent increase in the number of insurees in the Social Security Fund points to stronger jobs creation. Similarly, exports of parts and components doubled in 2015 and increased by 20 percent in 2016, further suggesting growth in the manufacturing sectors.

The fiscal deficit widened significantly to 6.2 percent in FY2015/16 from below 4 percent in the previous year largely due to underperformance of revenues. Revenues, as a share of GDP, are estimated to have declined to 19 percent of GDP in FY2015/16 from about 23 percent a year earlier due to lower commodity prices (copper price affected mining royalties and profit tax, while low oil prices affected customs revenue and excise tax), slower economic growth, and lower grants. Spending cuts were less commensurate to the revenue shortfall, with the expenditure-to-GDP ratio declining from 27 percent in FY2014/15 to 25 percent in FY2015/16. The deficit was financed by increased borrowing, pushing public debt to about 68 percent of GDP in 2016.

The external balance improved as higher exports of electricity and parts and components and lower oil prices offset a fall in copper prices and timber exports. Despite the improvement in the current account deficit, reserves were about US\$940 million in September 2016. With a reserve cover of less than two months of imports and about 25 percent of foreign currency deposits in the banking sector, the reserve level remains below standard benchmarks, especially in the context of a tightly managed exchange rate of the kip to the U.S. dollar. With the Bank of Lao PDR limiting interventions in the second half of 2016 to protect reserves, a gap between the official and parallel market exchange rate of about 3 to 5 percent emerged.

Outlook

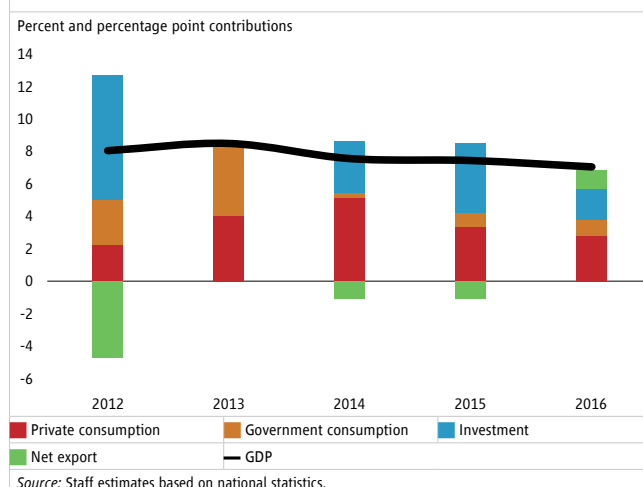
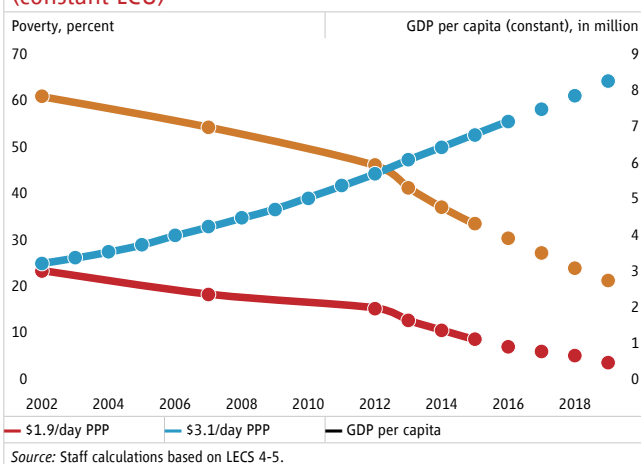
GDP growth is projected to remain at around 7 percent during 2017–19, supported by a healthy pipeline of power projects and growing opportunities for the nonresource sector resulting from closer ASEAN integration. China's growth rates are expected to moderate but remain high, and economic growth in Thailand is expected to accelerate slowly, providing a pull for the Lao PDR economy. Also, commodity prices (copper, rubber) are expected to edge up. The start of a few large investment projects—the construction of the 420-kilometer railway linking Vientiane Capital to the border with China, and the operations of large power plants coming on stream in the next few years—will support growth. Tourism will benefit from improved air transport connectivity, and recent entrants into few sectors (such as insurance and retail trade) are expected to generate additional dynamism. Inflation is likely to pick up to around 3 percent in 2017 as oil prices recover. Poverty is likely to continue to decline at a moderate pace as the gradual structural transformation continues.

The government plans to gradually consolidate the fiscal position with the deficit stabilizing at 6.2 percent of GDP in 2017 and declining afterward. Revenue measures

include strengthening nonresource taxation, introducing new revenue sources, modernizing tax administration, and reviewing and removal of exemptions. At the same time, wage bill spending will be tightly controlled, with additional gains expected from improved public procurement and public finance management. Efforts to improve public debt management, including through adoption of a Public Debt Law in 2017 and strengthening the debt management function, will be important to reduce the risk to fiscal solvency and sustainability of public debt. The external deficit is expected to widen reflecting higher import content of investments.

Risks and Challenges

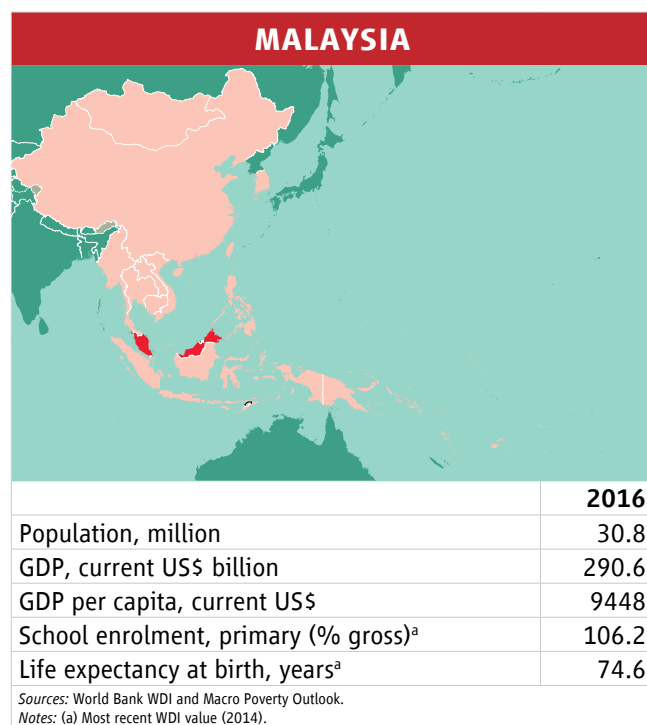
Uncertainty in the external outlook has increased considerably. Greater disturbances in the region resulting from a growing list of potential triggers could affect Lao PDR's main economic partners and lower external demand and investment, putting further pressure on the exchange rate. A reversal in commodity prices could lower mining and agricultural output, put further strain on the fiscal accounts, and affect livelihoods. Failure to address pressures on the exchange rate risks igniting inflation and testing the stability of the banking sector and fiscal solvency. In addition, slippages in public investment in large projects could derail the fiscal consolidation plan and heighten the risk to sustainability of public debt. With an increasing need for fiscal consolidation, the growing challenge for poverty reduction will be to effectively fund service delivery in lagging regions to build household endowments and equalize opportunities between the nonpoor and the poor.

Figure 1. GDP growth, contributions to growth**Figure 2. Actual and projected rates and GDP per capita (constant LCU)**

LAO PDR Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	7.5	7.4	7.0	7.0	6.8	7.2
Private Consumption	8.0	5.2	4.5	4.9	4.6	4.6
Government Consumption	3.7	-0.4	7.4	7.8	4.3	4.3
Gross Fixed Capital Investment	9.9	17.0	5.7	6.0	7.8	6.5
Exports, Goods and Services	16.6	-6.5	7.2	7.1	7.0	9.0
Imports, Goods and Services	15.8	-3.0	3.0	4.0	4.0	3.8
Real GDP growth, at constant factor prices	7.5	7.4	7.0	7.1	6.8	7.2
Agriculture	8.0	1.4	0.5	2.8	3.2	3.2
Industry	7.2	11.1	11.3	9.7	8.6	9.2
Services	7.5	8.1	7.2	7.1	7.3	7.3
Inflation (Consumer Price Index)	4.1	1.3	1.8	3.0	3.0	3.0
Current Account Balance (% of GDP)	-17.9	-17.5	-14.0	-18.4	-19.8	-19.1
Fiscal Balance (% of GDP)	-3.8	-3.7	-6.2	-6.2	-5.4	-4.6
Debt (% of GDP)	64.7	65.8	68.2	70.4	71.8	70.0
Poverty rate (\$1.9/day PPP terms) ^{a,b,c}	10.4	8.3	7.0	5.9	4.8	3.6
Poverty rate (\$3.1/day PPP terms) ^{a,b,c}	36.9	33.2	30.0	27.0	23.8	20.9

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

Notes: e = estimate; f = forecast. (a) Calculations based on EAPPOV harmonization, using 2012-LECS. (b) Projection using neutral distribution (2012) with pass-through = 1 based on GDP per capita in constant LCU. (c) Nowcast: 2014–2016. Forecast are from 2017 to 2019.



Summary

GDP growth in Malaysia moderated to 4.2 percent (yoy) in 2016, mainly supported by domestic demand despite slower external demand. Malaysia's economy is expected to grow at 4.3 percent in 2017, mainly driven by private consumption. Nevertheless, rising uncertainties over the global economic outlook could weigh on Malaysia's growth.

Recent Developments

Malaysia's GDP growth remained resilient in the second half of 2016, growing at 4.3 and 4.5 percent (yoy) in Q3 and Q4, respectively. For 2016, growth stood at 4.2 percent. Economic growth continues to be driven by private consumption, mainly supported by a stable labor market and increases in minimum wages and civil servants' salaries. Private investment also grew steadily, driven by higher capital expenditures in the manufacturing and services sectors.

Conversely, public consumption and investment tapered after peaking in the first half of 2016 as the government focused on achieving its fiscal deficit target of 3.1 percent of GDP. Efforts to contain operating expenditures were instrumental in ensuring fiscal consolidation remains on track. In addition, revenues from the goods and services tax (GST) helped offset the decline in the government's petroleum revenue.

Exports increased slightly by 0.8 percent (yoy) in the second semester as commodity prices stabilized. The well-diversified export base continued to provide some support as noncommodity exports remained strong amid expansion in manufacturing exports, particularly in machinery, and electrical and electronics. Exports also benefitted from a modest rebound in commodity prices towards the year end. Overall, the current account surplus increased slightly from 2.0 percent of GDP in 2016 to 2.4 percent of GDP in 2017.

Unemployment remains low and stable, registering 3.5 percent in December 2016, while the labor force participation rate declined slightly from 67.9 to 67.6 percent.

While Malaysia's official poverty rate remains less than 1 percent, measures to protect the welfare of households with incomes in the bottom 40 percent remain in place. In the budget 2017 announcement, the government increased the amount of its cash transfer program, and announced other measures such as incentives for households to generate additional income through ride-sharing services.

Inflation remained low and stable throughout the second semester of 2016, averaging 1.5 percent, as the base effect of the introduction of the GST in 2015 gradually diminished. In January 2017, inflation rose to 3.2 percent (yoy), driven by higher transport prices driven by the upward adjustment in domestic fuel prices, and higher food prices following increases in the prices of fish and other seafood, cooking oil, and base effects in vegetable prices. Although inflation remains

contained, there continues to be concerns about increases in the cost of living, particularly within the lower-income group, which allocates almost 40 percent of its monthly expenditure on food.

Volatility and uncertainty in the financial markets resulted in net portfolio outflows in the second semester. Portfolio flows shifted from a net inflow of RM13.1 billion (4.9 percent of GDP) in Q1 2016 to a net outflow of RM32.9 billion (5.8 percent of GDP) in the second half of the year. Portfolio outflows were largely driven by uncertainty over the timing of the normalization of the U.S. monetary policy and volatility in global oil prices.

Fluctuations in the financial markets and commodity prices also contributed to the depreciation of the ringgit. In the second semester, the ringgit weakened by 11.0 percent against the U.S. dollar. During the period, the central bank introduced currency-tightening measures that require exporters to convert most of their exports proceeds to ringgit, in addition to introducing measures to deepen onshore financial markets. These measures remain in place, and the central bank has been engaging with the public to provide further explanation and clarification.

The banking system remains resilient, and the banking system indicators suggest that banks are well capitalized, and net impaired loans are low. Moderation in household credit continues in the banking system, particularly in the riskier segments (such as consumer lending). Also, banking system liquidity remains adequate and provides buffers against liquidity shocks.

Outlook

Malaysia's GDP growth is expected to accelerate slightly to 4.3 percent (yoy) in 2016. Domestic demand is expected to continue to anchor growth. Stable labor market and income support measures such as cash transfers would help to sustain private consumption in

the near term. Major transportation and infrastructure projects are expected to shore up investment in the construction sector. On the external front, rising commodity prices and recovery in growth in advanced economies could contribute to improvement in exports. The current account surplus is expected to recover from 2.0 percent of GDP in 2016 to 2.2 percent in 2017. Meanwhile, the government remains committed with fiscal consolidation and has set a fiscal deficit target of 3.0 percent of GDP for 2017.

External developments will continue to pose risks to the Malaysian economy, stemming from the uncertainty regarding the potential U.S. fiscal stimulus and trade policies and their prospective impact on global economy and financial markets. Rising uncertainty in the global economy could further undermine domestic sentiment and exacerbate existing risks.

Risks and Challenges

As the economy continues to face challenges arising from external developments, exchange-rate flexibility should remain the primary mechanism for absorbing external economic shocks. Monetary policy will continue to operate in an environment of financial volatility affected by the potential acceleration in the normalization of US monetary policy. Continuing good performance on fiscal outcomes could be supported further through raising public revenues, including widening the personal income tax base and removing some exemptions in the GST. Also, raising efficiency of operational expenditure (for example, improving the targeting of social assistance and growing civil servants' salaries and pensions) and development expenditures could provide some additional fiscal space.

As traditional growth drivers such as infrastructure development and labor force growth are expected to slow, accelerating productivity growth is crucial for Malaysia to achieve convergence with high-income economies. This would entail further opening up the

economy to competition, overcoming skills mismatches in the labor force and ensuring further contributions of SMEs in the economy.

Figure 1. GDP growth, contributions to growth

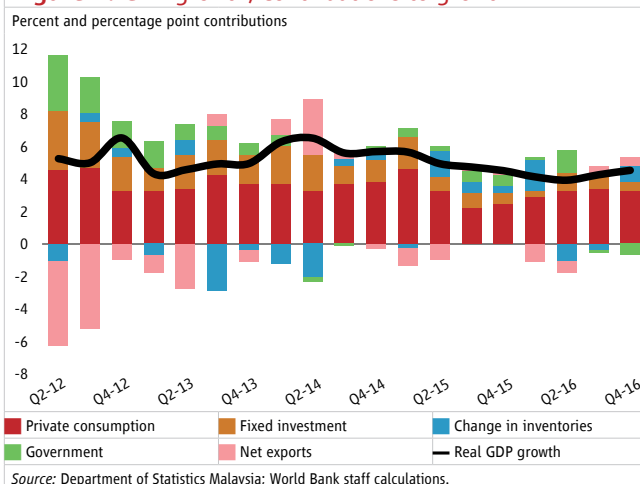
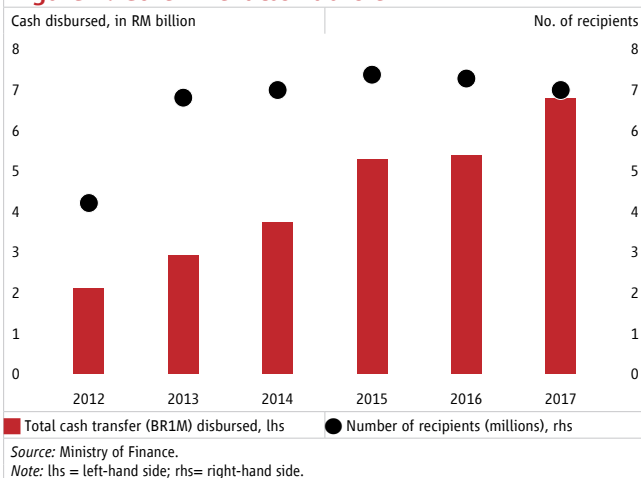
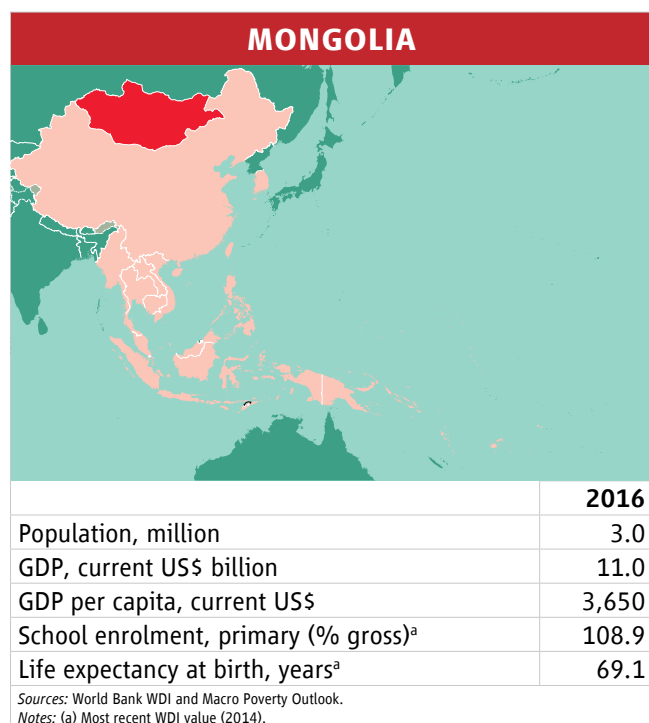


Figure 2. Government cash transfer



MALAYSIA Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	6.0	5.0	4.2	4.3	4.5	4.5
Private Consumption	7.0	6.0	6.1	5.6	5.8	5.9
Government Consumption	4.3	4.4	1.0	3.4	3.2	2.6
Gross Fixed Capital Investment	4.8	3.7	2.7	2.2	2.4	2.5
Exports, Goods and Services	5.0	0.6	0.1	2.7	2.4	3.9
Imports, Goods and Services	4.0	1.2	0.4	2.6	2.1	3.5
Real GDP growth, at constant factor prices	6.0	5.0	3.4	4.5	4.3	4.3
Agriculture	2.0	1.2	-0.2	0.1	1.1	1.1
Industry	6.1	5.2	-0.1	0.5	2.0	2.0
Services	6.6	5.4	6.3	7.6	6.2	6.0
Inflation (Consumer Price Index)	3.2	2.1	2.5	2.2	2.3	2.3
Current Account Balance (% of GDP)	4.2	3.0	2.0	2.2	2.3	2.4
Fiscal Balance (% of GDP)	-3.6	-3.2	-3.1	-3.0	-2.8	-2.7
Debt (% of GDP)	55.6	57.7	57.8	55.6	56.5	56.1
Primary Balance (% of GDP)	-1.4	-1.0	-0.8	-0.6	-0.5	-1.4

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.
Notes: e = estimate; f = forecast.



Summary

Mongolia continues to experience slow growth. An IMF-supported reform aims to restore fiscal sustainability and address immediate balance of payments risks. Risks remain high as Mongolia remains dependent on supportive commodity prices, political pressures are likely to increase as the reform program is implemented, and medium-term financing needs are substantial.

Recent Developments

Growth slowed to 1 percent in 2016, but there have been growing signs of recovery in the last quarter. Mining GDP growth dropped to 0.7 percent (yoy) in 2016, but picked up to 1.9 percent in the fourth quarter from the previous quarter's contraction due to a 116 percent increase in coal production. Nonmining growth slowed to 1.1 percent annually, but also picked up significantly in the last quarter due to stronger growth in agriculture, manufacturing, and services.

Poverty conditions are likely to have deteriorated in 2016. Despite subdued consumer price inflation at 1.1 percent at end-2016, private consumption fell by 8.8 percent annually, indicating that continued economic downturn has translated into households. The unemployment rate, despite gradual improvement from 11.6 percent in the first quarter, remained high at 8.6 percent in the fourth quarter. Urban households likely have been hit harder, since key labor-intensive sectors such as construction and services have contracted while agriculture continued to grow, albeit at a slower rate. Real household income declined by 4.7 percent in the capital city but showed a 0.2 percent rise in rural areas on yoy basis in the last quarter, indicating disproportional poverty effects.

The current account deficit narrowed to US\$329 million in 2016 from US\$948 million in 2015. Underlying the improvement was the trade surplus, which more than doubled over the same period owing to a strong recovery of coal exports in November and December. Imports declined by 11.6 percent annually, but import compression substantially slowed in the fourth quarter due to increasing imports of machinery and rising oil prices.

The balance of payments recorded only an US\$18 million deficit in 2016, as external debt financing of the government and the Bank of Mongolia (BoM) offset the current account deficit and other capital outflows. After a 24 percent depreciation between June and November, the exchange rate movement was less volatile, reflecting the improved balance of payments. Gross international reserves, after a drop to US\$1 billion in October amid increased intervention, rebounded to US\$1,296 million at end-2016.

The fiscal accounts sharply deteriorated in 2016. The consolidated deficit, which includes the Development Bank of Mongolia's (DBM) commercial portfolio, more than doubled to 17 percent of GDP over one year. Expenditure jumped to 40.6 percent of GDP in 2016 from 33.6 percent in 2015 owing to increasing interest

payments, delayed payments to clear promissory notes, and pre-electoral spending. Government debt is estimated to have increased by almost one-third in 2016, reaching 85 percent of GDP.

Monetary conditions remained tight, despite a recent moderate recovery in credit growth. The BoM hiked the policy rate by 450 basis points in August to 15 percent and introduced longer-term central bank bills to mop up excess togrog liquidity, in response to sharp depreciation. In December, the policy rate was lowered to 14 percent in light of the weak economic conditions and low inflation.

A staff-level agreement was reached on a US\$440 million three-year IMF program on February 19, 2017, which will be complemented by additional support from other multilateral and bilateral partners. Fiscal consolidation is planned to significantly reduce the consolidated deficit to less than 6 percent of GDP by 2019. The DBM will be transformed into an independent commercial entity, and the BoM will not engage in additional quasi-fiscal activities. A comprehensive diagnostic of banks will be conducted to assess their financial soundness.

Immediate external liquidity risks have been significantly reduced. The People's Bank of China, on February 22, 2017, rolled over an RMB15 billion bilateral currency swap facility by three years. The government successfully refinanced a US\$580 million bond due in March 2017, by issuing a seven-year bond at more favorable terms than initially expected.

Outlook

Growth will likely remain weak in 2017, but begin to rebound in 2018–19. In 2017, significant foreign investment into the OT underground mine (OT-2) and a gradual recovery in the commodity market would support the economy, but contractionary effects from fiscal consolidation and lower mineral concentration in OT's copper concentrates will weigh on growth. Growth

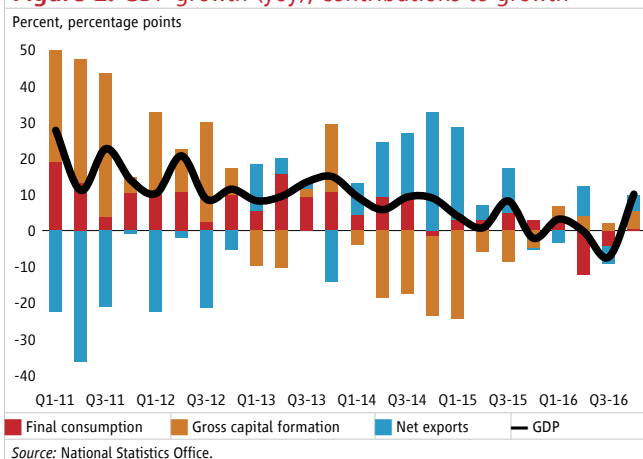
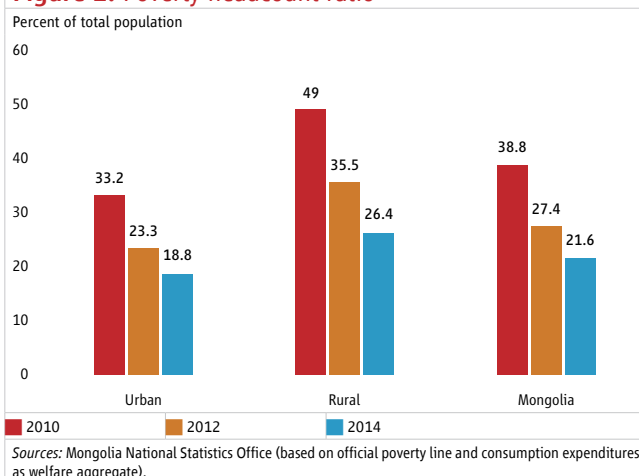
is projected to rebound in 2018 and significantly pick up in 2019, supported by strong FDI inflows into, and increased production from, Gatsuert gold mine, Tavan Tolgoi coal mine, and Oyu Tolgoia copper mine. Poverty conditions are likely to be adversely affected in the near term by continued weak growth, declining real household income, high unemployment, and a lagging labor market recovery.

Risks and Challenges

The current economic outlook is subject to substantial downside risks. Unexpected downswings in the commodity market, particularly coal and copper, and substantial delays in foreign investment could put a significant drag on growth and fiscal paths, and the external positions. The political environment poses another risk, particularly considering the next presidential election scheduled for June, 2017. External risks remain substantial as Mongolia has to repay over US\$650 million of nonconcessional debt in 2018 and a series of large debt repayments from 2020.

The most pressing challenge is to restore fiscal sustainability through strong adjustment of both expenditures and revenues. Official poverty rates show a rapid decline of poverty between 2010 and 2014. Growth deceleration and fiscal consolidation may decelerate or reverse this trend. An urgent priority is then to strengthen poverty-targeted welfare programs to mitigate adverse impacts on poverty, through fiscally sustainable ways.

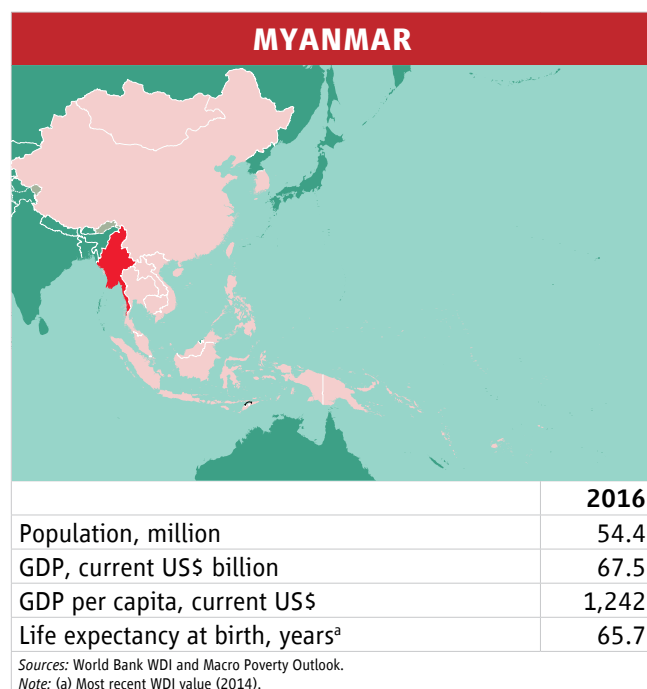
Monetary policy should be focused on price stability and replenishing international reserves, keeping the exchange rate flexible. Continued efforts are needed to strengthen the soundness of the banking system, through proper asset quality assessment and necessary measures to address the problems identified.

Figure 1. GDP growth (yoy), contributions to growth**Figure 2. Poverty headcount ratio**

MONGOLIA Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	6.9	2.2	1.0	-0.2	1.9	8.0
Private Consumption	6.3	7.2	-8.8	0.2	3.0	7.1
Government Consumption	3.4	-4.5	8.9	-5.2	-2.9	-3.4
Gross Fixed Capital Investment	-21.7	-34.4	4.9	19.0	22.4	36.7
Exports, Goods and Services	53.2	1.2	14.7	2.0	1.5	9.1
Imports, Goods and Services	6.8	-11.5	13.3	5.4	8.3	17.3
Real GDP growth, at constant factor prices	9.4	5.5	1.0	-0.1	1.8	8.2
Agriculture	14.4	9.9	4.8	2.5	2.5	3.5
Industry	12.0	9.7	-1.2	0.3	3.4	13.1
Services	6.2	0.9	1.8	-1.2	0.3	5.5
Inflation (Private Consumption Deflator)	10.7	0.5	2.9	6.1	6.1	6.1
Current Account Balance (% of GDP)	-11.5	-4.0	-3.0	-4.9	-9.4	-13.5
Financial and Capital Account (% of GDP)	12.9	5.9	5.5	-0.8	7.9	15.4
Net Foreign Direct Investment (% of GDP)	1.8	0.7	-37.7	9.6	14.3	20.5
Fiscal Balance (% of GDP)	-11.3	-8.5	-17.0	-10.7	-8.3	-5.3
Debt (% of GDP)	56.0	61.9	85.0	90.2	95.2	92.7
Primary Balance (% of GDP)	-9.1	-5.3	-13.3	-5.4	-3.3	-1.3

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

Notes: e = estimate; f = forecast.



Summary

Economic activity in Myanmar has slowed in 2016–17. Though inflation has moderated, it nonetheless remains elevated. Fiscal and external imbalances have widened. Growth is projected to recover over the medium term, though macroeconomic risks remain linked to commodity prices, vulnerability to natural disasters, and policy uncertainty. Maintaining fiscal and monetary discipline are critical to contain macroeconomic imbalances.

Recent Developments

Economic activity in Myanmar has slowed in 2016–17. Growth is expected to moderate from 7.3 percent in 2015–16 to 6.5 percent in 2016–17. The new administration has carefully navigated a challenging economic environment since it took office in April 2016. Agricultural recovery from last year's floods was hampered by long-standing productivity constraints in the sector. Industrial output has also decelerated.

Investors continued to bide their time pending greater clarity on economic policy priorities, which the new administration has started to elaborate.

Inflation moderated in H2 2016 to 3.5 percent in October (yoy), which is in part a base effect from the preceding period of high inflation, and began to pick up again reaching nearly 8 percent (yoy) in January 2017, due to a combination of ongoing supply constraints and exchange rate pass-through. The kyat depreciated by nearly 10 percent between September and December 2016.

Economic growth led to improvements in living conditions between 2009 and 2015. Household surveys indicate average expenditure growth of 3.5 percent, higher ownership of various durable goods, and a substantial increase in household dietary diversity during this period. However, poverty remains substantial in Myanmar. Poorer households remain highly susceptible to shocks, especially to climatic variation that influences production in agriculture, health shocks, and to overall macroeconomic stability.

Falling exports and slowing foreign investment flows have enhanced external vulnerabilities, contributing to an overall balance of payments deficit in 2015–16 (-0.7 percent of GDP) and low foreign exchange reserves (2.3 months of imports at end-October 2016). Falling exports were due to gas and agricultural commodities, which led to the current account deficit widening from 3.3 percent of GDP in 2014–15 to 4.8 percent in 2015–16.

The government has faced increasingly constrained fiscal space due in part to external shocks and losses from state-owned enterprises. The fiscal deficit in 2015–16 nearly tripled to 3.2 percent of GDP from 1.1 percent in 2014–15, and is expected to rise further to 4.5 percent of GDP in 2016–17. The draft budget proposal submitted to Parliament envisages further deterioration in fiscal conditions, though the

final approved budget expected by end-March may be further adjusted.

Outlook

Economic growth is projected to average 7.1 percent per year over the next three years. Private and public investment in infrastructure services are expected to accelerate in the near term. There has also been a significant accumulation of foreign investment commitments in noncommodity sectors. Implementation of these investment projects is expected to pick up subject to continued macroeconomic stability, progress on structural reforms, and expansion of critical services.

Inflationary pressures are expected to ease relative to 2015–16, averaging 8.9 percent over the course of 2016–17 due to the general slowdown in demand and efforts to reduce fiscal monetization. There are, however, risks particularly due to the pace of growth in credit to the private sector and a gradual uptick in capital inflows. International commodity prices are also expected to rise during 2017.

The current account deficit is projected to expand further over the medium term due to a combination of slowing gas exports, slowing demand in China, and large investment-related import needs. However, strong FDI flows are projected to remain a stable source of financing for the overall balance of payments, and its deficit should thus moderate in 2016–17.

Risks and Challenges

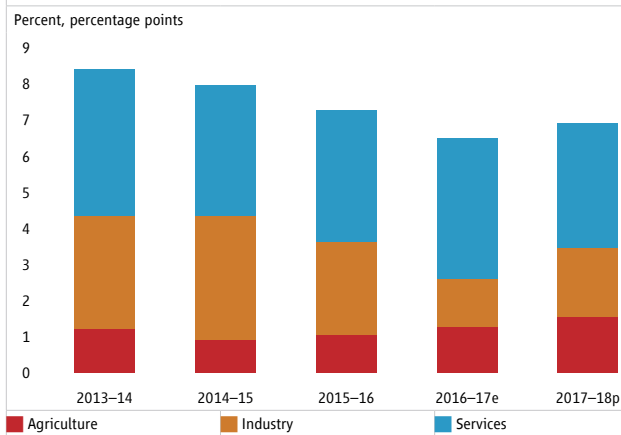
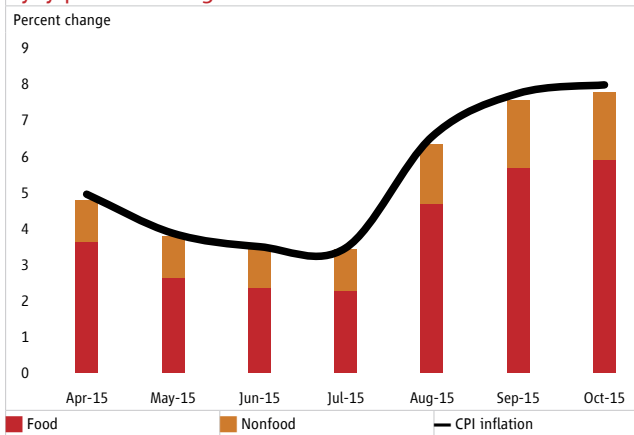
Despite the relatively favorable outlook, there are several macroeconomic risks. Low gas prices could increase fiscal and external imbalances, and exacerbate financing pressures. Myanmar's relatively narrow production base, dependence on primary commodities, and vulnerability to natural disasters pose risks to

stable growth. Lack of clarity or delays in policy implementation could prolong the economic slowdown.

Over the medium term, the government faces the challenge of balancing fiscal prudence with the need to expand public services. Greater fiscal discipline and the expansion of the government securities' market are expected to reduce pressures on monetary policy. There will, however, also be increased liquidity from foreign capital inflows and growing deposits in the commercial banking sector. This will require scaled up central bank deposit auctions to help tighten liquidity conditions.

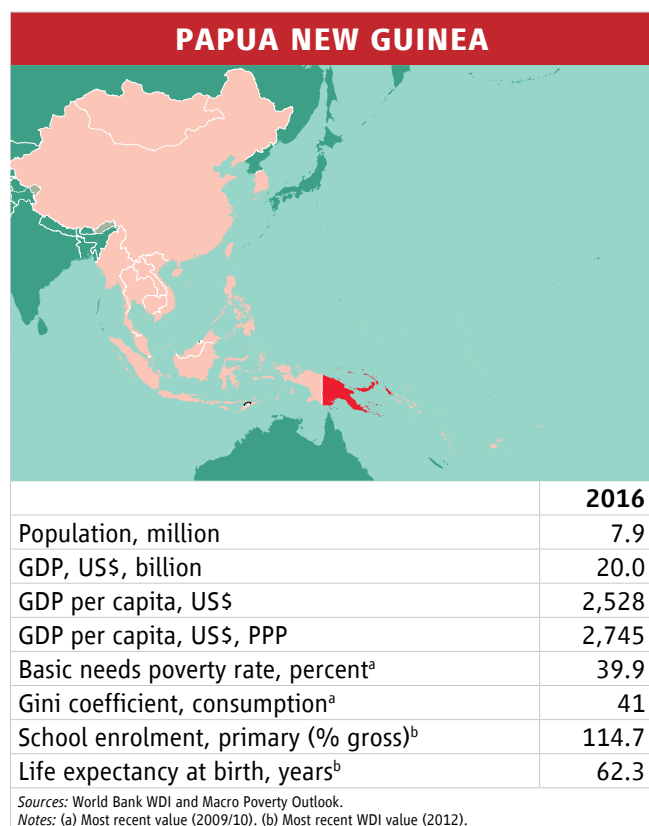
Monetary discipline and exchange rate flexibility are important for alleviating external pressures. Monetary expansion has impacted on the current account deficit, as illustrated by the relative resilience in the import of consumer items. This has added to currency pressures and contributed to imported inflation. At the same time, it is important to maintain exchange rate flexibility by allowing the reference rate to adjust to market conditions through the foreign exchange auctions.

Rapid growth in credit to the private sector points to emerging banking sector risks. Private sector credit grew at 34 percent in 2015–16, compared to 36 percent in 2014–15, and 53 percent the year before that. It is difficult to accurately assess the health of the banking system due to data constraints. However, emerging signs of risks include growing sector and borrower concentration of lending.

Figure 1. GDP growth, contributions to growth, by sector**Figure 2. Contributions to yearly inflation (yoy percent change)**

MYANMAR Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant prices	8.0	7.3	6.5	6.9	7.2	7.3
Agriculture	2.8	3.4	4.3	5.4	5.3	5.3
Industry	12.1	8.7	4.5	6.5	7.2	7.3
Services	9.1	9.1	9.5	8.2	8.5	8.5
CPI Inflation, period average	5.9	11.4	8.9	6.3	5.7	5.5
Current Account Balance (% of GDP)	-3.3	-4.8	-6.7	-6.8	-6.7	-6.6
Fiscal Balance (% of GDP)	-1.1	-3.2	-4.5	-3.8	-3.3	-3.1
Public Sector Debt (% of GDP)	32.3	29.2	34.1	35.1	35.7	36.0

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty and Equity Global Practice.
Notes: e = estimate; f = forecast.



Summary

In the lead-up to the 2017 elections, the continuation of relatively low global commodity prices limits revenue receipts and foreign exchange inflows. In the medium term, growth is expected to edge towards trend.

Recent Developments

Papua New Guinea is gearing up for elections in mid-2017. In the midst of preparations, the government continues to face a cash shortage that emanates from a continuation of the low global commodity price environment. Economic growth declined to 2.4 percent in 2016 from 6.8 percent in 2015. Growth in the nonresource sector contributed 2.3 percentage points to overall growth in 2016, while the resource sector contributed 0.1 percentage points.

One of the primary reasons for the lower growth rate in 2016 compared to the two previous years is the base effects associated with PNG's liquefied natural gas (LNG) project commencing production in 2014 and reaching full capacity in 2015. Further, growth in the resource sector was adversely affected by the shutting down of the Ramu nickel mine for the first few months of 2016 at the behest of the Mineral Resource Authority (MRA) for non-compliance, while the Porgera mine scaled down operations due to a landslide and the sabotage of power transmission lines.

Growth in the nonresource sector has also been adversely affected by lower commodity prices due to a curtailing of public and private expenditure given lower revenue receipts and disposable income, respectively. The cash flow shortage in the public sector coupled with the shortage of foreign currency has contributed to fewer construction projects completed. Consequently, employment in the nonresource sector declined by 4.4 percent yoy to June 2016. In addition to the cyclical downturn in nonresource sector growth, the relatively low growth rate in this sector reflects the need for structural reform.

In contrast, as the drought associated with the El Niño phenomenon ended, there was some support for growth in 2016, with the resurgence of the agricultural sector, particularly coffee, and the resumption of production at the Ok Tedi mine.

Based on the latest household survey data, the national poverty rate in 2010 was 39.9 percent. The level of consumption inequality, measured by the Gini coefficient was 41 in 2010.

With the lower-than-expected revenue receipts of K1.9 billion (or 3.1 percent of GDP), the government passed a supplementary budget for the second consecutive year (in August 2016) in order to curtail expenditure by K928 million (1.5 percent of GDP). With the passing of the supplementary budget, the fiscal deficit is expected to be 4.4 percent of GDP.

The government continued to consolidate expenditure in the 2017 budget with expenditures budgeted at K13.4 billion, K0.2 billion lower than 2016. Revenue is projected to be K11.5 billion, which is K0.7 billion higher than in 2016. This reflects a deficit of 2.7 percent of GDP. The 2017 budget undertakes a number of revenue-raising measures by rationalizing the taxation regime and reducing tax exemptions and special arrangements. The new tax measures include an increase in departure tax from K30 to K114, which is expected to yield K20 million in additional revenue in 2017.

With significant increases in public wages and debt servicing costs over the past five years, the share of these two expenditure items in total expenditure has increased from 19 percent to 42 percent. Compensation of public employees increased at an annual average rate of 22 percent from 2012 to 2017, while debt servicing costs have increased over the same period at an average annual rate of 27 percent.

Coupled with the issuance of domestic government securities, the first tranche (US\$200 million) of a five-year syndicated commercial loan of US\$500 million will be used to finance the deficit. The second tranche is expected in early 2017. In 2016, government debt (excluding contingent liabilities) is expected to reach 33.5 percent of GDP. Based on assessment of public and publicly-guaranteed external debt, the Debt Sustainability Analysis indicates that the risk of debt distress in PNG remains low.

Notwithstanding the lower commodity prices, on the back of LNG exports and import compression due to the limited availability of foreign exchange, the current account is expected to remain in surplus (7.9 percent of GDP) in 2016. The surplus in the current account is largely offset by financial account outflows due to a buildup in foreign currency account balances of resident mineral companies coupled with net loan repayments by the government.

The preliminary balance of payments data for the first six months in 2016 indicates an overall deficit of K74 million. There is a shortage of foreign exchange in the interbank market, with foreign exchange reserves held by the central bank at US\$1.7 billion (3.2 months of import cover) at the end of 2016. Falling commodity prices have contributed to the steady decline in foreign exchange reserves from US\$4.0 billion in 2012.

With the decline in commodity prices, the depreciation of the kina by 9 percent yoy to December 2016 has contributed to the higher CPI inflation rate of 7.0, from 6.0 percent a year earlier.

Outlook

The outlook for growth in the medium term is relatively more sanguine, with the establishment of at least two large petroleum and mineral projects totaling about US\$20 billion (100 percent of GDP) towards the end of this decade.

In 2017, CPI inflation is expected to edge upward further with the continued depreciation of the currency coupled with the increased demand driven by expenditure associated with the 2017 elections and the cost of organizing Asia-Pacific Economic Cooperation (APEC) meetings in PNG. Over the next five years, GDP growth is expected to edge toward trend, which is estimated at 4 percent.

Given the expected low commodity price environment in 2017 (despite gradual increase), domestic revenue generation and foreign currency inflows are expected to remain constrained in the near term. Fiscal consolidation, while necessary in the face of lower commodity prices, runs the risk of further moderating growth, while the foreign exchange shortage would continue to dampen necessary imports. Thus, in the near term, risks are weighted to the downside.

Risks and Challenges

There are several challenges both in the near term and the medium to longer term. Firstly, maintaining macroeconomic stability over the election period is a near-term challenge. Other domestic near-term challenges include the government's ability to maintain a prudent fiscal stance and ensure public

service delivery (particularly infrastructure) in the face of limited revenue receipts. Limited foreign exchange inflows owing to low commodity prices will continue to be a challenge throughout 2017. Further increases in the federal funds rate in the U.S. this year will make it more challenging for the government to issue an external sovereign bond.

Figure 1. GDP growth (yoy), contributions to growth

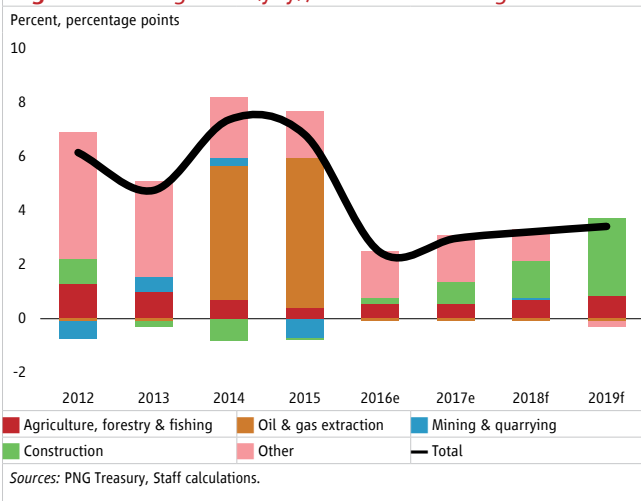
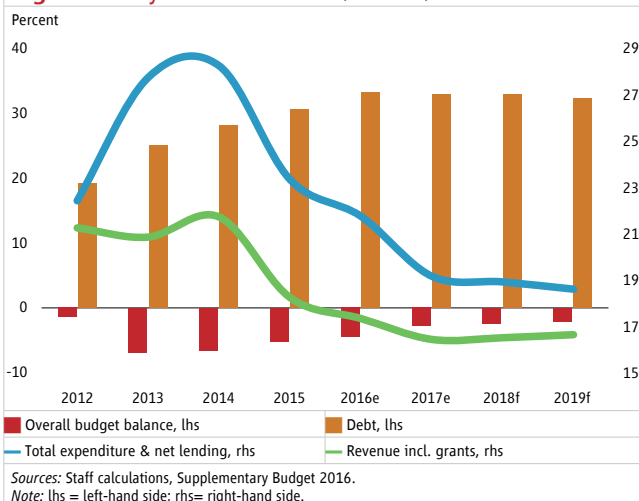
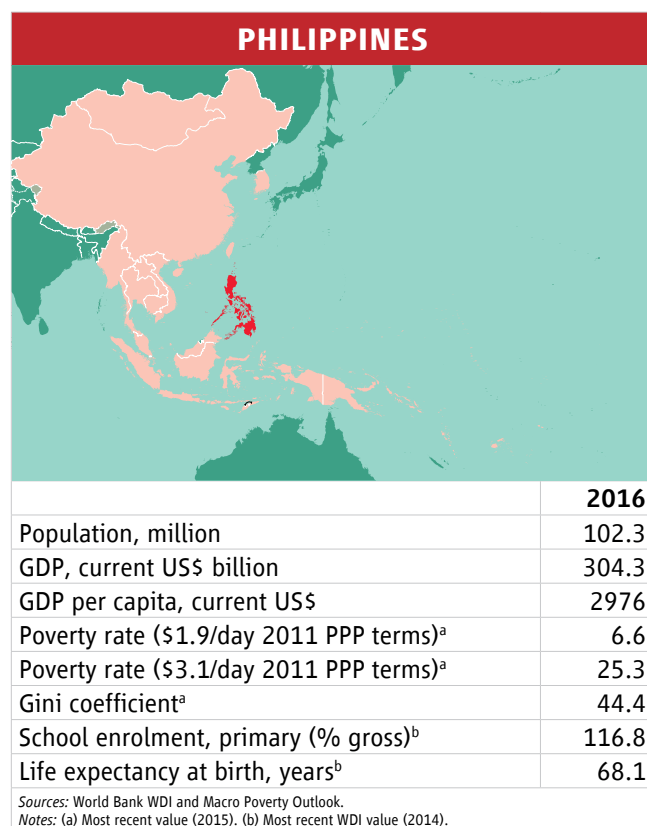


Figure 2. Key fiscal indicators (% GDP)



PAPUA NEW GUINEA Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	7.4	6.8	2.4	3.0	3.2	3.4
Mining and Petroleum	7.0	4.9	0.1	0.1	0.2	0.2
Non-mining and non-petroleum	0.4	1.9	2.3	2.9	3.0	3.2
CPI inflation, period average	5.2	6.0	7.0	7.5	7.0	6.5
Fiscal Accounts (% of GDP)						
Revenue	21.7	18.3	17.4	16.5	16.5	16.7
Expenditure	28.3	23.4	21.8	19.2	19.0	18.6
Balance	-6.5	-5.1	-4.4	-2.7	-2.4	-2.0
Debt	28.1	30.4	33.5	33.1	33.0	32.3
External Accounts (% of GDP)						
Current account balance	3.0	10.9	7.9	6.7	6.1	5.9
Resource	12.2	13.3	11.1	10.6	10.3	10.2
Non-resource	-9.2	-2.4	-3.2	-3.9	-4.2	-4.3

Sources: PNG Treasury; Bank of Papua New Guinea; IMF; and staff calculations.
Note: e = estimate; f = forecast.



Summary

Despite a weak external environment, growth in the Philippines accelerated to 6.8 percent yoy from 5.9 percent in 2015 on the back of upbeat domestic demand. The Philippine economy is expected to remain a top regional growth performer with growth projected at 6.9 percent in 2017 and 2018. Growth in recent years went hand in hand with job creation and poverty reduction. Extreme poverty (US\$1.90/day) has fallen by over 1 percentage point per year since 2012 to 6.6 percent in 2015 and is expected to decline at a faster pace.

Recent Developments

The Philippine economy grew by 6.8 percent yoy in 2016 from 5.9 percent in 2015 (Figure 1), despite a global environment of sluggish trade, tepid investment, and

heightened policy uncertainty in advanced economies. Growth was driven by strong domestic demand, mainly capital formation which was fueled by investments in durable equipment and a public infrastructure push that led to vigorous activities in the construction sector. Private consumption remained strong amidst robust remittance inflows and expanding consumer credit. However, net exports have been a drag on growth as a weaker-than-expected global recovery led to softer external demand. Growth in the services and industry sectors accelerated, expanding by 7.5 percent and 8.0 percent yoy, respectively. Meanwhile, agriculture contracted, suffering from low productivity and weather-related disturbances.

Robust economic performance fueled job creation. The unemployment rate fell to 5.5 percent in 2016 from 6.3 percent in 2015. As in previous years, the rapidly expanding services sector remained the largest contributor to employment, accounting for 55.6 percent of total jobs in 2016. However, the underemployment rate remained persistently high at 18.4 percent in 2016 from 18.5 percent in 2015, suggesting that the quality of employment remains a concern.

Fiscal policy was expansionary, following a long period of fiscal conservatism. In 2016, government expenditure accelerated by 14.3 percent yoy from 16.8 percent of GDP in 2015 to 17.6 percent of GDP. Infrastructure spending grew strongly as a result of the rollout of big-ticket infrastructure projects in roads, education, and health. Revenues decreased slightly as a percent of GDP from 15.8 percent in 2015 to 15.2 percent in 2016. Tax collections rose by 9.1 percent yoy, despite the absence of new tax policy measures, yet as a share of GDP, tax revenue effort remained at 13.7 percent compared to 13.6 in 2015. The government's fiscal deficit reached 2.4 percent of GDP, more than doubling from 0.9 percent of GDP in 2015, but close to the government's deficit target of 2.0 to 2.7 percent of GDP for the year. Meanwhile, the debt-to-GDP ratio improved to 42.1 percent in 2016 from 44.7 percent in

2015 as GDP growth outpaced the growth of the debt stock.

Monetary policy remained accommodative despite increasing inflationary pressure toward the end of 2016. Inflation settled in 2016 at 1.8 percent, higher than the 1.4 percent in 2015, but still below the central bank's 2.0 to 4.0 percent inflation target. The central bank only once eased monetary policy by reducing the key policy rate from 4.0 to 3.0 percent in June, and kept it at that level despite increasing inflationary pressures in the fourth quarter of 2016. Credit expansion continued to support economic growth, with commercial bank lending growing by 17.1 percent in 2016 compared to 14.6 percent in 2015. Nonperforming loans declined as a share of the total loan portfolio from 2.1 percent in December 2015 to 1.9 percent in December 2016.

Poverty reduction was faster during 2012–15 compared with previous years. The poverty rate declined from 10.5 percent in 2012 to 6.6 percent in 2015, measured by the US\$1.90 a day (2011 PPP) poverty line, or from 32.0 percent to 25.3 percent, measured by the US\$3.10 a day poverty line. Between 2012 and 2015, shared prosperity increased: the income of the bottom 40 percent grew much faster than the overall population. In particular, the income of the bottom 20 percent grew at 16 percent while the average income grew by 6 percent. While poverty declined both in urban and rural areas, poverty incidence in rural areas remained three times as high as in urban areas.

Outlook

The outlook for the Philippines remains positive, with the economy projected to grow at 6.9 percent in 2017 and 2018, before slowing slightly to 6.8 percent in 2019. The strong performance of 2016, and continued policy commitment to the planned increase in public infrastructure spending are expected to carry the economy's growth momentum over to 2017–18. Growth in capital investment is projected to be the

economy's primary growth engine and will be tied to the successful implementation of the administration's infrastructure investment push. Consumption is expected to be supported by the continued expansion in credit and sustained remittance growth. As global demand recovers, exports are expected to rebound, but imports will expand further to fill the domestic capital goods requirements.

Poverty is expected to decline further with extreme poverty projected to decrease from 6.6 percent in 2015 to 4.0 percent in 2019. The pace of poverty reduction is likely to be faster pace if the strong economic growth performance is sustained and becomes even more inclusive. Further poverty reduction will likely come from the continuous movement of employment from agriculture to more productive sectors, and from productivity improvements in agriculture. The poor and vulnerable are more likely to benefit from strong economic growth if they acquire the skills needed to seize job opportunities with higher productivity and higher wages. Continued efforts to improve targeting of public transfer program will further support human capital accumulation and poverty reduction in the long run.

Risks and Challenges

Preserving macroeconomic stability continues to be emphasized by the government as a key condition for inclusive growth, as fiscal and inflationary pressures build up gradually from a low base. While economic growth in the Philippines has become more inclusive in recent years, maintaining this pattern remains a challenge and requires commitment to structural reforms that encourage investments in human capital, and in sectors that create quality employment.

In February 2016, the president approved the new Philippine Development Plan 2017–22, which outlines the government's medium-term policy priorities to achieve more inclusive growth. The government is

embarking on a reform agenda to deliver equitable tax reforms, enhance market competition, and improve ease of doing business, while continuing to sustainably ramp up public investments in infrastructure and social services. Crucial support is being extended to the

agriculture sector, where the biggest number of poor are. Emphasis is also given to peace and economic development in the largest province of Mindanao, which includes conflict-affected areas and is the poorest region of the Philippines.

Figure 1. GDP growth, contributions to growth

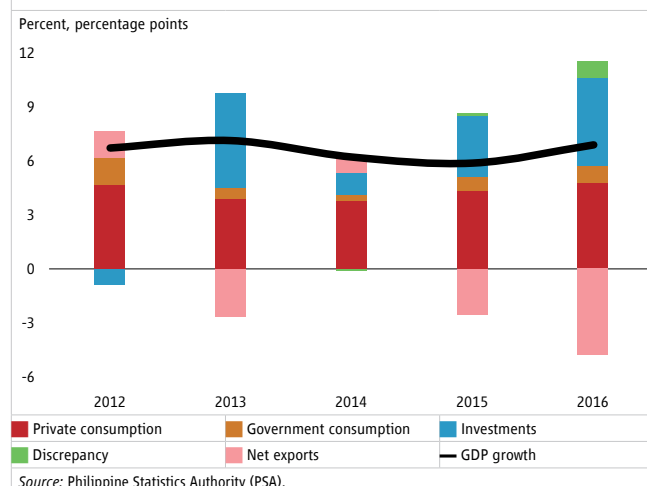
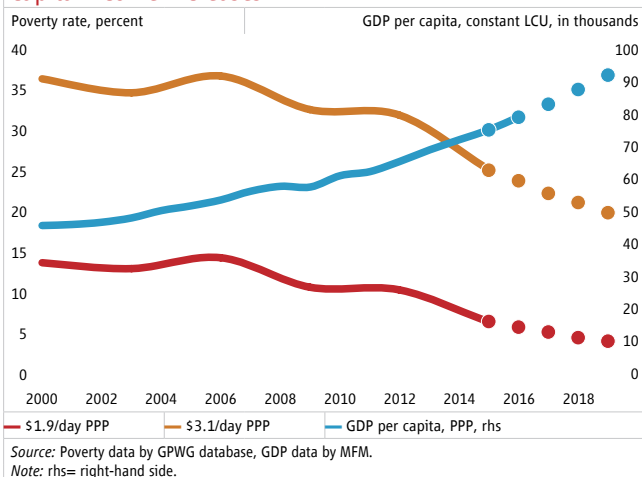


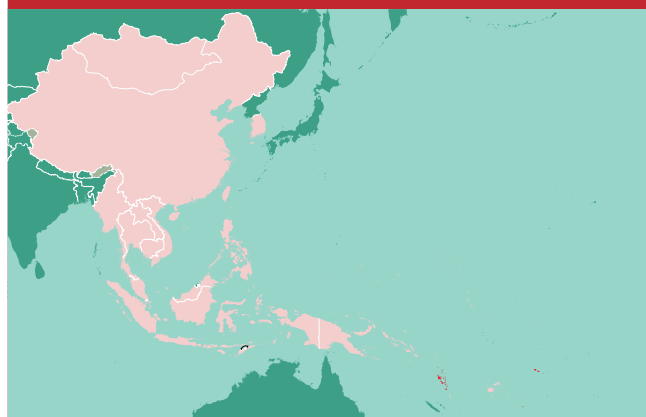
Figure 2. Poverty reduction is expected to continue as per capita income increases



PHILIPPINES Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	6.2	5.9	6.8	6.9	6.9	6.8
Private Consumption	5.5	6.3	6.9	6.8	6.7	6.6
Government Consumption	3.3	7.8	8.3	13.0	12.2	11.4
Gross Fixed Capital Investment	6.2	15.2	23.5	23.6	23.6	23.2
Exports, Goods and Services	11.7	9.0	9.1	10.2	10.4	10.7
Imports, Goods and Services	9.3	14.0	17.5	18.4	18.5	18.6
Real GDP growth, at constant factor prices	6.2	5.9	6.8	6.9	6.9	6.8
Agriculture	1.7	0.1	-1.3	0.5	0.6	0.7
Industry	7.8	6.0	8.0	8.1	8.1	7.9
Services	6.2	6.8	7.5	7.3	7.1	7.0
Inflation (Consumer Price Index)	4.1	1.4	1.8	3.3	3.0	2.8
Current Account Balance (% of GDP)	3.8	2.5	0.2	0.2	0.5	0.7
Financial and Capital Account (% of GDP)	3.4	1.1	0.3	0.5	0.8	1.1
Net Foreign Direct Investment (% of GDP)	2.0	2.0	2.6	2.5	2.4	2.4
Fiscal Balance (% of GDP)	-0.6	-0.9	-2.4	-3.0	-3.3	-3.5
Debt (% of GDP)	45.4	44.8	42.1	40.4	39.2	38.4
Primary Balance (% of GDP)	2.0	1.4	-0.3	-0.7	-1.1	-1.4
Poverty rate (\$1.9/day PPP terms) ^{a,b,c}	..	6.6	5.8	5.1	4.5	4.0
Poverty rate (\$3.1/day PPP terms) ^{a,b,c}	..	25.3	23.9	22.5	21.3	20.1

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty and Equity Global Practice.
Notes: e = estimate; f = forecast. (a) Calculations based on EAPPOV harmonization, using 2006-FIES and 2015-FIES. (b) Projection using annualized elasticity (2006–2015) with pass-through = 1 based on GDP per capita in constant LCU. (c) Actual data: 2015. Nowcast: 2016. Forecast are from 2017 to 2019.

SMALL PACIFIC ISLAND COUNTRIES



	2015
Population, million	0.88
GDP, US\$, billion	3.01
GDP per capita, current US\$	4,406

Sources: WDI, World Bank staff estimates.

Summary

Most Small Pacific Island Countries (PICs) are experiencing moderate to strong growth, driven by stimulus from public and donor-funded investments, reconstruction from recent natural disasters, and relatively strong tourism receipts and remittances. Inflation remains moderate due to low commodity prices, which have also supported current account positions. Ensuring fiscal sustainability remains a challenge for most PICs; despite large fiscal surpluses in recent years, both revenue and expenditure are subject to large and frequent shocks.

Recent Developments

Economic growth in the *Federated States of Micronesia* (FSM) was 3.7 percent in FY2015, following a 2.4 percent contraction in FY2014. Strong fisheries growth contributed 1.5 percentage points of overall growth. During FY2015, formal sector employment dropped by 0.3 percent, cumulating in a 4.7 percent decline over the past three years. With the recent rebound in commodity and oil prices, inflation is

estimated at 1.9 percent during FY2016. The current account reached an estimated surplus of 8.6 percent of GDP in FY2015 (reflecting fishing license fee receipts), and is expected to remain at around 10 percent of GDP in 2016.

FSM's macrofiscal performance has improved significantly since FY2004. While general tax revenue was 12.4 percent of GDP in FY2015 and has been largely stagnant over past years, nontax revenues tripled over the past three years to 24.7 percent of GDP, reflecting higher fishing license fees, resulting from the introduction of the Vessel Day Scheme. Recurrent expenditure picked up slightly to 48.8 percent of GDP in FY2015, due to higher wages and salaries. Grants are expected to pick-up, mirrored by a rise in capital expenditure as infrastructure projects under the Compact resume. As a result, the fiscal balance registered a surplus of 10.5 percent of GDP in FY2015, which was subsequently transferred to the government-managed trust fund aimed at mitigating external shocks.

In *Kiribati*, growth is estimated at around 3.1 percent in 2016—a third consecutive year of growth above the historical average of 1.7 percent. Growth is expected to moderate to about 2.5 percent this year, with the winding down of major donor-financed infrastructure projects. Inflation remained below 2 percent, as lower food and commodity prices offset pressures from relatively strong domestic demand and the weak Australian dollar (which Kiribati uses as its currency). Despite large trade deficits, the current account balance remained in surplus due to high fishing license fees (equivalent to around 63 percent of GDP) and, to a lesser degree, steady remittance inflows and solid investment incomes from Kiribati's sovereign wealth fund (RERF). The fishing license fees were also the key driver of the budget surplus in 2016, estimated at about 12.5 percent of GDP.

Reversing a decade-long trend of drawdowns, the government made a net transfer of \$A50 million to the RERF in 2015, and an additional \$A70 million in 2016.

The remaining cash reserves were equivalent to three to four months of current spending, consistent with IMF recommendations. Strong fishing license revenue increased cash reserves back to nine months of current spending), warranting a further transfer to the RERF.

Nauru is estimated to have grown by more than 20 percent annually on average from FY2011 to FY2014, due in part to the reopening of Australia's Regional Processing Centre for asylum seekers in 2012, currently the main driver of economic activity in Nauru. The resumption of phosphate mining in 2011 and an increase in fishing license fees also spurred growth in recent years. After growth moderated to around 3 percent in FY2015, the economy is estimated to have expanded by about 10 percent in FY2016 due to the repair of the seaport, strong activity in the services sector, and a large increase in government spending.

Government revenue increased substantially since FY2012 due to RPC-related revenues and fishing license fees, and increased tax collection from the implementation of employment and services taxes and improvements in tax administration. However, government spending has also increased rapidly, particularly the wage bill (in an effort to retain key public employees). Still, the overall fiscal balance remained in surplus and has been used to clear arrears, build-up cash buffers, and make contributions to the Nauru Trust Fund. To support long-term fiscal sustainability, this trust fund will receive windfall revenues and donor contributions with a view to providing an additional source of budget financing over the longer term.

The *Palauan* economy grew by 9.4 percent in FY2015, with tourist arrivals and construction activity expanding by 35 percent. However, the rapid rise in tourism activity strained infrastructure, prompting the authorities to limit the number of charter flights in FY2016. The economy, as a result, is not expected to have grown in FY2016. Inflation fell to 2.2 percent in FY2015 and is expected to have remained moderate in FY2016. The external position improved in FY2015, reflecting lower

commodity prices and stronger tourism receipts, with the current account narrowing from an 11.8 percent deficit in FY2014 to a deficit of 0.5 percent in FY2015. This trend is however expected to have reversed thereafter due to weaker tourism receipts and larger infrastructure and related imports.

Palau's fiscal position strengthened in FY2015 following spending restraints and the impact of strong economic growth. The current fiscal deficit declined to 5.5 percent of GDP in FY2015, while the overall fiscal surplus (including grants) stood at 5.0 percent of GDP. The fiscal position is expected to improve further in FY2016, as higher airport departure and visa fees offset lower tourist arrivals, and as spending restraint continued.

After contraction in the previous year, the economy of the *Republic of Marshall Islands* (MHL) is estimated to have expanded by around 0.4 percent in FY2015, as the fisheries sector recovered. Growth is expected to rise to about 1.5 percent in FY2016, as the effects of the drought from early 2016 are offset by the resumption of infrastructure projects. Inflation dropped to -2.2 percent in FY2015 due to falling oil and utility prices and is expected to have risen to about 0.5 percent in FY2016. The fiscal balance is estimated to have been a surplus of just under 3 percent of GDP in FY2015, reflecting record fishing license fees. A smaller surplus is expected in FY2016. The current account deficit is likely to worsen in FY2016 from an estimated deficit of 1.6 percent of GDP FY2015.

Economic growth in *Samoa* accelerated to over 6 percent in FY2016, driven by strong growth in retailing and wholesaling, transport, and fishing (due mainly to a newly established fish processing and packing company). Inflation remained subdued at 0.1 percent in FY2016, with declines in the prices of imported goods (particularly fuel) continuing to offset increases in domestic prices. The current account deficit narrowed in recent years to 2 to 3 percent of GDP, owing to an increase in tourism-related services, lower

oil and food prices, and a reduction in reconstruction-related imports.

Total revenue in FY2016 was around 29 percent of GDP. Comprehensive revenue policy and administrative reforms have led to significant increases in domestic revenue collection over the last five years. Total expenditures (excluding donor-financed development expenditures) were under 30 percent of GDP in FY2016, down from 35.1 percent recorded two years before, mainly due to a reduction in investments, in part to a winding down of cyclone reconstruction and other one-off activities. Operating expenses have also declined over the past two years, due in part to a reduction in grants to public bodies. As a result, the government ran a fiscal deficit of just 0.4 percent of GDP in FY2016, down from 3.9 percent in FY2015. While Samoa's public debt remains high compared to other small PICs, it has started to decline and stood at just over 50 percent of GDP at end-FY2016.

Tonga continued its relatively strong recent economic performance, with growth in FY2016 estimated at 3.1 percent, due to a recovery in agricultural production coupled with construction activity in preparation for the 2019 South Pacific Games (SPGs). Economic activity also benefited from prudent macrofiscal management as well as a series of growth-supporting reforms. Inflation in FY2016 stood at 0.1 percent, as low imported food and fuel prices provided some buoyance to consumers' real purchasing power. The current account deficit is estimated to have narrowed to 3.1 percent of GDP in FY2016 from 7.7 percent in FY2015, while official foreign exchange reserves continue to cover more than six months of imports.

The government has focused on increasing domestic revenue and prioritizing expenditure. Domestic revenues increased by over 5 percentage points of GDP over the last five years, supported by a series of tax policy and administration reforms. Concurrently, total public expenditure increased from 25.7 percent of GDP in FY2014 to over 29 percent in FY2015 and FY2016,

mostly in response to cyclone reconstruction needs and increases in wages for civil servants. The deficit is estimated to have risen to 2 percent of GDP in FY2016, from 1.1 percent in FY2015, with lower grants from development partners also affecting the bottom line. The government maintains a stance of avoiding new nonconcessional borrowing, and has plans to finance SPG-related costs using non-debt-creating sources of finance.

Economic growth has picked up in *Tuvalu* in recent years, with 2.6 percent growth in 2015 and projected growth of around 4.0 percent in 2016, partly on account of recovery spending following Tropical Cyclone Pam (TCP). Government and donor-funded investments, including in outer-islands schools and clinics, have also supported growth. Inflation remained at 3.2 percent in 2015 and is expected to reach 3.5 percent in 2016, reflecting higher government expenditures and a shortage of essential items due to TCP-related disruptions in transportation and agricultural production.

The pick-up in government expenditures in recent years has been offset by rising fishing license fees, estimated at around three-quarters of GDP in 2016 on the back of favorable exchange rates, weather conditions, and access fees. As a result, despite the large one-off expenditures related to TCP, the government achieved an average fiscal surplus of around 2.3 percent of GDP in 2015 and 2016. These, together with accumulated surpluses since 2011, have largely been reinvested into the Tuvalu Trust Fund.

The current account is expected to move from a surplus of around 7.6 percent in 2015 to a deficit of around 4 percent of GDP in 2016 as the trade deficit widened due to increased imports for government and donor-funded investment projects. Remittances, dominated by transfers from seafarers, have continued to decline as employment opportunities on cargo ships have dwindled, and are now slightly under 10 percent of GDP. Steady performance on the assets invested in the TTF have resulted in higher income flows. Record fishing

license revenues in 2015 and 2016, almost doubling from 2014, also resulted in substantially higher income flows. Gross reserves have remained adequate, covering around seven months of imports in 2015 and 2016.

Vanuatu is still recovering from the impact of March 2015 TCP, which caused damages and losses amounting to over 60 percent of GDP, and affected much of the rural population. Unusually dry conditions triggered by El Niño throughout 2015 and early 2016 further curtailed agricultural production, and led to reports of food and water shortages on Tanna and other islands. In response, the government allocated emergency funding for water, sanitation, hygiene and food to mitigate the impacts on the vulnerable in affected areas.

Overall, economic growth is estimated at 4 percent in 2016, driven by the commencement of large infrastructure projects, the continuation of post-cyclone reconstruction and rehabilitation activities, the gradual recovery of agricultural production, and overall growth in visitor arrivals. In the first quarter of 2016, tourism arrivals declined by 10 percent, as concerns about the condition of the runway into Port Vila's Bauerfield airport led to the suspension of a number of international flights. By end of the third quarter, air arrivals had fully recovered. Similarly, cruise ship arrivals fell sharply in the aftermath of the cyclone, but rebounded strongly thereafter. Total tourism arrivals in the first three quarters increased by 21 percent compared to the same period in the previous year.

The dissolution of parliament in late 2015 and election of a new coalition government in January 2016 delayed the passing of the 2016 budget until March. The incoming government committed to advancing a number of major reconstruction projects (which had stalled in the latter half of 2015), resulting in a targeted budget deficit of 17 percent of GDP. In the second quarter, a supplementary appropriation was approved by parliament, increasing the targeted deficit to around 18 percent of GDP. The current account deficit is estimated at 15 percent of GDP in 2016,

reflecting an increase in imports associated with post-cyclone recovery efforts. Inflation for 2016 is estimated at 2 percent, a marginal increase over the previous quarter, driven by food and transport prices.

Outlook and Emerging Challenges

The outlook, particularly for *FSM*, *MHL*, *Palau*, and *Tuvalu*, is subject to substantial risks due to their reliance on tourism, grants, and commodity imports. A slowdown in key trading partners, a further U.S. dollar appreciation, and natural disasters could impact negatively on tourism activity. Higher commodity prices could make food and fuel imports costlier. Failure to implement a strategy for sustainable development, including high-return investments, could reduce growth in the medium term. These countries will have to rely on fiscal and structural policies should the above-mentioned risks materialize. Financial sector volatility could also affect returns on the various trust funds and their ability to provide fiscal space for priority spending or buttress against future shocks, given the limited space for additional debt and the lack of monetary policy levers.

The outlook for *Kiribati* remains positive, although fishing revenues are expected to decline from recent peaks with changing climate cycles and tuna migration patterns. Growth is expected to moderate toward its potential, around 2 percent per year, but if planned major donor-financed infrastructure projects are implemented, medium-term growth would shift up. Maintaining fiscal sustainability remains a challenge despite large fiscal surpluses in recent years, as both revenue and expenditure are subject to large and frequent shocks. Kiribati's main sources of income—fishing license fees, investment income from the RERF, and foreign aid—will continue to be volatile, while disaster-related expenditure shocks could increase in frequency and severity with climate change. A surplus of about 0.2 percent of GDP is budgeted for 2017, reflecting lower fishing revenue and the maintenance

of recent higher levels of expenditure, including on subsidy programs. The country's large infrastructure and essential services deficit, high share of poor and vulnerable, and young and growing population require increased and more effective spending on physical and human capital. Ongoing efforts to improve the performance of SOEs also need to be maintained, to continue to improve access to basic public services and reduce fiscal risk.

Growth in Nauru is projected to moderate to 4 percent in FY2017 due to a slowdown in phosphate exports and only limited expansion of the RPC. In the medium term, Nauru is highly vulnerable to the expected scaling down of the RPC. Nauru's biggest challenge is to diversify its economy beyond reliance on phosphate mining and the RPC, neither of which is a sustainable source of income in the longer-term. To ensure fiscal sustainability, it will be important for the revenue reforms now underway to be complemented with systematic efforts to contain the wage bill and recurrent spending, while preserving critical expenditures on health and education.

In *Samoa*, the pending exit of a major manufacturer is likely to temporarily lower growth in FY2017 and lead to a loss of jobs, although the opening of several hotel developments and increased agricultural exports should provide a partial offset. The growth rate is expected to moderate to 2 percent over the medium term, reflecting a balance between increased productive capacity in the tourism and agriculture sectors and the dampening effect of continued fiscal consolidation and reduced construction activity. Nevertheless, as public debt remains high, it is important that fiscal consolidation continue, consistent with recent efforts to increase domestic revenues, control recurrent spending (while protecting critical social expenditures), and pursue only high-priority and concessionally funded investments.

Over the next few years, the key challenge facing *Tonga* is to maintain its fiscal performance, which will be critically dependent on careful management of the government wage bill and of the financing of

SPG-related construction. To the extent that Tonga manages these expenditures prudently, it will retain the fiscal space necessary to meet pressing service delivery needs and respond effectively to the frequent shocks (particularly natural disasters) that it faces. With tourist receipts at around 10 percent of GDP, Tonga's tourism industry should benefit from the recent redevelopment and reopening of a large luxury hotel, which marks a much-needed increase in high-end accommodation.

For *Vanuatu*, if public investments are undertaken efficiently, and with due regard to capacity constraints, they should boost Vanuatu's potential growth rate and ensure that services are available to the poorest and most vulnerable. Given the government's conservative fiscal stance in recent years, it now has some fiscal space to take on moderate levels of concessional debt to meet its post-cyclone recovery and broader development needs. Further, throughout 2016 the new government has made progress in addressing deficiencies in controls on anti-money laundering and combating the financing of terrorism, which will see Vanuatu withdrawn from the Financial Action Task Force money laundering "grey list", and may impact positively on new foreign business investment.

Figure 1. Primary balances

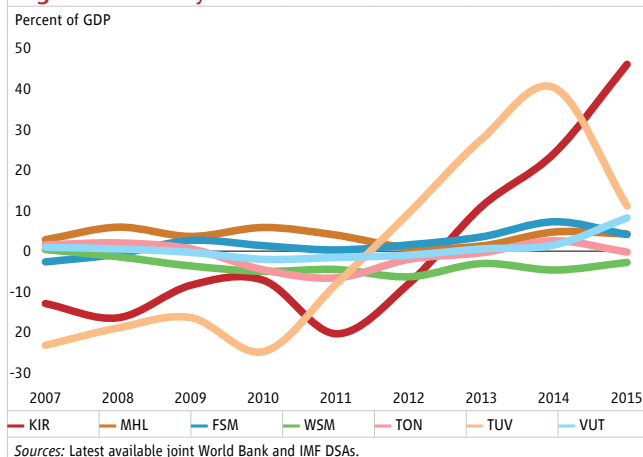
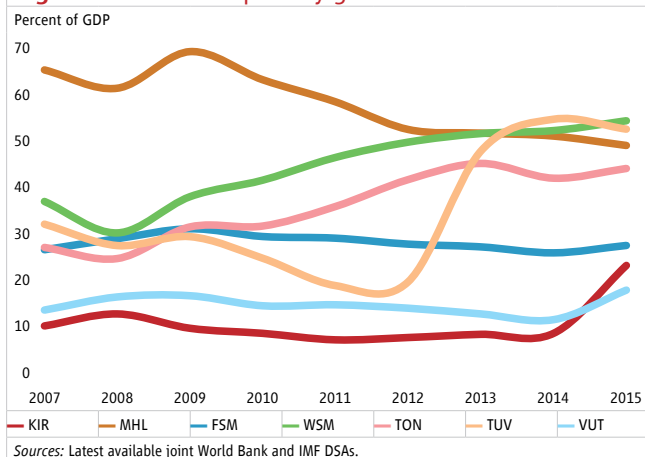
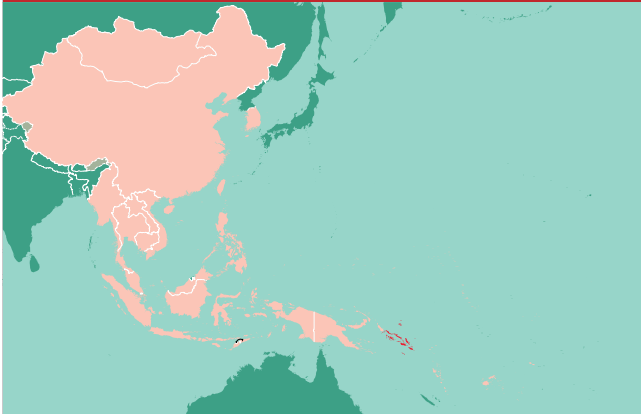


Figure 2. Public and publicly guaranteed external debt



SOLOMON ISLANDS	
	
	2016
Population, million	0.6
GDP, current US\$ billion	1.3
GDP per capita, current US\$	2,146
GDP per capita, current US\$, PPP	1,984
Basic needs poverty rate	12.7
Gini coefficient	37.1
School enrolment, primary (% gross)	88.4
Life expectancy at birth, years	68.0
<small>Sources: World Bank WDI; Macro Poverty Outlook and Ministry of Education and Human Resources Management.</small>	

Summary

The Solomon Islands Government continues to prioritize infrastructure and development in rural areas—where most of the population reside. Growth is expected to remain around 3 percent. Emerging challenges include a sharper slowdown in the Chinese economy, and ongoing uncertainties, particularly in the mining sector. Continued strong and coordinated government action coupled with greater private sector investment to promote inclusive growth is necessary to ensure broad-based improvements in living standards.

Recent Developments

The Solomon Islands continues to remain dependent on foreign aid flows and natural resource extraction, and is heavily exposed to natural disasters and external price shocks. Following the cessation of low-level civil strife

in 2003, economic growth has depended primarily on the logging sector and a large influx of donor financing. The national basic-needs poverty rate, estimated in 2012/13, is 12.7 percent, while the Gini coefficient, is 37.1.

Economic growth for 2016 is estimated at 3.0 percent (compared to 3.3 percent in 2015), reflecting the effects of El Niño weighing on agricultural production and fish catch. Growth was driven by the logging and wholesale and retail sectors, and investments in construction, communications, and manufacturing. Domestic economic activity, as measured by the central bank's production index, fell sharply in Q1 of 2016, reflecting a decline in log export volumes, and cocoa and fish production against the previous quarter. Production recovered by the end of Q3, as the logging and cocoa industries recovered, and international prices for key export commodities increased, particularly for copra and palm oil. Preliminary figures suggest that log production was 17.4 percent higher in 2016 compared to 2015.

Formal labor market conditions improved in the first half of 2016 after a decline in the second half of 2015. Labor market indicators from the National Provident Fund showed the half-yearly average number of active contributing members rose marginally by 1 percent to 55,799 contributors.

Since 2015, the government's fiscal policy has targeted investments toward rural infrastructure and development, and the health and education sectors—potentially important and direct investments in improving the well-being of Solomon Islands' poor. The 2016 budget targeted a deficit of 5.7 percent of GDP, financed through a drawdown of cash reserves. Given the historic under-implementation of the development budget, it is unlikely the deficit fully materialized to the extent forecasted.

Total public and publicly guaranteed external debt stood at 10.2 percent of GDP at end-2016. As such,

Solomon Islands continues to enjoy one of the lowest debt-to-GDP ratios in the EAP region, and globally. The most recent Debt Sustainability Analysis, undertaken in early 2016, classifies Solomon Islands at a moderate risk of debt distress, with the baseline scenario subject to significant risks resulting from a lower-than-expected growth path and a shock to financing terms.

International reserves stood at US\$526 million at end-2016, equivalent to 10.1 months of imports. The current account deficit is projected to have widened from 2.6 percent of GDP in 2015 to 3.8 percent in 2016, to support imports related to large infrastructure projects.

Inflation fell throughout 2016 from 2.9 percent in January to negative 2.8 percent in November—far below the forecast range of 3 to 5 percent.

Outlook

Solomon Islands' economy is projected to grow on average by 3.1 percent over the medium term. This baseline scenario is based on the assumption of resumed gold-mining activity; the exploitation of large nickel deposits; increased investments in key transport infrastructure, energy and telecommunications projects; and sustained levels of foreign direct investment of around 3.3 percent of GDP.

The government has targeted a budget deficit for the third consecutive year, however, in line with the historic underspending of the development budget, it is unlikely to materialize to the extent projected. The 2017 budget projects domestically sourced revenues to significantly increase (by 19.4 percent) against the revised 2016 budget, which could pose additional fiscal pressures should this target not be met. Total government expenditures in 2017 are anticipated to decline by 6.7 percent against the 2016 revised budget, with a 2.3 percent reduction in recurrent spending outweighing a 13.6 percent increase in development

expenditures. The government has indicated it will adjust spending in line with revenue collection rates, should spending pressures risk resulting in the deficit target being surpassed.

The current account deficit is expected to widen to 7.1 percent of GDP by end-2017, reflecting an increase in capital imports related to much needed infrastructure and energy projects, and the underlying long-run decline in logging exports.

The Honiara Consumer Price Index (period average) is expected to remain at around 3 percent over the medium term.

Risks and Challenges

This outlook is subject to considerable risks, especially in relation to mining. Future developments in the sector hinge on the development of a legal and regulatory framework conducive to mining, and on clear procedures for the acquisition of land for the exploration and exploitation of resources. Such frameworks will also ultimately impact the extent to which forthcoming benefits from mining are shared across the population.

A sharper slowdown in the Chinese economy (the main export destination for logs), also poses a risk to growth and government revenues. With logging sources expected to be depleted in the long run and uncertainty around the mining potential, the Solomon Islands faces the challenge of developing new sources of growth.

A number of challenges remain in the fisheries sector, including licensing, monitoring, and enforcing compliance in offshore fisheries. If sustainably managed, fisheries offer the potential to contribute to growth and government export earnings over the medium term.

Tourism, which is projected to increase by 5 to 6 percent per year in the Pacific region until 2020, could also make an important contribution to broad-based and

more inclusive growth, although at this stage it is not very developed. Challenges in developing the tourism sector include but are not limited to low market exposure of tourism products, limited transport infrastructure and services, and weak access to finance for small and medium enterprises operating in the sector.

Also, should future formal employment opportunities continue to remain concentrated in Honiara and the immediate surroundings, this might exacerbate challenges associated with rapid population growth, rural-to-urban migration, and the growth of urban squatter settlements.

Figure 1. Trade balance

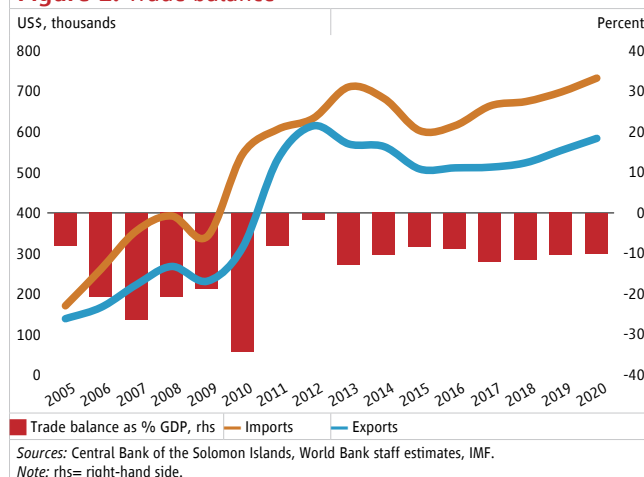
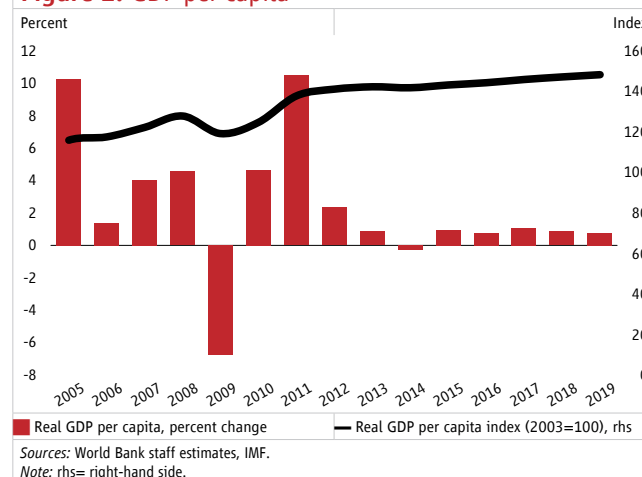
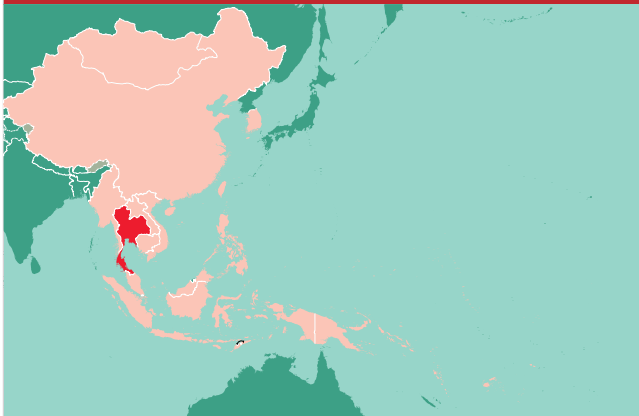


Figure 2. GDP per capita



SOLOMON ISLANDS Selected Indicators	2014	2015	2016e	2017e	2018f	2019f
Real GDP growth, at constant prices	2.0	3.3	3.0	3.3	3.0	3.0
Per capita GDP	-0.8	1.1	0.8	1.0	0.8	0.8
GDP deflator	3.2	1.6	4.3	1.8	1.8	2.5
Inflation (Consumer Price Index, eop)	4.2	2.2	2.7	2.5	3.6	2.3
Fiscal accounts (% of GDP)						
Expenditures	46.3	46.4	45.1	44.0	41.6	41.4
Revenues	48.0	46.1	43.8	43.4	43.2	42.7
General government balance	1.7	-0.3	-1.4	-0.7	1.6	1.3
Balance of Payments (% of GDP)						
Current account balance	-4.3	-2.6	-3.8	-7.1	-5.7	-4.5
Imports (goods and services)	59.3	52.7	51.3	52.7	51.0	50.0
Exports (goods and services)	49.2	44.6	42.8	40.8	39.8	39.9
Foreign direct investment	1.8	2.0	3.1	3.5	3.4	3.3
Gross reserves (in US\$ millions, eop)	514.3	519.6	526.0	544.6	592.1	653.5
In months of next year's imports	10.2	10.1	10.1	9.7	10.1	10.7
External debt (% of GDP)	10.4	9.8	10.2	11.2	12.4	13.8
Exchange rate to US\$ (average)	7.4	7.9	8.0	8.0	8.0	8.0

Sources: World Bank; International Monetary Fund.
Notes: e = estimate; f = forecast.

THAILAND	
	
	2016
Population, million	68.1
GDP, current US\$ billion	407.8
GDP per capita, current US\$	5984
Poverty rate (\$1.9/day 2011PPP terms) ^a	0.0
Poverty rate (\$3.1/day 2011PPP terms) ^a	0.9
Gini coefficient ^a	37.8
School enrolment, primary (% gross) ^b	97.9
Life expectancy at birth, years ^b	74.2
<small>Sources: World Bank WDI and Macro Poverty Outlook. Notes: a) Most recent value (2013); b) Most recent WDI value (2014).</small>	

Summary

The Thai economy continued to recover, growing by 3.2 percent in 2016, up from 2.9 percent in 2015. While a broad-based recovery has yet to take hold, there are signs of improvement in private investment and exports. The economy is projected to grow by 3.2 percent in 2017 amid positive momentum from fiscal stimulus, tourism arrivals, private consumption and exports. Stabilizing agricultural prices may slow further improvements in living conditions in rural areas.

Recent Developments

Thailand's economy grew by 3.2 percent in 2016, a slight improvement compared to 2.9 percent in 2015, due to fiscal stimulus and higher private consumption and exports. The contribution of net exports to growth increased, mainly due to stronger export demand,

higher tourism receipts, and lower imports. The growth rate in gross fixed capital formation decelerated, also due to challenges in implementing large public infrastructure projects. The passing of the draft Charter in the August 2016 public referendum and the royal transition following the passing of King Bhumibol Adulyadej helped improve business sentiment and confidence. As a result, private investment increased marginally in 2016 (by 0.4 percent, yoy), while private consumption rose by 3.1 percent, up from 2.2 percent in the previous year.

On the production side, agriculture recovered from a severe drought, with output expanding by 0.6 percent. Manufacturing growth remained relatively constant at 1.4 percent, where a significant increase in production of electrical appliances partly offset a stagnant automotive sector, while construction expanded by 8.3 percent. Services expanded by 4.3 percent, including due to strong tourism growth. Tourist arrivals increased by 8.9 percent over the year, despite a contraction in the last quarter following the clampdown on illegal tour operators.

The fiscal deficit widened in 2016, including due to scale-up of public investment toward the end of the year, while public debt remained at 45 percent of GDP. The current account surplus increased to 11.4 percent of GDP in 2016, compared to 8.1 percent of GDP a year earlier, reflecting a gradual pickup in exports and subdued imports during most of the year. Capital outflows intensified, including due to Thai direct investment abroad.

The nominal exchange rate depreciated slightly in the second half of the year in line with expectations of a hike in the U.S. Fed Fund rate, but recovered by the end of the year. International reserves further increased to US\$183 billion by end-February 2017, equal to 3.2 times short-term foreign debt. The policy interest rate remained unchanged at 1.5 percent since April 2016 as headline inflation gradually picked up toward

the target band of 1 to 4 percent on account of higher food and oil prices.

Thailand has made impressive progress in reducing poverty over the last two decades. Extreme poverty, measured by the international extreme poverty line (US\$1.90 per day, at 2011 PPP) affected only 0.03 percent of the population in 2015, down from 14.3 percent in 1988. Based on the national poverty line (approximately US\$6.20 per day 2011 PPP), the poverty rate was 10.5 percent in 2014.

Outlook

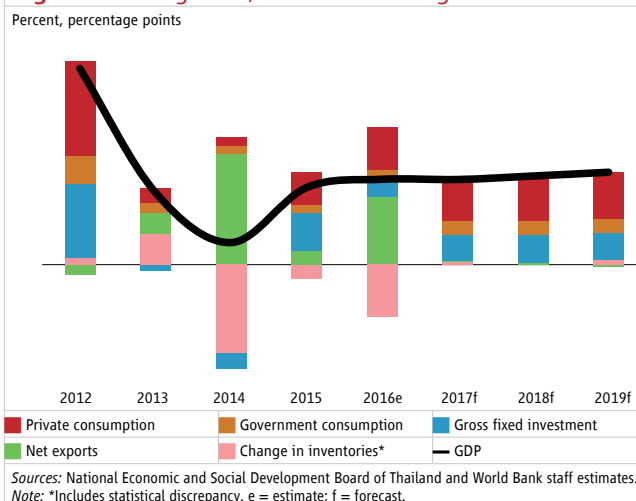
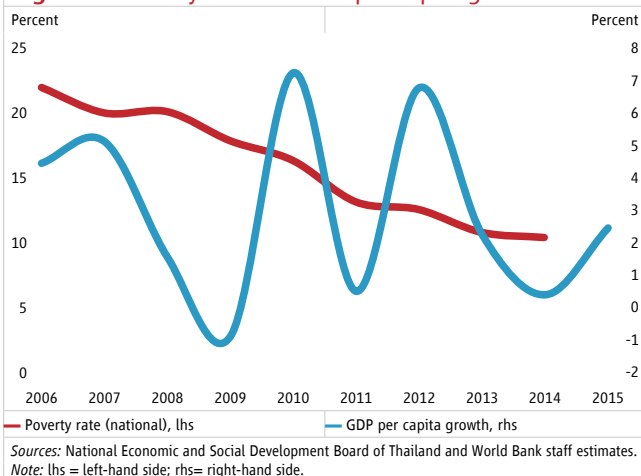
Real GDP growth is projected to remain at 3.2 percent in 2017. Consumption would continue to underpin growth, as consumer confidence improves and households deleverage. Stronger public infrastructure projects and some structural reforms would help crowd in private investment. The current account balance is expected to narrow as domestic demand and imports recover. The fiscal deficit is projected to widen to 3.7 percent of GDP in FY2017, with public investment as the key contributor. Similar trends are expected to continue in outer years; however, underlying productivity challenges will cap growth at 3.4 percent even in 2019.

Rising agricultural income in recent years mainly reflected a global commodity price cycle, rather than productivity increases in agriculture. As agricultural prices retreat, growth could become less inclusive, with the rural poor negatively affected. Constrained by education attainment and skills levels, a large share of the poor workers might not be able to reap the full benefit of the job opportunities in the high-end services sector. As a consequence, further improvement in living conditions in rural areas may be more muted.

Risks and Challenges

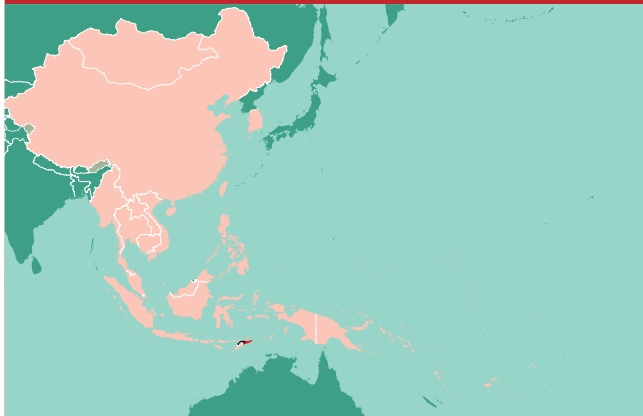
A potential deterioration in global economic prospects could weigh on Thai export recovery. Growing economic, political, and institutional uncertainty in response to the policies of the new U.S. administration and results of upcoming elections in the Euro area could affect exports and tighten financing conditions and dent the nascent recovery. Still, Thai authorities have ample monetary and fiscal buffers while a flexible exchange rate serves as a buffer against external shocks.

In addition, while the passage of the draft constitution in the August 2016 public referendum and the royal transition lowered domestic risks, postponing ongoing political reforms could increase political uncertainty and could delay public spending and economic reforms, and could weigh on consumer and investor confidence.

Figure 1. GDP growth, contributions to growth**Figure 2. Poverty rate and GDP per capita growth**

THAILAND Selected Indicators	2014	2015	2016 e	2017 f	2018 f	2019 f
Real GDP growth, at constant market prices	0.9	2.9	3.2	3.2	3.3	3.4
Private Consumption	0.6	2.2	3.1	3.0	3.3	3.4
Government Consumption	2.1	2.2	1.6	3.1	3.1	3.1
Gross Fixed Capital Investment	-2.5	5.7	2.9	4.1	4.2	4.2
Exports, Goods and Services	0.2	0.7	2.1	2.0	2.2	2.4
Imports, Goods and Services	-5.3	0.0	-1.4	2.2	2.5	2.8
Real GDP growth, at constant factor prices	0.9	3.3	3.4	3.2	3.3	3.4
Agriculture	0.7	-5.7	0.6	0.9	1.2	1.3
Industry	-0.3	2.8	2.0	2.0	2.1	2.2
Services	1.8	4.8	4.7	4.2	4.3	4.3
Inflation (Consumer Price Index)	1.9	-0.9	0.2	1.5	2.0	2.5
Current Account Balance (% of GDP)	3.8	8.1	11.4	9.5	9.0	8.5
Financial and Capital Account (% of GDP)	-3.7	-7.9	-11.2	-9.3	-8.8	-8.3
Net Foreign Direct Investment (% of GDP)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Fiscal Balance (% of GDP)	-1.8	-2.0	-2.6	-3.7	-3.7	-3.7
Debt (% of GDP)	44.9	45.3	45.0	46.8	48.2	49.3
Primary Balance (% of GDP)	-0.7	-0.8	-1.5	-2.4	-2.4	-2.3

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty and Equity Global Practice.
Notes: e = estimate; f = forecast.

TIMOR-LESTE	
	
	2016
Population, million	1.3
GDP, current US\$ billion ^a	1.6
GDP per capita, current US\$ ^a	1,239
Basic needs poverty rate ^a	41.8
Poverty rate (\$1.9/day 2011PPP terms) ^a	30.3
School enrolment, primary (% net) ^b	96.6
Life expectancy at birth, years ^b	68.0
Source: World Bank WDI and Macro Poverty Outlook. Notes: (a) Most recent value (2014). (b) Most recent WDI value (2014).	

Summary

As Timor-Leste enters an election year, it can look back on considerable gains made in poverty reduction at a faster pace than in most countries. Nevertheless, poverty rates remain high, and there is a heightened risk of backsliding on progress to date. Oil production is ceasing, leaving a large fiscal deficit and a depleting sovereign fund. An accelerated public infrastructure program aims to raise prospects for growth, support the diversification of the economy, and create a sustainable tax base. However, the success of this strategy depends on investments representing value for money and on meeting the economic and social development needs of the country.

Recent Developments

The latest poverty estimates indicate that in 2014, about 42 percent of people lived in basic needs poverty. This is a

significant reduction from the 50 percent poverty rate in 2007, following the end of a period of conflict. Over the same period, the domestic economy grew by 77 percent, with per capita GDP up by 48 percent, although most of this growth was seen in public-sector-led areas of the economy. Using the international US\$1.90 a day poverty line, poverty has fallen even more rapidly—from 47.2 to 30.3 percent over the period—a rate of 2.4 percentage points a year. That is rapid progress, and faster than most developing countries have achieved over a similar period. Nonincome indicators of poverty have also improved rapidly, with electricity extended to 72 percent of the population, compared to 37 percent in 2007, and markedly increased access to improved sanitation and water sources. However, unemployment and under-employment remain high, education levels low, and malnutrition and other health problems severe.

Domestic (excluding offshore oil) economic activity is projected to have grown at a reasonable pace of 4.3 percent in 2014, and around 5 percent in 2015. Trends in government spending—both public investment and current spending—continue to have the most direct effect on economic growth. From 2012 to 2014, GDP growth rates varied in line with stop-start government spending trends. Inflation has been low for the last three years, and over 2016 the economy experienced deflation, with the national consumer price index falling in each month except for December. Falling prices have been led by an appreciating U.S. dollar, Timor-Leste's official currency, which has led to a generalized fall in prices of imports. Continued low commodity prices over 2016, especially oil and food have also contributed to falling prices.

Offshore oil production continues to decline as existing oil fields are depleted. While in 2016 Timor-Leste ceased publishing oil production volumes as part of its reporting in the annual Government Budget, estimates derived from government revenue indicate that production may have fallen by as much as 50 percent in 2016. Timor-Leste's non-oil exports are basic and small scale. The most significant commodity export is coffee, while

tourism affords some additional income-generating activities. Coffee has been a long-standing cash crop in Timor-Leste, but the sector has been stagnant for the last decade, suffering from a lack of investment and facilitation services. However, provisional data indicate that coffee exports rose sharply over 2016, with annual exports of almost US\$30 million more than double their level over the last three years. This is likely due to a combination of sale of stockpiles built as coffee prices fell, and improvements in yield following adverse weather conditions in the previous two years. While up-to-date information on visitor arrivals is not available, the latest estimates from 2014 indicate that the number of visitors is very low by international standards, at just 60,000 per year, although the number has been gradually increasing.

In 2016, government receipts from the petroleum sector fell sharply from close to US\$1 billion in 2015 to a projected US\$400 million in 2016. Over the same period, government expenditure is projected to have increased by US\$350 million, opening up a wider fiscal gap. The overall government budget (including oil revenues) fell into deficit for the first time since oil revenues came on stream in 2005, with a deficit of 6.4 percent of overall GDP. In 2016, this deficit is projected to reach 29 percent of overall GDP. This indicates that even after accounting for the investment returns from the Petroleum Fund, the government is running down its financial assets. The independently estimated level of sustainable budget financing from the Petroleum Fund in 2016 was US\$545 million, whereas actual withdrawals amounted to almost double that level, at US\$900 million.

In July 2016, the government announced a supplementary budget to increase expenditure appropriations by US\$400 million (or 26 percent of nonoil GDP) for the rest of the year to December 2016. The supplementary budget documentation notes that expenditure is being front-loaded in advance of elections, planned to take place in mid-2017. Projected government expenditure increased by over 20 percent

in 2016, and by 50 percent since 2013. Government transfers and capital expenditure have accounted for the majority of increased spending. Transfer payments of veterans' pensions have continued, supplemented by large (US\$218 million in 2016) transfers to the autonomous zone of Oecusse, a district of Timor-Leste of approximately 60,000 inhabitants—a budget allocation of around US\$3,500 per person for one year. Increased capital expenditure includes a number of road projects, which vary radically in cost—one road under construction in a rural, sparsely populated area costs US\$10 million per kilometer and is intended to serve a possible future oil industry. A government contribution towards a new public-private partnership container port development of US\$131 million was also transferred to an escrow account in 2016.

Outlook

Economic activity is expected to be manifestly affected by the conduct of both presidential and parliamentary elections in 2017. Some productive activity is expected to be diverted to campaigning efforts, while the recently prepared 2017 budget marks a reduction in planned expenditure as the administration moves to “caretaker mode” during the election year. As a result, GDP growth is expected to fall to 4 percent in 2017, before recovering to 5 percent in 2018 with the first full-year budget of the new government and continuation of planned public and private investment activities.

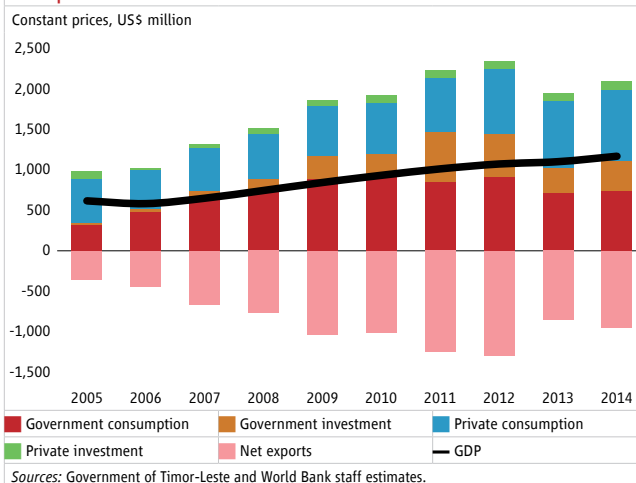
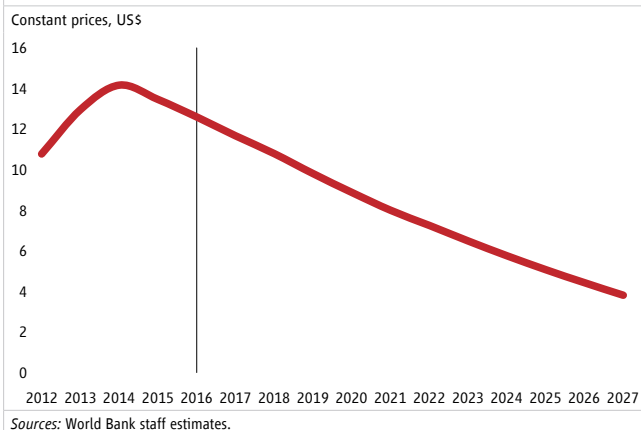
Following a smooth completion of elections in 2017, foreign direct investment is expected to continue on a modest upward trend, although substantial scaling up of investment is likely to require significant policy efforts in areas of key concern to business—including the quality of ICT and connective infrastructure and effective governance, particularly in areas of property rights (particularly land) and government service provision.

Continued government investment in basic infrastructure such as national highways, local roads, community irrigation, and water and sanitation is expected to support relatively robust poverty-reduction, both via improved standards of living and opportunities for income generation. However, high-cost developments such as the Tasi Mane project are expected to have only a very weak impact on poverty reduction in the near term, and may never yield a social return in a range of feasible scenarios.

Risks and Challenges

Recent surveys show that since the period of civil conflict in 2006, Timor-Leste has made good progress in alleviating poverty, and the benefits of public investments are becoming evident with sharply improved access to electricity and significant improvements in other basic infrastructure services. However, while it may be appropriate for an initial stage of development, these investments and the associated gains have been achieved using a finite resource of oil revenues. The overriding fiscal challenge for Timor-Leste is to transition to a more sustainable model and rebalancing towards private-sector-led growth over the next 5 to 10 years.

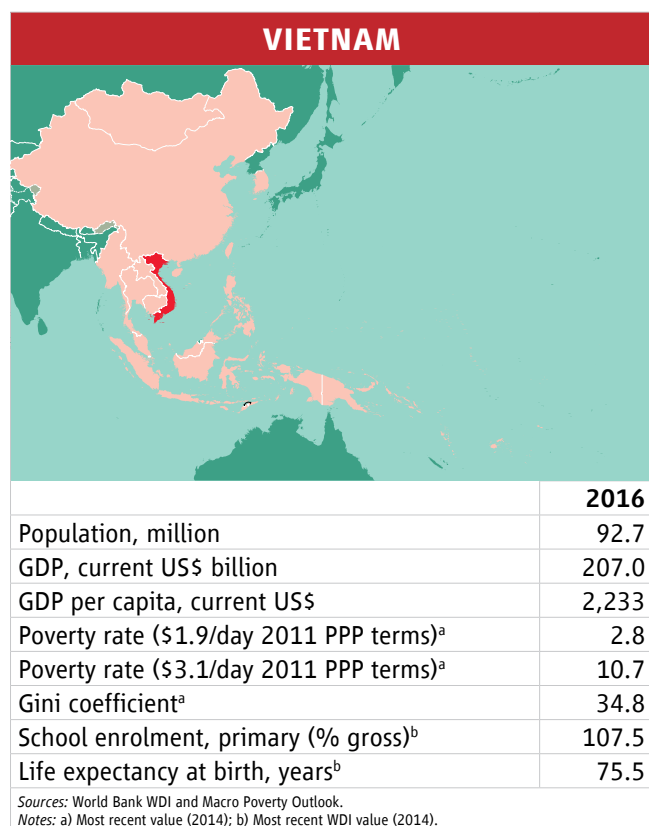
The prospect of new oil fields being exploited in Timor-Leste remains highly uncertain. A recent joint statement by the governments of Australia and Timor-Leste indicated that they are engaging in discussions on a permanent maritime boundary, which would determine the national claims to the vast majority of viable oil fields that lie in Australian waters. Even if viable fields were developed, which is unlikely to happen for 10 years, efforts to diversify towards sustainable models of private sector growth would be just as important to provide a range of economic livelihood opportunities and guard against possible effects of Dutch disease.

Figure 1. Gross domestic product, expenditure components**Figure 2. Petroleum Fund wealth per capita**

TIMOR-LESTE Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
GDP growth, at constant market prices (non-oil)	5.9	4.3	5.0	4.0	5.0	6.0
Exports, goods and services, US\$ million ^a	15.5	18.0	27.4	28.5	29.6	30.8
Imports, goods and services, US\$ million	-764.0	-692.0	-728.0	-864.0	-914.0	-930.0
Trade in services, net, US\$ million	-388.0	-414.0	-486.0	-648.0	-647.0	-605.0
CPI inflation, period average	0.7	0.6	-1.3	3.0	4.0	4.0
Current Account Balance, % of GDP ^a	27.6	12.2	2.4	-11.2	-13.7	-14.8
Foreign Direct Investment, US\$ million	47.0	35.0	170.0	200.0	200.0	220.0
Fiscal Balance, % of GDP ^b	21.8	-6.4	-29.2	-18.8	-35.1	-34.9

Sources: Government of Timor-Leste and World Bank staff estimates.

Notes: e = estimate, f = forecast. (a) Denominator is total GDP, since current account includes offshore oil sector as domestic activity. (b) Overall balance including incorporating petroleum receipts and current earnings from Petroleum Fund, as a proportion of total GDP.



Summary

Economic growth has moderated in 2016 to 6.2 percent, accompanied by moderate inflation and a strengthening external position. Vietnam's medium-term outlook remains positive, albeit subject to downside risks both domestic and external. An acceleration of structural reform to support a more productivity-led growth model would help Vietnam sustain its long-term development. Rising antitrade sentiment and associated risks of protectionist measures in major economies pose significant risks to Vietnam's highly open economy.

Recent Developments

Economic activity in Vietnam moderated in 2016. GDP is estimated to have expanded by 6.2 percent in 2016, below the 6.8 percent in 2015. The slowdown was driven by weakness in the agriculture and mining

sectors while manufacturing output and services growth strengthened. The agroforestry-fisheries sector expanded by a mere 1.36 percent, the lowest growth rate since 2011, reflecting unfavorable weather conditions in the first half of the year. The industry and construction sector expanded by 7.6 percent, below last year's 9.6 percent, driven primarily by a 4 percent contraction in the mining sector. By contrast, growth of the services sector accelerated to 7 percent from 6.3 percent last year due to buoyant private consumption and strong tourism receipts. On the demand side, stronger growth was supported by investment (spurred by strong FDI inflows) and improved private consumption.

Healthy labor market developments point to an aggregate improvement in welfare and continued decline in poverty. Nearly 1 million people moved from agriculture, finding jobs mostly in industry and construction, which saw a 7.6 percent yoy growth, and to a limited extent in the service sectors. Observed growth in nonagricultural jobs is expected to compensate or was a coping mechanism for the stagnation of incomes in agriculture due to El Niño drought. However, localized increases in poverty are projected in communities (especially ethnic minorities) who are both more dependent on agriculture and less integrated into the rest of the economy, and those affected by the environmental pollution in the central coastal provinces of Vietnam.

Resilient growth was accompanied by moderate inflation and a strengthening external position. After falling to record lows in 2015, inflation has picked up mainly due to administrative price hikes for health and education services but core inflation remains subdued and headline inflation has stayed below the official target of 5 percent. Despite the unfavorable external economic environment, Vietnam's exports (in nominal terms) increased 9 percent in 2016, outperforming most competitors in the region. This, combined with a slowdown in import growth, led to a trade surplus in turn widening the current account surplus from 0.5 percent of GDP in 2015 to an estimated 3 percent in 2016.

Foreign direct investment (FDI) remains an important driver of Vietnam's trade and more generally economic performance. FDI inflows peaked in 2016 at a record level of almost US\$16 billion (7.7 percent of GDP).

The exchange rate has been relatively stable throughout the year, though the Vietnamese dong started to depreciate in late 2016. The State Bank of Vietnam has gradually rebuilt foreign reserves, albeit they remained at a relatively low 2.8 months of imports at the end of 2016. In the context of a strengthening U.S. dollar and sharper depreciation of currencies of major Vietnam trading partners, concerns of real exchange rate appreciation of the dong and its possible negative impacts on Vietnam's export competitiveness remain.

While policy rates have remained unchanged, credit growth remains elevated. Credit growth reached about 19 percent (yoy) in December 2016. This rapid expansion of credit—more than twice the growth rate of nominal GDP—provides some cause for concern, particularly since Vietnam's credit-to-GDP ratio—about 120 percent in December 2016—is already high and the overhang of past non-performing loans has not been fully resolved.

Sizable and persistent fiscal deficits have emerged in recent years. The fiscal deficit averaged 5.5 percent of GDP during 2011–16, compared to 2.2 percent of GDP during 2006–10. Preliminary data show that fiscal pressure remained in 2016, where the fiscal deficit was estimated at 6.5 percent of GDP. Persistently high fiscal deficit is the main reason for accumulating public debt which was estimated to reach the legally mandated ceiling of 65 percent of GDP at the end of 2016.

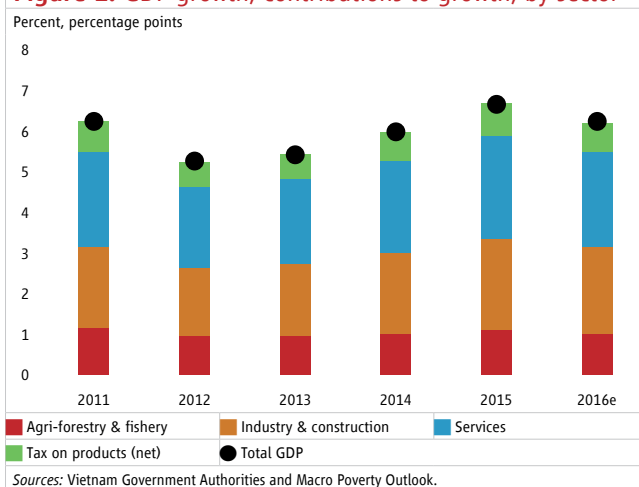
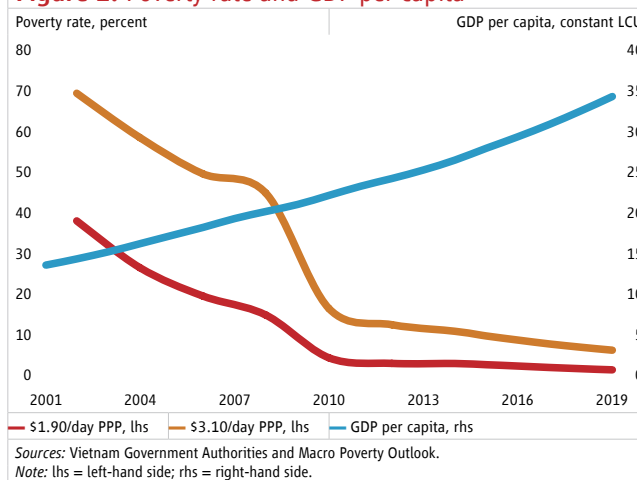
Outlook

Vietnam's medium-term outlook remains favorable. GDP growth is projected to improve gradually during 2017–2019, driven by robust domestic demand and export-oriented manufacturing. Inflation pressures

overall are expected to remain moderate thanks to subdued commodity and energy prices globally. On the fiscal front, some fiscal consolidation is expected, as well as acceleration of divestment, though at a gradual pace that would contain the further rise of public debt.

Risks and Challenges

Vietnam's medium-term outlook remains positive, but pronounced downside risks remain. Domestically, delayed implementation of structural and fiscal reforms could intensify macroeconomic vulnerabilities and lower potential growth. Externally, intensifying uncertainties of the global economy could dim Vietnam's growth outlook through trade and investment channels. Dealing with vulnerability to shocks—which in recent years are mainly climate and environmental disasters—continues to be a challenge for improving household welfare, particularly in rural areas.

Figure 1. GDP growth, contributions to growth, by sector**Figure 2. Poverty rate and GDP per capita**

VIETNAM Selected Indicators	2014	2015	2016e	2017f	2018f	2019f
Real GDP growth, at constant market prices	6.0	6.7	6.2	6.3	6.4	6.4
Private Consumption	6.1	9.3	7.4	7.2	7.2	7.0
Government Consumption	7.0	7.0	8.8	5.0	6.7	8.6
Gross Fixed Capital Investment	9.3	9.4	9.3	8.7	8.2	7.8
Exports, Goods and Services	11.6	8.8	17.9	14.6	13.6	14.2
Imports, Goods and Services	12.8	14.3	19.2	15.3	14.0	14.4
Real GDP growth, at constant factor prices	5.7	6.8	6.1	6.4	6.5	6.5
Agriculture	3.4	2.4	1.4	1.7	2.0	2.0
Industry	6.4	9.6	7.6	8.3	8.5	8.6
Services	6.2	6.3	6.9	6.5	6.3	6.2
Inflation (Consumer Price Index)	4.1	0.6	2.7	4.0	4.0	4.0
Current Account Balance (% of GDP)	5.0	0.5	3.0	1.2	0.8	0.5
Fiscal Balance (% of GDP)	-6.3	-6.1	-6.5	-6.2	-5.9	-5.3
Debt (% of GDP)	55.1	58.3	62.1	63.6	64.0	65.3
Primary Balance (% of GDP)	-4.6	-4.2	-4.4	-4.0	-3.8	-3.1
Poverty rate (\$1.9/day PPP terms) ^{a,b,c}	2.8	2.5	2.1	1.8	1.5	1.2
Poverty rate (\$3.1/day PPP terms) ^{a,b,c}	10.7	9.5	8.5	7.6	6.8	6.0

Sources: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

Notes: e = estimate; f = forecast. (a) Calculations based on EAPPOV harmonization, using 2014-VHLSS. (b) Projection using neutral distribution (2014) with pass-through = 0.87 (Med) based on GDP per capita in constant LCU. (c) Actual data: 2014. Nowcast: 2015 - 2016. Forecast are from 2017 to 2019.

