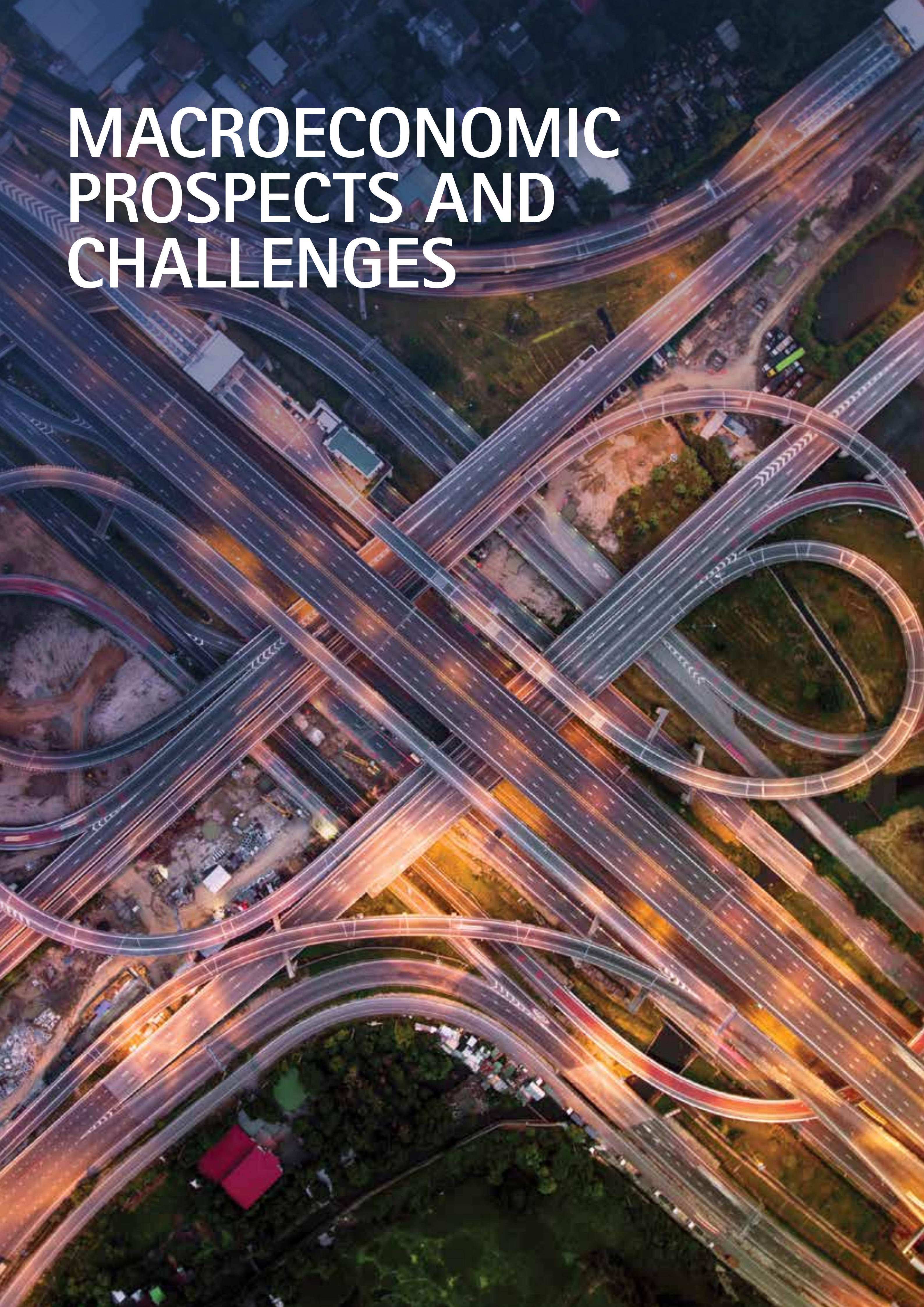
MACROECONOMIC PROSPECTS AND CHALLENGES

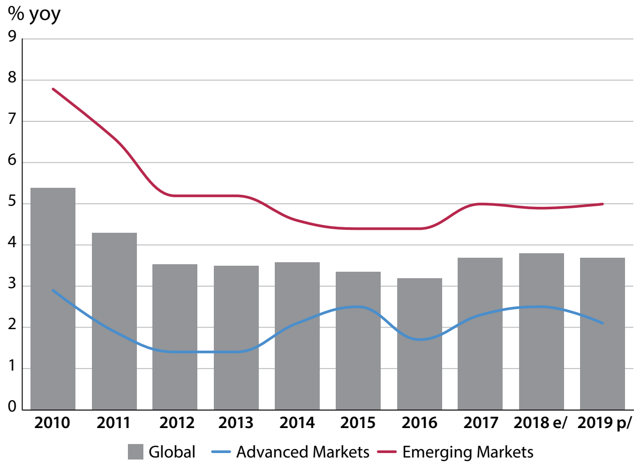


1 Global Settings and Spillovers to Regional Economies

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.

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

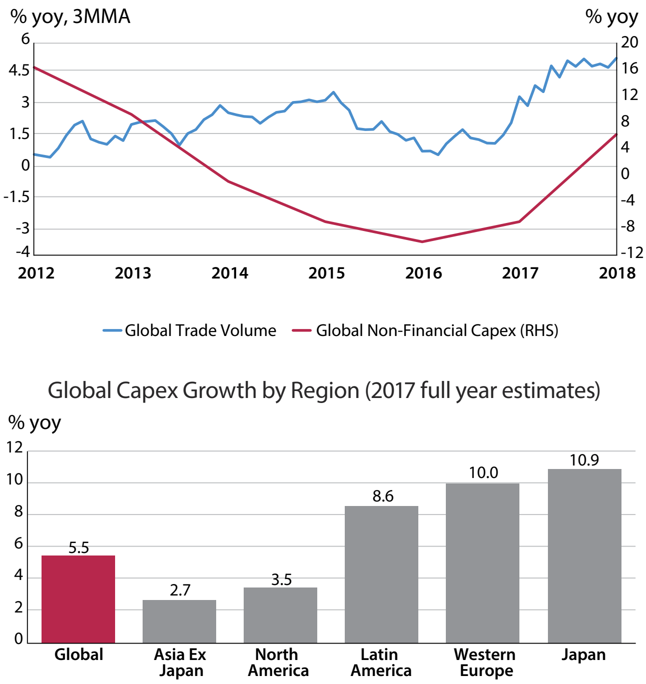


Note: e/ Estimates and p/ Projections
Source: Bloomberg Consensus Forecasts

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



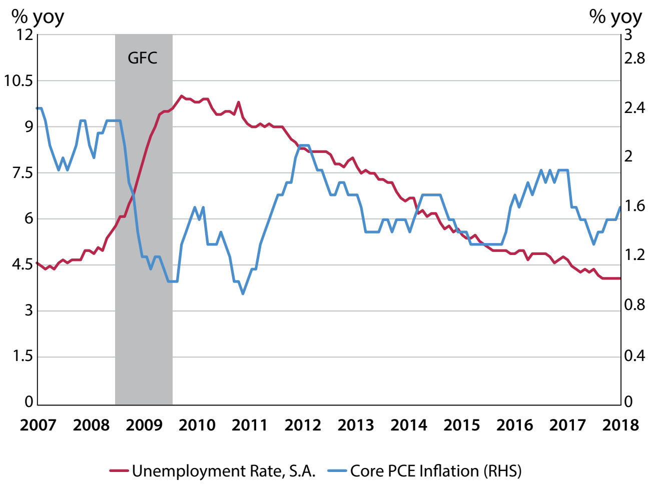
Sources: CPB Netherlands Bureau of Economic Policy Analysis, S&P Global

[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.

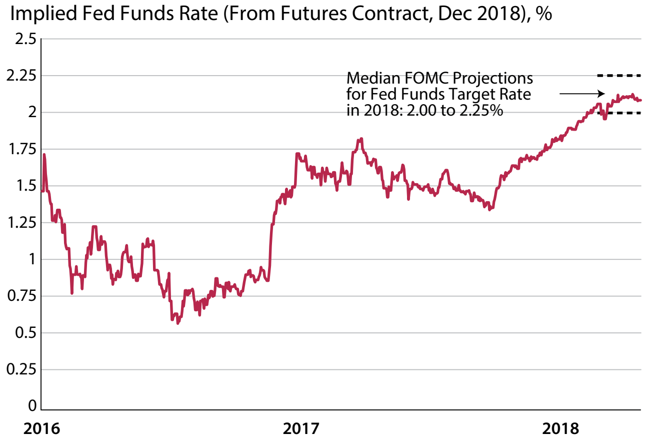
4 In contrast to the Eurozone, the U.K. economy has slowed on Brexit uncertainty. The real income shock from the depreciation of the pound has translated into a pullback in household spending (Figure 1.6) and cooling business activities due to higher cost pressures. Core CPI inflation in the U.K. remains 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



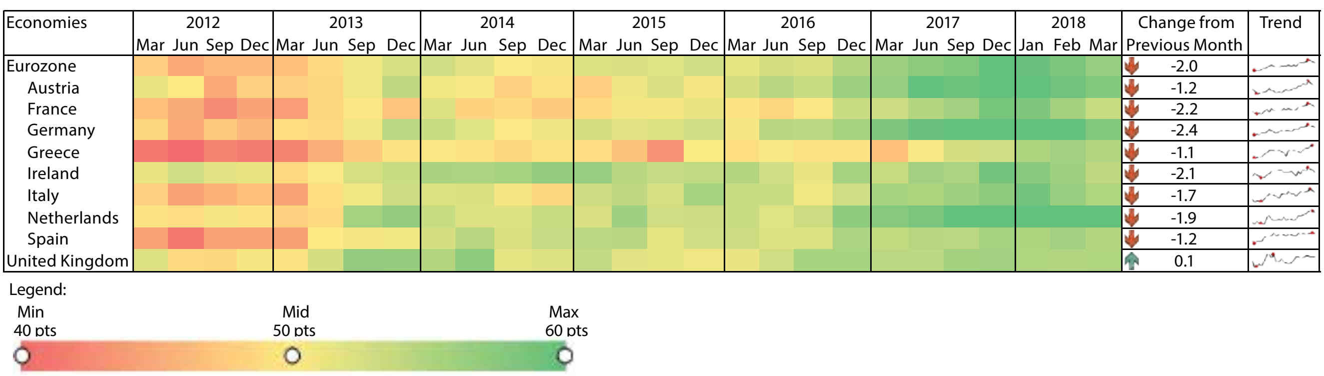
Note: The shaded area highlights GFC period.
Source: U.S. Bureau of Economic Analysis

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



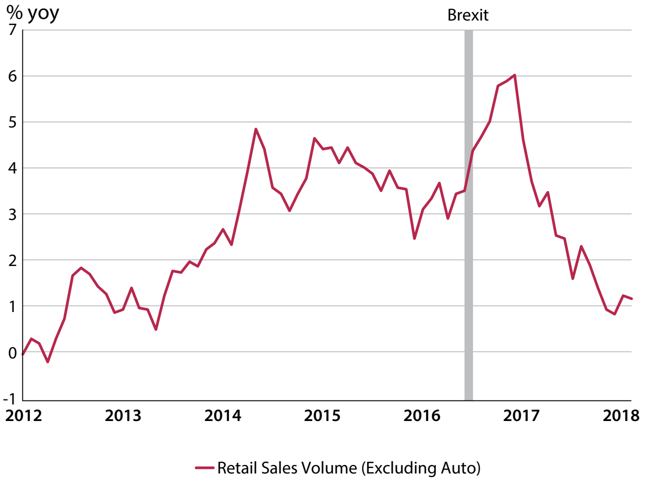
Source: Markit

[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.

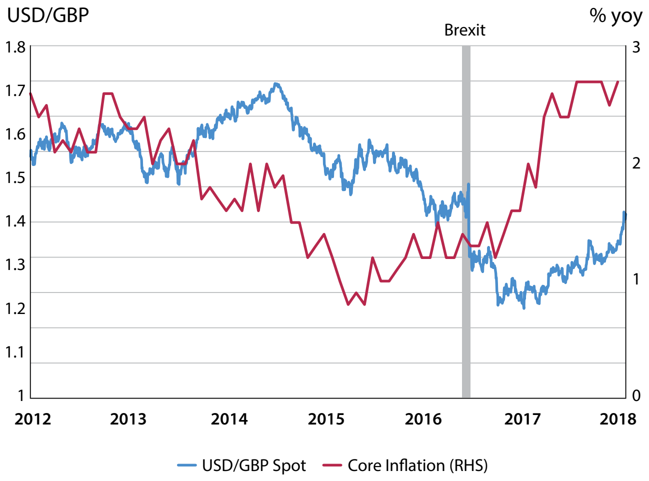
[5] On 2 November 2017, the Bank of England raised interest rates for the first time in more than 10 years, hiking the benchmark rate to 0.50 percent (from 0.25 percent).

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

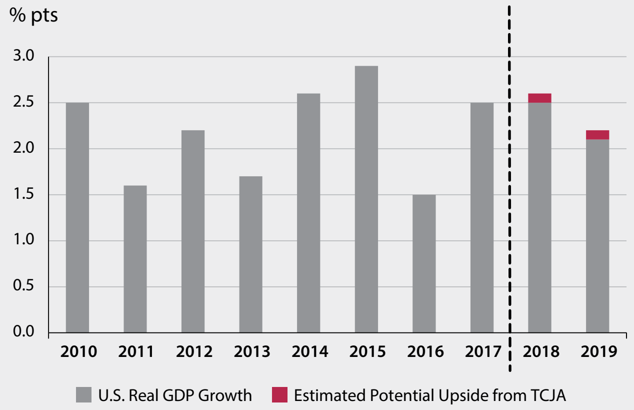
The TCJA is not revenue-neutral and is projected to increase the U.S. budget deficit by USD1.46 trillion cumulatively in the first ten years (2018-27). Thereafter, the rise in budget deficit will taper off as personal income tax cuts expire (Figure A2). This increase in the budget deficit may be ameliorated 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.

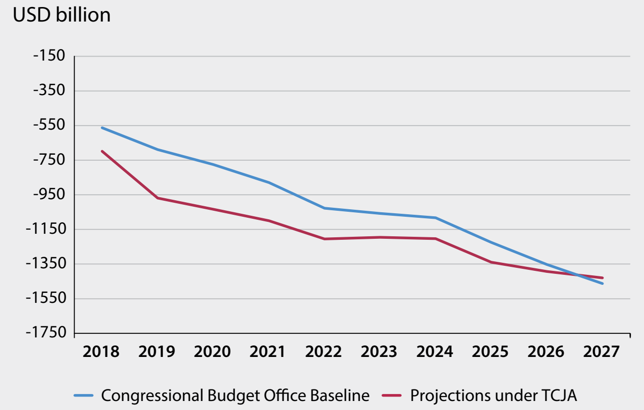
[6] This Box first appeared as a feature article in AMRO's Monthly Update of the ASEAN+3 Regional Economic Outlook (AREO), February 2018.

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



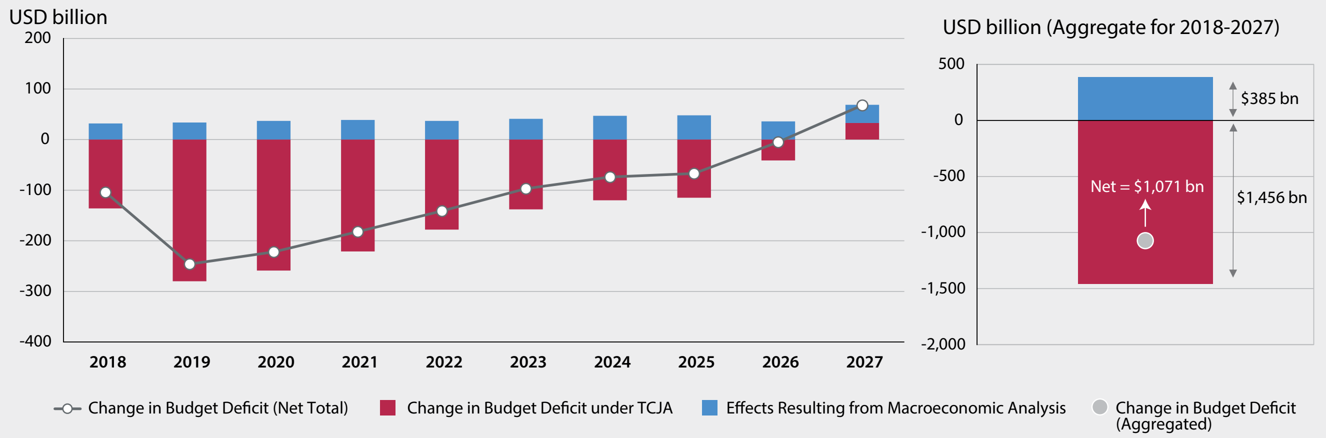
Source: Bloomberg

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



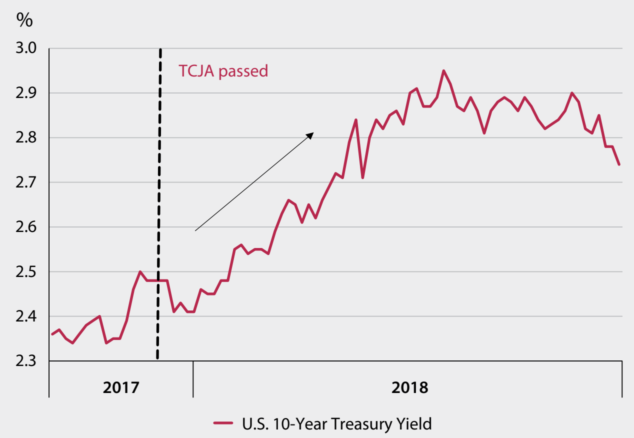
Sources: Congressional Budget Office, Joint Committee on Taxation

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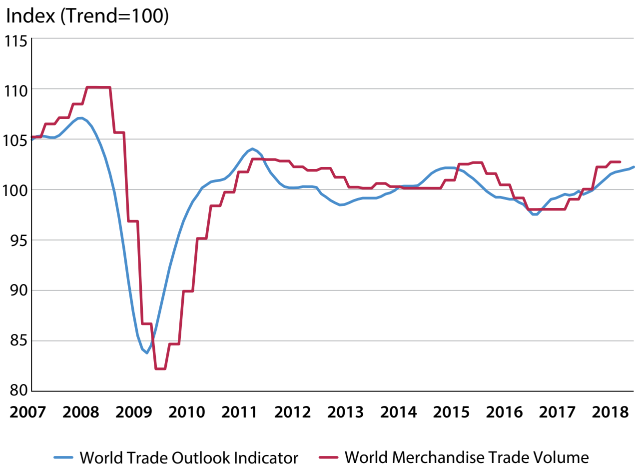
7 The TCJA imposes a 15.5 percent tax on cash and liquid assets accumulated abroad between December 1986 and December 2017 and an 8 percent tax on income reinvested abroad over the same period. Based on estimates by the Joint Committee on Taxation, the one-time impact could cost U.S. MNCs USD 339 billion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

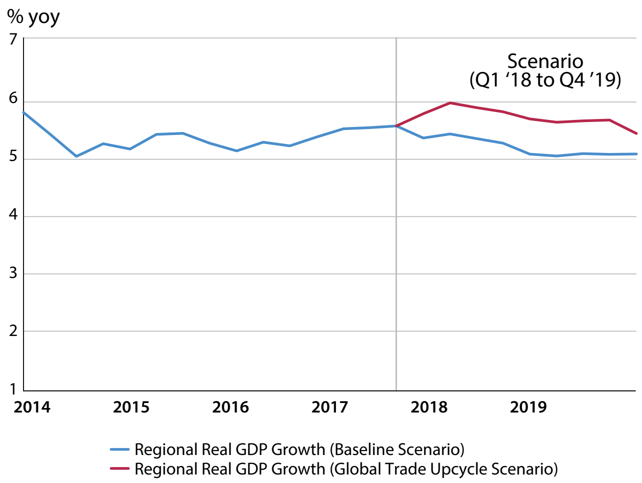
6 Commodity prices, such as energy and industrial metals, though not agriculture, have recovered this year. In the energy market, OPEC production cuts have supported global oil prices since early this year (Figure 1.10). However, fundamental oil demand and supply projections by the U.S. Energy Information 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



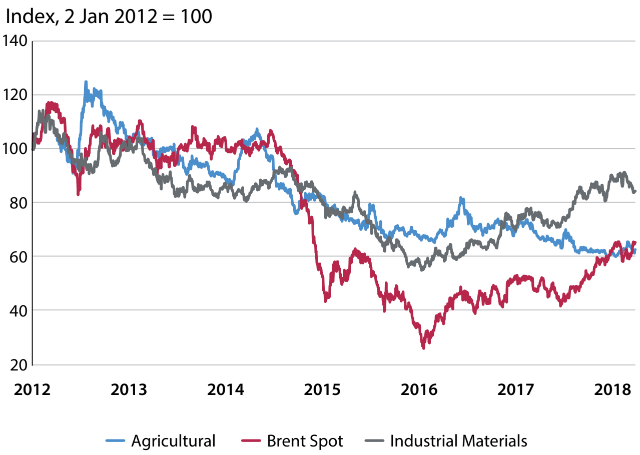
Notes: Readings of 100 indicate growth in line with medium-term trends; readings greater than 100 suggest above trend growth, while those below 100 indicate the reverse. The direction of change reflects momentum compared to the previous month. The chart compares historical values of the WTOI to actual 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



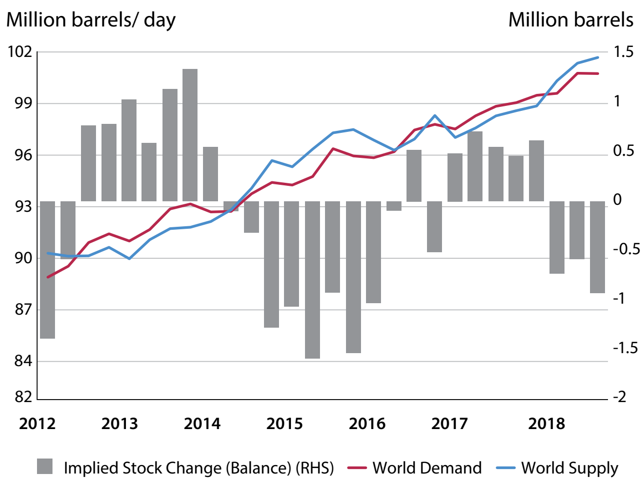
Note: The global trade upcyle scenario assumes an average global trade growth of 5 percent in 2018 and 2019 (AMRO's baseline average: +4 percent), which underscores the continued resurgent growth in global trade seen in H1 2017. Estimates start from Q4 2017. The baseline scenario assumes an average global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



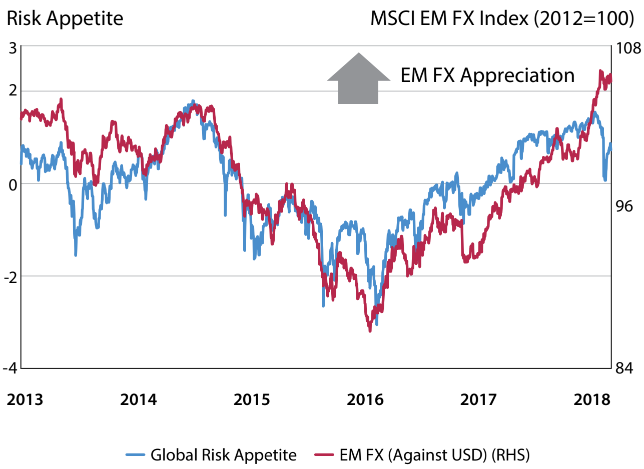
Source: EIA

[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.

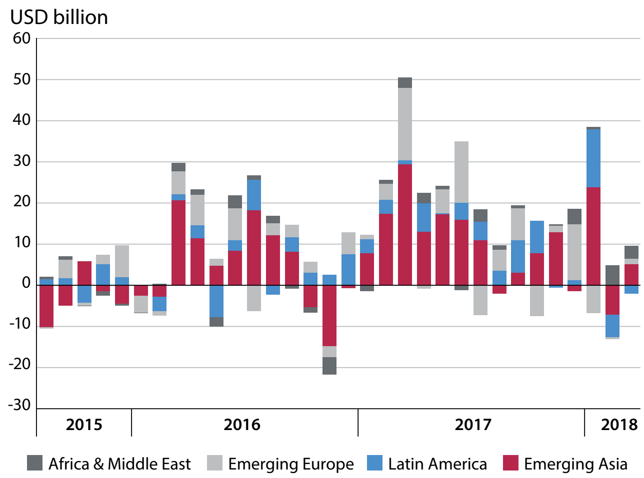
8 The impact of faster-than-expected global interest rate hikes on EM bond markets, which has seen large inflows, should be watched. Figure 1.14(b) shows that, unlike equities, global investors have been overweight in EM debt securities, with these securities accounting for 12 percent of global bond 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

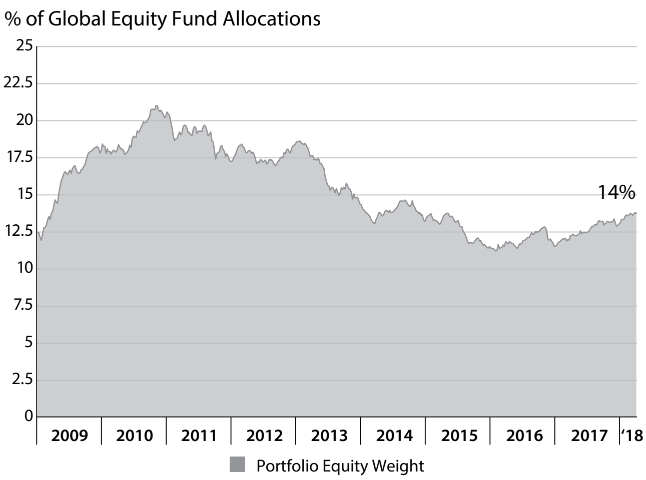
Figure 1.13 Portfolio capital inflows have continued into emerging markets



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

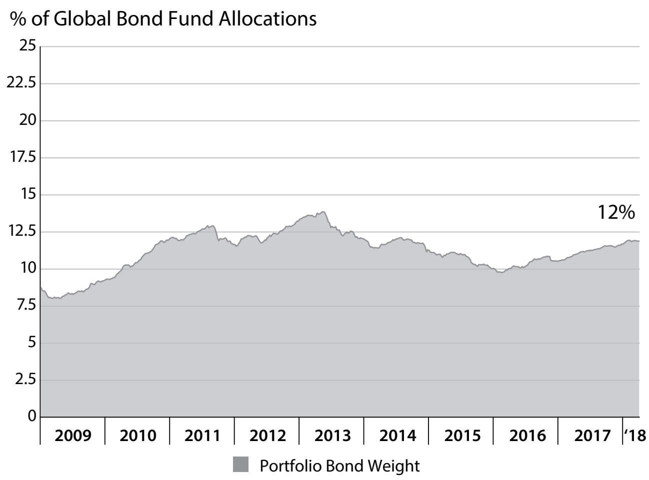
Figure 1.14 Global investors continue to be overweight in EM debt securities

(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.

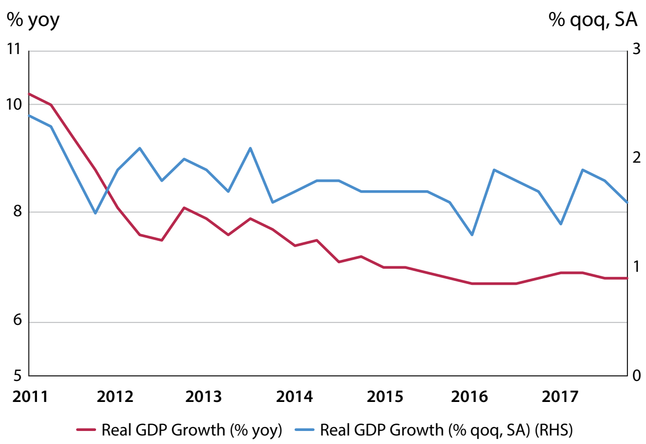
9 China's economic growth is driven by broad-based growth in consumption, investment and exports. Real GDP grew at 6.9 percent in 2017 (Figure 1.15), mainly driven by the expansion in private consumption and infrastructure investment, with added impetus from exports. Growth in private investment bottomed 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.

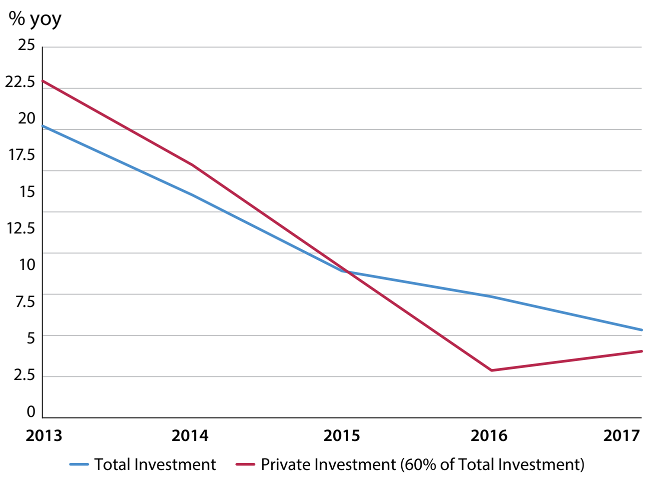
12 While China's economy continues to undergo structural reform, the likelihood of a sharp dip in growth (hard landing) in the process is low in the short term. Risks in the real estate, corporate and financial sectors have been mitigated by policy measures. Policy measures curbing speculation have helped 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



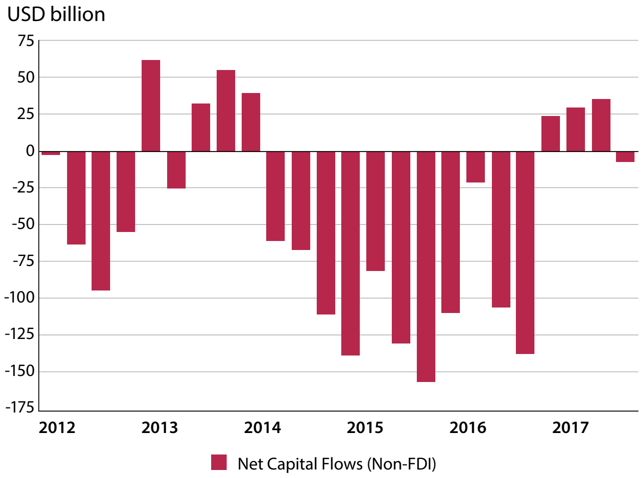
Source: China National Bureau of Statistics

Figure 1.16 Private investment growth picked up in 2017



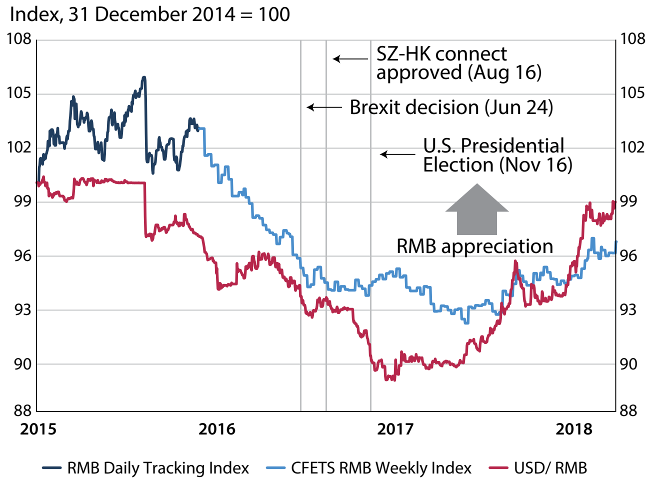
Source: China National Bureau of Statistics

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



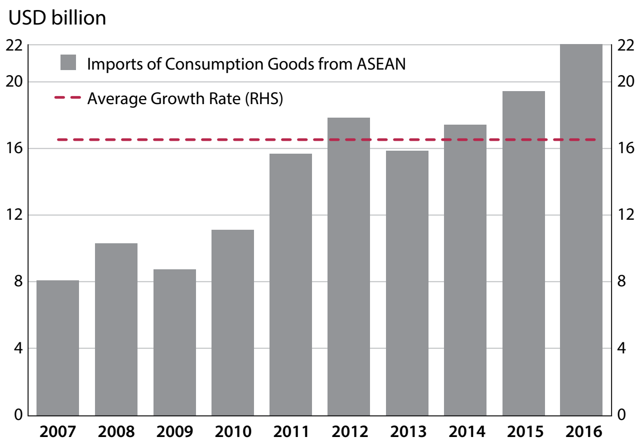
Note: For USD/RMB, an increase refers to RMB appreciation. The shaded areas represent U.K. referendum in June 2016, the approval of Shenzhen-Hong Kong Connect in August 2016 and the U.S. president election in November 2016.
Source: People's Bank of China

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.

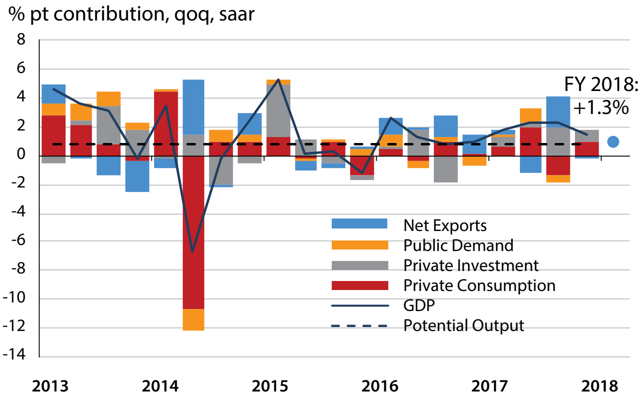
15 In Japan, economic growth has continued to be robust, well above its potential growth rate, supported by sustained domestic demand and strong external demand (Figure 1.21).[13] The latest Tankan survey in Q3 2017 shows that Japanese manufacturers have more confidence in Japan's business conditions 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.

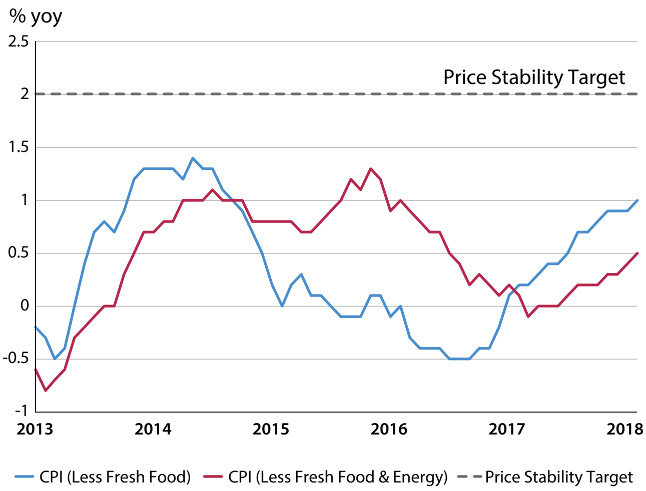
[13] Japan's potential growth is estimated at 0.7 to 0.9 percent.
[14] Japan's fiscal year is from April to March.

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



Source: Japan Cabinet Office

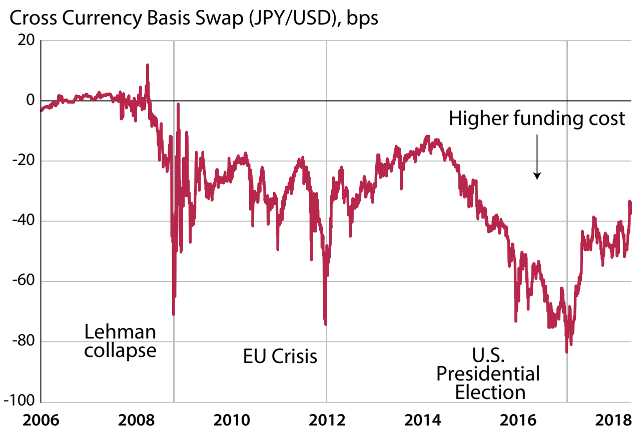
Figure 1.22 CPI remains sluggish in Japan



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

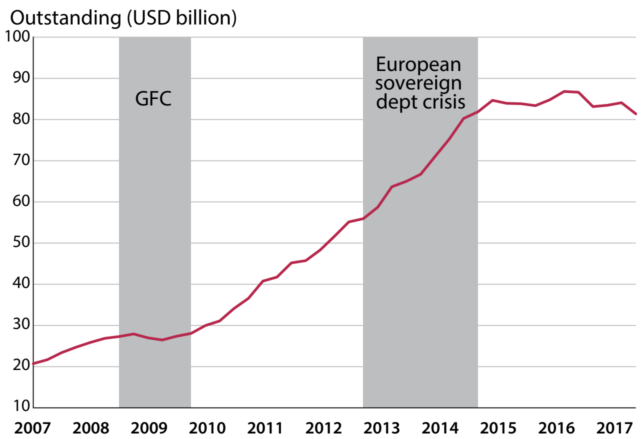
18 Japanese banks continue to be major lenders to the region. Easing USD funding and hedging costs have capped USD funding costs for Japanese banks, thereby supporting their USD lending to the region. USD funding costs, measured by cross currency basis swap points,[15] have come off from their peak in 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)

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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.

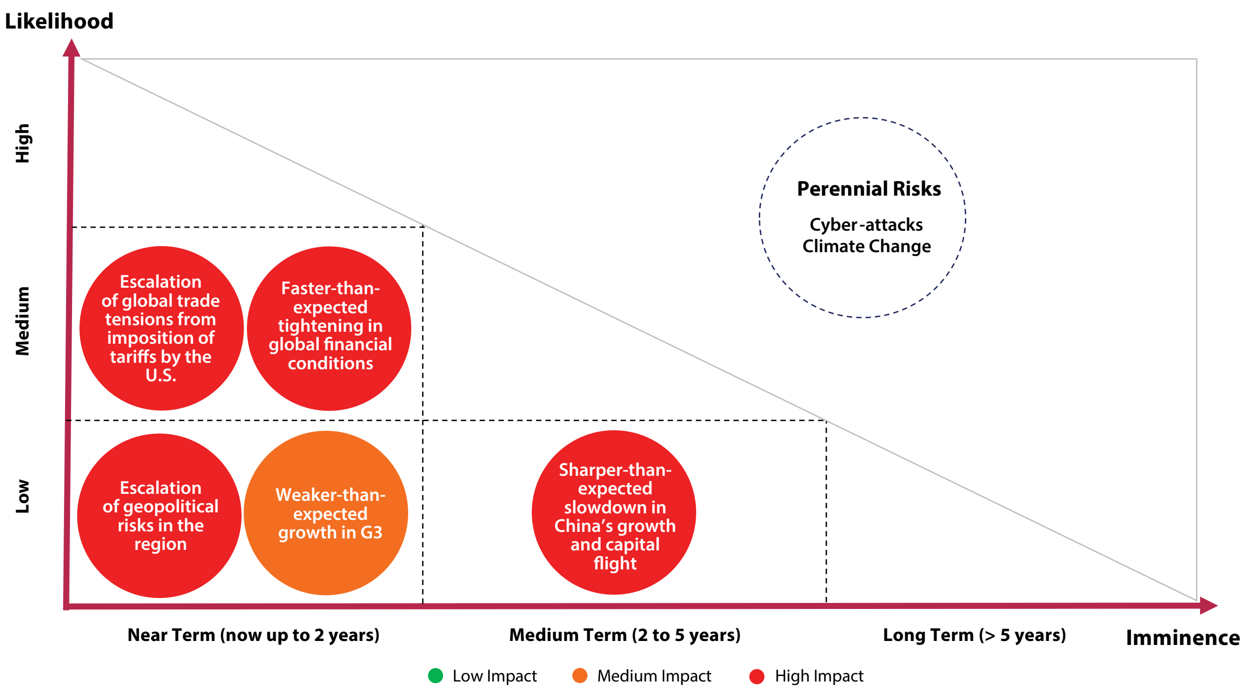
19 The main risks the ASEAN+3 region faces are external, with two main near-term risks being a faster-than-expected tightening in global financial conditions and an escalation of global trade tensions from more U.S. trade protectionist actions (Figure 1.25). The near term risks could be mutually reinforcing, 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

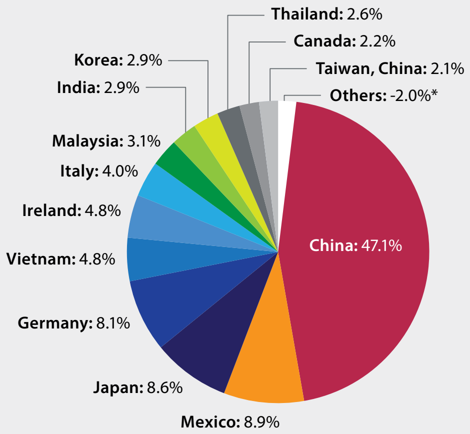
The world's two largest economies have a close, symbiotic trade relationship from which both, as well as the rest of the world, have benefitted significantly but these gains are at risk of being derailed. In January, the U.S. Administration – concerned over the large trade deficit with its main partners – 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:

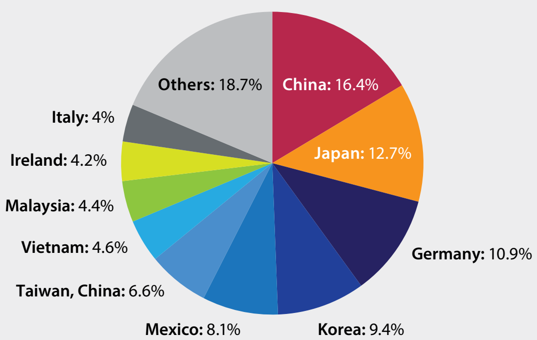
- *The rise of trade in value-added goods*. The U.S. goods trade with China reflects, in part, the goods trade within the Asian supply chain that is centered on China as the final processing hub (see thematic chapter). Previous market estimates suggest that China imports substantial amounts of raw and 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).

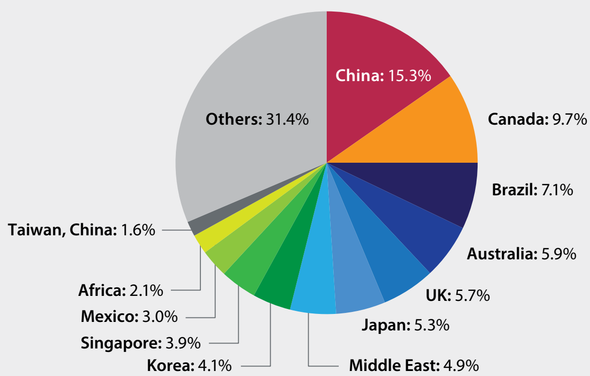
Not surprisingly, the introduction of uncertainty to the outlook fuelled risk aversion in markets. This potential manifestation of one of the key risks to growth – trade protectionism – identified in AMRO's Global Risk Map (Figure 1.25), spurred investors to sell down their holdings. Since late-January, 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

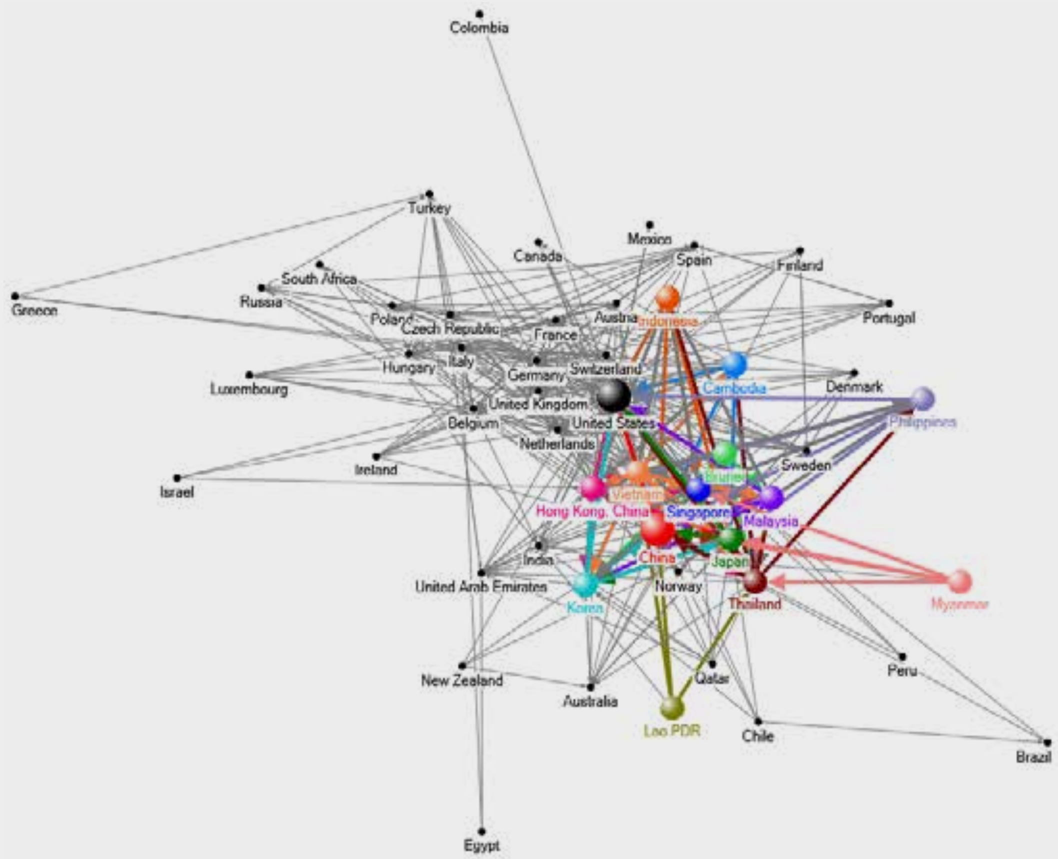


Source: U.S. Census Bureau

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.

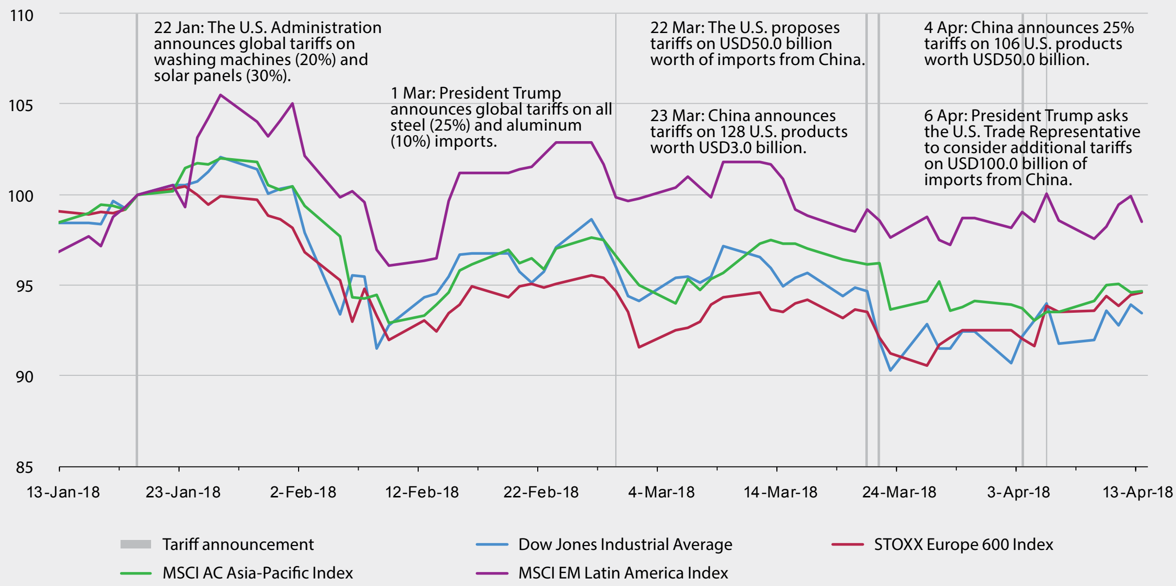
19 The Economist. (2017, January). *Peter Navarro is about to Become One of the World's Most Powerful Economists.*

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.

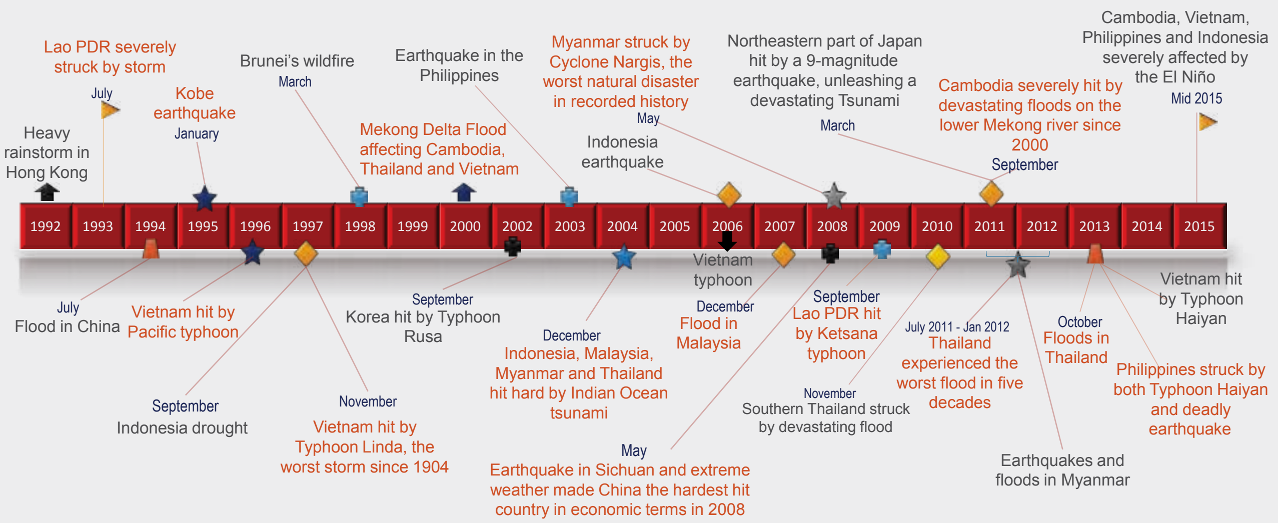
Natural Disasters and Climate Change in ASEAN+3 Region: Impact and Risk

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.

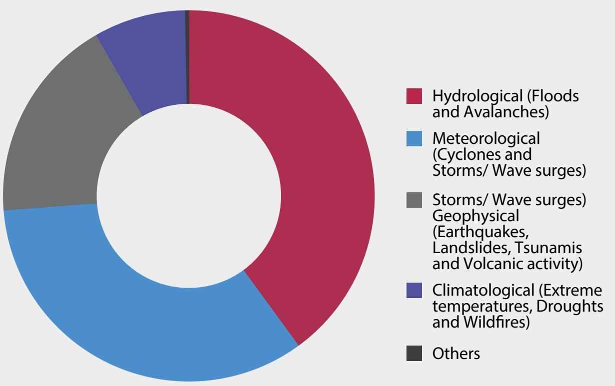
While natural disasters may cause more severe and lasting damage to agriculture-based and lower-income economies

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

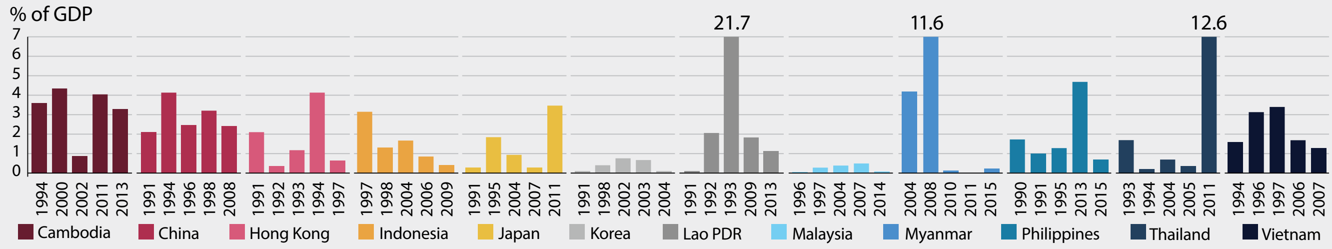
Figure C2. Share of Total Damage in the ASEAN+3 Region, by Types of Disaster (%) during 1990-2016



Source: United Nations ESCAP

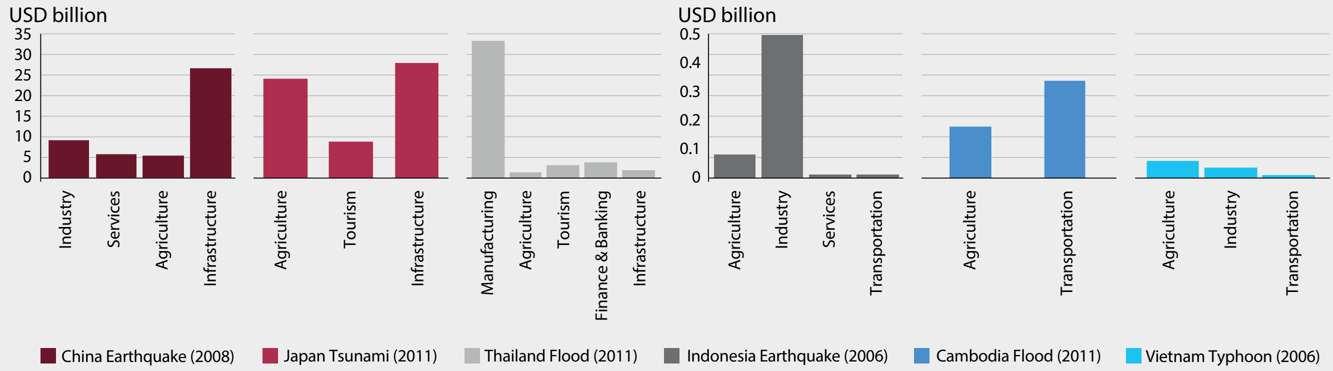
in the region, no economy is immune from the impact of these disasters. In Lao PDR and Myanmar, economic damages from a single natural catastrophe have exceeded 10 percent of GDP in the year of occurrence. This was also the case in Thailand, with damages from the floods in 2011 – the worst flood in its 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 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

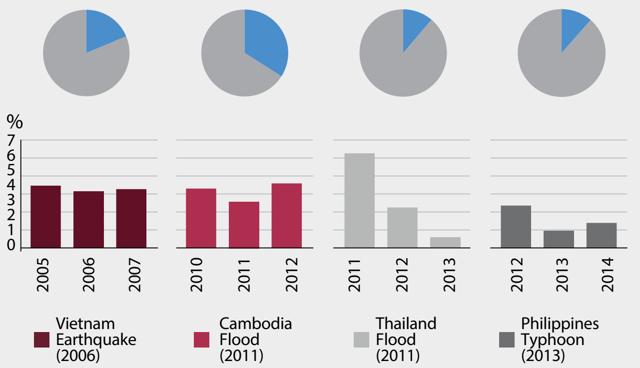
[23] World Bank. (2012). Thai Flood 2011: Rapid assessment for resilient recovery and reconstruction planning.

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.

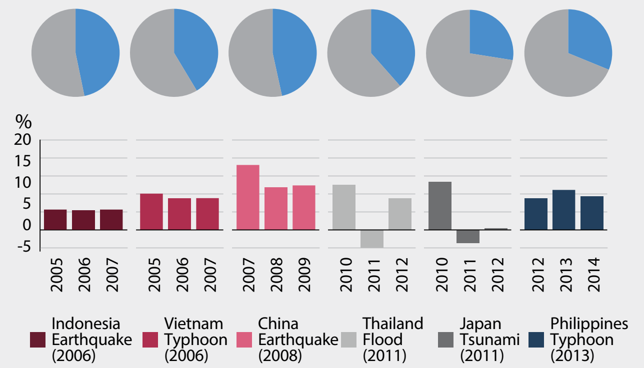
In industrial strategies, environmental sustainability should also be an important criterion, and this may require regional cross-border cooperation. To achieve sustainable economic growth, the region should strike a balance between growth and environmental sustainability, particularly through continued 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)



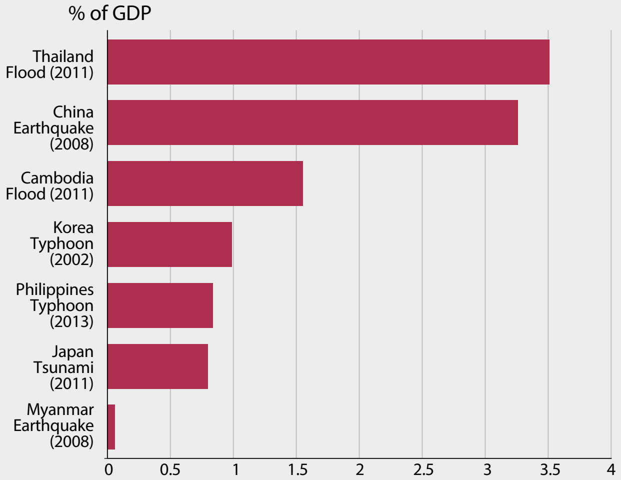
Note: Pie charts represent average share of agriculture sector of GDP.
Source: National Authorities, World Bank

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



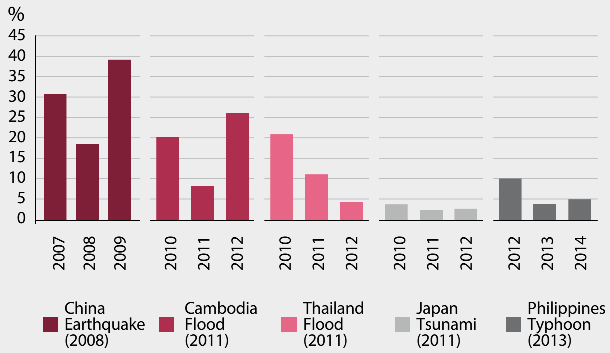
Note: Pie charts represent average share of industry sector of GDP.
Sources: National Authorities, World Bank

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

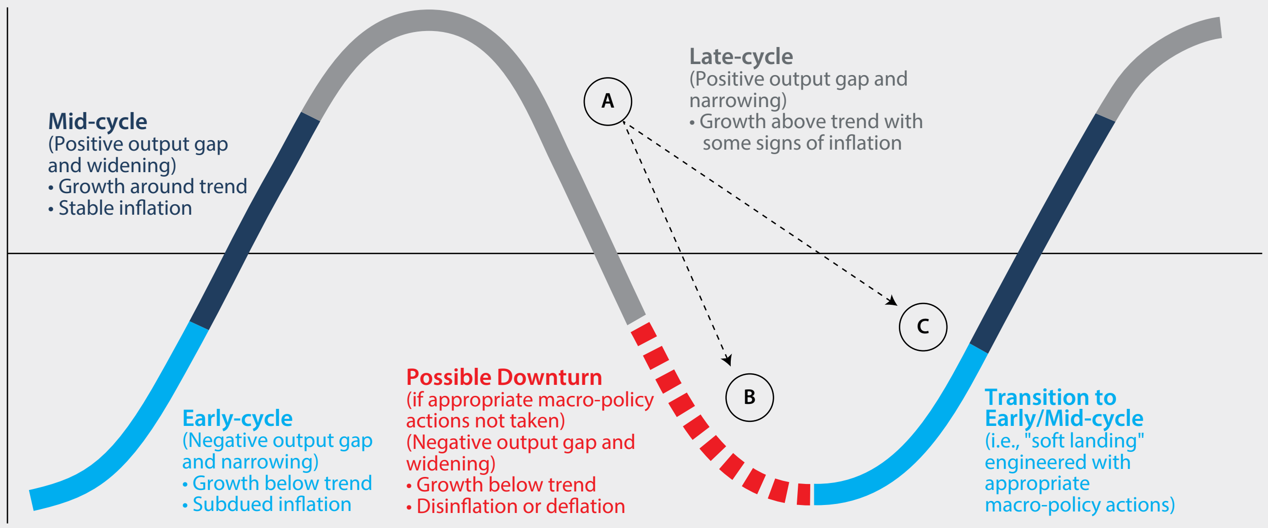
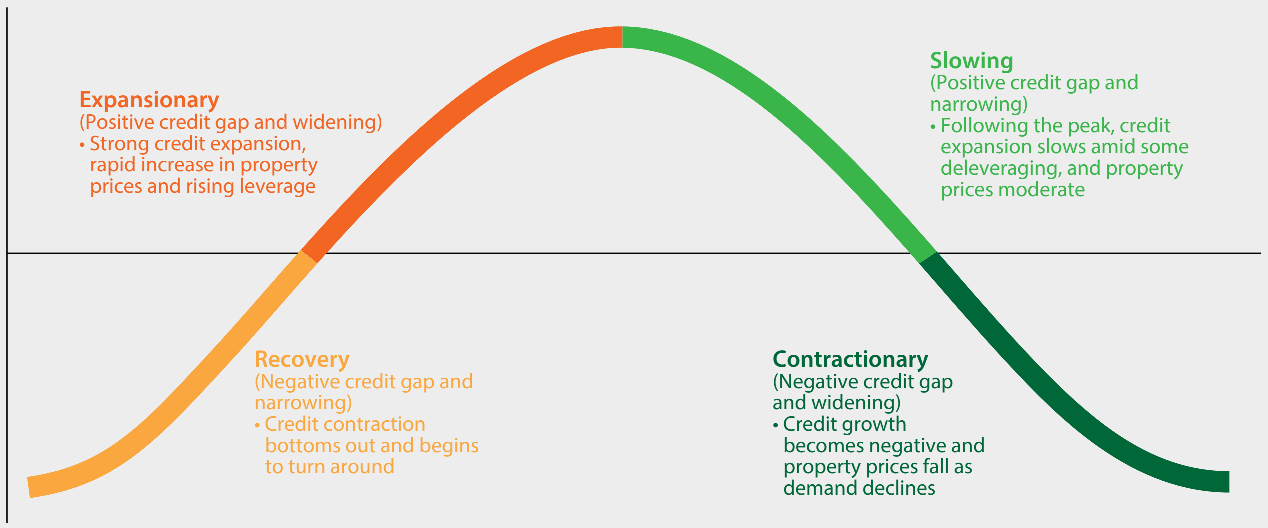


Figure D2. Stylized Credit Cycle



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

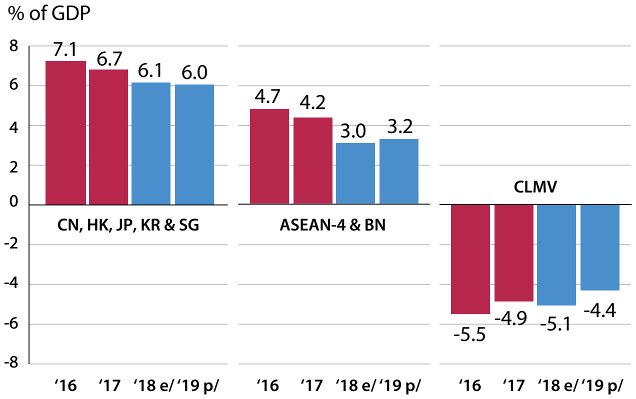
		Credit Cycle			
		Recovery	Expansionary	Slowing	Contractionary
Business Cycle	Early	Brunei Indonesia		Myanmar	
	Mid	Thailand	Hong Kong Vietnam	Cambodia China Korea Lao PDR Malaysia Singapore	
	Late			Japan The Philippines	
	Downturn				

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.

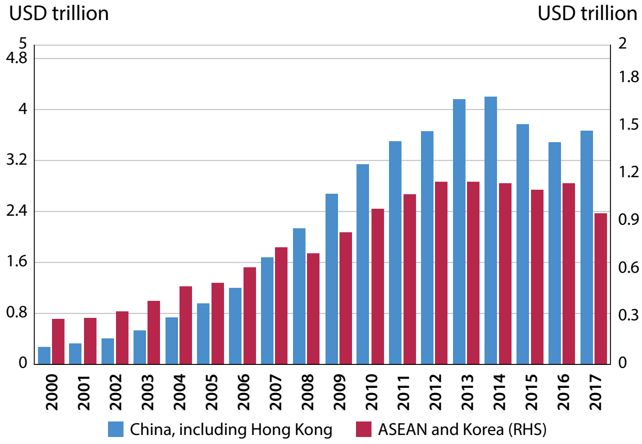
27 The key near-term uncertainty stems from trade protectionism as pointed out in the Global Risk Map, which could weigh on export outlook in the period ahead. As mentioned earlier, due to stronger exports, growth in some regional economies has gained traction. The lift to exports was boosted by the 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



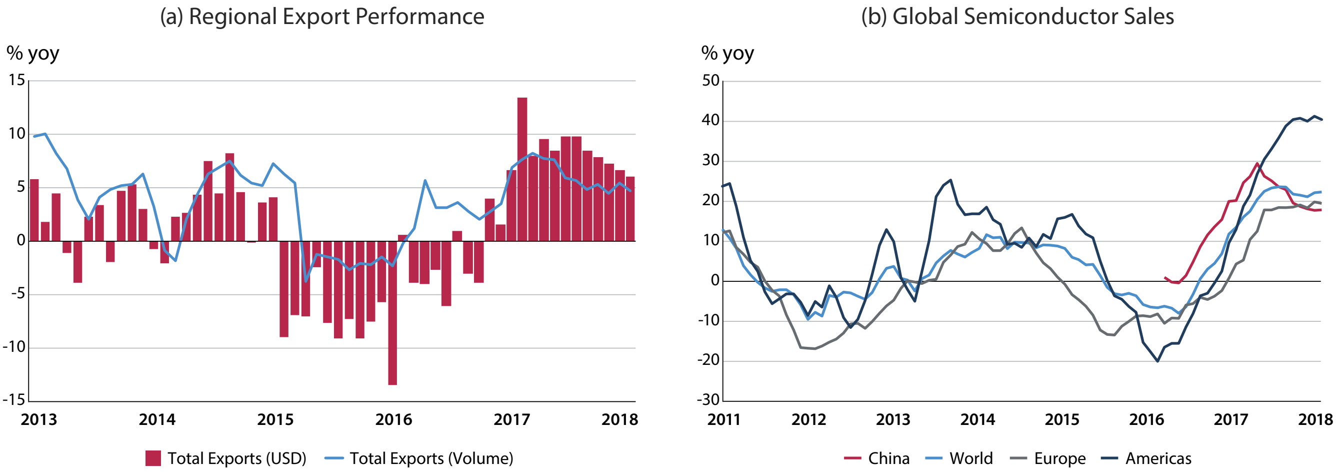
Note: e/ Estimates and p/ Projections
Sources: National Authorities, AMRO staff estimates

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



Sources: National Authorities, AMRO staff calculations

Source: Semiconductor Industry Association

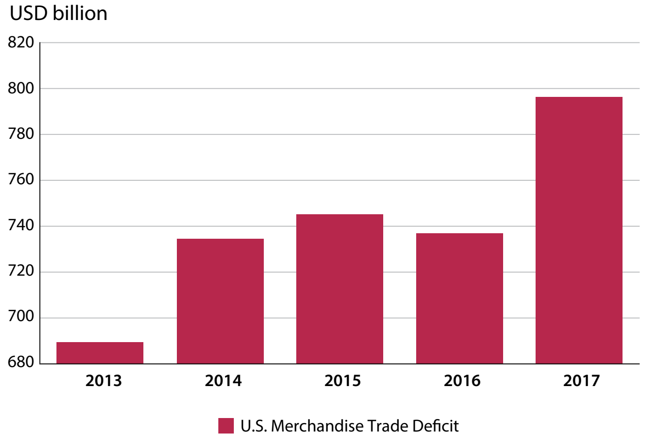
28 A firmer U.S. trade protectionist stance and escalating trade tension could derail the global trade recovery. Although the U.S. has started to impose punitive tariffs on several products (solar panels, washing machines, steel, and aluminum), its impact on the region has been relatively mild so far 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.

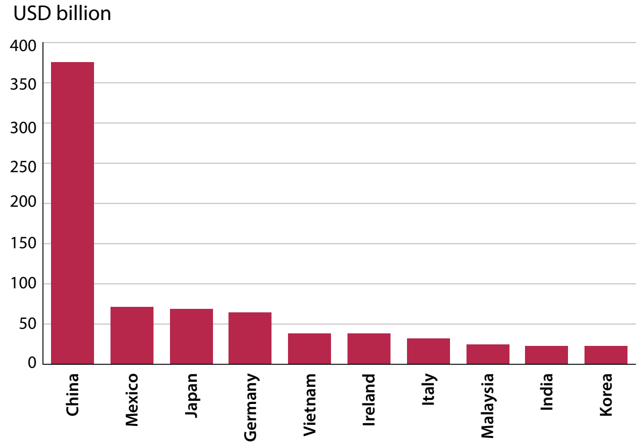
[32] Previous attempts to curb imports – country-specific antidumping and countervailing duties, failed to address the surge in imports as foreign manufacturers continuously relocated production from one country to another, thereby circumventing the import duties.

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

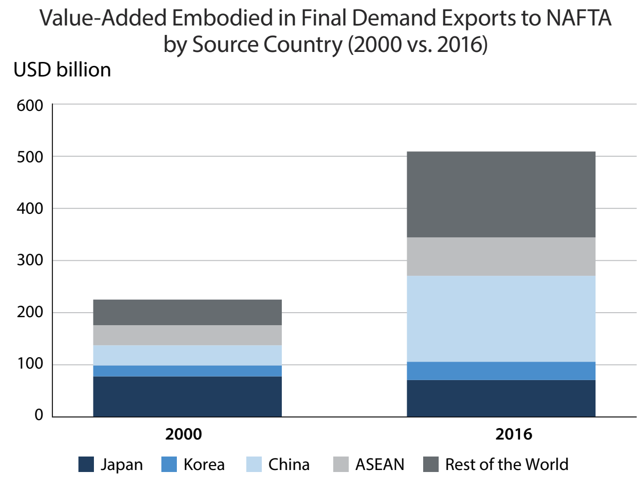
(such as Korea and China) are among the key players, there could be some real repercussions, such as on the employment front. Likewise, the tariffs on steel and aluminum imports by the U.S. is also expected to affect a broad range of countries, including some in the region (Figure 2.6). On NAFTA, a U.S. 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

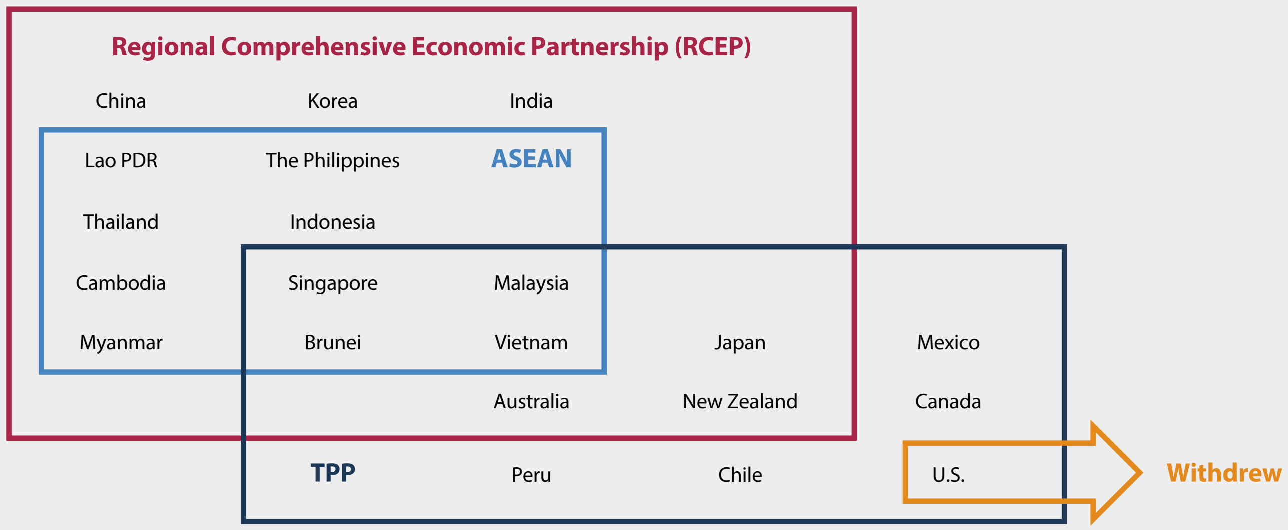
Prompted by the withdrawal of the U.S. from the Trans-Pacific Partnership (TPP) in November 2017, the other remaining 11 TPP members agreed to push ahead on a modified version[33] of the original TPP to bring the agreement into force. Although the withdrawal of the U.S. from the TPP is a major setback 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)

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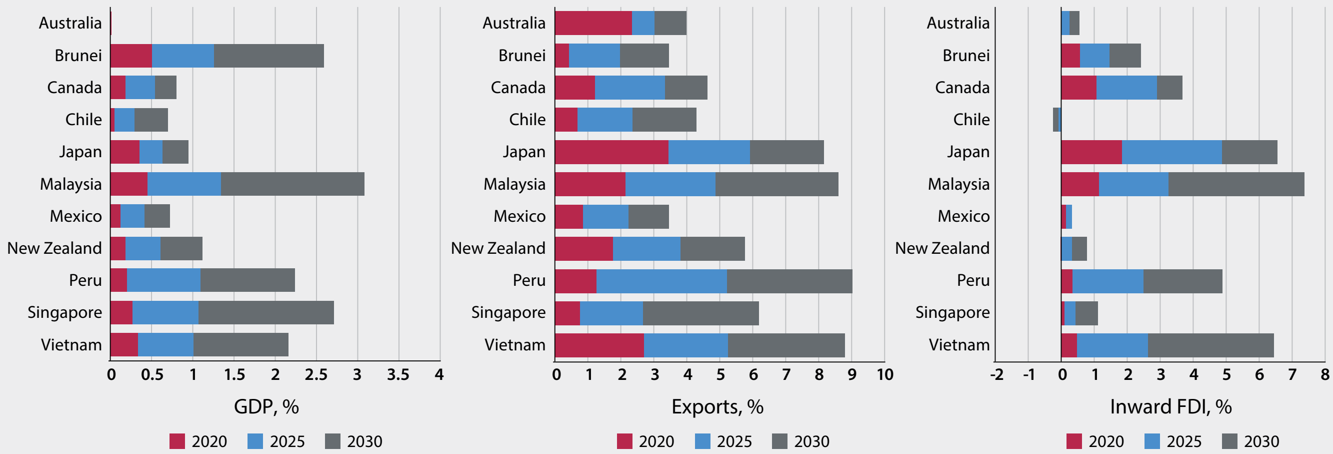
33 While most of the original TPP text remains unchanged, and all of the parties' commitments relating to liberalized trade in goods, services, procurement and investment remain intact, 20 TPP items are "suspended" in the CPTPP to reflect the concerns of the remaining member countries. These provisions 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

Cumulative GDP, Exports and Inward FDI Growth Above Baseline (2020, 2025, 2030), %



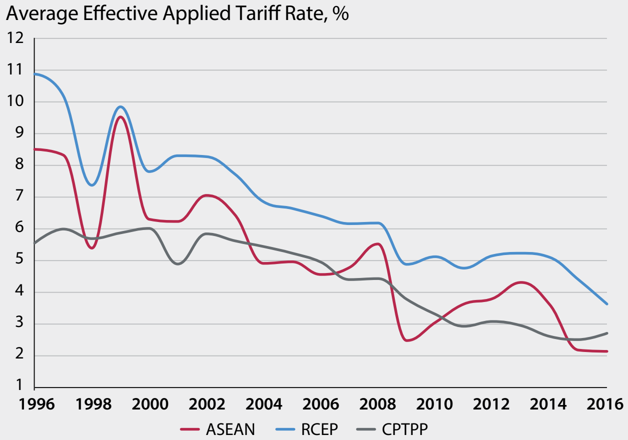
Sources: Petri, P. A., Plummer, M. G., Urata, S., & Zhai, F. (2017). Going It Alone in the Asia-Pacific: Regional Trade Agreements Without the United States.

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

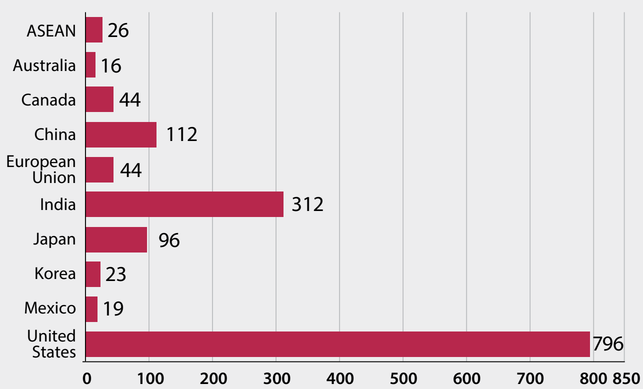
Average Effective Applied Tariff Rate, %



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.

Cumulative Number of New NTBs (2009-2017)

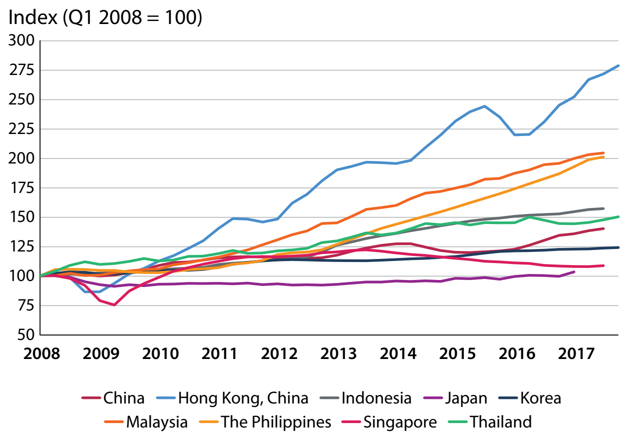


Source: Global Trade Alert Database

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.

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



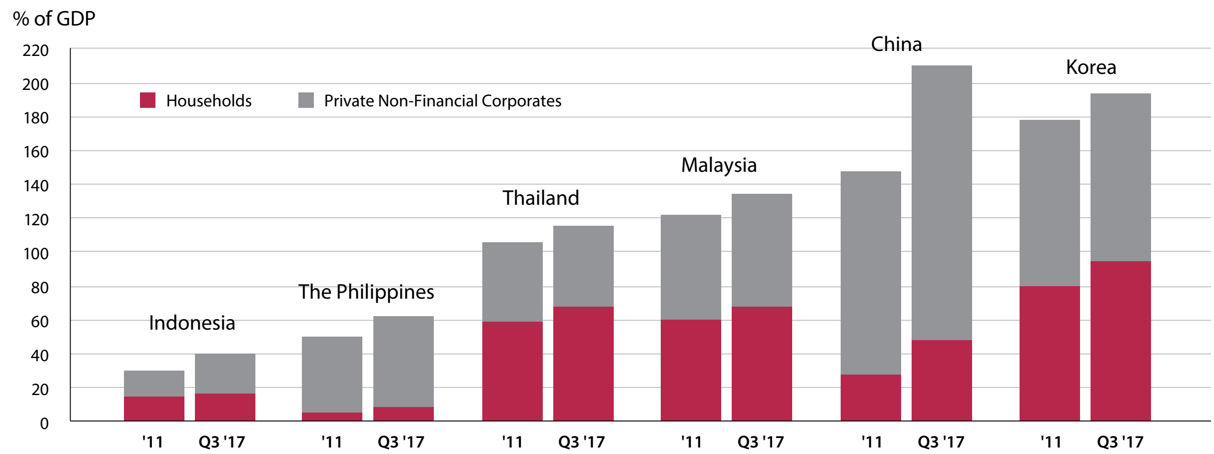
Source: BIS

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.

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.

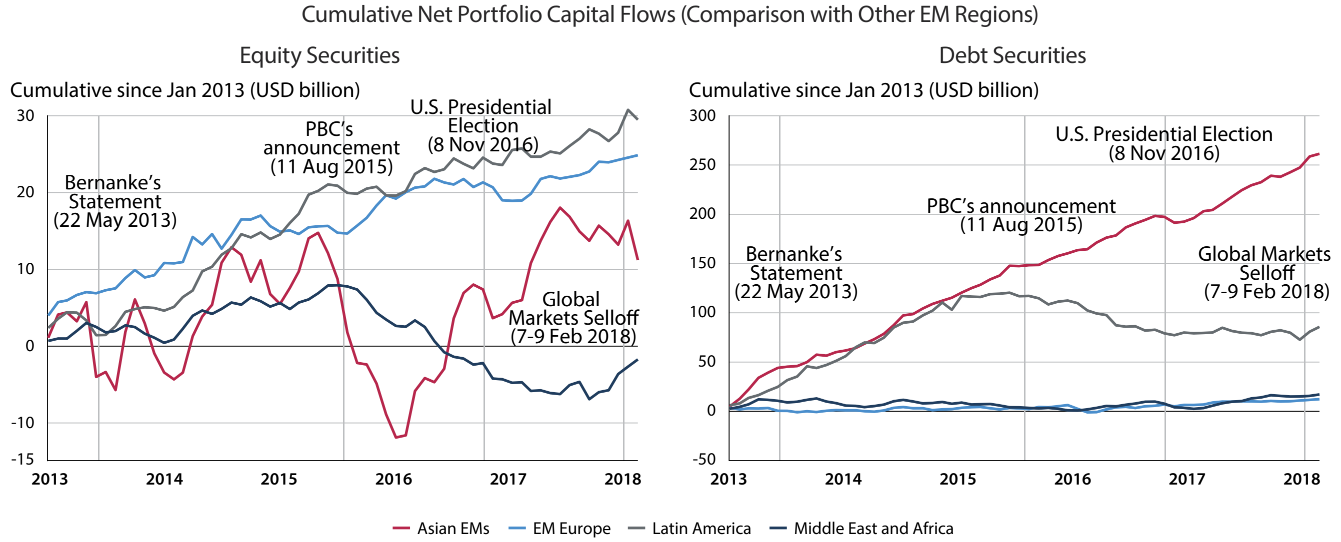
33 The main risk as highlighted in the Global Risk Map, is a faster-than expected pace of tightening in global financial conditions, which could heighten financing risks. The combination of sharply higher global interest rates, sustained USD appreciation and higher term premiums, could lead to a rebalancing 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

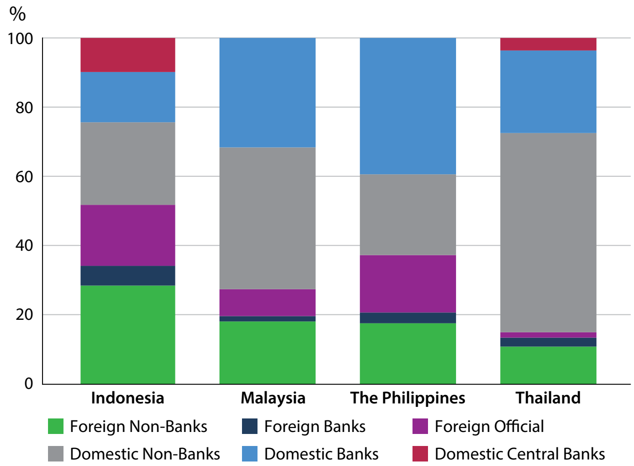
Note: Regional EM bond markets refer to Korea, Malaysia, Thailand, Indonesia and the Philippines.
Source: Bloomberg

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.	

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).

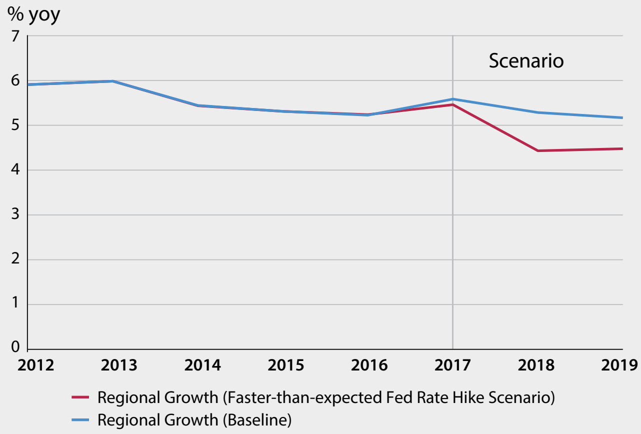
b. 10-year U.S. Treasury yields climb higher, averaging 3.3 percent over 2018-19 amid rising inflation expectations. In the region, even though fundamentals underpinning growth and inflation outlook remain unchanged, long-term borrowing cost (10Y sovereign yields) spikes across major regional EMs driven 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

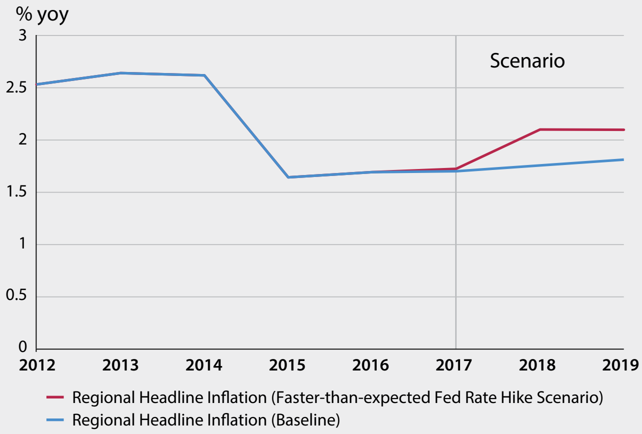
The illustrative scenario shows that a faster-than-expected U.S. Fed rate hike – one that is not well-signaled – has the potential to cause non-trivial spillover effects on asset prices and capital flows in regional EMs. This is consistent with the Global Risk Map, where the impact is assessed to be 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



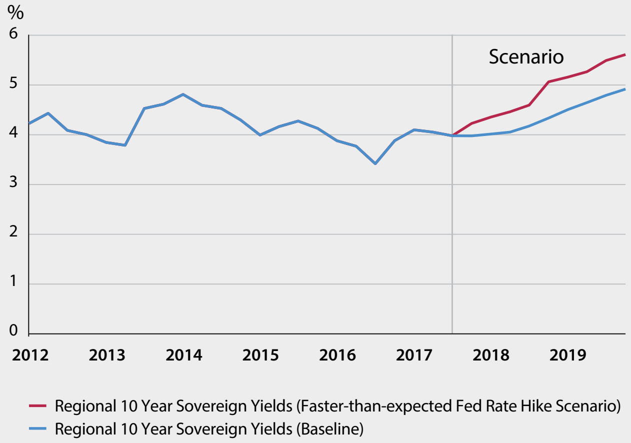
Note: Data after 2017 refers to scenario estimates.
Sources: Oxford Economics, AMRO staff estimates

Figure F2. …while headline inflation edges slightly higher



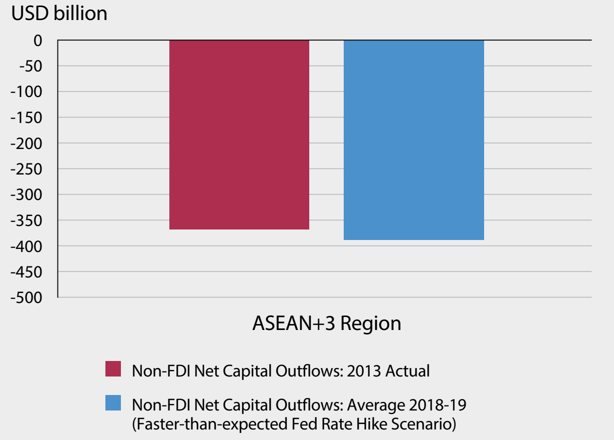
Note: Data after 2017 refers to scenario estimates.
Sources: Oxford Economics, AMRO staff estimates

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

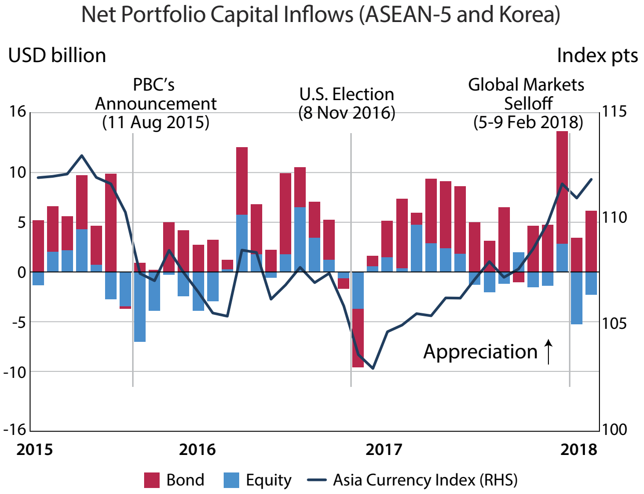
While risks in the short term have diminished compared to last year, they have started to rise in recent months with the imposition of protectionist measures by the Trump administration and stronger signs of inflationary pressures. Policymakers should be more vigilant and continue to build policy space, 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.

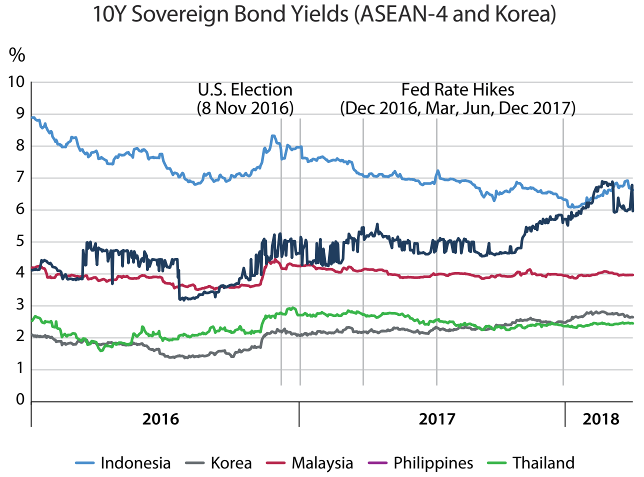
37 Even though most regional economies are in early- to mid-business cycle, given the build-up of credit over the past years, the financial stability objective should be prioritized in the near future over economic growth, with monetary policy on a tightening bias. For some economies, monetary policy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

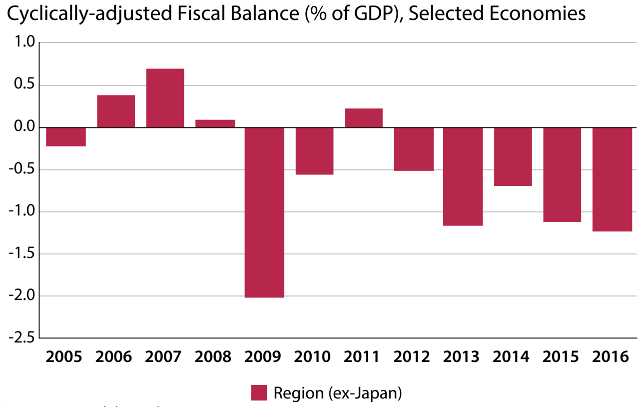
39 Policy will have to be calibrated taking into account constraints from domestic and external vulnerabilities such as debt, and degree of reliance on external financing. Economies in which financial vulnerabilities have built up, with high leverage or external debt, will face the sharpest trade-off 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).

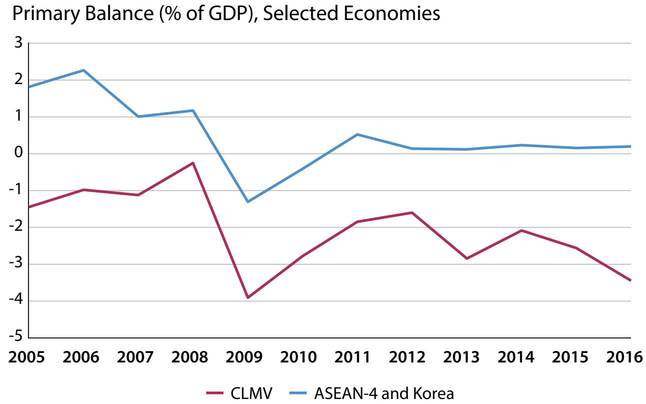
41 However, the scope for more active use of fiscal policy is subject to available fiscal space, which has generally narrowed (Figure 3.3). For several economies (Korea, Indonesia, Malaysia, the Philippines and Thailand), there are also constraints imposed by fiscal rules on the ceilings for fiscal deficit 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*.