

# 1. Global Economy in Transition and the Outlook for the United States and Canada

*As the world economy undergoes key transitions, the pace of global activity has slowed amid higher financial market volatility. In advanced economies, a modest recovery continues, but unevenly. An expanding U.S. economy, led by consumption and job creation, has enabled interest rate lift-off toward gradual monetary normalization. This transition suggests diverging influences from major central banks over global financial conditions and appreciation pressures on the U.S. dollar. In emerging market economies, growth continues to slow, led by China as it rebalances and by continued stress in several large economies in recession. Financial conditions have tended to tighten and uncertainty has risen amid concerns of slower growth and lack of policy space. Alongside this, commodity prices remain weak—notably, in oil markets where a supply glut has led to appreciably lower prices since last year. Consequently, Canada's economy is likely to see continued sluggish growth before gradually strengthening as it navigates lower oil prices. The main global risks stem from these ongoing transitions and could derail growth if not managed well. Policy priorities include managing vulnerabilities and rebuilding resilience to transition risks while supporting near-term growth, and enhancing productivity and potential growth through crucial structural reforms.*

## Global Transitions

Against the backdrop of a global economy in transition, growth has weakened amid tighter financial conditions and lower commodity prices. Specifically, global growth disappointed in the final quarter of 2015 and weakness in activity indicators persisted into early 2016. Overall, as discussed in the April 2016 *World Economic Outlook* (WEO), global growth is projected to be 3.2 percent in 2016 and 3.5 percent in 2017, reflecting a more gradual pickup in activity than projected in the October 2015 WEO. Along with the weaker pace of activity, heightened risk aversion and

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tighter financial conditions act as headwinds. With a modest recovery in advanced economies and a protracted decline in growth in emerging market and developing economies, global demand and activity are expected to remain subdued in 2016 before some pickup in 2017 (Figure 1.1).

Key underlying transitions continue to shape this global outlook, with important implications for the Western Hemisphere: (1) a gradual slowdown and rebalancing of economic activity in China, away from investment and manufacturing toward consumption and services; (2) durably lower prices for oil and other commodities; and (3) changing influences over global financial conditions with lift-off from zero interest rates in the United States, which plays a dominant role in driving financial conditions in the region, while other major advanced economy central banks continue to ease monetary policy. Downside risks to the global outlook surround these ongoing transitions, and if these key challenges are not successfully managed, global growth could weaken further.

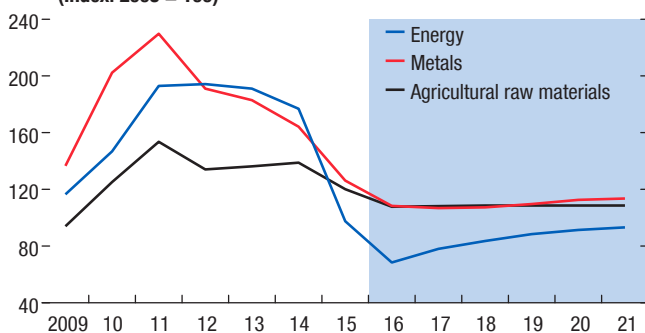
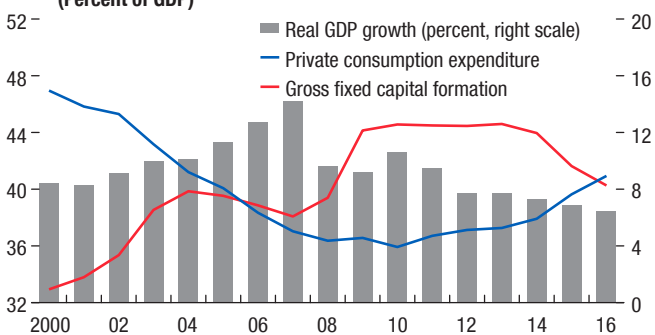
## Subdued Growth and Outlook

In advanced economies, growth in 2015:Q4 was generally weaker than anticipated, given softening domestic demand. Although accommodative monetary policy and lower oil prices should provide support to domestic demand, weak external demand, currency appreciation—especially in the United States—and somewhat tighter financial conditions will weigh on growth. Growth is projected at 1.9 percent and 2.0 percent in 2016 and 2017, respectively, a slightly slower pickup than was forecast in October. Specifically:

- Growth remains solid in the United States, supported by still easy financial conditions and strengthening housing and labor markets. But with tighter financial conditions in the wake of recent market volatility, a stronger dollar weighing on manufacturing, and lower

**Figure 1.1. Weaker Global Growth, Lower Commodity Prices, and China Rebalancing****1. Real GDP Growth  
(Percent; annual rate)**

	2014	2015	Projections	
			2016	2017
<b>World</b>	<b>3.4</b>	<b>3.1</b>	<b>3.2</b>	<b>3.5</b>
Advanced economies	1.8	1.9	1.9	2.0
United States	2.4	2.4	2.4	2.5
Euro area	0.9	1.6	1.5	1.7
Japan	0.0	0.5	0.5	-0.1
Emerging market and developing economies	4.6	4.0	4.1	4.6
China	7.3	6.9	6.5	6.2
Russia	0.7	-3.7	-1.8	0.8

**2. Global Commodity Prices  
(Index: 2005 = 100)****3. China: Growth, Consumption, and Investment  
(Percent of GDP)**

Sources: IMF, World Economic Outlook database; and IMF staff calculations.

oil prices curtailing energy investment, U.S. growth this year is expected to be weaker by  $\frac{1}{4}$  percentage point compared with previous projections. Elsewhere in North America, Canada is projected to return to stronger growth but more gradually than previously anticipated given lower oil prices, as the rest of the economy strengthens supported by expansionary monetary and fiscal policies and a more competitive currency.

- In the euro area, a modest pickup in activity is projected in 2016–17 with growth between 1.5 percent and 1.7 percent, supported by lower oil prices, supportive fiscal policies, and further unconventional easing by the European Central Bank, outweighing a weakening in net exports. Activity is expected to decelerate in Spain, though growth is still relatively strong, and in Portugal. Political uncertainty, including from the refugee surge and possible exit of the United Kingdom from the European Union, are key domestic risks.
- In Japan, slightly firmer growth of about 0.5 percent is expected in 2016 on the back of fiscal stimulus, lower oil prices, and relaxed financial conditions—including from quantitative and qualitative easing with a negative interest rate by the Bank of Japan. A weak fourth quarter, stronger yen, weaker demand from emerging market economies, and declining equity markets suggest higher downside risks to growth.

The picture for growth in emerging market and developing economies is diverse. Overall, growth in China is evolving broadly as envisaged, but with a faster-than-expected deceleration in manufacturing and slowdown in imports and exports. These developments imply spillovers to other economies through trade, as well as weaker commodity prices and confidence. More generally, manufacturing activity and trade remain weak globally, reflecting not only developments in China, but also subdued global demand and investment more broadly—in particular, a decline in investment in extractive industries. Stress in several large emerging market economies, notably Brazil and Russia, is expected to continue. Against this backdrop, a recovery in emerging market (and global) growth is likely to be delayed to 2017–18.

## Cheaper Commodities, Tighter Financial Conditions

In commodity markets, prices for metals, fuel, and food-related commodities remain weak amid subdued global demand. Oil prices declined markedly during the fourth quarter of 2015,

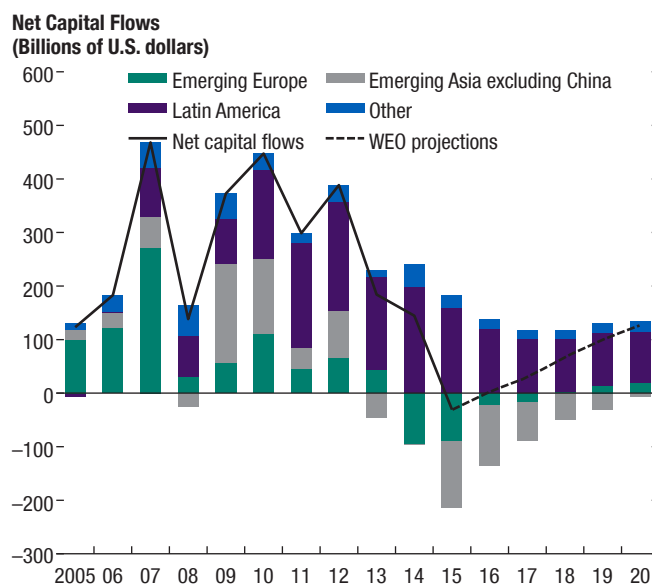
largely reflecting a glut in oil supply, as well as tepid growth in oil demand. Specifically, sustained increases in production by members of the Organization of the Petroleum Exporting Countries and resilience in unconventional production have helped push oil prices to recent lows in early 2016. Though there has been some rebound in prices over the first quarter, the legacy of past oil investment and new production coming on line may keep prices at relatively low levels over the next few years. However, curtailed investment affecting future oil capacity and secular trend growth in oil demand suggest some medium-term recovery in oil prices (see Box 1.1).

Financial conditions have generally tightened in the wake of recent market volatility and weaker sentiment about growth prospects and concerns about lack of policy space. Setbacks to growth and confidence, amid disruptions in asset markets, have increased risks to global financial stability, as discussed in the April 2016 *Global Financial Stability Report*. In asset markets, a broad-based sell-off across equity markets in early 2016 lowered stock prices noticeably below their recent highs though they have since recovered to some degree. Nevertheless, markets appear to have become more risk averse amid concerns about economic growth, including ongoing stress in large emerging market economies mired in deep recessions and financial risks in China as its economy makes the transition to more balanced and sustainable growth. In bond markets, spreads for riskier borrowers—sovereign and corporate—have tended to widen and external financing conditions have tightened for emerging market economies. Capital flows to these economies have been declining from their peaks reached after the global financial crisis, although flows to Latin America have been resilient so far (Figure 1.2). While there have been large changes in asset prices, notably in the exchange rate, the change in the volume of portfolio flows to the region has been relatively muted, perhaps owing to weaker local currencies.

## Transition Risks

Unless key transitions in the world economy are navigated well, the anticipated pickup in global

**Figure 1.2. Weaker Capital Flows to Emerging Markets**



Source: IMF, World Economic Outlook (WEO) database.

Note: Excludes official reserves.

growth may fail to materialize. Prominent risks include the following:

- Bumps along China's needed transition path to more balanced growth associated with a hard landing in its credit and asset markets can lead to wider international spillovers through trade, commodity prices, and confidence. See Chapter 2 for scenario analysis of related downside risks for Latin America.
- Further declines in commodity prices can worsen the outlook for already-fragile commodity producers. On the upside, the recent decline in oil prices may provide a stronger boost to demand in oil importers than currently envisaged, including through consumers' possible perception that prices will remain lower for longer.
- Finally, adverse corporate balance sheet effects and funding challenges could arise from potential further dollar appreciation and tighter global financing conditions as the United States exits from extraordinarily accommodative monetary policy, while monetary easing continues in Europe and Japan.

More broadly, a sudden rise in global risk aversion, regardless of the trigger, could lead to further sharp depreciations in emerging market currencies and to possible financial strains. In Latin America, for example, vulnerabilities at the firm level have risen alongside higher corporate indebtedness. In this setting, systemic risks, including currency mismatches, should be monitored closely (see Chapter 3). And in an environment of higher risk aversion and market volatility, even idiosyncratic shocks in a relatively large emerging market or developing economy could generate broader contagion effects across markets, not only through trade and financial linkages but also through a reassessment of risks (“wake-up calls”).

## Global Policy Priorities

With a more fragile conjuncture, threat of a broader slowdown and limited policy options in many economies may require bolder multilateral actions.<sup>1</sup> With higher downside risks facing most economies, the urgency of broad-based policy responses to safeguard near-term growth and to secure resilience has increased. In advanced economies, where inflation rates remain well below central banks’ targets, accommodative monetary policy remains essential. Where conditions allow, near-term fiscal policy should be more supportive of the recovery, especially through investment. Fiscal consolidation, where warranted by high public debt, should be growth friendly.

In emerging market and developing economies, policy priorities are more varied given the diversity in conditions. Policymakers should manage vulnerabilities and rebuild resilience against potential shocks while lifting growth and ensuring continued income convergence. In general, allowing for exchange rate flexibility will continue to be important for cushioning against adverse external shocks and it has been actively used in Latin America. Several countries, including the three largest economies in the region, have experienced sizable depreciations relative to their

<sup>1</sup>See April 2016 *World Economic Outlook* (Chapter 1) for further details.

post-global financial crisis peaks, with the bulk of the adjustment taking place in 2015 (Figure 1.3). In some cases, substantial currency depreciation is limiting the scope for monetary policy easing depending on the extent of exchange rate pass-through and monetary policy credibility (see Chapter 4).

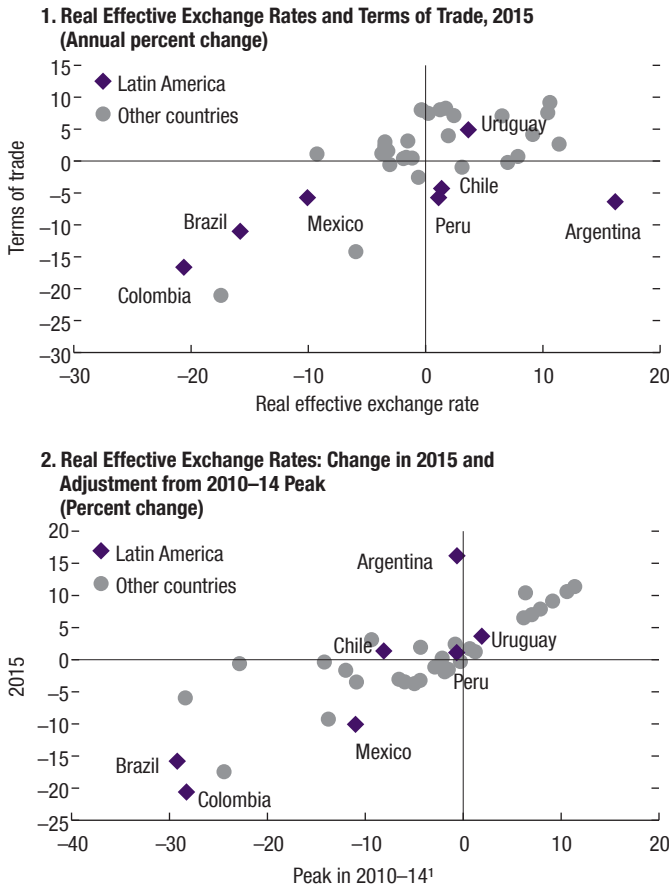
To address possible risks faced by emerging markets going forward, especially commodity exporters with strong fundamentals but high vulnerability, there may be a need to consider strengthening the global financial safety net, including new financing mechanisms. Policymakers need to press on with structural reforms to alleviate infrastructure bottlenecks, facilitate a dynamic and innovation-friendly business environment, and bolster human capital. In Latin America, for example, considerable scope remains for improving infrastructure networks, which, over time, should support growth (see Chapter 5).

## The United States: Consumption as Engine of Growth

In the United States, private consumption has been the main engine of growth and continued to expand solidly. Despite a sharp slowdown in the fourth quarter, the U.S. economy grew at a respectable 2.4 percent pace in 2015, driven by steady household spending. With the labor market deemed near full employment, the Federal Reserve raised interest rates smoothly in December of last year, while inflationary pressures remain restrained. External headwinds to U.S. growth produced some output volatility, including via a stronger dollar and cheaper oil. External factors pose the key downside risks to the U.S. outlook.

U.S. labor market performance has been a pillar of support for consumer spending as the expansion continues. During the past year, growth in payrolls averaged a quarter of a million jobs per month—a healthy clip by historical standards. The unemployment rate dropped by  $\frac{3}{4}$  percentage point, to end the year at 5 percent—only a few tenths of a percentage point above its long-term equilibrium level. Healthy job creation translated into higher

**Figure 1.3. Real Effective Exchange Rates**



Sources: IMF, Information Notice System database; IMF, World Economic Outlook database; and IMF staff calculations.

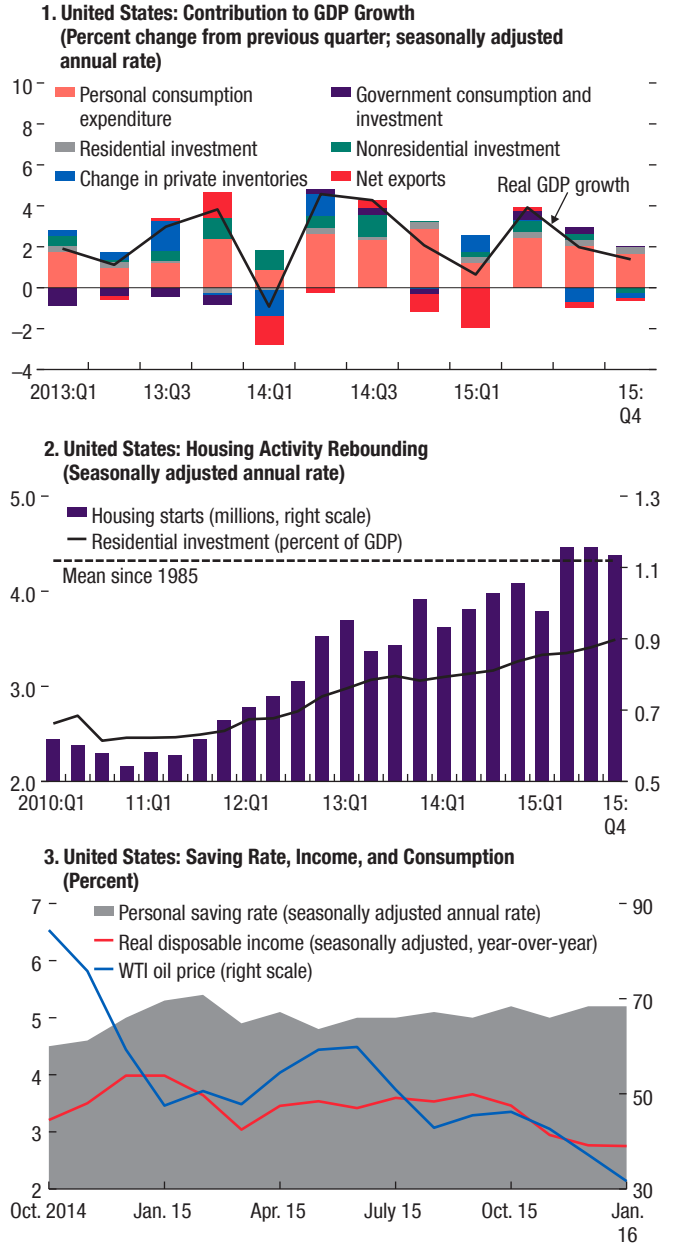
<sup>1</sup> Refers to the change in the maximum real effective exchange rate during 2010–14 to 2015.

personal disposable income, further underpinning rising household spending (Figure 1.4).

The housing market continues to recover. Its strength is supported by the younger cohorts—which have been gaining a stronger foothold in the labor market and spurring household formation—and by a lower stock of foreclosed homes (which is reverting to its precrisis level). As a result, house prices rose at a healthy pace in the last two quarters of the year, coupled with strong growth in housing starts and permits—which are still recovering from postcrisis lows (Figure 1.4).

Notwithstanding strong payroll growth, there has been little sign of price pressures until only recently. Inflation has been restrained by lower

**Figure 1.4. U.S. Consumption as Engine of Growth**



Sources: U.S. Bureau of Economic Analysis; U.S. Census Bureau; and U.S. Energy Information Administration.  
Note: WTI = West Texas Intermediate.

import prices, a stronger dollar, and the recent fall in energy prices, although some of these effects are fading. Core personal consumption expenditure (PCE) inflation, a measure closely followed by the central bank, is still running below the Federal Reserve’s mandate of 2 percent. More recently, core inflation has edged higher



but wages have not accelerated. In part this is due to surplus labor, which is restraining wage growth from picking up meaningfully. In fact, labor force participation rates are still below what demographic trends would imply, suggesting that a sizable number of workers who left the labor market have not yet returned.

Less favorable or less predictable effects from external shocks to U.S. growth have worked through global commodity and currency markets. In oil markets, in particular, noticeably cheaper oil failed to lift U.S. consumption further, contrary to most expectations, as income windfalls boosted saving instead; meanwhile, U.S. investment in the energy sector dropped sharply. Specifically:

- Unlike past episodes of major oil price declines, a subsequent boost to U.S. consumption did not materialize. On average, households increased their saving rate from 4.8 percent in 2013 and 2014 to about 5.1 percent in the last quarter of 2015 (Figure 1.4). Although disaggregated data on who saved the oil windfalls (about 1 percent of GDP) are not yet available, it is likely that lower-income households that benefited the most from lower energy prices were also the ones eager to boost saving to pay down debt after the crisis.
- The effect of the oil price drop on energy producers, in contrast, was immediate. Given the nature of shale oil production, energy investment is very sensitive to oil price movements. Indeed, the collapses in spot and futures oil prices led energy investment to fall dramatically throughout 2015. As a result, the short-term impact of cheaper oil, on balance, has been negative for U.S. growth.

In currency markets, a stronger U.S. dollar has emerged, appreciating further in the last two quarters of the year and bringing the total appreciation of the real effective exchange rate to 15 percent in 2015. This in part reflects the relative strengthening of the economy compared to most trading partners. At the same time, however, the negative effects of the strong dollar

have been quite visible. External demand for U.S. products has decreased and U.S. consumers have increasingly replaced domestic products with imports. As a result, net exports have subtracted about ½ percentage point from growth in 2015. A similar subtraction from trade is expected in 2016 given the downgraded growth outlook in partner countries. The drop in goods exports has weakened manufacturing substantially, and it is expected to remain weak so long as the dollar is strong.

## Solid Outlook but External Risks

Given underlying economic and policy fundamentals, the outlook for U.S. growth remains solid. Real GDP is expected to grow at 2.4 percent in 2016 and 2.5 percent in 2017, with consumption remaining as an engine of growth. Drivers of robust household spending include a further strengthening of the labor market, a recovering housing market, lower oil prices, and a pickup in wage growth, boosting current and expected real disposable incomes. Net exports will be a substantial drag on GDP growth as a result of a strong dollar and weak overseas activity.

Investment should become a stronger driver of growth. Energy investment's drag on growth will carry over to 2016, but it will be modest—given that the industry has already shrunk dramatically and reverted to pre-shale investment levels. Outside mining, oil, and manufacturing, investment is expected to grow at a healthy pace supported by solid consumer demand, an aging capital stock, and substantial corporate cash holdings. This is against the backdrop of benign prospects for the housing market given the expected rebound in household formation and relatively loose financial conditions with mortgage rates hovering near record low levels.

The stance of macroeconomic policies should remain supportive. A halt in fiscal consolidation and still very accommodative monetary policy this year should help sustain growth. Indeed, because of limited signs of inflationary pressures, IMF staff expects that the stance of monetary policy

would remain accommodative through 2016 (see the next section). In addition, various fiscal agreements in late 2015 imply that the stance of fiscal policy in 2016 is expected to remain broadly neutral, following a few years of consolidation.

Risks to the outlook are tilted to the downside, mainly because of external factors. On the positive side, however, private consumption could grow at a stronger pace than forecasted, thanks to solid job and income gains and lower oil prices. Private investment could also recover at a higher pace. On the downside, though, risks are mostly associated with the following:

- A further appreciation of the dollar, possibly in coincidence with emerging market turmoil or in response to a market reassessment of cyclical divergences between the U.S. economy and key trading partners, could lead to a sharper contraction in manufacturing and exports, and possibly trade tensions.
- A sharp weakening of the Chinese economy would affect U.S. trade flows—even though exports to China constitute only about 7 percent of total exports. If that weakening leads to a sizable depreciation of the renminbi, U.S. imports from China would likely be higher.
- A tightening of domestic financial conditions, owing to equity market volatility and a deterioration of corporate credit in the high-yield bond market, would affect investment. The size of the sector, however, is relatively small and risks are concentrated in the energy sector. Overall, the exposure of banks to energy (less than 5 percent of bank assets) seems well contained and losses absorbable.

## Monetary Policy after Lift-Off

The December lift-off by the Federal Reserve was uneventful, and long-term yields are at levels similar to those at the time of the October 2015 WEO. The increase in the federal funds (policy) rate—reflecting the Federal Reserve’s view of a stronger U.S. economy—was taken in stride by

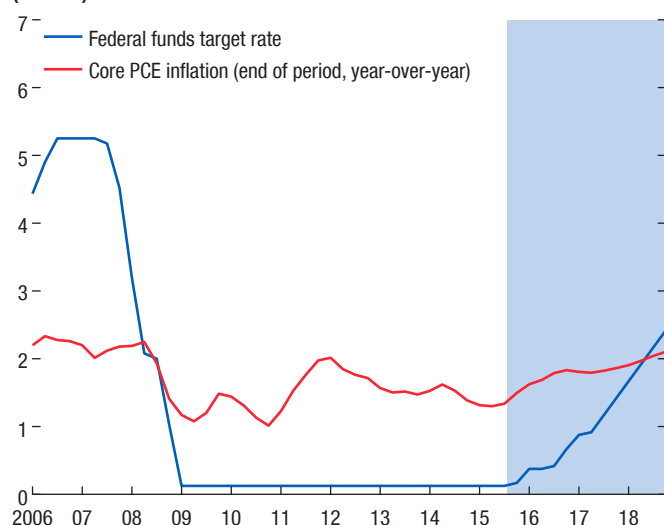
markets, domestically and internationally, because the policy action had been well communicated and largely anticipated. Financial conditions in the corporate bond market tightened in late 2015 and early 2016, in part owing to continued pressure on the energy sector, while financial market volatility increased mainly due to external factors. Overall, domestic financial conditions tightened marginally and remain relatively loose, especially for households.

Looking ahead to monetary policy normalization, subsequent rate hikes are expected to be very gradual. Hence, the stance of monetary policy would remain highly accommodative in 2016. Indeed, the Federal Reserve’s decision to keep the rate unchanged in March was welcome given higher economic uncertainty and a more modest growth outlook relative to December. The policy decision substantiates that the central bank is pursuing a data-dependent approach and has validated more subdued market expectations for only one rate increase in 2016. With regard to risks, though, these interest rate expectations may be too subdued if inflation rises faster than anticipated and exceeds the inflation target.

Further monetary tightening actions should be gradual, well communicated, and based on clear evidence of rebounding economic activity, firmer wage or price pressures, and an assessment that inflation is set to rise steadily toward the Federal Reserve’s 2 percent medium-term inflation objective. With excess capacity in global manufacturing, dollar strength, and lower energy prices, coupled with some slack in the labor market, stronger evidence may be required that PCE core inflation is set to return to target within the policy horizon before further monetary normalization can proceed (Figure 1.5).

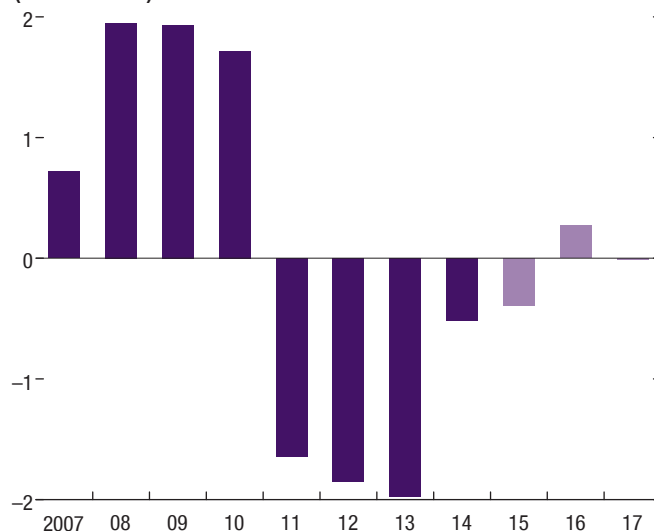
## Fiscal Policy and Structural Priorities

With respect to fiscal policy, the federal government had a deficit of 2½ percent of GDP in 2015—the lowest since 2007. The deficit is projected to widen to above 3 percent towards the end of the decade on the back of age-related and

**Figure 1.5. Subdued Inflation and Gradual Monetary Tightening****United States: Policy Rate and Inflation (Percent)**

Sources: U.S. Bureau of Economic Analysis; Federal Reserve Board; and IMF staff estimates.

Note: PCE = personal consumption expenditure.

**Figure 1.6. Fiscal Stance Moving Into Neutral****United States: Fiscal Impulse (Percent of GDP)**

Sources: IMF, World Economic Outlook database; and IMF staff estimates.

Note: The fiscal impulse is the negative of the change in the primary structural balance. Light bars refer to projections.

entitlement spending pressures and given various agreements made in 2015 on spending and taxes.<sup>2</sup> At the general government level, the change in the structural primary balance is expected to be close to zero in both 2016 and 2017, reflecting a broadly neutral fiscal stance (Figure 1.6).

Although the neutral stance of fiscal policy in the short term is appropriate, public finances in the long term are not sustainable under the current trajectory of policies. Building on recent bipartisan agreements, a new credible medium-term consolidation plan would also help create near-term fiscal policy space. Policies are needed to boost longer-

term potential output through investments in infrastructure, raising educational outcomes, improving the tax structure, and developing and expanding a skilled labor force (including through immigration reform, job training, and providing child-care assistance for working families). Specific policy recommendations include the following:

- *Taxes*—Simplify the income tax system, broaden the base and raise the earned income tax credit, change the tax treatment for multinationals, introduce a carbon tax and a federal-level value-added tax, and raise the federal gas tax.
- *Social security*—Raise the retirement age, increase progressivity of benefits, and index benefits and contributions to consumer price inflation.
- *Health care*—Introduce a cost-sharing system with beneficiaries, contain overuse of expensive treatments, and eliminate tax breaks for generous employer-sponsored health plans.

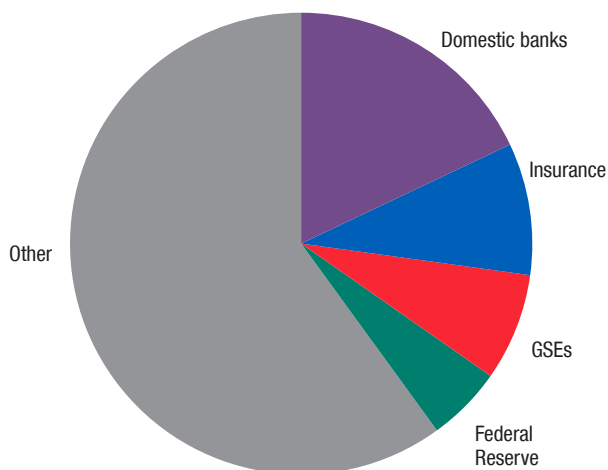
<sup>2</sup>Congress overcame several hurdles in the last quarter of 2015 to pass bills that were signed into law by the president: (1) the Bipartisan Budget Act of 2015 provides a total of ½ percent of GDP of sequester relief in 2016 and 2017, split evenly between defense and nondefense spending; (2) the “Omnibus” spending appropriation act of 2015 finalized the appropriations for the Bi-Partisan Budget Act of 2015 and also laid out spending until 2025 (cumulatively worth \$1.1 trillion or 6½ percent of GDP); and finally (3) the tax act of 2016 (Protecting Americans from Tax Hikes, or the PATH Act) provides a cumulative tax break of \$622 billion or 3½ percent of GDP for 2016–25.



**Figure 1.7. Financial Assets Outside U.S. Banks**

United States: Assets, 2015:Q4

(Percent of total domestic financial assets)



Sources: Federal Reserve Board; and IMF staff calculations.

Note: GSEs = government-sponsored enterprises.

- Introduce skills-based *immigration reform* to expand the skilled labor force.

To safeguard financial stability, completing regulatory reforms that began with the Dodd-Frank Act and monitoring risks shifting into less-regulated areas of the financial sector is essential.<sup>3</sup> Banks are well capitalized and profitability remained high in 2015. However, the large size of the nonbanking sector—with total assets of about 230 percent of GDP in 2014—is a source of systemic risk in conjunction with increased risk taking during the past low-interest-rate period. In particular, life insurers have taken on additional credit risk on their balance sheets. As vulnerabilities in high-yield bond and leveraged loan markets are elevated, shocks could spread through the financial sector with redemption runs in the asset-management sector as potential propagation channels. Systemic risks appear relatively low, however, given the comparatively small size of the below-investment-grade securities market (Figure 1.7).

<sup>3</sup>Detailed recommendations have been made in the 2015 U.S. Financial Sector Assessment Program report.

## Canada: Navigating Lower Oil Prices

Lower oil prices have hit the Canadian economy hard. A sharp cut in capital spending in energy took a heavy toll on business investment<sup>4</sup> and led to a technical recession in the first half of 2015 (−0.6 percent annualized rate), despite solid private consumption. Output growth subsequently rebounded to 1.6 percent in the second half, as exports picked up (Figure 1.8). As a result, overall output growth in 2015 was 1.2 percent, a sharp deceleration from 2014 and the slowest expansion since the 2008–09 recession.

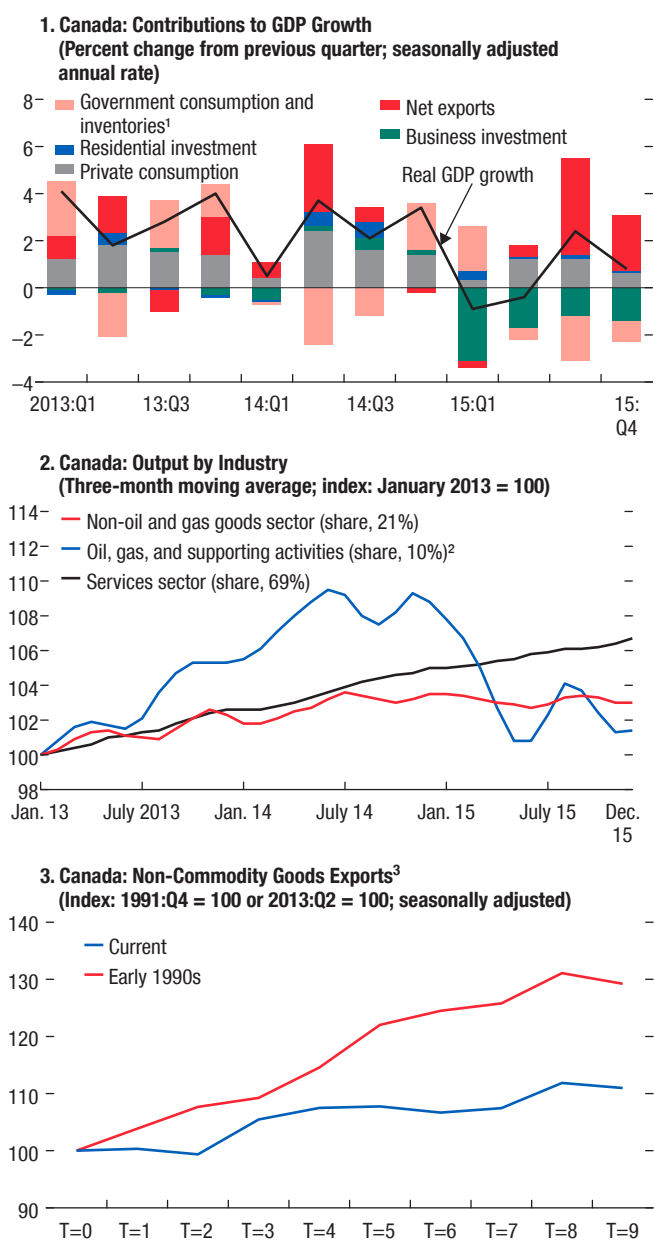
The marked decline in oil prices last year has set in motion some rebalancing toward the non-resource sectors of the economy, facilitated by a weaker Canadian dollar—which depreciated by 15 percent in real effective terms over the past two years—as well as the solid U.S. recovery and accommodative monetary policy. From the supply side, the services sector (accounting for about 70 percent of total output) was the key driver of GDP growth (Figure 1.8). In the energy sector, oil companies were maintaining production levels so long as oil prices remained higher than their marginal operating costs—which was the case until toward the end of 2015. However, lower oil prices hit hard many oil-related industries such as support activities and engineering construction.

Despite this rebalancing, the response of non-commodity exports to a weaker exchange rate and accommodative policies has been weaker than in past episodes (Figure 1.8).<sup>5</sup> The sluggish recovery probably reflects, in part, reduced capacity in non-resource sectors which will take time to rebuild, given past erosion in external competitiveness for non-resource-exporting industries during the oil boom (see IMF 2013).

<sup>4</sup>Energy sector capital expenditures accounted for one-fifth of total capital expenditures in 2015.

<sup>5</sup>Between 1991 and 1993, the exchange rate depreciated by 14 percent in real effective terms, and non-energy goods exports grew by a strong 30 percent. Although the size of the exchange rate depreciation is comparable between 2013 and 2015, exports have increased by only 11 percent over this period.

**Figure 1.8. Canada Navigating Lower Oil Prices**



Source: Statistics Canada.  
<sup>1</sup> Includes statistical discrepancies.  
<sup>2</sup> Includes extraction, support activities, and engineering construction.  
<sup>3</sup> Non-commodity goods exports are chemical products, machinery, electronics, motor vehicles, aircraft, and consumer goods. Current: from 2013:Q3 to 2015:Q4; early 1990s: from 1991:Q4 to 1994:Q1.

At the provincial level, economic activity diverged along the lines of their resource dependence. British Columbia, Ontario, and Quebec (accounting for nearly 70 percent of national GDP) are showing signs of improvements in economic activity. These provinces are net importers of oil and benefit from

lower oil prices. In contrast, economies in large resource-rich provinces—Alberta and Saskatchewan (accounting for 25 percent of national GDP)—are weakening, with unemployment rates approaching 2008–09 recession levels. Alberta is also expecting a large fiscal deficit this year.

With respect to inflation, headline and core inflation are within the Bank of Canada’s target range (1–3 percent). Two opposing factors are at play with respect to consumer prices: pass-through from a weaker Canadian dollar is adding to inflationary pressures, while lower energy prices and slack in the economy are placing downward pressures on inflation.

### Macrofinancial Spillovers

The effects of the lower oil price are spilling over to the real economy through a complex set of macrofinancial transmission channels. In the corporate sector, for example, oil companies’ credit worthiness has deteriorated, with a larger number of companies estimated to have moved into non-investment-grade status (Figure 1.9). So far, strains in oil companies have not spilled over to the broader corporate sector, but there is emerging evidence that a higher number of companies face tighter liquidity conditions and higher borrowing costs, as indicated in various business lending surveys.

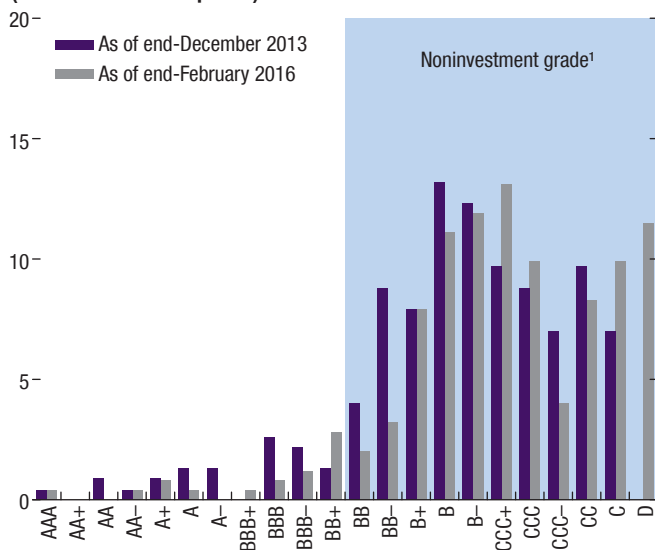
Trends in the housing market have “trifurcated.” In the Greater Toronto and Greater Vancouver areas, house prices are growing fast, at about 10 percent and 20 percent year-over-year, respectively. In contrast, house prices are falling in Calgary (Alberta) and Regina (Saskatchewan), consistent with weakening economic fundamentals in these resource-rich provinces. Elsewhere, house prices are rising at a moderate pace (Figure 1.10).

The direct exposure of the banking system to the oil sector is limited but indirect exposures (through households and supporting businesses) are more substantial.<sup>6</sup> Furthermore, household indebtedness has grown to more than 165 percent of disposable

<sup>6</sup>The six largest banks extend only about 2 percent of their total loan book to the oil sector. However, they extend about 13 percent of total loans to oil-producing regions, and collectively, mortgage

**Figure 1.9. Lower Ratings for Energy Firms**

Canada: Oil and Gas Companies EDF-Implied Credit Ratings  
(Percent share of companies)



Source: Moody's Credit Edge.

Note: EDF = expected default frequency.

<sup>1</sup> About 60 percent of market assets as of February 2016 (up from 32 percent at end-2013).

income—with a growing proportion of debt held by younger households—and represents a key financial vulnerability for the Canadian economy. In the wake of negative income shocks, for example, a high debt burden carries potential nonlinear effects that could overwhelm households' debt servicing capacity and lead to higher mortgage defaults. Under this scenario, banks' asset quality and capital would take a hit, although large banks are profitable, with well-diversified revenue sources, and government guarantees on insured mortgages would mitigate bank losses. Thus, losses would be manageable and, in this regard, markets view spillover risks to large banks as likely to be well contained.

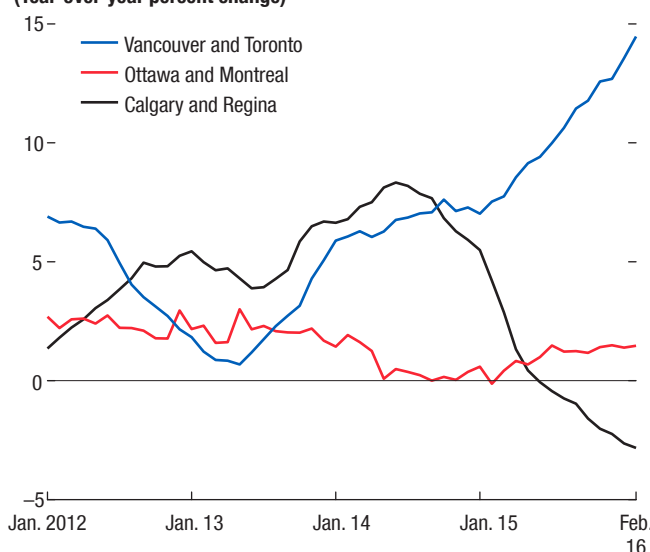
### Subdued Outlook, Risks Tilted to the Downside

Looking ahead, output growth is projected to recover moderately to 1.5 percent in 2016 and 1.9 percent in 2017. A decline in investment in

and consumer loans are a substantial 55 percent of total loans (see Bank of Canada, *Financial System Review*, December 2015).

**Figure 1.10. Divergent Trends in Housing Markets**

Canada: House Price Index, Metropolitan Areas  
(Year-over-year percent change)



Source: Canadian Real Estate Association.

Note: Indices are weighted by population.

the energy sector will continue to be a drag on the economy. Oil prices in the range of \$35 to \$50 a barrel, projected for the foreseeable future, are significantly below long-term break-even costs for unconventional oil extraction activities in Canada, and further substantial cuts in capital spending are expected in 2016.

On the flipside, several countervailing factors will likely lift output. First, non-resource exports and investment are expected to improve, in line with the robust expansion in the U.S. economy and the more competitive Canadian exchange rate. Second, private consumption will remain solid given firm employment growth in non-resource provinces and accommodative monetary policy. Finally, the government just announced new infrastructure spending in the 2016 federal budget.

Overall, however, the balance of risks is tilted to the downside:

- As a net oil exporter, Canada will continue to face headwinds from persistently low oil prices. If oil prices stay at current low levels for an extended period, or fall further, oil companies would cut not only capital spending but also production.

- As an open economy, Canada is susceptible to weaker growth in key trading partners, especially in the United States (where about three-quarters of Canada's exports are directed) and to a lesser extent, in emerging Asia (about 8 percent of Canada's exports). A stronger U.S. expansion, though, would present an upside risk for Canada.
- A sharp correction in the housing market (importantly, in Toronto and Vancouver, where house prices remain overvalued) could lead to adverse wealth effects, reducing domestic demand and worsening banks' asset quality. Nonetheless, the adverse impact on the banking system would be mitigated by a high level of bank capital and government guarantees on insured mortgages.

With regard to regional spillovers, a downturn in Canada could affect a number of Caribbean economies. Canadian banks have a dominant presence in the Caribbean banking system, accounting for up to 70–80 percent of total banking assets in, for example, The Bahamas and Barbados. Tourism in the Caribbean could also be affected, as the number of arrivals from Canada is the second largest after the United States.

## Policy Priorities in Canada

The Bank of Canada has maintained its policy rate at 0.5 percent since July 2015 and has

appropriately signaled that it will keep monetary policy accommodative given slack in the economy. The Bank of Canada has also recently updated its framework for unconventional policy tools (including negative policy interest rates and large-scale asset purchases). With the policy rate near zero, conventional monetary policy space may be quickly exhausted if the growth outlook were to deteriorate. While the Bank of Canada is prepared to deploy unconventional tools, fiscal policy can also play a supporting role given available policy space and low debt at the federal level.

In this context, the federal government announced a growth stimulus package of about 1¼ percent of GDP over the next two years. The package includes increased infrastructure spending, housing investment, transfers to families with children, and tax cuts for the middle class. The government is committed to expanding infrastructure projects by C\$60 billion over the next 10 years. This will help provide near-term stimulus to the economy and contribute to Canada's longer-term potential growth.

To guard against housing risk, the authorities are introducing additional macroprudential measures. In December 2015 the authorities announced rule changes on mortgage finance: an increase in down payment requirements for insured mortgages (effective in February 2016), and an increase in securitization fees (effective in July 2016). They also proposed higher capital requirements for residential mortgages.

### Box 1.1. Lower for Longer? Fallen Oil Prices and the Role of North American Shale

Since the October 2015 *World Economic Outlook*, oil markets have seen renewed downward pressure on crude oil prices, which have fallen 35 percent relative to what was assumed in earlier IMF staff projections. Notwithstanding some rebound in prices over the first quarter of 2016, oil prices remain at relatively low levels. West Texas Intermediate prices, for example, are trading around \$40 a barrel after briefly reaching \$27 in February 2016—the lowest levels seen since 2003. Factors behind the price collapse include a glut in supply, efficiency gains in production, and weaker demand—raising questions of whether oil prices will remain “lower for longer.”

The advent of shale oil production—led by the United States—has added about 4 million barrels per day to the crude oil market since 2009, contributing to a supply glut. The Organization of the Petroleum Exporting Countries (OPEC) essentially accommodated this supply shock,<sup>1</sup> maintaining or raising levels of conventional production. Significant projected increases in Iranian oil exports will likely place added downward pressure on prices. Downward revisions to global growth, especially in emerging market economies, have also softened oil demand. Inventory levels are very high. Financial market turbulence and a strong dollar, meanwhile, have also contributed to lower oil prices.

Going forward, the secular drop in oil consumption in advanced economies, dampened growth prospects in emerging markets, and the resilience of shale oil producers to lower prices all point to a “lower for longer” scenario. First, shale oil production is still a relatively new technology and has experienced phenomenal efficiency gains in response to lower oil prices. Part of its resilience is also due to weak demand for the oil services industries, which reduced the costs to these nonconventional oil producers. That said, shale production has started to show some signs of weakness in the near term. The oil price decline has triggered drastic investment cuts in the sector and shale production is about 10 percent below its peak.

The emergence of the U.S. shale industry as a significant player will also likely affect the future path of oil prices. On the one hand, shale production can be stepped up rapidly so long as oil prices remain above breakeven prices in production. Breakeven prices have on average dropped from about US\$60 to US\$40 a barrel owing to operational efficiency gains. These gains are the results of technological progress, cost deflation, and concentration of resources on the most productive wells. Figure 1.1.1 shows that the current level of production can be sustained if oil prices are slightly above \$40 assuming 10 percent cost deflation. Shale oil will also lead to shorter and more limited oil-price cycles because it requires lower sunk costs than conventional oil, and the lag between first investment and production is much shorter. That feature of shale will limit an upward swing in oil prices over the medium term. On the other hand, there are financial vulnerabilities in the shale industry. A wave of bankruptcies and layoffs could potentially limit the nimbleness of shale production because required skilled labor may be more difficult to mobilize swiftly. In addition, the cost discount from the oil services industry is likely to diminish once prices go back up; thus, break-even prices could be higher than current levels even with technological progress.

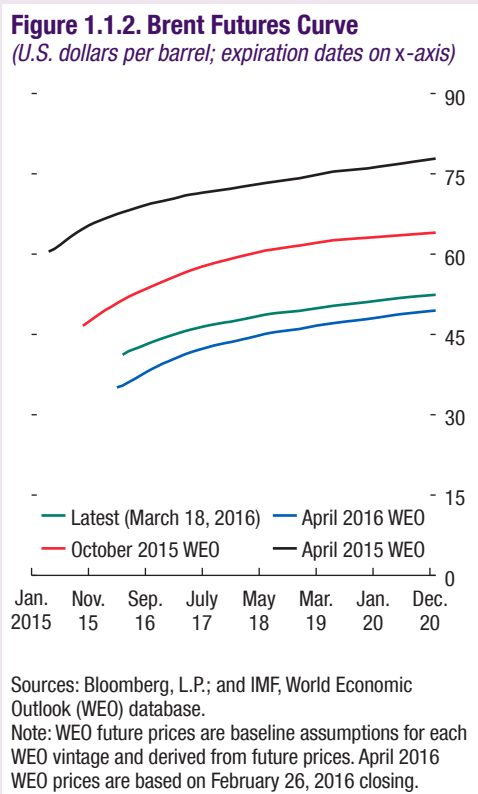
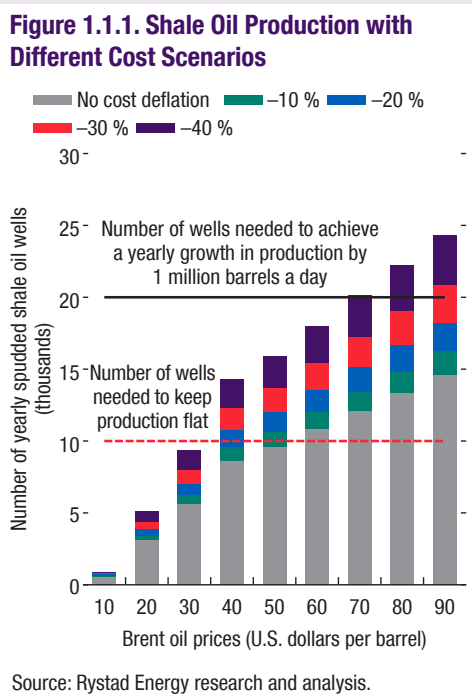
On balance, the current low price environment should result in a partial price reversal over the medium term. Oil futures point to moderately rising prices as shown in Figure 1.1.2. The current IMF baseline projects prices to average \$34.60 in 2016, a decline of 32 percent from 2015, before climbing to \$40.99 in 2017 and to \$44.52 by 2020. Uncertainty around the baseline though has widened, as reflected by unusual price volatility in recent weeks. Geopolitical tensions in the Middle East could potentially cause oil market disruptions. But high oil inventories and a rapid response from U.S. shale producers by tapping drilled but uncompleted wells

Note: This box was prepared by Akito Matsumoto with research assistance from Vanessa Diaz Montelongo and Rachel Fan.

<sup>1</sup>Most recently, at a meeting in Doha on February 16, oil ministers from Qatar, Russia, Saudi Arabia, and Venezuela agreed to freeze output, and Iran and Iraq subsequently welcomed the initiative but without any commitment to stop or slow their scheduled production increases.



Box 1.1 (continued)



should limit price spikes in the near future. A protracted period of cheap oil, however, could also lead to a significant recovery in prices as investment in extraction activities is cut back, affecting future oil supply. Such a decline in investment is already under way, especially outside OPEC.

In the longer run, increasing oil demand from emerging markets should more than offset decreasing demand from advanced economies. China and India are projected to be the top two contributors to global oil consumption growth. Rising incomes and expansion of the middle class in these economies will increase their demand for transportation services (Chamon, Mauro, and Okawa 2008). There are, however, uncertainties regarding how much the increased demand will translate into actual fuel consumption considering the rapid developments in automotive technology and public transportation policies. China is attempting to shift away from fossil fuels because of air quality and other environmental concerns, but low oil prices may delay the transition toward more efficient and cleaner sources of energy (see the Commodities Special Feature in Chapter 1 of the April 2016 *World Economic Outlook*). The share of electric vehicle (including hybrid) sales in the United States has declined in 2015 along with falling fuel prices. In sum, future oil demand from emerging markets will depend not only on their income growth, but also on their energy policies.