1. A Synchronized Global Upturn and the Outlook for the United States and Canada

The world economy and global trade are experiencing a broad-based cyclical upswing. Since October 2017, global growth outcomes and the outlook for 2018–19 have improved across all regions, reinforced by the expected positive near-term spillovers from tax policy changes in the United States. Favorable global financial conditions, despite some tightening and market volatility in February and March, have been providing support to economic recovery. Higher commodity prices are contributing to an improved outlook for commodity exporters. The US and Canadian economies posted solid gains in 2017 and are expected to grow above potential in the near term. Despite the improved near-term outlook, however, medium-term prospects are tilted downward. Growth prospects for advanced economies are subdued, and many emerging market and developing economies are projected to grow in per capita terms more slowly than advanced economies, raising concerns about income convergence. While risks appear broadly balanced in the near term, they skew to the downside over the medium term, including a possible sharp tightening of financial conditions, waning popular support for global economic integration, growing trade tensions and a shift toward protectionist policies, and geopolitical strains. In this context, policies should focus on building buffers, improving financial resilience, and strengthening the potential for higher and more inclusive growth.

Broad-Based Acceleration

The global economy is seeing stronger economic momentum across regions. A cyclical global upswing strengthened in 2017, driven by an investment recovery in advanced economies, an acceleration of private consumption in emerging markets, and improving economic conditions of commodity exporters. Global growth for 2017 is now estimated at 3.8 percent, 0.2 of a percentage point higher than projected last fall. Upward surprises to growth were broad-based, originating from both advanced economies (such as the euro area, Japan, and the United States) and emerging market economies (such as China) (see Chapter 1 of the April 2018 *World Economic Outlook*).

The stronger growth performance is accompanied by robust trade flows and higher commodity prices (Figure 1.1). World trade has been growing robustly, supported by the investment recovery in advanced economies and commodity-exporting countries, while commodity prices, particularly energy prices, are being lifted by the improved global growth outlook and supply events.

Price pressures are gradually rising alongside stronger global activity and commodity prices. Headline inflation has picked up with the increase in oil prices, and core inflation (excluding fuel and food prices), while still relatively soft, has recently started to edge up, particularly in advanced economies. In emerging market and developing economies, inflation has bottomed out, reflecting recent currency stability or appreciations.

Global financial conditions continue to support economic activity (see Chapter 1 of the April 2018 *Global Financial Stability Report*). While the turbulence in equity markets in early February, followed by a further selloff in March, as well as increases in bond yields in response to firmer growth and inflation, have led to some tightening of financial conditions, overall market sentiment remains favorable (Figure 1.2). Capital flows to emerging markets remain robust, with portfolio flows recovering from the recent bouts of market turbulence.

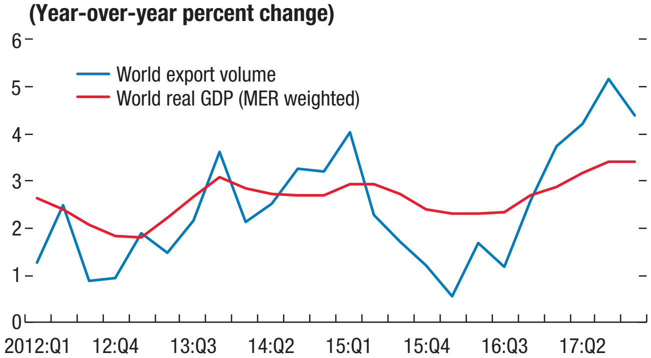
This chapter was prepared by Pelin Berkmen with Kotaro Ishi and Suchanan Tambunlertchai. Pablo Bejar, Yurani Granada (Canada section), and Peter Williams (US section) provided excellent research assistance.

Figure 1.1. Global Growth, Exports, and Commodity Prices

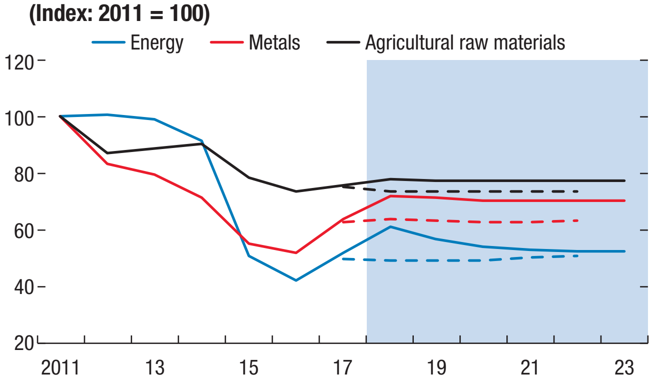
1. Real GDP Growth
(Percent; annual rate)

	2016	2017	Projections 2018	Projections 2019
World	**3.2**	**3.8**	**3.9**	**3.9**
Advanced Economies	1.7	2.3	2.5	2.2
United States	1.5	2.3	2.9	2.7
Euro Area	1.8	2.5	2.4	2.0
Japan	0.9	1.7	1.2	0.9
Emerging Market and Developing Economies	4.4	4.8	4.9	5.1
China	6.7	6.9	6.6	6.4
Russia	–0.2	1.5	1.7	1.5

2. World Real Exports and Real GDP Growth
(Year-over-year percent change)



3. Global Commodity Prices[1]
(Index: 2011 = 100)



Sources: Haver Analytics; IMF, Global Data Source database; IMF, World Economic Outlook database; and IMF staff calculations.
Note: MER = market exchange rate.
[1]Dashed lines refer to the October 2017 *World Economic Outlook* global assumptions.

Medium-Term Prospects Tilted to the Downside

The near-term global outlook has firmed up. The stronger momentum experienced in 2017 is expected to carry over into 2018 and 2019, reinforced by the spillover effects of the fiscal policy stimulus in the United States (accounting for half of the global growth upgrade for 2018–19). Global growth is revised up to 3.9 percent for both years (0.2 of a percentage point higher than the previous forecast in October 2017), also reflecting accommodative financial conditions.

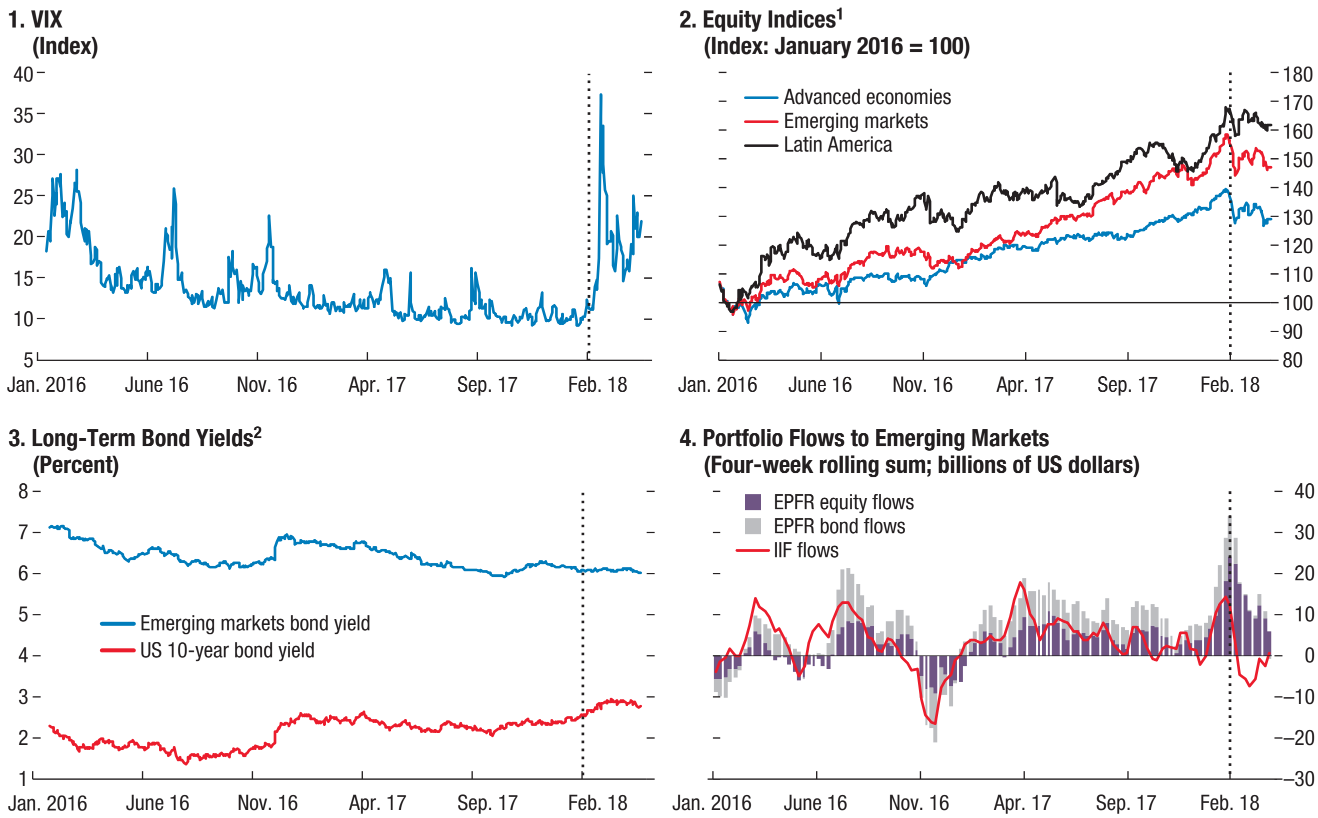
In advanced economies, growth is revised up considerably to 2.5 percent in 2018 and 2.2 percent in 2019 (about half a percentage point higher than previous forecasts for both years). Growth revisions are broad-based, reflecting effects of expansionary fiscal policy in the United States, stronger-than-expected domestic demand, supportive monetary policy, and improved external demand prospects.

The aggregate growth forecast for the emerging market and developing economy group for 2018 is unchanged (4.9 percent) and revised up for 2019 by 0.1 of a percentage point (5.1 percent). This reflects the continued strong performance of emerging Asia and improved prospects for commodity exporters. In *China*, strong growth in 2017 was supported by net exports, despite the slowdown in investment growth. Going forward, growth is projected to decline gradually from 6.9 percent in 2017 to 6.4 percent in 2019 (higher by 0.1 percentage point relative to the October 2017 projections), as policy support gradually declines and the economy continues rebalancing the composition of demand from investment to consumption.

With these revisions, the output gaps in advanced economies are expected to close in 2018. Advanced economies are projected to grow faster than potential this year and next. Headline inflation across the world is expected to pick up in 2018, reflecting closing output gaps and higher commodity prices (Figure 1.3).

However, medium-term prospects are tilted to the downside, with global growth projected to decline to around 3.7 percent over the medium term. This slowdown reflects the decline in advanced economy growth toward subdued potential after the cyclical upswing and US fiscal stimulus

Figure 1.2. Stock Market Volatility, Equity and Bond Markets, and Capital Flows



Sources: Bloomberg Finance L.P.; Haver Analytics; Institute of International Finance (IIF) database; and IMF staff calculations.
Note: Dotted, vertical lines refer to recent market volatility episode in February 2018. EPFR = Emerging Portfolio Fund Research; VIX = Chicago Board Options Exchange Volatility Index.
[1]Refers to Morgan Stanley Capital International local currency indices.
[2]Refers to local currency J.P. Morgan Government Bond Index-Emerging Markets Global Diversified, which is a uniquely weighted index that limits the weights of index countries with larger debt stocks by including only specified portions of these countries' eligible current face amounts of debt outstanding. The index includes countries that are directly accesible by most of the international investor base without explicit capital controls: Brazil, Chile, Colombia, Hungary, Indonesia, Malaysia, Mexico, Nigeria, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, and Turkey.

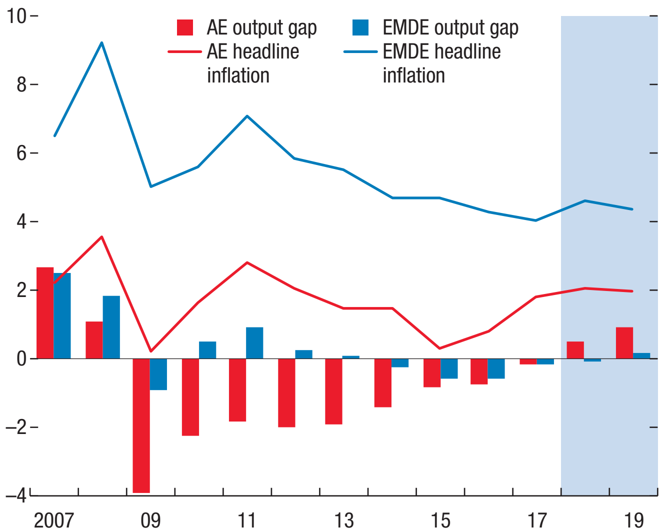
have run their course. Growth in emerging market and developing economies is expected to stabilize around current levels. In per capita terms, however, a portion of emerging market and developing economies, including Latin America and the Caribbean, is projected to grow more slowly than advanced economies, failing to narrow income gaps with advanced economies.

Rising Risks

Risks to the outlook are broadly balanced in the near term, but skewed to the downside over the medium term. Upside risks include stronger-than-expected growth in advanced economies and a potential rebound in productivity led by an ongoing recovery in investment.

While financial conditions have remained supportive, the sudden bout of volatility in global equity markets in early February illustrates risks around the current trend of gradual monetary policy normalization. Financial markets remain particularly vulnerable to an inflation surprise. As output gaps turn positive, inflation could pick up faster than currently priced in by markets. Central banks may then have to tighten monetary policy more aggressively, leading to a sharper decompression of term premiums, a rise in market

Figure 1.3. Advanced and Emerging Market and Developing Economies: Output Gap and Inflation
(Percent)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: AE = advanced economies; EMDE = emerging market and developing economies.

volatility, and tighter global financial conditions than expected in the baseline (see Chapter 1 of the April 2018 *World Economic Outlook* and *Global Financial Stability Report*).

At the same time, continued easy financial conditions, despite the onset of monetary policy normalization, could lead to a further reach for yield and a buildup of financial vulnerabilities, leaving markets exposed to a sharp tightening of financial conditions.

Additional risks stem from a shift toward inward-looking policies, with weakened support for globalization in advanced economies as the North American Free Trade Agreement (NAFTA) and the economic arrangements between the United Kingdom and the rest of the European Union are being renegotiated. NAFTA-related uncertainty is already weighing on investment in Canada and Mexico (see below and Chapter 2). An increase in tariff and nontariff barriers (as seen recently, for example, with the recent import restrictions announced by the United States, announced retaliatory actions by China, and potential retaliation by other countries) would disrupt global supply chains, slow the spread of new technologies, lower consumer welfare, and make international cooperation (to deal with global shocks) more difficult. Illustrative scenarios (see Scenario Box 1 of the October 2016 *World Economic Outlook*) indicate that rising protectionism in all countries—leading to a 10 percent increase in import prices everywhere—could lower global output and consumption by about 1¾ percent after five years.

Similarly, changes in US tax policies are expected to exacerbate income polarization, which could affect the political climate for policy choices in the future. More limited migration flows could exacerbate the effects of declining labor force growth rates in aging societies.

Noneconomic risks include geopolitical tensions, notably in East Asia and the Middle East, political uncertainty in the context of upcoming elections in several countries (including in Latin America), and, more broadly, weak governance and systemic corruption practices. Finally, more frequent occurrence of extreme weather events could impose large humanitarian and economic losses.

Policies: Shifting the Focus to Medium-Term Priorities

Against the global setting with subdued medium-term prospects, low productivity growth has been an issue for advanced and emerging market economies alike. Therefore, there is a need to raise growth potential and enhance inclusiveness, including through measures to lift labor productivity, increase labor force participation, and support the young and those displaced by global structural change in their search for job opportunities.

At the same time, downside risks highlight the need to rebuild global countercyclical buffers to better manage the next downturn, contain financial market risks to increase financial resilience, and improve available fiscal space to help finance growth-friendly policies and put debt ratios on a downward trend (see the April 2018 *World Economic Outlook* and *Fiscal Monitor*).

Fiscal policy in both advanced and emerging market economies should focus on medium-term objectives—including improving infrastructure to boost potential output—while ensuring that public debt dynamics are sustainable and buffers are rebuilt. Where fiscal consolidation is needed, its pace should be calibrated to avoid sharp drags on growth.

In emerging market and developing economies, improved monetary policy frameworks have helped lower core inflation, which provides scope for using monetary policy to support demand should activity weaken. Over the longer term, governance reforms and economic diversification, particularly in commodity-exporting countries, would help lift private investment, create jobs, and expand the range of activity beyond primary, resource-based sectors.

US Outlook: Above-Potential Growth but with Higher Risks

Economic momentum in the United States is rising as domestic-demand-led growth receives further policy stimulus. The US economy posted solid gains in 2017, thanks to robust private consumption and investment and to favorable global economic and financial conditions. Seasonally adjusted annual real GDP grew by slightly over 3 percent in the second and third quarters of 2017, with 2017:Q4 numbers coming in at 2.5 percent. For the whole year, growth was 2.3 percent, up from 1.5 percent in 2016.

Headline inflation was weak in 2017 due to idiosyncratic factors, such as the fall in telephone services prices and subdued growth in health care prices. Since September 2017, core personal consumption expenditure inflation has gradually risen, although at 1.5 percent it remains below the US Federal Reserve's target of 2 percent. With unchanged labor force participation, the economy has been operating slightly above full employment, pushing average hourly earnings up 2.5 percent over the past 12 months.

Policy stimulus reinforces this economic momentum. The recently enacted tax reform, as well as the 2018 two-year bipartisan budget agreement, will add stimulus to the growth momentum, further boosting private sector activity while raising employment and wages. These changes will boost the level of GDP over the next two years, with economic activity in 2018 and 2019 projected to expand by 2.9 and 2.7 percent, respectively (up by 0.6 and 0.8 of a percentage point, respectively, compared to the October 2017 *World Economic Outlook* forecasts). Beyond the near-term effects, growth is expected to be lower than in previous forecasts for a few years from 2022 onward—given the increased fiscal deficit, which will require adjustment down the road, and the temporary nature of some provisions—offsetting some of the earlier growth gains. With the economy at full employment, inflation is expected to rise to 1.9 percent by the end of 2018 and modestly overshoot the Federal Reserve's target in 2019.

Reflecting domestic-demand-led growth and policy stimulus, the current account deficit is projected to deteriorate to 2.9 percent of GDP in 2018, peaking at 3.6 percent of GDP in 2020. The reaction of the US dollar, which has depreciated since November, to the change in tax policy has thus far been muted. General government debt is projected to rise to 110 percent of GDP by 2020 due to aging-related expenditure pressures, the revenue loss from the tax reform, and the latest budget.

Policy Mix

The US policy mix has changed relative to the October 2017 *Regional Economic Outlook Update*. Since congressional passage of the Tax Cuts and Jobs Act (TCJA) in December 2017 and the budget agreement in February 2018, fiscal policy has become expansionary and procyclical, necessitating a faster pace of monetary policy tightening.

- *Fiscal policy:* The key fiscal measures included in the TCJA feature temporary cuts in the personal income tax and significant and permanent cuts in the corporate income tax (see Box 1.1). The recent two-year budget bill increases spending authority by $300 billion over the next two years. The primary structural general government balance is estimated to weaken from –2.5 percent in 2017 to –3.9 percent of potential GDP by 2019. While temporarily lifting growth, the tax reform will lead to revenue losses and increase federal debt by about 5 percentage points of GDP in the next five years, further adding to unsustainable debt dynamics. After 2021, the fiscal stimulus is expected to move into reverse, acting as a drag on the economy and resulting in growth falling below potential.
- *Monetary policy:* The US economy is operating above potential output and could require faster-than-expected tightening of US monetary policy, which could lead to a rise in term premiums and debt service costs. In March 2018, the Federal Open Market Committee raised the federal funds rate target range by 25 basis points to 1½ to 1¾ percent in response to the strengthening job market and inflation. The Federal Reserve's gradual balance sheet normalization, announced in September 2017, has proceeded as planned with muted effects on US and global monetary conditions. The gradual approach means that the Federal Reserve will continue to be an active player in the Treasury and mortgage-backed securities markets in the years to come, even as it steps up the pace of balance sheet reduction toward the end of this year and into 2019.

Increased Upside and Downside Risks

The current policy mix has widened risks around the baseline. There is a wide range of estimates on the effects of the fiscal stimulus, but there is general agreement that such a stimulus, coming at a time when the economy is at full employment, will push US economic activity well above potential. As such, this heightens the risk of an inflation surprise as the economy performs above the full employment level, with an attendant risk of a tightening of US and global financial conditions. Higher inflation pressures, together with faster Federal Reserve policy rate tightening than anticipated in the baseline, could contribute to a larger decompression of term premiums, a stronger US dollar, and lower equity prices. Over the medium term, the eventual withdrawal of the fiscal stimulus, when policy rates are likely to be above neutral, could trigger a sharper-than-expected slowdown that could have global spillovers.

Uncertainty remains in other areas of US policies:

- *Financial deregulation:* Both chambers of Congress have put forward proposals that aim, albeit to different degrees, to roll back some provisions of the Dodd-Frank Act. There is broad support for simplifying the regulatory frameworks, particularly those governing small and medium-sized banks that do not individually pose systemic risks. More contentious are the wide-ranging proposals to roll back prudential standards or reduce the powers of regulatory agencies. A material weakening of such oversight, particularly vis-à-vis large systemic banks, could lead to a fresh buildup of financial stability risks.
- *Trade policy:* Renegotiations of NAFTA are ongoing. While the agreement can benefit from an update (for example, strengthening the provisions on labor and the environment), a renegotiation that leads to increased restrictions on free trade would have a negative impact on all parties. With Canada and Mexico being the largest US export markets, a disorderly withdrawal from NAFTA would weaken the US economy, leading to job losses and lower potential growth. Further, there have been steps to introduce trade restrictions—for example, the recent safeguards linked to imports of washing machines and solar panels, the proposed tariffs on steel and aluminum, and the announced

trade actions over China's intellectual property practices. In this context, a worsening of trade tensions and the imposition of broader barriers to cross-border trade would not only take a direct toll on economic activity (as shown in Scenario Box 1 of the October 2016 *World Economic Outlook*) but also weaken confidence, with further adverse repercussions.

- *Immigration policy:* Immigrants make up around 14 percent of the US population, and 17 percent of the US workforce, according to the US Census Bureau. An interruption to the steady inflow of immigrants would reduce the growth in the US workforce and weigh on growth (particularly given that the economy is expected to expand well through full employment).

US Policy Priorities

The 2017 tax reform saw the biggest overhaul of the tax code over the last 30 years. It features important positive changes, including a reduction in rates, the expensing of new investment, and a modest simplification to the system. However, the revenue losses from the reform increase the urgency of implementing policies—including steps to raise indirect taxes and gradually curb expenditure to create financing for much-needed spending on infrastructure, education and skill development, and family-friendly benefits—that will ensure a steady decline in the general government deficit and public debt-to-GDP ratio over the medium term. According to the Congressional Joint Committee on Taxation, the tax overhaul is projected to reduce the average tax rate on upper-income US households relative to those in the middle and lower segments, especially over the medium term (when some provisions benefiting lower- and middle-income taxpayers expire), thus increasing income polarization.[1]

In the financial markets, there is scope to strengthen the regulatory system, including in areas related to housing finance and the supervision of insurance companies. However, the thrust of the current risk-based approach to regulation, supervision, and resolution should be preserved, and care should be taken not to reverse the important gains that have been made since the global financial crisis in strengthening the financial oversight structure.

Structural policies should focus on maintaining a productive and flexible workforce and reducing income inequality. Priority measures should include improving educational opportunities and outcomes, protecting recent gains in health care coverage, maintaining a free, fair, and mutually beneficial trade and investment regime, and containing health care cost inflation. Other complementary policies—such as childcare support for low- and middle-income families, paid family leave, an expanded earned income tax credit, an increased federal minimum wage, and better social assistance programs for the poor—could further alleviate long-term structural issues. Last, skills-based immigration reform that addresses the demand for skilled labor would enhance labor productivity, lift potential growth, and ameliorate medium-term fiscal imbalances due to population aging.

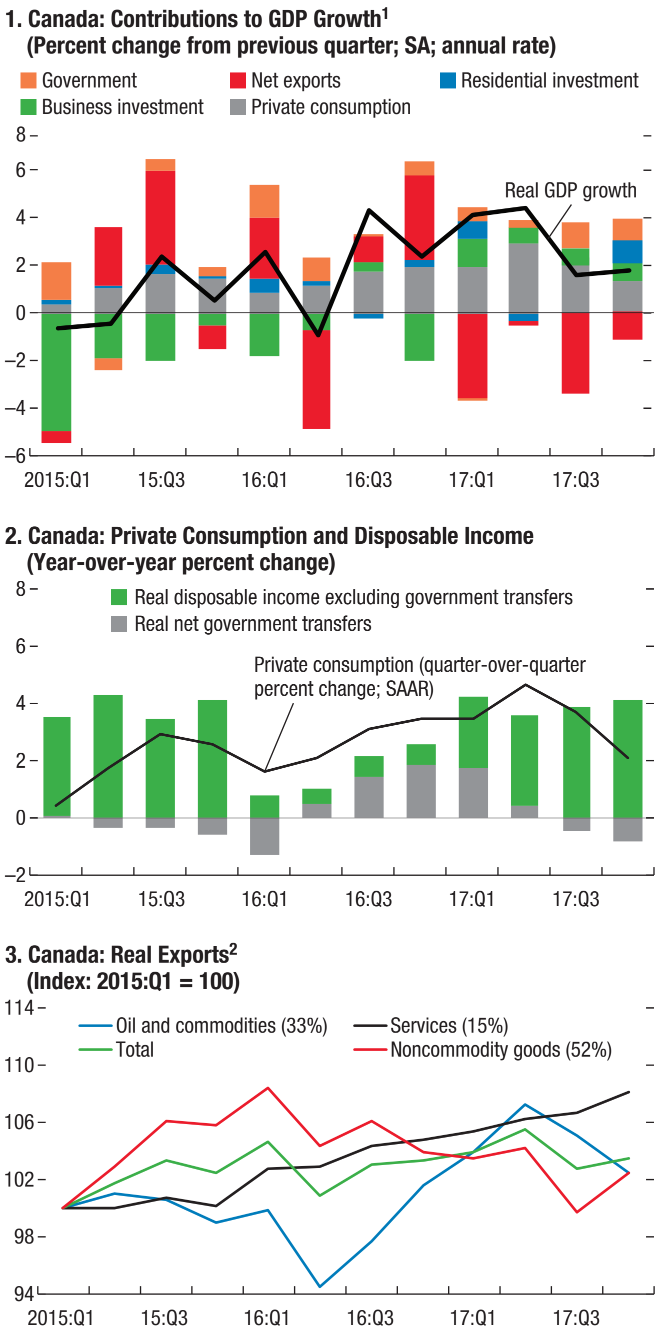
Canada: Back on a Steady Growth Path

Canada recorded the highest growth rate among Group of Seven (G7) economies in 2017. The economy grew by 3 percent in 2017, notwithstanding some moderation in the second half, supported by accommodative fiscal and monetary policies, a strong US economy, and higher oil prices.

Private consumption has been strong, particularly for the first three quarters, supported by gains in disposable income (Figure 1.4). Fiscal transfers contributed to the initial boost in incomes, but more recent increases have been the result of a strengthening labor market. The employment rate has increased steadily, and the unemployment rate has fallen to its lowest level in 40 years.

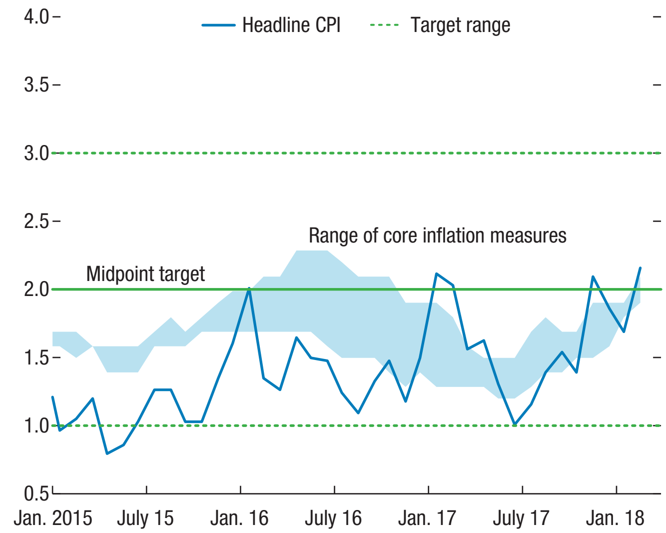
[1]Box 1.2 of the April 2018 *Fiscal Monitor* discusses the distributional implications of the US tax overhaul.

Figure 1.4. Canada: Growth, Consumption, Business Activity, and Export Conditions



Sources: Statistics Canada; and IMF staff calculations.
Note: SAAR = seasonally adjusted annual rate.
[1]Includes statistical discrepancies.
[2]Numbers in parentheses are the percentage share in total exports.

Figure 1.5. Canada: Inflation Developments
(Year-over-year percent change)



Sources: Statistics Canada; IMF, World Economic Outlook database; and IMF staff calculations.
Note: The shaded area corresponds to Bank of Canada's monthly minimum and maximum value for CPI-trim, CPI-median, and CPI-common year-over-year inflation. CPI = consumer price index.

Other demand components of GDP have remained sluggish. Business investment grew for the first time since 2014, but recovery has been moderate, with investment in the oil sector hampered by relatively low oil prices. Export growth picked up in the first half of 2017 but has since stopped growing. While residential investment accelerated in the fourth quarter of 2017 ahead of the tightening of residential mortgage underwriting guidelines (in January 2018), the underlying trend has slowed, reflecting higher mortgage interest rates, tighter macroprudential policies, and new tax measures.

Inflation has been rising, consistent with a closing output gap (Figure 1.5). After decelerating toward the lower bound of the Bank of Canada's target range (1–3 percent) in mid-2017, all three core consumer price index (CPI) inflation measures (CPI-trim, CPI-median, and CPI-common) and headline inflation have recovered and currently hover around 2 percent, the midpoint of the target range.

Robust Near-Term Outlook but Looming Concerns over US Policy

GDP growth is expected to moderate to 2.1 percent in 2018 and 2 percent in 2019, above the economy's medium-term potential. Higher interest rates are expected to slow private consumption as debt service costs rise and, combined with tighter macroprudential policies, continue to dampen residential investment. Meanwhile, a stronger US economy will provide support to demand for Canada's exports and investment in the export sector.

The medium-term outlook is less upbeat. Canada's long-standing problems of weak external competitiveness, sluggish labor productivity growth, and population aging limit growth to about 1¾ percent, significantly lower than the recent average of 2.6 percent (over 2000–08). In addition, Canada's medium-term prospects are clouded by changes in US tax and trade policies.

Significant Implications of the US Tax Reform and NAFTA Negotiations

US tax reform is expected to temporarily boost Canada's near-term growth by around 0.2 to 0.3 percentage point. Over the medium term, however, a lower tax burden on business investment could make the United States a more attractive investment location, negatively affecting investment and growth in Canada (Box 1.1).

NAFTA negotiations are ongoing. Preliminary indications are that there has been progress in modernizing NAFTA by incorporating the evolution of digital and e-commerce trade. However, several proposals put forward by the United States—notably, minimum US content requirements, eliminating the dispute resolution framework, a cap on government procurement, and a five-year sunset clause—represent major points of contention for the negotiations. In early March, the United States indicated its intentions to impose tariffs on steel and aluminum, which intensified trade tensions between the United States and Canada. It was subsequently announced that Canada would be exempt conditional on a deal on NAFTA. NAFTA uncertainty is already weighing on investment in Canada, and failure to forge a new agreement could impact investment for a much more prolonged period.

Housing Markets Remain Highly Vulnerable

Housing market vulnerabilities and imbalances continue to pose risks to macro-financial stability. Household debt as a percentage of disposable income reached a historic high of 173 percent at the end of 2017 (Figure 1.6). While the banking system is sound, with high profitability, banks' exposures to households remain substantial (accounting for about one-third of bank assets). Thus, financial stability risks could emerge were a sharp correction in the housing market to occur, together with a sharp and persistent rise in unemployment.

Macroprudential policy and tax measures have cooled the housing markets, but it is not yet clear whether this will prove durable.

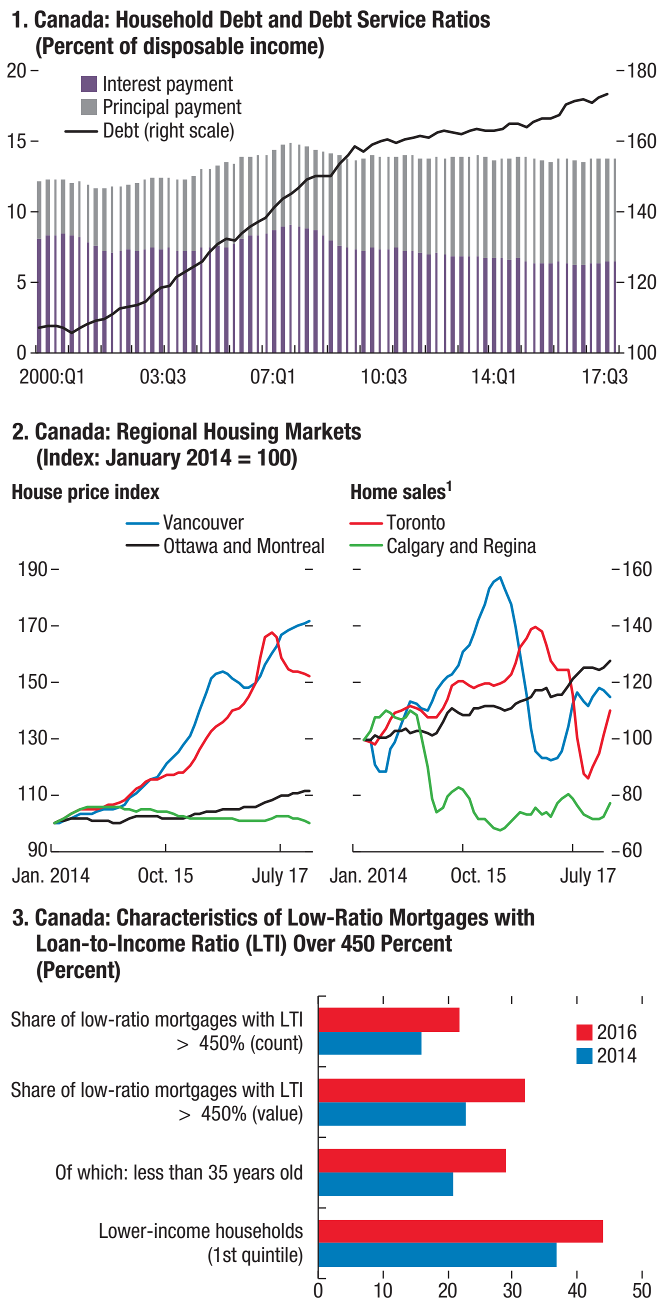
- In Vancouver, tighter macroprudential policies at the federal level and a new tax on nonresident home buyers that the provincial government introduced in August 2016 contributed to a softening in the housing market, with house prices falling about 3½ percent between August and December 2016. However, price pressures have since reemerged, and house prices grew by about 16 percent in 2017.
- In Toronto, house prices have fallen since the middle of 2017. Ontario's Fair Housing Plan, announced in April 2017, which included a 15 percent tax on nonresident home buyers, together with changes in mortgage insurance rules at the federal level, contributed to a dampening in market sentiment and a decline in house prices.

There has been a notable change in the risk characteristics of mortgage loans. Following the introduction of a stress test for insured mortgages in late 2016, high loan-to-value-ratio mortgages dropped by about 5½ percent in 2017, whereas growth of low loan-to-value-ratio mortgages accelerated to about 17 percent.[2] There is some concern that low loan-to-value ratio mortgages have increasingly been taken by households with higher levels of risk (Figure 1.6).[3] Against this backdrop, policymakers have shifted their attention to low loan-to-value-ratio mortgages by tightening residential mortgage underwriting procedures (effective in January 2018). Key revisions to guidelines include (1) restrictions on borrowing from multiple sources; (2) stringent requirements for the measurement of loan-to-value ratios by taking account of housing market risks (for example, price risks); and (3) introduction of a stress test for noninsured mortgages as was introduced for insured mortgages in late 2016.[4]

Policy Priorities in Canada

Given the elevated level of uncertainty emanating from US tax and trade policies, macroeconomic policies in Canada should be tightened only gradually. The Bank of Canada has raised the policy rate three times since July 2017 (by 75 basis points to 1.25 percent). Looking ahead, the balance of risks to the outlook warrants a gradual approach to monetary policy normalization. The IMF staff projects a gradual increase of the policy rate toward its neutral level (around 3 percent) over the projection horizon. On the fiscal front, no additional fiscal stimulus would be warranted, and the federal government should start rebuilding fiscal buffers now, at a gradual pace, as envisaged in the 2018 budget. At the provincial level, Quebec and British Columbia are expected to broadly maintain balanced operational budget positions, while Alberta is expected to step up its

Figure 1.6. Canada: Housing Market Developments



Sources: Bank of Canada, November 2017 Financial System Review; Canadian Real Estate Association; Office of the Superintendent of Financial Institutions; Statistics Canada; and IMF staff calculations.
[1]Three-month moving average.

[2]Canada's mortgage products can be divided into two segments: high-ratio mortgages with loan-to-value ratios greater than 80 percent, which are required to have insurance; and low-ratio mortgages with loan-to-value ratios of 80 percent or less.

[3]For example, the share of low-ratio mortgages with loan-to-income ratios greater than 450 percent rose to 32 percent in 2016 (most recent data available), up from 23 percent in 2014. About 30 percent of these loans are to younger households (under 35 years old) that could have less job security, and 44 percent are loans to the lowest-income households. See Bilyk, Ueberfeldt, and Xu (2017).

[4]Federally regulated financial institutions must set the qualifying rate for noninsured mortgages at the greater of the contractual mortgage rate plus 2 percentage points or the five-year benchmark rate published by the Bank of Canada.

efforts to reduce deficits. Ontario is on course for achieving an operating budget surplus in fiscal year 2017/18 but announced, in its 2018 budget, its intention to run a deficit of about ¾ percent of Ontario's GDP over the next three fiscal years.

In the financial sector, the authorities should hold off on additional macroprudential measures for now, until the effects of the recent measures are known. Meanwhile, more efforts may be warranted to address supply-side constraints in the housing market, including a review of zoning and density policies, the approval process for new developments, and the enhancement of urban transit systems.

Structural reforms are vital to boost Canada's competitiveness and growth over the medium term. The authorities are implementing an ambitious structural reform agenda covering internal and external trade, innovation, immigration, and female labor participation. As an immediate priority, a holistic review of the overall tax system would be critical to help assess the scope for improving the efficiency of the tax system, while maintaining Canada's tax competitiveness, before a decision on a major tax reform.[5] The implementation of the long-term infrastructure investment plan has been delayed, and further efforts are needed to make infrastructure investment more timely and efficient. In this regard, it would be useful to consolidate existing information on project plans from all levels of government and to expand the use of common standards of project evaluation. The implementation of the Canadian Free Trade Agreement (which entered into force in July 2017) should also be accelerated to reduce barriers to internal trade, investment, and labor mobility. More can also be done to reduce foreign direct investment restrictions and regulatory barriers to entry in key sectors of the economy. Finally, Canada needs to continue diversifying its trade patterns. The Comprehensive Economic Trade Agreement with the European Union, which entered into force in September 2017, is expected to boost Canada's trade with Europe, while a new Comprehensive and Progressive Agreement for Trans-Pacific Partnership would enhance Canada's economic ties with Asian economies.

[5]In December 2017, the Finance Minister's Advisory Council on Economic Growth put forward the third report, focusing on recommendations to boost business investment and innovation. The report also stressed the merits of a targeted tax review to create incentives for investment. Other major recommendations by the council included (1) a review of business regulations by establishing a new Expert Panel on Regulatory Agility and Innovation to ensure that the regulatory regime fosters business investment and innovation; and (2) the establishment of a new Canada Lifelong Learning Fund to boost support for retooling and training of working adults.

Box 1.1. The US Tax Cuts and Jobs Act

The passage of the Tax Cuts and Jobs Act (TCJA) in December 2017 marked the most sweeping tax reform in the United States since 1986. For corporations, the TCJA includes significant rate cuts, expensing of capital investment, and a move toward a territorial system. Personal income tax reform includes temporarily lower marginal tax rates and higher standard deductions.

Business Tax Changes

In addition to lowering the statutory corporate income tax rate from 35 to 21 percent, the tax bill introduced several other changes:

- *Temporary capital expensing:* Businesses will be able to fully deduct certain capital investments (for example, tangible property with an economic life of under 20 years, software, and some structures) until 2023, with a gradual phaseout to the previous system of depreciation schedule by 2027.
- *Interest deductions:* The interest deduction is capped at 30 percent of earnings before interest, taxes, depreciation, and amortization (EBITDA) until 2022, and 30 percent of EBIT thereafter (unused deductions can be carried forward).
- *Pass-through exemptions:* The roughly 95 percent of US businesses organized as pass-through entities (for which business income distributed to owners is taxed at the individual tax rates) will receive a 20 percent exemption on their incomes before the individual rates apply.
- *International provisions:* Foreign-sourced earnings, with the exceptions discussed below, will now be exempt from taxes, moving the United States away from a worldwide tax system and closer to a territorial tax system. This change is accompanied by a number of guardrail provisions:
    - A one-time repatriation tax will be levied on profits of US multinationals currently held offshore, on which taxes were deferred under the old rules. Cash and cash equivalents will be taxed at 15.5 percent and other assets at 8 percent, payable over eight years.
    - To encourage the return of US intellectual property currently held offshore in low-tax jurisdictions, foreign-derived intangible income (FDII) of US corporations will be granted a reduced effective tax rate of 13.125 percent (16.4 percent after 2025).
    - The global intangible low-taxed income (GILTI) rule imposes a minimum tax on a US multinational's global foreign earnings that exceed a 10 percent standard rate of return on tangible assets. The effective tax rate on the GILTI is 10.5 percent (rising to 13.125 percent after 2025).
    - To discourage profit shifting to jurisdictions with tax rates lower than 21 percent, large multinationals with significant tax deductions from payments to foreign affiliates will be subject to the base erosion anti-abuse tax, which serves as a minimum 10 percent tax (12.5 percent after 2025) on such payments.

Personal Income Tax Changes

Lower marginal tax rates across the various tax brackets, with the top rate falling from 39.6 to 37 percent, are accompanied by a number of other changes. All personal income tax measures sunset after 2025.

- *Deductions and exemptions:* To simplify the system by reducing the number of filers who choose to itemize deductions, the standard deduction is roughly doubled (from $13,000 to $24,000 for joint filers) while individual exemptions and a range of allowable itemized deductions are eliminated.

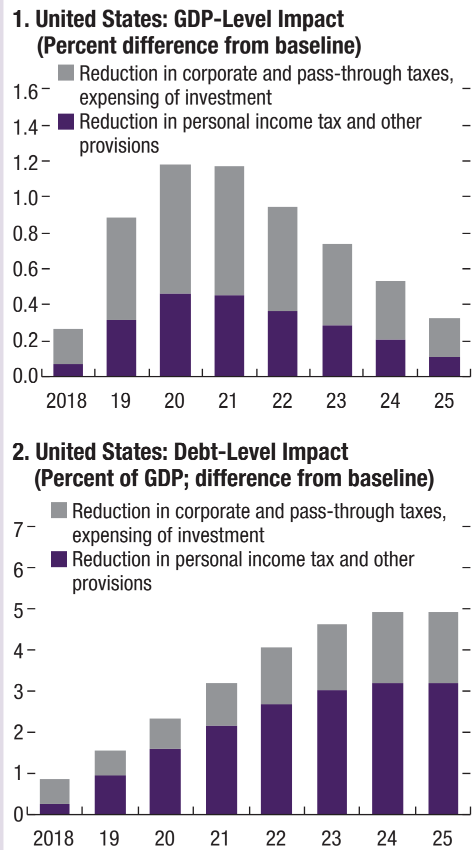
This box was prepared by Suchanan Tambunlertchai.

Box 1.1 *(continued)*

- *Tax credits:* The child tax credit is increased from $1,000 to $2,000 and is available for a broader range of household income. There is no change to the earned income tax credit.
- *Alternative minimum tax:* This tax, which largely applies to wealthy households, has been scaled back, with the number of individuals affected by it reduced from 5 million to 200,000.
- *Estate tax:* The exemption for the estate tax is doubled to $11.2 million a person.
- *Carried interest:* Carried interest is a share of profits distributed to investment managers to encourage improved performance. Such interest is taxed as long-term capital gains rather than the higher-rate ordinary income. The tax reform preserved the carried interest break, but limited it to gains on assets held for at least three years.

The corporate tax reform is expected to reduce many of the existing distortions. A lower tax rate and the shift toward a territorial system will make US corporations more competitive, reduce the dispersion in effective rates across industries, and lessen incentives to shift profits offshore. More could be done to further simplify the system and enhance efficiency. Some provisions add fresh layers of complexity. The temporary capital expensing creates a timing distortion that will accelerate investments. The mechanisms to discourage base erosion and offshore holdings of intellectual property could be more directly achieved via a uniform minimum tax applied to low-tax jurisdictions.

Figure 1.1.1. Macroeconomic Impacts of the US Tax Legislation



Source: IMF staff calculations.
Note: Only the effects of the tax reform are shown in the charts.

Changes to the personal income tax system will increase disposable income in the short run, both from the tax cuts and spillovers to wages and employment from increased economic activity. Certain elements of the reform may increase income inequality (see discussion under policy priority in the main text).

The US tax policy changes are expected to stimulate activity, with the short-term impact in the United States largely driven by the investment response to the corporate income tax cuts (Figure 1.1.1). The effect on US economic activity is estimated to be positive through 2020, cumulating to a level effect on real GDP of 1.2 percent through that year, with uncertainty surrounding this central scenario. Due to the temporary nature of a number of provisions, the tax policy package is projected to lower growth in the outer years.

Direct international spillovers from the tax reforms are expected to be limited, and contained to low-tax jurisdictions with large investments from US multinationals. Demand spillovers from higher US growth and larger trade deficits are likely to be more important for closer trading partners, such as Canada and Mexico. The effects of the package on output in the United States and its trading partners contribute about

Box 1.1 *(continued)*

half of the cumulative revision to global growth over 2018–19. At the same time, emerging markets with dollar-denominated debt could face the risk of a stronger US dollar.

The reduced corporate tax rate will make it more attractive for multinational companies to invest in the United States and less attractive to shift profits out of the United States (see Box 1.3 of the April 2018 *Fiscal Monitor*). This could place downward pressure on corporate tax rates in other jurisdictions as countries compete to protect their tax bases and attract tangible investments by US multinationals. At the same time the territorial system makes it more attractive to invest in other countries offering lower tax rates. While the GILTI may in some respects mitigate the increased pressure for tax competition, the FDII is likely to further intensify it.

Reference

Bilyk, Olga, Alexander Ueberfeldt, and Yang Xu. 2017. "Analysis of Household Vulnerabilities Using Loan-Level Mortgage Data." *Financial Stability Review* (November). Bank of Canada.