ASEAN+3 REGIONAL ECONOMIC OUTLOOK 2018

Resilience and Growth in a Changing World

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ASEAN+3 Macroeconomic Prospects and Challenges

Acknowledgments

The assessments provided in the *ASEAN+3 Regional Economic Outlook 2018* are part of AMRO's continuing surveillance of major economic developments and risks in the ASEAN+3 region. It aims to provide a comprehensive assessment of recent developments and the outlook for the regional economy and its linkages with the global economy, as well as inter-linkages in the financial markets, mainly through studies by staff in the Surveillance Group at AMRO and through consultation visits to member economies.

This report was prepared under the guidance of AMRO Director Dr. Junhong Chang, AMRO Chief Economist Dr. Hoe Ee Khor with other AMRO Senior Management, by the Regional and Financial Surveillance Team at AMRO led by Ms. Chuin Hwei Ng.

The chapter on "ASEAN+3 Macroeconomic Prospects and Challenges" was anchored by Mr. Anthony Tan, and the thematic chapter of "Resilience and Growth in a Changing World" was anchored by Mr. Suan Yong Foo. Team members contributing to the report are Ms. Siti Athirah Ali, Mr. Edmond Choo, Ms. Laura Grace Gabriella, Ms. Vanne Khut, Mr. Justin Lim and Dr. Xinyi Liu. ADB Consultant Dr. Li Lian Ong provided valuable technical advice to set up and implement macro-financial surveillance tools in this analysis. Dr. David Skilling of Landfall Strategy Group contributed to the case studies and insights in the thematic chapter.

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Foreword

Following the successful launch of this flagship report, the "ASEAN+3 Regional Economic Outlook" (AREO) last year, AMRO has continued its outreach and publication of our surveillance work and research. Shortly after the publication of AREO 2017 last year, we published our first Country Consultation Report in May 2017 with support from our member economies, followed by other reports. Since January 2018, we have also started publishing short timely Monthly Updates of the AREO on our website.

In this AREO 2018, we have integrated the assessments from our regional surveillance and country surveillance work, by introducing analysis of business cycles and credit cycles. This framework enables a more consistent and comparable cross-country assessment within the region, and improves the analysis of domestic and spillover risks among economies. We are continually improving our analytical toolkit and framework, to fulfil our mandate of contributing to the macroeconomic and financial stability of the region through conducting regional economic surveillance and supporting the implementation of the Chiang Mai Initiative Multilateralization (CMIM) Agreement.

Compared to a year ago, the ASEAN+3 region faces an improving global economic outlook, led by robust growth in the U.S. and Eurozone, but also external risks to this outlook. Exports have grown with external demand, domestic demand has remained resilient, and inflation is benign although firming in some economies. The two top risks against this outlook, presented in our Global Risk Map in this report, are trade protectionism and a faster-than-expected tightening in global financial conditions. It would be prudent for policymakers to prioritize financial stability over the economic growth objective given these risks. With monetary and fiscal policy space likely to become more constrained in this environment, using the full set of policy tools to deal with external shocks would be sensible.

The thematic study in last year's AREO was the "ASEAN+3 Region: 20 Years after the Asian Financial Crisis". We noted that in recovering from the Asian Financial Crisis (AFC), the commitment and openness to global trade, foreign direct investment and capital flows was a key factor enabling the region to benefit from regional trade and integration and to recover quickly.

This year's thematic study is titled "Resilience and Growth in a Changing World". It considers how the region can rise to the challenges posed by global forces including fundamental changes in trade and production networks, and technology. And it explores how the region can best use and develop resources, including human capital, to maintain resilience and sustain growth. These forces are putting the region's "manufacturing for exports" strategy to the test. For example, while the formation of global value chains has accelerated intra-regional trade and integration, it may also magnify the transmission of external shocks, such as trade protectionism, along the whole supply chain. Technology and automation, and the growing services sector, give rise to both challenges and opportunities for our economies in the search for resilience and growth. Working in our region's favor are the ample buffers and resources that can be used to invest in the region's productive capacity and to deepen integration for collective benefit.

Hoe Ee Khor
AMRO Chief Economist

Highlights

Macroeconomic Prospects and Challenges

The global economic outlook has improved across advanced and emerging economies, with inflation firming. In the U.S., robust growth has seen some firming of price pressures, with additional fiscal stimulus from tax cuts and fiscal spending expected this year and in future. In the Eurozone, the cyclical recovery has been stronger than anticipated, supported by strengthening private sector demand. In contrast to the Eurozone, the U.K. economy has slowed on Brexit uncertainty.

Global trade has expanded robustly with global demand, with added impetus from the global semiconductor upcycle, and growing capital expenditures. Technology sector indicators such as global semiconductor sales continue to signal strong momentum for global trade. Commodity prices in energy and industrial metals have also recovered, supporting exports.

Given that the U.S. Fed has already started with its monetary policy normalization and interest rate hikes, and with the ECB set on an exit strategy, global financial conditions would tighten. Inflation has re-emerged as a concern in the U.S. that may trigger faster-than-expected monetary policy tightening. Despite some selloffs in global equities in early February 2018, emerging markets in ASEAN+3 have continued to receive net capital inflows into bond markets. As the region has received large inflows into bond markets over the last five years, the risk and impact of outflows that may be triggered by tightening of global financial conditions or confidence shocks should be closely monitored.

Boosted by favorable global conditions, regional economic growth has been underpinned by resilient domestic demand and export growth, with stable inflation. Most regional economies are at mid-business cycle, with a small output gap around trend growth. With improving external demand, growth in the region is expected to be sustained at mid-5 percent level, with AMRO's GDP growth forecast for the ASEAN+3 region at 5.4 percent for 2018 and 5.2 percent for 2019. GDP growth is forecast at 6.6 percent for China in 2018 and 1.3 percent for Japan in FY2018.

The two main near-term risks facing the ASEAN+3 region are externally driven, as summarized in AMRO's Global Risk Map:

- Faster-than-expected tightening in global financial conditions led by the U.S. Fed's interest rate hikes in response to rising domestic inflation could cause sharp market reactions if policy actions are not well communicated. The spillovers to the region would be via capital outflows, higher sovereign yields, higher borrowing costs and debt refinancing risk; and

- Escalation of global trade tensions from imposition of tariffs by the U.S. on more imports and on major trading partners including those in the ASEAN+3 region could derail the region's robust export growth. The impact of trade tensions would be amplified through the global value chains (GVCs) in the region. Furthermore, escalation of trade tensions would increase uncertainties and generate spillovers onto the global economy as well as on financial markets.

Tail risks in the near term include escalation of geopolitical risks in the region, weaker than expected growth in G3 economies in conjunction with other risks of trade protectionism. The risk of a sharper-than-expected slowdown in China's economic growth is assessed as unlikely in the near-term. Finally, there are perennial non-economic risks of climate change and natural disasters, and cyber-attacks.

The improving external demand has allowed the region to build up buffers against potential external shocks. Considering the significant degree of foreign participation in regional domestic financial markets, the sudden unwinding of foreign holdings of local currency assets and capital outflows in a "risk-off" scenario would put downward pressure on exchange rates and foreign exchange reserves. However, regional exchange rates have become more flexible in recent years, and have played a greater role as a shock absorber. With judicious intervention by the authorities, the pace of adjustment to external shocks and the impact on the real economy can be managed.

Policymakers should continue to build policy space, particularly in monetary policy, for tighter global financial conditions ahead. The policy mix of fiscal, monetary and macroprudential policies would depend on where each economy is currently, in its business and its credit cycle.

- For economies in the mid-business cycle, there would be no strong impetus for policymakers to pursue additional monetary or fiscal stimulus. In contrast, for economies in the late-business cycle where there are signs of inflation pressures or external imbalance building up, policymakers may consider adjusting the degree of monetary accommodation and reducing fiscal stimulus.

- Even though most regional economies are in an early- to mid-business cycle, given the build-up of credit over the past years, policymakers should prioritize financial stability in the near future over economic growth, with monetary policy on a tightening bias.

- Where pockets of vulnerability have built up in sectors such as the property market, tightening macroprudential policy can help safeguard financial stability, and most regional economies have already tightened macroprudential policy proactively.

- With monetary policy constrained by global conditions, fiscal policy may have to play a greater role in supporting growth so that the overall macroeconomic policy is not tightened too much. However, this is subject to available fiscal space and to fiscal rules.

- Policy will have to be calibrated taking into account constraints from domestic and external vulnerabilities such as leverage, and degree of reliance on external financing. The policy momentum for structural reform should continue, to build productive capacity.

Theme: Resilience and Growth in a Changing World

The thematic chapter studies how the region can maintain its resilience and growth in view of fundamental and global changes in trade and production networks and technology as well as demographic challenges. ASEAN+3 economies have pursued a "manufacturing for exports" strategy over the past few decades – starting with Japan and Korea, then the major ASEAN economies and now the developing ASEAN economies – creating strong and self-reinforcing dynamics to boost economic growth, employment, productivity and wages. The formation of GVCs, centered on China as a production base in the past decade, has enabled economies in our region to boost exports and benefit from export-oriented FDI to build up manufacturing capacity.

This "manufacturing for exports" strategy is now being put to the test by structural changes in the evolution of GVCs, which show signs of plateauing with enhanced domestic productive capacity that allows countries to produce instead of importing intermediate inputs. GVCs, while making the ASEAN+3 region as a whole more competitive in attracting FDI and as a regional production base, also amplify the impact of near-term challenges such as protectionism on the whole supply chain. Balanced against these forces is

the region's growing intra-regional final demand, which is absorbing more regional exports and can help cushion the external shock of protectionism.

Technology has proven to be a double-edged sword in the "manufacturing for exports" growth dynamics. On the one hand, technology and automation in the manufacturing sector have meant that manufacturing will no longer generate employment opportunities as strongly as in the past. The case studies of the automobile sector and the textile, clothing and footwear (TCF) sector in the region are illuminating. They suggest that economies that lag in terms of developing skilled workforces and ramping up capacity to absorb and apply new technology will lose out the most in maintaining economic resilience and growth.

On the other hand, technology has facilitated the emergence of the services sector as a potential new engine of economic growth and employment. While the services sector is commonly regarded as low-productivity and creating low-wage jobs, this does not have to be the case with the right enabling technologies. Technology transforms services by making them tradable across borders and creating skilled employment opportunities, as seen in the case study on business process outsourcing. Technology also "commoditizes" and "uberizes" services, facilitating market-driven identification of services in demand, then use of technology to deliver these more efficiently and cheaply to consumers. Similar to trade in goods, growing intra-regional demand for services such as tourism can also create another engine of growth.

To harness the benefits of intra-regional demand, technology and the services sector, and to build resilience in an economy and in the region requires policy commitment and action. For an individual economy in ASEAN+3, given the challenges of changes in trade and production and technology, the key recommendation is to build resilience through multiple engines of growth, including through the growing services sector. For the ASEAN+3 region as a whole, the key recommendation is to strengthen intra-regional connectivity and integration to meet growing intra-regional final demand. While the region remains open to global trade and investment, leveraging on intra-regional demand will improve the resilience of the region as a whole against external shocks such as protectionism. The ample resources and diversity in development within the ASEAN+3 region are a source of strength.

- Improving connectivity through investment in domestic and intra-regional infrastructure, coupled with trade facilitation policies, can maximize the efficiency of current GVCs in the region, and through continued cost advantages, make the region still more competitive in the "manufacturing for exports" strategy. For GVC integration, reducing costs of imported inputs is as important as promoting exports, and establishing Special Economic Zones (SEZs) in the region could facilitate imported inputs for processing into exports.

- Developing a vibrant services sector would require a set of dedicated policies, starting with reviewing policies that may have disadvantaged the services sector relative to promotion of the manufacturing sector. Liberalizing the services sector to international competition would improve productivity, and technology is likely to force this liberalization against vested interests.

- As human capital and skilled labor are closely linked to the highest value-added segments of the services sector, leveraging on the availability of human capital across the ASEAN+3 region through supportive workforce and immigration policies may be appropriate. The challenge posed by technology and automation to unskilled employment has to be dealt with through a comprehensive policy mix, including labor force upskilling, immigration to leverage on mobility of skilled labor across ASEAN+3, and education policies.

Acronyms and Abbreviations

ADB	Asian Development Bank
AEs	Advanced Economies
AFC	Asian Financial Crisis
AI	Artificial Intelligence
BIS	Bank for International Settlements
BOJ	Bank of Japan
BPO	Business Process Outsourcing
CAPEX	Capital Expenditure
CPI	Consumer Price Index
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CBO / CPB	Congressional Budget Office / Netherlands Bureau for Economic Policy Analysis
DXY	U.S. Broad Dollar
EMBIG	Emerging Market Bond Index Global
EME	Emerging Market Economies
EMs	Emerging Markets
EIA	U.S. Energy Information Administration
ECB	European Central Bank
FCY	Foreign Currency
FDI	Foreign Direct Investment
Fed	U.S. Federal Reserve
FOMC	Federal Open Market Committee
FX	Foreign Exchange
G3	U.S., Euro area and Japan
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFCF	Gross Fixed Capital Formation
GVC	Global Value Chain
ICT	Information, Communications and Technology
IEA	International Energy Agency
IIF	Institute of International Finance
IMF	International Monetary Fund
KPO	Knowledge Process Outsourcing
LCY	Local Currency
MOVE	Merrill Lynch Option Volatility Estimate Index
NAFTA	North American Free Trade Agreement
NTBs	Non-Tariff Barriers
ODI	Outward Direct Investment
OECD	Organization for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
OPEC	Organization of the Petroleum Exporting Countries
PBC	People's Bank of China
PCE	Personal Consumption Expenditure
PMI	Purchasing Managers' Index
PPI	Producer Price Index
R&D	Research and Development
SEZ	Special Economic Zone
SOEs	State-Owned Enterprises
TCF	Textiles, Clothing and Footwear
TCJA	Tax Cut and Jobs Act
UNCTAD	United Nations Conference on Trade and Development
VIX	Chicago Board of Options Exchange Volatility Estimate Index
WEO	IMF World Economic Outlook
WTO	World Trade Organization
3MMA	3 month moving average
bps	Basis points
FY	Fiscal Year
mb/d	Million barrels per day
SA	Seasonally-adjusted
s.w.d.a.	Seasonally and working day adjusted
yoy	Year-on-year

ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus China (including Hong Kong), Japan, and Korea
ASEAN-4	Malaysia, Thailand, Indonesia and the Philippines
ASEAN-5	Malaysia, Thailand, Indonesia, the Philippines and Vietnam
ASEAN-6	ASEAN-5 and Singapore
ASEAN-9	ASEAN excluding Singapore

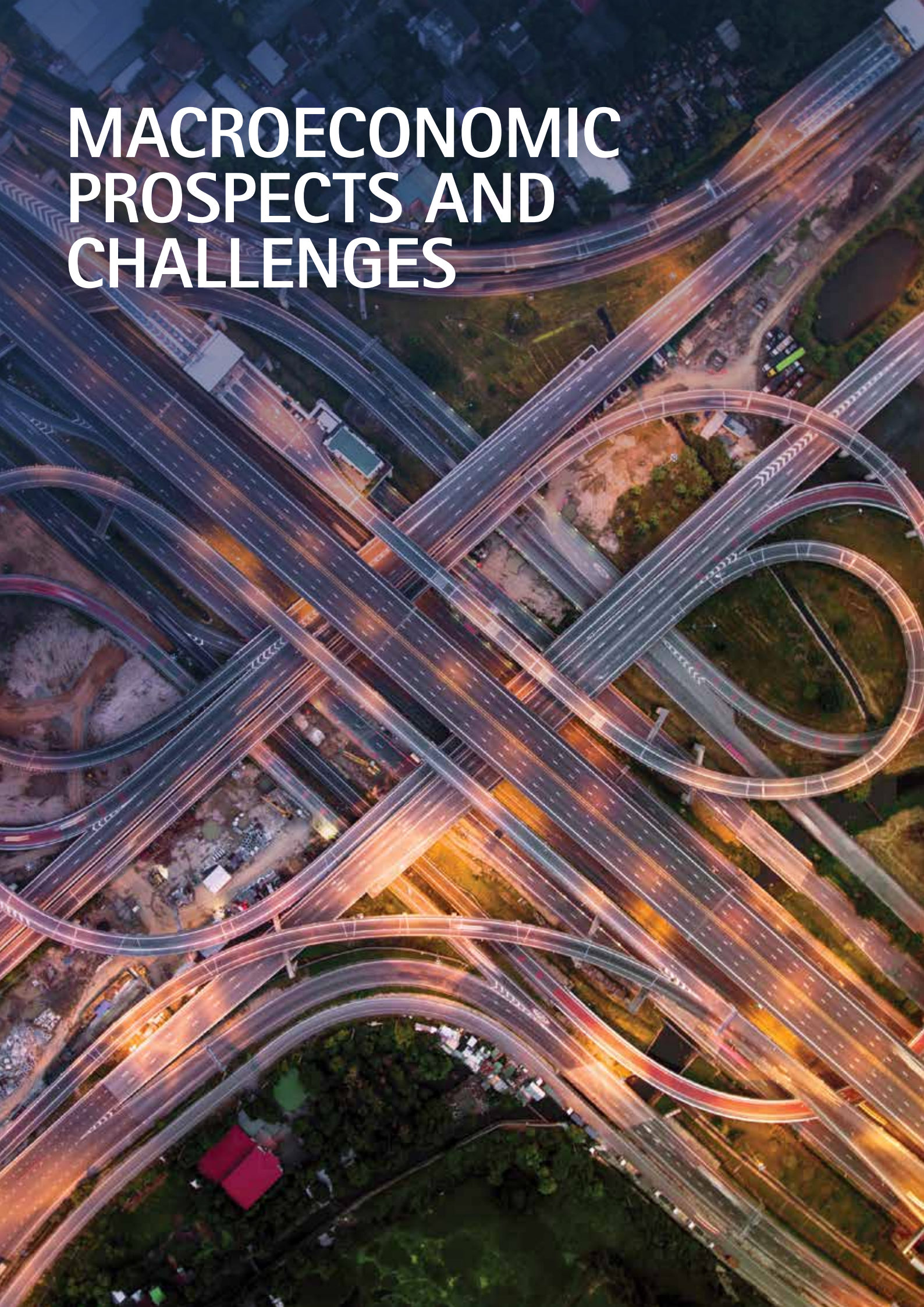
Plus-3	China, Japan and Korea
BCLM	Brunei, Cambodia, Lao PDR and Myanmar
BRICS / LatAM	Brazil, Russia, India, China and South Africa / Latin America
CLMV	Cambodia, Lao PDR, Myanmar and Vietnam
BN	Brunei Darussalam
CN	People's Republic of China
HK	Hong Kong, China[1]
ID	Indonesia
JP	Japan
KH	Cambodia
KR	Korea
LA, Lao PDR	Lao People's Democratic Republic
MM	Myanmar
MY	Malaysia
PH	The Philippines
SG	Singapore
TH	Thailand
VN	Vietnam

BR	Brazil
CA	Canada
DE	Germany
EU	European Union
HU	Hungary
IN	India
MX	Mexico
TR	Turkey
U.K.	United Kingdom
U.S.	United States of America

EUR	Euro
GBP	Pound Sterling / Pound
JPY	Japanese Yen
RMB	Chinese Renminbi
USD	U.S. Dollar

[1] For brevity, "Hong Kong, China" is referred to as "Hong Kong" in the text.

MACROECONOMIC PROSPECTS AND CHALLENGES



1 Global Settings and Spillovers to Regional Economies

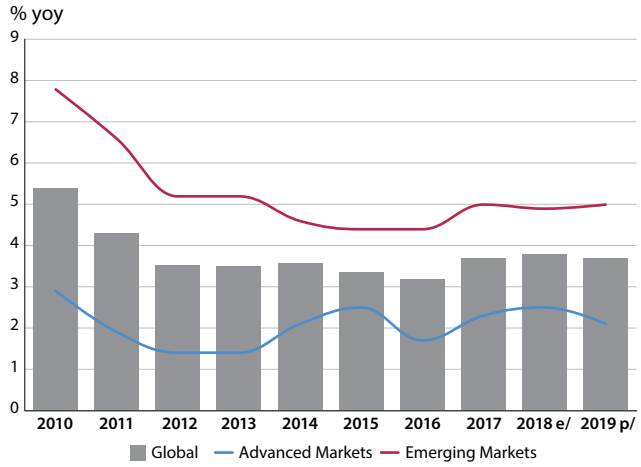
The global economic outlook has improved across advanced and emerging economies. Inflation has re-emerged as a concern that may trigger faster than expected monetary policy tightening in the advanced economies, which is a risk to capital flows to emerging markets. Global trade has picked up but may be vulnerable to U.S. trade protectionist measures this year.

1 The global economic outlook has turned brighter across major advanced and emerging economies, with inflation firming particularly in the U.S. and Eurozone. Global growth is now synchronized across advanced and emerging economies after a decade (Figure 1.1). In major advanced economies, improving business confidence has materialized into a rebound in capital expenditures (capex), with global non-financial capex growing by more than 5 percent in 2017, driven mainly by Western Europe and Japan (Figure 1.2). Emerging and developing economies' export growth is driven by global demand and the cyclical upswing in global trade, with firmer commodity prices benefiting commodity exporters. The baseline consensus forecasts for global growth in 2018 and 2019 are 3.8 and 3.7 percent, respectively.

2 In the U.S., late cycle growth has led to some firming of price pressures, with additional stimulus from tax cuts and fiscal spending. Sustained employment growth leading to a low unemployment rate, rising business fixed investment outlays, and improving household balance sheet, have underpinned the building economic momentum. The positive outlook is expected to be further supported by fiscal stimulus from the U.S. Tax Cuts and Jobs Act (see Box A), as well as fiscal expenditure programs in the next two years.[2] With the U.S. economy near full employment, U.S. core Personal Consumption Expenditure (PCE) inflation has edged higher in recent months (Figure 1.3). Reflation from fiscal stimulus has led to market concerns over whether the U.S. Fed would accelerate its path of three rate hikes in 2018, although the Fed has not signaled an accelerated path of rate hikes (Figure 1.4). The market consensus has converged from two rate hikes in 2018, to the Fed's signaled intention of three rate hikes in 2018 (Figure 1.4).

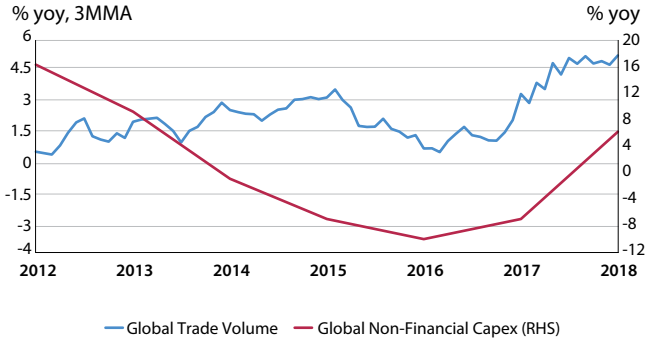
3 In the Eurozone, the cyclical recovery has been stronger than anticipated, with private sector demand

Figure 1.1 Growth between advanced and emerging economies is synchronized after a decade

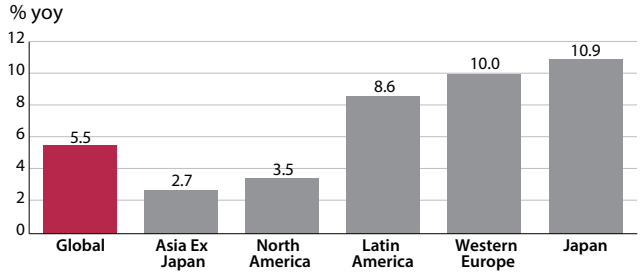


Note: e/ Estimates and p/ Projections
Source: Bloomberg Consensus Forecasts

Figure 1.2 Cyclical upswing in global trade and capex is supporting global growth



Global Capex Growth by Region (2017 full year estimates)



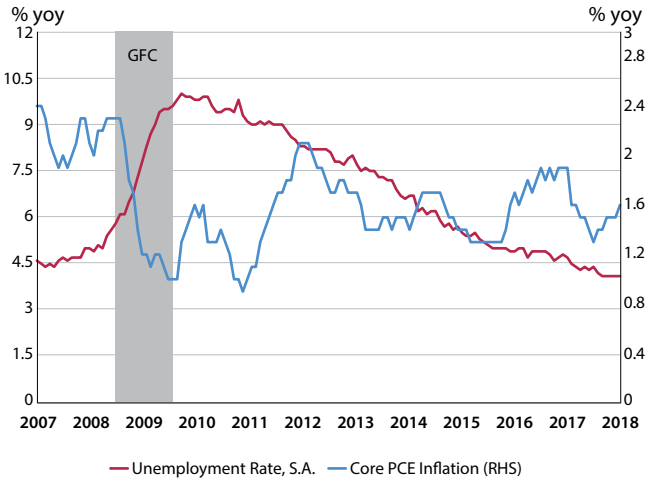
Sources: CPB Netherlands Bureau of Economic Policy Analysis, S&P Global

[2] A bipartisan spending deal reached by U.S. lawmakers in February 2018 will see increases in federal government spending by USD300 billion over the next two years.

set to strengthen based on Purchasing Managers' Index (PMI) indicators (Figure 1.5). After several years of sluggish growth, the Eurozone economies surprised on the upside, posting one of the highest growth rates in years. Business confidence across the Eurozone has hit the levels of pre-GFC and is broad-based across industrial and service sectors. Although underlying price pressure is trending up, wage inflation is still subdued, including in Germany where economic growth is robust. Notwithstanding low inflation, the ECB policy is set on an exit path to withdraw monetary stimulus gradually considering narrowing output and employment gaps.[3] Together with the U.S. Fed's rate hikes and balance sheet reduction,[4] global financial conditions and interest rates are set to tighten in 2018.

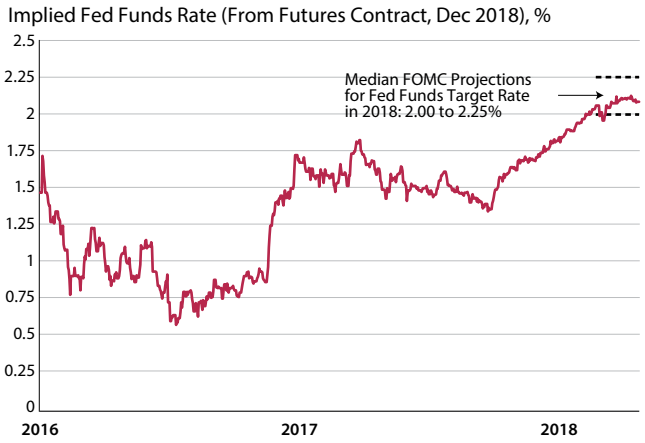
4 In contrast to the Eurozone, the U.K. economy has slowed on Brexit uncertainty. The real income shock from the depreciation of the pound has translated into a pullback in household spending (Figure 1.6) and cooling business activities due to higher cost pressures. Core CPI inflation in the U.K. remains elevated (Figure 1.7), which compelled the Bank of England to tighten policy in November 2017, potentially dampening the growth outlook.[5]

Figure 1.3 The U.S. economy is near full employment, while underlying inflation is trending upwards, albeit from a low base



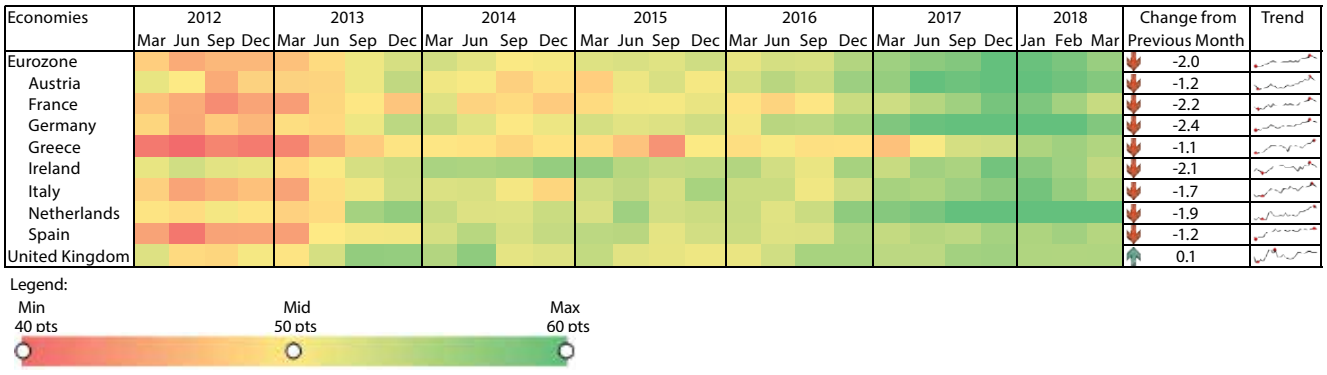
Note: The shaded area highlights GFC period.
Source: U.S. Bureau of Economic Analysis

Figure 1.4 Market consensus of Fed's rate hike path have converged to the Fed's signaled path



Note: The dotted lines refers to the median FOMC projections for Fed Funds target rate in 2018. They are between 2% and 2.25% respectively.
Sources: Federal Reserve, Bloomberg

Figure 1.5 Manufacturing PMI readings in the Eurozone area have improved remarkably



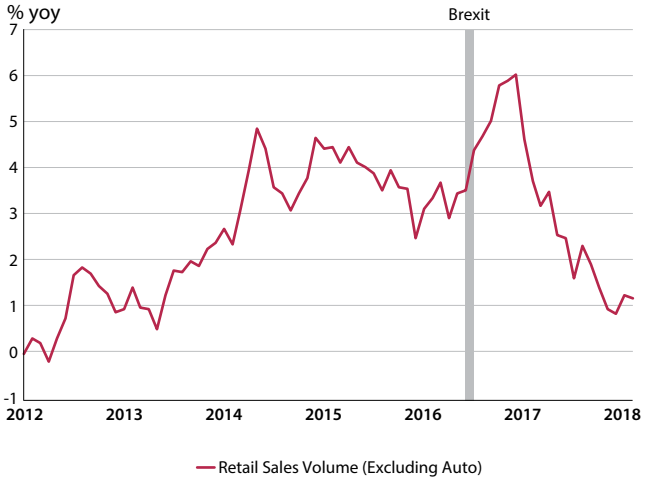
Source: Markit

[3] From January 2018, ECB's net asset purchases have been reduced to EUR30.0 billion (from EUR60.0 billion). The scheme is intended to run until the end of September 2018, or beyond, if necessary. The main refinancing rate was kept unchanged at 0.00 percent, while the rate on bank overnight deposits was also left unchanged at -0.40 percent. The emergency overnight borrowing rate for banks remained at 0.25 percent.

[4] Starting October 2017, the Fed has also begun reducing its balance sheet. As unveiled in June 2017, the Fed plans to reduce Treasury holdings with an initial cap of USD6.0 billion per month, and the cap will increase by USD6.0 billion every 3 months, with a maximum cap of USD30.0 billion per month. The Fed will also reduce its Agency Debt and Mortgage Backed Securities holdings with an initial cap of USD4.0 billion per month. This cap will be increased by USD4.0 billion every 3 months, with a maximum cap of USD20.0 billion per month.

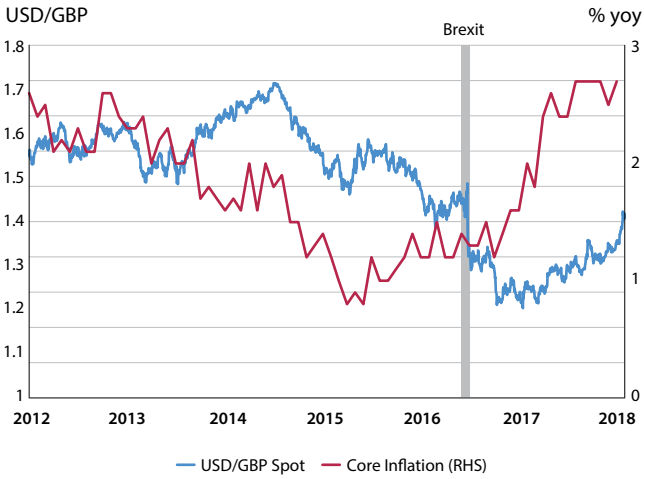
[5] On 2 November 2017, the Bank of England raised interest rates for the first time in more than 10 years, hiking the benchmark rate to 0.50 percent (from 0.25 percent).

Figure 1.6 U.K. households have pulled back spending as the pound has depreciated



Note: The shaded area highlights the U.K. referendum period.
Source: U.K. Office of National Statistics

Figure 1.7 The effects of a weaker pound have passed through to rising inflation



Note: The shaded area highlights the U.K. referendum period. A lower GBP/USD rate indicates a depreciation of the GBP.
Sources: Reuters, Bank of England

Box A.

U.S. Tax Reform and Implications on Regional Emerging Markets[6]

Main Provisions in Tax Reform

U.S. President Trump signed the Tax Cuts and Jobs Act (TCJA) into law on 22 December 2017. The TCJA is the most significant tax reform since the 1980s, through lowering personal income and corporate taxes, as well as moving from a worldwide to a partially territorial system of international taxation. While the cuts in personal income tax rates are marginal and would mostly expire at end of 2025, the cut in corporate income tax from 35 percent to 21 percent is large and permanent.

The other significant change is the move from a worldwide system of international taxation to a territorial system, where corporates would be taxed only on income earned within the U.S. The territorial system is only partial as there are provisions that continue to tax U.S. multinational companies' (MNCs) accumulated income parked overseas.

Potential Macroeconomic Spillover Channels to ASEAN+3 Region

The TCJA could have macroeconomic spillover effects on emerging markets, including on the ASEAN+3 region, through three main channels:

a. Raising U.S. economic growth through tax cuts boosting U.S. domestic consumption and investment;
b. Increasing the U.S. budget deficit in future, raising U.S. Treasury yields and pulling up sovereign yields globally; and
c. If the U.S. Fed assesses U.S. inflationary pressures to have risen as a result of TCJA, the Fed may raise policy rates at a faster pace than the expected three rate hikes in 2018. This would tighten global financial conditions faster than expected and, if not well communicated by the Fed, may trigger capital outflows from emerging markets.

Of these three channels, the first channel of boosting U.S. economic growth would be positive, while the other two are potentially negative to the region.

a. Limited boost expected to U.S. economic growth

The U.S. Congress' Joint Committee on Taxation estimates that the TCJA would increase real GDP growth annually on average by about 0.7 ppts relative to baseline growth in the decade ahead. Private sector consensus forecasts are lower, with the estimated boost ranging from +0.2 to +0.4 ppts (Figure A1). The potential upside to U.S. economic growth is limited as the economy is near full employment.

b. Projected rise in U.S. budget deficit may pull up U.S. Treasury yields further

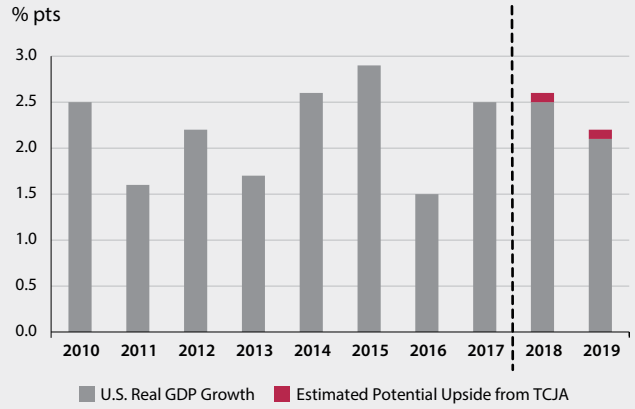
The TCJA is not revenue-neutral and is projected to increase the U.S. budget deficit by USD1.46 trillion cumulatively in the first ten years (2018-27). Thereafter, the rise in budget deficit will taper off as personal income tax cuts expire (Figure A2). This increase in the budget deficit may be ameliorated by positive supply-side response, whereby the increase in economic growth will increase tax revenue collections. The U.S. Joint Committee on Taxation estimates that after accounting for positive supply-side effects, TCJA will still increase the budget deficit increase by USD1.07 trillion cumulatively over 2018-27 (Figure A3). Markets have largely priced in the projected increase in the U.S. budget deficit through U.S. Treasury yields, which have been rising since the beginning of 2018 (Figure A4).

c. Fed response: maintain pace of rate hikes

Although U.S. Treasury yields have risen, global financial conditions have not tightened excessively as the Fed signaled its intention to maintain its pace of three rate hikes in 2018. The Fed also noted that expectations of changes to fiscal policy over the past year have been reflected in financial market conditions.

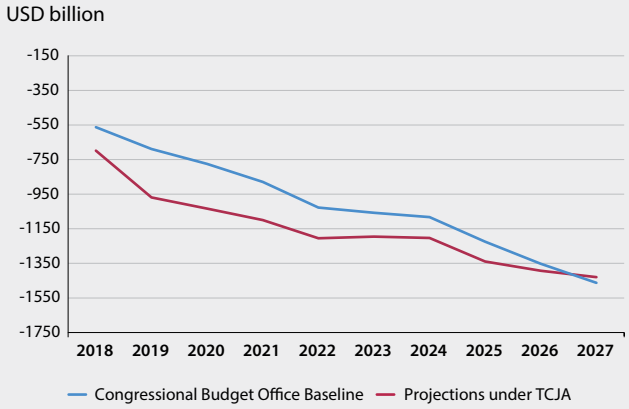
[6] This Box first appeared as a feature article in AMRO's Monthly Update of the ASEAN+3 Regional Economic Outlook (AREO), February 2018.

Figure A1. U.S Real GDP Growth with Boost from the TCJA



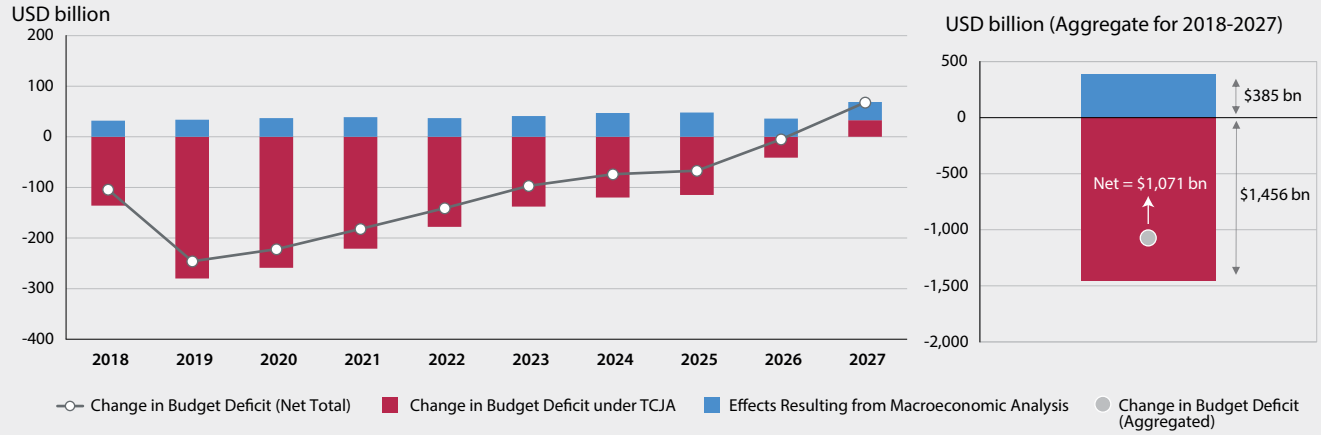
Source: Bloomberg

Figure A2. U.S. Budget Deficit Outlook Under the TCJA (2018-2027)



Sources: Congressional Budget Office, Joint Committee on Taxation

Figure A3. Estimated Annual Change in U.S. Budget Deficit Under the TCJA (2018-2027)



Source: Joint Committee on Taxation

Figure A4. Rising U.S. Treasury Yields

Source: Bloomberg

Overall Assessment of Potential Macroeconomic Spillovers

With the limited boost to U.S. economic growth from TCJA, positive spillovers to the region through increased U.S. demand for exports would be limited. The potential negative spillovers from sharp spikes in U.S. Treasury yields and a faster-than-expected pace of U.S. Fed rate hikes have also not materialized, but these are risks that should be watched as the macroeconomic impact of TCJA becomes clearer.

Potential Impact on U.S. MNCs' Activities Overseas

In addition to these macroeconomic channels, the TCJA may potentially change the tax considerations of U.S. MNCs in investing or parking their earnings overseas, although rates of return on good investment opportunities in host countries, such as in Asia, may continue to outweigh tax savings under TCJA. While it has been suggested that the U.S. corporate tax rate cut in itself could induce some shifting of investment to the U.S. from other OECD countries, the tax rate cut to 21 percent actually brings the U.S. rate closer to the OECD average, not significantly below. Hence, it is unlikely that the U.S. corporate tax rate cut would trigger a round of global tax competition.

The more significant change is the shift from a worldwide system of international taxation to a partial territorial system. As the TCJA still imposes a tax on U.S. MNCs' cash and liquid assets accumulated abroad[7] – hence not a "pure" territorial system – there may be a one-off negative impact on MNCs with significant earnings currently parked abroad. The TCJA also contain provisions to combat "profit shifting" and "base erosion" that on balance, appear to impact host countries where U.S. MNCs have parked "intangible assets" for tax purposes (such as patents, copyright and trademarks), or where they have significant intra-group financial transactions.[8] Insofar as these "intangible assets" and transactions are more significant for U.S. MNCs in developed markets such as the EU rather than Asia, the EU may be more affected. The U.S. MNCs are still studying the impact of the TCJA on the location of their operations overseas, with the actual impact on U.S. MNCs' investment activities in the ASEAN+3 region still uncertain. On balance, however, the rates of return on good investment opportunities in host countries, such as in Asia, may continue to outweigh tax considerations under TCJA.

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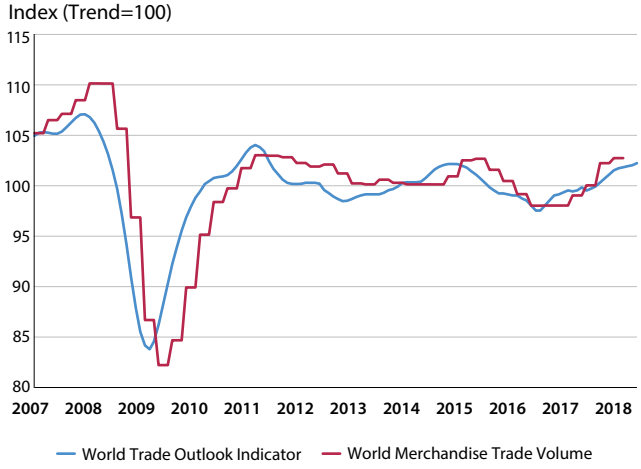
[7] The TCJA imposes a 15.5 percent tax on cash and liquid assets accumulated abroad between December 1986 and December 2017 and an 8 percent tax on income reinvested abroad over the same period. Based on estimates by the Joint Committee on Taxation, the one-time impact could cost U.S. MNCs USD 339 billion over the next decade.

[8] The TCJA also introduces a "base erosion and anti-abuse tax (BEAT)." The TCJA works like an alternative minimum tax by requiring firms to calculate what their U.S. taxable income would be if they disregard deductions for cross-border payments to foreign affiliates. To the extent that a tax at the rate of 10 percent on this alternative tax base exceeds the tax at the rate of 21 percent on the normal tax base, the firms must pay the difference. The BEAT is estimated to cost U.S. MNCs USD 150.0 billion over the next decade.

5 Global trade has expanded robustly with global demand, with added impetus from the global semiconductor upcycle. World Trade Outlook (WTO) Indicator shows strong growth in export orders, air freight and container shipping (Figure 1.8). Assuming a global trade upcycle scenario of 5 percent growth in 2018-19 (baseline scenario by AMRO: +4.0 percent), positive spillovers to ASEAN+3 regional economies from the sustained global trade upcycle is estimated to add 0.8 ppts to the baseline regional economic growth of about 5.5 percent (Figure 1.9).[9] However, this growth in global trade remains vulnerable to risks emanating from trade protectionism, explored further in this section.

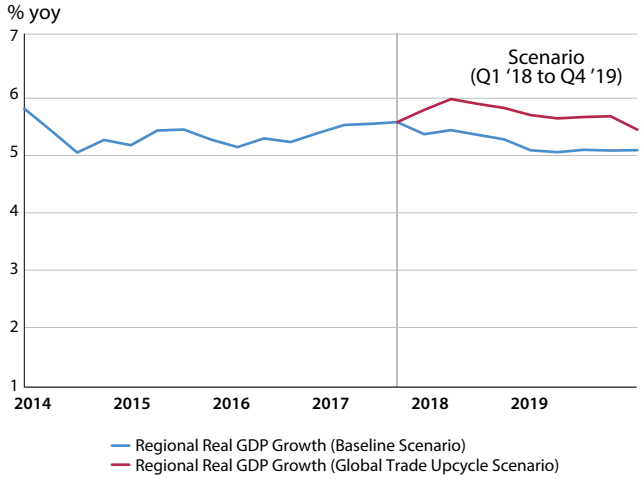
6 Commodity prices, such as energy and industrial metals, though not agriculture, have recovered this year. In the energy market, OPEC production cuts have supported global oil prices since early this year (Figure 1.10). However, fundamental oil demand and supply projections by the U.S. Energy Information Administration (EIA) suggest that supply imbalances may persist in the near term, limiting upside potential to oil price increases (Figure 1.11). Prices of industrial metals (such as copper, aluminum and steel) have recovered, supported by favorable supply dynamics from declining output levels.[10]

Figure 1.8 Global merchandise trade volume continues to expand above the medium-term trend



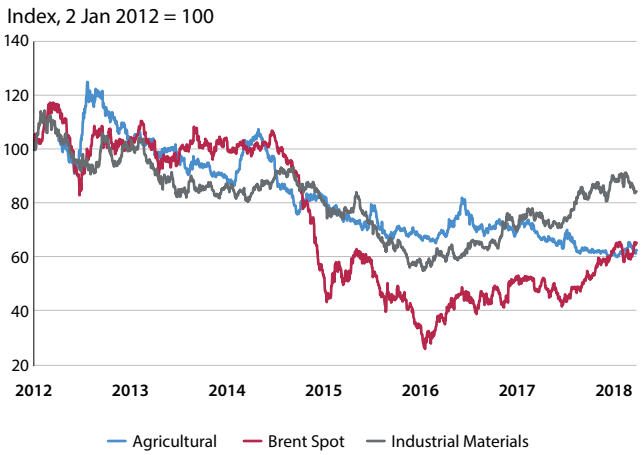
Notes: Readings of 100 indicate growth in line with medium-term trends; readings greater than 100 suggest above trend growth, while those below 100 indicate the reverse. The direction of change reflects momentum compared to the previous month. The chart compares historical values of the WTOI to actual merchandise trade data. Trade volume growth tends to accelerate when the WTOI (blue line) is above the index for merchandise trade (red line), and decelerate when the WTOI is below the trade index.
Sources: World Trade Organization, CPB

Figure 1.9 Global trade has supported ASEAN+3 regional economies' exports and growth



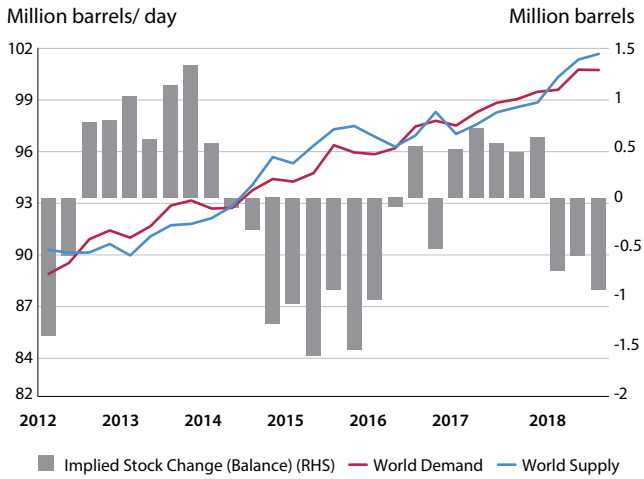
Note: The global trade upcyle scenario assumes an average global trade growth of 5 percent in 2018 and 2019 (AMRO's baseline average: +4 percent), which underscores the continued resurgent growth in global trade seen in H1 2017. Estimates start from Q4 2017. The baseline scenario assumes an average global growth of 3.5 percent in 2018 and 2019. Estimates start from Q1 2018.
Sources: Oxford Economics, AMRO staff estimates

Figure 1.10 Energy and industrial metal prices have increased this year



Source: Bloomberg

Figure 1.11 Global oil demand and supply imbalances are expected to persist in 2018



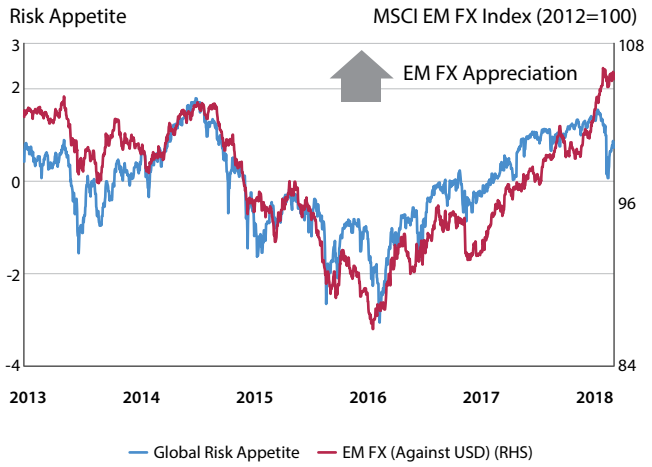
Source: EIA

[9] The model assumes an average baseline growth of 3 percent in the U.S., and 2.5 percent in the Eurozone in 2018-19.
[10] According to Bloomberg, investors have bought aluminum amid signs that China's measures to cut capacity and sharpen environmental controls will tighten supply, while other industrial metals such as zinc have benefited from falling mining output.

7 Global financial conditions remain accommodative although they are set to tighten ahead, supporting global markets and capital inflows into emerging markets for now (Figures 1.12 and 1.13). Nonetheless, the short-lived sell-off in global markets, triggered by reflation fears in the U.S.,[11] illustrates how sensitive markets are to a possible faster-than-expected Fed rate hike. Following a sustained period of market calmness, policymakers should be prepared for future shocks as global financial conditions become tighter in the period ahead.

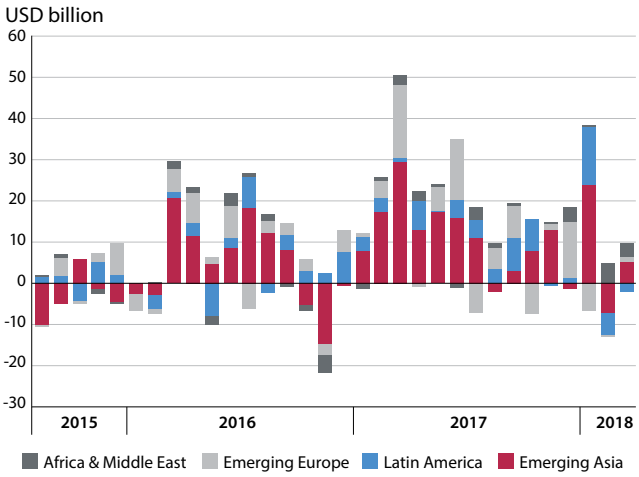
8 The impact of faster-than-expected global interest rate hikes on EM bond markets, which has seen large inflows, should be watched. Figure 1.14(b) shows that, unlike equities, global investors have been overweight in EM debt securities, with these securities accounting for 12 percent of global bond fund allocation as of January 2018, which is a post-GFC high. There could be a disorderly shift in portfolio debt allocation and attendant capital outflows if interest rates were to rise sharply as holdings of longer term debt securities would become relatively unattractive.

Figure 1.12 Improved global growth underpinned the rally in EM assets, supporting EM currencies



Notes: For global risk appetite, a higher positive reading suggests greater investor appetite for risk assets. It is proxied by the negative of the first principal component of global VIX index, MOVE index, global FX volatility index, U.S. BBB corporate bond spread, and EMBIG spread. For EM FX, an increase means an appreciation in FX.
Sources: Bloomberg, AMRO staff estimates

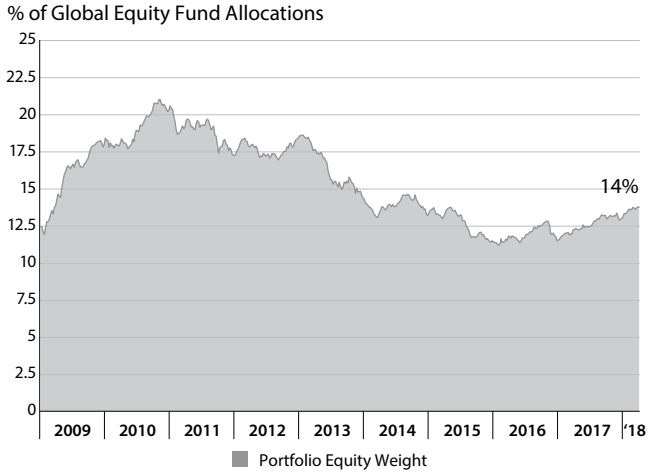
Figure 1.13 Portfolio capital inflows have continued into emerging markets



Note: Date refers to non-resident net capital flows.
Source: IIF

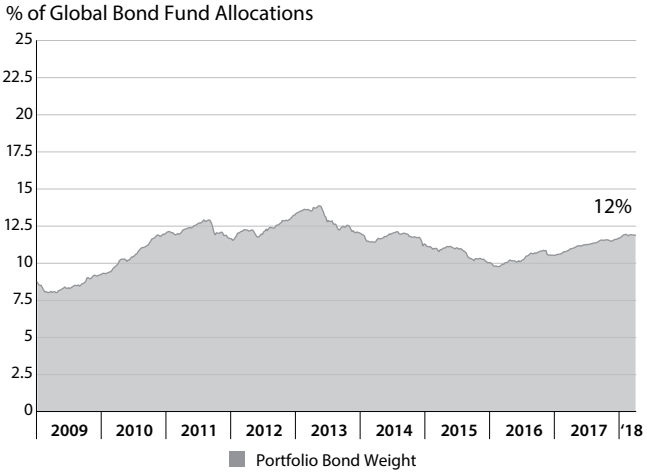
Figure 1.14 Global investors continue to be overweight in EM debt securities

(a) Global Investors' Portfolio Allocation in EM Equities



Source: IIF

(b) Global Investors' Portfolio Allocation in EM Bonds



Source: IIF

[11] AMRO. (2018). Monthly Update of the ASEAN 3 Regional Economic Outlook (AREO) (February).

The growth outlook is positive for China and Japan, the systemically important economies in our region. China's growth is driven by stronger expansion in private consumption, infrastructure investment and the services sector.

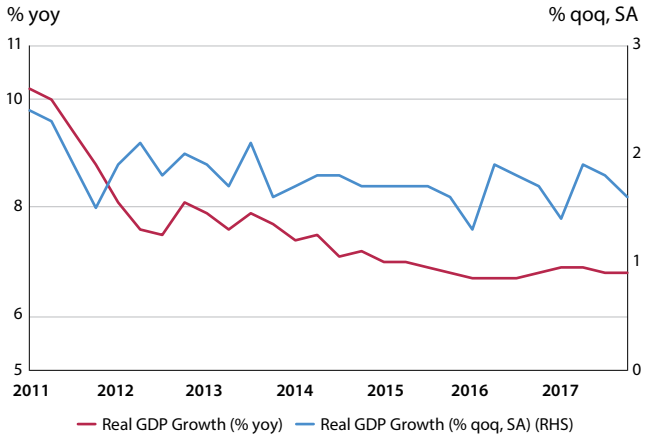
9 China's economic growth is driven by broad-based growth in consumption, investment and exports. Real GDP grew at 6.9 percent in 2017 (Figure 1.15), mainly driven by the expansion in private consumption and infrastructure investment, with added impetus from exports. Growth in private investment bottomed out in 2016, picking up moderately in 2017 on the back of rising prices and improved corporate profits (Figure 1.16). Considering the positive outlook, AMRO has revised upwards its real GDP growth projection for China in 2018 to 6.6 percent and 6.4 percent for 2019.

10 China's headline inflation has remained subdued, with PPI inflation moderating after the sharp rise in early 2017. Lower headline inflation in 2017 mostly reflected declining food prices. In contrast, core inflation has increased in line with stronger economic growth. Following a prolonged period of negative growth, PPI inflation has turned positive since September 2016 due to a strong rebound in commodity prices amid ongoing overcapacity reduction, speculation, and to some extent, base effects.

11 China's capital and financial account registered a surplus in Q1 to Q3 2017, for the first time in three years (Figure 1.17). This partly reflects rising non-resident portfolio investment in China's capital markets, following the inclusion of Shanghai Stock Exchange's A-shares in the MSCI index on 20 June 2017, as well as the establishment of the bond trading connection between Hong Kong and the Mainland ("Bond Connect"). Earlier concerns over capital outflows from China have eased along with the positive economic outlook, a more stable exchange rate, as well as counter-cyclical management on cross-border capital flows via macroprudential policies. Along with other regional currencies, the RMB has strengthened against the USD (Figure 1.18). The introduction of a counter-cyclical adjustment factor in the RMB/USD central parity pricing mechanism in May 2017 has also helped to dampen excessive exchange rate volatility. With the RMB's growing role as a currency for trade settlement and in financial markets, continued clear communication by policymakers on the RMB would help anchor market expectations.

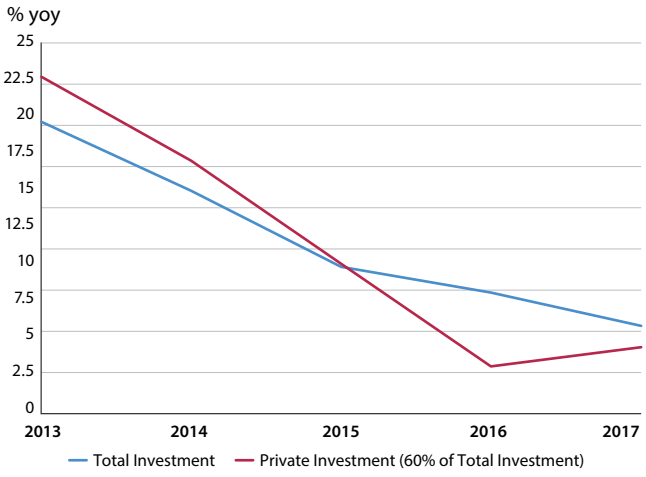
12 While China's economy continues to undergo structural reform, the likelihood of a sharp dip in growth (hard landing) in the process is low in the short term. Risks in the real estate, corporate and financial sectors have been mitigated by policy measures. Policy measures curbing speculation have helped moderate rapid growth in residential property prices in the first and second tier cities. In the non-financial corporate sector, debt accumulation has tapered off as corporates' profitability improved amid a sharp rise in producer prices. Policy measures such as market-based debt-to-equity swaps and debt securitization have also contributed to the debt reduction. In the financial sector, banks' exposure to corporates in sectors with more debt (such as those in the overcapacity sectors) is assessed to be moderate, though this exposure remains

Figure 1.15 China maintained stable growth momentum in 2017



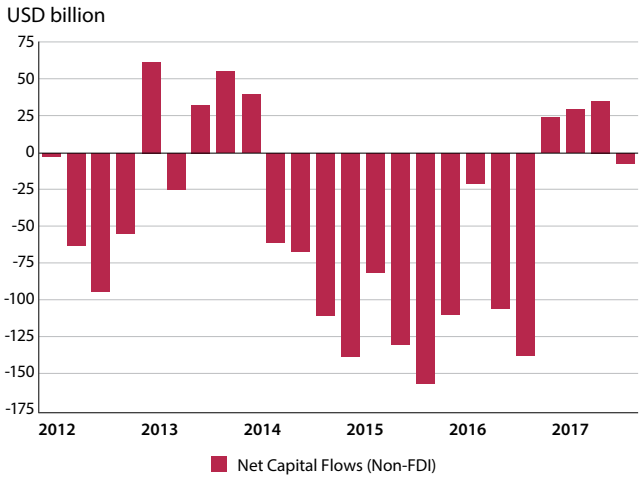
Source: China National Bureau of Statistics

Figure 1.16 Private investment growth picked up in 2017



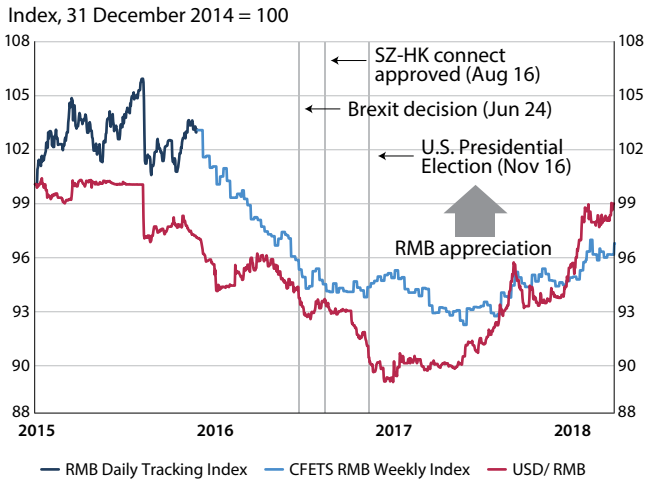
Source: China National Bureau of Statistics

Figure 1.17 China's capital and financial account (ex-direct investment flows) turned into surplus starting Q1 2017



Source: China State Administration of Foreign Exchange

Figure 1.18 In line with other regional currencies, the RMB has strengthened against the USD



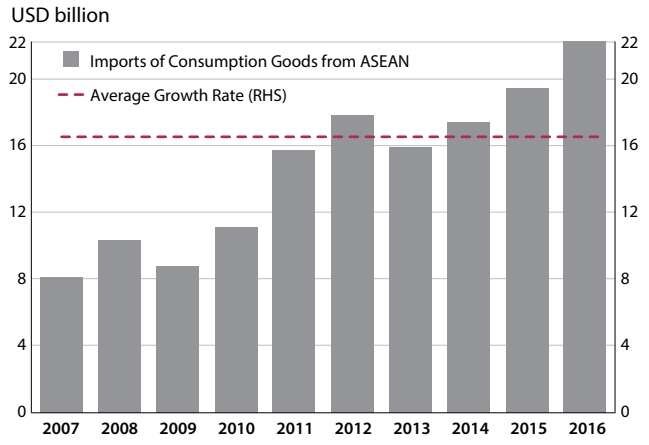
Note: For USD/RMB, an increase refers to RMB appreciation. The shaded areas represent U.K. referendum in June 2016, the approval of Shenzhen-Hong Kong Connect in August 2016 and the U.S. president election in November 2016.
Source: People's Bank of China

significant for the smaller banks.[12] Tighter regulation by China's financial supervisory authorities, including the implementation of the Macro-Prudential Assessment (MPA) starting in 2016, has imposed restraint on banks' risk-taking activities and increased prudence in lending, especially in small and medium-sized banks.

13 While domestic risks are mitigated in China, the external risk of trade protectionism targeting China, with potentially significant spillovers on the region, are rising with U.S. trade actions. China, along with Japan and Korea, is among the top 10 trading partners of the U.S. in terms of the U.S. bilateral trade deficits, and is likely to remain targeted by the U.S. in trade actions. In March, President Trump pushed forward with the imposition of 25 percent tariffs on steel and 10 percent tariffs on aluminum imports globally, including China. Earlier in January 2018, the U.S. had already imposed tariffs on imports of solar panels and washing machines, which affects businesses in China (as well as major exporters in the region). U.S. trade actions, and possible retaliatory actions from the region, may lead to growing trade tensions that remain a risk for the rest of this year.

14 Against this short-term external risk of trade protectionism, rising intra-regional trade with China as the source of final demand will continue to have positive spillovers to the region. China's economic transition toward consumption-driven growth will create greater demand to import consumer goods and services from the region. China's imports of consumption goods from ASEAN have been rising rapidly (Figure 1.19). China's consumption of services from the region has also increased. Outbound tourism activities by Chinese nationals in the region have grown significantly (Figure 1.20), providing an impetus to service sector development and an important source

Figure 1.19 China's imports of consumption goods from ASEAN have been steadily rising



Source: UN Comtrade

[12] The sectors that account for significant shares of total corporate debt include manufacturing (20 percent), real estate (15 percent), utilities (14 percent), construction (12 percent) and transport (12 percent). Although the financial stability risks from high corporate indebtedness have been mitigated due to improved economic conditions and policy measures, pockets of vulnerabilities remain. Given that output growth has continued to lag the growth in debt, profitability and debt payment capacities have declined in certain sectors such as mining, real estate, steel, and to a lesser extent, construction. Within the industrial sector, SOEs seem to show weaker solvency indicators than non-SOEs. A sharper-than-expected rise in borrowing cost amid tighter financial conditions can cause corporate distress, potentially amplifying the vulnerabilities of these companies to shocks. See AMRO Thematic Study, "High Corporate Debt in China: Macro and Sectoral Risk Assessments", November 2017.

Figure 1.20 Tourists from China (excluding Hong Kong) have accounted for a rapidly growing share of tourists into most regional economies

	Number of Chinese Tourists in 2016 (mn)	Share of China's Tourists in Total Overseas Tourists Going into Regional Economy (%)		
		2009	2012	2016
Brunei*	0.04	0.4	0.5	0.5
Cambodia	0.8	6.3	9.3	16.6
Indonesia*	1.2	6.2	8.5	12.0
Japan	5.0	14.8	17.1	26.5
Korea	8.1	17.2	25.5	46.8
Lao PDR*	0.4	6.4	6.0	10.2
Malaysia*	2.1	4.3	6.2	7.9
Myanmar*	0.05	n.a.	n.a.	14.5
Philippines	0.7	5.1	5.9	11.3
Singapore	2.9	9.7	14.0	17.5
Thailand	8.8	5.5	12.5	26.9
Vietnam	2.7	14.0	20.9	26.9
Total	**32.0**	**7.8**	**12.0**	**20.6**

Note: *Data for Myanmar as of 2016; data for Brunei and Indonesia as of 2015; data for Lao PDR as of 2014. Data for Malaysia include arrivals from Hong Kong.
Sources: National Authorities, AMRO staff calculations

of foreign exchange earnings particularly for developing ASEAN economies. Moreover, China is emerging as a large outward investor, recycling its savings to investments overseas. China's outward direct investment (ODI) related to the Belt and Road Initiative (BRI) will help fill the infrastructure investment gap in some ASEAN economies (see Box K on China's Belt and Road Initiative).

Japan has continued to grow strongly above potential, with growth driven by strong external demand and supportive macroeconomic policies.

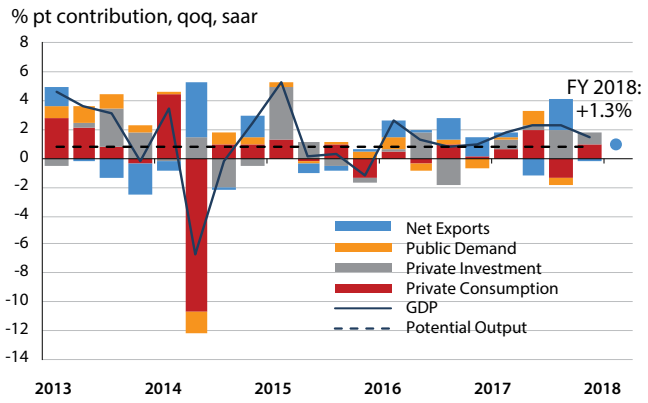
15 In Japan, economic growth has continued to be robust, well above its potential growth rate, supported by sustained domestic demand and strong external demand (Figure 1.21).[13] The latest Tankan survey in Q3 2017 shows that Japanese manufacturers have more confidence in Japan's business conditions than they have had in a decade. Households' private consumption has also picked up, as household incomes gradually increase with a tightening labor market. The positive outlook also reflects the effect of supportive macroeconomic policies, including the implementation of FY2016[14] stimulus package. AMRO has projected growth to slow to 1.3 percent in FY2018 as the contribution of public spending to overall growth declines. For FY2019, real GDP growth is projected at 0.7 percent.

16 Consumer price inflation in Japan remains sluggish despite tighter labor market conditions and higher global commodity prices. CPI (less fresh food but including energy-related items) inflation gradually picked up since the end of 2016 due to rising global commodity prices, but CPI (less fresh food and energy) remains low (Figure 1.22). Inflation is expected to rise moderately to around 0.7-0.8 percent in the near term with above-potential economic growth rate and pass-through effects from higher global commodity prices. Over the medium term, inflation is expected to stay well below the 2 percent target, weighed down by structurally sticky prices (such as house rents and publicly administered prices), with inflation expectations remaining at current low levels.

17 Financial conditions in Japan remain highly accommodative with favorable funding conditions. Given the ample liquidity and the negative to zero interest rates environment, financial institutions have continued their search for yield by expanding lending to the real estate sector and to households for mortgages. On the business side, demand for corporate finance has also increased. Notwithstanding the favorable funding conditions, banks continue to face profitability challenges with low net interest margins in their domestic lending, propelling them to lend and invest abroad for higher interest margins and yields.

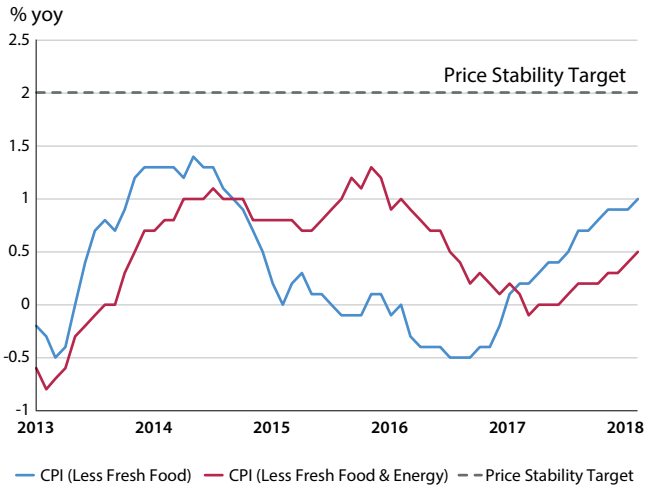
[13] Japan's potential growth is estimated at 0.7 to 0.9 percent.
[14] Japan's fiscal year is from April to March.

Figure 1.21 Japan's growth continued to be robust and above potential



Source: Japan Cabinet Office

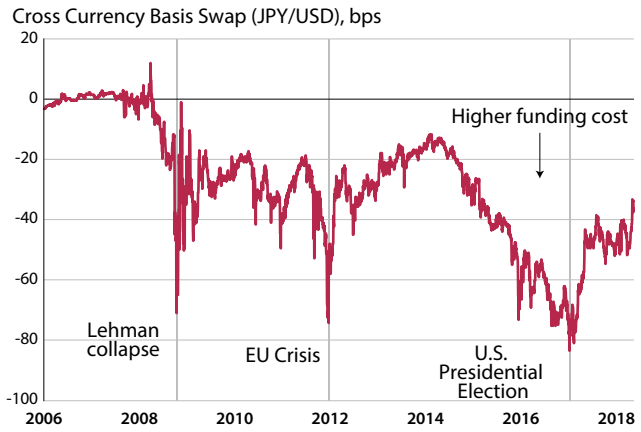
Figure 1.22 CPI remains sluggish in Japan



Sources: Ministry of Internal Affairs and Communications, Japan Center for Economic Research

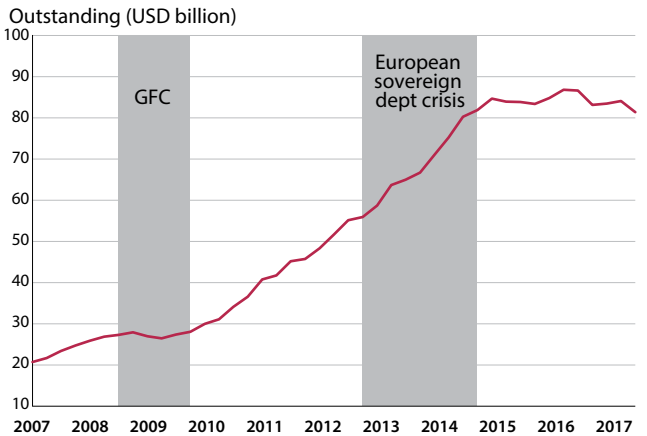
18 Japanese banks continue to be major lenders to the region. Easing USD funding and hedging costs have capped USD funding costs for Japanese banks, thereby supporting their USD lending to the region. USD funding costs, measured by cross currency basis swap points,[15] have come off from their peak in late 2016 (Figure 1.23), partly reflecting the temporary decline in overseas bond investment by Japanese investors in early 2017. However, USD funding costs could increase again given the uncertainties in U.S. financial regulatory reforms and potential tightening of the European banking sector capital regulation.[16] This would increase pressure on Japanese financial institutions to fund in foreign currency their growing demand for foreign securities.[17] In terms of spillovers, any rise in USD funding costs would also raise the cost of Japanese banks' USD lending to the region, although the business imperative to seek higher returns overseas remains strong (Figure 1.24).

Figure 1.23 USD funding liquidity conditions have eased, as compared to during the U.S. Presidential Election



Note: The cross currency basis swap is a calculation that shows how much premiums (-) / discount (+) that needs to be paid / received to convert lump-sum borrowings in local currency into USD. The lower the swap indicates higher funding costs. The shaded areas represent Lehman collapse in October 2008, EU crisis in December 2011 and U.S. Presidential Election in November 2016.
Source: Bloomberg

Figure 1.24 Japanese banks are major cross-border lenders to ASEAN-9 economies



Note: The shaded areas represent GFC and EU sovereign debt crisis periods respectively.
Source: Bank for International Settlements (BIS)

[15] Cross-currency basis swaps are often used as a tool for foreign-currency funding or currency-risk hedging by banks and institutional investors.
[16] For example, rising risk aversion and/or concerns over counterparty risks due to uncertainties over financial regulatory reforms can drive the widening of the basis points.
[17] Furthermore, the availability of JGBs in the market to be used as collateral for the FX swap transaction has also been decreasing among domestic banks.

The Global Risk Map below summarizes AMRO's assessment of risks facing the ASEAN+3 region, with risks being mainly external.

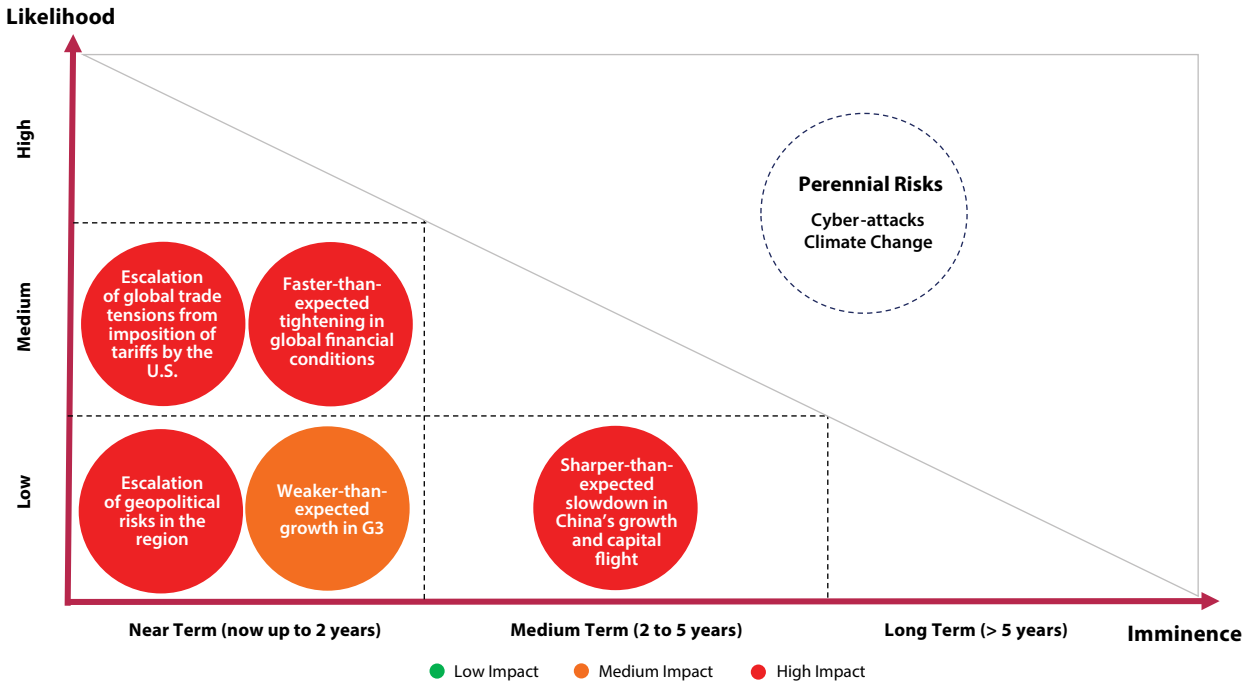
19 The main risks the ASEAN+3 region faces are external, with two main near-term risks being a faster-than-expected tightening in global financial conditions and an escalation of global trade tensions from more U.S. trade protectionist actions (Figure 1.25). The near term risks could be mutually reinforcing, reflecting the interaction of one or more risk events materializing. For instance, the escalation of global trade tensions triggered by the imposition of tariffs by the U.S. could interact with the escalation of geopolitical risks in the region, leading to heightened risk aversion, and large capital outflows from the region. The risk of weaker-than-expected growth in G3 economies is assessed to be of low likelihood given the improving global economic outlook, but could similarly materialize as a consequence of other risks. The risk from sharper-than-expected slowdown in China's economic growth is assessed to have receded in the near-term with the positive growth outlook in China.

Near term Risks

a. Faster-than-expected tightening in global financial conditions *(medium likelihood/high impact)* led by the U.S. Fed's interest rate hikes in response to rising domestic inflation could cause sharp market reactions if policy actions are not well-communicated. The spillovers to the region would be via capital outflows, higher sovereign yields, higher borrowing costs and debt refinancing risk.

b. Escalation of global trade tensions from imposition of tariffs by the U.S. *(medium likelihood/high impact)* on more imports and on major trading partners including those in the ASEAN+3 region could derail the region's robust export growth. The impact of trade tensions would be amplified through the global value chains in the region. Furthermore, escalation of trade tensions would increase uncertainties and generate spillovers onto the global economy as well as on financial markets. Box B on "The Winds of (a Trade) War" elaborates on the symbiotic trade relationship between the U.S. and China, and the rest of the region, and presents AMRO's estimates of the impact of trade tensions on the region's economic growth.

Figure 1.25 Global Risk Map (Risks Faced by the ASEAN+3 Region)



Notes: The risks are the top risks that may lower the baseline projections for global economic growth, and/or significantly impact global financial stability. Likelihood (y-axis): Likelihood of risk materializing in that time horizon. It is not possible to be precise about probabilities; rather, the relative position of risks is more important.
Source: AMRO

c. Escalation of geopolitical risks in the region *(low likelihood/high impact)*, depending on what form this escalation would take, could result in market reactions ranging from heightened risk aversion, capital outflows amidst a flight to safety, to severe real economy consequences.

d. Weaker-than-expected growth in G3 economies *(low likelihood/medium impact)*, in conjunction with other risks of trade protectionism, would dampen global growth and external demand, with second-round effects on the region's growth and exports.

Medium term Risks

e. Sharper-than-expected slowdown in China's economic growth and capital flight *(low likelihood/high impact)* due to setbacks to the pace of structural reforms could see financial distress emerging leading to sharper-than-expected debt deleveraging. This could undermine confidence in the economy, and would remove an important engine of growth globally and in the region. The associated capital outflows from residents and non-residents, through their impact on the RMB and on China's foreign reserves, would significantly affect market confidence in the region.

Besides risks in the real economy and financial markets, there are tail risks stemming from non-economic sources, such as geopolitical tensions – a near-term tail risk – as well as "perennial risks" such as climate change and cyber-attacks. The likelihood and impact of these non-economic risks are inherently difficult to assess, though the risk transmission channels may be better anticipated.

20 One of the non-economic tail risks in the near term is geopolitical tensions and their impact on the growth outlook. While the timing and severity of such risk events are often difficult to identify, the direct and spillover impact on the real economy (trade and investment) and financial markets (asset prices and confidence) is clearly negative. For example, in the case of geopolitical risks, shocks to the economy can quickly propagate to the banking systems and financial markets and cause major disruptions to the economy. While it may be difficult to avert the risks, especially spillover risks, active risk management and business continuity planning to minimize the impact of the shocks would be prudent. In the banking sector and financial markets, possible mitigation measures could be to have sufficient liquidity buffers and backstops for systemically-important banks. Effective policy communication and coordination in times of crisis management can safeguard and maintain confidence in the economy.

21 A perennial risk is the impact of climate change, with rising incidence and severity of natural disasters inflicting higher costs of rehabilitation to economies. Lower-income economies in particular, are more vulnerable to the impact of such natural disasters, considering the scale of economic damage, and the need for large resources and funds to be allocated for reconstruction activities. This calls for policies to build long-term resilience through investment in climate-proof infrastructure and adaptation measures, while at the same time, preparing for disaster recovery costs by sufficiently budgeting for reconstruction and spending on social safety nets. Box C on "Natural Disasters and Climate Change in ASEAN+3 Region: Impact and Risk" looks at the impact of natural disasters in the ASEAN+3 region, including on economic growth and fiscal positions, and the importance of building sufficient economic buffers in anticipation of these economic shocks.

Box B.

The Winds of (a Trade) War

"Those who cannot remember the past are condemned to repeat it." – George Santayana, The Life of Reason, 1905–06

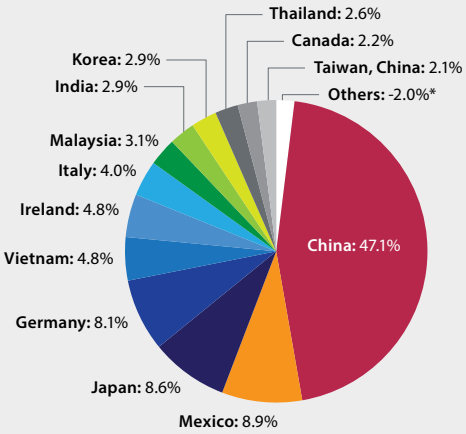
The world's two largest economies have a close, symbiotic trade relationship from which both, as well as the rest of the world, have benefitted significantly but these gains are at risk of being derailed. In January, the U.S. Administration – concerned over the large trade deficit with its main partners – imposed tariffs on U.S. imports of washing machines and solar panels. President Trump subsequently upped the ante on 1 March by announcing tariffs of 25 percent on U.S. steel imports and 10 percent on aluminum imports from all economies (though some exemptions were subsequently granted). These were followed by proposed tariffs on USD50.0 billion of technology imports from China on 22 March. In response, China indicated that it would impose tariffs on a raft of U.S. imports, including soybeans, vehicles and aircraft. On 6 April, President Trump asked the U.S. Trade Representative to consider additional tariffs on USD100.0 billion of imports from China.

The U.S. has a large headline goods trade deficit with China but this could largely be explained by fundamental tenets of economics and trade, and progress in globalization. Since China became a member of the WTO in 2001, its goods exports to the U.S. have grown rapidly, leading to the increasingly large bilateral trade surplus. Currently, China accounts for 47 percent of the U.S. total goods deficit, much higher than with any of the latter's other major trade partners (Figure B1). That said, the Sino-American trade imbalance arguably reflects, in large part: (i) the desired market outcome of both economies leveraging on their comparative advantage in factors of production and technology; (ii) the opening up of markets to benefit from comparative advantage; and, importantly (iii) the strong appetite of U.S. producers and consumers for China's goods. It would therefore be simplistic to attribute U.S. losses in output and jobs to the country's trade with China.

The U.S. trade deficit with China is less obvious when other factors are taken into account. These represent advances in countries' economic development and their internationalization, and include:

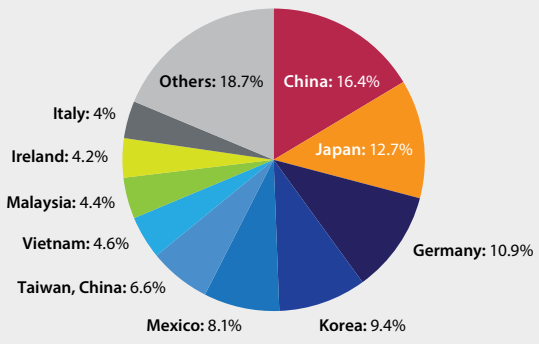
- *The rise of trade in value-added goods.* The U.S. goods trade with China reflects, in part, the goods trade within the Asian supply chain that is centered on China as the final processing hub (see thematic chapter). Previous market estimates suggest that China imports substantial amounts of raw and intermediate goods from other Asian economies to use as inputs for its products that are then exported to the U.S. and elsewhere (Figure B2). In other words, the U.S. trade deficit with China could be considered the sum of the former's trade deficit with many other economies exporting intermediate goods to China for final export to the U.S.

Figure B1. Decomposition of U.S. Goods Trade Deficit, 2017, Percent



* "-" refers to U.S. trade surplus with "Others".
Sources: U.S. Census Bureau, and AMRO staff calculations.

Figure B2. Decomposition of U.S. Goods Trade Deficit, Value-Added Basis, 2015, Percent



Source: Deutsche Bank, based on data from China Customs, IMF and WIND.

- *The benefits to U.S. producers and consumers*. Corporates in the U.S. also derive significant advantage from purchasing cheaper Chinese goods as inputs for their production. These companies need to keep their costs down in order to compete internationally, and more expensive materials as a result of higher tariffs would undermine their competitiveness and damage profitability. Separately, the trade in manufactured goods is estimated to put an average USD1,000 in yearly savings in the pocket of every American, and China contributes about a quarter of that amount.[18] [19]

- *The comparative advantage of U.S. services exports*. The goods trade imbalance is only part of the picture of bilateral trade between the U.S. and China. Less overt is that the former has been enjoying a growing services trade surplus with China since 1999, one that has been increasing exponentially and at a significantly faster pace than the corresponding goods deficit since 2008 (Figure B3). In 2016, China accounted for over 7 percent of the total services exported by the U.S. (versus only 3 percent of its services imports), and was the largest contributor to the U.S. total services surplus at 15 percent (Figure B4). This surplus will likely grow further as China continues to open its markets to foreign investment.

Given the increasing interdependence between China and the U.S., as well as with the rest of the world, any hostile and protracted trade war could cause significant damage to the global economy. The impact on a particular economy could occur through several channels, notably, from:

- an initial loss in business confidence (and hence investment) as uncertainty in the growth outlook intensifies;

- a drop in demand for its exports which are used as direct inputs into China and U.S. exports, as well as from subsequent spillovers from other export markets; and/or

- a decline in overall global demand arising from the multiplier effects of a large decline in bilateral trade between the two economic giants on the rest of the global economy, through linkages in international trade and investment as well as via any adverse impact on global financial markets.

A shock would be particularly significant for ASEAN+3 members, given the importance of trade for the region's economic growth (Figure B5).

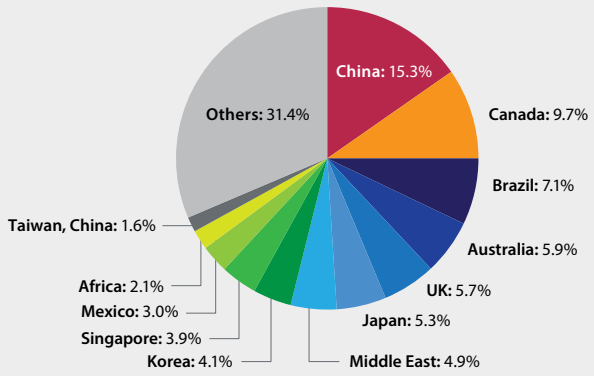
Not surprisingly, the introduction of uncertainty to the outlook fuelled risk aversion in markets. This potential manifestation of one of the key risks to growth – trade protectionism – identified in AMRO's Global Risk Map (Figure 1.25), spurred investors to sell down their holdings. Since late-January, both Asia-Pacific and European stock markets have fallen by about 5 percent (Figure B6). Most telling is that the U.S. stock market itself has fallen the most over this period, by about 6 percent.

The chief concern among other ASEAN+3 members is that they would be unavoidably affected by any China-U.S. trade

Figure B3. Share of China's Services Trade with the U.S.

Source: U.S. Census Bureau

Figure B4. Decomposition of the U.S. Services Trade Surplus, 2016, Percent

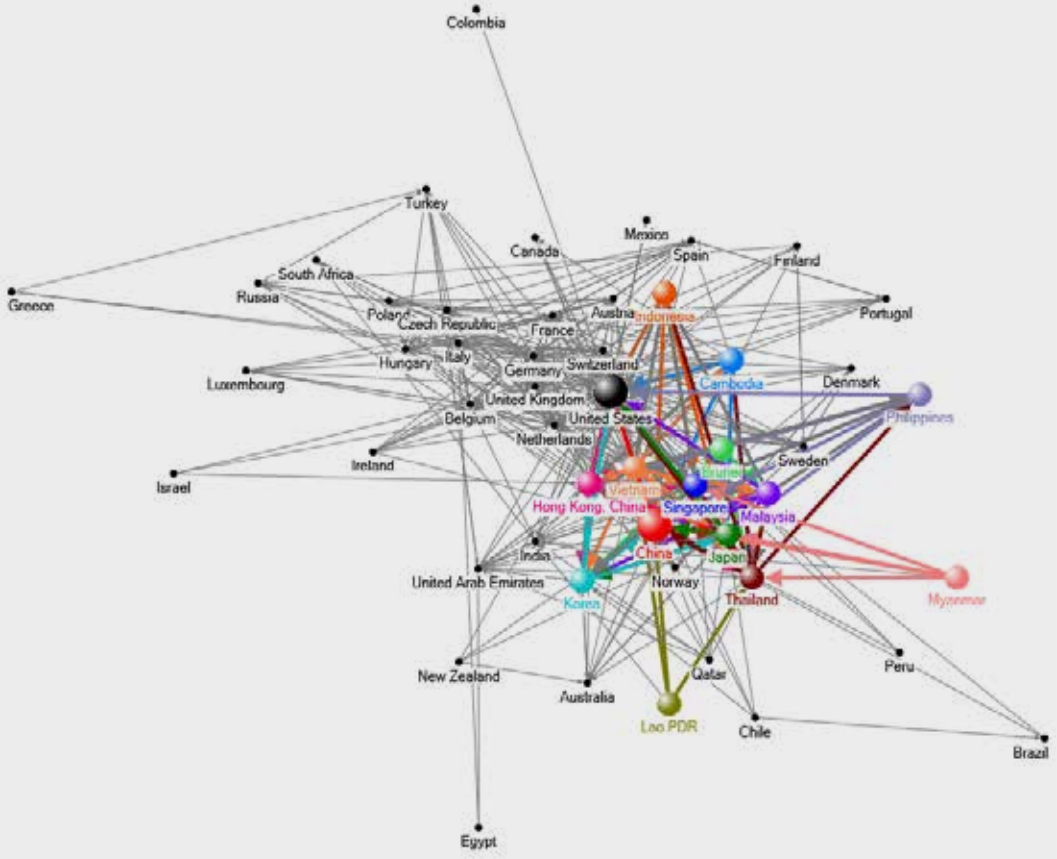


Source: U.S. Census Bureau

[18] As an example, the global aircraft fleet is projected to double over the next two decades, which poses a significant growth opportunity for major U.S. aircraft producers such as Boeing. However, aluminum makes up an estimated 80 percent of the weight of most commercial aircraft and the announced tariffs on aluminum imports into the U.S. would have important business implications for these companies. Separately, as much as 7 and 15 percent of exports to the U.S. from China comprise mobile phones and computers, respectively, and a significant share of these exports is attributable to U.S. multinational corporations, which take advantage of the lower cost of production and assembly in China to produce cheaper goods for U.S. consumers.

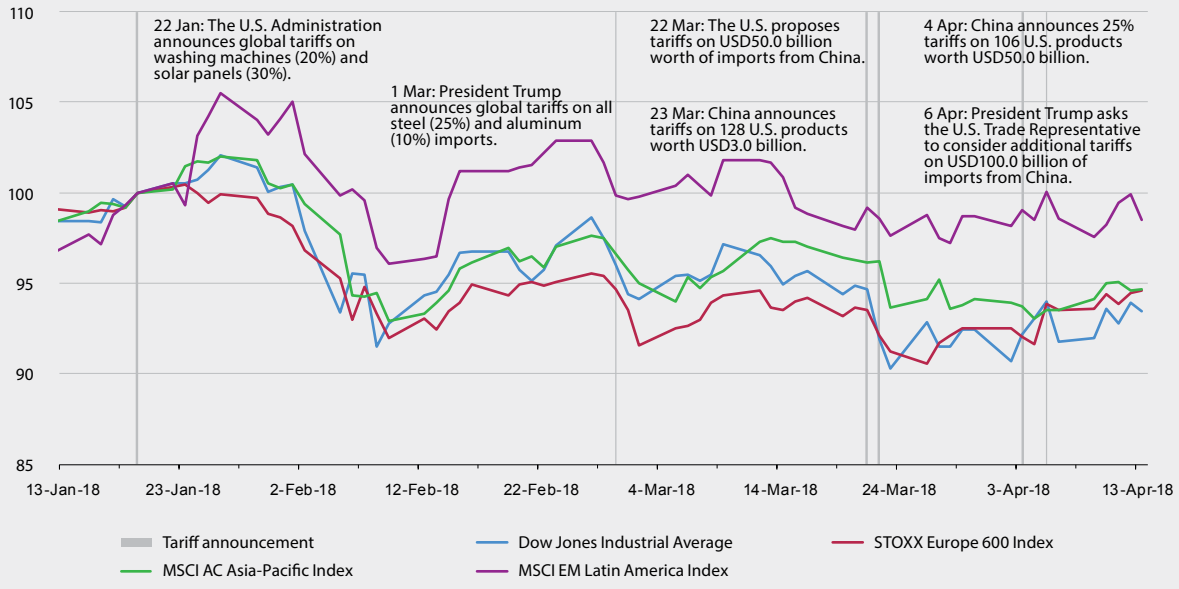
[19] The Economist. (2017, January). *Peter Navarro is about to Become One of the World's Most Powerful Economists.*

Figure B5. The Global Trade Network, as of December 2017



Sources: IMF DOTS, IFS and AMRO staff calculations.
Note: Figure shows trade relationships among the U.S., China and the other ASEAN+3 economies, and with other economies (in terms of countries' exports as a percentage of own GDP). The size and color of vertices and edges merely highlight the "centrality" of these countries in the global trade network. The direction of each arrow denotes exports from one country to another.

Figure B6. Global Markets: In the Line of Fire (Index: 22 Jan 2018 = 100)



Sources: Bloomberg, MSCI, various financial press and AMRO staff calculations.

war. The increasing integration of trade within Asia as well as the importance of the U.S. market for the region points to inevitable costs to economic activity. For the affected economies, the absolute size of the expected loss in trade to China and the U.S. and its multiplier effects are crucial. Although China's exports to the U.S. are a relatively small share of its own GDP and similarly for the U.S., the size of the "collateral damage" could be much more significant for other smaller countries relative to growth (Table B1).

We use the trade Global Vector Autoregressive (GVAR) model, previously developed in AMRO (2017), to estimate the spillover and feedback effects if shocks to China and U.S. exports were to materialize.[20] For this exercise, we focus specifically on assumed actions by these two economies that result in a cut in merchandise exports to each other, and the associated impact over the next 12 to 36 months:

- A decrease in USD100.0 billion in China's exports to the U.S., on the basis that the Trump Administration has reportedly indicated its desire to reduce the U.S. bilateral merchandise trade deficit with China by USD100.0 billion (i.e., the equivalent of almost a quarter of China's exports to the U.S. or more than 4 percent of China's total exports).

- A corresponding proportional drop in the magnitude of U.S. exports of USD30.0 billion (i.e., the same percentage decline in share of U.S. exports to China or almost 2 percent of U.S. total exports) from "proportionate" counter-measures taken by China.

Our findings confirm the lessons from history that there would be no winners in a trade war.[21] Several key themes emerge from the results (Table B1), notably:

- *Both China and the U.S. would be negatively affected.* In the first 12 months of the assumed shocks, the losses would be similar for both China and the U.S. in that they would each lose around 0.2 percentage points of growth, which means that the relative impact would be larger for the U.S. The effects would be more protracted for the U.S., which could see growth fall by another 0.2 percentage points by the 36-month mark. While this outcome might appear counter-intuitive given the assumed bigger proportional fall in China's exports, the U.S economy is more open and hence likely to experience greater feedback effects flowing from the impact on trade and finance of other partners. Moreover, China has historically been effective in utilizing economic stabilisers (given its significant policy space) to cushion shocks.

- *Globalization would ensure greater spillovers and feedback effects on other economies.* The outcome of any shock to demand from the two economic giants would reverberate around the world. For the other ASEAN+3 members, a large decline in China's exports would have slightly greater influence on growth, compared to that in U.S. exports – the trend would be largely negative across the region except for economies that are well-diversified in their export markets. The impact on members from the assumed one-off hits to China and U.S. exports would be front-loaded and any aftershock would have largely died out by the third year for most economies. For the group of advanced economies among the ASEAN+3, the negative impact would range from -0.2 to -0.8 percentage points of growth, while among the emerging market economies, we estimate the impact at between 0 and -0.5 percentage points over the first 12 months.[22]

Clearly, the damage to global growth would be greater the longer any trade war between China and the U.S. continues and conceivably escalates. It would also worsen if other economies or regions were compelled to enter the fray. The most prominent trade war of the twentieth century, which was triggered by the U.S. Smoot-Hawley Tariff Act of 1930, is widely seen to have exacerbated and prolonged the Great Depression. It left such an indelible mark on the political psyche of Western nations that it led to the setting up of the GATT/WTO and the rules-based multilateral trading system that has underpinned global trade policies for the last 70 years. Given that globalization has resulted in significantly greater integration in international trade and finance in the intervening years, any fallout from a large-scale trade war now would surely be magnified manifold in terms of reach and intensity. Hence, for the collective global good, trade disputes should be addressed via the established multilateral system rather than through unilateral actions.

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[20] The model takes into account spillovers and feedback effects; its specification incorporates economy-specific factors such as industrial production (as a proxy for real GDP), consumer prices, trade (exports and imports in local currency), the nominal effective exchange rate (NEER) and interest rates, as well as other global variables such as oil and food prices (see Annex A of AMRO (2017) for a detailed description). The sample used to run the estimations comprises 33 economies, including the ASEAN+3 members and the U.S., using monthly data from 2001.

[21] Bouet, A. & Laborde, D. (2017). *U.S. Trade Wars with Emerging Countries in the 21st Century: Make America and Its Partners Lose Again*. IFPRI Discussion Paper 01669, The International Food Policy Research Institute, Washington, DC.

[22] ECB staff simulations suggest that the imposition of tariffs could result in a contraction in world trade in goods by up to 3 percent in the first 12 months and global growth by up to one percent (Coeure, B. (2018). *The Outlook for the Economy and Finance*. Workshop, 29th Edition, Villa d'Este, Cernobbio, 6–7 April).

Table B1. Trade GVAR Results: Estimated Total Impact of China-U.S. Trade War on Selected ASEAN+3 Economies [1/ 2/]

Country	Exports								Estimated Total Impact on GDP					
	Billions of U.S. Dollars			Percent of Total		Percent of Own GDP			Percentage Points of Growth					
	To World	To China	To the U.S.	To China	To the U.S.	To World	To China	To the U.S.	Shock to China Exports		Shock to U.S. Exports		Total Shock	
									12-Month	36-Month	12-Month	36-Month	12-Month	36-Month
U.S.	1,545.6	130.4	…	8.4	…	8.0	0.7	…	-0.03	-0.05	-0.05	-0.09	-0.23	-0.39
China	2,280.1	…	433.7	…	19.0	18.0	…	3.4	-0.03	-0.03	-0.02	-0.02	-0.18	-0.16
Advanced Economies														
Japan	698.1	132.8	135.1	19.0	19.3	14.4	2.7	2.8	-0.03	-0.10	-0.03	-0.02	-0.20	-0.16
Korea	562.0	141.2	68.7	25.1	12.2	36.7	9.2	4.5	to	to	to	to	to	to
Singapore	366.1	53.9	24.3	14.7	6.6	109.4	16.1	7.2	-0.10	-0.80	-0.16	-0.16	-0.77	-0.76
Emerging Markets and Developing Economies														
Thailand	236.4	29.4	26.5	12.4	11.2	50.0	6.2	5.6						
Malaysia	217.8	27.4	20.5	12.6	9.4	65.4	8.2	6.2	0.00	0.01	0.01	0.02	0.02	0.20
Vietnam	211.9	30.7	42.7	14.5	20.1	94.9	13.7	19.1	to	to	to	to	to	to
Indonesia	168.5	22.9	17.8	13.6	10.6	16.8	2.3	1.8	-0.08	-0.12	-0.06	-0.10	-0.45	-0.75*
The Philippines	62.8	6.9	9.2	11.0	14.6	19.8	2.2	2.9						
Cambodia	10.7	0.7	2.3	6.9	21.5	53.4	3.7	11.5						

Notes:
1/ The data for some member economies are insufficient to be included in the model.
2/ Assumes declines of USD100.0 billion in China exports and (proportional) USD30.0 billion in U.S. exports.
* Refers to one outlier country; the rest are within the 0.2 to -0.5 range.
Source: IMF Directions of Trade Statistics, International Financial Statistics, National Authorities, OECD TiVA, and AMRO staff estimates.

Box C.

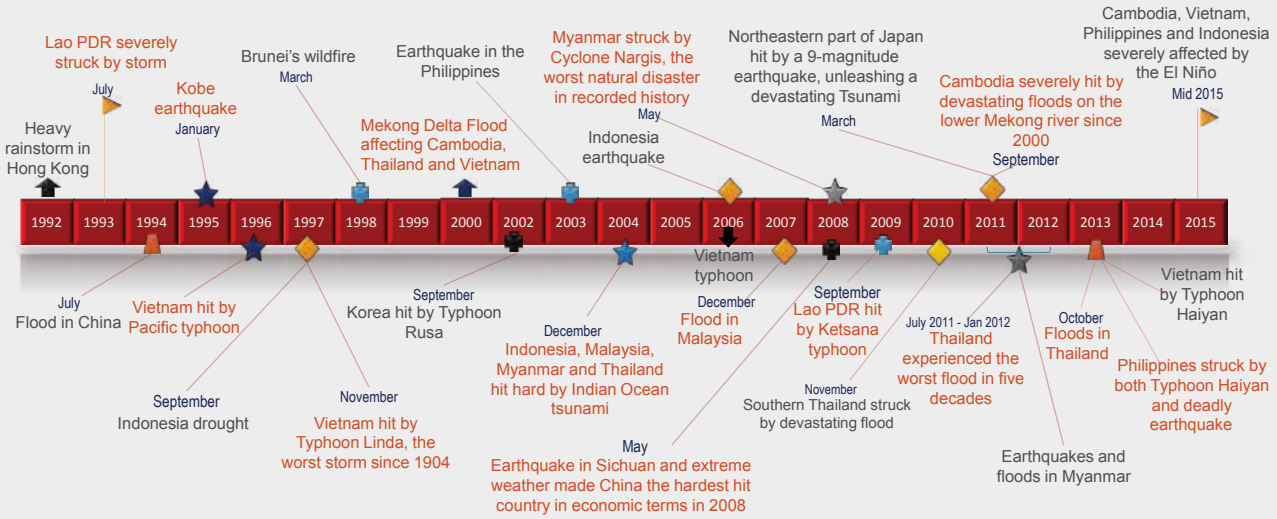
Natural Disasters and Climate Change in ASEAN+3 Region: Impact and Risk

Climate change is a global risk, with rising incidence and severity of natural disasters causing more severe unexpected shocks to economies. This box looks at the impact of natural disasters in the ASEAN+3 region, including on economic growth and fiscal positions, and the importance of building sufficient economic buffers to absorb these economic shocks.

In the ASEAN+3 region, floods, drought, storms and earthquakes are the most common types of natural disasters (Figure C1), with floods and storms together accounting for about 74 percent of total economic damages over the past decade and a half (Figure C2). Based on estimates by UNESCAP, natural disasters have resulted in over USD1.0 trillion in accumulated economic damages in the ASEAN+3 region over 1990 to 2016, or at an annual average of 0.4 percent (USD37.5 billion) of regional GDP.

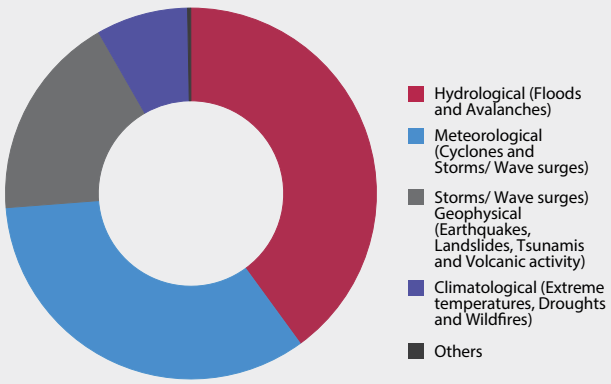
While natural disasters may cause more severe and lasting damage to agriculture-based and lower-income economies in the region, no economy is immune from the impact of these disasters. In Lao PDR and Myanmar, economic damages from a single natural catastrophe have exceeded 10 percent of GDP in the year of occurrence. This was also the case in Thailand, with damages from the floods in 2011 – the worst flood in its recorded history – estimated at 12.6 percent of GDP (Figure C3). In Japan, the Great East Earthquake and resulting tsunami in 2011 inflicted economic losses estimated at 3.4 percent of GDP, while in China, damages from the Sichuan earthquake and extreme weather were estimated at 2.4 percent of GDP in the year of occurrence, making China the country most affected in the region in terms of economic damages in 2008.

Figure C1. Major Disaster Events in the ASEAN+3 Region (1990-2015)



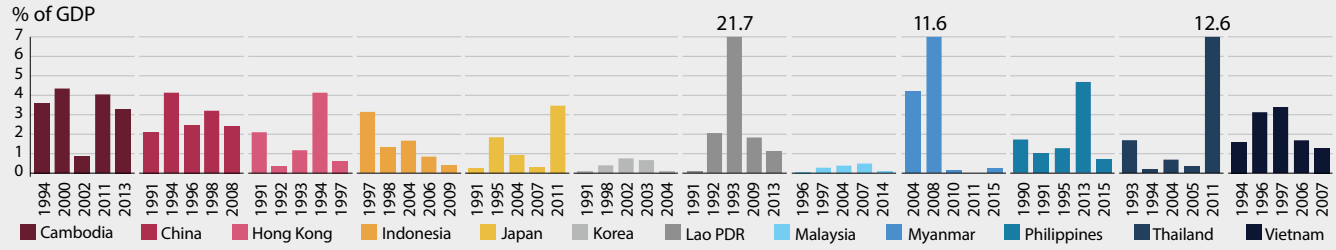
Sources: Earth Observatory, EM-DAT, Facts and Details, The Asia Foundation, UNOCHA, Relief web, Hong Kong Observatory, Telegraph, Reuters and International Strategy for Disaster Reduction

Figure C2. Share of Total Damage in the ASEAN+3 Region, by Types of Disaster (%) during 1990-2016



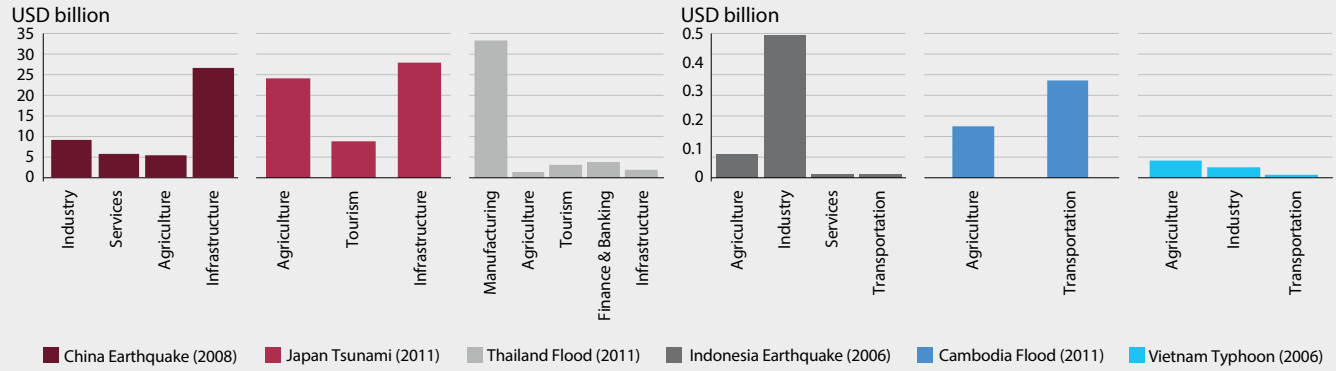
Source: United Nations ESCAP

Figure C3. Total Economic Damages (in the Year of Disaster Occurrence, Selected Economies) are Substantial



Note: This figure shows economic damages as percent of GDP for the top five disaster events in each country.
Sources: United Nations ESCAP, World Bank, National Authorities, AMRO staff calculations.

Figure C4. Damages and Losses (Selected Affected Years and Sectors)



Sources: Asian Development Bank, World Bank, Wall Street Journal; exchange rates from IMF IFS

The transmission channels of natural disasters to the real economy are immediate and direct through damages to agriculture, industrial production, infrastructure and housing. The impact has been across the board in the agriculture, industry and service sectors (Figure C4), which would further deteriorate the current account position through the reduction in goods exports and tourism receipts. Economies with large agriculture sectors would experience an immediate impact on growth. For instance, in Cambodia where agriculture contributed about 35 percent of GDP in 2011, agriculture production declined in 2011 due to floods (Figure C5). In 2015, the El Niño-induced drought dragged down Cambodia's agricultural production to near-zero growth of 0.2 percent, from a 10-year average of 5.1 percent during 2005-2014. Similarly, Typhoon Haiyan in 2013 inflicted extensive damage on the agricultural sector in the Philippines, causing an estimated USD225.0 million in damages and a large loss of human lives.

The economic damage and impact on industrial capacity can be broad-based and long-lasting. The floods in Thailand in 2011 took a toll on its industry with damages and losses in the manufacturing sector (USD33.0 billion) accounting for the bulk (70 percent) of total estimated damages (Figure C6).[23] In Thailand's service sector, the losses in the tourism sector alone were estimated at almost USD3.0 billion with damages in tourism-related transportation, accommodation, food and beverages, shopping and entertainment.

On the fiscal side, the adverse impact on fiscal positions can be significant due to unbudgeted spending on disaster relief and reconstruction, at a time when revenue collection may have fallen due to the disaster. For example in Thailand, the government had to allocate USD13.0 billion or 3.5 percent of GDP for the post-flood reconstruction of infrastructure and water management (Figure C7) even while fiscal revenue collection growth had fallen sharply in 2011. (Figure C8). This contributed to the increase in the fiscal deficit to 2.5 percent of GDP in 2011 from 0.7 percent of GDP in 2010.

In terms of policy response, economies should build long-term resilience through investment in climate-proof infrastructure, diversification into other economic activities, and also greater regional integration to enhance the resilience of the ASEAN+3 region as a whole. In agriculture-dependent economies, the government should invest in climate-proof infrastructure to mitigate the impact

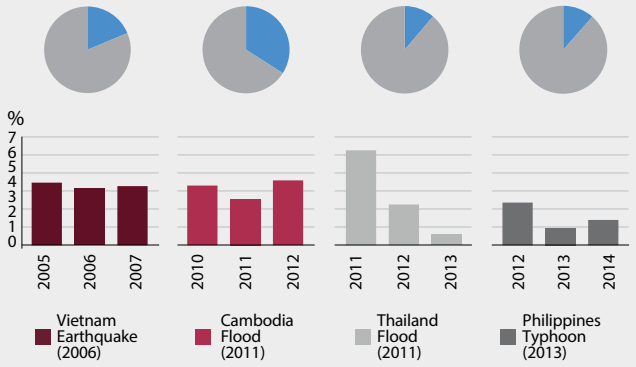
[23] World Bank. (2012). Thai Flood 2011: Rapid assessment for resilient recovery and reconstruction planning.

of natural disasters, and adopt a strategy of economic diversification towards industry and services. Diversification in terms of geographical development, with industrial clusters in different locations within the same country, could also isolate and minimize the impact of a disaster. In this regard, growing regional integration through infrastructure linkages among ASEAN+3 economies could increase the resilience to shocks of the ASEAN+3 region as a whole, in facilitating the growth of complementary production bases in multiple locations, with one location continuing production while another location may be temporarily affected by climate change events.

At the same time, economies should remain proactive in managing disaster risks through allocating necessary budget for upgrading the quality of their infrastructure, while maintaining fiscal buffers for spending on social safety nets and reconstruction as the incidence and severity of climate change events increase.[24] Buffers built up during cyclical upturns can be used to improve infrastructure quality to reduce the impact of natural hazards, and to cushion the unexpected spending for climate change events.

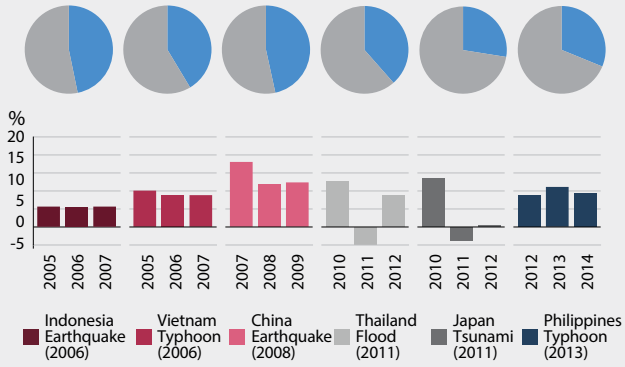
In industrial strategies, environmental sustainability should also be an important criterion, and this may require regional cross-border cooperation. To achieve sustainable economic growth, the region should strike a balance between growth and environmental sustainability, particularly through continued investment in sustainable development while incorporating climate change mitigation strategies into national development policies, and also in regional cross-border cooperation.

Figure C5. Growth and Share of Agriculture Sector (Selected Affected Years and Economies)



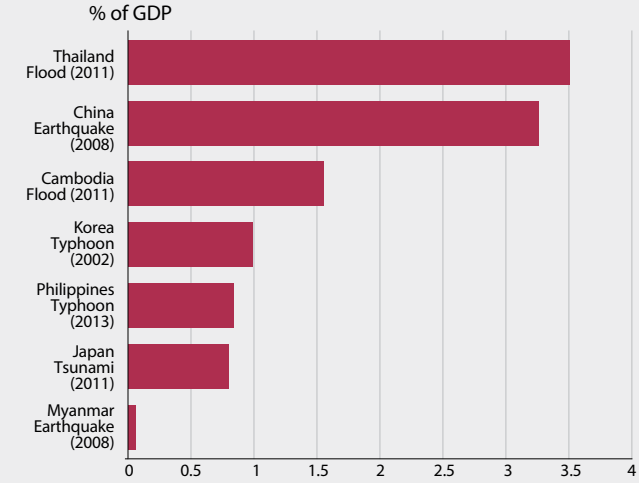
Note: Pie charts represent average share of agriculture sector of GDP.
Source: National Authorities, World Bank

Figure C6. Growth and Share of Industry Sector (Selected Affected Years and Economies)



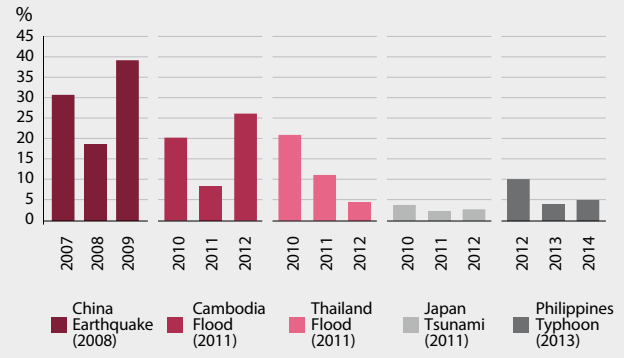
Note: Pie charts represent average share of industry sector of GDP.
Sources: National Authorities, World Bank

Figure C7. National Budget for Post-disaster Reconstruction



Sources: CNN, Reuters, World Bank, ASEAN-China Center, The Guardian Reliefweb

Figure C8. Growth of Domestic Revenue Collection (Selected Affected Countries and Years)



Source: National Authorities

[24] Specifically, for Southeast Asia, climate-change-induced economic losses could lower its GDP by up to 11 percent by 2100 should there be no action taken to tackle the climate change issues. See Raitzer, D. A., Bosello, F., Tavoni, M., Orecchia, C., Marangoni, G., & Samson, J. N. G. (2015). Southeast Asia and the economics of global climate stabilization. Asian Development Bank.

2 Regional Economic Outlook and Assessment

Regional economic growth remains robust, reflecting the sustained expansion in domestic demand supported by expansionary macroeconomic policies, as well as the stronger impulse from the global trade upcycle. In most regional economies, financing conditions remain favorable amid resilient capital inflows, particularly into debt capital markets. The positive outlook is expected to continue in the near term, although the risks of trade protectionism and tighter financial conditions have heightened recently.

22 Boosted by favorable conditions in the global economy, regional economic growth is sustained, underpinned by resilient domestic demand supported by expansionary macroeconomic policies, and a stronger impulse from exports. On the domestic demand side, private consumption remains resilient, underpinned by improving labor markets, higher earnings of commodity exporters from rising commodity prices, and to some extent, the easing of household debt in some economies. On investment, the outlook remains positive, given the ongoing implementation of public infrastructure projects in some regional economies.[25] Private investment is expected to be boosted by the recovery in exports, which has led to better capacity utilization rates in the manufacturing sector, which in turn will provide additional impetus to capital expenditures.

23 With strengthening domestic demand and a positive near-term export outlook, regional economic growth is projected to be sustained around mid-5 percent level in 2018-19, while inflation is expected to be largely stable, at around 2 percent level (Table 2.1). Most regional economies are in a mid-business cycle with a small output gap around trend growth. Some regional economies are in the late-business cycle, with emerging signs of inflation and external imbalance. AMRO's baseline growth projection for the ASEAN+3 region is 5.4 percent for 2018 and 5.2 percent for 2019. Notwithstanding, headline inflation in the region is expected to be largely stable at 2.1 percent in 2018, and 2 percent in 2019. Underlying inflation remains well anchored.

Table 2.1 AMRO's Projections for GDP Growth and Inflation (2018-19)

	(a) Real GDP Growth (% yoy)			(b) Headline Inflation (% yoy)		
	2017	2018 p/	2019 p/	2017	2018 p/	2019 p/
ASEAN+3 Region	**5.6**	**5.4**	**5.2**	**1.8**	**2.1**	**2.0**
Brunei Darussalam	0.6	1.6	3.4	-0.2	0.2	0.4
Cambodia	6.9	6.8	6.8	2.9	3.2	3.4
China	6.9	6.6	6.4	1.6	2.0	1.8
Hong Kong	3.8	3.4	3.0	1.5	2.1	2.3
Indonesia	5.1	5.2	5.3	3.8	4.0	4.0
Japan	1.8	1.3	0.7	0.7	0.8	0.9
Korea	3.1	2.9	2.8	1.9	1.9	2.0
Lao PDR	6.8	6.8	7.1	0.8	2.1	2.5
Malaysia	5.9	5.3	5.0	3.7	2.4	2.6
Myanmar	5.9	7.0	7.4	6.8	3.9	4.5
The Philippines	6.6	6.8	6.9	3.2	4.3	3.3
Singapore	3.6	3.0	2.8	0.6	1.2	1.8
Thailand	3.9	3.9	3.7	0.7	1.0	1.6
Vietnam	6.8	6.6	6.6	3.5	3.4	3.5

Note: p/ Projections. For Japan and Myanmar, 2017 and 2018 real GDP data refer to fiscal year ending March 2018 and 2019, respectively. For economies where 2017 data are not yet readily available, the data refer to AMRO's estimates.
Sources: National Authorities, AMRO

[25] In some economies such as Thailand, the start of mega-infrastructure projects is expected to provide additional impetus to growth in the period ahead.

Box D.

Introducing the Business and Credit Cycles for the ASEAN+3 Economies

This issue of the AREO introduces analysis of where each of the ASEAN+3 members are located in their respective **business and credit** (or financial) **cycles**.[26] The aim is to provide a broad overview of regional macro-financial developments in order to achieve the following going forward: (i) enable more consistent and comparable cross-country assessments within the region; (ii) improve the analysis of domestic within and spillover risks among members; (iii) promote greater transparency in the discussion on members' current policy settings and recommendations for their future direction.

While the credit cycle and the business cycle are different phenomena, they are closely inter-related and need to be considered in tandem. As Borio (2012) argues, macroeconomics without the credit cycle would be like "Hamlet without the Prince."[27] The empirical evidence suggests that the credit cycle, which has increased in duration and amplitude since the mid-1980s, is much longer than the traditional business cycle (Drehmann, Borio and Tsatsaronis, 2012).[28] While the contraction phase of the credit cycle tends to last several years and the business cycle downturns are generally much more short-term, the coincidence of both significantly amplifies the negative impact on economic activity.

AMRO applies well-established methodology in constructing the business and credit cycles for the ASEAN+3 economies. In line with common practice, a univariate approach – using real GDP as the representative variable – is taken for the business cycle, both for simplicity and to account for the data gaps issue among some members.[29] Separately, the credit cycle is constructed using Drehmann, Borio and Tsatsarionis' (2012) frequency-based filter method, by aggregating real credit growth, real property prices (where available) and the credit-to-GDP ratio.[30] The stylized business and credit cycles, with their various stages, are presented in Figures D1 and D2.

It is important to emphasize that policymakers should use the levers available to them to ensure smooth transitioning across the various stages or phases of these cycles. Appropriate macro-policy actions that are taken in a timely manner could help minimize economic and financial volatility. For instance, an economy that is in a late business cycle could avoid falling into a recession if a "soft landing" could be engineered (Figure D1). Similarly, concerted macroprudential policy actions to contain the build-up in financial vulnerabilities, complemented by the strengthening of financial regulation and supervision to ensure the soundness of financial institutions, could prevent crises that result in sharp credit contractions.

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[26] The European Commission and the OECD Development Center have respectively published regular business cycle indicators for Europe and emerging Asia (see European Commission, European Business Cycle Indicators (various issues); and OECD Development Center, Asian Business Cycle Indicators (various issues)), while the ADB has also published its assessment of business cycles in Asia (see ADB, "Gauging Asia's business cycles", Asian Development Outlook Update 2017, September 2017).

[27] Borio, Claudio. 2012. "The Financial Cycle and Macroeconomics: What Have We Learnt?" BIS Working Paper No. 395, Bank for International Settlement, Basel.

[28] Drehmann, Mathias, Claudio Borio and Kostas Tsatsaronis. 2012. "Characterising the Financial Cycle: Don't Lose Sight of the Medium Term!" BIS Working Paper No. 380, Bank for International Settlement, Basel.

[29] The National Bureau of Economic Research (NBER), for example, considers a range of indicators in estimating the U.S. business cycle.

[30] Drehmann, Borio and Tsatsaronis (2012) provide a comprehensive list of references on the business cycle, the financial cycle and the interaction of both.

Figure D1. Stylized Business Cycle

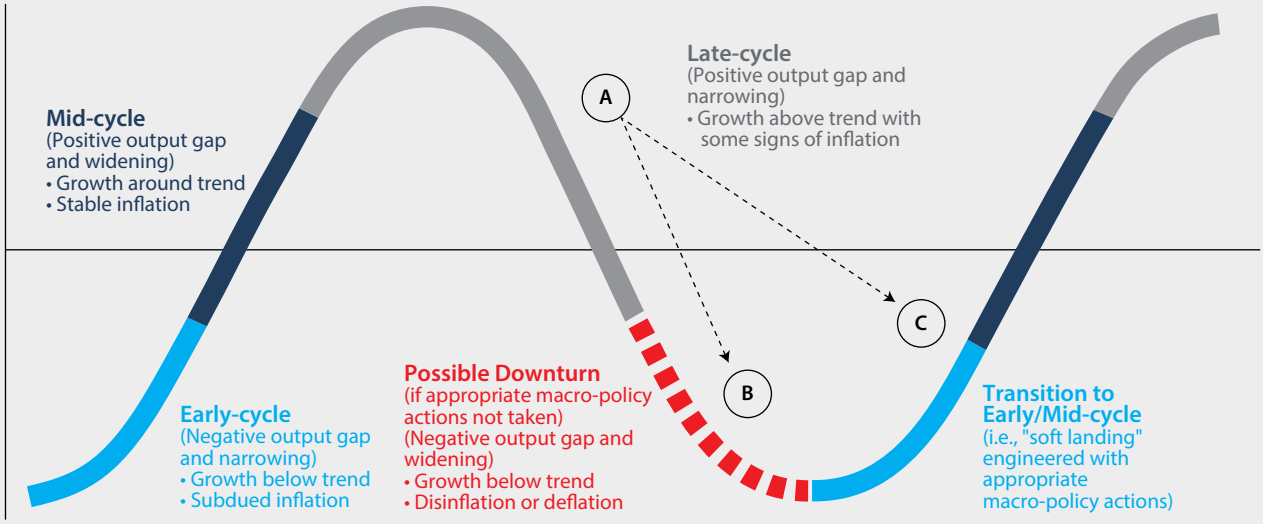
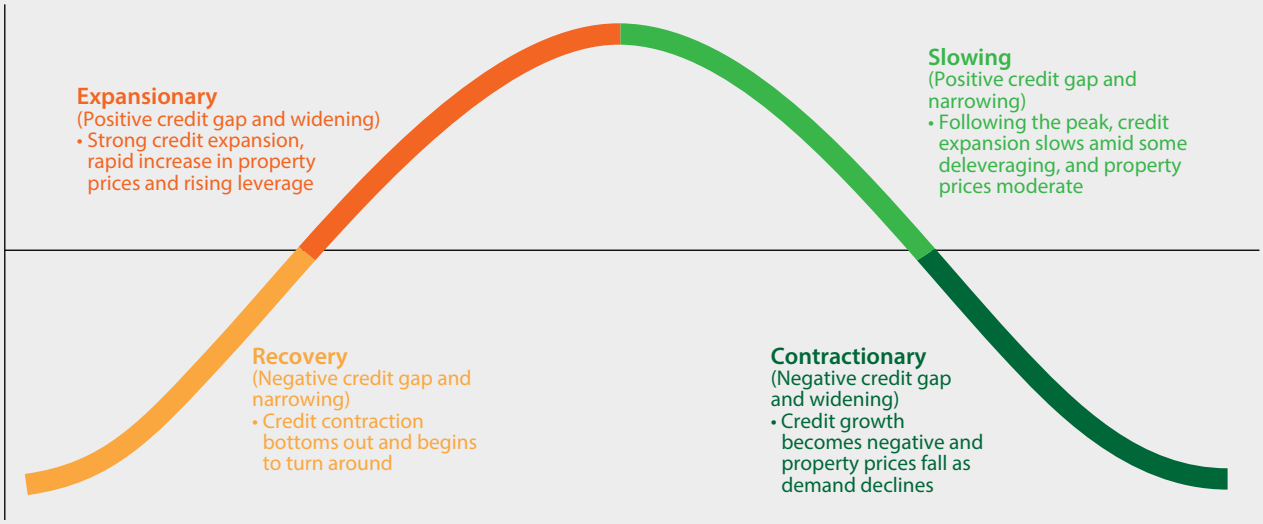


Figure D2. Stylized Credit Cycle



24 Analyzing the business and credit cycles for ASEAN+3 economies (see Box D), most regional economies are at mid-business cycle, where growth is picking up or near its long-run trend, with output gap close to zero and inflation within policy targets or around the long-run trend. For some economies, notably commodity exporters of Brunei, Indonesia and Myanmar, favorable global demand combined with upswing in energy prices have helped them to transition to the early-business cycle phase where growth is gaining pace but output gaps are still negative and inflation is subdued or below long-run trend. Growth in trade-dependent economies such as Korea, Singapore and Hong Kong benefited from the cyclical recovery in global trade, while several emerging ASEAN economies also saw robust growth on stronger impulse from exports. In some economies such as Japan and the Philippines, growth has been running above potential or has picked up strongly recently, with output gaps positive and widening, and with signs of inflationary pressure or external imbalance. With appropriate macro-policy settings (see further discussion in Section 3 on policy recommendations), economies in a late business cycle can manage the transition straight to an early-cycle recovery or mid-cycle without going through a downturn period (Box D). The credit cycle is discussed later in this section.

Table 2.2 ASEAN+3 Economies in Business and Credit Cycles

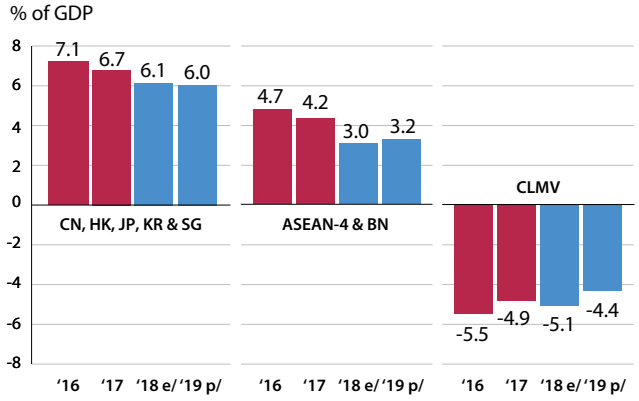
		Credit Cycle			
		Recovery	Expansionary	Slowing	Contractionary
Business Cycle	Early	Brunei Indonesia		Myanmar	
	Mid	Thailand	Hong Kong Vietnam	Cambodia China Korea Lao PDR Malaysia Singapore	
	Late			Japan The Philippines	
	Downturn				

25 On the external front, regional current accounts have generally improved since 2017, due to stronger export performance, and for commodity exporters, the current accounts have been supported by higher global commodity prices. Regional exports have outperformed, reflecting the strong rebound in manufacturing exports and also the recovery in oil prices, as well as prices of industrial metals (such as copper, aluminum and steel), which have benefited some regional commodity exporters. For regional economies that are dependent on the agricultural sector, the rebound in manufactured exports has helped mitigate the relatively sluggish agricultural commodity prices. Looking ahead, the aggregate current account surplus is projected to be relatively stable for the region in 2018-19. For ASEAN-4 and Brunei, the aggregate current account balance is projected to be stable (around 3 percent of GDP) in 2018-19. For CLMV economies, the aggregate current account deficit is projected to improve from 5.1 percent in 2018 to 4.4 percent of GDP in 2019. For the Plus-3 economies, Hong Kong, and Singapore, the strong current account position (around 6 percent of GDP) is expected to be sustained (Figure 2.1).

26 The improving external demand has allowed the region to build up buffers further against potential external shocks (Figure 2.2). Considering the high degree of foreign participation in regional domestic financial markets, the sudden unwinding of foreign holdings of local currency assets and capital outflows in a "risk-off" scenario would put strong downward pressure on exchange rates and/or result in large declines in FX reserves as the authorities intervene to cushion the impact on the exchange rates. However, regional exchange rates have become more flexible in recent years, and have played a greater role as a shock absorber. Together with judicious intervention by the authorities, it has helped to moderate the pace of adjustment to shocks and their impact on the real economy.

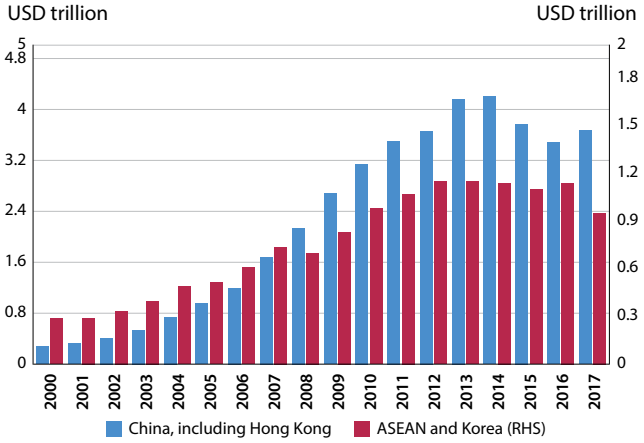
27 The key near-term uncertainty stems from trade protectionism as pointed out in the Global Risk Map, which could weigh on export outlook in the period ahead. As mentioned earlier, due to stronger exports, growth in some regional economies has gained traction. The lift to exports was boosted by the tech upcycle, which benefited the region, as a manufacturing hub (Figure 2.3). Looking ahead, tech sector indicators such as global semiconductor sales continue to signal strong momentum for global trade, with U.S. and Europe being key growth drivers.

Figure 2.1 Improving Current Account Outlook in Emerging and Developing ASEAN Economies



Note: e/ Estimates and p/ Projections
Sources: National Authorities, AMRO staff estimates

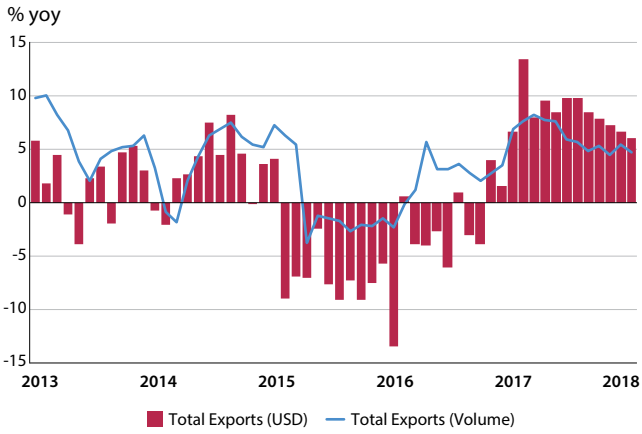
Figure 2.2 The region's FX reserves and exchange rate flexibility have helped to buffer against the impact of capital flows volatility



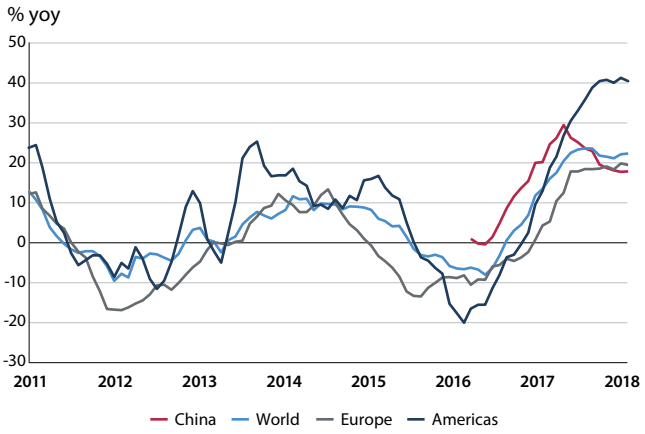
Source: National Authorities

Figure 2.3 The tech upcycle has supported regional exports

(a) Regional Export Performance



(b) Global Semiconductor Sales



Sources: National Authorities, AMRO staff calculations

Source: Semiconductor Industry Association

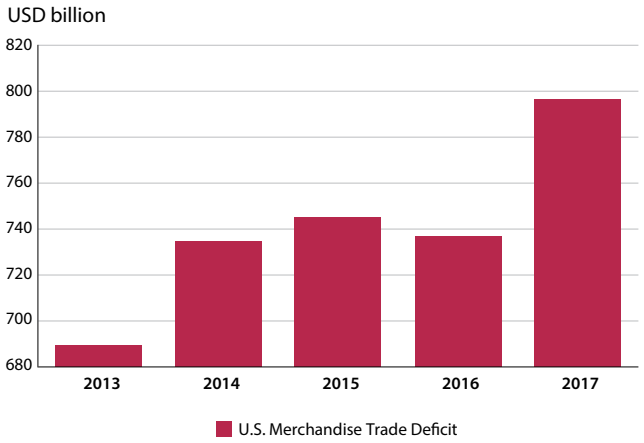
28 A firmer U.S. trade protectionist stance and escalating trade tension could derail the global trade recovery. Although the U.S. has started to impose punitive tariffs on several products (solar panels, washing machines, steel, and aluminum), its impact on the region has been relatively mild so far and the countries affected have not retaliated yet although some affected European countries have threatened to retaliate. However, the widened U.S. merchandise trade deficit in 2017 (-4 percent of GDP – the largest in recent years), could prompt the U.S. administration to impose further measures on other products or against targeted countries going forward (Figure 2.4). Several countries in the region (China, Japan, Korea, Malaysia and Vietnam) are major contributors to the U.S. merchandise trade deficit and hence are more vulnerable to such protectionist measures (Figure 2.5).

29 Trade frictions can exert significant impact on the region's exports given its openness to trade and the extensive trade linkages through the region's supply chains. As noted above, the U.S. protectionist pressure was ratcheted up in early 2018, with the imposition of 20 and 30 percent global tariffs on imported washing machines and solar panels respectively,[31] and then again in March with the imposition of 25 and 10 percent tariffs on steel and aluminum respectively.[32] Considering that major exporters in the region

[31] The U.S. imposed a 20 percent tariff on the first 1.2 million imported large residential washers in the first year, and a 50 percent tariff on additional imports. The tariffs decline to 16 percent and 40 percent respectively in the third year. For solar cells, a 30 percent tariff will be imposed on imported solar cells and modules in the first year, with the tariffs declining to 15 percent by the fourth year. The tariff allows 2.5 gigawatts of unassembled solar cells to be imported tariff-free in each year.

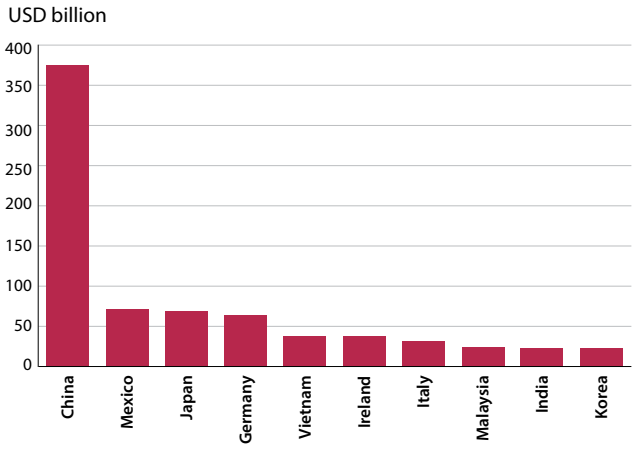
[32] Previous attempts to curb imports – country-specific antidumping and countervailing duties, failed to address the surge in imports as foreign manufacturers continuously relocated production from one country to another, thereby circumventing the import duties.

Figure 2.4 The U.S. merchandise trade deficit grew at the fastest pace in recent years



Source: U.S. Census Bureau

Figure 2.5 China, Japan and Vietnam are among the largest contributors to the U.S. trade deficit (2017)



Source: U.S. Census Bureau

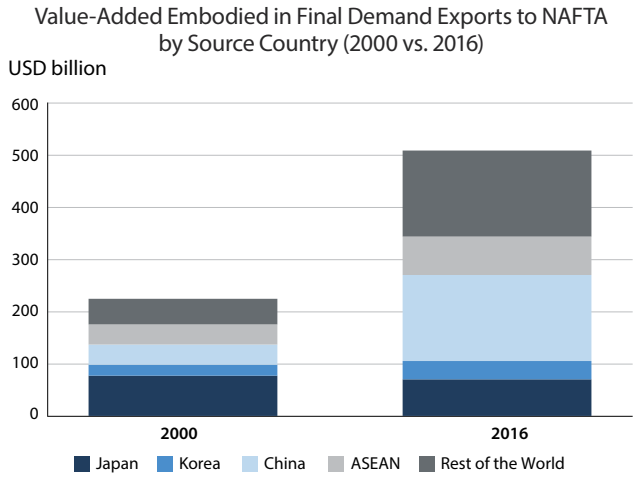
(such as Korea and China) are among the key players, there could be some real repercussions, such as on the employment front. Likewise, the tariffs on steel and aluminum imports by the U.S. is also expected to affect a broad range of countries, including some in the region (Figure 2.6). On NAFTA, a U.S. exit is not expected this year given marked progress in other non-trade areas, for instance, provisions on anti-corruption practices. However, the steel and aluminum tariff issues raised by the U.S. is complicating the negotiation process. While the near term impact is yet to be seen, escalation of trade conflicts is clearly negative, posing longer term downside risks for regional economies whose growth models are based on the global supply chain. Figure 2.7 shows that NAFTA countries are major final demand destinations for regional economies which would be significantly affected by the outcome of NAFTA negotiations.

30 The CPTPP can cushion, at least partially, the threat of U.S. trade protectionism on the region, and sends an important signal of commitment by its members to free trade and trade liberalization, and against rising protectionist sentiment. The CPTPP would result in binding commitments to reduce tariffs and remove new NTBs, thereby helping to mitigate the adverse impacts from rising protectionist threats. ASEAN's experience since the GFC shows that deeper trade and economic cooperation have been effective in harmonizing trade rules and keeping in check the pace of additional NTBs being introduced. Some regional economies (such as Vietnam) have already seen benefits in terms of increased FDI inflows, in anticipation of the trade agreement (see Box E on A New Trade Pact – The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)).

Figure 2.6 The impact on NAFTA countries is among the most consequential

Source: U.S. Department of Commerce, International Trade Administration

Figure 2.7 NAFTA countries are key trading partners for regional economies



Source: OECD, AMRO staff calculations

Box E.

A New Trade Pact – The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

Background

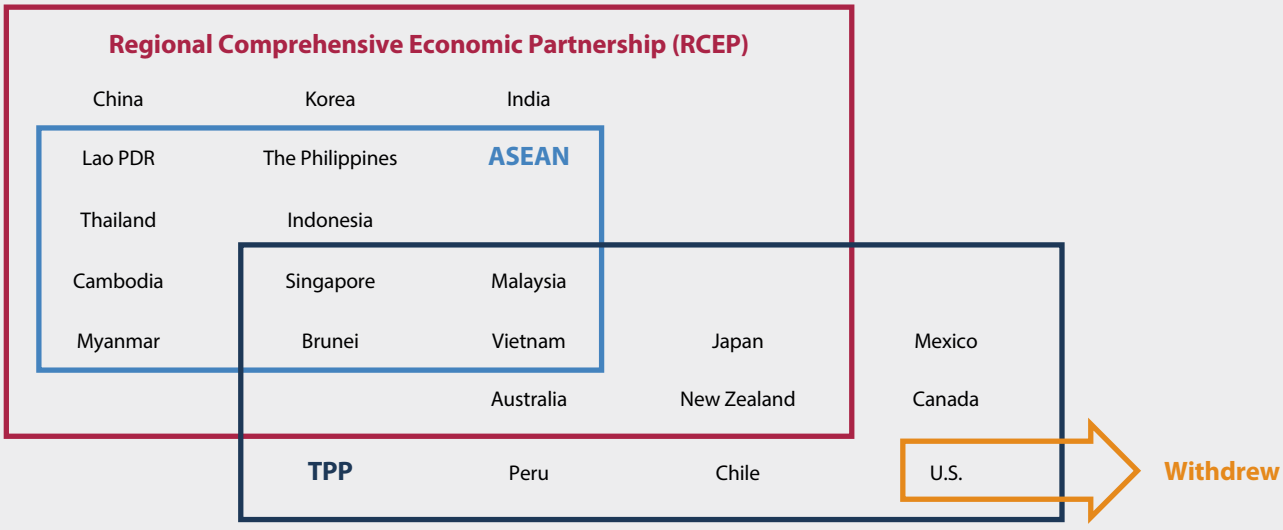
Prompted by the withdrawal of the U.S. from the Trans-Pacific Partnership (TPP) in November 2017, the other remaining 11 TPP members agreed to push ahead on a modified version[33] of the original TPP to bring the agreement into force. Although the withdrawal of the U.S. from the TPP is a major setback given its relative size and importance to international trade, the new agreement, now named the CPTPP is a significant achievement for the remaining 11 member states. According to Petri et. al. (2017), the withdrawal of the U.S. in some ways undermines, but in others, strengthens the rationale for Asia Pacific regional integration. Figure E1 shows the main trade deals in the Asia Pacific region.

Benefits of the CPTPP

The CPTPP is an ambitious trade pact as it aims at a high degree of liberalization and integration, with commitments that are deeper and more far-ranging than outlined in previous Free Trade Agreements (FTAs) signed between parties. The CPTPP is therefore considered a game changer as it is a trade pact that goes beyond existing FTAs by setting standards in areas including government procurement, environmental and labor conditions, and corruption prevention, in addition to reducing or eliminating tariffs and non-tariff barriers. By opening up the goods, services and investment sectors of CPTPP signatory countries to one another, it allows increased market access, promotes the development of regional supply chains, division of labor, economies of scale, and technology upgrading. Although the benefits are low at the early stages of implementation, all CPTPP member countries are projected to see gains in their GDP, exports and inward FDIs. By 2030, the gains can become quite large – cumulative GDP and exports growth of 1.5 percent and 4 percent respectively above the baseline [34] (Petri et. al., 2017 and World Bank, 2016) (Figure E2).

The signing of the CPTPP can cushion, at least partially, the threat of U.S. trade protectionism on the region. The CPTPP would result in binding commitments to reduce tariffs and decelerate the pace of new NTBs, thereby helping to mitigate the adverse impacts from rising protectionist threats. While the return to further tariff reductions declines as it approaches the zero lower-bound (Figure E3), there remains ample gains by ensuring that trade rules are of high standards while cutting inefficient ones that impede trade.

Figure E1. Framework of Asia Pacific's Major Trade Deals

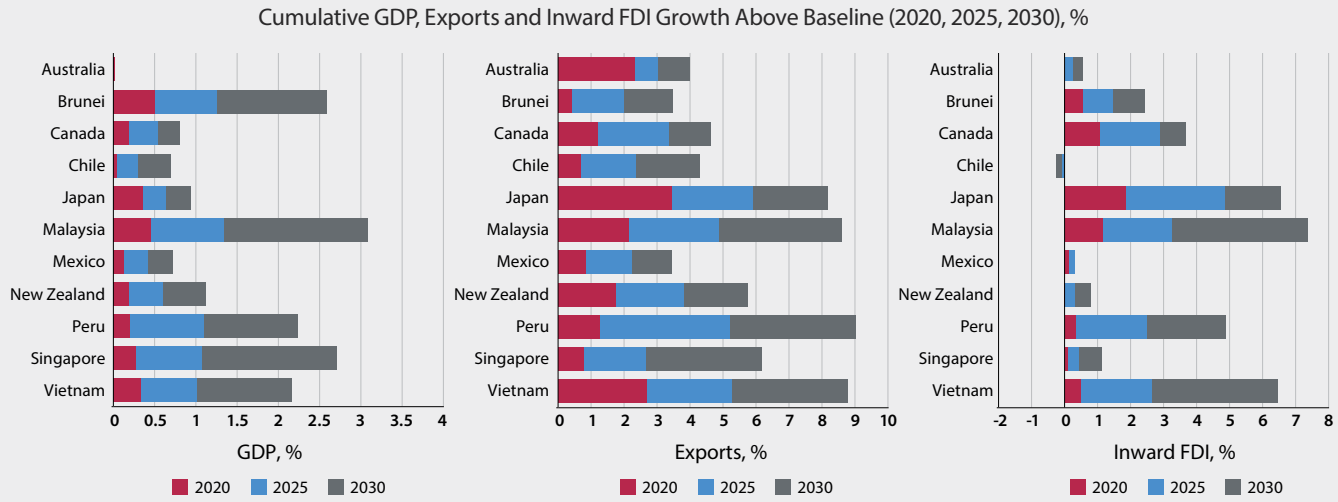


Source: Adapted from The Journal (journal.accj.or.jp)

[33] While most of the original TPP text remains unchanged, and all of the parties' commitments relating to liberalized trade in goods, services, procurement and investment remain intact, 20 TPP items are "suspended" in the CPTPP to reflect the concerns of the remaining member countries. These provisions will not be implemented by the CPTPP parties until the parties agree by mutual consent to do so. The suspended provisions, while notable, do not form the backbone of the CPTPP. Given the divergent interests and levels of economic development among the 11 parties, it is remarkable how much of the original TPP is either unchanged or was only subject to minor alteration in the CPTPP (Goldman, Kronby and Webster (2017)).

[34] A computable general equilibrium (CGE) model was used to estimate the projected benefits of the CPTPP, simulated using data from 19 sectors across 29 regions. The model takes into account the economic structures of the underlying economies – population, capital stocks, wage, price levels and trade patterns, and their response to changes in tariff and non-tariff barriers as a result of the CPTPP.

Figure E2. CPTPP benefits are initially low, but gain momentum at a later stage

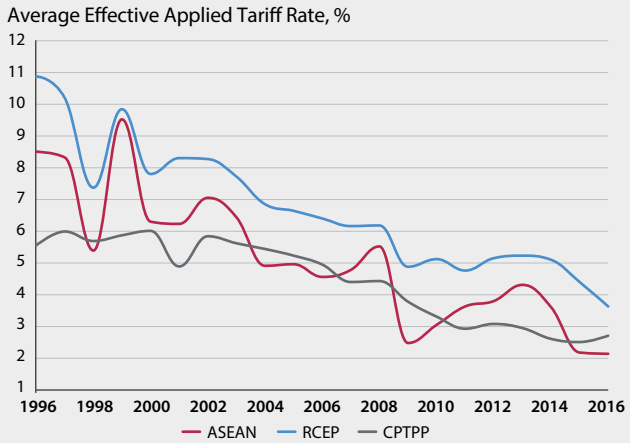


Sources: Petri, P. A., Plummer, M. G., Urata, S., & Zhai, F. (2017). Going It Alone in the Asia-Pacific: Regional Trade Agreements Without the United States.

Similar to the ASEAN Economic Community (AEC), trade rules under CPTPP are envisioned to protect consumers and facilitate trade by ensuring greater checks and balances, transparency and consistency in their design and implementation process. For instance, all member countries are required to make public all rules and procedures pertaining to imports in a common depository. ASEAN's experience since the GFC shows that deeper trade and economic cooperation have been effective in harmonizing trade rules and keeping in check the pace of additional NTBs being introduced. In contrast, they have risen substantially among its key trading partners, most notably the U.S. which has very few trade arrangements globally (Figure E4). More broadly, by reaffirming the principles of transparent, free and fair trade, the CPTPP represents another key milestone in the global trade and economic integration agenda, especially in an environment of rising trade protectionism.

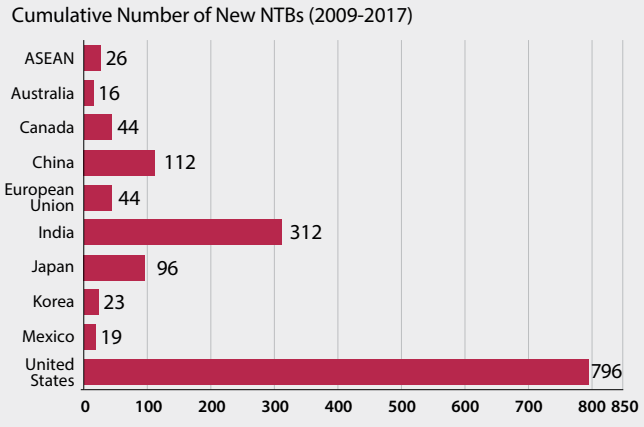
Even without the U.S., the benefits are still substantial, and may incentivize other countries in the region to participate in the future due to the omission of U.S.-centric trade standards. While it is clear that that new CPTPP is much smaller in terms of share of global GDP and global trade, the signing of the trade pact is significant and has far-reaching implications beyond short and long term economic benefits. Not only does it give new life to multilateral trade negotiations, it can also have knock-on effects on other trade negotiations, potentially serving as a benchmark for rule settings, which implies that the CPTPP's terms could serve as a model for future FTAs, including the Regional Comprehensive Economic Partnership (RCEP). Also, the omission of key intellectual property standards in the original TPP agreement, previously deemed to be contentious by several parties, may also spur other countries to join the CPTPP. Increased membership further boosts the benefits of CPTPP by enhancing and deepening existing trade and investment linkages in the region. Gains will stem from positive spillovers among existing members, in addition to the sum of direct bilateral gains between each new signatory and CPTPP country.

Figure E3. Average effective applied tariff rates are on a declining trend



Sources: World Integrated Trade Solution (WITS), WTO Integrated Database

Figure E4. Number of new NTBs have risen across all countries, notably in the U.S.



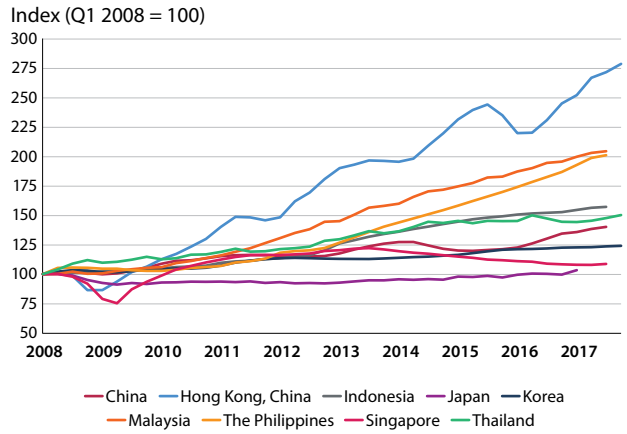
Source: Global Trade Alert Database

Although private sector indebtedness and leverage levels relative to GDP have eased somewhat in the region to the upturn in growth, debt remains a source of vulnerability. It can lead to distress in certain sectors should global financial conditions tighten prematurely. Notwithstanding that major global central banks are unwinding (or set to withdraw) monetary stimulus, regional asset prices continue to be supported by still favorable global financial conditions.

31 While private sector credit growth has moderated with some easing of debt-to-GDP ratios, the stock of credit has already built up in economies over the past years, as highlighted in AREO 2017 (Figure 2.11). In the credit cycle (see Table 2.2 and Box D), credit has started slowing in regional economies (such as China, Japan, Korea, Malaysia, the Philippines, Singapore and CLM economies) after a period of above-trend growth. Notwithstanding the still relatively easy global financial conditions, the external environment can shift quickly and cause domestic financial conditions to tighten prematurely, resulting in distress in some sectors of the economy.

32 The extended period of low global interest rates has buoyed real estate prices in the region, particularly in the residential sector. Figure 2.8 shows that in some economies (such as in Hong Kong), residential real estate prices continue to climb higher, above the historical average. The buoyant capital inflows amid the ultra-low interest rate environment in major advanced economies post-GFC, have also contributed to easy financing conditions in the region, leading to the rapid credit growth in this sector. The sizable ramp up in residential real estate prices reflects the late cyclical position of these economies in the credit cycle. Mindful of the financial stability risks from rapid credit growth, some regional economies (such as in Singapore, Hong Kong and Malaysia) have taken pre-emptive measures to curb excesses in residential property prices, as well as to foster sustainable developments in the overall real estate market.

Figure 2.8 Residential property prices in some regional economies have continued to be buoyant

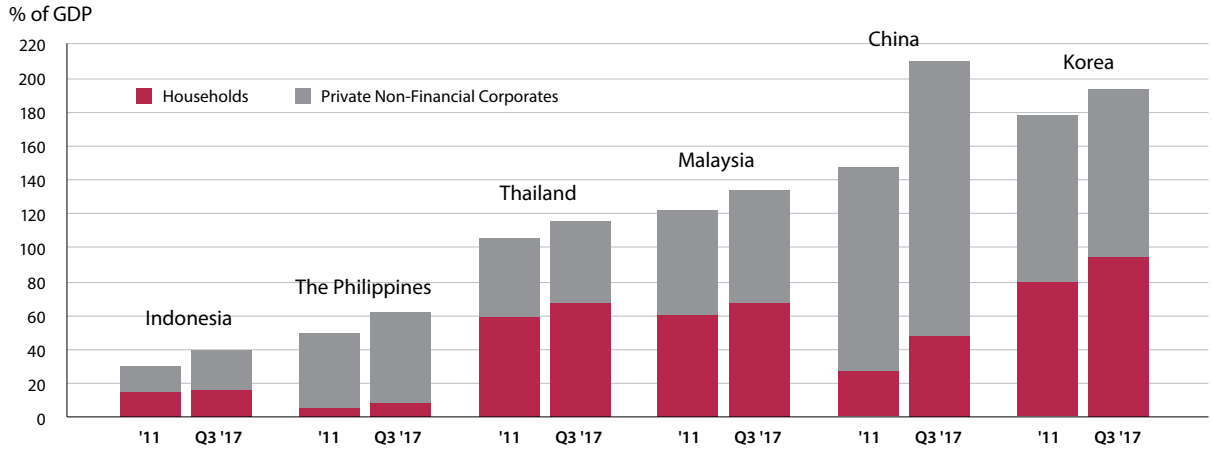


Source: BIS

Regional sovereigns and corporates with large external financing needs, relying on bank borrowing and/or portfolio capital inflows, remain vulnerable to refinancing risks from a sharper-than-expected rise in interest rates and shifts in risk appetite.

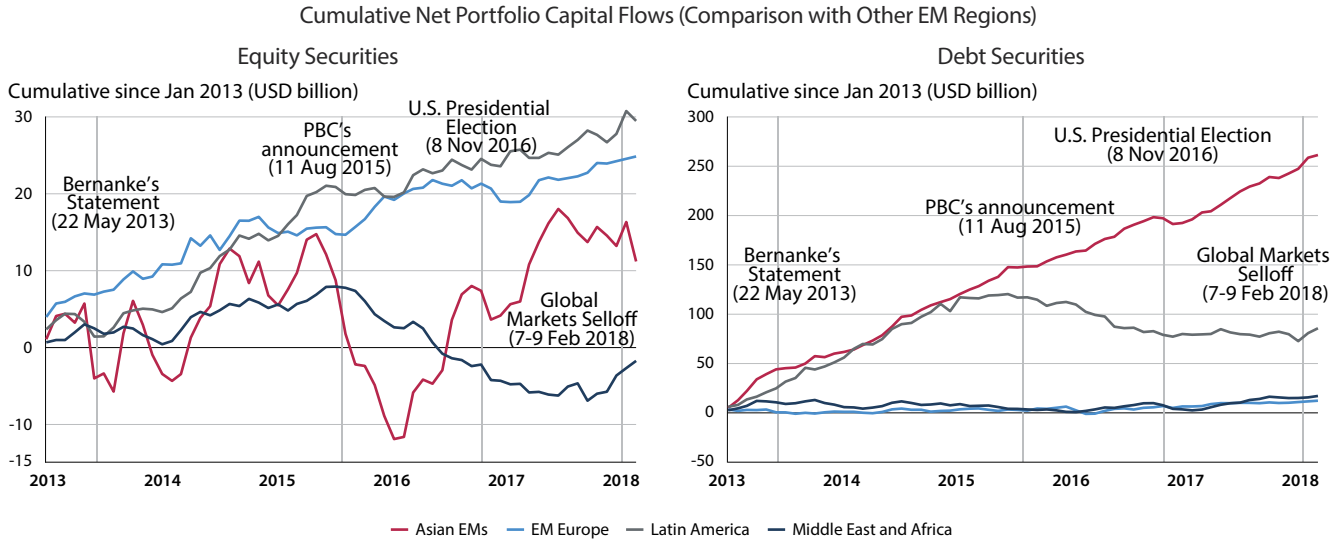
33 The main risk as highlighted in the Global Risk Map, is a faster-than expected pace of tightening in global financial conditions, which could heighten financing risks. The combination of sharply higher global interest rates, sustained USD appreciation and higher term premiums, could lead to a rebalancing of portfolios by institutional investors resulting in massive capital outflows from emerging markets. This would heighten the debt refinancing

Figure 2.9 Credit to Households and Private Non-financial Corporations from All Sectors



Sources: BIS, Haver

Figure 2.10 Relative to other EMs, regional bond markets remain attractive for global bond investors



Note: Regional EM equity markets refer to Korea, Malaysia, Thailand, Indonesia, the Philippines and Vietnam.
Source: Bloomberg

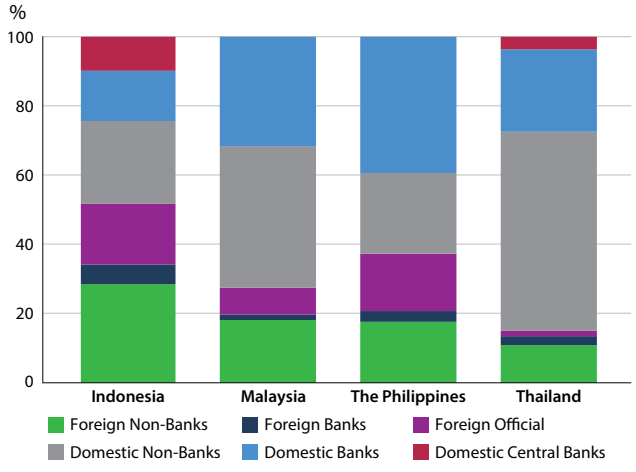
Note: Regional EM bond markets refer to Korea, Malaysia, Thailand, Indonesia and the Philippines.
Source: Bloomberg

risk in regional economies, given that private non-financial corporate and household debt remains elevated in some economies (Figure. 2.9). The authorities in the region have generally taken actions, such as macroprudential measures, to address this risk in their economies.

34 Unlike in other EM regions, sovereign debt markets in regional EMs have remained attractive to global investors. The impact of faster-than-expected U.S. Fed rate hikes on regional market debt markets, which have seen large inflows, should be closely monitored. Portfolio capital inflows into the regional EMs (ASEAN-5 and Korea), particularly in the debt markets, have been resilient despite the recent financial market volatilities. Figure 2.10 shows that from January 2013 to December 2017, ASEAN-4 and Korea's sovereign debt markets collectively recorded cumulative net foreign capital inflows of USD247.0 billion. Rising yields globally could heighten refinancing risks, with higher perceived risk in economies where there is a high share of foreign participation in domestic bond markets.

35 Notwithstanding the rising foreign participation in local government debt markets, some regional EMs have a large foreign official sector as an investor base, which tends to be more stable.[35] Given that some regional EMs continue to rely on external financing, foreign private investors (banks and non-banks alike) tend to be more risk averse in times of stress. Consequently, they may be less willing to roll over their holdings during episodes of stress. Figure 2.11 shows the composition of the investor base in China and ASEAN-4 economies' local currency-denominated government debt. It is encouraging to note that even though foreign banks and foreign non-banks, collectively, are major holders of local currency-denominated government debt securities, notably in Indonesia, Malaysia and the Philippines, there is also a growing share of participation from foreign official sector (such as sovereign wealth funds and national pension funds). These are long-term institutional investors who may not necessarily react to short-term market volatility, hence helping to provide some stability in regional capital flows. While rising foreign participation does create opportunities, the changing external financing conditions and the frequent, abrupt shifts in investor risk appetite can be destabilizing (see Box F on the Scenario Simulation of a Faster-than-expected Fed Rate Hike and Its Implications for Regional EMs).

Figure 2.11 In some EMs, the foreign official sector is an important investor in government debt securities



Source: IMF

[35] However, as most of these investors have strict investment mandates, any ratings downgrades beyond a certain threshold would trigger these investors to unwind their holdings (a "cliff effect") and rebalance their portfolios.

Box F.

Spillover Analysis: Scenario Simulation of a Faster-than-expected Fed Rate Hike and Its Implications for Regional EMs[36]

The pro-growth agenda of the Trump administration, spurred by tax cuts and federal spending plans, has stoked market concerns over the widening budget deficit and rising U.S. government debt level. In early February 2018, global stock markets experienced a short-lived sell-off on concerns that the increase in U.S. growth will also spur inflation.[37] While there has been some repricing of U.S. sovereign debt risks, it has not sharply pulled up long-term borrowing costs in regional EMs or resulted in disorderly asset allocations and capital outflows from the region.

However, upside risks remain to U.S. inflation given that the U.S. economy is near full employment. Considering the lags in monetary policy transmission mechanism, the Fed could decide to react earlier, and by a somewhat greater degree than anticipated in the event inflation surprises on the upside. The spillovers from a surge in U.S. Treasury yields, reflecting expectations of a faster-than-expected Fed rate hike and tighter financial conditions could be significant to the region. If the policy is not well signaled, it could accentuate risks of large and sustained capital outflows from regional EMs, causing EM currencies to weaken substantially ("overshooting") amidst portfolio rebalancing by global investors. This Box aims to illustrate a hypothetical scenario, in order to quantify the impact in a scenario whereby inflationary pressures in the U.S. surprised on the upside, prompting the Fed to raise rates more quickly than the market expected, which surprised markets, leading to capital outflows with adverse impact on global and regional economies in 2018-19.

Simulations of Spillover Effects (Impact Relative to Baseline Scenario)

a. Regional economic growth slows to 4.5 percent over 2018-19 (from around 5 percent in the baseline)[39] amid tighter global financial conditions, while regional headline inflation rises slightly to 2.1 percent (from 1.8 percent in the baseline) (Figures F1, F2).

Key Scenario Assumptions

The main assumptions of this scenario are as follows:

Faster-than-expected Fed Rate Hike Scenario	Baseline Scenario
• U.S. PCE inflation unexpectedly rises above 2 percent in 2018-19 and is sustained above Fed's 2 percent target.	• U.S. PCE inflation remains below the Fed's 2 percent target in 2018-19.
• Fed implements a faster-than-expected pace of policy rate hike, which surprises markets (cumulative rate hike of 100 bps in both 2018 and 2019).	• Fed maintains its current pace of policy normalization, continuing to signal a cumulative rate hike of 75 bps in 2018, and 50 bps in 2019.
• U.S. Treasury yields climb, amid rising inflation expectations with the 10Y yield surpassing the 3 percent level.	• U.S. Treasury yields continue to stay below the 3 percent level.
• The Fed maintains its current balance sheet reduction program.	• The Fed maintains a gradual and incremental pace of balance sheet reduction.
• No policy surprises (relative to baseline scenario) in other major advanced economies throughout the scenario period.[38]	
• In the region, current policy settings remain unchanged throughout the scenario period. Regional growth, inflation, current account and fiscal outlook are AMRO's (baseline) projections.	

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[36] In this Box, regional EMs refer to China, Korea, Indonesia, Malaysia, the Philippines and Thailand. Analysis as of 28 Feb 2018.

[37] "U.S. Tax Reform and Implications on Regional Emerging Markets" in AMRO. (2018). Monthly Update of the ASEAN 3 Regional Economic Outlook (AREO) (February).

[38] Policy direction based on market consensus:
(1) Bank of England: Cumulative 25 bps and 50 bps rate hikes in 2018 and 2019, respectively.
(2) ECB: Policy rates remain unchanged, with net asset purchases maintained at a monthly pace of EUR30.0 billion, the purchases of which are intended to run until the end of September 2018, or beyond, if necessary.
(3) Bank of Japan: No change in current policy.

[39] Key baseline assumptions in 2018-19: global growth (mid-3 percent level), global trade volume growth (4 percent), global oil prices (USD50.0 per barrel), cumulative Fed rate hike (50 bps for both 2018 and 2019), Regional growth, inflation, fiscal and current account outlook are as per projections by AMRO (also see the Appendix).

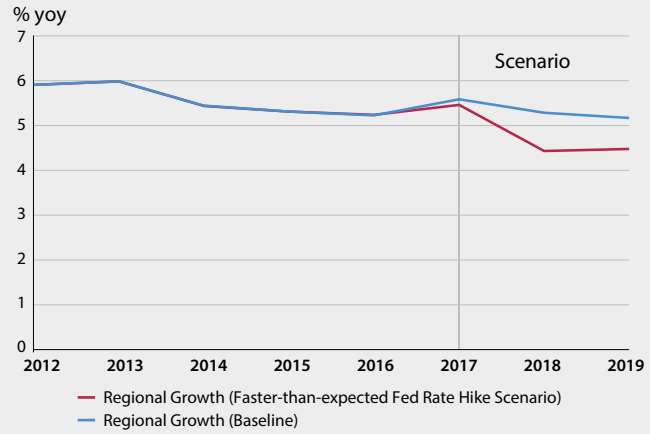
b. 10-year U.S. Treasury yields climb higher, averaging 3.3 percent over 2018-19 amid rising inflation expectations. In the region, even though fundamentals underpinning growth and inflation outlook remain unchanged, long-term borrowing cost (10Y sovereign yields) spikes across major regional EMs driven mainly by higher country risk premia. With the re-pricing of sovereign risks, the yields stay at a higher level as compared to the baseline scenario (Figure F3).

c. In terms of capital flows, the results from the scenario suggest that regional non-FDI net capital outflows (including reserve changes) could be sizable. Figure F4 compares the scenario results with the actual non-FDI net capital outflows in 2013 – the year of the taper tantrum. Highly open regional economies, and those with strong trade linkages with China are vulnerable to a potential capital reversal. However, the magnitude of the capital outflows could be mitigated by appropriate policy responses by the authorities (this scenario assumes that policies remain unchanged).

Conclusion

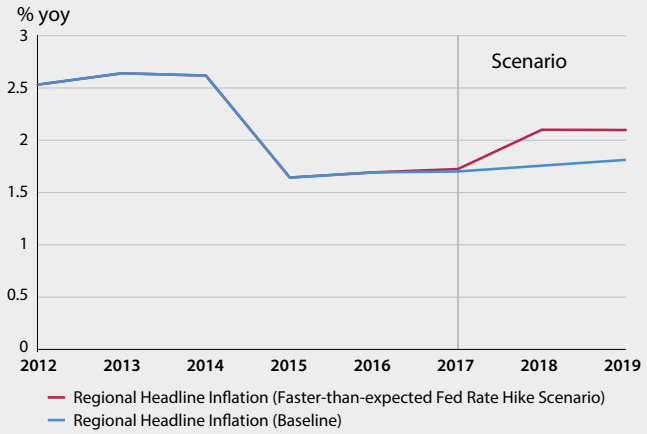
The illustrative scenario shows that a faster-than-expected U.S. Fed rate hike – one that is not well-signaled – has the potential to cause non-trivial spillover effects on asset prices and capital flows in regional EMs. This is consistent with the Global Risk Map, where the impact is assessed to be high (Figure 1.25). It will be crucial for policymakers to have an expanded policy toolkit, build foreign exchange buffers, and to undertake pre-emptive risk mitigation measures in order to attain both growth and financial stability objectives.

Figure F1. Regional growth slows in 2018-19



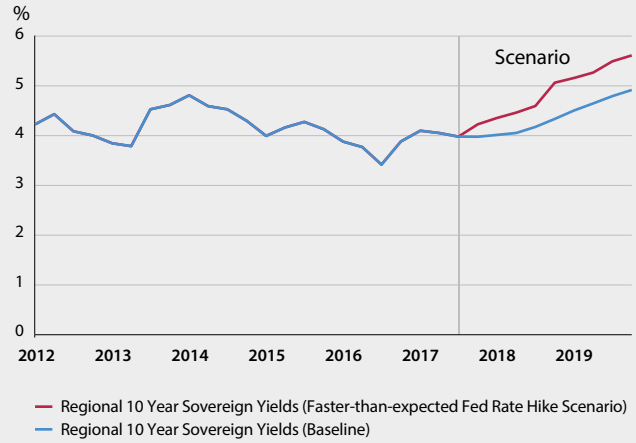
Note: Data after 2017 refers to scenario estimates.
Sources: Oxford Economics, AMRO staff estimates

Figure F2. …while headline inflation edges slightly higher



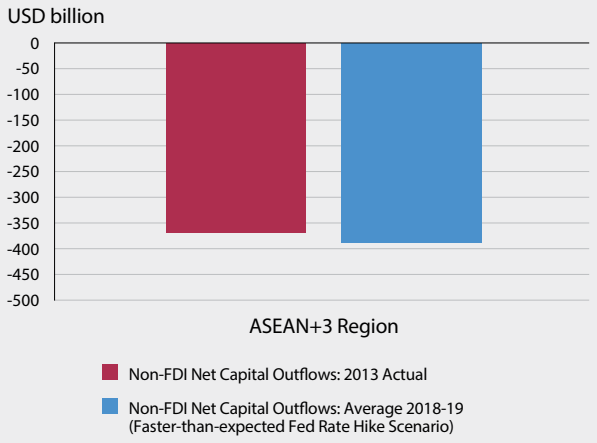
Note: Data after 2017 refers to scenario estimates.
Sources: Oxford Economics, AMRO staff estimates

Figure F3. Long-term borrowing costs in regional EMs spike up in tandem with rising U.S. Treasury yields



Note: Data after 2017 Q3 refers to scenario estimates.
Sources: Oxford Economics, AMRO staff estimates

Figure F4. Non-FDI net capital outflows (including change in reserves) can be large for the region



Note: ASEAN+3 region in this context refers to China, Indonesia, Korea, Malaysia, the Philippines and Thailand.
Sources: Oxford Economics, AMRO staff estimates

3 Policy Recommendations

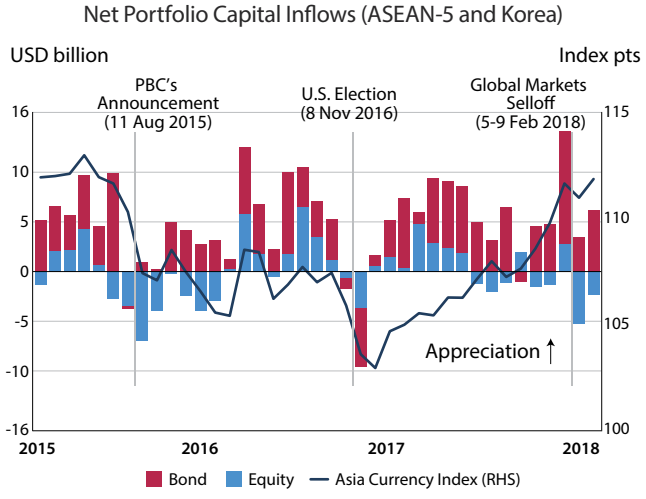
While risks in the short term have diminished compared to last year, they have started to rise in recent months with the imposition of protectionist measures by the Trump administration and stronger signs of inflationary pressures. Policymakers should be more vigilant and continue to build policy space, particularly in monetary policy, for tighter global financial conditions ahead. The policy mix of fiscal, monetary and macroprudential policies would depend on where each economy is currently in its business and credit cycle.

Monetary Policy and Financial Stability

36 In terms of policy developments, considering the benign domestic inflation, regional economies have largely kept monetary policy accommodative. While policy interest rates have been adjusted upwards in some regional economies, the monetary policy stance for the region still remains accommodative. Other targeted policy measures, such as cuts in reserve requirement ratio (RRR) have also been adopted (notably in China and the Philippines) in order to adjust liquidity in support of domestic economic activities, such as lending to small businesses and priority sectors. This underscores the principle that policy calibration should be more nuanced, and tailored to country-specific considerations. As discussed in Section 2, regional economies that are growing robustly above potential and where output gaps are positive and inflationary pressures are building, may consider signaling a tighter monetary policy bias. Regional economies that are in late business cycles could consider a tightening monetary policy bias, in view of emerging signs of inflation, subject to their inflation targeting monetary policy framework.

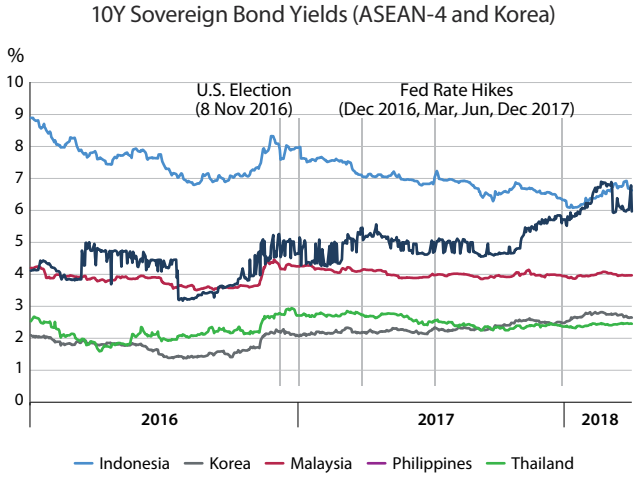
37 Even though most regional economies are in early- to mid-business cycle, given the build-up of credit over the past years, the financial stability objective should be prioritized in the near future over economic growth, with monetary policy on a tightening bias. For some economies, monetary policy space may be constrained, given the impending tightening of global financial conditions, with possible shocks if global financial conditions were to tighten faster-than-expected. So far, the interest rate upcycle in the U.S. has not led to massive capital outflows from regional EMs, notwithstanding the recent corrections in global equity markets, suggesting greater resilience. While there has been some pullbacks in equity capital by foreign investors, regional bond markets have continued to benefit from foreign capital inflows, albeit at a slower pace in recent months (Figure 3.1). Despite a sustained rise in major advanced markets' bond yields in response to a reassessment of the inflation and monetary policy outlook particularly in the U.S.,[40] long term borrowing costs across most regional EMs have remain largely stable (Figure 3.2), and liquidity conditions continue to be ample in the region. This provides for some monetary policy space for several regional economies, underscoring greater resilience amid the U.S. interest rate upcycle. AMRO's recommendation

Figure 3.1 Non-resident net portfolio capital inflows into regional bond markets have been resilient, despite the selloffs in global equities in early February 2018



Source: Bloomberg

Figure 3.2 Long-term borrowing costs (10Y sovereign yields) in regional EMs (except the Philippines) have remained largely stable despite increases in U.S. Treasury yields



Source: Bloomberg

[40] The sharply higher U.S. Treasury yields mainly reflect a decompression of term premium, after an extended period of low inflation.

is for economies to either maintain their current stance or have a tightening bias for monetary policy in order to prepare for future risk, and not to ease monetary policy further.

38 Where pockets of vulnerability have built up in sectors such as the property markets, maintaining or tightening macroprudential measures can help safeguard financial stability, and most regional economies have already tightened macroprudential measures proactively. Macroprudential policy measures such as loan-to-value (LTV) limits, debt servicing ratios (DSR), single borrower limits (SBL) and countercyclical capital buffers (CCB) can help moderate or rein in excessive build-up of debt in the household and corporate sectors and contain potential systemic risks to the financial sector. AMRO's recommendation for most economies is to maintain their current tight macroprudential policy stance in view of the still high level of indebtedness in the non-financial sector and signs of pick-up in the property markets.

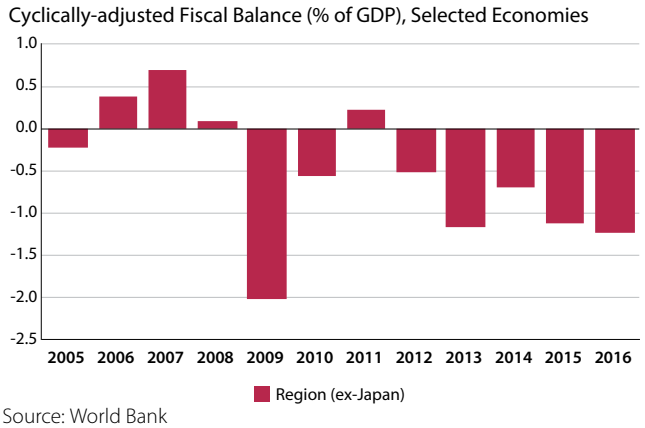
39 Policy will have to be calibrated taking into account constraints from domestic and external vulnerabilities such as debt, and degree of reliance on external financing. Economies in which financial vulnerabilities have built up, with high leverage or external debt, will face the sharpest trade-off in maintaining an accommodative monetary policy to support growth while maintaining financial stability, especially as global financial conditions tighten. Economies relying on capital markets to finance both the currently account and the fiscal deficits ("twin deficits") may face financing constraints when trying to maintain an easy monetary policy or an expansionary fiscal policy.

Fiscal Policy: Supporting Structural Adjustment

40 For economies in the mid-business cycle, there is generally no need for policymakers to pursue additional monetary or fiscal stimulus as the economy is growing at or above potential and the output gap is zero or a small positive. For economies in early-business cycle, there is a stronger impetus for policymakers to support growth through additional stimulus in order to close the negative output gap. In contrast, for economies in the late-business cycle where the output gap is positive and there are signs of inflationary pressures or external imbalance, policymakers should consider recalibrating monetary and fiscal policies to withdraw stimulus so that the economy can avoid a downturn and transit smoothly to an early or mid-cycle. For most economies, the current fiscal stance is still expansionary and given the increase in the public debt, our view is to consolidate or maintain the fiscal stance and to use fiscal policies more actively to support the structural reforms and enhance growth potential (China, Japan, Malaysia, Lao PDR).

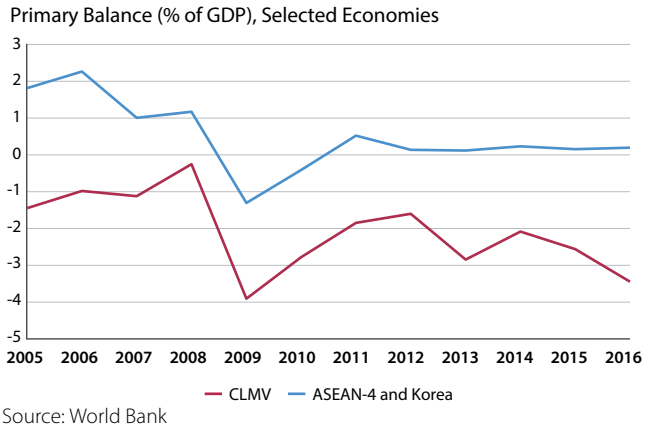
41 However, the scope for more active use of fiscal policy is subject to available fiscal space, which has generally narrowed (Figure 3.3). For several economies (Korea, Indonesia, Malaysia, the Philippines and Thailand), there are also constraints imposed by fiscal rules on the ceilings for fiscal deficit or debt/GDP ratio. For most CLMV economies and Brunei, fiscal policy could also expand less in the context of ongoing fiscal consolidation[41] (Lao PDR, Myanmar, Vietnam), given that fiscal deficits (primary balance) had widened significantly in those economies (Figure 3.4). On the other hand, fiscal expenditure should be reprioritized to

Figure 3.3 As compared to before the GFC, the cyclically-adjusted fiscal balances are widening in the region



Source: World Bank

Figure 3.4 Primary balances, particularly in CLMV economies, are generally widening



Source: World Bank

[41] In economies where fiscal consolidation is ongoing, reprioritizing and rebalancing existing expenditure programs should continue, while undertaking reforms to raise revenue. In response to the weaker fiscal conditions, several regional economies are implementing fiscal reforms to boost revenue such as minimizing leakages (scaling back fiscal incentives, formalizing the informal sector and improving efficiency), and improving tax administration.

support structural reform to build future economic capacity, such as implementing planned infrastructure spending (for example in the Philippines and Thailand).

42 Fiscal policy could play a greater role to support growth, while also promoting structural adjustments as benign conditions allow the region to push ahead with reform agenda. In addition to demand management policies, structural reforms in building necessary physical infrastructure and human capital, and promoting economic diversification, would help increase the productive capacity and resilience in the long run. These structural reforms have gained urgency with global trends such as technological disruption and automation potentially threatening employment, and with ageing populations posing challenges to productivity and growth in several countries in our region. Besides national-level policies, these reforms can have greater returns when combined with regional policies to take advantage of the growing intra-regional trade and investment, and the complementarity in factor endowments among the diverse economies in ASEAN+3. This is explored in the next chapter on the theme *Resilience and Growth in a Changing World*.

Appendix: Selected Key Macroeconomic Projections

	2016	2017 e/	2018 p/	2019 p/
Brunei Darussalam				
Real GDP Growth (% yoy)	-2.5	0.6	1.6	3.4
Headline Inflation (Period Average, % yoy)	-0.7	-0.2	0.2	0.4
Current Account Balance (% of GDP)	11.7	10.1	8.1	11.7
Central Government Fiscal Balance (Fiscal Year, % of GDP)	-16.6	-10.6	-8.1	-5.1
Cambodia				
Real GDP Growth (% yoy)	7.0	6.9	6.8	6.8
Headline Inflation (Period Average, % yoy)	3.0	2.9	3.2	3.4
Current Account Balance (% of GDP)	-8.9	-7.4	-6.9	-5.3
General Government Fiscal Balance (Excluding Grants, % of GDP)	-2.6	-0.7	-5.9	-5.0
China				
Real GDP Growth (% yoy)	6.7	6.9	6.6	6.4
Headline Inflation (Period Average, % yoy)	2.0	1.6	2.0	1.8
Current Account Balance (% of GDP)	1.8	1.3	1.1	1.0
General Government Fiscal Balance (% of GDP)	-2.9	-2.9	-2.6	-2.7
Hong Kong, China				
Real GDP Growth (% yoy)	2.1	3.8	3.4	3.0
Headline Inflation (Period Average, % yoy)	2.4	1.5	2.1	2.3
Current Account Balance (% of GDP)	4.0	4.2	3.3	3.0
Central Government Fiscal Balance (% of GDP)	4.5	5.2	3.1	2.7
Indonesia				
Real GDP Growth (% yoy)	5.0	5.1	5.2	5.3
Headline Inflation (Period Average, % yoy)	3.5	3.8	4.0	4.0
Current Account Balance (% of GDP)	-1.8	-1.7	-1.9	-2.0
Central Government Fiscal Balance (% of GDP)	-2.5	-2.5	-2.2	-2.2
Japan				
Real GDP Growth (Fiscal Year, % yoy)	1.2	1.8	1.3	0.7
Headline Inflation (Fiscal Year, Period Average, % yoy)	-0.1	0.7	0.8	0.9
Current Account Balance (Fiscal Year, % of GDP)	3.8	3.8	3.8	4.1
Central Government Fiscal Balance (Fiscal Year, % of GDP)	-4.6	-4.8	-4.3	-3.4
Korea				
Real GDP Growth (% yoy)	2.9	3.1	2.9	2.8
Headline Inflation (Period Average, % yoy)	1.0	1.9	1.9	2.0
Current Account Balance (% of GDP)	7.0	5.1	4.9	4.5
Central Government Fiscal Balance (Excluding Funds, % of GDP)	-1.4	-1.1	-1.2	-1.4
Lao PDR				
Real GDP Growth (Fiscal Year, % yoy)	7.0	6.8	6.8	7.1
Headline Inflation (Period Average, % yoy)	1.6	0.8	2.1	2.5
Current Account Balance (% of GDP)	-12.0	-11.3	-11.3	-10.1
General Government Fiscal Balance (Including Grants, % of GDP)	-4.9	-5.7	-5.2	-5.1

	2016	2017 e/	2018 p/	2019 p/
Malaysia				
Real GDP Growth (% yoy)	4.2	5.9	5.3	5.0
Headline Inflation (Period Average, % yoy)	2.1	3.7	2.4	2.6
Current Account Balance (% of GDP)	2.4	3.0	2.5	2.1
Central Government Fiscal Balance (Excluding Funds, % of GDP)	-3.1	-3.0	-2.8	-2.6
Myanmar				
Real GDP Growth (Fiscal Year, % yoy)	7.0	5.9	7.0	7.4
Headline Inflation (Period Average, % yoy)	10.0	6.8	3.9	4.5
Current Account Balance (Fiscal Year, % of GDP)	-5.1	-3.9	-4.7	-4.6
Central Government Fiscal Balance (Fiscal Year, % of GDP)	-4.1	-5.0	-4.3	-4.9
The Philippines				
Real GDP Growth (% yoy)	6.9	6.6	6.8	6.9
Headline Inflation (Period Average, % yoy)	1.8	3.2	4.3	3.3
Current Account Balance (% of GDP)	-0.4	-0.8	-1.5	-1.1
Central Government Fiscal Balance (% of GDP)	-2.4	-2.0	-2.9	-3.1
Singapore				
Real GDP Growth (% yoy)	2.4	3.6	3.0	2.8
Headline Inflation (Period Average, % yoy)	-0.5	0.6	1.2	1.8
Current Account Balance (% of GDP)	19.0	18.8	17.5	17.2
Central Government Fiscal Balance (% of GDP)	1.4	2.1	-0.1	0.0
Thailand				
Real GDP Growth (% yoy)	3.3	3.9	3.9	3.7
Headline Inflation (Period Average, % yoy)	0.2	0.7	1.0	1.6
Current Account Balance (% of GDP)	11.7	10.6	7.9	5.4
General Government Fiscal Balance (Fiscal Year, % of GDP)	-2.8	-3.6	-2.9	-2.8
Vietnam				
Real GDP Growth (% yoy)	6.2	6.8	6.6	6.6
Headline Inflation (Period Average, % yoy)	2.7	3.5	3.4	3.5
Current Account Balance (% of GDP)	4.2	3.1	2.6	2.6
General Government Net Lending (% of GDP)	-5.6	-3.5	-3.7	-3.5

Notes: e/ Estimates and p/ Projections. Data for Real GDP Growth refer to calendar year unless otherwise stated. Data for 2017 refer to AMRO staff estimates, for those data that are not readily available. The Lao Statistics Bureau recently rebased GDP to 2012, with the rebased GDP series (both nominal and real) higher by around 15 percent compared to the previous series, affecting past indicators. Myanmar's fiscal year extends from 1 April to 31 March. FY2018 starts from 1 April 2017 to 31 March 2018

Source: National authorities, AMRO staff estimates

THEME: RESILIENCE AND GROWTH IN A CHANGING WORLD

1 Staying the Course: Resilience and Growth in a Changing World

1 The thematic chapter of AREO 2017 traced the ASEAN+3 region's evolution in each of the two decades after the AFC and the policy lessons learnt for the future. Economies recovered robustly from the AFC through adopting more flexible domestic policy frameworks, rebuilding their balance sheets, strengthening their macroeconomic fundamentals, and engaging in greater financial cooperation within the region against external shocks. Besides firm policy actions in domestic structural reform, the region's commitment and openness to global trade, FDI and capital flows have also enabled the economies to reap benefits from the growth in global trade. Even as external demand from advanced economies was subdued after the GFC, the emergence of China as the global production base and growing regional integration continued to offer benefits from trade and investment integration (AMRO, 2017).

2 Building on last year's theme, this thematic chapter considers how the region can maintain its resilience and growth in the face of fundamental global forces of change in trade, production networks, and technology. These forces are putting the economies' "manufacturing for exports" growth strategy to the test. This chapter first sketches out the mutually reinforcing growth dynamics between exports, manufacturing, productivity and growth, then assesses the adjustments that may be needed. It ends with policy recommendations for the region.

2 "Manufacturing for Exports" Growth Strategy: Still Viable?

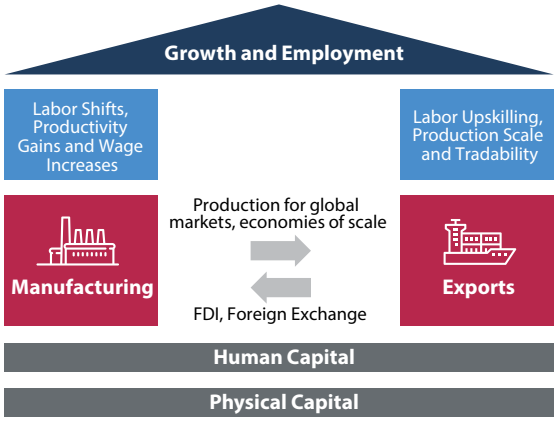
3 Integration into the global economy via trade has underpinned virtually all ASEAN+3 economies' growth and development in the past decades. For large and small developing economies alike, exporting goods to meet external demand has helped to overcome constraints imposed by the size of their domestic markets given their low incomes, enabling them to reap economies of scale, establish and gain export competitiveness, and bring in much-needed FDI and foreign exchange earnings to import capital goods. Moreover, the inward FDI has brought technology transfer and positive spillovers to the wider economy.

4 This "manufacturing for exports" strategy has created strong, self-reinforcing dynamics to raise economic growth, productivity and wages in ASEAN+3 economies (Figure 2.1). As the manufacturing sector has generally been the fastest growing sector and the one with the highest productivity in the economy, the boost to manufacturing capacity by exports and FDI has pulled up overall productivity in the economy. In terms of employment, the "manufacturing for exports" strategy has been facilitated by availability of labor to move from lower-productivity sectors such as agriculture, to manufacturing. Not only have jobs been created in the manufacturing sector, real wages have been pulled up along with productivity. This economic transformation has contributed to rapid growth in real wages in the region, particularly in China, which is well above the world average (Figure 2.2).

5 This strategy has propelled income convergence of ASEAN+3 economies towards advanced economies. The "first wave"[42] of economies – Japan, Korea, Hong Kong and Singapore – successfully followed this strategy in the 1960s and 1970s. They have long exited the phase where low labor costs were a significant competitive advantage and moved on to higher-value exports including services. The "second wave" economies – China and the large ASEAN economies of Indonesia, Malaysia, the Philippines, Thailand and Vietnam – entered this transformation later in the 1980s and 1990s, and have already reaped large benefits from export-oriented FDI that built up manufacturing capacity. These economies also have the added advantage of large populations, especially China and Indonesia, which incentivizes inward FDI not only to set up export-oriented production bases, but also to meet growing domestic consumer demand as incomes grow over time. The "third wave" of economies, which include resource-dependent economies – Cambodia, Lao PDR, Myanmar and Brunei – have begun the process of trade integration through manufactured goods exports, or are in the process of diversifying their economies away from agriculture and mining towards manufacturing.

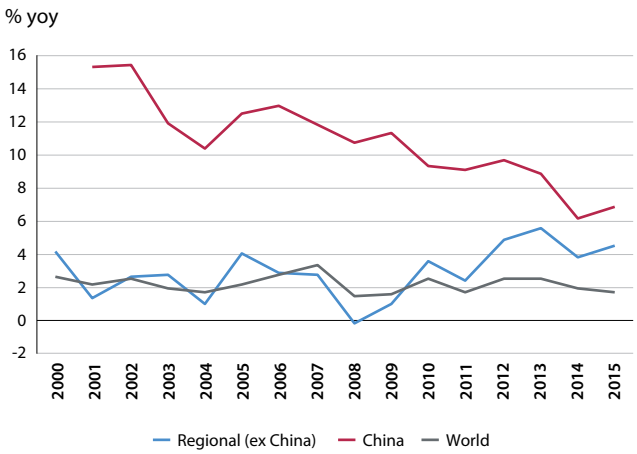
[42] First wave (current per capita income above USD35,000): industrialized economies of Japan and Korea, and financial centers of Hong Kong and Singapore; Second wave (per capita income between USD2,000 and USD10,000): China and the large ASEAN economies of Indonesia, Malaysia, the Philippines, Thailand and Vietnam; and Third wave (per capita income below USD2,000): Cambodia, Lao PDR and Myanmar, as well as Brunei, with much higher capita incomes but at an early stage of developing the breadth and sophistication of their manufacturing and services sectors.

Figure 2.1 Growth Dynamics of "Manufacturing for Exports" Strategy



Source: AMRO

Figure 2.2 Average Annual Real Wage Growth by Region



Note: Data for Regional (ex China) is calculated as the simple average of annual wage growth of the economies. Data is not available for Myanmar.
Sources: ILOSTAT, AMRO staff calculations

6 While "manufacturing for exports" has been an effective strategy so far, this chapter explores how global forces in trade and production networks and technology may necessitate adjustments. Although these trends in some aspects have reinforced growth dynamics between exports, manufacturing, productivity and growth, they may also have had offsetting effects.

7 Section 3 of this chapter examines the key features and contributions of GVCs, which have been an increasingly important driver of intra-regional trade, particularly with the emergence of China as a global production base. In earlier years, the formation and proliferation of GVCs might have lowered the technological entry threshold for regional economies, especially developing ASEAN economies, to benefit from the "manufacturing for exports" strategy. Instead of having to produce entire manufactured products for export, economies can instead participate in GVCs through exports at intermediate stages of production (WTO, 2017). In this way, GVCs made the ASEAN+3 region more resilient as a whole in terms of competitiveness through specialization and leveraging on the comparative advantage of each economy. However, with manufacturing processes and the products themselves having become more high-technology over time, it has become more difficult for EMEs to join GVCs and become more competitive within GVCs. Most recently, rising trade tensions have also raised the prospect of external shocks being transmitted and magnified, along whole supply chains. In this context, the region's growing intra-regional final demand, especially since the GFC, has partly cushioned the impact of the collapse in external demand from outside the region and allowed the region to sustain a relatively high level of growth.

8 Section 4 of this chapter goes on to examine the nature of accelerating technological advancements, and how this poses growth-generation and job-creation challenges for the first, second and third wave ASEAN+3 countries in different ways. It recognizes that the strategy of manufacturing for exports, while still working, faces both short-term headwinds and longer-term challenges. Technology, conventionally seen as a plus for economic development, is proving to be double-edged. Technological gains have helped to lift both the manufacturing and services sector. However rapid changes in technology and their impact on the manufacturing sector, the increasing role of the services sector as well as expansion of cross-border trade are also posing challenges to EMEs in different regions including ASEAN+3. They are increasing the capital intensity of several manufacturing sub-sectors, altering the nature of the services sector, placing greater demands on higher-quality human capital, and requiring more advanced infrastructure and supporting ecosystems. Economies may be caught unprepared in the process of pursuing growth catch-up and greater resilience, and in creating sufficient jobs for young expanding populations. In this regard, compared to "first wave" economies, "second wave" and "third wave" economies may see their manufacturing sectors' contribution to employment peak at lower levels. The peak could occur well before they have reached high-income status and before they acquire the technological base and capacity for a high level of economic development.

9 Section 5 of this chapter further looks into the increasingly key role of the highly diverse services sector as an enabler of manufacturing and as a growth driver itself, and how there is scope for more services sub-sectors to become the new driver of employment and productivity. It posits that across most segments of manufacturing and services, countries will find it increasingly challenging to reap demographic dividends to create jobs and sustain growth. The conclusions of the Chapter will be supported by case studies illustrating how the various forces and challenges are already playing out in different sectors across ASEAN+3 countries, and they then form the basis for the concluding Section 6 on policy recommendations for the region.

3 "Manufacturing for Exports" Strategy: Reinforced by Global Value Chains (GVCs) and Growing Intra-regional Demand, Threatened by Protectionism

10 The formation of GVCs and cross-border production networks is an important driver of global and intra-regional trade. While the increase in global trade has kept pace with world GDP growth (Figure 3.1), the share of global trade (in value-added terms) accounted for by GVCs increased significantly from 2000 onward, even with the dip during the 2008-9 GFC period (Figure 3.2). Not only has GVC trade grown, GVCs have deepened. The share of global trade accounted for by complex GVCs – which involve intermediate goods crossing two or more borders before assembly into final goods – has risen more quickly than the share accounted for by simple GVCs. Given the well-established linkages between trade, growth and employment, especially for EMs, there was a synchronized acceleration then dip in growth, labor productivity, and wage increases across EM regions in Asia, Latin America, and emerging Europe.

11 China exemplifies the benefits of integration into the world economy for a large economy, spurring the formation of GVCs that boosted intra-regional trade. China's trade and economic growth experienced a pronounced liftoff from the early 2000s onward with its accession to the World Trade Organization (WTO), following years of reform to establish a market-based economic system. From its accession in 2001 to 2007, just before the GFC, China's exports grew sharply as it became a global manufacturing hub (WTO, 2017). From the start, GVCs feeding into this production hub, with imported inputs from the region, were critical to the regional supply chain. This gave regional trade a substantial boost. Other economies in the region, which had benefitted similarly from integration into world trade, received an additional boost with the increase in intra-regional trade and investment.

12 GVCs have facilitated the integration of developing economies in ASEAN+3 into global and regional trade and production networks. Although GVCs do not account for nearly all of global production or trade, several ASEAN+3 countries' trade has involved GVCs to a far greater degree (Figure 3.3), and benefitted from the trade.

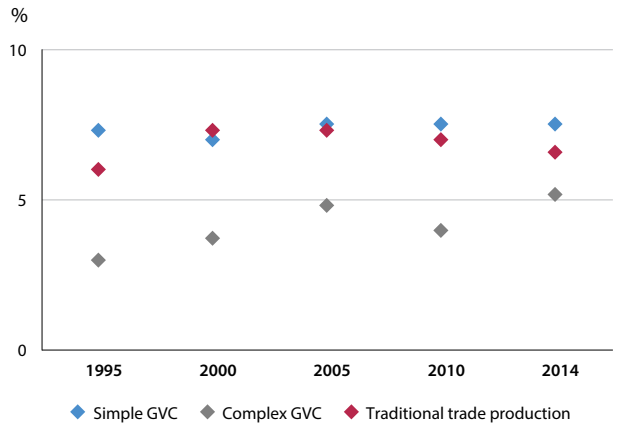
a. GVCs have provided opportunities for economies without the technological knowhow to produce entire manufactured products, which are competitive enough for export, to still pursue export-led growth by participating in certain stages of production, and then gradually diversify their production and exports.

b. With GVCs centered initially on trade in intermediate manufactured goods, the formation of GVCs has spurred the development of the manufacturing sector. Within ASEAN+3 and also outside the region, greater participation in GVCs has been correlated with larger proportions of GDP accounted for by manufacturing value-added (Figure 3.4). Plugging into GVCs has

Figure 3.1 Global Trade Growth and GDP Growth

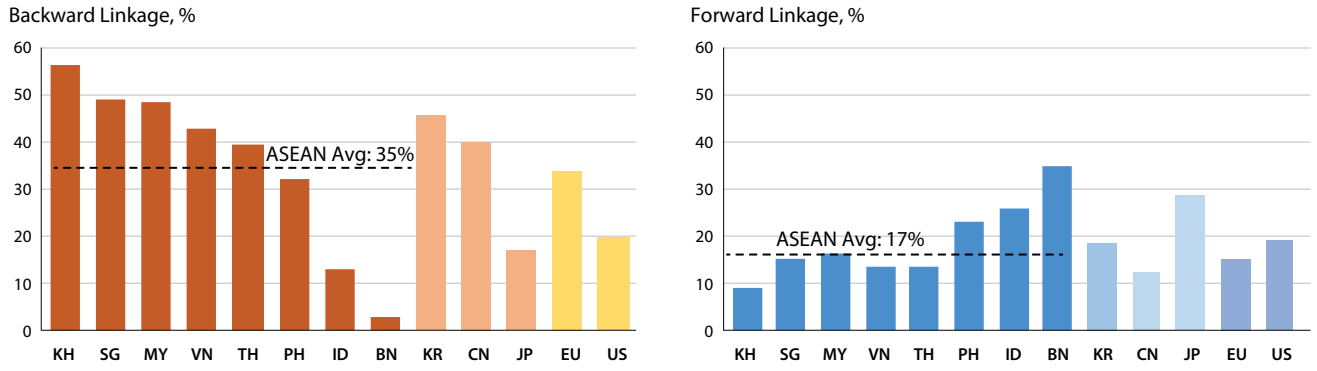
Sources: IMF, AMRO staff calculations

Figure 3.2 Share of Global Production (in VA Terms) Accounted for by GVCs



Note: Simple GVCs involve domestic value-added crossing national borders for production only once, while complex GVCs involve domestic value added crossing the border at least twice and are used by the partner country to produce intermediate or final product exports either for re-export to the home country or for re-export to other countries. The remainder is value-added that does not involve trade and is accounted for by pure domestic production.
Source: WTO

Figure 3.3 GVC Participation: Selected ASEAN+3 Economies and Comparator Countries



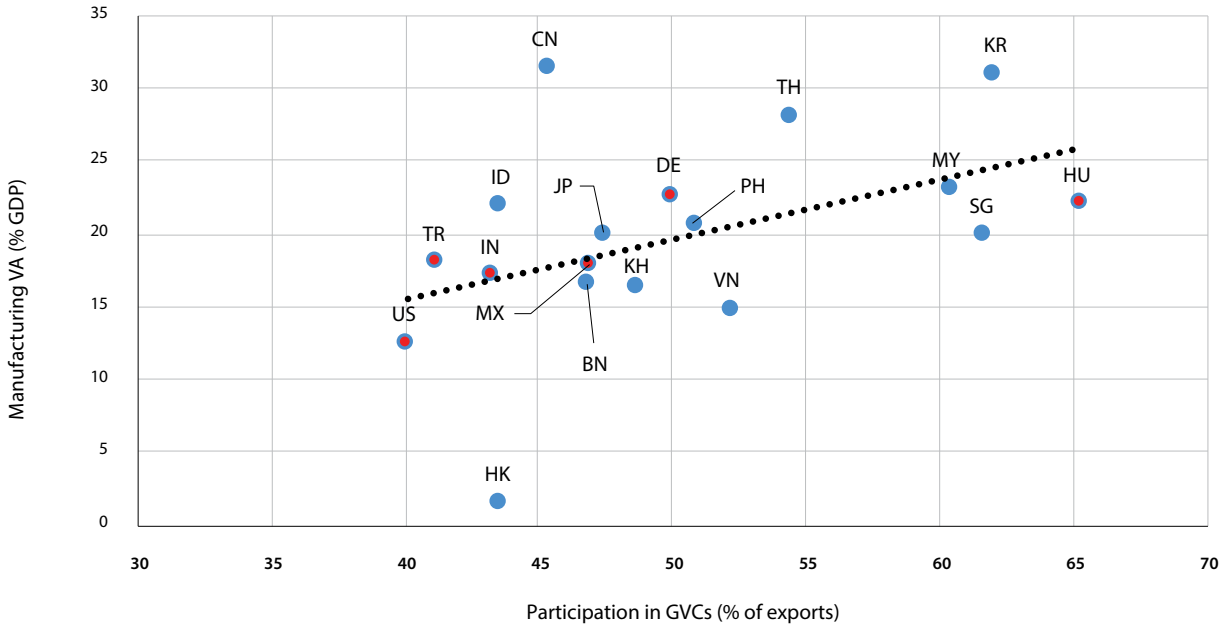
Note: To assess an economy's participation in the GVCs, two major indicators, backward and forward GVC participation, are taken as indicators. Both of these measures are expressed as shares of the reference country's exports. The backward GVC participation captures the extent to which domestic firms use foreign intermediate value added for exporting activities in a given country. The forward GVC participation captures the extent to which a given country's exports are used by firms in partner countries as inputs into their own exports. They also measure different forms of engagement in GVCs. For example, a country that is predominantly assembling products into final goods and subsequently exporting these will have a strong backward participation but a small forward participation measure. Conversely, a country which predominantly supplies intermediates to an assembler will have a highly developed forward participation indicator but a small backward participation measure. These participation measures therefore give us a metric of engagement in the form of buying from (backward participation) and selling (forward participation) to GVCs or the demand and supply sides of the value chain activity. Data is as of latest available (2011).
Source: OECD's Trade in Value Added database (TiVA), International Trade Center's FDI statistics, AMRO staff calculations

enabled countries to deepen their technological knowhow, upgrade the skills profile of their labor force, and spur the building of infrastructure. All these have helped to raise exporting countries' capacity to perform more sophisticated functions in the value chain.

13 The unevenness of GVC participation by ASEAN+3 countries reflects diversity in economic resources and structures (Figure 3.3). Resource-rich countries such as Brunei and Indonesia exhibit greater degrees of forward linkages, in which their exports (e.g. palm oil, coal, and oil) are used in the production of other countries' exports (e.g. chemicals). In contrast, manufacturing export-oriented ASEAN countries (notably Singapore, Malaysia, Thailand and Vietnam), tend to have higher backward linkages which reflect greater reliance on imported goods for their manufacturing exports.

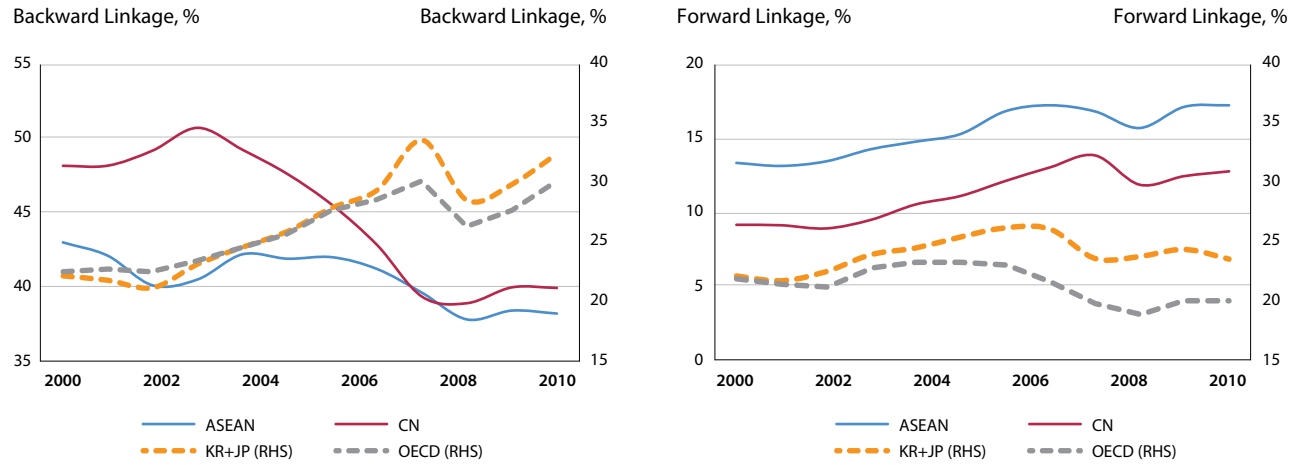
14 Technological advances have been critical enablers for deeper GVC participation and upskilling of workforces, globally and especially in ASEAN+3 countries. From about the mid-1990s onwards, for a prolonged period of time, continuing technological advances

Figure 3.4 Centrality of Manufacturing to Growth and Depth of GVC Integration: Selected ASEAN+3 Countries and Comparators



Note: Participation in GVCs is calculated as the sum of forward and backward participation. Data is as of latest available (2011).

Figure 3.5 Forward and Backward Linkages of Selected Regions and Economies



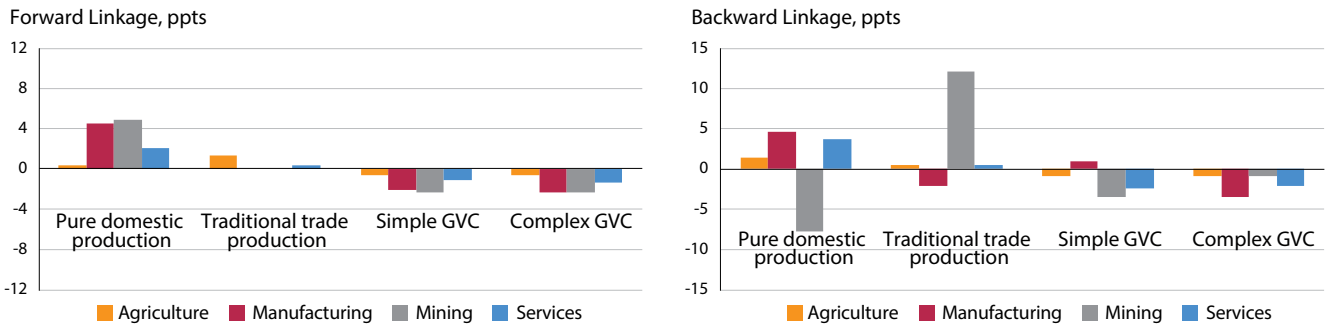
Note: Interpretation of "forward linkages" and "backward linkages" is as for Figure 3.3. Data as of latest available (2011).
Source: OECD's TiVA database

such as computerization, internet, and wireless mobile telecommunications played a key role in facilitating international fragmentation of production (IFP). They reduced production costs and transportation costs, and boosted labor productivity. This allowed new entrants, and enabled countries already in GVCs to participate to a greater degree. Most countries have benefitted from these developments, resulting in deeper GVC linkages and a more highly skilled workforce over time (Figure 3.4). China and Indonesia, for example, saw dramatic improvements in labor upskilling although base effects played a part too. Notably, low-skilled jobs have been adversely affected, especially in advanced economies where wages are higher, reflecting in part the labor-substituting effect of newer technologies.

15 However, as early as the late-2000s, GVC participation was showing signs of plateauing (WTO, 2017). In tandem with a lacklustre global trade environment, several factors explain the moderation in GVC activities. First, a combination of slower pace in tariff reductions and rapid rise in NTBs slowed the momentum of GVC participation. In the early 1990s, trade liberalization efforts facilitated the expansion of GVCs via sizable declines in tariff rates, which made offshoring an attractive strategy to foreign MNCs. Meanwhile, implementation of new NTBs was also relatively moderate. However, by the late-2000s, the decline in average global tariff rates had become more gradual, while the number of new NTBs increased substantially. Second, in more recent years, with manufacturing processes and the products themselves having become more high-technology, it has become more difficult for EMEs – including those in the ASEAN+3 region – to join GVCs and become more competitive within GVCs. Third, most recently, rising trade tensions have also raised the prospect of external shocks being transmitted and magnified along whole supply chains.

16 Indeed, this global trend of a tapering in GVC participation is also seen in the ASEAN+3 region after a period of strong growth earlier. Figure 3.5 shows that backward linkages have declined for ASEAN-4 and China, while forward linkages have risen gradually. These developments could be partly attributed to the constant upgrading of the manufacturing sector and the development of supply clusters by domestic suppliers, helped by sustained FDI

Figure 3.6 Structural Changes in Different Types of VA Creation Activities: China



Note: Data refers to the difference between share in 2015 and 2011 linkages.
Source: WTO Global Value Chain Development Report (2017)

inflows. For example, over the past decade, MNCs from advanced countries, including Japan and Korea from the region, have been establishing production bases in emerging ASEAN+3 economies for exports and to meet domestic demand in the host countries, thereby helping to facilitate industry upgrading and the development of domestic suppliers. This has contributed to declining demand for imported intermediate goods for production, as ASEAN-4 economies and China are increasingly able to source them domestically.

17 Looking ahead, one key uncertainty is whether more advanced or larger economies might develop greater capacity to site more production processes onshore as well as greater commercial incentives to emphasize speed-to-market over savings from producing in other lower-cost locations. China is a prime example, appearing to have increasingly used domestically-produced intermediate inputs instead of imported intermediate goods. While the empirical evidence is mixed, there does seem to have been a slight fall in China's GVC trade as a proportion of its total trade (in VA terms) in recent years (Figure 3.6) (WTO, 2017). Such a development is consistent with communication technology lowering coordination costs disproportionately more for domestic fragmentation rather than international fragmentation, as well as greater likelihood of more advanced technology and more highly-skilled human capital being found within countries (Fort, 2014). This trend of using domestically-sourced inputs instead of imports could have been the case in China's manufacturing industries such as computers, electronics, optical equipment, electrical machinery and apparatus (World Bank, April 2016).

18 China's local content of processing exports had also been rising steadily in the past decade, at the same time period when backward linkages in GVCs were declining (Figures 3.7 and 3.5). From the viewpoint of ASEAN-4 as exporters to the world, including to China, empirical estimates[43] suggest a decline in long-run elasticity of export volumes to global demand since the early 2000s, which may have partly reflected less absorption of ASEAN-4 intermediate or primary exports to China among other countries (Figure 3.8). This structural upgrading in China and its use of domestically-sourced inputs is set to continue, but the downside impact on its imports of intermediate inputs from the region may be offset by its increasing imports of consumer goods and services from the region for final consumption, as discussed later in this section.

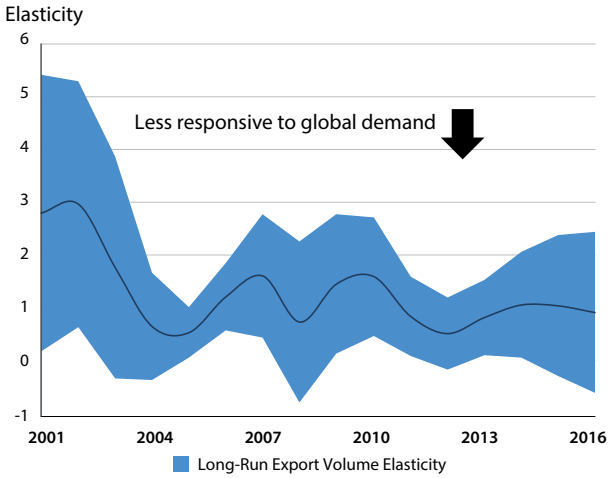
The protectionist challenge may be partially cushioned by growing intra-regional demand.

19 Rising protectionist sentiment could also weigh on the region's GVC participation and labor market prospects. While GVCs have made the ASEAN+3 region more resilient as a whole in terms of competitiveness as a regional production base, they may have also accentuated the transmission of external shocks, such as trade protectionism, along the whole supply chain. Actual or anticipated trade protectionism could affect GVCs in two ways. First, protectionism makes imported

Figure 3.7 Share of Local Content in China's Processing Exports

Source: China's Customs Statistics

Figure 3.8 ASEAN-4 Output Elasticity of Export Volume (Rolling Estimates, 2001-2016)



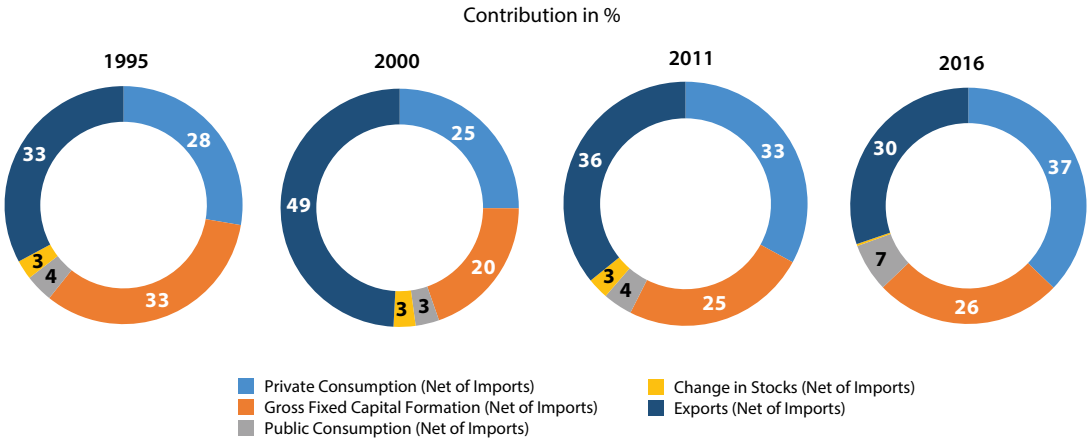
Note: The shaded area shows the 90 percent confidence bands. Time variation of the coefficients are estimated over a rolling 6-year window sample.
Sources: OECD's TiVA database, World Development Indicators, AMRO staff estimates

[43] The long-run elasticities of ASEAN-4's export volume to global GDP and relative price are estimated under a panel error correction model of the form:
$\Delta \ln(Export_{i,t}) = \alpha + \beta \ln(Export_{i,t-1}) + \gamma \ln(GlobalGDP_{i,t-1}) + \delta \ln(RelativePrice_{i,t-1}) + \eta \Delta \ln(GlobalGDP_{i,t}) + \theta \Delta \ln(RelativePrice_{i,t}) + \varepsilon_{i,t}$
where the long-run elasticities to global GDP and relative price are -γ/β and -δ/β respectively. The data includes Malaysia, Thailand, Indonesia and the Philippines, ranging from 1995 to 2016. The relative export price refers to the ratio of countries' export price to global export price

intermediate and capital goods more expensive due to higher tariffs – reducing the incentive to locate production abroad or triggering a reshoring of manufacturing activities. Second, by introducing greater investment uncertainty or business uncertainty, the threat of protectionism causes investors to adopt a wait-and-see approach. Moreover, trade measures targeted at certain countries or renegotiation of key trade agreements will invariably affect other countries due to the linkages through the extensive supply chain in the region. Disorderly adjustments in supply-chain linkages will also have adverse implications on the region's trade performance with spillovers to growth and employment in the economy.

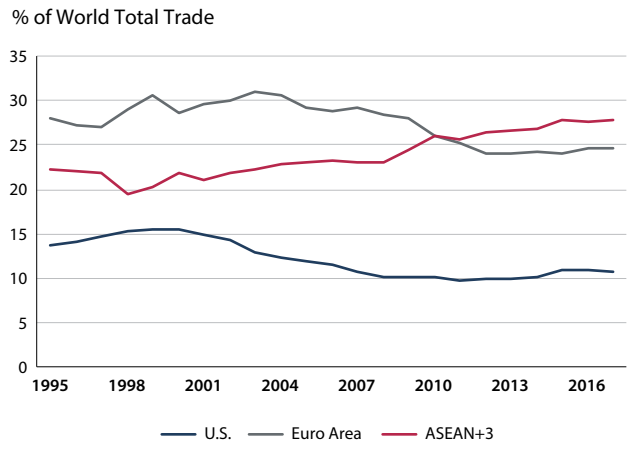
20 The region's growing intra-regional final demand and absorption of regional exports can help to cushion the impact of protectionism on GVCs oriented towards demand outside the region. This process has already begun in the past decade. Weaker global demand from outside the region following the GFC and the European sovereign debt crisis has compelled regional economies to rebalance growth drivers in order to be less dependent on final demand from major advanced economies. Even though exports have continued to be an important driver of growth, their contribution has declined (Figure 3.9), and the region is diversifying away from traditional export markets (Figure 3.10), and leveraging on the bourgeoning regional demand amid growing affluence and the rise of the middle class, particularly in China. Figure 3.11 shows that VA exports destined for final demand in the region have grown to nearly half of total regional value-added exports in 2016.

Figure 3.9 Contribution in % to Real GDP Growth: ASEAN-4 & VN (Import-adjusted Method)



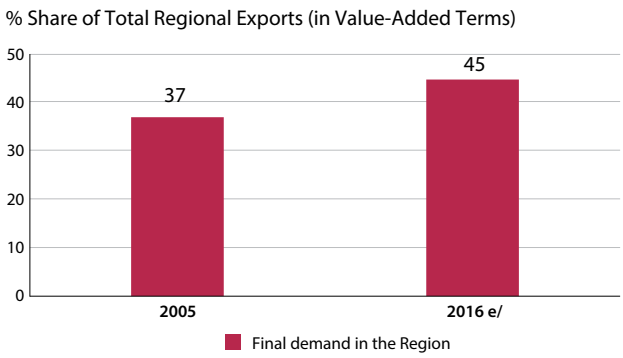
Sources: National Authorities, AMRO staff estimates

Figure 3.10 Share of World Trade Accounted for by ASEAN+3 Trade



Sources: National Authorities, IMF DOTS database

Figure 3.11 Share of Total Regional VA Exports Accounted for by Regional Final Demand



Sources: OECD's TiVA database, AMRO staff estimates

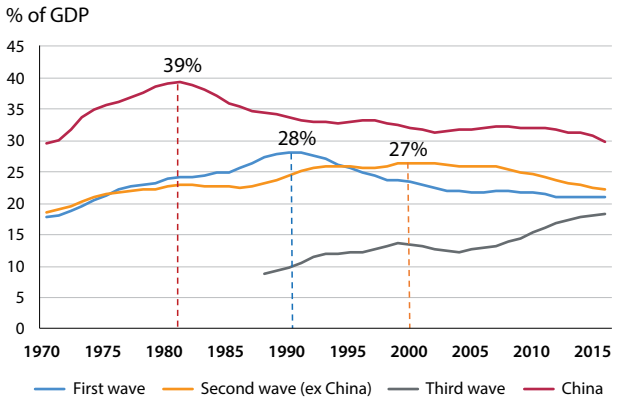
4 Technology: A Double-edged Sword

Employment gains from manufacturing-for-exports are likely to be more muted

21 The strategy of manufacturing for exports, while still an important growth driver, faces near-term headwinds from trade protectionism, and also longer-term challenges from changes in production structures and GVCs, and the impact of technology on employment. For several years, continuing technological shifts and reconfigurations of GVCs have increased the capital intensity of most manufacturing sub-sectors and placed greater demands on higher-skilled labor as a prerequisite for manufacturing. For many ASEAN+3 countries, the manufacturing sector's contribution to growth and employment has already slowed for some years, and it has become more challenging to sustain buoyant growth while continuing to move up the value chain. While the "first wave" and "second wave" of economies managed to expand manufacturing sectors to 25-30 percent of GDP during their development (a few decades apart), most "third wave" economies' manufacturing sectors, though still rising, seem likely to peak at 15-20 percent of GDP (Figure 4.1).

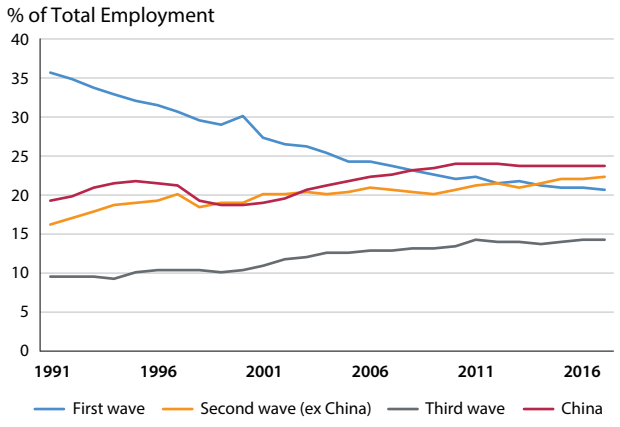
22 Over the past 15 years or so, different "waves" of ASEAN+3 countries have had different experiences with the pace at which manufacturing has contributed to employment relative to the pace at which it has contributed to economic growth. This is due to several factors such as the stage of economic development, attained level of labor productivity, and more broadly, overall technological sophistication. The "first wave" countries had already achieved fairly high levels of productivity by the turn of the century and they then continued with further productivity drives in the manufacturing sector – which also shifted labor to the services sector. The "second wave" countries and "third wave" followed a similar path and also attained consistently high economic growth rates over the past 15 years, although they have had less success than the "first wave" countries in lifting labor productivity further. (Figure 4.2). While "first wave" economies used manufacturing to generate up to 40 percent of total employment and then managed a largely gradual easing to about 25 percent, "second wave" and "third wave" economies may see their respective peaks of manufacturing employment at lower levels, in fact at levels near to the trough for the "first wave" economies. Alongside this, technology, by making a wider range of services more attractive to domestic consumers and more tradable, has also diminished manufacturing's contribution to growth. Overall, technological advancement is positive. However, when this is wide-ranging and rapid, it can lead to important sectoral shifts in GDP and employment patterns, and there will be winners and losers. The Special Feature of the Monetary Authority of Singapore (MAS)' April 2018 Macroeconomic Review (MAS, 2018) is a recent study which highlights this key challenge brought about by digitalization. In the context of the ASEAN+3 region, this sectoral shift – for both GDP and employment – has occurred well before most "second wave" and "third wave" economies have reached high-income status, and before they acquire the technological base and capacity for a high level of economic development. These trends mirror

Figure 4.1 Share of GDP Accounted for by Manufacturing



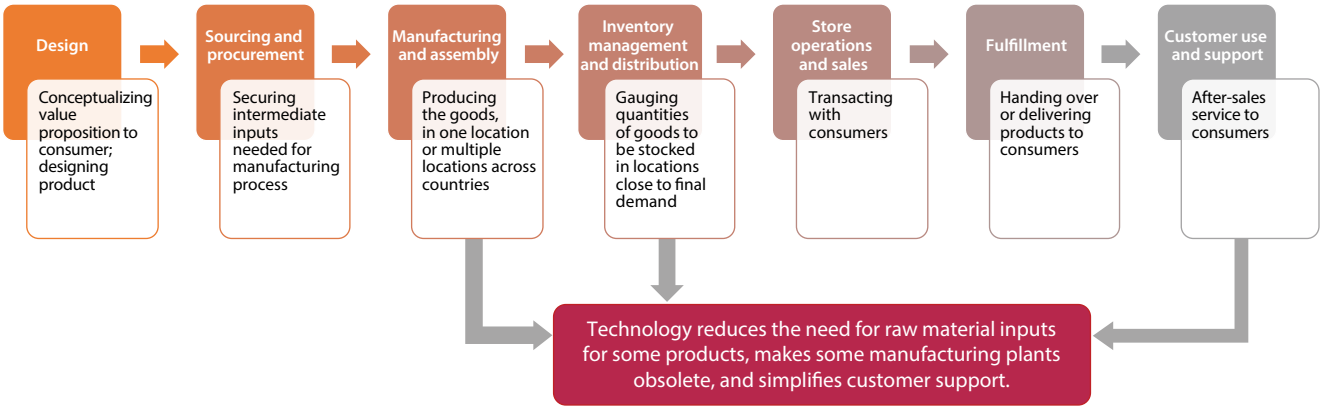
Sources: World Bank, AMRO calculations

Figure 4.2 Share of Employment Accounted for Manufacturing and Resources Sectors



Note: Available data combines manufacturing and resources sectors.
Source: World Bank

Figure 4.3 Typical Value Chain and Impact of Technology



Sources: Deloitte (2016), AMRO

the experiences of EMEs in other regions, and authorities have started developing other sectors to support growth and jobs.[44]

23 Looking ahead, a wide range of technologies is expected to disrupt different economic sectors, further challenging all ASEAN+3 countries and especially third-wave countries to sustain the manufacturing sector's contribution to jobs creation and wage gains – which must ultimately underpin countries' continued economic growth. With automation, artificial intelligence (AI) and 3D printing just to name a few technologies, production will become more complex, and even lines between conceptualization and production, as well as between different stages of production, will become increasingly blurred. Digital technologies, along with enabling infrastructure, will shorten GVCs (Figure 4.3) (Deloitte, 2016.) Manufacturing labor intensity will fall more quickly with robotics and AI. As technological advances are rapid, the speed at which infrastructure and supporting industries are reconfigured to support manufacturing production will also have to pick up. The combined impact will favor advanced countries over EMEs, globally and within the ASEAN+3 region. Compressed production processes for more customized goods increase economic incentives for (re-)agglomeration of production. More advanced countries, by virtue of having higher quantities of skilled labor and engineers and physical capital, better infrastructure, and international connectedness, will hold an advantage over EMEs which tend to have substantial gaps in one or more of these areas. "Third wave" ASEAN+3 countries, if unprepared, risk being "locked" into low value added tasks or as providers of commodities at the beginning of GVCs (WTO, 2017).

24 The following two case studies of the automobile and TCF sectors provide comparative outlines of the experiences of two important manufacturing industries in the region and how technology has shaped these industries and the employment outlook. They suggest that countries which lag too far behind in developing skilled workforces and ramping up capacity to absorb and apply new technologies would be most adversely affected in the pursuit of sustained growth and resilience.

[44] For example, Cambodia has made moderate progress in diversifying into construction and tourism, while both Lao PDR and Myanmar have continued to develop their agriculture sector and resources sector.

Box G.

The Automobile Sector: How Disruptive Technologies are Working Against Less Advanced Economies

The automobile sector is an important sector in terms of economic activity and employment.

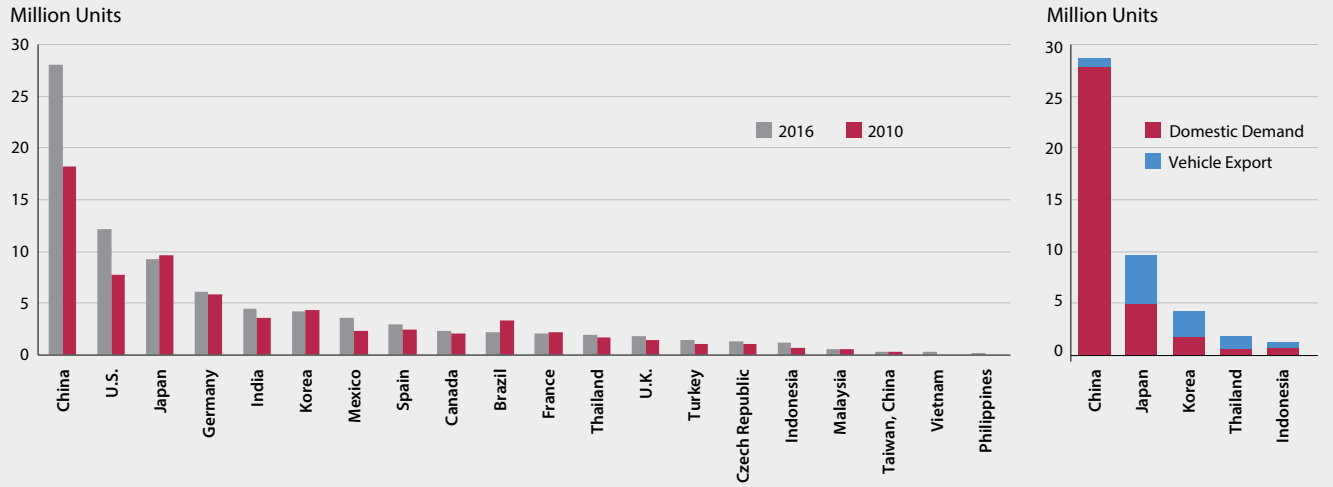
The automobile sector is important for the ASEAN+3 region. The Plus-3 countries are major producers on a global scale, while for several ASEAN countries, production helps to meet domestic demand as well as to generate employment. China and Korea figure among the top 10 producers of motor vehicles globally, while there are also significant nodes of production in Thailand and Indonesia, and smaller-scale production, mainly for domestic sales, in Malaysia, Vietnam and the Philippines (Figure G1). While almost all of China's automobile production is to meet domestic demand, the fact that China alone accounts for a large share of global demand and nearly one-third of worldwide production, means that China can be considered a global player even though most of the vehicles are produced by foreign car manufacturers based in China. The story is more nuanced for Japan and Korea, with about half of their production destined for export. Moreover, most of the Korean and Japanese automakers have production plants in the U.S., China and other locations to reduce costs and to be closer to the markets. As for the smaller ASEAN economies, Indonesia and Malaysia produce automobiles largely to meet domestic demand, while Thailand, a regional hub for automobile production, exports just over half of the vehicles it produces. The automobile sector is a big source of employment in middle-income ASEAN countries. The ILO reports employment of 800,000 people in the automobile sector in ASEAN, most of which are in Thailand and Indonesia (Figure G2).

Increasing capital intensity and rapid technological change threaten less advanced countries.

Around the world, automobile production is becoming increasingly capital- and technology-intensive. Indeed, the automobile sector is seen as more exposed to the deployment of technologies such as industrial robots, the "internet of things" in factories, and technologies such as 3-D printing. The stock of industrial robots is concentrated in the transport and automobile sectors. The International Federation for Robotics estimates that the automobile sector in Korea leads in industrial robots, followed by the U.S., and Japan. China lags behind, but is catching up rapidly (Figure G3). Meanwhile, there are also developments in terms of the materials that are used in production, with an ongoing trend towards more lightweight materials to improve fuel efficiency, which involve a more complicated production process. The nature of automobiles produced is also changing. Vehicles are becoming more complex and sophisticated – with many more features and greater use of digital technology.

The nature of technology shifts in the automobile sector is working against less advanced countries offering low-cost labor as a primary competitive edge or value proposition. The business model which has developed over the past

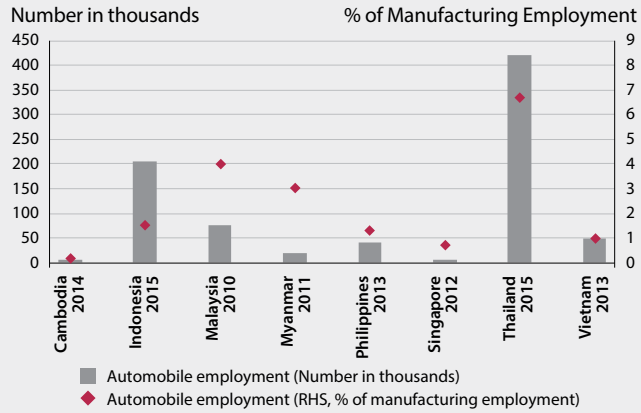
Figure G1. Automobile Production



Source: www.oica.net

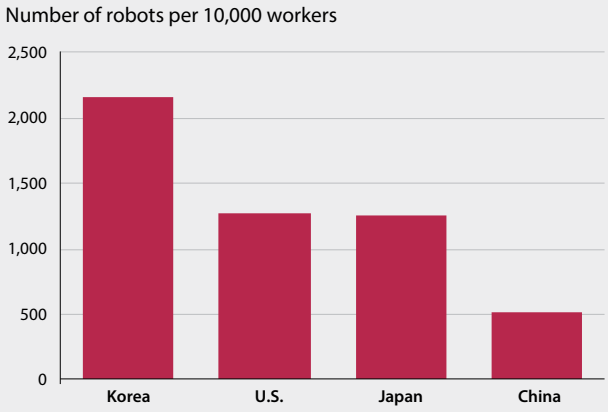
Note: Plus 3 countries (data as of November 2017), Indonesia 2016, Thailand 2014
Sources: www.oica.net, www.indonesia-investments.com, Thailand Board of Investment

Figure G2. Employment in Automobile Sector



Source: ILO

Figure G3. Robot Density in Automobile Sector



Source: IFR World Robotics 2017

decades has been for research and development (R&D) and design functions to be carried out in advanced economies while the more labor-intensive production functions are undertaken in lower-cost economies. However, the World Bank notes that robotization threatens the location of this labor-intensive assembly in low cost countries, given that automobiles, electronics, and heavy machinery are ecosystem-intensive industries, which require closely clustered suppliers which can provide just-in-time delivery of parts and services. These developments will thus affect less advanced countries in two ways. First, reducing the automobile sector's generation of jobs; and second, heightening the risk of relocation of production activities to advanced countries or near final-demand markets.

"First wave" ASEAN+3 countries are well-placed but ASEAN countries need to boost capacity.

China, Japan and Korea are relatively well-placed, as they have proven capacity to undertake advanced, sophisticated production which is capital intensive and operates at scale. The new technology and business models are likely to create a bigger challenge for the ASEAN producers, such as Indonesia, Malaysia, Philippines and Vietnam – and Thailand to a lesser extent. Their productions are smaller in scale, and therefore their marginal costs are higher. More importantly, their ability to compete in the domestic market is based mainly on lower costs of domestic labor and high tariffs against automobile imports.

As the automobile sector continues to move towards new types of vehicles (electric and, over time, autonomous vehicles), ASEAN producers will need to improve their capability and capacity in terms of technology and human capital in order to remain competitive. OEMs (original equipment manufacturers) like Toyota or Hyundai are under pressure to upgrade their production platforms in order to make more technologically sophisticated cars. This will require increasing investment in new capital as well as the availability of new skills, such as analytics and advanced engineering.[45] Looking ahead, there is a strong consensus within the industry as well as in recent World Bank and ILO studies that automation and other emerging technologies are likely to cause substantial disruptive change in the automobile sector across the world. The move to increasingly sophisticated and capital-intensive modes of production will constrain jobs creation and place new demands on labor quality and firm capability. These and the increased importance of clustering, proximity to customers and transport infrastructure, will also have an impact on the nature of GVCs in the sector, raising the prospect of production being more agglomerated than before. ASEAN producers will have to improve their capacity in terms of technology and human capital in order to survive the competition.

[45] This is happening in some countries. For example, Thailand is one of the larger purchasers of industrial robots, and is looking to build electric car capability.

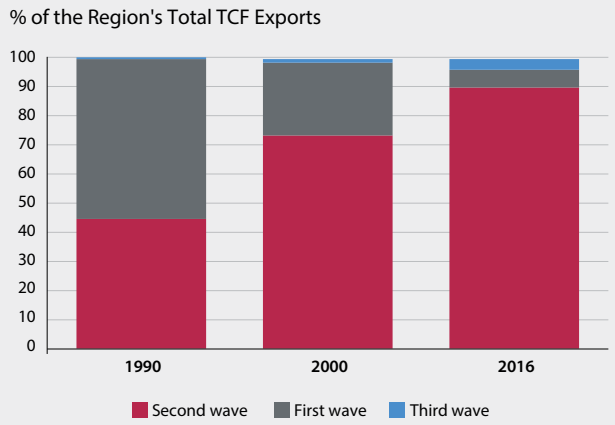
Box H.

The Textiles, Clothing and Footwear (TCF) Sector: Its Importance as a Growth Engine for Emerging Countries and a Window of Opportunity for Capacity Upgrading

The TCF sector has been a key economic engine for emerging ASEAN+3 countries.

The TCF sector has served as an important economic development engine for emerging countries including ASEAN+3 countries, generating jobs and providing openings for potentially moving up the skills and income ladder. Production within the region is heavily dominated by second-wave and third-wave countries (Figure H1). China is by far the largest exporter of TCF in the ASEAN+3 region, exporting over USD320.0 billion in 2017 (as well as large production for domestic consumption). Vietnam is a distant second in terms of absolute numbers (USD40.0 billion in 2016), but the sector accounts for about 30 percent of the country's merchandise exports. In comparison, Cambodia's TCF exports are even smaller in absolute terms, at about USD10.0 billion, but account for a very large 90 percent of its manufactured exports.[46] In terms of employment, the ILO estimates that TCF accounts for over 9.0 million jobs in ASEAN, with the sector employing more than 3.5 million workers in Indonesia, more than 2.5 million workers in Vietnam, and 605,000 workers in Cambodia.

Figure H1. Exports of Textiles, Clothing and Footwear (TCF) Sector: ASEAN+3 Region



Sources: World Integrated Trade System, World Bank, AMRO calculations

New technologies, alongside changing consumer preferences, are pressuring low-cost models.

A variety of technologies, together with changing consumer preferences, are placing pressure on the low-cost model of TCF production in ASEAN+3 countries. For example, automated cutting, robot-based sewing, 3D printing of shoes, as well as changing preferences around environmental properties of the clothing and mass customization. In parts of the TCF sector, "fast fashion" and speed to market are becoming important factors.

Currently, there are limits on the extent to which the TCF sector can be automated or disrupted by technology (because of technological constraints and economic incentives), and there is a window of opportunity for countries with lower-skilled workers and weaker technological readiness to upgrade their capacity. Indeed, the current penetration of industrial robots for TCF is the lowest among manufacturing subsectors according to the World Bank (2018),[47] at less than 0.1 robots per 1,000 workers compared to about 50 robots per 1,000 workers for the automobile sector. Automation remains at an early stage, and some relatively basic functions (for example, inserting shoelaces, still require human labor.

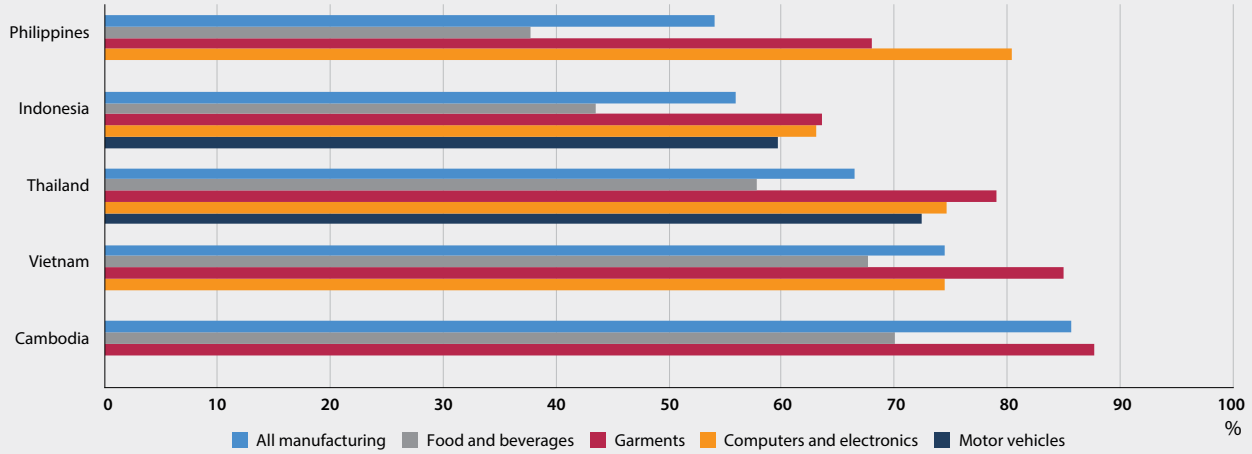
However, there is widespread concern that newer technologies will increasingly have disruptive effects on the TCF sector, with the potential to undermine the third-wave ASEAN+3 countries' strategy of first providing lower-cost labor, upskilling gradually, and then diversifying their economic development base. For example, workers may be displaced by custom cutting of materials as well as technologies which automate sewing processes. China is already investing heavily in automation to respond to rising cost pressures, and the relocation of TCF production from China to lower-cost locations in the ASEAN+3 region may not be as strong in the future as it has been in the past. According to ILO estimates, automation will impact large shares of TCF workforces in many ASEAN countries, most notably Cambodia (Figure H2). Furthermore, emerging

[46] Outside of Vietnam, Cambodia, and China, TCF exports of ASEAN+3 countries are not increasing strongly - suggesting that TCF's importance as growth engine has tailed off in most cases.

[47] Sources: Trouble in the Making? The Future of Manufacturing-led development, World Bank, 2018

changes in business models by TCF companies in developed markets are likely to lead to a reduction in the amount of production that is located in lower-cost countries.[48] As with other sectors, more automated production techniques and the importance of speed to market are likely to weaken the attractiveness of low-cost but distant production locations. These technologies will reduce the contribution that the TCF sector makes to many emerging countries, including those in the ASEAN+3 region. This could weaken "third-wave" ASEAN+3 countries' strategy of using the TCF sector to attract FDI, create jobs, and generate gradual wage increases and upskilling.

Figure H2. Share of TCF Sector Employment at Risk from Automation: Selected ASEAN+3 Countries



Note: The ILO provides estimates to gauge the extent to which these at-risk workers could be replaced with automation and affected by rapid advances in engineering. These "worst-case" estimates tend not to materialize assuming that policymakers will take preventative and proactive steps to strategically transform these groups of workers to keep up with technology's advancement and implementation. In successfully doing so, these economies could even "leap frog" over others and gain a new competitive edge. For the current purpose, impact on garments manufacturing is taken as a good estimate of impact on TCF manufacturing.
Source: ILO (2016)

[48] As one example, Adidas has established two 'speed factories' (in Germany and the U.S.), which use 3D printing for athletic footwear, that can each produce 500,000 pairs of shoes annually. The transfer has eliminated 1,000 jobs in Vietnam's workforce and will create 160 technician jobs each in Ansbach and Atlanta. While this is more of an experiment at this stage than something done at scale, it points to the need to prepare for future technology disruptions associated with a mass customization environment.

25 At the risk of oversimplification, the technology challenge would be how countries can build capacity for technology absorption quickly, yet manage the pace of technology adoption judiciously, so that economic gains from productivity ramp-up do not override the adverse impact on employment and income. This is critical for countries which are further away from the technology frontier and have populations which are young, expanding, and still in the relatively early phases of upskilling. The complexity of this process may be affected partly by a country's economic structure, including (as the contrasting nature of the automobile sector and the TCF sector has illustrated) the extent to which major sectors of the economy have a window to shift gradually from labor-intensive and low-technology production to more capital-intensive and high-technology production.

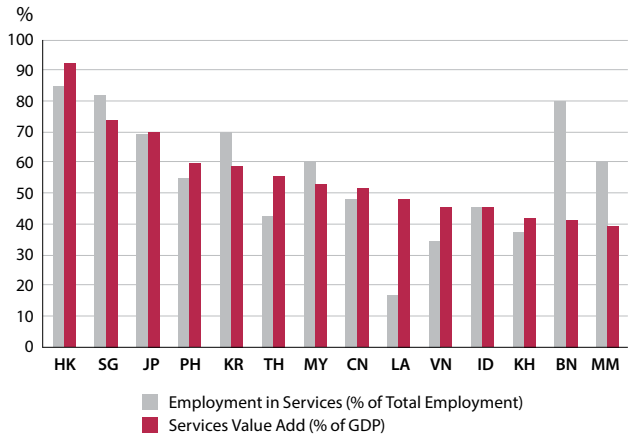
5 Services Sector: The New Engine of Growth and Employment?

Services' contribution to ASEAN+3's growth and employment is large and rising.

26 With technology posing challenges to the manufacturing-for-exports strategy, economies are turning to services as an alternative engine for growth and employment. As a whole, the services sector's contribution has been rising rapidly over time, and it now accounts for more than half of both GDP and employment in many ASEAN+3 countries (Figure 5.1). This is broadly consistent with global trends, whereby trade in services is growing and has been accounting for an increasingly large share of total global exports since the 1980s (Figure 5.2). Based on WTO and OECD data, while services as a share of total world gross exports have remained at around 20 percent since 1980, in VA terms, they have increased from below 30 percent to more than 40 percent (WTO, 2017). Looking at selected ASEAN+3 economies (Figure 5.3), the service VA content of gross exports ranges from 30 to 50 percent.

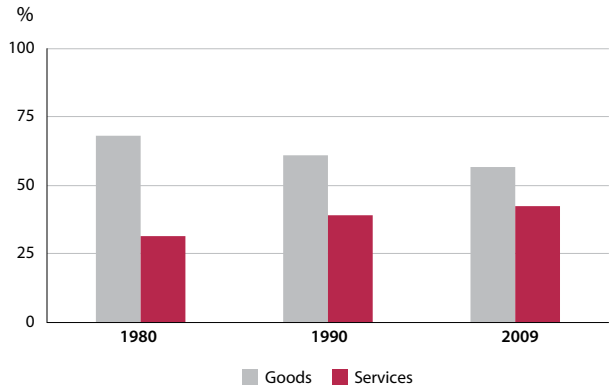
27 A key traditional concern about the services sector is that while it absorbs labor, it is not a high-productivity sector compared to manufacturing. Although the services sector is highly diverse, many services sub-sectors are widely perceived to be characterized by low quality jobs, with low productivity and wages; with limited opportunities for upskilling, and little mobility within and across sectors (ILO, 2016). Examples include manual cleaning services, security guards, receptionists and sales jobs, and delivery services. Growth in the services sector is not associated with overall productivity growth, but rather, driven by rising demand for services relative to goods supported by a shift in available labor from manufacturing to services. The price-inelastic nature of demand for services, combined with lower productivity of the services sector, can potentially pose a drag on the economy's overall productivity and growth (Baumol, 1967).

Figure 5.1 Services' Share of GDP and Employment: ASEAN+3 Countries, 2016



Note: Japan's services share of GDP data is 2015.
Source: World Bank

Figure 5.2 Value-Added (VA) Global Exports of Goods and Services

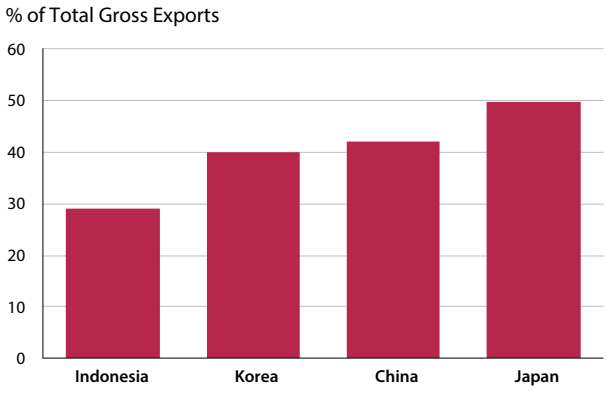


Source: WTO Global Value Chain Development Report (2017)

Commoditization and "uberization" raise productivity of services.

28 The low productivity of the services sector is partly due to its mainly non-tradable and non-standard nature, which means it is not subject to international competition and economies of scale for standardized production. Technology is however making services more tradable and commoditized, with potential gains for productivity. The Information, Communications and Technology (ICT) revolution over the past few decades, for example, has made the growth of the business process outsourcing (BPO) service industry possible. Telecommunication costs have fallen sharply, allowing such services to be provided more cheaply from abroad by countries with lower labor cost, which has benefited frontier and emerging economies with labor force of the requisite skills. Services in call centers, accounting, and other types of professional services, which previously could only be provided domestically – either for cost reasons or because face to face contact was important – can now be provided across borders and subject to international competition. Box I on the BPO sector in the Philippines illustrates the opportunities created through technology making BPO services tradable, with the important pre-requisite of a skilled labor force in the Philippines able to join this service industry.

Figure 5.3 Services Value-added (VA) Content of Gross Exports: ASEAN+3 Countries, 2011



Source: OECD's TiVA database

Box I.

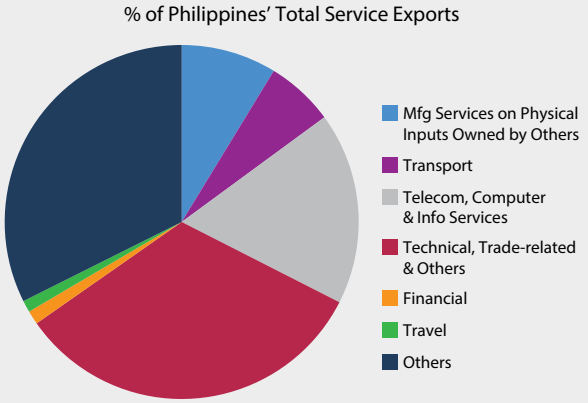
Business Process Outsourcing (BPO) and Services in General: How the Philippines' Experience Suggests Upskilling is Needed for Future Competitiveness

The ICT revolution has broadened the set of tradable services.
The Philippines has benefited tremendously from the ICT revolution with services now accounting for about 40 percent of total exports (similar to India) largely driven by the BPO sector (Figure I1). BPO employs more than 1 million workers with wages 3-5 times higher than the national average; and over the past decade, it has broadened from call centers to a broader set of functions and more complex services.[49]

The value proposition of the Philippines' BPO sector is being undermined by disruptive technology.
Business services like BPO are also exposed to technological disruption. While the BPO sector is still growing quite well in the Philippines, there are challenges on the horizon, with technology eroding aspects of the current value proposition. New technologies are poised to eliminate many call-center jobs and transform others. Artificial intelligence (AI)-enabled softwares or robots can perform tasks quickly, work around the clock, and produce high-quality output. This technology can enable and incentivize firms to move away from an outsourcing model, and cost-effectively bring these functions back inside their firms. As with automation technologies in other sectors, the greatest threat is to routine repetitive jobs. The ILO (2016) estimates that up to 90 percent of jobs in the BPO sector in the Philippines are at risk of disruption from automation, while the remaining jobs will require higher-order skills.

But rapid technological advances can also create opportunities for the Philippines and others.
However, rapid technological advances in the services sector can also give rise to opportunities, though new skills will need to be developed to provide higher VA services. For example, the emergence of cloud technologies which support Business Process as a Service (BPaaS) is a growth opportunity, opening up the SME market (as it can take a more tailored approach to purchasing BPO services, with reduced fixed costs). And technology also allows BPO providers to offer new services to guard against the erosion of their existing business. As a case in point, the ILO notes that some firms are "shifting their services towards knowledge process outsourcing (KPO)", such as "fraud analytics, data integration, project management, R&D, mergers and acquisitions valuation, and medical image analysis". More likely than not, the way ahead for both advanced and emerging countries within the ASEAN+3 region must involve rapid upskilling of human capital and innovation by businesses to provide new types of services which will be in demand.

Figure I1. Breakdown of the Philippines' Service Exports



Source: National Authority

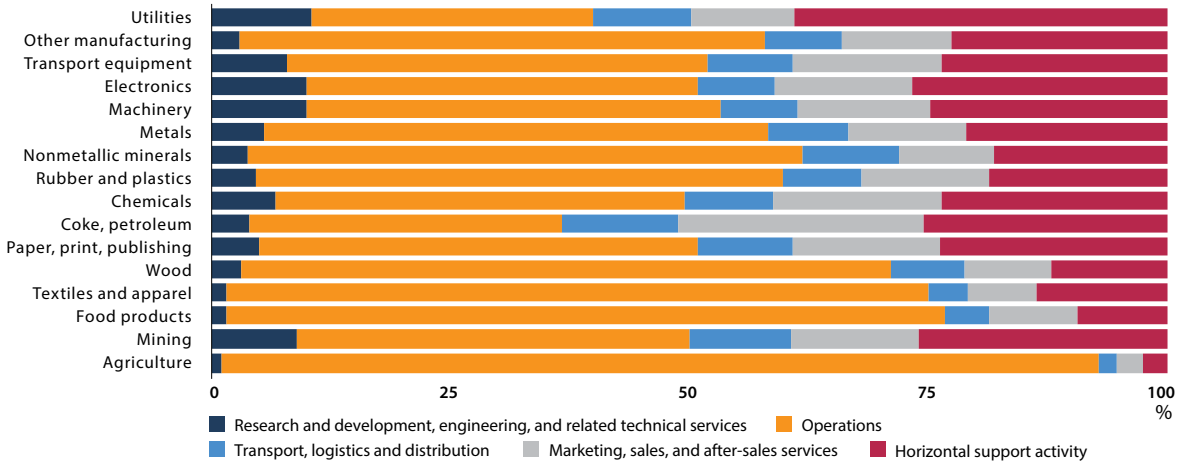
[49] These include back office support, data transcription, animation and software development.

29 Technology has also facilitated market-driven identification of services in great demand, then use of technology to deliver these more efficiently, cheaply and predictably to consumers. This so-called "uberization" of services, while potentially disruptive to current service providers, introduces competition in domestic markets and hence raises productivity. Examples can range from taxi services to tourist accommodation. In addition, by offering customized goods and services for end-use consumers, "uberization" can create new demand for services and support the growth of small and medium enterprises. A recent example cited in the literature is that of smaller manufacturers, including companies which were previously unable to enter the manufacturing sector due to cost barriers, renting equipment and buying a range of services in an uber-like manner to produce highly-customized products for consumers. (See, for example, Sheng, 2017.) Alongside this, the application of digital technologies, for example in big data analytics, can help manufacturing firms in several areas of their operations, ranging from forecasting demand and adjusting inventories to identifying production bottlenecks and reducing wastage (MAS, 2018). Across various sectors of the economy, start-ups can grow to become large companies. For example, European budget airline Ryanair to Indian mobile service provider Airtel are companies with business models that exploit new technology to eliminate outdated purchase or usage experience, or eliminate a superfluous major expense category (Ersek, Keller and Mullins, 2015).

30 Supported by new technology, a more efficient and competitive services sector also has positive spillovers to the manufacturing sector and reinforces the manufacturing for exports strategy (WTO, 2017). Examples of service industries that support manufacturing exports are R&D, transport and logistics, operations, and marketing and sales (Figure 5.4). The service sector employment created here is skilled employment, with productivity driving wages, which is a step up from the traditional conception of service sector employment as low-productivity with low wages.[50]

31 Similar to the manufacturing sector, the services sector increasingly requires a numerate and literate workforce, with low-skilled jobs also at risk of being automated away by technology. ILO estimates show that a high share of services sector jobs in hotels, banking retail trade and call centers could be at risk of being automated away (Figure 5.5). Maximizing the potential gains from developing the services sector as a growth and employment driver therefore requires investment in human capital to upskill of the labor force. This is the path that has enabled "first wave" countries such as Japan to improve productivity in the services sector in tandem with extensive automation, although it is acknowledged that there is more room for improvement in some services industries such as the retail industry.

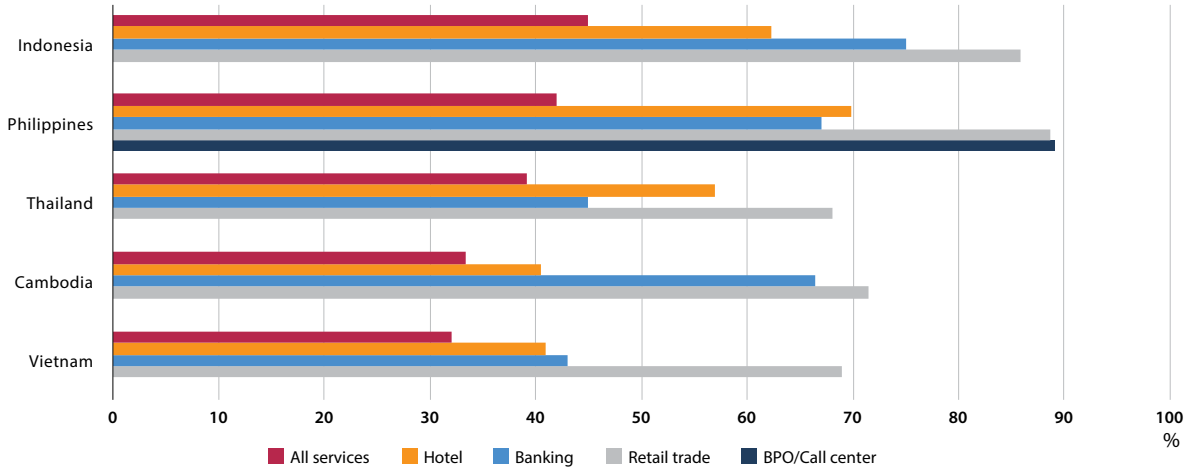
Figure 5.4 Jobs Embodied in Manufacturing Exports: by Industry and by Business Functions



Source: Miroudot (2016)

[50] Technology has also led to the creation of non-standard employment, or "gig-economy" jobs, which on the one hand creates more employment opportunities, but on the other hand brings challenges of employment security and coverage under social security arrangements compared to standard employment (ILO, 2017).

Figure 5.5 Share of Wage and Salaried Employment in Services Sub-sectors at High Risk of Automation



Note: The ILO provides estimates to understand the extent to which these at-risk workers could be replaced with automation and affected by rapid advances in engineering. These "worst-case" estimates tend not to materialize assuming that policymakers will take preventative and proactive steps to strategically transform these groups of workers to keep up with technology's advancement and implementation. In successfully doing so, these economies could even "leap frog" over others and gain a new competitive edge.
Source: ILO (2016)

Growing intra-regional demand can drive demand for services.

32 Similar to the role played by growing intra-regional demand in spurring regional exports, growing demand for services (such as tourism) can also spur the development and upgrading of various services sub-sectors within the region. One important growth sector is tourism, boosted by intra-regional flows of tourists, in particular outbound tourists from China in recent years (AMRO, 2017). As highlighted in the first chapter of this report, outbound tourism activities by Chinese nationals in the region have grown rapidly, providing an impetus to service sector development and an important source of foreign exchange earnings particularly to developing ASEAN economies. This observation is consistent with common expectations that the travel and tourism sector will account for significant shares of many ASEAN+3 economies' services exports in the years ahead. Box J explores the potential for tourism as a growth and employment driver in the region. With promotion efforts from the authorities, the tourism sector could become a strong engine of growth, jobs and wage incomes for the "third wave" economies in ASEAN+3 that are well-endowed with natural and cultural tourist attractions. It could create service employment at a time when its labor force is still growing, and add to the economies' resilience by providing an additional engine of growth even while these economies are starting to integrate into manufacturing GVCs in the region. The sector also offers a continuum of value-added and positive spillovers to the rest of the economy, with the tourist sector in Thailand as a prime example. The growing demand for quality tourist services, alongside rapid technological advancements, has also led to upgrading, expansion and professionalization of the tourist sector in the region.

Box J.

Tourism as a Growth Driver in ASEAN+3 Countries: Evolution and Challenges

This box considers how global macro trends over the past two decades have helped several ASEAN countries develop the tourism sector as an increasingly important growth driver and jobs generator, and prospects for enhancing the sector's contribution further. The economic contribution of travel and tourism to the global economy has widened in scope and risen in importance over the past two decades. Overall, the total contribution of the sector to both global GDP and global employment has been estimated at more than 11 percent[51] (Figure J1).

The tourism sector has evolved for "first wave" and "second wave" ASEAN+3 countries.

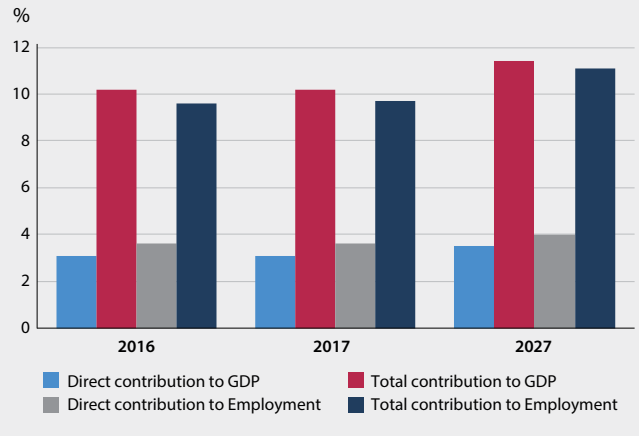
Globally, a few macro trends have jumpstarted and sustained the buoyant development of tourism: a rising global middle class, changing consumer preferences, improved connectivity, and a pressing need to create jobs.

Despite the impact of the GFC and European sovereign debt crisis, there has been a notable rise of the global middle class and shift in consumer preferences. The global middle class has doubled in size between 2000 and 2015, and its consumption expenditure is projected to rise from about USD35.0 trillion in 2015 to USD64.0 trillion by the 2030 (Figure J2) (Kharas, 2017). Disposable incomes have risen to levels which enable more people to travel (Global Tourism Economy Research Centre, 2016; and others).

Alongside buoyant increases in outbound travel from Asia and the Pacific since 2009, intra-regional travel has ramped up more sharply than travel to destinations outside the region (Figure J3). Consumer preferences have also been changing, with many studies in the literature (e.g. Kharas, 2017; World Travel and Tourism Council; Best, 2015; and TravelRave, 2013) suggesting that new middle class entrants from EMs and ageing persons from advanced countries alike, are seeing a shift in demand from basic goods and standardized services to new experiences and customized services as part of these experiences.

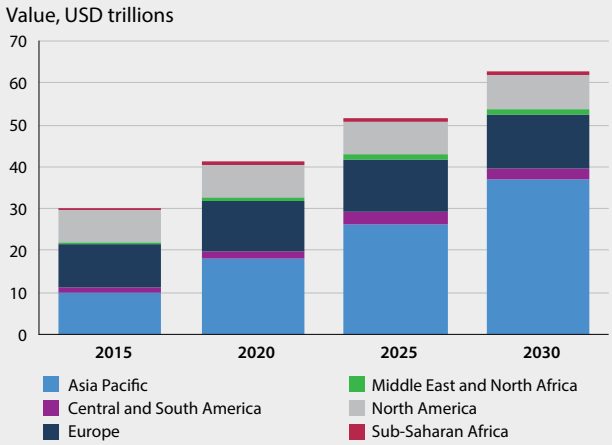
Vast improvements in domestic infrastructure and cross-border connectivity (Figure J4) have been a key enabling factor. Air, rail and road transport have all become much more efficient and comfortable, costs have kept falling partly due to competition and partly due to technology. With transportation networks becoming denser both across and within countries, traveling has become much more attractive than before. These developments have made tourism a natural avenue for the growth in income to be channeled towards satisfying these new consumer preferences. At the same time, the need to create jobs for large populations has been pressing across several ASEAN+3 countries, as indeed it has been in other regions across the world.

Figure J1. Projected Economic Contribution of the Global Travel and Tourism Sector



Sources: World Travel and Tourism Council 2017

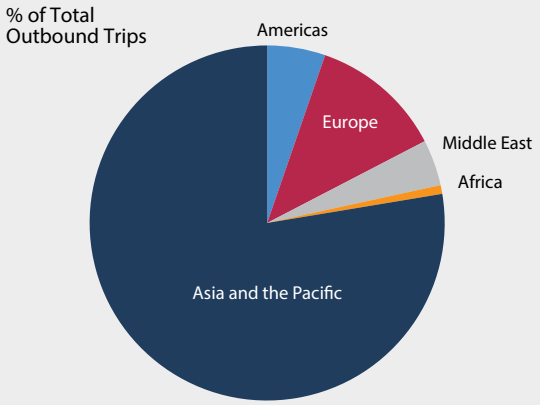
Figure J2. Projected Global Middle Class Consumption Expenditure (PPP, constant 2011 USD trillions)



Source: Kharas 2017

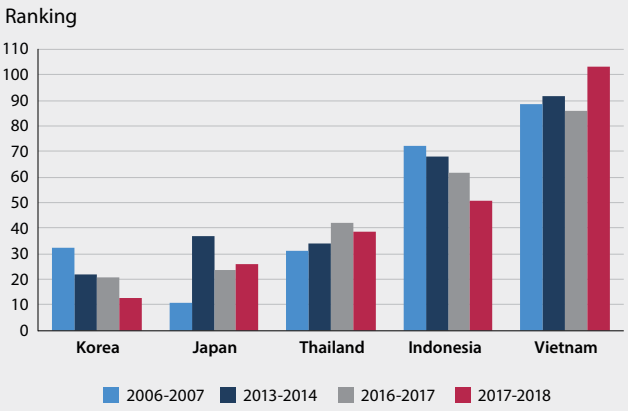
[51] Key elements of direct contribution include accommodation, transport, entertainment, food and beverage services, and retail trade; while key elements of indirect contribution include private investment spending and public sector investment spending, purchases from suppliers, and even knock-on demand by tourism sector workers for food, clothing and housing.

Figure J3. Composition of Outbound Trips: Asia and the Pacific (2016)



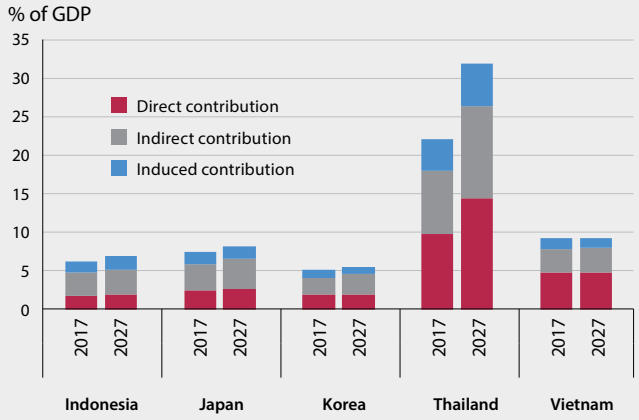
Source: Global Tourism Economy Research Centre (2017)

Figure J4. Quality of Domestic Infrastructure and Air Transport Infrastructure: Selected ASEAN+3 Countries



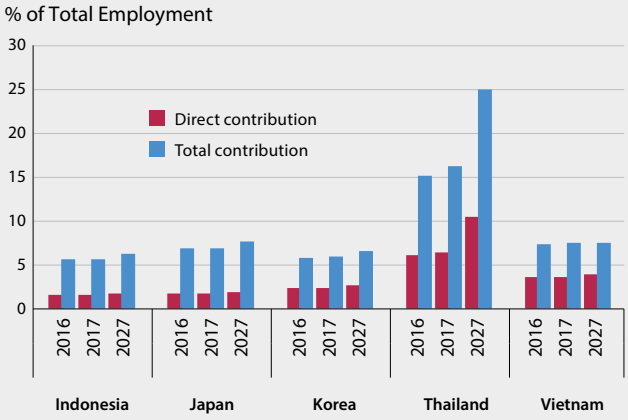
Note: Ranking for 2006-2007 (out of 125 countries), 2013-2014 (148 countries), 2016-2017 (138 countries), 2017-2018 (137 countries)
Source: World Economic Forum

Figure J5. Travel and Tourism Sector's Contribution to GDP: Selected ASEAN+3 Countries



Notes: Indirect contribution includes travel and tourism (T&T) investment spending, government collective T&T spending, impact of purchases from suppliers. Induced contribution includes food and beverages, recreation, clothing, housing and household goods.
Source: World Travel and Tourism Council 2017

Figure J6. Travel and Tourism Sector's Contribution to Employment: Selected ASEAN+3 Countries



Source: World Travel and Tourism Council, 2017

"Second wave" countries have done well in using tourism to spur growth.

Despite lagging behind "first wave" countries in infrastructure and connectivity, "second wave" countries have done well in using tourism to spur growth: creating jobs, lifting incomes, spawning other economic sectors, and lifting growth overall (Figure J5). Both demand- and supply-side factors have been at work. On the demand side, tourists seek leisure, attentive service and new experience. This often means little or no pressure to use advanced technology or highly productive labor to churn output. On the supply side, many ASEAN+3 countries' demographics have been an important enabling factor. Thailand is a good example: it has excellent attractions, it has done exceptionally well in marketing its hospitality offerings; and it is not as labor-constrained as some other countries in the region. The tourism sector accounts for a much larger share of total employment in Thailand than it does in other ASEAN+3 countries (Figure J6). Indeed, in the "second wave" countries, the young growing populations have included sizable segments of low- or semi-skilled workers who are willing to take up service jobs in the tourism sector in return for decent pay such as tourist guides, masseurs, receptionists and waiters.

Technological advancements have already played a key enabling role.
Besides drastically improving domestic infrastructure and cross-border connectivity, technology has also enabled more cities in Asia to become "smart cities". For the travel and tourism sector, this has meant a big boost due to higher degrees of comfort, greater ease of searching for food and entertainment options, lower costs – for a range of services including accommodation, leisure activities and healthcare, and greater ease of payments (with more travelers shifting from cash and credit cards to digital/mobile payments). The ramp-up in demand for a whole range of services has in turn generated employment in both the services and manufacturing sectors of countries across the region.

Development opportunities are rich, and greater regional collaboration can play a key role.
Looking ahead, there are rich opportunities for developing the tourism sector further, provided that "second wave" countries keep upgrading their human capital, technology and ecosystems. Although the tourists of the future may not necessarily want "high tech" experiences, they are likely to generate large demand for experiences which are most efficiently delivered by having skilled human capital applying high-technology methods. One example is air travel, where preferences are growing for more complete inflight experiences including customized meals and fresher entertainment – which are likely to raise demand for more highly-skilled workers behind the scenes. Another example is dining experiences, where there is a need to produce high-quality meals and reduce order-to-delivery times. A third example is "medical tourism", where the experience sought may cut across many areas ranging from advice from physicians and treatment administered by physiotherapists to entertainment during waiting periods and after-treatment counselling services. These examples illustrate how, developing the tourism sector as a strong driver of growth and jobs is likely to require much more advanced technology readiness, higher-quality human capital and a more efficient ecosystems.

Greater intra-regional collaboration can play a key role in developing the competitiveness of the tourism sector across ASEAN+3 countries. ASEAN countries have already come together to take some joint policy actions for boosting the attractiveness of the region for tourist experience. The Tourism Strategic Plan 2016-2025 is wide-ranging in its coverage, with priorities including the development of ASEAN sub-regional corridors, attracting investments to boost tourism infrastructure, implementing a mutual recognition framework for tourism professionals, facilitating intra-region air travel, and even raising responsiveness to environmental protection and climate change.

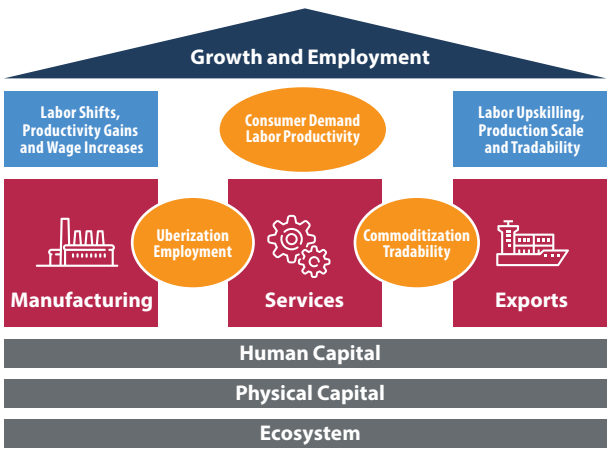
6 Policy Recommendations: Building Resilience through Multiple Engines of Growth

33 For an individual economy in ASEAN+3, given the challenges of changes in trade, production and technology, the key recommendation is to build resilience through multiple engines of growth, including through the growing services sector. While the "manufacturing for exports" strategy has been the mainstream strategy for development in most ASEAN+3 economies over the past decades, the experiences of other economies in the region have shown that other strategies can also make important contributions to growth, especially for newly-emerging economies. The experiences of the Philippines in adopting a services-based growth model and the experiences of Lao PDR, Brunei and Indonesia in concentrating on their resources sectors point to the viability of growth strategies that are more broad-based and diverse than those focused exclusively on developing a manufacturing base. The resource sector will continue to be important in some economies in the region, for example in Indonesia, Lao PDR and Myanmar. The challenge is to build resilience in the economy against swings in global commodity prices, for example, or protectionism against certain manufacturing sectors. The analysis suggests economic diversification, and in particular building a vibrant services sector to augment the growth strategy (Figure 6.1).

34 Economic diversification, through growing the services sector and harnessing technology, requires policymakers to take an "ecosystem" perspective in order to deal with the complexity and interaction among various economic sectors. For example, while low wages may be the single most important factor to attract FDI into a manufacturing sub-sector such as garments, diversifying into other sectors such as tourism requires policy focus on a suite of policies. On this, the World Bank (2018) notes that "the importance of low wages in determining low unit labor costs is increasingly giving way to more demanding ecosystem requirements". If some of the traditional sources of advantage become less effective, then there is a need to invest in other areas that make the country competitive as well as attractive to foreign investment. The World Bank's ease of doing business index reveals some key issues for several ASEAN+3 countries (Figure 6.2). These include customs procedures, quality and capacity of ports and airports; quality of business environment; transport and communications infrastructure. These areas need to be addressed comprehensively through a mix of trade, fiscal and social policies.

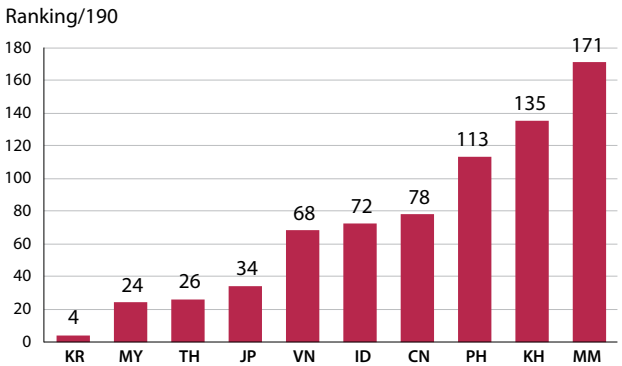
35 For ASEAN+3 economies as a region, the key recommendation is to strengthen intra-regional connectivity and integration. Strengthening intra-regional connectivity through improving physical infrastructure and trade facilitation would improve the competitiveness of GVCs that have already formed within the region. This would make the whole network of intra-regional GVCs more resilient against shocks, so that the region can continue to maximize benefits from the "manufacturing for exports" strategy. In addition, increased intra-regional connectivity would facilitate more trade in goods and services to meet growing intra-regional final demand. While the region remains open to global trade and investment, leveraging on intra-regional demand would improve the resilience of the region as a whole against external shocks such as protectionism.

Figure 6.1 Schema of ASEAN+3 Countries' Augmented Growth Model



Source: AMRO

Figure 6.2 World Bank's Ease of Doing Business Index: Selected ASEAN+3 Countries



Source: World Bank Ease of Doing Business, 2018

Figure 6.3a Costs to Clear Customs: ASEAN+3 Countries and Selected Comparators, 2014

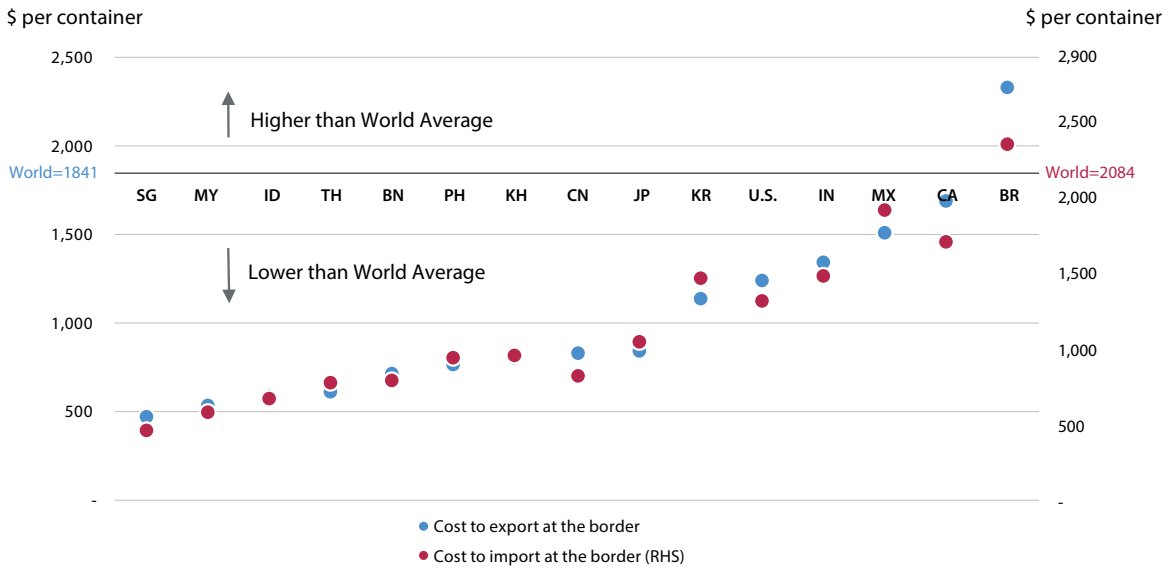


Figure 6.3b Number of Documents to Clear Customs: ASEAN+3 Countries and Selected Comparators, 2014

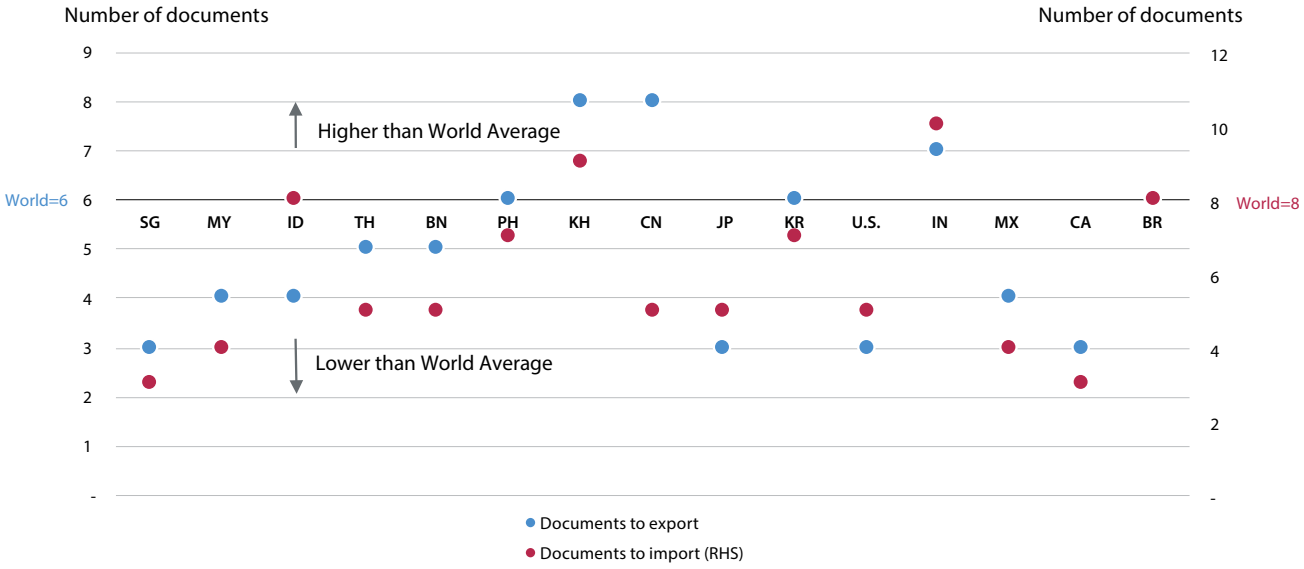
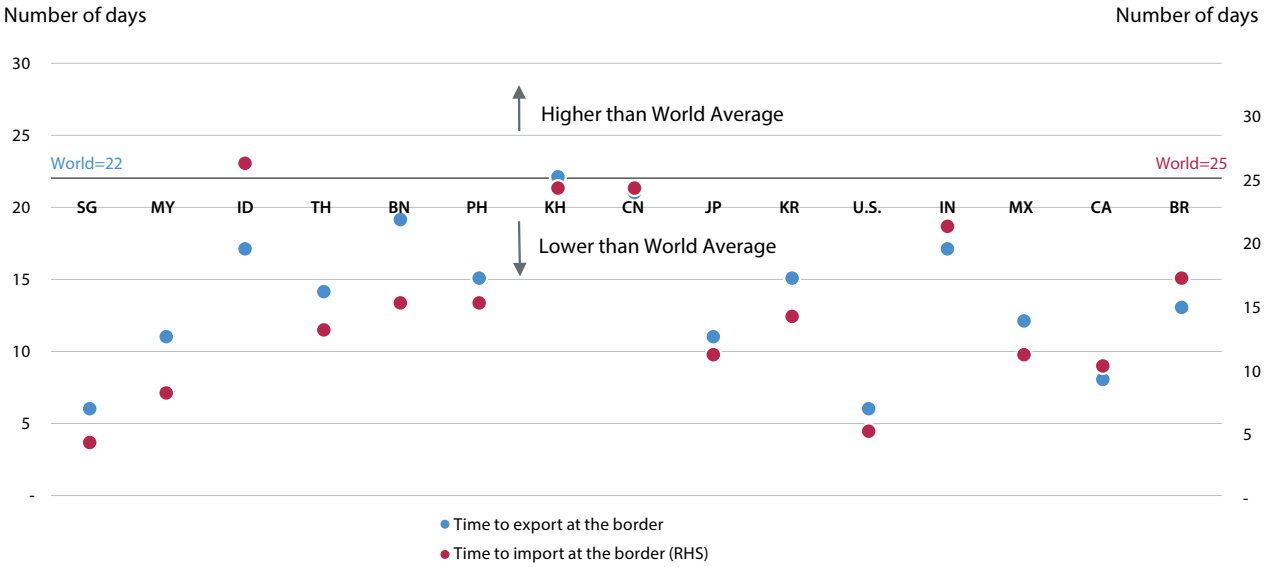


Figure 6.3c Number of Days to Clear Customs: ASEAN+3 Countries and Selected Comparators, 2014



Source: WTO (2016)

36 In implementing these recommendations, the ample resources and diversity in development within the ASEAN+3 region can be a source of strength. The "first wave" economies – Japan, Korea, Hong Kong and Singapore – are important investors in the region. China, Malaysia and Thailand, in the "second wave" of economies, are also emerging as major FDI investors in the region. China, through its BRI, is financing the building of much-needed infrastructure (see Box K), and Thailand is a regional hub in the Mekong region. For these economies, the ASEAN+3 hinterland has allowed relocation of production bases from their home countries as costs increase, to the neighboring countries. These recommendations are elaborated below.

Strengthening intra-regional connectivity and integration

Trade Facilitation and Special Economic Zones

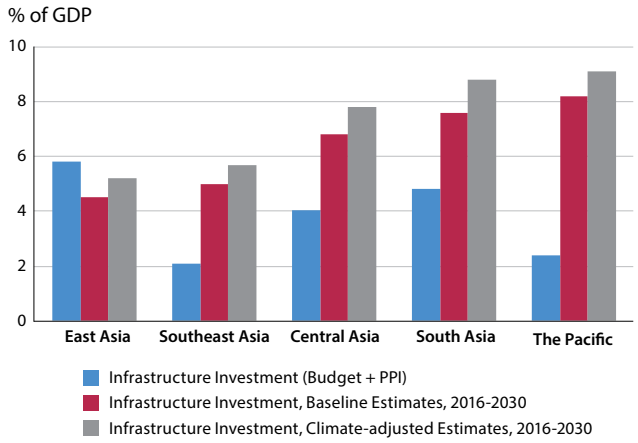
37 Although the ASEAN+3 region has reduced costs of trading through tariff reductions, there is still room for trade facilitation efforts to reduce trade costs and customs procedures. ASEAN+3 economies are among the lowest-cost compared to other emerging markets, in terms of indicators such as costs to export or import at the border, and numbers of days to clear customs. However, there is still room for improvement, for example in terms of number of documents to submit at customs (Figure 6.3). These efforts would also help maximize the gains from trade, in particular for economies in GVCs, where trade facilitation would reduce the cost and time involved in intermediate inputs crossing national borders.

38 For GVC integration, reducing costs of imported inputs is as important as export promotion, and the establishment of Special Economic Zones (SEZs) in the region could facilitate imported inputs for processing into exports. These SEZs could provide an important avenue into integration into GVCs for the "third wave" countries in the region. Cambodia, Lao PDR, Myanmar and Thailand have designated SEZs and industrial parks close to their borders. Examples include Dawei in Myanmar-Kanchanaburi in Thailand, Mukdaharn in Thailand-Savannakhet in Lao PDR, Poi Pet O'Neang in Cambodia-Srakeaw in Thailand, Chiang Rai in Thailand and the Kyaukphyu SEZ in Myanmar, which is close to Yunnan province China. Given its geographical location, Yunnan has plans to become China's transport hub connecting to South Asia and Southeast Asia.[52] These are aimed at promoting and facilitating the development of regional value chains, between heavy industries in Thailand and Guangxi and their suppliers operating in labor-intensive industries in the neighboring countries.

39 Improving infrastructure and connectivity, both within borders and across borders, is critical to export competitiveness. The infrastructure gap is large. The ADB estimates in 2017 that over the period 2015-2030, climate-adjusted infrastructure investment needs amount to 5.7 percent of GDP per annum for Southeast Asia and 5.2 percent per annum for East Asia (Figure 6.4). Within these estimates, lower-income countries' needs would be a few times as large as those of high-income countries.

40 The ASEAN+3 region has ample resources to invest in intra-regional connectivity, with China's BRI being a prime example. As outlined in Box K below, there are several channels through which countries across the ASEAN+3 region can benefit from BRI. Firstly, considering the still large developmental needs in many ASEAN countries, these economies can benefit from BRI's focus on infrastructure investment, in terms of improved energy supply, more efficient transportation, and better connectivity, facilitating further regional integration. Secondly, through helping to fill the infrastructure investment gap in the region, BRI is also expected to have second-order positive impact through crowding in private investment. Thirdly, the distribution of China's ODI in BRI countries will likely reflect the resource endowments and comparative advantages of each BRI country, thus helping to plug gaps and augment strengths.

Figure 6.4 Infrastructure Investment Needs: Asia and the Pacific



Note: In this case, East Asia comprises China, Hong Kong, Taipei, China, Korea and Mongolia; Southeast Asia comprises Indonesia, Malaysia, Thailand, the Philippines, Singapore, Brunei, Cambodia, Lao, Myanmar and Vietnam.
Source: ADB (2017)

[52] Policies to develop the province's logistics infrastructure, economic and technological development zones as well as a border economic cooperation zone in the province are in the pipeline, with the aim of promoting cross-border economic activity and transforming the province into an export-oriented processing base for South Asia and Southeast Asia and to promote cross border economic activity in the south of China.

Box K.

China's Belt and Road Initiative: Growing Outward Investment and Implications for ASEAN Economies

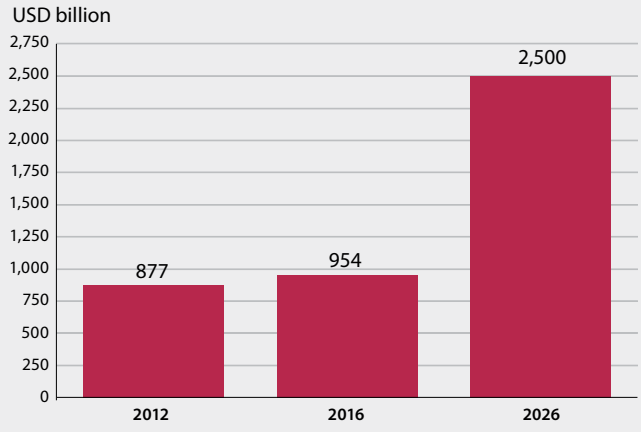
The BRI, unveiled by President Xi in 2013, is a major initiative by China aimed at strengthening intra-regional integration between China and countries in Eurasia and beyond. Geographically, the BRI refers to the Silk Road Economic Belt (land route) along the traditional Silk Route from China to Central Asia, West Asia and then through Eastern Europe into Europe. The Maritime Silk Road (maritime route) refers to the maritime side of the Silk Road from the coastal regions in China to Southeast Asia, Indian Ocean, Middle East and Eastern Africa and then to Europe. The land and maritime belt and road will involve around 70 countries, making up 60 percent of the world's population and 30 percent of global gross domestic product.[53] This Box aims to examine the impetus behind China's growing ODI, and the implications for emerging and developing ASEAN economies.

China's trade with BRI countries has grown significantly over the years, and will continue to gain traction. Figure K1 shows that China's trade with countries involved in the BRI is just under USD1.0 trillion in 2016 (or 25.7 percent of China's total trade). At the 2015 Boao Forum for Asia Annual Conference, President Xi indicated that he expected this figure to surpass USD2.5 trillion[54] within a decade due to improved trade interconnectedness and market access. The top 10 BRI trade partners with China are Vietnam, Thailand, Singapore, United Arab Emirates, Russia, Indonesia, Philippines, India, Malaysia, and Saudi Arabia, six of which are in ASEAN+3 (Figure K2).

After 40 years of reforms and opening up, China has accumulated vast resources, both in terms of expertise and financial resources, to invest overseas. Given its large domestic savings, China can benefit from channeling its savings towards productive investment, both within and outside the region. For the first time in 2016, China's ODI exceeded inward FDI. According to estimates, China's BRI-related ODI is set to pick up, with USD600.0-800.0 billion investments expected for the next five years.[55]

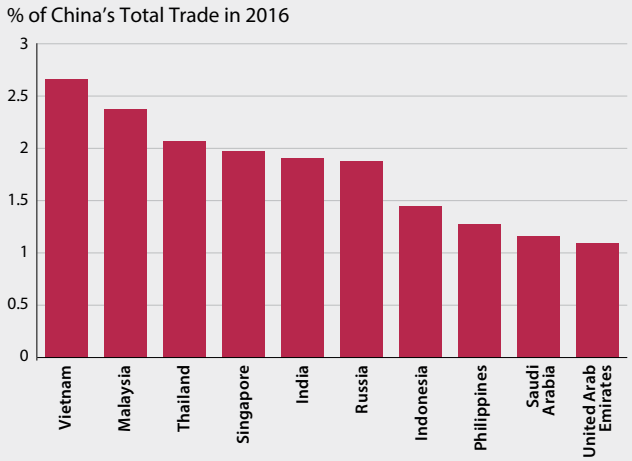
Following the principle of extensive consultation, joint contribution and shared benefits, China is now cooperating with BRI countries and organizations to mobilize funding for BRI projects. So far, more than USD270.0 billion has been allocated to various development projects. China Development Bank has granted USD168.0 billion worth of loans for more than 600 projects since BRI was unveiled, and the Export and Import Bank of China has made BRI-related loans of around USD100.0 billion.[56] The newly established Silk Road Fund, backed by China's government, has also lent USD4.0 billion of funds. The China-led Asian Infrastructure Investment Bank (AIIB), launched in early 2016, has granted USD1.7 billion of loans for nine projects so far.

Figure K1. China's Trade with BRI Countries



Sources: Belt and Road Portal, Reuters

Figure K2. Top 10 Largest BRI Trading Partners of China



Source: IMF DOT

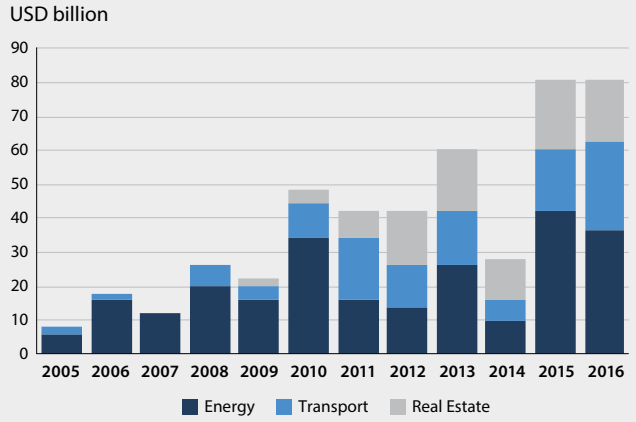
[53] Chin, H., & He, W. (2016). The Belt and Road Initiative: 65 Countries and Beyond. Hong Kong: Fung Business Intelligence Center.
[54] Boao Forum for Asia Annual Conference 2015, in Boao, south China's Hainan Province, China. 29 March, 2015.
[55] Yi, H. (2018). Singapore Summit 2018 - Connectivity and Inclusive Development under the "Belt and Road" Initiative. [online] Singaporesummit.sg.
[56] UOB. (2017). "China: Belt and Road Initiative and What it Means."

Enhancing Regional Integration with Emerging and Developing ASEAN Economies

Considering the still large developmental needs in ASEAN, these economies are poised to benefit from the BRI, in terms of improved energy supply, infrastructure and connectivity, facilitating further regional integration. China's total ODI is mainly concentrated in the energy, transportation and real estate sectors, with China's investment and construction contracts in these three sectors cumulatively accounting for 74 percent of China's ODI in ASEAN economies from 2005 to 2016 (Figures K3 and K4).

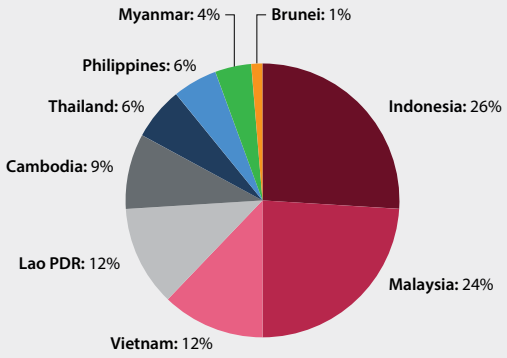
Through helping to fill the infrastructure investment gap in the region, the BRI is also expected to have second-order positive impact through crowding in private investment. Figure K5 shows that the estimated annual infrastructure investment needs in emerging and developing ASEAN economies amounted to USD15.0 billion on average, from

Figure K3. China's Investment and Construction Contracts in ASEAN Economies (by Sector)



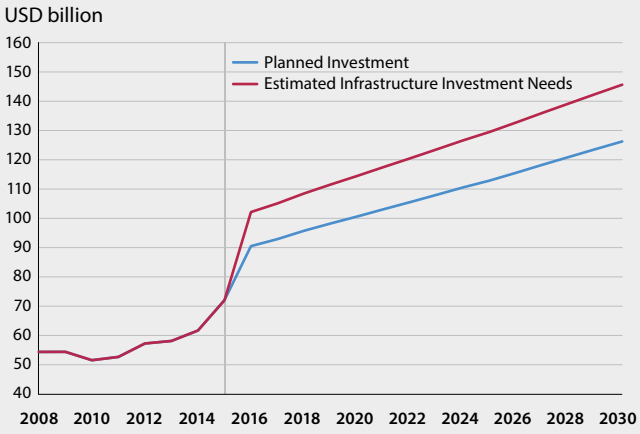
Note: ASEAN in this context excludes Singapore. Investments here are the sum of both investments and construction contracts defined by American Enterprise Institute and The Heritage Foundation.
Source: American Enterprise Institute and The Heritage Foundation

Figure K4. Distribution of Chinese Investment and Construction Contracts in ASEAN Economies (Cumulative 2010-2015, Share)



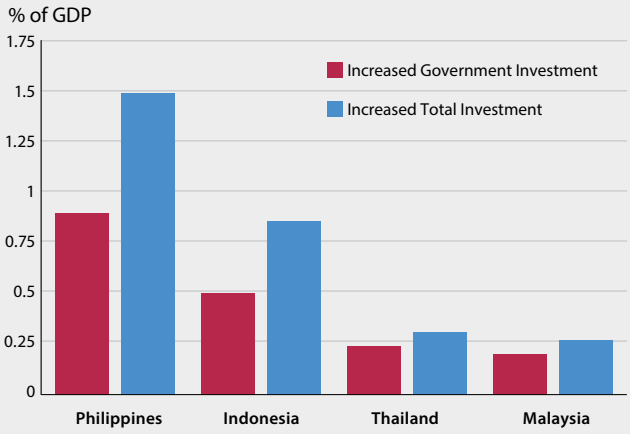
Note: Investments here are the sum of both investments and construction contracts defined by American Enterprise Institute and The Heritage Foundation.
Source: American Enterprise Institute, The Heritage Foundation

Figure K5. Infrastructure Development Needs in ASEAN Economies (2017-30)



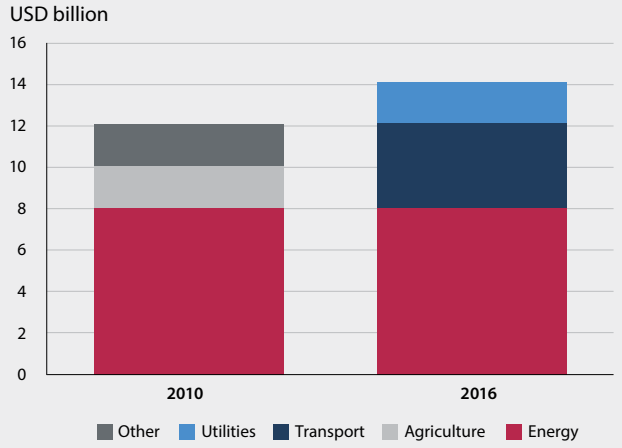
Note: Data refers to emerging and developing ASEAN economies, excluding Lao PDR and Vietnam. Data after 2015 refers to estimates.
Source: Global Infrastructure Hub

Figure K6. Impact of Total Investment and Crowding in of Private Investment in ASEAN-4, Change over 2019 to 2020 (Simulation)



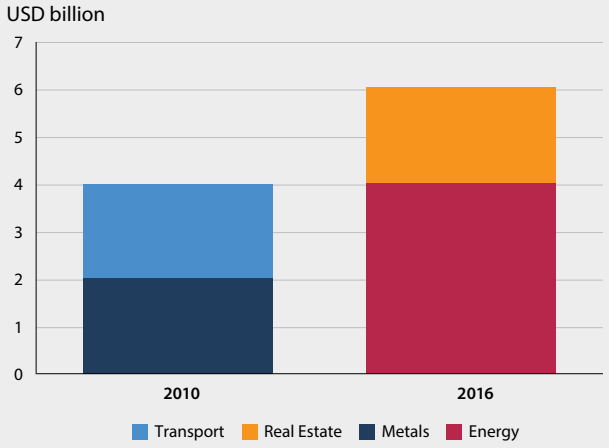
Notes: We assume that due to the BRI, government investment in these countries will exceed the investment gap shown in Figure K5 by 20 percent. This in effect, narrows the total investment gap by 20 percent. As shown by the red bar, Philippines and Indonesia have high gaps and their public investment, as a percentage of GDP will increase the most. The higher government investment will then push up private investment and GDP in the following period. The blue bars show the effect on total investment within the first two years.
Sources: Oxford Economics and ARMO staff estimates.

Figure K7. Chinese Investment and Construction Contracts in Lao PDR



Note: Investments here are the sum of both investments and construction contracts defined by American Enterprise Institute and The Heritage Foundation.
Source: American Enterprise Institute, The Heritage Foundation

Figure K8. Chinese Investment and Construction Contracts in Myanmar



Note: Investments here are the sum of both investments and construction contracts defined by American Enterprise Institute and The Heritage Foundation.
Source: American Enterprise Institute, The Heritage Foundation

2017-2030. Simulations show that the BRI-related public investment will crowd in private investment, especially for countries with large gap in investments. Assuming that BRI investment would help fill up 20 percent of the infrastructure investment gap, simulations based on the Oxford Economics' model estimates that this could crowd in private investment by as much as 0.3 percent of GDP within the next two years[57], with the crowding-in effect most pronounced in the Philippines and in Indonesia, whose investment gaps are also the largest in the ASEAN-4 economies (Figure K6).

The distribution of China's ODI in BRI countries also reflects the resource endowments and comparative advantages of each BRI country. For example, China's ODI in Lao PDR is focused on the hydropower sector and the transport sector (Figure K7), with the construction of a new high-speed rail line running from southern China through Laos to Thailand's industrial eastern coast.[58] In Vietnam, the main sectors are coal and electricity. In Myanmar, the main sector is energy – for example the cross-border gas pipeline into the southeastern part of China (Figure K8).[59]

Maximizing Mutual Benefit from BRI Projects

Given that most ASEAN economies are still in the catch-up phase, there is a developmental need for sustained FDI. Nevertheless, there are challenges for both the Chinese and the BRI participating economies, which could be managed with appropriate coordination and prioritization by national authorities.

- First, while it is noted in the Belt and Road Vision document that development of the BRI is a flexible process that will differ in implementation from place to place, China will need to cooperate with other countries along the route to work out relevant timetables and roadmaps, and align national development programs and regional cooperation plans. This requires close and continuing coordination among the various national authorities and relevant agencies.

- Second, to ensure sustainability, social and environmental safeguards according to international best practices would be observed during implementation of the BRI projects.

- Third, on China's side, there is increased exposure of Chinese financial institutions to BRI countries and these risks would have to be managed through appropriate contractual safeguards or other risk management tools, such as hedging of financial risks.

- Fourth, on the side of participating economies, the BRI project funding is mainly in the form of loans for medium to long term projects. This requires careful assessments of project viability at the start, so as to ensure that these projects can generate sustainable returns that can be used to pay back the loans. Any fiscal guarantees or co-financing needed would also need to be carefully managed by the participating country for fiscal sustainability.

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[57] As the Oxford Economics' model uses supply-side factors to determine GDP in the long-run, but we only shock the demand-side factors, therefore, we only use the dynamics in the first two years to study the crowding-in effect of BRI investment.
[58] China has made a new pledge to Lao PDR for the construction of a USD6 billion railway project linking Lao PDR's capital Vientiane to China's southern Yunnan province by 2020.
[59] The pipeline is now operational and can carry up to 22 million tons of oil each year, equivalent to nearly 6 percent of China's total imports in 2016.

Economic Diversification with a Vibrant Services Sector, and Harnessing of Technology Advances

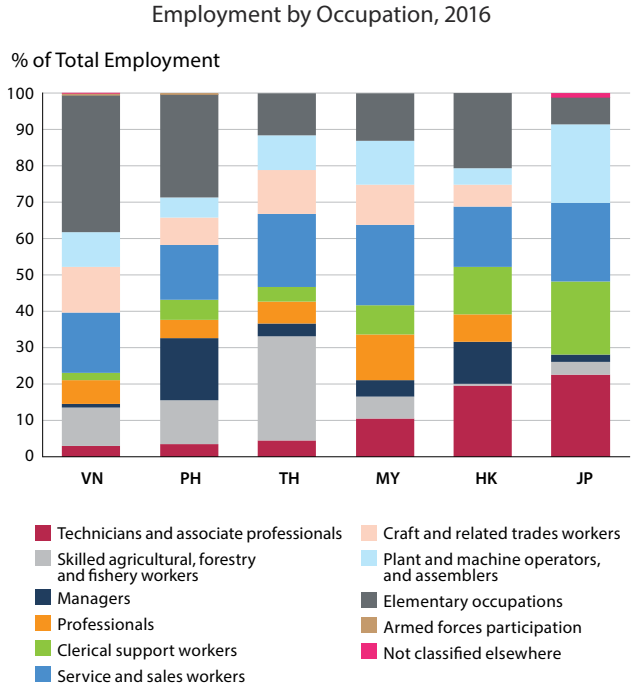
41 Developing a vibrant services sector would require a set of dedicated policies, starting with review of policies that may have disadvantaged the services sector relative to the manufacturing sector. Historically, services have been accorded less priority than manufacturing and export promotion in goods. The policy response needs to be broader than adapting the services sector to support the changing needs of the manufacturing sector. As the sectoral shares of employment and GDP change, a greater focus on levelling the playing field for the manufacturing and services sector in areas such as trade promotion, fiscal incentives and wage policies would be appropriate. As pointed out in the context of commoditization and uberization of services, innovative SMEs could be the first to harness new technology to become competitive in the services sector. These SMEs may need policy support – or at least a removal of unnecessary policy restrictions – in order to grow in the services sector.

42 Liberalizing and opening up the services sector to international competition would improve productivity, and technology is likely to force this liberalization against vested interests. For trade, liberalization of services has typically lagged that of manufacturing, including in the ASEAN+3 region (WTO, 2017). Even without policy efforts, technology is already forcing this liberalization through making services more tradable than before. One example is the BPO sector, where technology has made it possible to move these activities from higher-cost economies to lower-cost economies. While protectionism may slow this process down, the pull factors of cost savings may still overcome the barriers to trade in services.

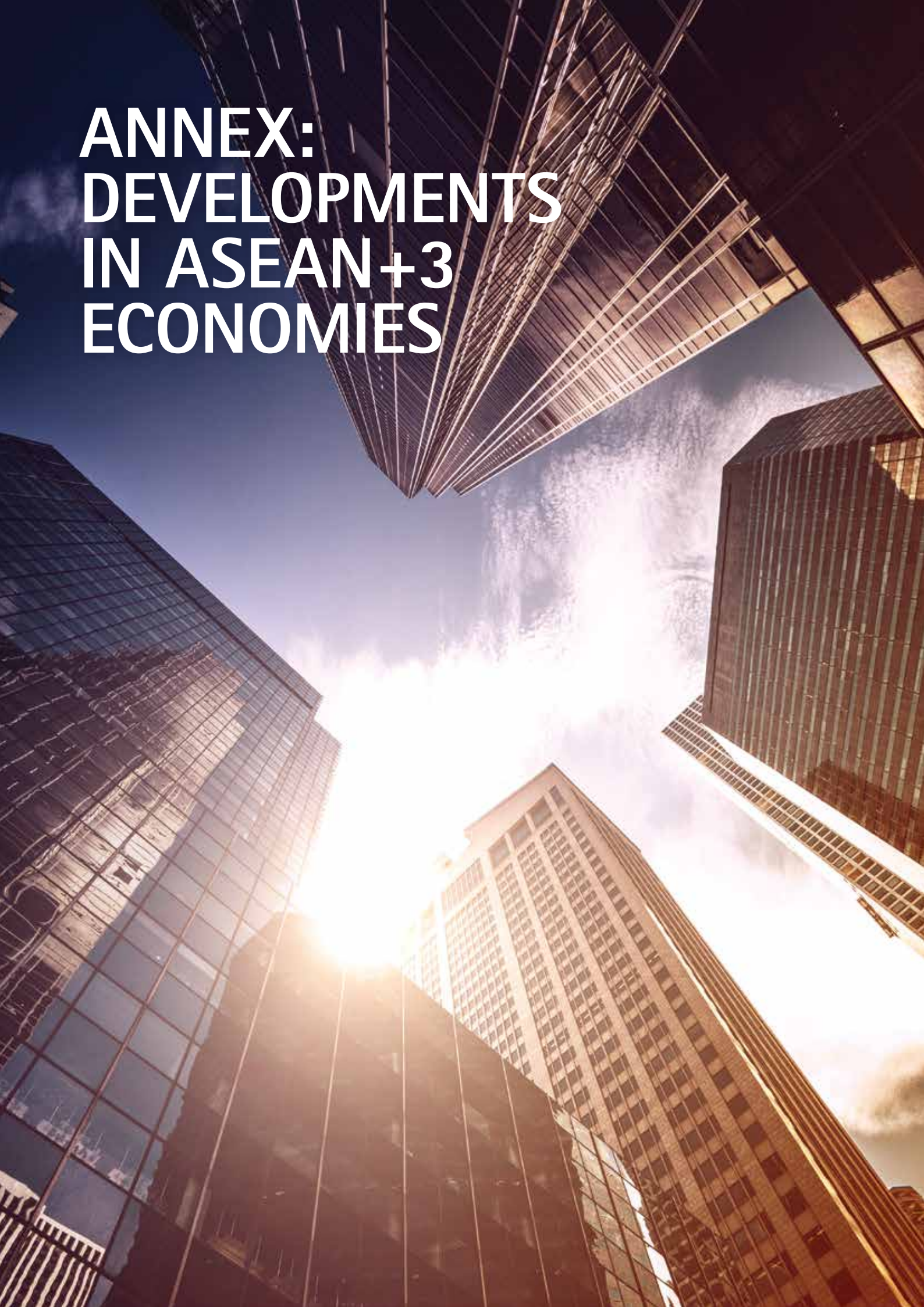
43 As human capital and skilled labor are closely linked to the highest value-added segments of the services sector, leveraging on the availability of human capital across the ASEAN+3 region through supportive workforce and immigration policies would be appropriate. The current distribution of human capital in the region is highly uneven (Figure 6.5). A more economically rational distribution, through workforce or immigration policies that enhance labor mobility, could be a win-win solution in alleviating job creation pressures in home countries and help to fill skills gaps in other economies. This would be a near-term response to skilled labor shortages, while concurrent policy efforts continue in education and skills training that would yield long-term dividends in a more skilled labor force.

44 These trends in the growing importance of services and disruptive technologies imply that large adjustments may be necessary in the labor market and the labor force, which should be supported by social policies. In the context of estimates having put the size of the digital economy at about 15 percent of global GDP (MAS, 2018), it is clear that disruptive technologies will increasingly accentuate demand for human capital to have, firstly, skills specifically required to apply new methods of production (or service delivery), and second, the ability to move across economic sub-sectors. Labor market flexibility and life-long training programs will be much more important than before. Depending on the national context, social policies and insurance to provide a safety net for displaced workers would ease the adjustment. At the same time, technology can also assist in easing shifts in the labor force, especially in the first and second wave economies in ASEAN+3 that are undergoing rapid demographic change and rapid ageing in their labor force. With appropriate supportive policies, these economies can tap on technology and automation to raise productivity in their economies even as their labor forces start to shrink in the coming decades.

Figure 6.5 Distribution of Human Capital for Different Economic Sectors across Selected Countries in the ASEAN+3 Region



Source: ILO



ANNEX: DEVELOPMENTS IN ASEAN+3 ECONOMIES

Brunei Darussalam

After four years of contraction, the economy showed signs of improvement, driven by a recovery in the oil and gas sector, and an expansion in investment. Between 2013 and 2016, the economy contracted as oil prices plummeted to their lowest level in a decade and oil production suffered from unexpected disruptions. Since Q2 of 2017, growth has improved on the back of higher oil and gas production and expanding private investment. A moderate recovery in oil and gas prices and further progress of major infrastructure and FDI construction projects are expected to contribute to positive GDP growth of 0.6 and 1.6 percent in 2017 and 2018, respectively.

Inflation was still negative but improved in 2017. Inflation trended up to -0.2 percent in 2017, improving from -0.7 percent in 2016. This was mainly driven by a higher cost of air transportation and an increase in excise tax and import duty on some foods and beverages. For 2018, inflation is expected to turn positive in line with strengthening domestic demand.

On the external side, the trade balance remained in surplus but it is expected to continue to shrink due to a sharp import recovery on the back of the progress in major infrastructure and FDI construction projects. Exports during January to November 2017 grew by 11.5 percent, compared to -22.4 percent last year in line with a modest recovery in oil prices. However, during the same period, imports grew by 14.4 percent, rising from -18 percent last year due to the implementation of the two large scale construction projects (Temburong Bridge Project and Hengyi Oil Refinery and Petrochemical Plant Project). Given that the services and secondary income accounts remained in deficit, the current account surplus is projected to continue to decline. Nevertheless, it is expected to improve from 2019 onwards as the downstream industries begin their commercial production and exports.

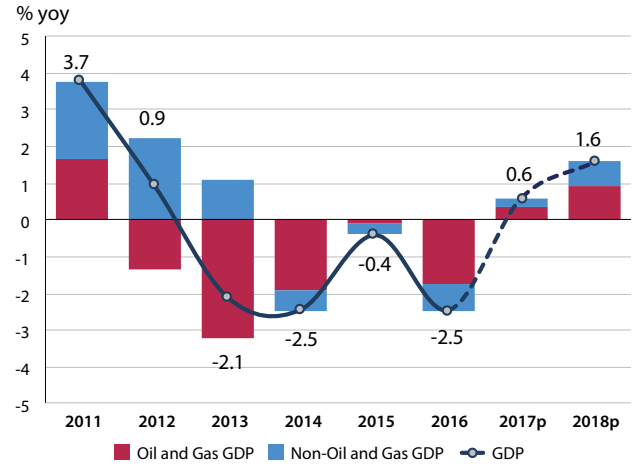
Banks continued to be sound but some challenges remained. The banking sector continued to be well-buffered. The capital adequacy ratio and the liquidity ratio stood well above the minimum requirements. However, bank intermediation remained limited as reflected by the low and declining loans-to-deposit ratio (LDR) against the backdrop of decelerating loans growth to the private sector. To address this issue, the AMBD has implemented some initiatives to spur credit growth through the increase of personal financing cap from 40 to 60 percent and increasing the total debt service ratio (TDSR) from 60 to maximum 70 percent since 2016. As for asset quality, the gross non-performing loans and financing (NPLF) ratio, which trended upwards since 2015 started to moderate and stood at 5.3 percent with net NPLF at 2.4 percent in Q3 2017.

Fiscal pressures remained high, although the budget deficit is expected to improve. Over the past three years, the budget deficit widened sharply to 16.6 percent of GDP in FY2016/17. With a modest recovery in oil prices and continued restraint in current spending, the FY2017/2018 budget deficit is projected to narrow but it will still be sizable at around 10.6 percent of GDP. In addition, the spending restraint was more significant for capital spending.

Looking ahead, high reliance on oil and gas-related factors will continue to pose risks to the economy and the fiscal sector. There are two main risks related to the oil and gas sector: unexpected disruption in production due to ageing oil fields and unfavorable global oil and gas prices in the medium term. Brunei's economic growth as well as the fiscal sector are highly dependent on oil and gas production and global energy prices. As the government sector has a very significant role in the economy with government consumption and investment accounting for more than 30 percent of GDP. A further decline in oil and gas-related revenue may significantly limit the government's capacity to support growth.

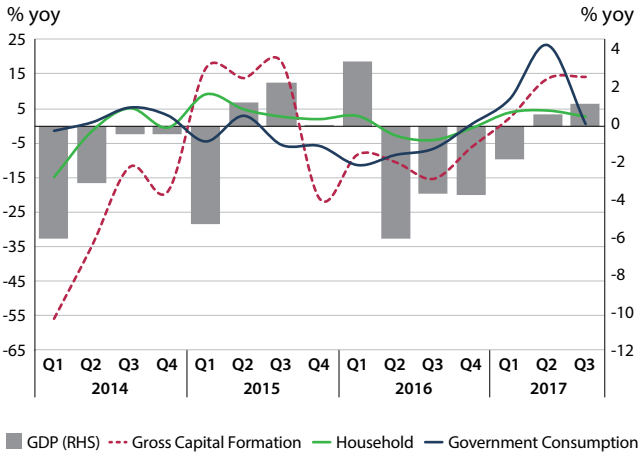
Brunei Darussalam: Selected Charts

After four years of contraction, the economy showed signs of improvement in 2017 and is expected accelerate in 2018.



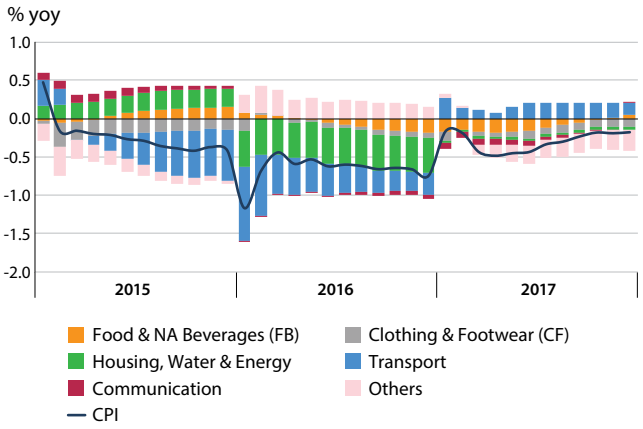
Source: CEIC, AMRO staff calculations

The improvement in growth since Q2 2017 was supported by higher oil and gas production and private investment.



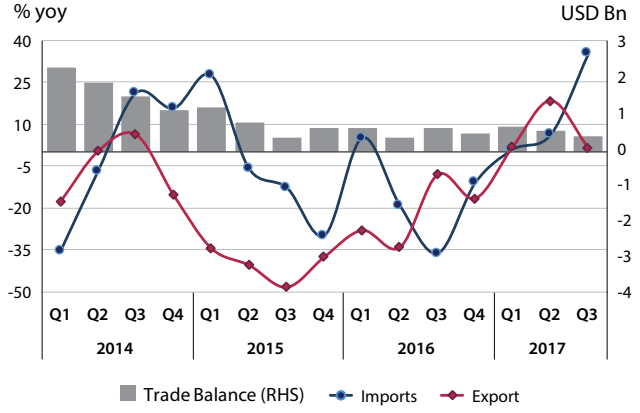
Source: CEIC, AMRO staff calculations

Inflation was still negative but improved toward the end of 2017, driven by the increase in transportation and food prices.



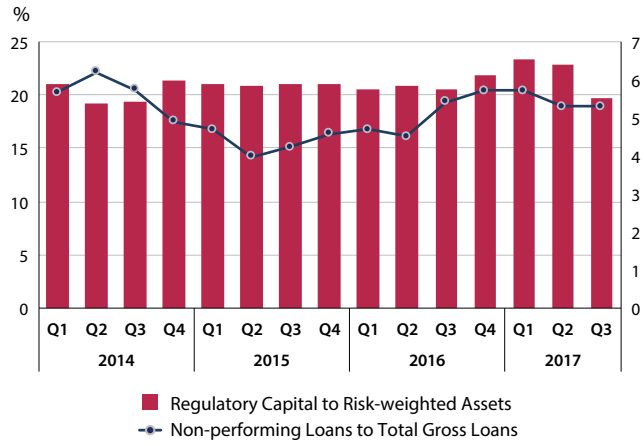
Source: CEIC, AMRO staff calculations

The trade surplus continued to shrink as imports recovered faster than exports.



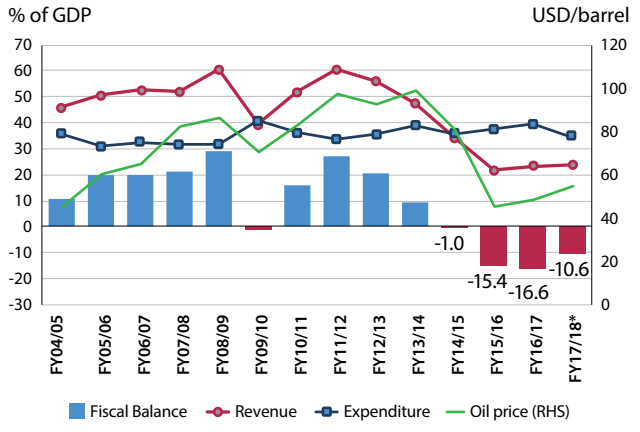
Source: CEIC, AMRO staff calculations

Banks remained well-buffered with a high capital adequacy ratio, while the NPLs tended to moderate.



Source: CEIC, AMRO staff calculations

Despite an improvement, the government budget continued to show a sizable deficit in FY2017/2018.



Notes: * Based on government budget. Fiscal year: April to March
Source: Ministry of Finance Brunei Darussalam, AMRO staff calculations

Brunei Darussalam: Selected Economic Indicators

	2014	2015	2016	2017 [1]
Real Sector and Prices				
Real GDP	-2.5	-0.4	-2.5	0.6
Consumer price inflation (average)	-0.2	-0.4	-0.7	-0.2
External Factor		(in millions of USD)		
Trade balance	7,433	2,893	2,380	2,303
Current account balance	5,244	2,141	1,338	1,226
In percent of GDP	30.7	16.6	11.7	10.1
Gross international reserves	3,648	3,367	3,489	3,339
In months of imports of goods & services	7.5	8.3	9.8	7.4
		(in annual percentage change)		
Export value	-7.3	-40.2	-17.6	12.4
Oil and gas	-11.1	-39.9	-26.5	13.9
Crude oil	-13.3	-46.6	-19.6	21.2
LNG	-9.2	-34.4	-31.2	8.1
Others	98.4	-44.3	102.2	4.2
Export volume	-3.8	-3.0	13.2	-1.6
Import value	-0.5	-10.0	-17.4	26.3
Import volume	0.1	-4.7	-16.0	24.4
Terms of trade	-3.0	-34.7	-25.9	11.6
Fiscal Sector[1]		(in percent of GDP)		
Revenue and grants	34.4	21.7	22.6	23.4
Oil and gas revenue	29.9	16.2	16.3	16.7
Non-oil and gas revenue	4.5	5.6	6.5	6.7
Expenditure	35.4	37.1	39.4	34.0
Current spending	26.6	29.2	31.3	28.0
Capital spending	8.8	8.0	8.1	6.0
Budget balance	-1.0	-15.4	-16.6	-10.6
Monetary and Financial Sector		(in annual percentage change)		
Domestic credit	32.9	28.5	-21.3	-2.7
of which: private sector	1.1	4.9	-8.4	-3.3
Broad money	3.2	-1.8	1.5	-1.8
Memorandum Items				
Exchange rate (BND per USD, period average)	1.27	1.37	1.38	1.38
Exchange rate (BND per USD, end of period)	1.33	1.42	1.45	1.34
GDP (in millions of USD)	17,098	12,930	11,400	12,115
GDP (in millions of BND)	21,664	17,778	15,748	16,729

Notes:
1) AMRO staff projection except for Inflation
2) Fiscal Year April/March
Source: National Authorities, CEIC and AMRO staff projection

Cambodia

The Cambodian economy is expected to maintain a stable growth rate. Cambodia's GDP growth is estimated to grow by 6.9 percent in 2017. Tourism-related services has been growing fast amidst strong tourism arrivals. Although slightly slower than the previous year, the construction and real estate sector continued to grow solidly. The garment sector maintained a robust growth while other new industries such as luggage and electronic parts continued their expansion. We project the economic growth to remain stable at 6.8 percent in 2018 with support from higher public investment, strong tourism activities, as well as emerging non-garment industries.

Headline inflation remained stable amid recently rising energy prices. Headline inflation stood at 3 percent in 2017, despite upward pressures from rising energy prices while food prices has generally moderated since Q2 2017 following the recovery in food production. Inflation rate is expected to inch up slightly in 2018 and 2019 with modest increases in oil prices. The exchange rate remained relatively stable over the past two years. The month-on-month changes in the KHR/USD exchange rate remained modest, fluctuating within a small +/- 1 percent band throughout 2016 and 2017.

The overall external position remained strong with improving current account deficit and sustained FDI inflows. Trade deficit is expected to show a slight improvement in 2017, while surplus in the services account seems to strengthen with robust increase in tourism activities. As a result, current account deficit is expected to continue to narrow to 6.9 percent of GDP in 2017, down from 8.9 percent in 2016. The capital and financial account is likely to remain relatively strong supported by an uptick in FDI inflows, especially to the financial and construction and real estate sectors. Looking ahead, the capital and financial account surplus may decline with slower FDI inflows and lower net external borrowing among commercial banks.

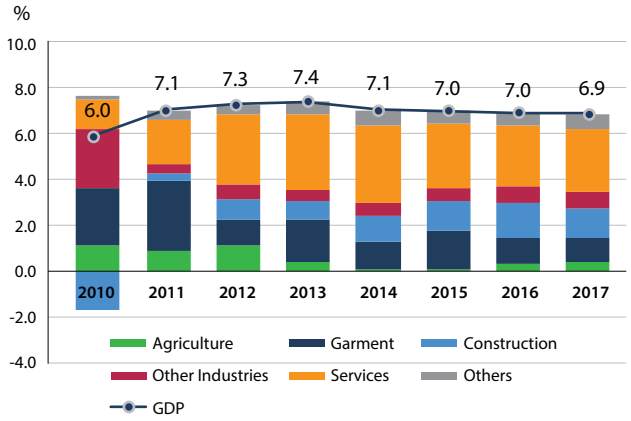
Credit growth has moderated in 2017. While the growth rate remained solid, credit growth has slowed down to 18.5 percent in 2017, lower than 22.5 percent in 2016. The interest rate cap policy introduced in 2017 has slowed down the MFIs credit growth for the small-size loan borrowers, increasing average loan size. The credit growth is likely to stabilize in the next few years with the continuing policy measures. Overall, banking indicators remain sound, including the NPL ratio which has stabilized since the beginning of the second half of 2017.

The overall fiscal position has improved with continued robust revenue collection. Tax revenue grew strongly by 17.4 percent in 2017, or 6 percent above its target. With current expenditure increase by 10.7 percent, the overall fiscal deficit (excluding grants) stood at 0.7 percent of GDP, much lower than its initial budgeted figure. While tax revenue is expected to increase further, fiscal deficit is budgeted to widen in 2018 as the government plans to increase capital spending substantially to support growth.

In order to sustain high growth in the medium to long term, Cambodia needs to maintain its external competitiveness and resilience. Improving infrastructure and human resources should be critical to enhance competitiveness, productivity and economic diversification. In this regard, reprioritizing budget allocation to address these issues more effectively is essential.

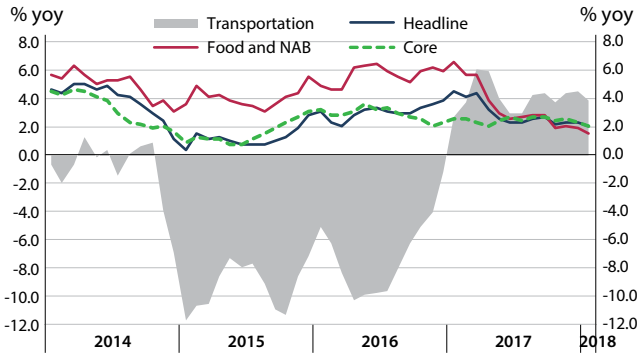
Cambodia: Selected Charts

The growth contribution of the garment sector has moderated, partially offset by faster growth in other emerging industries.



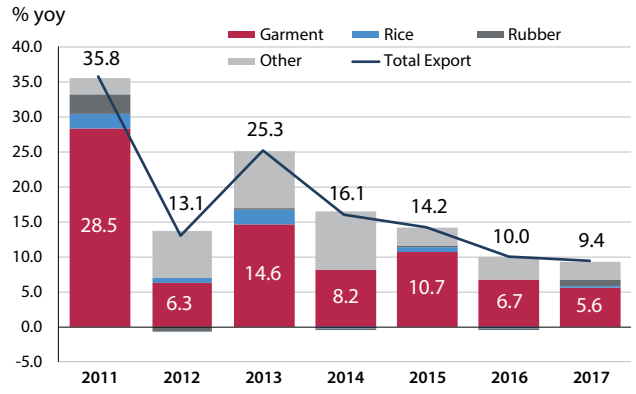
Note: Garments and Construction are sub-categories in the Industry category.
Source: NIS

Despite upward pressures on energy prices, headline inflation stabilized in 2017, weighed down by better agricultural production.



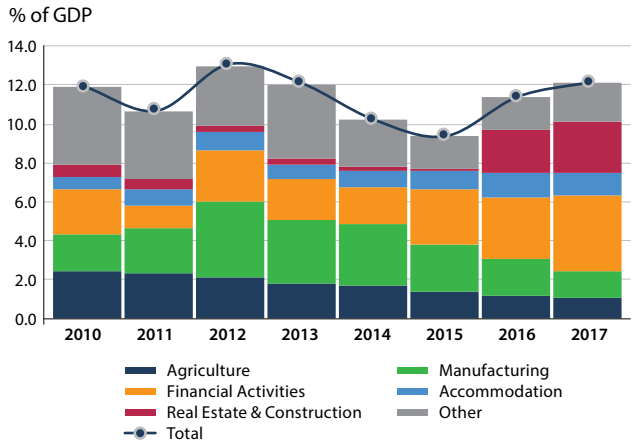
Source: NBC

Export growth continued to decelerate with the slowdown of garment exports.



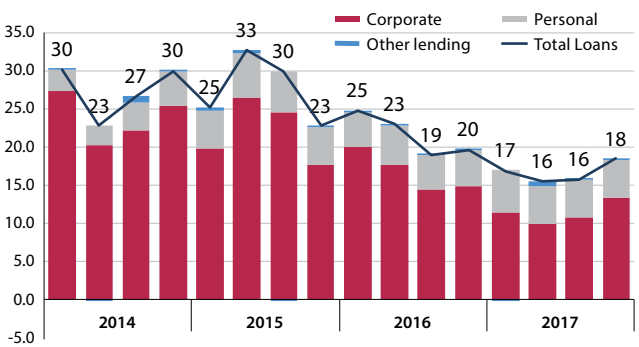
Source: NBC

FDI inflows remain strong, especially in the financial sector and real estate-related activities while manufacturing has been on a declining trend.



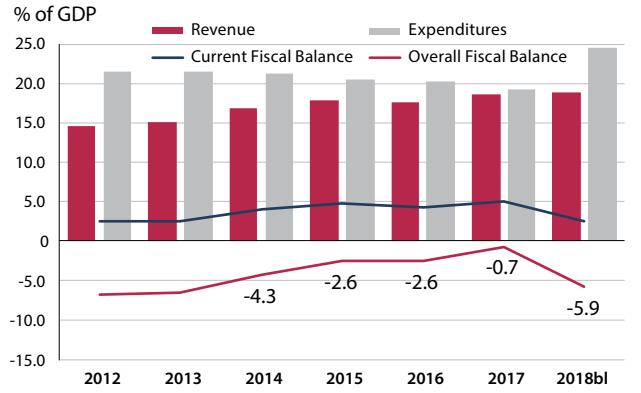
Source: NBC

Domestic credit growth from commercial banks to the private sector softened with a slight pickup in Q4 2017, particularly credit to corporate sector.



Source: NBC, AMRO staff projections

The fiscal position continued to strengthen in 2017, but is likely to see a larger deficit in 2018 due to an increase in wages and capital spending.



Source: MEF

Cambodia: Selected Economic Indicators

	2014	2015	2016	2017 Est.
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	7.1	7.0	7.0	6.9
Consumption (in percent of GDP)	83.0	82.2	82.1	82.0
Investment (in percent of GDP)	22.1	22.5	23.3	19.2
GDP deflator	2.6	1.7	3.2	3.0
Consumer price inflation (average)	3.9	1.2	3.0	2.9
Consumer price inflation (end of period)	1.1	2.8	4.2	2.0
External Sector	(in millions of USD, unless specified)			
Trade balance	-3,206	-3,467	-3,416	-2,541
Current account balance	-1,640	-1,693	-1,782	-1,635
In percent of GDP	-9.8	-9.4	-8.9	-7.4
Overall balance	754	775	846	967
Gross international reserves 1/	4,391	5,093	6,731	8,758
In months of imports of goods & services	4.2	4.4	5.5	6.0
Fiscal Sector (General Government)	(in percent of GDP)			
Revenue and grants	20.1	18.5	18.4	19.2
Revenue	16.9	17.8	17.7	18.6
of which: tax revenue	14.4	15.4	15.0	16.0
Expenditure	21.2	20.4	20.3	19.3
Expense	12.8	13.0	13.4	13.5
Net acquisition of non-financial assets	8.4	7.4	6.9	5.8
Overall budget balance, excl. grants	-4.3	-2.6	-2.6	-0.7
Net lending/borrowing balance	-1.1	-1.9	-1.9	-0.1
Primary net lending/borrowing balance	-0.8	-1.6	-1.5	0.2
Monetary and Financial Sector	(annual percentage change, unless specified)			
Domestic credit	28.5	24.3	21.9	19.4
Private sector	31.3	27.1	22.5	18.5
Broad money	29.9	14.7	17.9	18.7
Reserve money	24.6	21.7	25.0	26.3
Memorandum Items				
Nominal GDP (in billions of Riels)	67,437	73,423	81,242	89,453
Nominal GDP (in millions of USD)	16,701	18,078	20,035	22,114
GDP per capita (USD)	1,095	1,159	1,266	1,376
Exchange rate (Riels per USD, average)	4,038	4,060	4,055	4,045
Exchange rate (Riels per USD, end of period)	4,075	4,050	4,037	4,037

Notes:
1) Investment includes change of inventories.
2) Gross international reserves exclude unrestricted foreign currency deposits held as reserves at the NBC; reflected RMB inclusion in the SDR basket on Oct 1, 2017;
Source: National Authorities, AMRO staff calculations; 2017 figures are based on AMRO staff estimates and projections.

China

China's growth was robust in 2017. On the supply side, service activities expanded further, reflected by higher PMI indicators. Manufacturing activities also continued to expand, especially in the IT-related sectors, although they have moderated somewhat recently. On the demand side, growth was mainly driven by steady consumption and further infrastructure investment.

Growth in 2018 is expected to moderate slightly as compared to 2017. The authorities' policy priority has shifted from high-speed to high-quality growth. Although this will lead to growth moderation with declining contribution from investment, it is a welcome adjustment that will potentially lead to more sustainable growth. For growth in 2018, the authorities set the growth target at around 6.5 percent. We project that it will be at around 6.6 percent, with momentum being sustained by further expansion in private consumption and services (including the internet economy). Downside risks include moderating investment and smaller net exports, the impacts of financial deleveraging and macroprudential measures on the property markets.

Capital outflow pressure has eased further mainly due to macroeconomic improvement as well as counter-cyclical management on cross-border capital flows via macroprudential policies. The capital and financial account registered a surplus of USD148.5 billion in 2017 as compared to a deficit of USD416.4 billion in 2016. Meanwhile, overseas investors have recently increased their portfolio investment in China's bond and equity markets since November 2017. As a result, foreign reserves trended up to USD3.13 trillion as of end-February 2018 and the RMB strengthened against most currencies during late December 2017 to early February 2018.

CPI inflation rose in February while PPI inflation continued to moderate. CPI inflation rose to 2.9 percent in February as compared to 1.5 percent in January and 1.6 percent in all of 2017, reflecting rising food prices due to the Chinese New Year and low base effect. After peaking at 7.8 percent in February 2017, PPI inflation moderated to 3.7 percent as of end February 2018 and is expected to trend down further in 2018, partly due to the high base effect.

Short-term risks to growth and macroeconomic stability have diminished. A hard landing risk is assessed to be low against steady consumption, continuing urbanization, and the strengthened efforts to mitigate financial risks by strengthening financial deleverage and regulation and imposing macroprudential measures on the property markets. The imminent risks in the financial and the property markets have moderated and growth of debt in the corporate and government sectors has also slowed. Overcapacity reduction has proceeded according to schedule and targets.

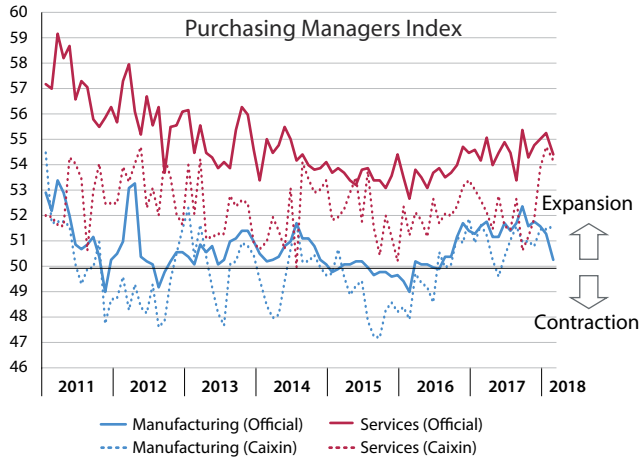
External risks have moderated but trade tension continues to warrant attention. Near-term risks from capital outflows have receded. That said, these risks could heighten if U.S. monetary policy normalization proceeds at a faster-than-expected pace, or growth in China were to falter. Geopolitical risk is a tail-risk, which is likely to remain. The U.S. registered a higher goods deficit with China in 2017 compared to 2016. Hence, the trade tension may still pose risks to Chinese exports. However, the impact on the overall economy is assessed to be limited.

In the medium-term, risks to growth could heighten should the push for structural reform slacken, leading to increased corporate vulnerabilities. Corporate leverage and associated vulnerabilities remain high in some sectors such as mining, steel, and real estate although profits have rebounded recently in the mining and steel industries due to higher prices. These problems are not likely to lead to a systemic crisis in the short term. However, if problems in these sectors are not addressed, debt distress could deteriorate in some industries, which could undermine confidence in the economy and the financial sector and become a drag on growth.

Due to continually increasing trade and financial integration, spillover effects from China to the regional economies can be sizable. China's economic transition toward consumption-driven growth has created increasing demand for consumer products and outbound tourism. It is expected that the Belt and Road Initiative will significantly increase ODI to ASEAN economies, which will contribute to much-needed infrastructure development. RMB funding has played an increasing role in regional trade and investment settlements. Besides, financial channels are likely to have an increasing impact on regional financial markets along with the further opening-up of China's financial markets and outward investment.

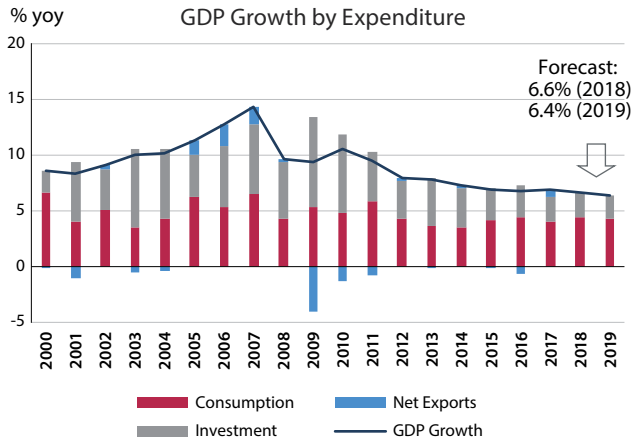
China: Selected Charts

Service activity expanded further, reflected by higher PMI data. Manufacturing activities also continued to expand but they have moderated somewhat recently.



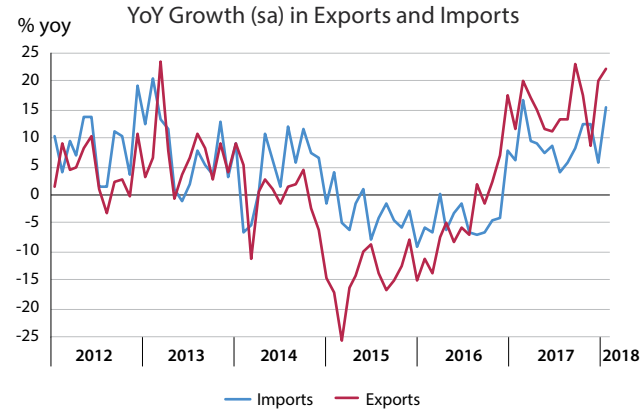
Sources: NBS, Markit

On the demand side, growth was mainly driven by steady consumption while investment expansion slowed.



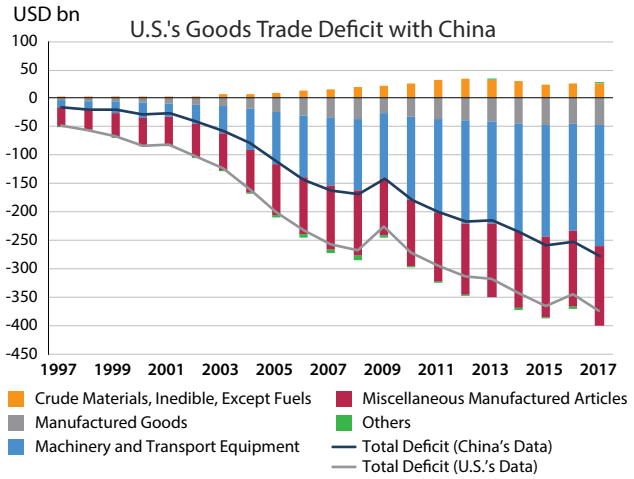
Sources: NBS, AMRO Estimates

While exports have continued to expand in the backdrop of a global trade recovery, imports have risen in tandem with growing domestic consumption.



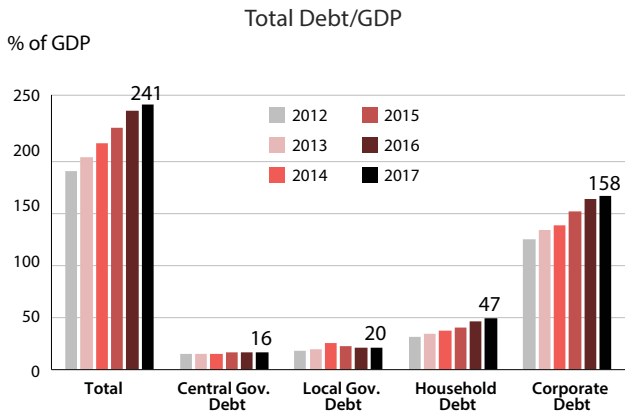
Source: General Administration of Customs

China's trade surplus with the U.S. widened further in 2017.



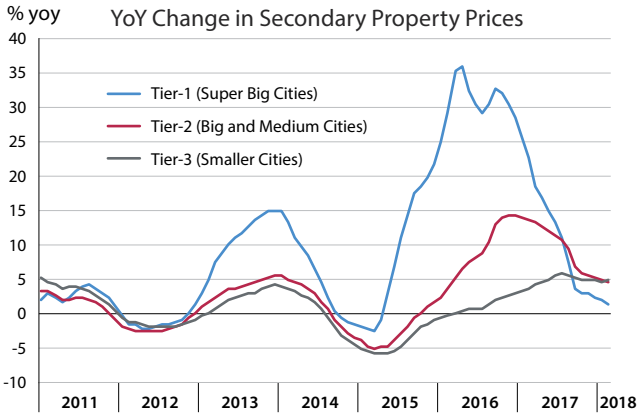
Sources: U.S. Census Bureau, China's General Administration of Customs

Growth in government debt decelerated compared to household and corporate debt.



Source: NBS, PBC, CMOF, AMRO

Growth of property prices in the first and second tier cities has further moderated due to the measures imposed by the authorities.



Source: Wind

China: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	7.3	6.9	6.7	6.9
Consumption	6.7	7.8	8.3	7.5
Gross capital formation	7.1	6.0	6.0	4.7
PMI (manufacturing, period end)	50.1	49.7	51.4	51.6
PMI (non-manufacturing, period end)	54.1	54.4	54.5	55.0
Consumer price inflation (period average, % yoy)	2.0	1.4	2.0	1.6
Core consumer price inflation (period average, % yoy)	1.6	1.5	1.6	2.2
Producer Price Index (period average, % yoy)	-1.9	-5.2	-1.4	6.3
Newly-hired urban workers (in millions)	13.2	13.1	13.1	13.5
Average registered unemployment rate: urban, %)	4.1	4.0	4.0	3.9
Average wages (RMB)	56,360	62,029	67,569	…
Growth in average wages	9.5	10.1	8.9	…
External Sector	(in billions of USD, unless specified)			
Exports (% yoy, USD)	6.0	-2.9	-7.7	7.9
Imports (% yoy, USD)	0.5	-14.3	-5.5	15.9
Trade balance	383.1	593.9	509.7	422.5
Trade balance (% of GDP)	3.7	5.4	4.6	3.4
Current account balance	236.0	304.2	202.2	164.9
Current account (% of GDP)	2.3	2.7	1.8	1.3
Financial and capital balance (excl. reserves)	-51.4	-434.1	416.4	148.4
Financial and capital balance (% of GDP)	-0.5	-3.9	-3.7	1.2
FDI	119.6	126.3	126.0	131.0
ODI	102.9	118.0	170.1	120.6
External debt (gross)	1,779.9	1,383.0	1,415.8	1,710.6
Foreign reserves	3,843.0	3,330.4	3,010.5	3,139.9
Exchange rate (RMB/USD, period average)	6.16	6.28	6.64	6.75
Fiscal Sector	(in percent of GDP, unless specified)			
Revenue (% yoy)	8.6	8.4	4.5	7.4
Expenditure (% yoy)	8.2	15.8	6.4	7.7
Revenue	21.8	22.1	21.5	20.9
Expenditure	23.6	25.5	25.2	24.6
Overall balance	-2.1	-2.4	-2.9	-2.9
Central Government debt	14.9	15.5	16.1	16.3

	2014	2015	2016	2017
Monetary and Financial Sector	(in annual percentage change, unless specified)			
M2 (% yoy)	12.2	13.3	11.3	8.1
Aggregate financing (% yoy)	14.3	12.5	12.8	12.0
Total loans (% yoy)	13.6	14.3	13.5	12.7
Lending rate (1y, period end, %)	5.6	4.4	4.4	4.4
10 year Treasury bond yield (%)	4.17	3.37	2.86	3.58
Banking CAR (%)	13.2	13.5	13.3	13.7
NPL ratio (%)	1.25	1.67	1.74	1.74
Memorandum Items				
Nominal GDP (in billions of RMB)	64,397	68,905	74,359	82,712
Nominal GDP (in billions of USD)	10,483	11,063	11,195	12,250

Note:
(i) RMB external debt has been included since 2015
Source: National Bureau of Statistics, Ministry of Finance, People's Bank of China, Ministry of Commerce, Ministry of Human Resources and Social Security, China Customs, China Banking Regulatory Commission, State Administration of Foreign Exchange, AMRO

Hong Kong, China

GDP growth in Hong Kong has continued to recover strongly backed by private consumption and external demand. The GDP growth rate in 2017 was 3.8 percent, up from 2.1 percent in 2016, with a positive output gap. Goods exports have registered a brisk expansion amid improved global trade volumes. Services exports have also increased due to rising trade and cargo flows as well as recovering tourism demand. Meanwhile, private consumption has continued to strengthen, backed by rising income amid a tight labor market and favorable consumer sentiment. Moving forward, the growth momentum is likely to remain solid, mainly supported by resilient domestic private consumption. However, the GDP growth rates in 2018 and in 2019 are projected to moderate to 3.4 percent and to 3.0 percent respectively, reflecting tighter global and domestic financial market conditions as well as a slight moderation in China's growth.

Inflationary pressures remain contained. Headline inflation was 1.5 percent in 2017 amid a disinflationary environment in major import partners. It is projected to increase slightly to 2.1 percent in 2018 and to 2.3 percent in 2019, due to steady wage growth, higher housing rents, and depreciation of the nominal effective HKD.

Domestic financial conditions remain accommodative. Short-term HKD interest rates have been lower than USD counterparts due to the ample liquidity in Hong Kong. Since late 2017, the widening spreads between USD Libor and Hibor have again led to exchange rate depreciation with the HKD moving closer toward the weak-side Convertibility Undertaking rate of 7.85 HKD/USD. Meanwhile, 1-year and longer HKD interest rates have gradually picked up, reflecting expectations for higher HKD interest rates in the coming years. The U.S. stock market sell-off in early February triggered the Hang Seng Index to drop by more than 10 percent from the all-time high record in late January 2018 and led to increased volatility. However, the latest data suggests that the market sentiment has improved somewhat.

The banking system remains sound and well-capitalized. Credit growth has recovered strongly with a declining classified loan ratio due to improved economic activities. The capital adequacy ratio remained high at 19.1 percent as of end-December 2017.

Fiscal conditions remain sound. According to the Budget Speech by the Financial Secretary in February 2018, the fiscal surplus is estimated at 5.2 percent of GDP in FY2017/18, while the fiscal reserve will reach a level equivalent to 28 months of expenditure as of end-March 2018. In the FY2018/19, the government plans to boost the public expenditure amounting to 21 percent of GDP, higher than 19 percent last year, while maintaining fiscal surplus and adequate reserves. Budget measures includes further efforts on increasing land housing supply, reducing salaries tax and profits tax, providing additional expenditures on Innovation and Technology development, and raising education spending.

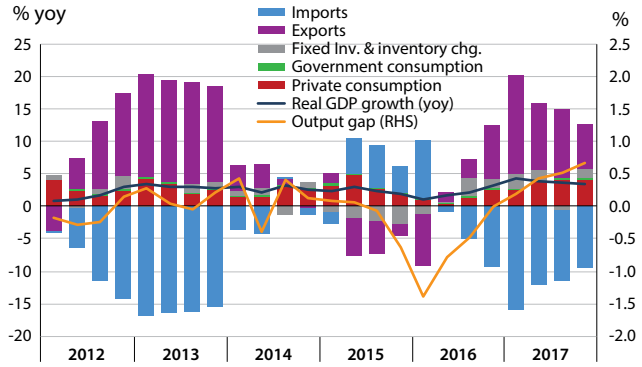
Near-term risks to growth come largely from the U.S. policies and their impacts on the global economy. Risks related to China that lingered in H1 2017, including a hard landing and large capital outflows, have receded. Risks to our baseline projection in the near term for Hong Kong are now significantly related to the U.S. policies. The tax reform, together with the infrastructure investment, can boost the U.S. economy and bolster global trade volumes, which will benefit Hong Kong as well. However, such expansionary fiscal policy under the full-employment situation may have limited impacts on growth. Concerns are rather on higher inflation and larger fiscal deficits, which have led to higher U.S. sovereign yields. This can trigger capital outflows from the region, leading to higher HKD interest rates. A rise in protectionist sentiment can adversely affect trade activities.

Major central banks' monetary policy normalization will result in higher domestic financing costs. Policy normalization by major central banks is likely to proceed in the period ahead, leading to tighter global financial condition. This can reduce the ample liquidity in Hong Kong and increase HKD interest rates. Meanwhile, the pace of interest hikes by the U.S. Federal Reserve, which directly affects interest rates in Hong Kong under the currency board system, has become uncertain due to the aforementioned U.S. fiscal policy.

Domestic risks stem mainly from the buoyant residential property market. Despite some signs of stabilization after the introduction of macroprudential measures in May 2017, property prices and transaction volumes have accelerated moderately since Q4 2017. There could be a risk of significant correction in housing prices should the HKD interest rates increase sharply. The elevated household debt and the dominance of floating interest rates of mortgages would amplify debt-servicing burdens of household. In the mid-to-long run, an increase in housing supply will help improve affordability, although the outlook is uncertain. Meanwhile, the sequence of macroprudential and demand-side management measures introduced since 2009 have supported to safeguard financial stability.

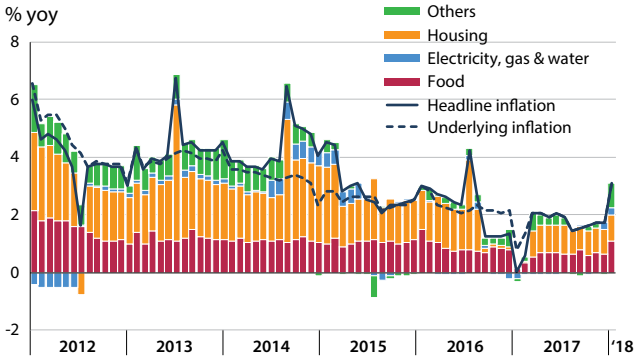
Hong Kong, China: Selected Charts

Real GDP growth has recovered strongly on the back of resilient private consumption and improved external demand.



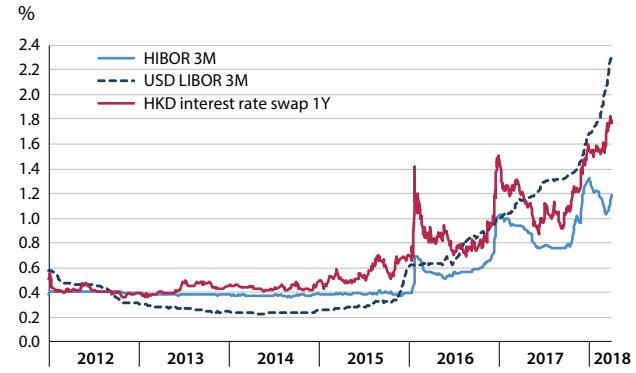
Source: CEIC, AMRO staff estimates

Inflationary pressure is contained, but the recent buoyancy in housing prices will likely put upward pressures on the CPI going forward.



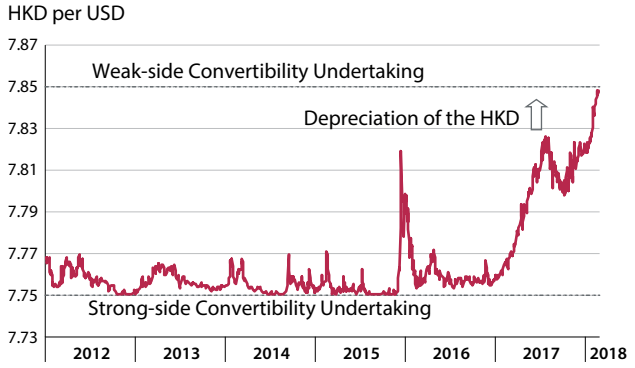
Note: Both headline and underlying inflation in February 2018 increased by 3.1 percent, jumped up from 1.7 percent in January, mainly because of the different timing of the Lunar New Year (mid-February in 2018 as opposed to late January in 2017).
Source: CEIC

Despite the recent increase in one-year and longer HKD swap rates, USD Libor premiums over Hibor in the short-ends have widened again since early this year.



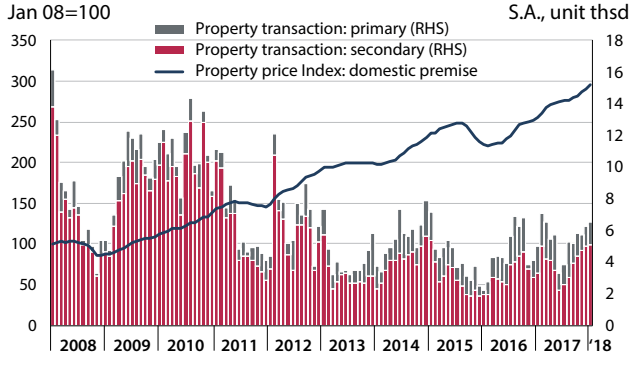
Source: Bloomberg

As a result, the HKD spot exchange rate has weakened towards the weak-side Convertibility Undertaking of the HKD/USD 7.85 in recent months.



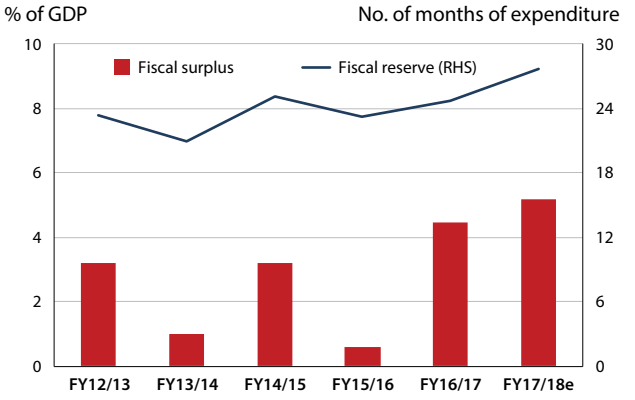
Source: CEIC, HKMA

The residential property market has regained an upward momentum in recent months, after some stabilization in Q3 2017 amid implementation of the latest round of macroprudential measures.



Source: CEIC, AMRO staff estimates

The fiscal position remains strong with ample policy space, although expenses for healthcare and social welfare will continue to increase due to an aging population.



Source: CEIC, The 2018-19 Budget Speech

Hong Kong, China: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	2.8	2.4	2.1	3.8
Private consumption	3.3	4.8	1.9	5.4
Government consumption	3.1	3.4	3.3	3.4
Gross domestic fixed capital formation	-0.1	-3.2	-0.1	4.2
Building and construction	9.3	2.2	5.9	3.0
Machinery, equipment and intellectual property product	-8.7	-7.7	-6.3	1.9
Exports	1.0	-1.4	0.7	5.5
Goods	0.8	-1.7	1.6	5.9
Services	1.6	0.3	-3.4	3.5
Imports	1.0	-1.8	0.9	6.3
Goods	1.5	-2.7	0.7	6.9
Services	-2.2	5.0	2.1	1.8
GDP deflator	2.9	3.6	1.7	3.0
Headline inflation	4.4	3.0	2.4	1.5
Underlying inflation	3.5	2.5	2.3	1.7
Unemployment rate (%)	3.3	3.3	3.4	3.1
External Sector	(in percent of GDP)			
Overall BoP	6.2	11.8	0.4	9.4
Current account	1.4	3.3	4.0	4.2
Financial non-reserve assets	2.9	6.4	-3.7	3.6
Fiscal Sector (National Government)	(in percent of GDP, end-Mar of fiscal year)			
Revenue	21.2	18.8	23.0	23.0
Expenditure	17.5	18.2	18.6	17.8
Consolidated budget assets	3.6	0.6	4.5	5.2
Monetary and Financial Sector	(in annual percentage change, unless specified)			
M1	13.1	15.4	12.3	9.8
M2	9.5	5.5	7.7	10.0
M3	9.6	5.5	7.7	10.0
Total loans	12.7	3.5	6.5	16.1
Classified loan ratio (%)	0.5	0.7	0.7	0.5
Capital adequacy ratio (%)	16.8	18.3	19.2	19.1

	2014	2015	2016	2017
Memorandum Items				
Interest rates (%, end-period)				
Three-month Hibor	0.4	0.4	1.0	1.3
10Y Government bond yield	1.9	1.7	1.9	1.8
Asset prices				
Hang Seng Index (end of period, 1964=100)	23,605	21,914	22,001	29,919
(% yoy)	1.3	-7.2	0.4	36.0
Residential property prices (end of period, 1999=100)	278	285	307	353
(% yoy)	13.5	2.4	7.9	14.8
Spot exchange rate (HK$/US1$, period average)	7.754	7.752	7.762	7.794
Official reserve assets (USD bn, end-period)	328.5	358.8	386.3	431.4
Nominal GDP (in billions of HKD)	2,260.0	2,398.3	2,490.7	2,662.6
Nominal GDP (in billions of USD)	291.4	309.4	320.9	341.7

Source: Bloomberg, CEIC

Indonesia

Growth recovery continued on the back of domestic demand. Output growth increased further to 5.2 percent in Q4 from 5.1 percent in Q3. Household consumption growth climbed up to 5 percent from 4.9 percent in the previous quarter, thanks to controlled inflation, while government consumption expanded by 3.8 percent. In line with infrastructure development, investment growth remained robust at 7.3 percent, up from 7.1 percent in the previous quarter. Strong domestic demand growth resulted in double-digits import growth, at 11.8 percent, while exports rose by 8.5 percent on the back of firm commodity prices and improving global economic recovery.

Bank Indonesia (BI) has kept the policy rate unchanged against the backdrop of stable inflation and ongoing growth recovery. Headline inflation was 3.2 percent yoy in February, within the targeted range of 3.5±1 percent for 2018, while core inflation remained subdued at 2.6 percent. With well-tempered price pressure and economic recovery gathering steam, BI has left the policy rate unchanged at 4.25 percent since September last year.

The current account deficit widened in the second half of 2017, but remained below 2 percent of GDP in 2017. The current account deficit increased to 2.2 percent of GDP in Q4 from 1.7 percent in Q3. The widening of the deficit was largely due to rising imports, in line with investment growth. For the whole year of 2017, the current account deficit was contained at 1.7 percent of GDP. As the economy picks up, import demand will likely keep the deficit at around the current level.

Since the beginning of the year, the equity and government bond markets experienced some volatility due to capital outflows. The Jakarta Composite Index has declined by about 2.5 percent. Meanwhile, active participation by foreign investors in the government securities market kept the 10-year yield relatively low, at 6.9 percent as of end-March.

The 2017 fiscal outturn showed a better-than-expected budget deficit of 2.5 percent of GDP. While the revised 2017 budget forecast a deficit of 2.9 percent of GDP, the realization was more satisfactory than anticipated on the back of strong non-tax revenue collection and moderated expenditure. Going forward, the 2018 budget targets a deficit of 2.2 percent of GDP, on the basis of strong revenue mobilization and 5.4-percent GDP growth.

Amid economic rebound, credit growth picked up to 8.2 percent (year-on-year) in 2017, slightly higher than 7.9 percent in the previous year. Meanwhile, deposit growth performed better, registering 9.4 percent in 2017. The marginal increase in credit growth in 2017 was mainly due to ongoing corporate consolidation and selective bank lending. In light of the current economic conditions and progress in corporate and banking sector consolidation, credit growth is expected to rise moderately in 2018.

Key risk factors for growth are investment implementation and protectionism. As the authorities have shown unwavering commitment to infrastructure development, investment has emerged as a crucial driver of growth in the near term. However, the extent to which investment is realized is subject to a few challenges, such as the effectiveness of measures in the economic policy packages, land acquisition for infrastructure development, and the government's revenue pressure. Another major risk is the imposition of protectionist measures by some major trading partners, which can cause a relapse in global trade and a fall in demand for Indonesia's exports.

While the country's external position has improved, external risks remain in light of potential episodes of heightened global risk aversion. Foreign investors are still attracted to the positive narrative of Indonesia's growth prospect, which is underpinned by commendable reforms and potential for infrastructure development – in recognition of improved macroeconomic fundamentals, Fitch upgraded Indonesia's sovereign rating in December last year, following an upgrade from S&P in May 2017. Nevertheless, external factors such as Fed rate hikes or geopolitical events may lead to episodes of volatile capital flows, with adverse consequences on the exchange rate, equity prices, and sovereign bond yields. In addition, the trajectories of key commodity prices are instrumental in determining the current account's performance.

Financial stability risks are fairly limited at this juncture. The rise in NPLs seems to have reversed course, while the banking system has relatively ample capital cushions.

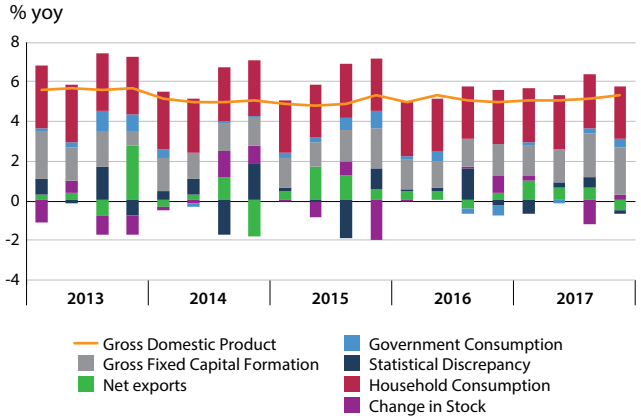
The current monetary policy stance is in line with maintaining external stability and aiding the growth momentum. Indonesia's strengthening economic fundamentals, which have diminished the risk of acute capital outflows, and the fact that growth recovery is still gaining traction amid well-anchored core inflation suggest that the current monetary policy stance remains appropriate.

Long-term revenue enhancement will steer the government towards a firmer fiscal footing. The authorities should continue to focus on long-term revenue enhancement measures, such as broadening the tax base, reducing exemptions, and improving tax compliance, in order to enhance fiscal soundness, as well as to raise the authorities' ability to respond to economic shocks

The authorities have made noteworthy strides in focusing their efforts on infrastructure investment and structural reforms. Nonetheless, a host of challenges remain, and the authorities are addressing them through regulatory changes, institutional adjustments, and fiscal incentives.

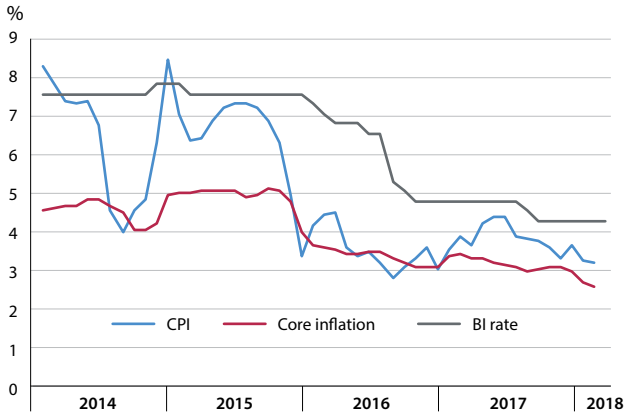
Indonesia: Selected Charts

GDP growth picked up last year.



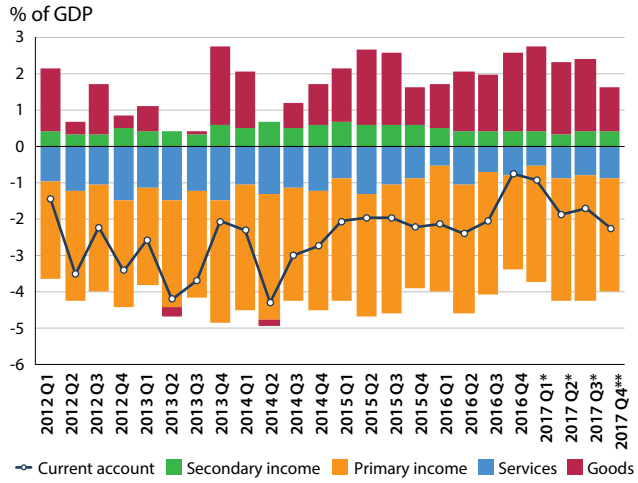
Source: Central Bureau of Statistics

With subdued inflation, BI lowered the policy rate to support economic growth.



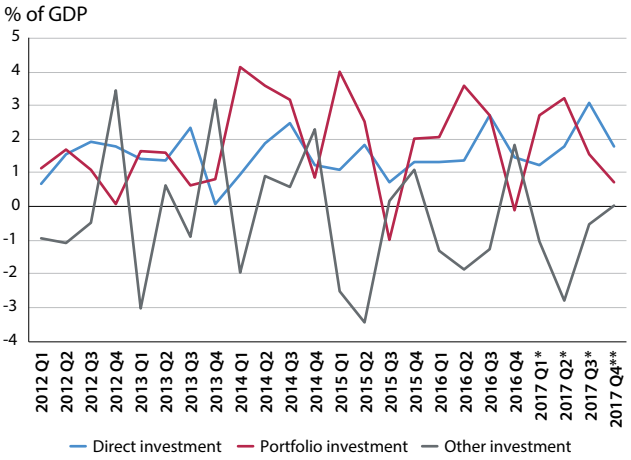
Sources: Bank Indonesia, Central Bureau of Statistics

The current account deficit widened in line with growth in import demand…



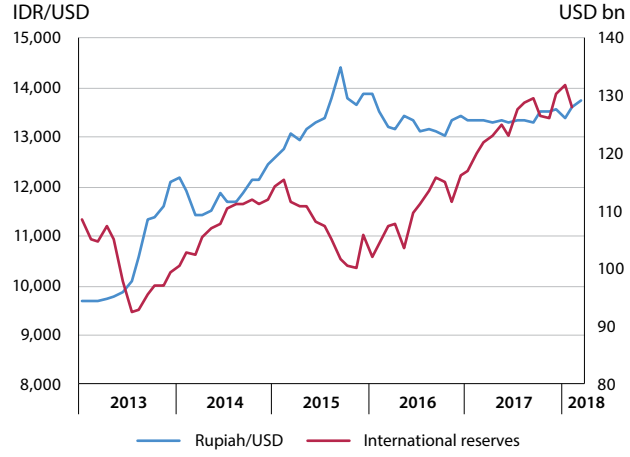
Note: */ Data for Q1-3 2017 are provisional; **/ Data for Q4 2017 are very provisional.
Sources: Bank Indonesia, AMRO staff calculations

…while net capital inflows continued to be positive…



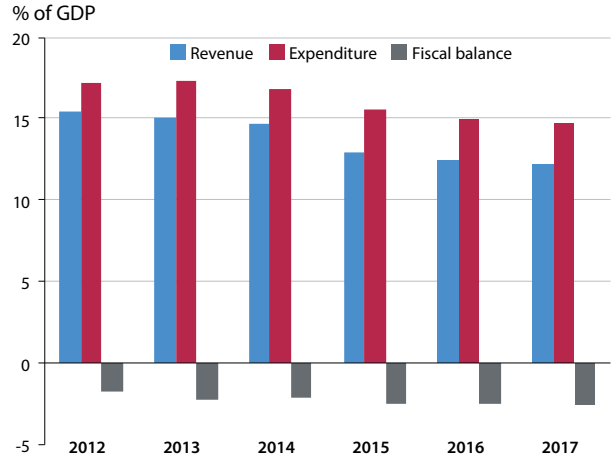
Note: */ Data for Q1-3 2017 are provisional; **/ Data for Q4 2017 are very provisional.
Sources: Bank Indonesia, AMRO staff calculations

…keeping the rupiah relatively stable.



Sources: Bank Indonesia, AMRO staff calculations

Fiscally, revenue collection remains a challenge.



Sources: MOF, AMRO staff calculations

Indonesia: Selected Economic Indicators

	2014	2015	2016	2017*
Real Sector and Price		(in annual percentage change)		
Real GDP	5.0	4.9	5.0	5.1
Household consumption	5.1	5.0	5.0	4.9
Government consumption	1.2	5.3	-0.1	2.1
Gross fixed capital formation	4.4	5.0	4.5	6.2
Change in stocks	31.4	-31.0	18.2	-13.5
Exports	1.1	-2.1	-1.6	9.1
Imports	2.1	-6.2	-2.4	8.1
External Sector		(in percent of GDP)		
Current account balance	-3.1	-2.0	-1.8	-1.7
Trade balance	0.8	1.6	1.6	1.9
Oil and gas	-1.3	-0.7	-0.5	-0.7
Non-oil and gas	2.1	2.3	2.2	2.6
Financial account balance	5.0	2.0	3.1	2.9
Foreign direct investment (net)	1.7	1.2	1.7	2.0
Portfolio investment (net)	2.9	1.9	2.0	2.0
Other investment (net)	0.5	-1.2	-0.6	-1.1
Overall balance	1.7	-0.1	1.3	1.1
Fiscal Sector (Central Government)		(in percent of GDP)		
Revenue and grant	14.7	13.1	12.5	12.3
Expenditure	16.8	15.7	15.0	14.9
Budget balance	-2.1	-2.6	-2.5	-2.5
Monetary and Financial Sector		(in annual percentage change)		
Broad money	11.9	9.0	10.0	10.0
Private sector credit	12.6	9.6	7.7	7.8
Memorandum Items				
Headline inflation (end of period)	8.4	3.4	3.0	3.6
BI Policy Rate**	7.8	7.5	4.75	4.25
Exchange rate (rupiah per USD), average	11,876	13,392	13,305	13,385
International reserves (USD bn)	111.9	105.9	116.4	130.2
External debt (percent of GDP)	32.9	36.1	34.3	34.7
Nominal GDP (in billions of USD)	890.8	860.9	932.7	1,015.5

Note: */ Provisional figures. **/ Starting August 19th 2016, Bank Indonesia reformulates its policy rate from the BI Rate into the 7-day (Reverse) Repo Rate (BI7DRR) to improve the effectiveness of the monetary policy transmission.
Sources: Central Bureau of Statistics, Bank Indonesia, Ministry of Finance, and AMRO Staff Calculations

Japan

Japan's economy has maintained a strong growth path, albeit with some moderation in Q4 2017 due to weaker public support and higher imports. Private consumption has gradually trended up with the steady increase in household income. Business investment remains on a moderate upward trend supported by record-high corporate profits and retained earnings. Exports have continued to pick up in tandem with global economic growth and imports increased with stronger domestic demand. Meanwhile, public investment, which were boosted by stimulus package for FY2016-17, contracted for two consecutive quarters in Q4 2017. The labor market has become very tight with the steady increase in employment although the overall wage growth remains low. The unemployment rate fell to 2.5 percent and the jobs-to-applicant ratio rose to a record high level of 1.58 in February 2018.

Consumer price inflation, however, has remained low, falling short of the 2 percent price stability target of the Bank of Japan (BOJ). Rising global commodity prices have gradually pushed CPI (less fresh food) inflation up to 1 percent in February 2018. However, when energy-related items are excluded, inflation has stayed below 0.6 percent since August 2016. Medium-term inflation expectations, which is widely viewed to be adaptive in behavior, have still hovered around 1 percent.

The external position remained strong with a sizable current account surplus of more than 3.5 percent of GDP in FY2017. Income inflows from large overseas investment assets have continued to be robust amid solid global economic growth. Goods exports (JPY terms) have picked up rapidly, which has led to trade surpluses for eight consecutive quarters. Capital outflows have continued, led by ODI. Japanese investors have continued to purchase foreign bonds and equities, although they repatriated their investment on U.S. bonds in 2017 amid concerns over the rise in U.S. interest rates.

The financial condition continues to be highly accommodative while financial institutions remain sound. Bank lending has picked up steadily at a slightly moderated pace of around 2.1 percent and the credit cycle is assessed to be expansionary. Financial markets have been broadly stable with low interest rates and yields although stock markets observed some volatility in February 2018. Banks remain sound in general with sufficient capital buffers and a low non-performing loan (NPL) ratio.

Macroeconomic policies continue to be supportive to growth. Fiscal stimulus package for FY2016-17 has implemented and the policy stance remained its emphasis on boosting growth. Monetary policy has continued to be accommodative under the 'QQE with yield curve control framework accompanied by inflation-overshooting commitment. The BOJ's open market operations and its communication with the market to implement the new framework have been broadly effective.

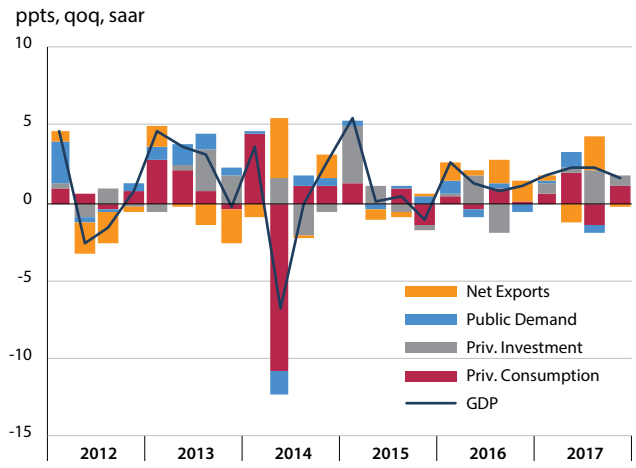
Looking forward, GDP growth is projected to be around 1.8 percent in FY2017, before moderating to 1.3 percent in FY2018. CPI (less fresh food) inflation is expected to be around 0.7-0.8 percent in FY2017-18 with modest increase in energy prices.

Japan's near-term economic prospects could be influenced by external shocks and/ or economic policies of other countries. These include trade protectionism and an economic slowdown among major trading partners as well as geopolitical shocks. Faster than expected monetary tightening or normalization by the Fed and the ECB could lead to higher volatility in financial markets and uncertainty in the growth outlook. Meanwhile, there exists an upside risk from U.S. tax reforms and fiscal stimulus.

Domestic challenges remain significant in fiscal, monetary, and financial sector as well as potential growth and inflation. The emphasis on growth in macroeconomic policies over a prolonged period of time could weaken the momentum for fiscal consolidation against the rapidly rising fiscal needs for old-age support. The BOJ's massive purchases of Japanese Government Bonds (JGBs) have affected the liquidity conditions in the JGB market in some aspects. Downward pressures on regional bank profitability due to tight interest margins and the consequent build-up of risky portfolios, combined with demographic factors, will put stress on their balance sheets. Efforts to lift potential growth and raise inflation are important to strengthen medium- to long-term expectations for economic growth and inflation of households and businesses.

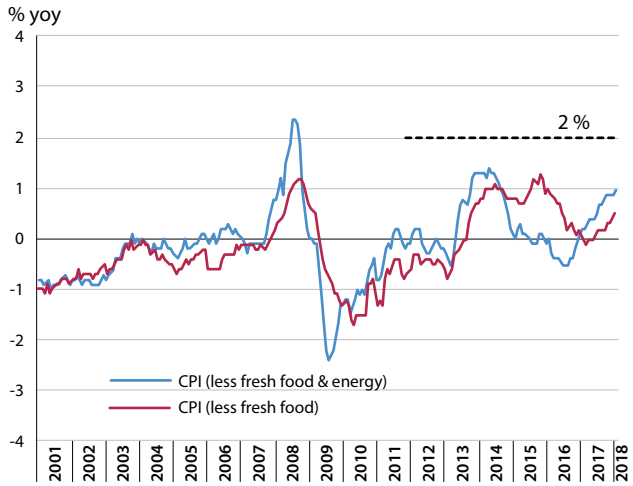
Japan: Selected Charts

Real GDP has continued to grow strongly as a trend, albeit with some moderation in Q4 2017.



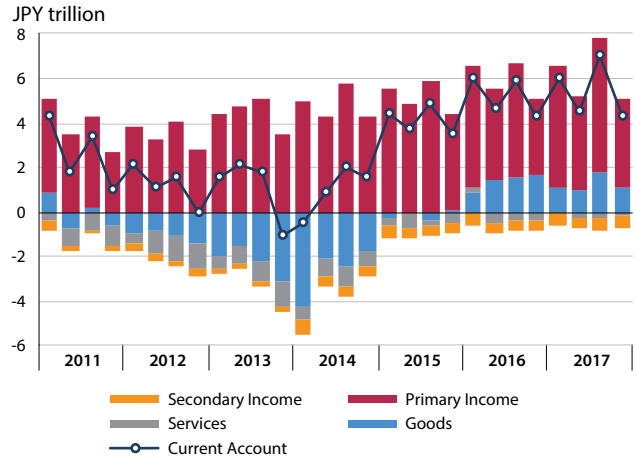
Source: Cabinet Office of Japan

Consumer price inflation remained low, falling short of the 2 percent price stability target of the BOJ.



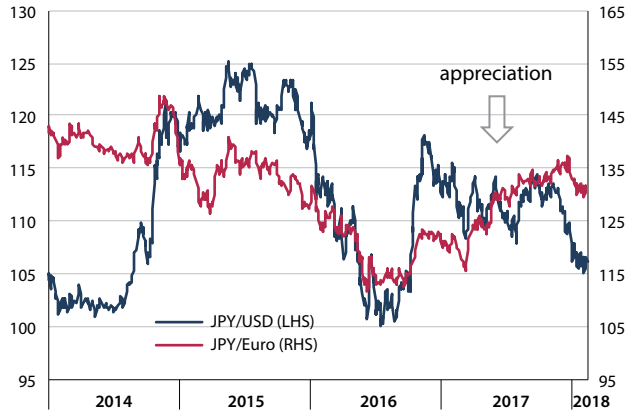
Source: Japan Ministry of Internal Affairs and Communications

External position remained strong with sizable current account surplus, supported by large income flows.



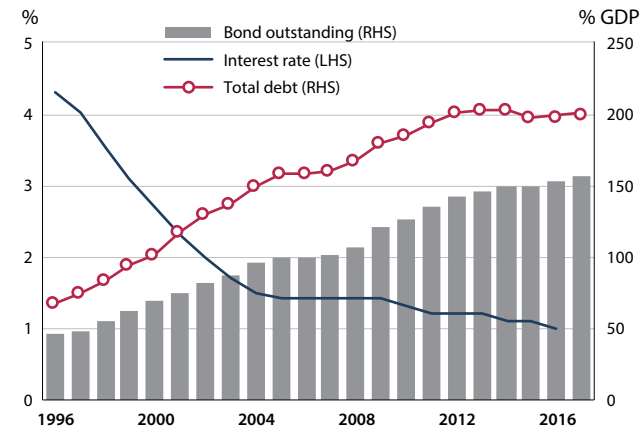
Source: Japan Ministry of Finance

JPY strengthened against USD and Euro in February 2018 amid heightened volatility in global markets.



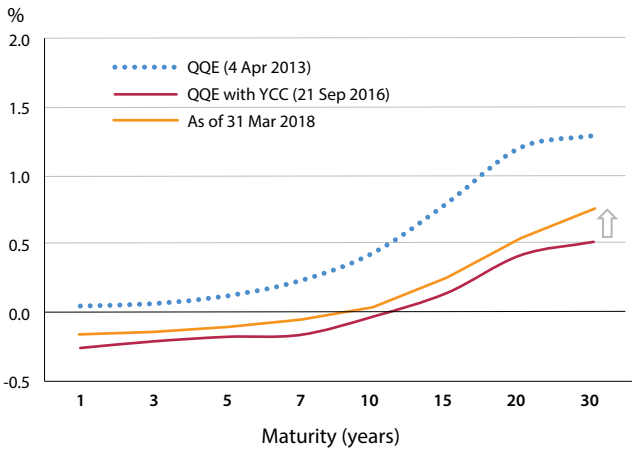
Source: Bloomberg

Government debt growth has stabilized in recent years, but the level remained high at around 200 percent of GDP.



Note: Fiscal year
Source: Japan Ministry of Finance, AMRO staff estimation (for FY17)

JGB yield curve was shifted upward slightly from the introduction of "QQE with Yield Curve Control".



Source: Bloomberg

Japan: Selected Economic Indicators

	2014	2015	2016	2017 Est.
Real Sector and Prices	(in annualized percentage change, unless specified)			
GDP growth	-0.3	1.4	1.2	1.8
Private consumption	-2.5	0.8	0.3	1.3
Private non-residential investment	3.3	2.3	1.2	3.1
Private residential investment	-9.9	3.7	6.2	3.0
Government consumption	0.4	1.9	0.5	0.6
Public investment	-2.0	-1.6	0.9	2.5
Net export (ppts)	0.6	0.1	0.8	0.3
Exports of goods and services	8.7	0.7	3.4	5.8
Imports of goods and services	4.2	0.3	-1.0	3.8
Labor market		(average of monthly data)		
Unemployment rate (%, sa)	3.5	3.3	3.0	2.7
Ratio of job offers per one applicant (sa)	1.1	1.2	1.4	1.5
Prices		(average of monthly data)		
Consumer price inflation (all items)	2.9	0.2	-0.1	0.7
Consumer price inflation (less fresh food)	2.8	0.0	-0.2	0.7
External Sector		(in JPY trillion, unless specified)		
Current account balance	8.7	17.9	20.4	21.0
Current account balance (% of GDP)	1.7	3.3	3.8	3.8
Trade balance	-9.1	-1.1	4.0	3.6
Exports of goods, FOB	74.7	74.1	71.5	78.2
Imports of goods, CIF	83.8	75.2	67.5	74.6
Current account: primary income	20.0	20.9	18.1	19.2
Financial account	14.2	23.8	24.9	16.8
International reserves (USD bn, period end)	1,245	1,262	1,230	…
Fiscal Sector (Central Government)		(in percent of GDP)		
Tax revenues	10.4	10.5	10.3	10.5
Expenditures	19.1	18.4	18.1	18.0
Primary balance	-2.7	-2.3	-2.9	-2.3
Outstanding gov. debt	203.2	196.5	198.7	200.7
Monetary Sector	(in annual percentage change, unless specified)			
Monetary base	39.7	32.3	23.4	…
Overnight uncollateralized call rate (%)	0.015	-0.002	-0.060	…
Memorandum Items				
Exchange rate (JPY per USD, period average)	109.9	120.1	108.4	110.8
Exchange rate (JPY per USD, end of period)	120.2	112.4	111.8	111.4
Nikkei 225 (JPY, end of period)	19,207	16,759	18,909	21,454
JGB 10 year yield (%, end of period)	0.398	-0.049	0.067	0.072
Non-performing loan ratio (%, end of period)	1.10	0.97	0.87	…
Nominal GDP (in billions of USD)	4,717	4,445	4,976	…
Nominal GDP (in trillions of JPY)	518.5	533.9	539.3	549.1

Note: Fiscal year unless otherwise mentioned.
Source: National Authorities, AMRO estimates (for FY2017 except financial market data)

Korea

The Korean economy gained traction in 2017, boosted by private consumption and investment. In Q4 2017, GDP growth declined by 0.2 percent qoq from a rapid expansion in Q3 (1.4 percent qoq), mainly due to long holidays in October. Over the whole year, the economy grew by 3.1 percent, which was above the potential growth rate. Private consumption continued to show a modest recovery, while government consumption expanded with higher fiscal spending. Facilities and construction investment remained strong albeit showing a slower pace in the second half. Exports continued to show a solid growth, mainly led by semiconductor sector. In 2018, the growth rate is projected to slow down to 2.9 percent, mainly due to weaker private investment, in particular construction investment, despite strong export momentum and a continuing improvement in private consumption.

In 2017, inflation picked up to above 2 percent, then showing a decline. In Q4 2017, CPI rose by 1.5 percent, mainly due to low agricultural product prices and a fall in public utility prices despite a rise in oil prices. Over the whole year, consumer prices rose by 1.9 percent on average, which is higher than the previous year (1 percent). However, demand-side inflation pressures remain subdued with stable core inflation and moderate wage growth. Moving forward, the headline inflation is projected to remain at 1.9 percent in 2018, but core inflation will rise to 2 percent from 1.5 percent in 2017. Inflationary pressures from the closing of output gap are likely to outweigh downward pressures from lower administrative prices led by the government.

External position remains strong. In 2017, the current account surplus remained sizable at USD78.5 billion on the back of a large trade surplus despite a deterioration in the services account deficits. Korea's substantial current account surplus has shown a strong tendency to be recycled as residents' overseas portfolio investment, mainly led by pension and insurance companies. On the non-residents' portfolio investment side, it showed net inflows over the whole year despite sustained geopolitical tensions. In 2018, the current account surplus is projected to further moderate below 5 percent of GDP but remains strong.

Credit to the private sector expanded at a slower pace, particularly to households. In Q4 2017, household debt level plateaued, reflecting a slowdown to a single-digit growth over a year ago. Financial institutions' buffers to cover expected and unexpected losses largely remain sufficient, with high capital adequacy ratios and low non-performing loan ratios in both banks and non-banks. In financial markets, bond yields showed a pick-up following the Bank of Korea's rate hike in November 2017 and stock prices continued to show an upward trend.

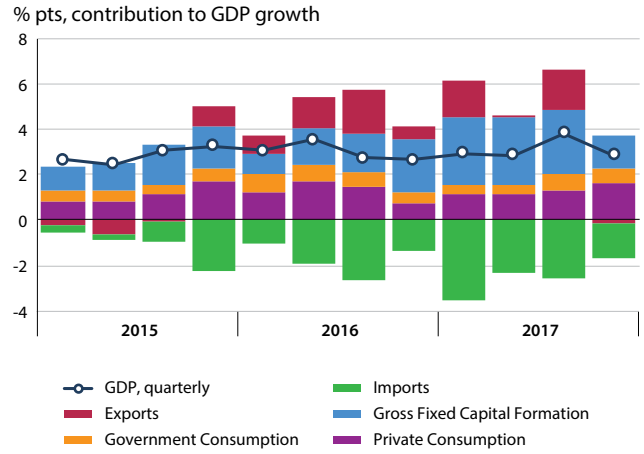
Fiscal buffers remain ample with strong revenue collection. In 2017, fiscal revenue continued to grow strongly supported by brisk tax collection while fiscal spending expanded with a higher policy priority on job creation. In the 2018 budget, the government aims to improve fiscal balance by restructuring expenditure amid a continued expansion in spending.

Korea's economic prospects could be influenced by high household debt, rising trade protectionism and geopolitical tensions. Headwinds to the growth outlook include adverse effects on private consumption of high household debt amid rising trade protectionism. U.S. trade protectionist measures may serve as a drag on Korea's strong exports if tariffs are imposed on key products. Heightened geopolitical tensions and tighter global financial conditions may pose significant tail risks to financial stability.

From a longer-term perspective, key challenges are centered around declining potential growth. In the corporate sector, the uneven growth between ICT and non-ICT companies, and the excessive concentration in the ICT sector may make the economy susceptible to shocks arising from global ICT downturns and fierce competition in the sector. The continued relocation of production lines abroad could adversely affect Korea's key manufacturing sectors and further weaken domestic employment.

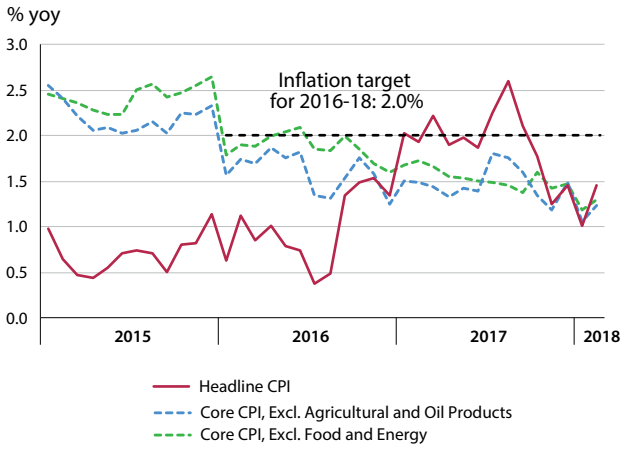
Korea: Selected Charts

In 2017, private investment led economic growth while private consumption showed a modest recovery.



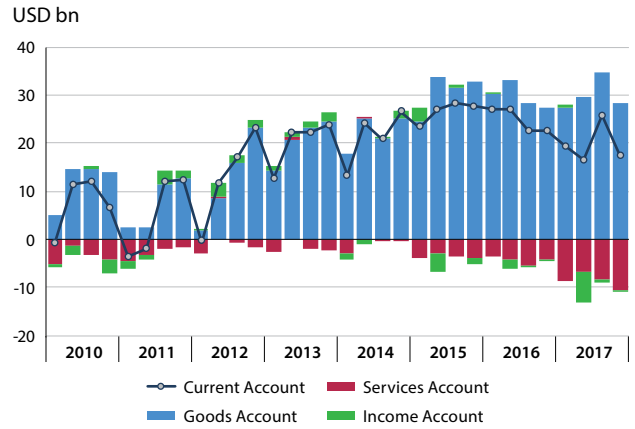
Source: Bank of Korea

Headline inflation picked up to above 2 percent, showing a decline in Q4.



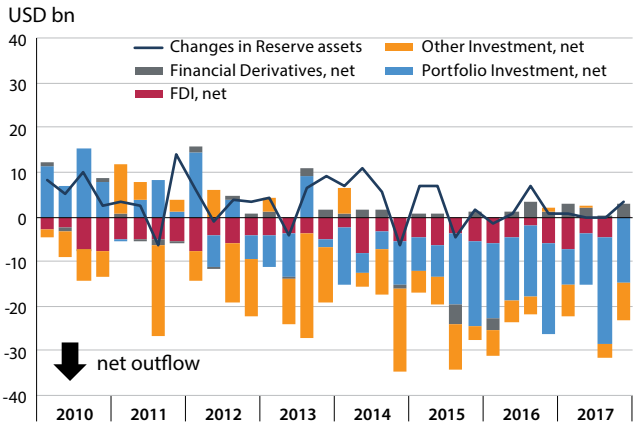
Source: Statistics Korea

In BOP, the current account continued to show a large surplus amid worsening service account balance.



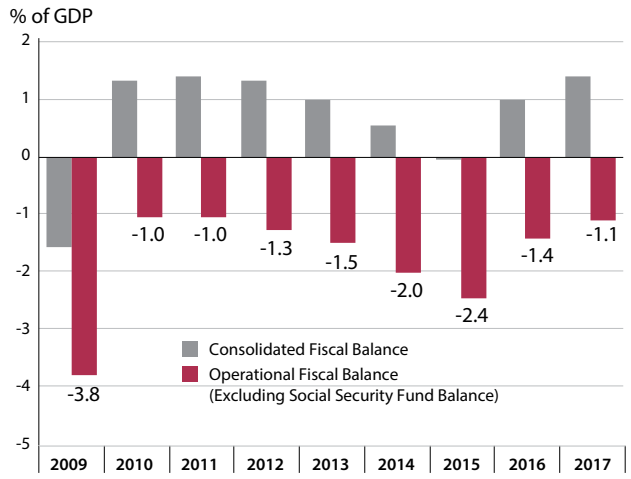
Source: Bank of Korea

The financial account has posted net outflows, mainly driven by continuing overseas portfolio investment by residents.



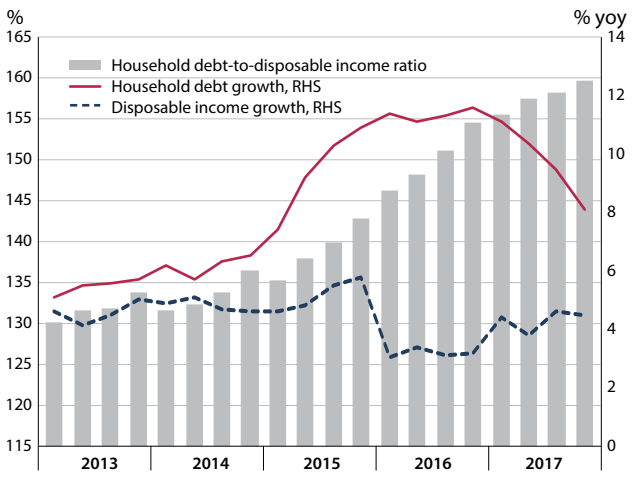
Source: Bank of Korea

Fiscal balance continued to improve in 2017.



Source: Ministry of Strategy and Finance

In Q4 2017, the household debt level plateaued, reflecting a slowdown to a single-digit growth over a year ago.



Source: Bank of Korea

Korea: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	3.3	2.8	2.9	3.1
Private consumption	1.7	2.2	2.5	2.6
Government consumption	3.0	3.0	4.5	3.4
Construction investment	1.1	6.6	10.3	7.6
Facilities investment	6.0	4.7	-1.0	14.6
Exports of goods and services	2.0	-0.1	2.6	1.9
Imports of goods and services	1.5	2.1	4.7	7.0
Labor market				
Unemployment rate (%)	3.5	3.6	3.7	3.7
Prices				
Consumer price inflation	1.3	0.7	1.0	1.9
Core inflation, excluding food and energy	1.7	2.4	1.9	1.5
External Sector	(in billions of USD, unless specified)			
Current account balance	84.4	105.9	99.2	78.5
Current account balance (% of GDP)	6.0	7.7	7.0	5.1
Trade balance, customs cleared	47.2	90.3	89.2	95.2
Exports, customs cleared	572.7	526.8	495.4	573.7
Imports, customs cleared	525.5	436.5	406.2	478.5
Financial account balance, excl. int'l reserves	71.4	94.2	95.0	82.7
Direct investment, net	18.8	19.7	17.9	14.6
Portfolio investment, net	30.6	49.5	67.0	57.8
Financial derivatives, net	-3.8	1.8	-3.4	-8.3
Other investment, net	25.9	23.3	13.6	18.5
Gross international reserves (end-period)	363.6	368.0	371.1	389.3
Fiscal Sector (Central Government)	(in percent of GDP)			
Total revenue	24.0	23.8	24.5	24.9
Total expenditure	23.4	23.8	23.4	23.5
Fiscal balance	0.6	0.0	1.0	1.4
Fiscal balance, excluding social security funds	-2.0	-2.4	-1.4	-1.1
Monetary and Financial Sector	(in percent per annum, end-period, unless specified)			
Bank of Korea base rate	2.00	1.50	1.25	1.50
3-year Treasury bond yield	2.1	1.7	1.7	2.1
3-year, AA-Corporate bond yield	2.4	2.1	2.2	2.6
Broad money growth (% change)	8.7	9.0	7.9	6.6
Exchange rate (won per USD, average)	1,053.1	1,131.5	1,160.4	1,130.5
Exchange rate (won per USD, end-period)	1,099.3	1,172.5	1,207.7	1,070.5
Memorandum Items				
Nominal GDP (in trillions of won)	1,486.1	1,564.1	1,641.8	1,730.4
Nominal GDP (in billions of USD)	1,411.0	1,382.4	1,414.7	1,530.2

Source: The Korean authorities

Lao PDR

Growth moderated in 2017 due to the high base of growth for the power sector in 2016, and is forecast to remain stable in 2018. A recovery in agriculture and higher construction activity, together with slower but still double digit expansion in the power sector were the main growth drivers in 2017. Meanwhile, weaker tourism activity and moderating domestic demand had a dampening effect on the economy. Growth in 2018 is expected to remain stable with no significant increase in installed capacity in the power sector, while tourism could provide some upside with the government's campaign for "Visit Laos Year in 2018".

Inflation dropped significantly to 0.8 percent in 2017 due to lower food prices and is expected to rise from this low base. The increased production, resulting in well-stocked domestic food markets, helped pull down inflation in 2017. Going forward, inflation is expected to rise to 2.1 percent in 2018 from a low base of food prices, and also taking into account the recovery in fuel prices in line with global trends.

The current account position improved, while fiscal consolidation remained challenging in 2017. A broad-based increase in exports of electricity, SEZ-related manufacturing, garments and agriculture goods offset the impact of weaker tourist arrivals, resulting in a narrower current account deficit in 2017. Meanwhile, challenges in the fiscal sector continue, with the fiscal deficit widening to 5.7 percent of GDP in 2017 from 4.9 percent in 2016. The budgeted fiscal deficit for 2018 is 5.4 percent of GDP.

Increasing debt burden and possible mismatch in revenue streams and debt repayments on the hydro projects could put pressure on the fiscal position. Around 80 percent of Lao's public debt is denominated in foreign currencies, making the fiscal position vulnerable to exchange rate movements. Growing exposure to rollover and interest rate risks need to be closely monitored, as an increasing portion of public debt is being raised in the Thai bond market on commercial terms. There is also a liquidity risk arising from a possible mismatch between the revenue streams from the massive hydroelectric projects and the debt repayment schedule on the loans incurred.

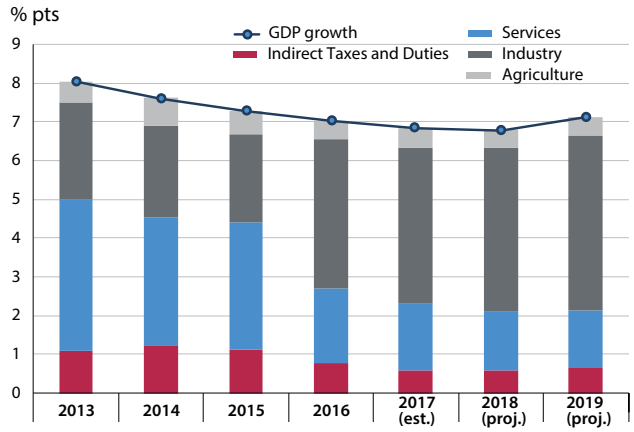
Credit growth moderated in 2017 mainly due to the slowdown in foreign currency lending. The central bank's main interest rates have remained unchanged since the reductions in July 2015. Amid the steady monetary conditions, credit growth decelerated to 10.8 percent in December 2017 from 20.9 percent last year, due to the strong enforcement of regulations on limiting foreign currency lending and contraction of credit to SOEs. In addition, BOL issued a directive reducing the margin between foreign currency lending and deposit rates from 4 percent to 3 percent in December 2017, which is expected to further moderate foreign currency lending. Meanwhile, kip-denominated credit growth increased to above 20 percent during the first three quarters of 2017, but has slowed down to 17.1 percent in December 2017.

The banking sector is still vulnerable to adverse shocks as legacy 'special mention' loans related to government projects remain unresolved. These past government projects have been a drag on bank balance sheets. Authorities are working towards measures to clearly and decisively settle these liabilities.

External risks could stem from tighter global conditions, shocks to major trading partners, and fall in commodity prices, as well as climate change. A depreciation of the Lao kip will increase the debt service burden, in light of Lao PDR's high and rising external debt. Thin international reserves make the kip vulnerable to volatility in international financial markets. Lao PDR also remains reliant on the commodity resource sectors, particularly copper mining and hydroelectric power. In this regard, shocks to major trading partners such as China and Thailand which affect their demand for such commodities, or a sharp fall in global commodity prices, would adversely affect the economy. Changing weather patterns related to climate change are also a risk, particularly severe droughts in the upper reaches of the Mekong river that could reduce the amount of electricity produced by the country's hydropower plants.

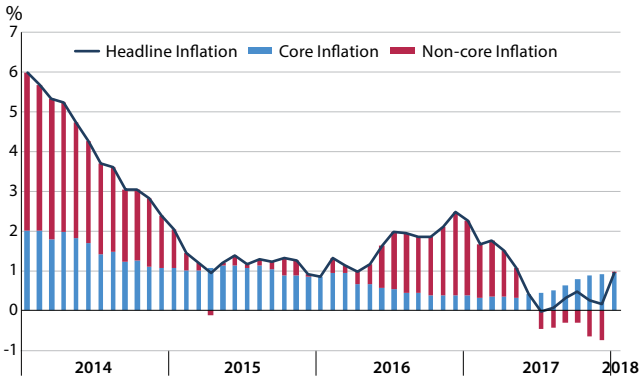
Lao PDR: Selected Charts

There has been a gradual shift towards industrial activity largely as a result of mining and hydropower.



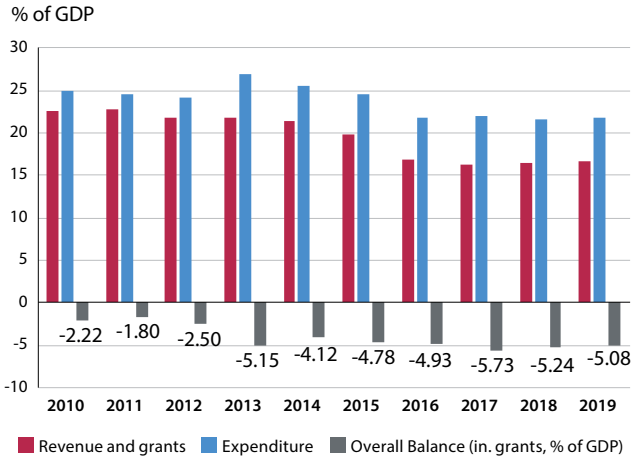
Source: Lao Statistics Bureau, AMRO staff estimates

Headline inflation remained low as non-core inflation fell, driven by lower food prices.



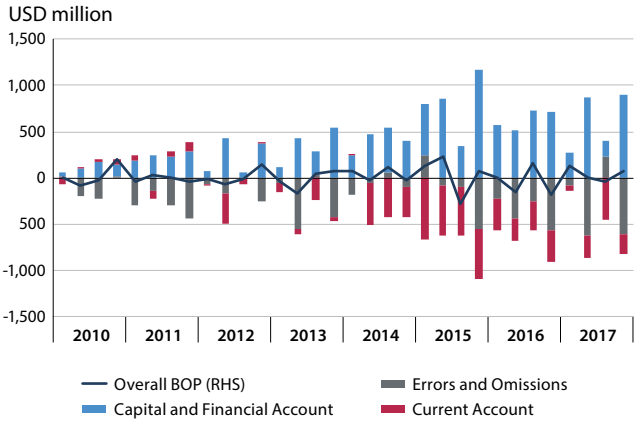
Source: Lao Statistics Bureau, AMRO staff estimates

The fiscal deficit widened further in 2017 requiring stronger efforts to raise revenue and strengthen expenditure management.



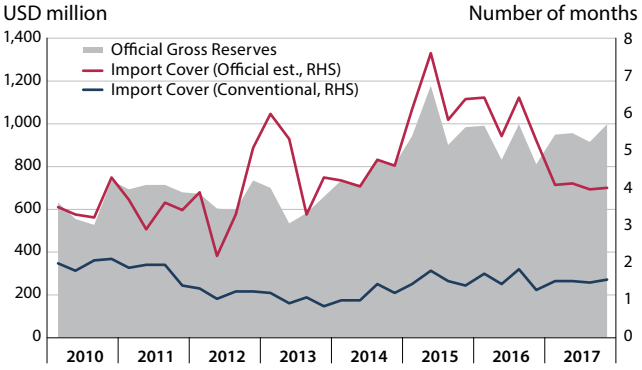
Source: Ministry of Finance, AMRO staff estimates

The narrower current account deficit together with larger FDI inflows supported the external accounts, enabling positive BOP in 2017.



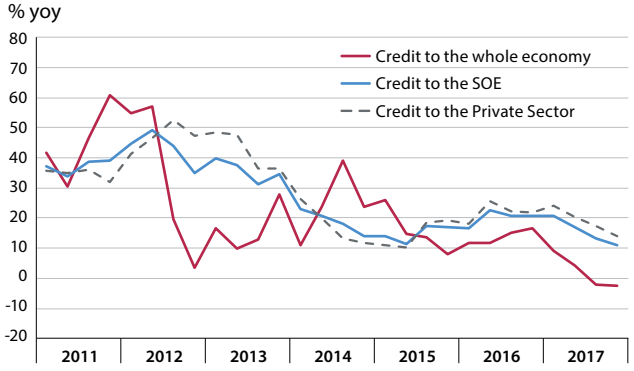
Source: Bank of Lao PDR

Official gross reserves increased to USD1.0 billion as of end 2017, covering 4 months of imports according to the authorities' definition and 1.5 months of imports according to the conventional definition.



Source: Bank of Lao PDR, AMRO staff estimates

Domestic credit has trended down due to slowing credit to the private sector and credit contraction to SOEs.



Source: Bank of Lao PDR

Lao PDR: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	7.6	7.3	7.0	6.8
GDP deflator	5.7	2.3	3.0	1.5
Consumer price inflation (average)	4.1	1.3	1.6	0.8
External Sector	(in millions of USD, unless specified)			
Export	4,380.0	3,813.0	4,450.0	5,293.0
Import	7,673.0	7,228.0	6,507.0	7,171.0
Trade balance	-3,293.0	-3,415.0	-2,056.0	-1,878.0
Current account balance	-2,862.0	-3,228.0	-1,902.0	-1,919.0
In % of GDP	-21.6	-22.4	-12.0	-11.3
Capital and financial account balance	1,609.0	2,918.0	2530.0	2,223.0
Overall balance	154.0	171.0	-172.0	185.0
Official gross reserves	816.0	987.0	815.0	1,000.0
In months of imports of goods & services	1.2	1.5	1.4	1.5
Export volume	23.8	-9.5	15.7	12.7
Import volume	6.0	-7.4	-10.6	7.8
Terms of trade	-3.6	-5.5	0.2	3.2
External debt, gross	5.6	6.7	7.3	8.1
In % of GDP	42.2	46.6	46.3	47.1
Fiscal Sector (General Government)	(in percent of GDP)			
Revenue and grants	21.3	19.7	16.8	16.2
Expenditure	25.4	24.5	21.7	21.9
Current expenditure	16.0	15.2	13.9	13.0
Capital expenditure	9.4	9.3	7.9	8.9
Net lending/borrowing balance (incl. grants)	-4.1	-4.8	-4.9	-5.7
Primary net lending/borrowing balance (in. grants)	-3.2	-3.8	-3.9	-4.6
Monetary and Financial Sector	(in annual percentage change)			
Domestic credit	17.7	17.9	18.5	17.1
Public sector	36.7	14.1	9.1	6.4
of which: general government	95.2	31.2	-8.8	14.4
Private sector	11.7	19.3	22.0	20.6
Broad money	25.2	14.7	10.9	10.7
Reserve money	30.3	18.3	-3.6	5.0
Memorandum Items				
Nominal GDP (in billions of LAK)	106,796.0	117,251.0	129,280.0	14,0152.0
Nominal GDP (in millions of USD)	13,279.0	14,430.0	15,913.0	17,008.0
Exchange rate (LAK per USD, average)	8,042.0	8,125.0	8,124.0	8,240.0

Notes:
1) GDP data and fiscal sector data are on a fiscal year basis, up to FY2016/17, starting from October to September. Starting from 2018 onward, the authorities will adopt the calendar year as the fiscal year.
2) Data for external sector in 2017 are AMRO staff estimates.
3) Data for 2017 are AMRO staff estimates.
Source: Lao Statistics Bureau, Bank of Lao PDR, Ministry of Finance, CEIC, ADB, IMF, World Bank, AMRO staff estimates and projections.

Malaysia

GDP growth expanded by 5.9 percent in Q4 2017, higher than consensus forecast of 5.8 percent. The strong Q4 growth came on the back of the still strong private consumption, and the acceleration of public consumption. Net exports also contributed to Q4 growth even though both exports and imports growth moderated. For 2017 as a whole, the GDP growth continue to surpass expectations with 5.9 percent growth in 2017, driven by robust domestic demand, especially private sector spending, and faster pace of expansion in external sector. Private consumption increased by 7 percent as private sector wages continue to expand further coupled with stronger employment growth. Gross fixed capital formation increased strongly as business sentiments remain optimistic. The latest data of coincident and leading indices (January 2018) and industrial production (January 2018) also showed better prospects in economic activities. Going forward, GDP is expected to grow by 5.3 percent in 2018 and 5 percent in 2019.

Despite robust import growth and widening services account deficit, the current account surplus widened to 3.0 percent of GDP in 2017 from 2.4 percent in 2016. The current account surplus totaled MYR40.3 billion in 2017, the highest since 2014 (MYR48.6 billion), underpinned by a strong exports performance, mainly manufactured exports. Exports accelerated across all major export items and across trading partners amid a strong recovery in global trade. Imports of intermediate and capital goods registered double-digit growth rates in 2017, in line with robust consumption and investment growth and export performance.

The government achieved its goal of reducing the fiscal deficit to 3 percent of GDP in 2017, and is targeting a deficit of 2.8 percent in 2018. In Q4 2017, government revenue increased by 8.3 percent, mainly on account of higher petroleum income tax and GST collections, while total expenditures increased 14.2 percent. Overall, in 2017, the deficit was 3 percent of GDP. In 2018, the government targets a revenue increase of 6.4 percent, and expects operating expenditure and development expenditure to increase by 6.5 percent and 0.2 percent, respectively.

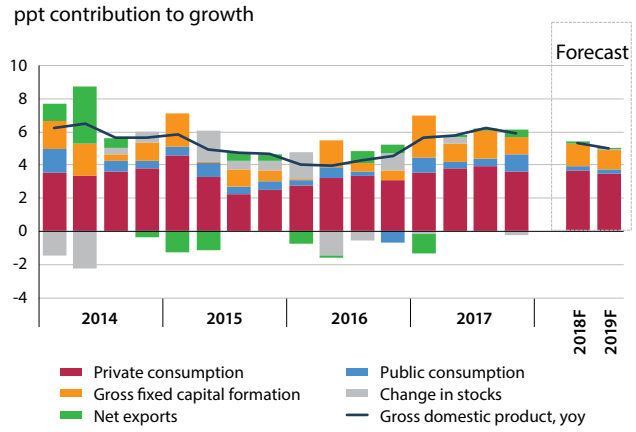
There have been net inflows in the bond market since November 2017. Meanwhile, in the equity market, there have also been net inflows from December 2017 to January 2018, although February 2018 saw net outflows triggered by selloff in the U.S. equity market. The prospect of outflows have generally diminished but the global policy environment remains uncertain and the possibility of renewed capital outflows arising from the US rate increase(s) and other external events remains. However, the risk remained manageable given the ability of entities such as the Employees Provident Fund to provide support in the event of a sell-off to support the sovereign's domestic funding needs. On a positive note, the short FX forward position has been reduced while official reserves have risen and the ringgit has strengthened recently.

Although key banking sector indicators remain generally sound, pockets of financial vulnerabilities remain. There remain pockets of vulnerabilities in the luxury and serviced apartment sectors, as well in the office, retail and commercial sectors, where vacancy rates are high. On a positive note, the household debt-to-GDP ratio has been declining recently, and the macroprudential measures adopted by Bank Negara Malaysia have helped contain the growth of household debt and house prices. Nonetheless, household debt remains high and requires continued monitoring.

Despite the continued momentum for further fiscal consolidation, and the decrease in the debt-to-GDP ratio, total government debt and contingent liabilities remains sizable. Although government debt decreased from 54.5 percent of GDP in Q4 2015 to 50.8 percent Q4 2017, government-guaranteed debt increased from 15.4 percent Q4 2015 to 16.8 percent in Q3 2017.

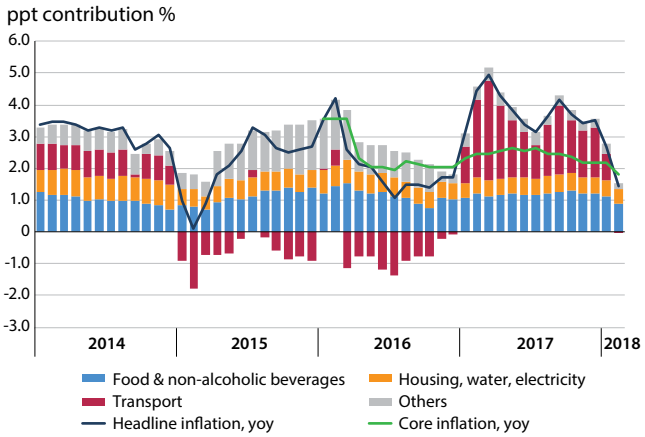
Malaysia: Selected Charts

Growth turned a corner in 2016 and strengthened further in 2017.



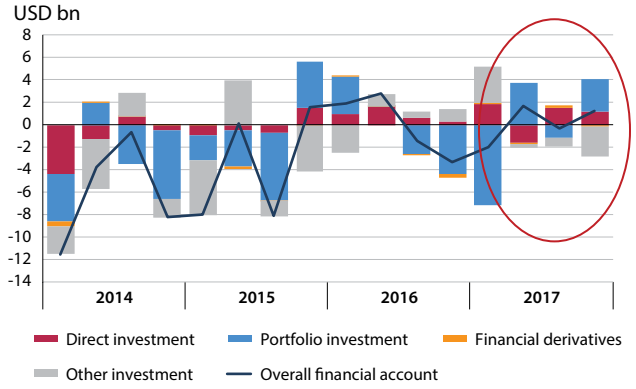
Source: CEIC, Department of Statistics - Malaysia, AMRO staff projections

Recently, both headline and core inflation have trended down.



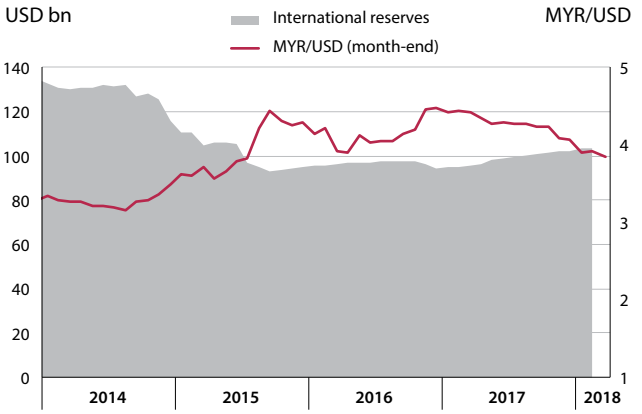
Source: CEIC, Department of Statistics - Malaysia

Following outflows from Q3 2016 to Q1 2017, capital outflows receded.



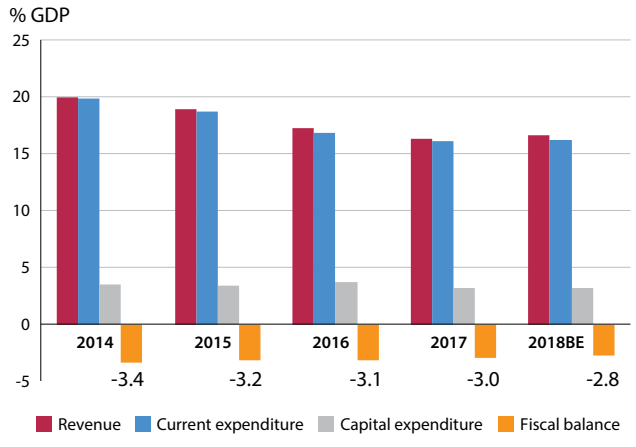
Source: CEIC, Department of Statistics - Malaysia

The ringgit appreciated and net international reserves increased.



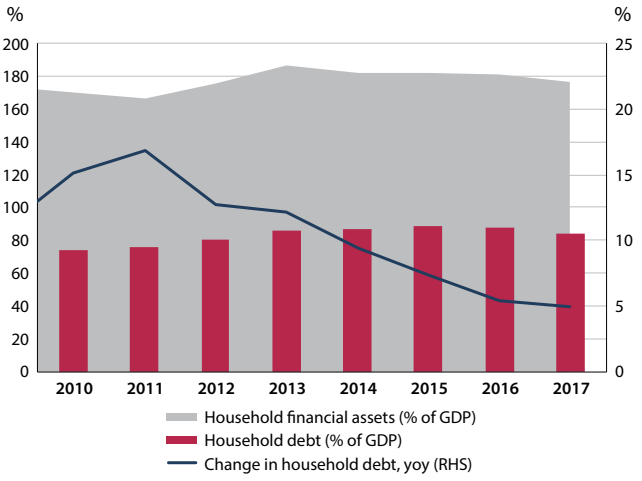
Source: CEIC, Bank Negara Malaysia

A continued decrease in the fiscal deficit is targeted, reflecting the government's fiscal consolidation efforts.



Note: 2018BE = Malaysia MOF budget estimates
Source: CEIC, Malaysia MOF, Economic Report 2017/2018

Although the household debt-to-GDP ratio remains elevated, it has been easing recently, and households have substantial financial assets.



Source: CEIC, Bank Negara Malaysia

Malaysia: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	6.0	5.0	4.2	5.9
Real consumption	6.4	5.7	4.9	6.7
Real private consumption	7.0	6.0	6.0	7.0
Real public consumption	4.4	4.4	0.9	5.4
Real gross fixed capital formation	4.8	3.6	2.7	6.2
Private	11.1	6.3	4.3	9.3
Public	-4.7	-1.1	-0.5	0.1
Exports of goods and service	5.0	0.3	1.1	9.6
Imports of goods and service	4.0	0.8	1.1	11.0
External Sector	(in billions of USD, unless specified)			
Gross exports (USD bn)	233.9	199.2	189.7	217.8
Gross imports (USD bn)	208.9	176.0	168.4	195.1
Trade balance	25.1	23.1	21.2	22.7
Current account	14.8	9.0	7.0	9.4
Current account (% of GDP)	4.4	3.0	2.4	3.0
Overall financial account	-24.4	-14.2	-0.3	0.5
Direct investment	-5.5	-0.5	3.4	2.9
Portfolio investment	-12.0	-6.7	-3.7	-2.1
Financial derivatives	-0.3	-0.2	-0.2	0.1
Other investment	-6.6	-6.9	0.2	-0.3
External debt (% of GDP)	67.6	72.3	74.5	65.3
International reserves	115.9	95.3	94.5	102.4
Fiscal Sector	(in percent of GDP)			
Revenue	19.9	18.9	17.3	16.3
Expenditure	23.3	22.1	20.4	19.3
Current expenditure	19.8	18.7	17.1	16.1
Capital expenditure	3.5	3.4	3.3	3.2
Fiscal balance	-3.4	-3.2	-3.1	-3.0
Federal government debt	52.7	54.5	52.7	50.8
Monetary Sector	(in percent)			
Headline consumer price inflation (%, average)	3.2	2.1	2.1	3.7
Core consumer price inflation (%, average)	n.a.	n.a.	2.4	2.3
Exchange rate (MYR/USD, average)	3.3	3.9	4.1	4.3
Treasury bill rate (%, average)	3.1	3.1	2.8	2.9
10-year government securities (%, average)	4.0	4.0	3.8	4.0
Memorandum Items				
Unemployment rate (% of labor force)	2.9	3.1	3.4	3.4
Nominal GDP (in billions of MYR)	1,106	1,158	1,230	1,352
Nominal GDP (in billions of USD)	338.3	297.3	297.1	315.1

Note: (a) As of 2014, external debt has been redefined in line with international standards to include non-resident holdings of local-currency denominated debt paper and other debt-related non-resident financial flows such as trade credits, currency and deposits, and other loans and liabilities. The numbers here follow the new definition. (b) Starting 2016, MYR21.9 billion of debt (estimated 1.8 percent of 2016 GDP) has been transferred from the federal government to the Public Sector Home Financing Board. The numbers here reflect such change.
Source: CEIC, Department of Statistics - Malaysia, Bank Negara Malaysia, Malaysia External Trade Development Corporation

Myanmar

Myanmar's economy is in a gradual recovery in FY2017/18. The favorable weather conditions helped the recovery in agricultural production in this fiscal year. The domestic oil and gas sector also benefited from rising global energy prices in the second half of 2017. The growing communication and expanding banking sectors supported service activities. With a strong recovery in 2H of FY17/18 suggested by manufacturing activities, GDP growth is estimated at 7 percent for FY17/18 and 7.2 percent in FY18 Interim.[1]

Inflation is likely to moderate further in FY17/18 mainly due to lower food inflation, compared to the previous fiscal year. Inflation fell to an average of 3.6 percent during the period April-Dec 2017, compared to 6.8 percent in FY2016/17. The estimated inflation rates for FY17/18 and FY18 Interim are 3.8 percent and 4.4 percent.

The external position remained weak with a large current account deficit, while a recovery in FDI inflows this year has provided a cushion for the BOP. Both exports and imports rebounded in the first three quarters of FY17/18. The current account deficit will likely widen further, partly due to statistical adjustments using a new data source on secondary income. FDI exhibited a strong recovery, as it registered USD3.0 billion in 1H of FY17/18, compared to USD3.7 billion for the whole year of FY16/17. As for the whole fiscal year, the BOP will likely be in surplus.

Fiscal deficit will widen in FY17/18. The revised estimates of the Ministry of Planning and Finance showed that revenue including grants will grow around 3 percent compared to FY16/17 and the expenditure around 18 percent. The primary deficit could widen from 1.5 percent in FY16/17 to around 4.2 percent of GDP. The interim budget for FY18 half-year budget from April to September 2018 will need a larger financing due to seasonal effects of a lower revenue collection compared to expenditure disbursement during the half year.

Downside risks to growth mainly emanate from ongoing ethnic tensions. The direct impact remains largely locally contained while the indirect impact could be more profound in terms of stability and investor confidence. A possible prolonged and elevated conflict scenario would have severe negative implications on the ability of the country to attract new foreign investments, weakening momentum in business and investment. Moreover, it may cause uncertainties or difficulties in preferential trade arrangements that Myanmar currently enjoys or tries to secure in the future.

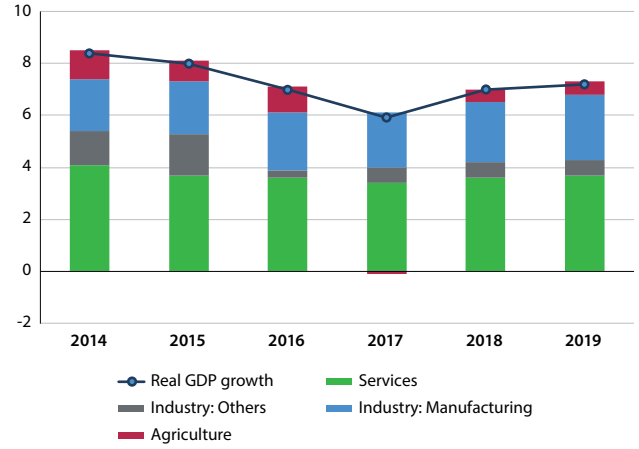
External stability risks remain significant. The overall trade deficit remains sizable with a sustained growth in imports partly driven by strong domestic consumption. The agricultural exports could continue to be subject to volatile weather conditions and bilateral relations with major trading partners, while energy exports are projected to decline in volume in the medium term. The recovery in FDI inflows in FY17/18 is a welcome sign. However, new FDI commitments under the new investment law have yet to pick up solidly.

Transitional risks in implementing the new banking regulations are substantial in the short term. The new regulatory Basel-II-standard framework has been in place since July 2017, requiring banks to maintain higher Capital Adequacy Ratios (CAR), limit exposure to single borrowers, reclassify loans and advances, and recover overdraft loans. Some domestic banks might not be able to fulfill the capital adequacy requirement by 31 March 2018 and the reduction of overdraft facilities by 6 July 2018 as required. The NPL ratio has been edging up, rising from 1.66 percent in June 2017 to 4 percent in June 2017, and likely increase further after the implementation of new asset classification.

[1] Previous Fiscal Year (FY) starts from April and ends by March. A special half-year interim fiscal year starting from April to September 2018 (denoted as FY18 Interim) will help migrate the FY to a cycle from October to September.

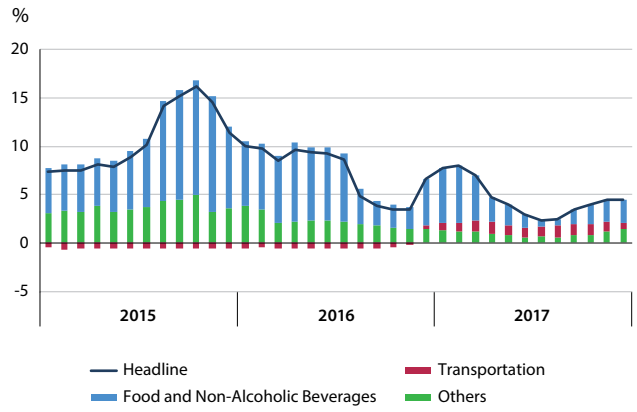
Myanmar: Selected Charts

The economy has been growing in FY17/18 with a recovery across sectors.



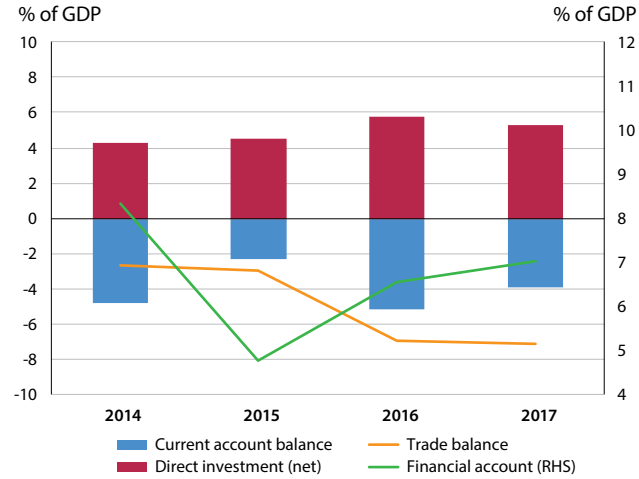
Note: Data refer to fiscal year where 2014 data refer to FY13/14.
Source: Planning Department, AMRO staff calculations

Despite a positive contribution from oil-related items, headline inflation softened in 2017 because of lower food price inflation.



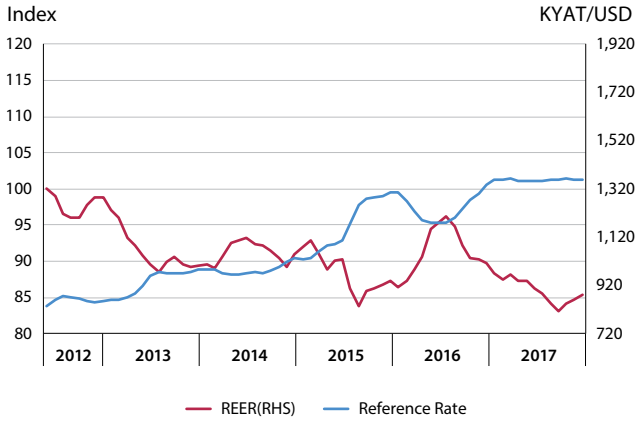
Source: Central Statistics Office

An increase in FDI inflows in the financial account could offset a widening current account deficit and contribute to an overall balance surplus.



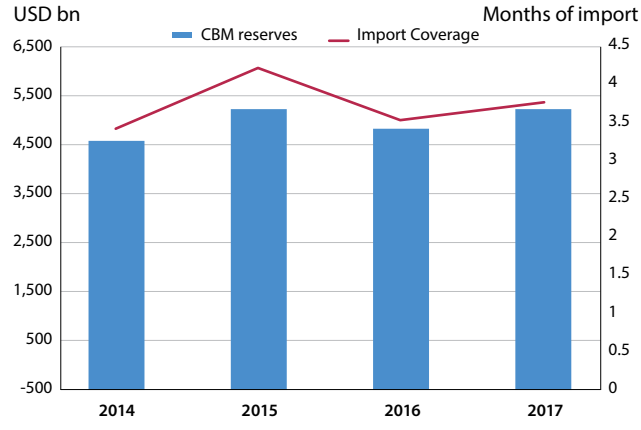
Note: Data refer to fiscal year.
Sources: Central Bank of Myanmar, AMRO staff calculations

The REER has depreciated as the Kyat vs USD has remained stable while other regional currencies have appreciated against the USD.



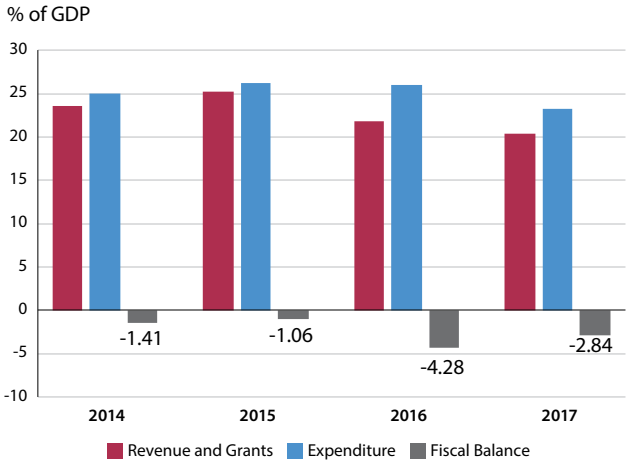
Sources: Central Bank of Myanmar, AMRO staff calculations

The CBM needs to strengthen its international reserves buffer to protect against external shocks.



Note: Data refer to fiscal year. Import cover is in months of imports of goods and services
Source: Central Bank of Myanmar, AMRO staff calculations

The fiscal deficit is expected to widen in 2017/18, as suggested by revised budget estimates.



Note: Data refer to fiscal year.
Source: Ministry of Planning and Finance, AMRO staff calculations

Myanmar: Selected Economic Indicators

	2015	2016	2017	2018
Real Sector and Prices	(in annual percentage change)			
Real GDP	8.0	7.0	5.9	7.0
Consumer price inflation (2012=100, period average)	5.1	10.0	6.8	3.9
Consumer price inflation (2012=100, end-period)	6.1	8.4	7.0	5.3
External Sector	(in percent of GDP, unless specified)			
Current account balance	-2.2	-5.1	-3.9	-4.7
Trade balance	-2.9	-6.9	-7.0	-5.8
Financial account	4.8	6.6	7.1	7.6
Direct investment (net)	4.6	5.8	5.4	6.6
Medium- and long-term disbursement	0.8	1.3	0.6	1.0
Gross International Reserves held by CBM (millions of USD)	5,124.6	4,764.0	5,133.9	6,188.0
In months of imports	4.2	3.5	3.8	4.1
Total external debt	13.8	16.3	14.6	14.1
Fiscal Sector	(in percent of GDP)			
Revenue and Grants	25.2	21.7	20.4	18.4
Tax Revenue	9.9	8.6	8.9	8.2
SEE receipts	12.6	10.2	9.1	7.7
Expenditure	26.2	26.0	23.2	24.1
Overall balance	-1.1	-4.3	-2.8	-5.7
Primary balance	0.3	-3.1	-1.5	-4.2
Monetary and Financial Sector	(in annual percentage change)			
Domestic credit	33.0	37.9	37.2	35.5
Private sector	33.5	33.2	32.7	30.4
Exchange rate (kyat per USD, average)	997.8	1,316.4	1,268.2	1,341.5
Exchange rate (kyat per USD, end of period)	1,027.0	1,216.0	1,362.0	1,321.0
Memorandum Items				
Nominal GDP (in billions of USD)	63.5	58.9	62.4	68.1
Nominal GDP (in billions of kyat)	65,261.9	72,714.0	79,720.9	91,320.2

Notes:
1) Data refers to fiscal year. Myanmar's fiscal year extends from April 1 to March 31. FY2018 starts from 1 April 2017 to 31 March 2018
2) Real GDP uses 2010/11 as the base year
3) Consolidated public sector includes union and state/region governments and state economic enterprises
Source: National Authorites, AMRO staff estimates

The Philippines

The Philippines' economic growth remains robust, although it eased slightly in 2017. From 6.9 percent in 2016, real GDP growth somewhat eased to 6.7 percent in 2017 as fixed investments decelerated. Private consumption also slowed but generally held up throughout the year, supported by gains in employment and sustained remittance inflows. After a weak first quarter, government disbursement improved in the succeeding three quarters to guide public spending higher. Net exports also improved in 2017 as exports outpaced imports. The Philippines economy is forecast to grow by 6.8 percent in 2018 as exports are expected to remain buoyant while hurdles to budget execution are gradually being overcome.

Headline inflation has increased and is expected to trend higher in 2018. Higher food and energy prices pushed inflation to return within the 3±1 percent target range in 2017 through February 2018 from 1.8 percent in 2016. Core inflation also inched higher on firm domestic demand. On the back of the excise tax increases in the recently approved tax reform, higher crude oil prices, and the modest pass-through from the sustained depreciation of the peso, headline inflation is projected rise slightly above the 4 percent upper-end of the band in 2018.

External buffers are ample despite continued BOP deficits. From a deficit of USD420.1 million in 2016, the BOP deficit widened to USD862.8 million in 2017 and USD960.7 million in the first two months of 2018. The widening of the BOP deficit, in turn, placed pressure on the peso, which depreciated by 10.7 percent against the USD from end-2015 to end-March 2018. However, at about USD80.4 billion as of February 2018, gross reserves are sufficient to cover over 3.5 times short term external debt by residual maturity plus the current account deficit.

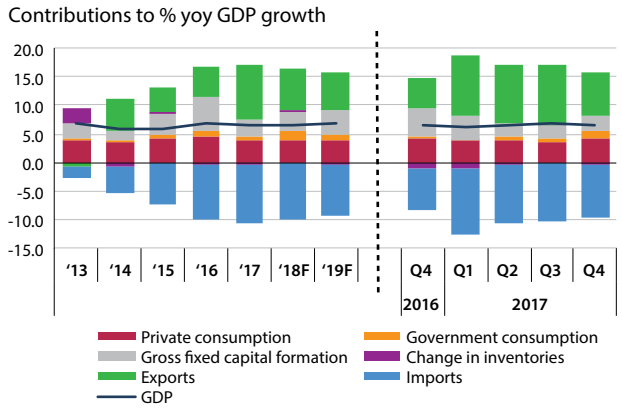
The BSP has made progress in improving the monetary policy transmission since the adoption of the interest rate corridor (IRC) framework. The BSP shifted its monetary operations to an IRC system in June 2016 in an effort to improve the transmission of monetary policy amid excess liquidity in the financial system. Since the IRC adoption, the transaction volumes of the term deposit auction facility (TDF) have increased with TDF rates moving towards the upper-end of the corridor. Short-term rates such as the 3-month Treasury bill yields have also crept up closer to the lower bound of the corridor. Reflecting its confidence in the progress of the IRC framework, the BSP in February started a phased reduction in the reserve requirement ratio (RRR) with a 1 percent cut to 19 percent. It hopes that the potential liquidity impact of the RRR reduction will be offset by auction-based monetary operations under the IRC.

The banking system continues to maintain good asset quality while capitalization remains adequate. However, rapid credit expansion continues to warrant close monitoring. Gross NPLs of the overall banking system have been on steady five year decline, down from 3.4 percent of the total loan portfolio in March 2013 to 1.8 percent by January 2018. The NPL provisioning coverage ratio at 120.7 percent as of end 2017 also indicates that the banking system has sufficient provisions for credit losses. Moreover, banks are well capitalized, with capital adequacy ratios above the BSP regulatory threshold of 10 percent. However, the rapid pace of credit expansion – at twice the pace of nominal GDP growth throughout 2017 – continues to warrant close monitoring, especially as lending could quicken further as financial inclusion advances and the banking system becomes more competitive. Already, pockets of risk are evident in the relatively elevated NPL ratios of the real estate and auto loan segments.

Fiscal reforms are being pursued to accelerate infrastructure development and raise the economy's growth potential. The government has committed to ramp up infrastructure spending from the target of 5.4 percent of GDP in 2017 to 7.3 percent in 2022. This has led to the budget deficit limit being widened from 2 to 3 percent of GDP for the 2017-2022 period. But the incremental boost in spending will also need to be financed by the additional revenues from the comprehensive tax reform program in order to maintain the downward trend in the debt-to-GDP ratio. The first package of the tax reform – involving a reduction in the personal income tax rates and an increase/introduction of some indirect taxes – has been implemented since January 2018. The second package – primarily comprising a reduction in the corporate income tax rate and the modernization of fiscal incentives – has been submitted by the Department of Finance to the lower house of the legislature.

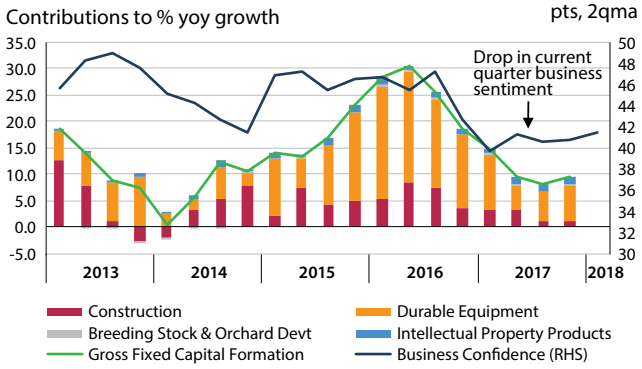
The Philippines: Selected Charts

Growth eased somewhat in 2017 as fixed investments decelerated, in part due to the high owing to the 2016 elections.



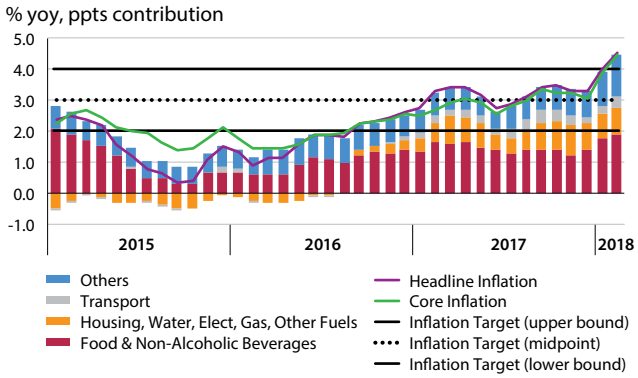
Source: Philippine Statistics Authority

The investment deceleration may also be due to the decline in business confidence.



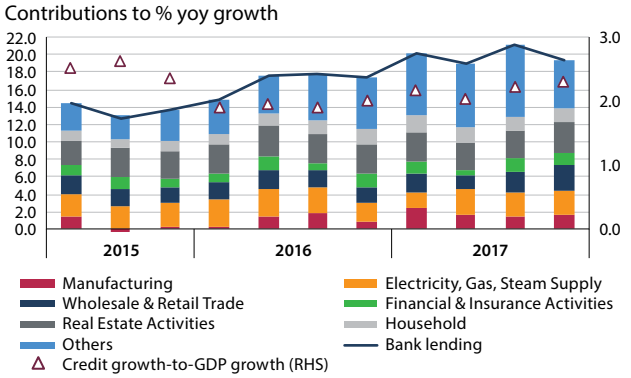
Source: Bangko Sentral ng Pilipinas, Philippine Statistics Authority

Higher food and energy prices have pushed inflation towards the upper-end of the government's target range in recent months.



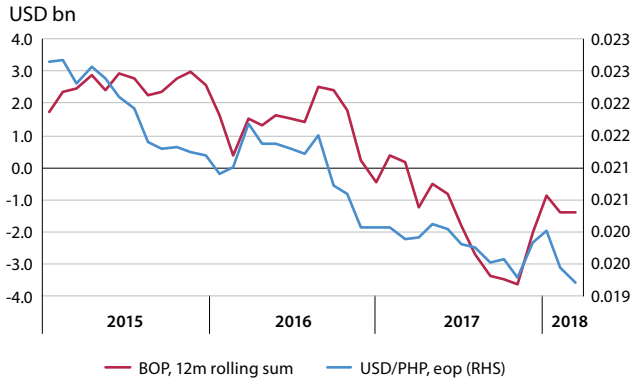
Note: Data is based on 2006 base year.
Source: Philippine Statistics Authority

Credit growth, while broad-based, is markedly faster than nominal GDP growth.



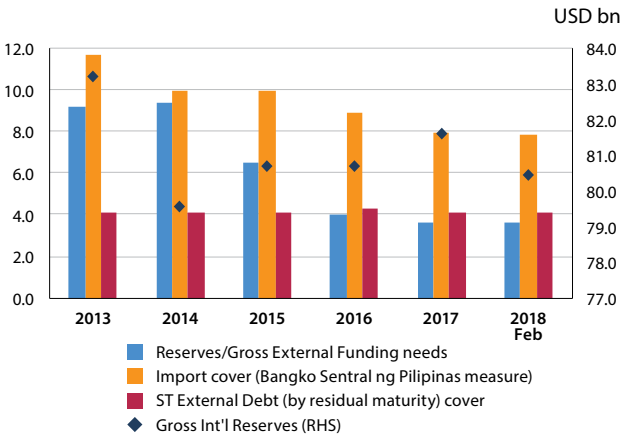
Source: Bangko Sentral ng Pilipinas, Philippine Statistics Authority

The BOP deficit has widened, putting depreciation pressure on the peso.



Source: Bangko Sentral ng Pilipinas

But FX reserves remain ample, providing sufficient buffer against external shocks.



Source: Bangko Sentral ng Pilipinas

The Philippines: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	6.1	6.1	6.9	6.7
Private consumption	5.6	6.3	7.0	5.8
Government consumption	3.3	7.6	8.4	7.3
Gross fixed capital formation	7.2	16.9	25.2	10.3
Exports of goods and services	12.6	8.5	10.7	19.2
Imports of goods and services	9.9	14.6	18.5	17.6
Prices				
Consumer price inflation (end of period)	2.7	1.5	2.6	3.3
Consumer price inflation (period average)	4.1	1.4	1.8	3.2
Core inflation (period average)	3.0	2.1	1.9	2.9
GDP deflator	3.2	-0.6	1.7	2.3
External Sector	(in billions of USD, unless specified)			
Current account balance	10.8	7.3	-1.2	-2.5
(in percent of GDP)	3.8	2.5	-0.4	-0.8
Trade balance	-17.3	-23.3	-35.5	-41.2
Exports, FOB	49.8	43.2	42.7	48.2
Imports, FOB	67.2	66.5	78.3	89.4
Services balance	4.6	5.5	7.0	9.5
Receipts	25.5	29.1	31.2	35.6
Payments	20.9	23.6	24.2	26.1
Primary income, net	0.7	1.9	2.6	3.1
Secondary income, net	22.8	23.3	24.7	26.1
Financial account balance	9.6	2.3	0.2	-2.2
Direct investment, net	1.0	-0.1	-5.9	-8.1
Overseas direct investment	6.8	5.5	2.4	1.9
Foreign direct investment	5.7	5.6	8.3	10.0
Portfolio investment, net	2.7	5.5	1.5	3.9
Net acquisition of financial assets	2.7	3.3	1.2	3.1
Net incurrence of liabilities	0.0	-2.1	-0.3	-0.8
Other investment, net	5.9	-3.1	4.6	2.1
Overall balance	-2.9	2.6	-0.4	-0.9
Gross international reserves (end-period)	79.5	80.7	80.7	81.6
(in months of goods & services imports)	10.8	10.7	9.4	8.5
Total external debt (percent of GDP)	27.3	26.5	24.5	23.3
Short-term external debt (percent of total)	20.9	19.5	19.4	19.5
Fiscal Sector (National Government)	(in percent of GDP)			
Government revenue	15.1	15.8	15.2	15.7
Government expenditure	15.7	16.7	17.6	17.9
Fiscal balance	-0.6	-0.9	-2.4	-2.2
Primary balance	2.0	1.4	-0.3	-0.3
Government debt	45.4	44.7	42.1	42.1
Government debt, including contingent liabilities	49.8	48.8	45.6	45.1

	2014	2015	2016	2017
Monetary and Financial Sector	(in percent change, end-period, unless specified)			
Domestic credit	17.8	11.5	17.0	13.7
Of which: Private sector	19.9	12.1	16.6	16.1
Broad money	12.4	9.3	13.4	11.4
Memorandum Items				
Exchange rate (peso per USD, average)	44.4	45.5	47.5	50.4
Exchange rate (peso per USD, end of period)	44.6	47.2	49.8	49.9
Gross domestic product at current price (in trillions of pesos)	12.6	13.3	14.5	15.8
Gross domestic product at current price (in billions of USD)	284.6	292.8	304.9	313.4
GDP per capita (in USD)	2,849.3	2,882.7	2,953.3	2,987.2

Source: Philippines authorities and AMRO staff estimates

Singapore

Growth is strong and broadening from both production and expenditure perspectives. From the production perspective, external-oriented sectors, such as manufacturing, continued to grow strongly albeit at a slower pace compared to the peak in Q3 2017. Domestic-oriented sectors, except construction, are catching up. From the expenditure perspective, private consumption has been improving since Q2 2017. Encouragingly, after declining during Q3 2016 to Q3 2017, investment also rebounded in Q4 2017.

The labor market is also improving on the back of economic recovery and restructuring. Employment grew in Q4 2017, after successive contractions in the preceding quarters. The number of retrenchments peaked in Q4 2016 and has been declining since. The resident and citizen unemployment rates also declined in December 2017. Job vacancies increased over the year for higher value-added sectors such as financial services and infocomm, reflecting the continuing shift towards higher value-added jobs.

Inflation remained subdued but it is expected to increase slightly. Core inflation was 1.6 percent in the first two months of 2018, similar to the average in 2017. In the near term, the previously accumulated slack in the labor market will temper wage growth. However, in the medium term, a sustained improvement in the labor market, rising imported prices and firm domestic demand will exert more upward pressure on inflation.

Monetary policy shall prepare for normalization with higher inflationary pressure in the medium term. While not imminent, inflation will rise in the medium term on the back of firm growth, further labor market recovery and a tight foreign labor policy. Hence, preparation for the eventual normalization of monetary policy stance is recommended.

Bank lending rebounded strongly and the stock market has been buoyant. Bank lending to business especially cross-border lending rebounded in 2017, while housing loan growth remained modest. Despite the recent global volatility, the benchmark Straits Times Index has gained by 6.5 percent in Q4 2017 and Q1 2018.

A strong fiscal surplus was witnessed in FY2017. The fiscal surplus was 2.1 percent of GDP in FY2017, largely due to favorable cyclical factors, such as an exceptional Statutory Board Contribution from Monetary Authority of Singapore (MAS) and an increase in stamp duty collections on property market transaction.

Fiscal impulse will be positive in FY2018, with a large expenditure increase, especially in infrastructure. Total expenditure is budgeted to increase by 8.3 percent in FY2018, as Singapore aims to invest massively in infrastructure to anchor itself as the center for regional economic activity. Singapore will continue to further enhance infrastructure to capture future opportunities and further improve living conditions.

The FY2018 Budget will support businesses and provides incentives to raise productivity. It will enhance and extend the corporate income tax rebate and Wage Credit Scheme. Among many other incentives, it has introduced the Productivity Solutions Grant scheme, to support business that adopt productivity-enhancing technology or solutions. These measures will help enhance economic vitality and encourage innovation.

The government has stayed on its course to steer the country towards a labor-lean, high productivity, and innovation-based economy. Guided by the strategies proposed by the Committee on the Future Economy, various government agencies have been developing and implementing sectoral initiatives to restructure the economy. All twenty three Industry Transformation Maps have been launched. The tripartite collaboration among the unions, employers and the government will be key to the successful implementation of these initiatives.

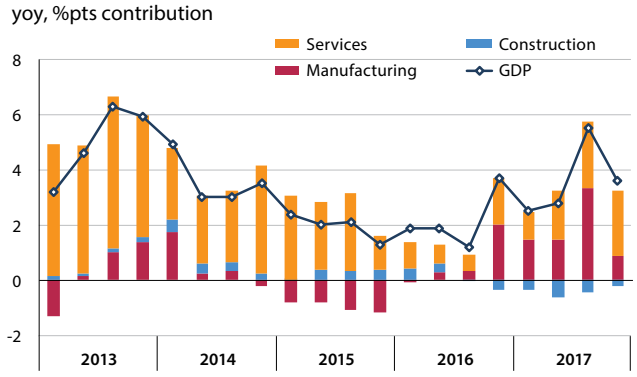
The macroprudential measures have been effective and should be maintained as the property market is recovering. In 2017, the volume of private residential transactions increased substantially. The value of collective sales also reached the highest level since 2007. High frequency SRX non-landed property index increased by 9.4 percent yoy in February 2018. Office rental also rebounded in Q4 2017.

A possible rise in trade protectionist sentiments is an important risk. Such sentiments could lead to imposition of protectionist measures in some advanced countries, causing a downturn in global trade and Singapore's growth.

Corporate and household debt remains high, and some segments are sensitive to an unexpected spike in interest rates. Under the low interest rate environment, both corporates and households have leveraged up since the GFC. Singapore interest rates tend to rise in tandem with the U.S., whose economy is facing late-cycle capacity constraints with a rising interest rate. This will push up debt repayment burdens of Singapore corporates and households, and may cause stress in some segments.

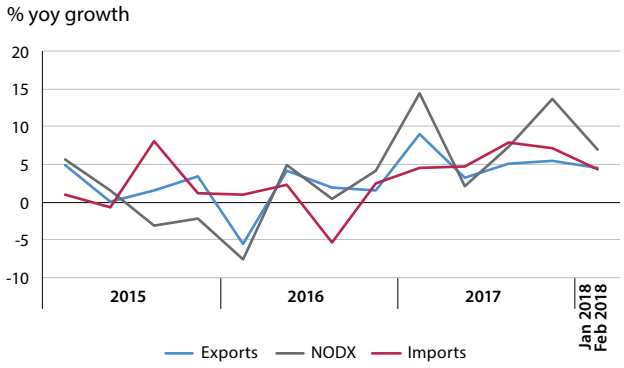
Singapore: Selected Charts

Growth has accelerated in recent quarters, led by manufacturing, and broadened to the services sector.



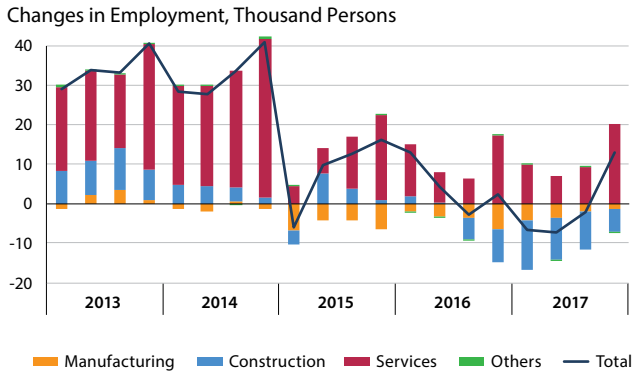
Source: Ministry of Trade and Industry (MTI), Department of Statistics (DOS)

Trade volume, especially NODX (non-oil domestic exports), has rebounded strongly.



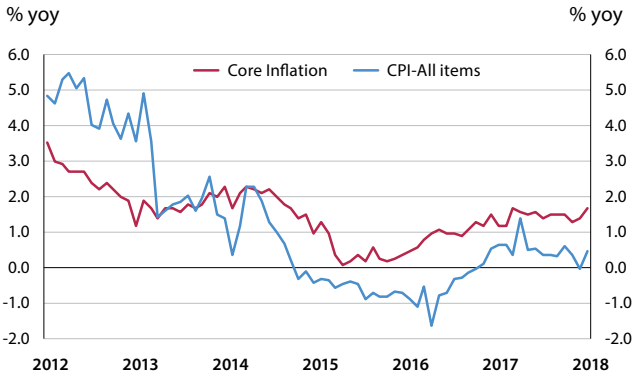
Source: Enterprise Singapore, CEIC, AMRO staff calculations

Labor market is also improving on the back of economic recovery and restructuring



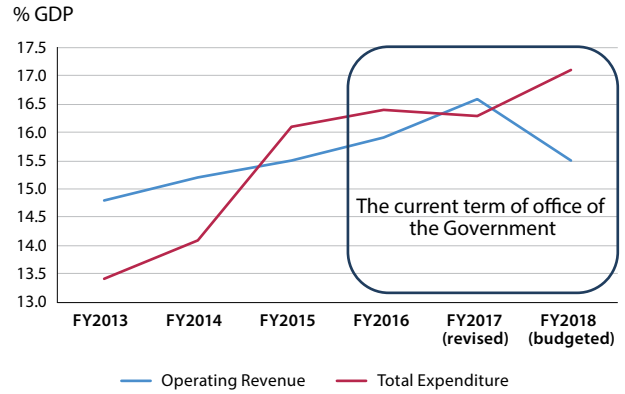
Source: Manpower Research & Statistics Department, Ministry of Manpower

Inflation has picked up recently but remains low. Near-term wage pressure will be contained, but will rise in the medium term.



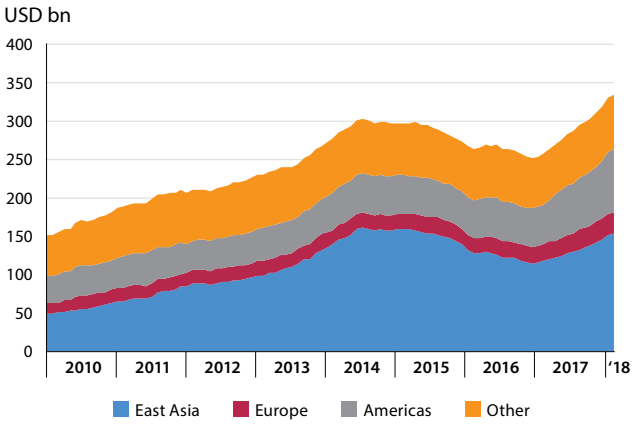
Source: DOS, CEIC

Fiscal policy continues to support economic recovery and restructuring, and the fiscal impulse will be positive in FY2018.



Source: Ministry of Finance

Cross-border bank lending to non-bank clients is growing most rapidly, in particular to East Asian clients.



Source: MAS

Singapore: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	3.9	2.2	2.4	3.6
Real private consumption	3.4	4.9	1.7	3.1
Real public consumption	0.2	7.8	3.5	4.1
Gross fixed capital formation	5.5	2.2	-0.6	-1.8
Exports of goods & services	3.4	4.7	1.1	4.1
Imports of goods & services	2.9	4.1	0.1	5.2
Manufacturing	2.7	-5.1	3.7	10.1
Construction	7.6	5.8	1.9	-8.4
Services	4.3	3.5	1.4	2.8
Wholesale & retail trade	3.0	3.6	1.0	2.3
Transportation & storage	3.1	1.9	1.3	4.8
Accommodation & food services	2.8	0.1	3.8	1.2
Information & communications	7.6	-1.2	3.6	3.3
Finance & insurance	9.3	5.3	1.6	4.8
Business services	2.0	5.4	-0.3	0.6
Other services industries	3.8	2.2	3.5	2.6
External Sector	(in billions of SGD, unless specified)			
Exports of goods (% yoy)	-0.5	-5.2	-5.0	9.2
Exports of services (% yoy)	10.2	8.0	2.2	4.2
Current account	73.7	77.7	81.3	84.2
Current account (% GDP)	18.7	18.6	19.0	18.8
Capital and financial account[1)]	-67.1	-74.0	-83.7	-46.5
Direct investment, net	21.7	54.3	64.0	53.8
Portfolio investment, net	-57.2	-81.5	-37.4	-47.4
Other investment, net	-33.3	-54.9	-91.2	-71.4
Overall balance	8.6	1.5	-2.5	37.8
Official reserve assets (USD bn, end-period)	256.9	247.7	246.6	279.9
Fiscal Sector	(in percent of FYGDP)			
Operating revenue (% GDP)	15.2	15.5	15.9	16.6
Total expenditure (% GDP)	14.1	16.1	16.4	16.3
Primary surplus / deficit (% GDP)	1.0	-0.6	-0.5	0.3
Overall budget surplus / deficit (% GDP)	0.1	-1.0	1.4	2.1
Monetary and Financial Sector	(in percent change, unless specified)			
MAS core inflation	1.9	0.5	0.9	1.5
Consumer price inflation	1.0	-0.5	-0.5	0.6
Unemployment rate (% annual average)	2.0	1.9	2.1	2.2
3-month SGD Sibor (% end period)	0.5	1.2	1.0	1.5
Straits Times Index (end period)	3,365	2,883	2,881	3,403
Property price index (Q1 2009=100)	147.0	141.6	137.2	138.7
Spot exchange rate (SGD per USD, period average)	1.27	1.37	1.38	1.38

Note: 1) There has been a change in sign convention for the financial account, based on BPM6. A positive sign now indicates an increase in assets or liabilities, and net outflows in net balances. However, this figure still uses the previous sign conventions.
Source: Singapore Authorities, CEIC, AMRO staff calculations

Thailand

Thai economic growth has gained traction. In 2017, the Thai economy grew at 3.9 percent, attributed by a strong merchandise and service exports, together with sustained domestic private consumption. Robust exports were mainly underpinned by improving global demand and the IT upcycle. Domestically, while private investment remained soft throughout 2017, exhibited a brighter prospect going forward as signaled by an increase in capacity utilization, foreign direct investment commitments, and capital goods imports. On the production side, manufacturing production rose in line with export performance, while service sectors were benefited from buoyant tourism. Agricultural products were volatile due to floods in many areas.

Inflationary pressure remains soft, while monetary conditions are accommodative. Rising global energy prices put an upward pressure on Thailand's consumer prices; however, headline inflation was at 0.66 percent in 2017, below the Bank of Thailand's medium-term inflation target at 2.5 ± 1.5 percent. Core inflation has been lower than 1 percent for three consecutive years, while inflation expectations have risen somewhat. The policy rate has been kept at 1.5 percent since the last rate cut in April 2015.

The external position has continued to strengthen with a widening current account surplus and ample international reserves. Driven by buoyant tourism and an export upturn, the current account surplus continued to be strong and widened further in 2017. The surplus has been partially recycled and invested overseas in the form of direct investment by domestic corporate and portfolio outflows by residents. Residents' outward investments will expand, spurred by the Bank of Thailand's further liberalization of capital account, portfolio diversification by local investors and overseas business expansion by Thai companies. The overall BOP surplus widened in 2017 and led to a further appreciation of the Thai baht and increasing international reserves, which stood at 10 months of goods and services imports.

An expansionary fiscal stance will also support the economic recovery in 2018. The current administration has employed fiscal measures and quasi-fiscal measures to support economic growth. The supplementary budget was set up for FY 2018,[1] the third consecutive year, in order to stimulate the grassroots economy. The government also plans to expand and expedite public investment through its own investment projects and those of state enterprises. Infrastructure investment is expected to gain traction, as the Eastern Economic Corridor Act has come into effect in February 2018. Despite the supplementary budget and an expected significant rise in public investment, fiscal position remains strong. The fiscal deficit is projected to be at around 3.5 percent of GDP in FY2018, and public debt would be kept at slightly above 40 percent of GDP.

The financial system is sound amid a high level of household debt, stabilizing credit quality, and growing search-for-yield behaviors. Concerns over high household debt have been easing due to a moderation in household credit growth. However, pockets of risks remain among low-income households, agriculture and SME households. Meanwhile, deteriorating loan quality, stemming from the protracted economic recovery, has been stabilizing after the economy showed broader improvement in 2017. Commercial banks and state-owned specialized financial institutions have a strong capital position and high loan loss provisions to safeguard against a potential rise in credit risk. Separately, in a low interest rate environment, investors continue to display search-for-yield behavior, which warrants continued monitoring.

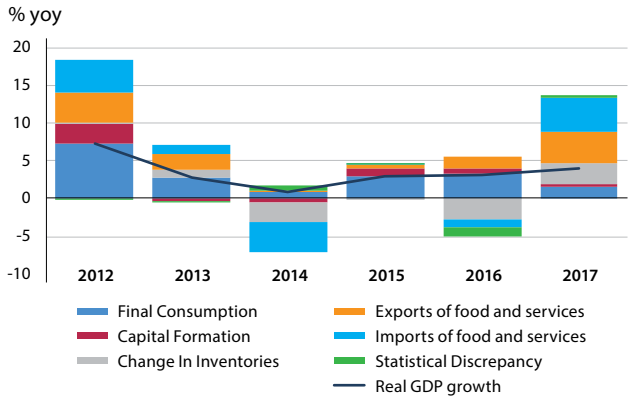
Going forward, the economy is projected to expand at 3.9 percent in 2018 and moderate slightly to 3.7 percent in 2019. The growth contribution would be more balanced between external and domestic drivers. The contribution by net exports would lessen due to a potential moderation of exports and rising imports of capital goods used in infrastructure construction and private investment. Domestically, private consumption is expected to continue growing at the same pace, while private investment is expected to be more robust. Headline inflation is expected to be at 1 percent in 2018 and at 1.6 percent in 2019, but remains relatively low among regional peers.

Trade protectionism, monetary policy in advance economies and domestic structural issues are potential challenges to Thailand's economic outlook. The intensification of trade protectionism, in particular between the U.S. and China, could have negative spillover effects on exports from Thailand and other regional economies. Meanwhile, faster-than-expected pace of the U.S. rate hike could add more risk of capital flow volatility. On the domestic front, more professionals in scientific and engineering fields are needed, as the country is striving to move up the GVC and is shifting toward more advanced technology. A fast-growing, aging society will also face labor constraints in the private sector in the next few decades.

[1] Thailand's fiscal year 2018 starts from 1 October 2017 to 30 September 2018.

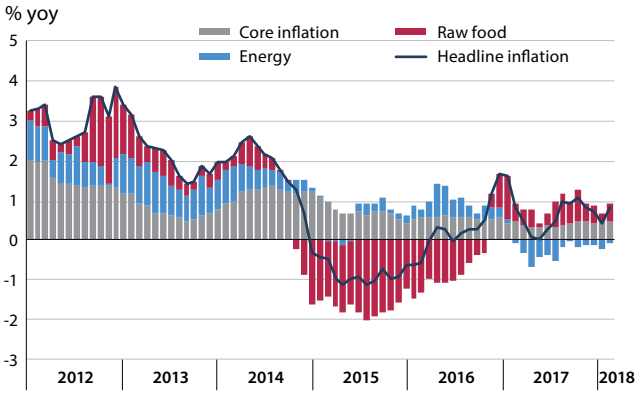
Thailand: Selected Charts

The Thai economy grew further in 2017, driven by merchandise and service exports and sustained domestic private consumption.



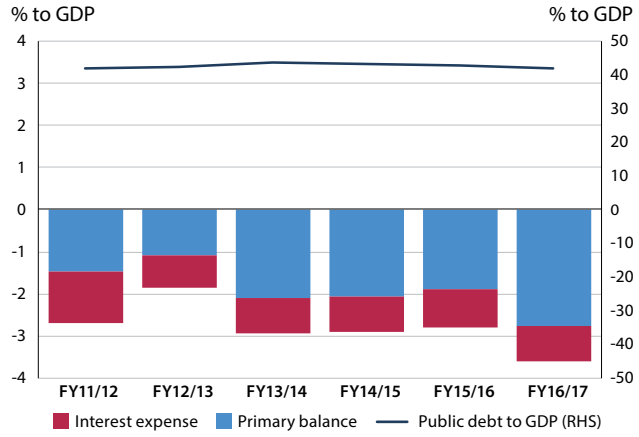
Source: Office of National Economic and Social Development Board, AMRO staff calculations

Headline inflation remains lower than Bank of Thailand's medium-term inflation target.



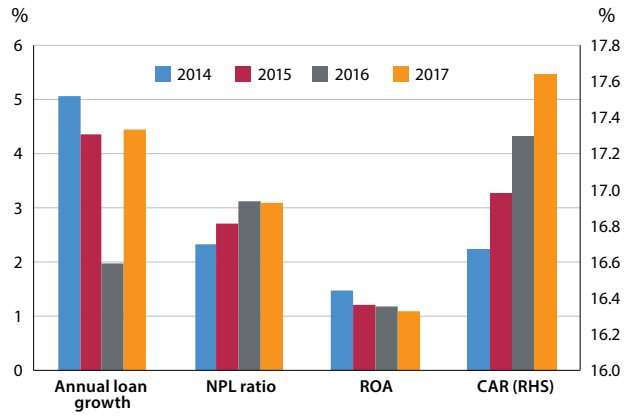
Note: Bank of Thailand's medium-term inflation target is 2.5±1.5 percent.
Source: Ministry of Commerce, AMRO staff calculations

Ample fiscal space will give the government room for more fiscal stimulus.



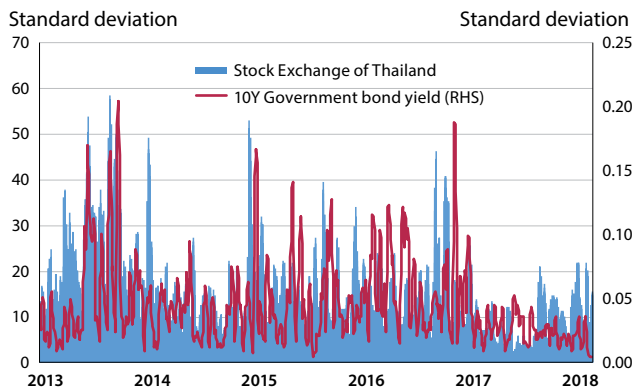
Source: Fiscal Policy Office, Public Debt Management Office

Despite an increase in NPLs, the banking system remains sound with strong capital buffer.



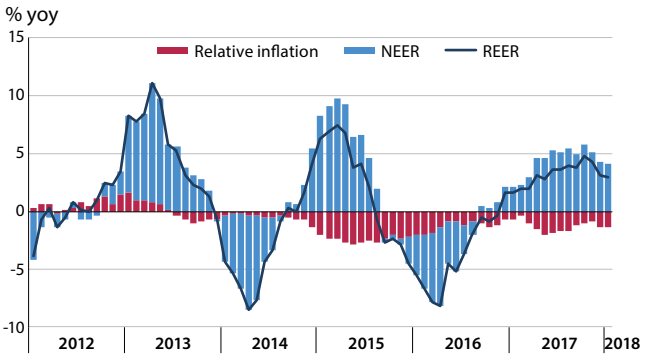
Note: Loan growth refers to total loans excluding interbank loans of commercial banks which includes Thai commercial banks and foreign bank branches. Non-performing loan ratio (NPL ratio), Return-on-asset ratio (ROA) and Capital Adequacy Ratio (CAR) composite of Thai commercial banks only.
Sources: Bank of Thailand, AMRO staff calculations

Financial market volatility heightened recently, but was less than during the U.S. taper tantrum and the U.S. Presidential Election.



Source: Stock Exchange of Thailand, Bank of Thailand, AMRO staff calculations

Driven by a sizable BOP surplus, the Thai baht appreciated against major trading partners' currencies.



Source: Stock Exchange of Thailand, Thai Bond Market Association

Thailand: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices	(in annual percentage change, unless specified)			
Real GDP	1.0	3.0	3.3	3.9
Final consumption	1.5	2.3	2.8	2.6
Private sector	0.8	2.3	3.0	3.2
General government	2.8	2.5	2.2	0.5
Capital formation	-2.2	4.3	2.8	0.9
Private sector	-0.9	-2.1	0.5	1.7
General government	-6.6	28.4	9.5	-1.2
Exports of goods and services	0.3	1.6	2.8	5.5
Imports of goods and services	-5.3	0.0	-1.0	6.8
Unemployment rate (in percent, period average)	0.8	0.9	1.0	1.3
Consumer price inflation (period average)	1.9	-0.9	0.2	0.7
Consumer price inflation (end of period)	0.6	-0.9	1.1	0.8
External Sector	(in billions of USD, unless specified)			
Current account balance	15.2	32.1	48.2	48.1
(In percent of GDP)	3.8	8.0	11.7	10.6
Trade balance	17.2	26.8	36.5	31.9
Exports, FOB	226.6	214.0	214.3	235.1
Imports, FOB	209.4	187.2	177.7	203.2
Services, net	10.3	19.2	24.2	29.8
Receipts	55.5	61.8	67.7	75.7
Payments	45.2	42.5	43.5	45.8
Primary income, net	-21.0	-20.6	-19.3	-21.0
Secondary income, net	8.7	6.7	6.8	7.4
Financial account balance	-16.0	-16.8	-21.0	-18.2
Direct investment, net	-0.8	3.9	-10.3	-11.6
Portfolio investment, net	-12.0	-16.5	-2.8	-2.5
Other investment, net	-3.2	-4.3	-7.9	-4.1
Overall balance	-1.2	5.9	12.8	26.0
Gross official reserves excluding net forward position	157.1	156.5	171.9	202.6
(In months of imports of goods & services)	7.4	8.2	9.3	9.5
Total external debt in percent of GDP[/2]	34.7	32.0	32.5	35.2
Debt services in percent of exports of goods and services	4.9	6.3	5.8	5.7
Fiscal Sector [/1]	(in percent of FYGDP)			
Revenue	15.8	16.2	16.8	15.5
Expenditure	18.7	19.1	19.6	19.0
Budget balance	-2.9	-2.9	-2.8	-3.5
Public Debt	43.6	43.1	42.8	42.4

Thailand: Selected Economic Indicators (continued)

	2014	2015	2016	2017
Monetary and Financial Sector		(in annual percentage change)		
Domestic credit (percent yoy)	4.2	5.6	3.5	4.1
Policy rate (percent per annum, end of period)	2.0	1.5	1.5	1.5
10-year government bond yield (percent per annum, end of period)	2.8	2.6	2.8	2.6
Memorandum Items		(in percent of FYGDP)		
Exchange rate (THB per USD, average)	32.5	34.3	35.3	33.9
GDP (in billions of THB)	13,230.3	13,747.0	14,533.5	15,450.1
GDP (in billions of USD)	407.2	401.9	411.8	455.8
GDP per capita (USD)	6,259.9	6,411.4	6,246.5	6,886.7

Note:
1/ Fiscal year extends from October 1 to September 30. For example, FY 2018 starts from 1 October 2017 to 30 September 2018.
2/ The denominator has been adjusted to be compliant with the World Bank method; i.e. calculated as a 3-year moving average GDP.
Source: Thai authorities, AMRO staff calculations

Vietnam

Vietnam's economic growth rebounded strongly in 2017, supported by strong manufacturing exports and strengthened domestic demand, as well as a recovery in agricultural output. Real GDP grew at 6.8 percent in 2017, up from 6.2 percent a year earlier. Growth momentum accelerated in the second half of the year, driven by robust domestic consumption and investment, and strong exports. Short-term growth outlook remains positive, with real GDP expanding robustly at 7.4 percent in the first quarter of 2018, the highest Q1 growth seen in the past seven years.

Despite a pick-up in headline inflation, underlying inflationary pressure remained subdued. Headline CPI averaged 3.5 percent in 2017, up from 2.7 percent a year earlier, driven by higher fuel prices and state-administered price hikes. Underlying inflationary pressure was, however, weaker, with core CPI averaging 1.4 percent in 2017, down from 1.8 percent in 2016. Going forward, inflation is expected to remain within the government target of about 4 percent in 2018.

The overall BOP reported a large surplus in 2017, benefiting from strong export performance and increased foreign investment. Export growth recovered, led by Information Technology and Communication (ITC) products, sustaining current account surplus in 2017. Foreign investment inflows surged, partly related to several large M&A transactions during the year. Against this backdrop, the Vietnamese dong remained relatively stable and gross international reserves increased significantly in 2017, sufficient to cover about 2.8 months of imports of goods and services.

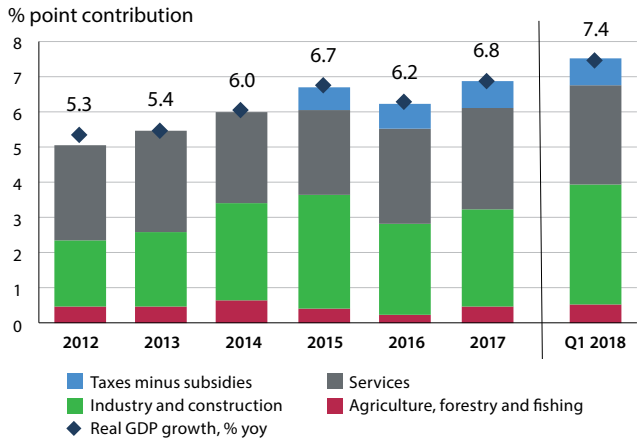
Monetary conditions continued to be supportive of economic activity. Credit grew at 19.1 percent, as at November 2017, compared to the target of 18 percent. While growth in mortgage loans and other personal consumption loans moderated, possibly in response to a tighter macroprudential measure introduced earlier; construction loans continued to increase robustly. The State Bank of Vietnam (SBV) lowered its refinancing and re-discounting rates by 25 basis points in July 2017, and cut its (reverse) repo rate, also known as the open market operation (OMO) rate in Vietnam, from 5 percent to 4.75 percent in January 2018, while setting a slightly lower credit growth target of 17 percent in 2018.

A number of institutional changes have been initiated to push the banking sector reform process, including the endorsement of a pilot NPL resolution scheme (Resolution 42) and a restructuring plan for credit institutions for 2016-2020. More banks reportedly bought back those NPLs which had been transferred earlier to the Vietnam Asset Management Corporation (VAMC) and wrote them down from their balance sheets in 2017. The VAMC has entered NPL resolution agreements with six commercial banks, using the enhanced framework of Resolution 42 to allow banks and VAMC to rapidly repossess collateral from default borrowers. Banks' capital adequacy ratios, however, have been relatively low and their asset quality is still constrained by legacy NPLs kept at the VAMC, which have come down recently but remained elevated at about 3 percent of total loans outstanding.

Fiscal consolidation continued in 2017. Fiscal position improved in 2016 on the back of an increase in land-based revenue and SOE equitization proceeds. Revenue collection in 2017 exceeded the budget plan, aided by buoyant tax revenue and continued strong land-based revenue. Budget expenditure moderated as current spending normalized from a high base in 2016, while capital spending increased in 2017. The overall fiscal deficit moderated from 5.6 percent of GDP in 2016 to about 3.5 percent in 2017, in line with the authorities' target. A number of structural measures to enhance tax revenue have been proposed by Vietnam's Ministry of Finance, as part of the implementation of the recently endorsed Five-year Fiscal Plan and Medium-Term Public Investment Plan for 2016-2020. On the back of improved fiscal position, public debt is estimated to have moderated to about 61.4 percent of GDP in 2017, after peaking at 63.6 percent in 2016.

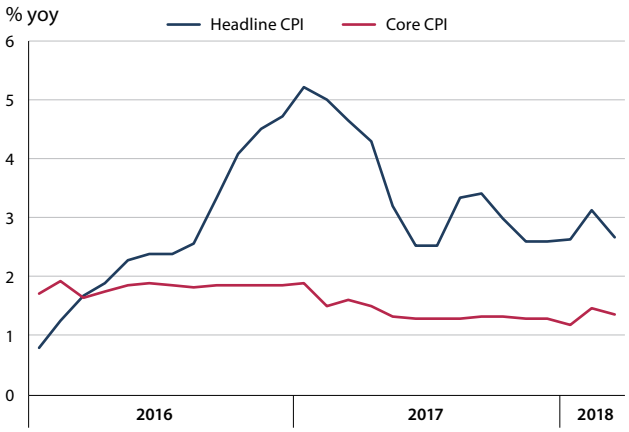
Vietnam: Selected Charts

Economic growth rebounded strongly in 2017 and gathered further momentum in early 2018.



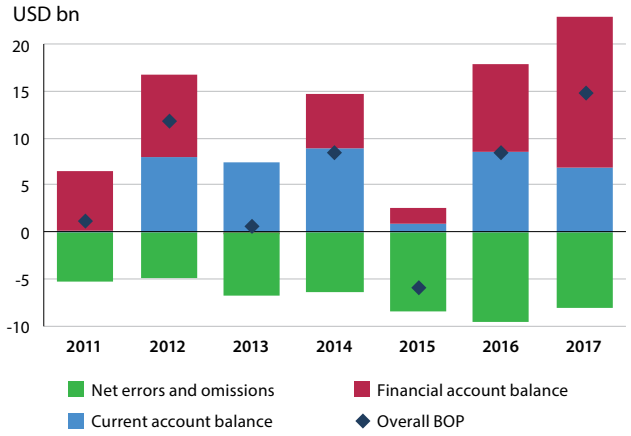
Source: General Statistics Office, CEIC, and AMRO Staff Calculations

Headline CPI inflation moderated in March 2018, after rising above 3 percent in February, and is expected to remain contained in 2018.



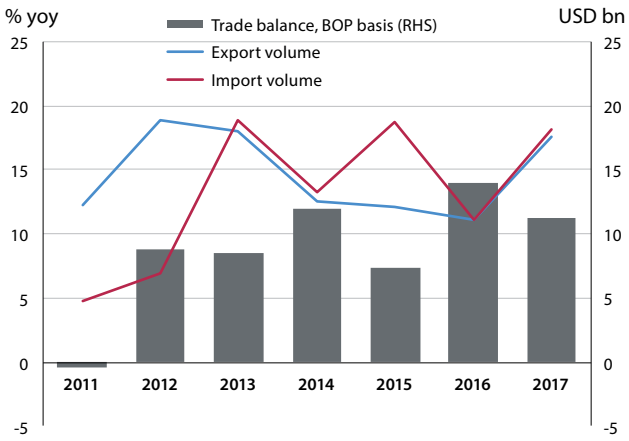
Source: General Statistics Office, CEIC, and AMRO Staff Calculations

The overall BOP saw a large surplus in 2017, benefiting from strong exports and increased foreign investment.



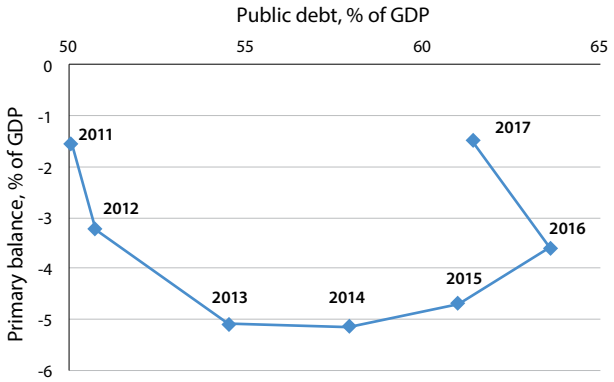
Note: Data for 2017 are AMRO staff estimates.
Source: State Bank of Vietnam (SBV), IMF, AMRO staff calculations

Export growth rebounded, led by rising Information technology and communication exports.



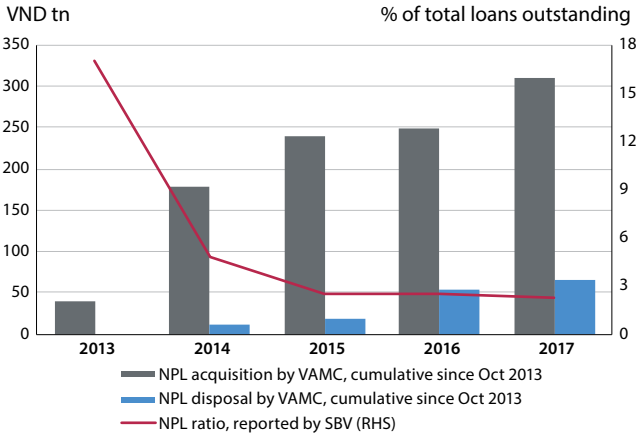
Source: General Statistics Office, SBV, IMF, AMRO staff calculations

Public debt moderated on the back of further fiscal consolidation in 2017.



Sources: Ministry of Finance, AMRO staff calculations

Several banks reportedly stepped up the resolution of legacy NPLs, but unresolved NPLs at the VAMC remain elevated.



Sources: SBV, VAMC, CEIC, AMRO staff calculations

Vietnam: Selected Economic Indicators

	2014	2015	2016	2017
Real Sector and Prices		(in annual percentage change)		
Real GDP	6.0	6.7	6.2	6.8
GDP deflator	3.7	-0.2	1.1	4.1
Consumer price inflation (average)	4.1	0.6	2.7	3.5
Consumer price inflation (end of period)	1.9	0.6	4.7	2.6
External Sector		(in billions of USD)		
Trade balance	11.9	7.4	14.0	11.3
Current account balance	8.9	0.9	8.5	6.8
In percent of GDP	4.8	0.5	4.2	3.1
Overall balance	8.4	-6.0	8.4	14.8
Gross international reserves				
In months of imports of goods & services	2.7	2.0	2.4	2.8
Coverage of short-term debt by remaining maturity	2.3	1.9	2.1	2.8
		(in annual percentage change)		
Export volume	12.5	12.1	11.1	17.6
Export unit value (in USD terms)	1.1	-3.8	-1.8	2.9
Import volume	13.3	18.8	11.1	18.2
Import unit value (in USD terms)	-1.1	-5.8	-5.3	2.6
Terms of trade	0.6	2.1	2.7	0.3
Fiscal Sector (General Government)		(in percent of GDP)		
Revenue and grants	22.3	23.8	24.5	24.8
Expenditure	28.6	30.3	30.1	28.2
Expense	20.1	20.8	22.8	20.3
Net acquisition of non-financial assets	8.5	9.5	7.3	7.8
Net lending/borrowing	-6.9	-6.7	-5.6	-3.5
Primary net lending/borrowing	-5.1	-4.7	-3.6	-1.5
Monetary and Financial Sector		(in annual percentage change)		
Domestic credit	15.4	20.2	17.2	17.1
General government	29.6	29.9	6.3	8.2
Other	13.8	18.8	18.8	18.2
Broad money	19.7	14.9	17.9	20.7
Memorandum Items				
Exchange rate (VND per USD, period average)	21,148	21,698	21,932	22,370
Exchange rate (VND per USD, end of period)	21,246	21,890	22,159	22,580
Nominal GDP (in billions of USD)	186.2	193.2	205.3	223.9
Nominal GDP (in trillions of VND)	3,938	4,193	4,503	5,008

Note: BOP and monetary sector data for 2017 are AMRO staff estimates. General government data are calculated by AMRO staff using Ministry of Finance of Vietnam's final account data for 2013-2015 and estimate data for 2016-2017.
Source: National Authorities, IMF, World Bank, CEIC, AMRO staff calculations

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