

1. The United States, Canada, and the World: Outlook and Policy Challenges

Alongside weaker prospects, lower oil prices, and currency swings, global growth remains modest and uneven. The outlook and policy challenges in Western Hemisphere economies are shaped by many of the same factors. First, a substantial fall in oil prices will affect the near-term pattern of growth—positively for the United States, negatively for Canada, and broadly neutral for the region as a whole. In this context, a stronger U.S. dollar has been helpful, but more volatile exchange rates also pose risks. Second, weaker expectations for medium-term growth in many emerging markets and advanced economies dampen current investment. Global and regional growth rates have been marked down, although risks are now more balanced than before. Key policy challenges center on raising actual and potential growth and supporting rebalancing.

Modest Growth and Cheaper Oil

Global growth remained modest at 3.3 percent in 2014, broadly in line with expectations. Performances across major economies have been uneven or divergent, with many falling short of earlier growth forecasts. As discussed in the April 2015 *World Economic Outlook*, global growth is projected at 3.5 percent and 3.8 percent in 2015 and 2016, respectively, 0.3 percentage point below the respective projections from October (see Figure 1.1). The downward revisions reflect a reassessment of prospects for large emerging markets and some major oil exporters. Meanwhile, the outlook for advanced economies, most notably the United States, is showing some signs of improvement.

The most dramatic change in the global environment recently has been the sharp drop in oil prices—currently more than 40 percent lower than assumed in the October 2014 *World Economic Outlook*.

Note: Prepared by Hamid Faruqee with Stephan Danninger and Andrea Pescatori. Madelyn Estrada, Genevieve Lindow, and Rania Papageorgiou provided excellent research assistance.

Figure 1.1

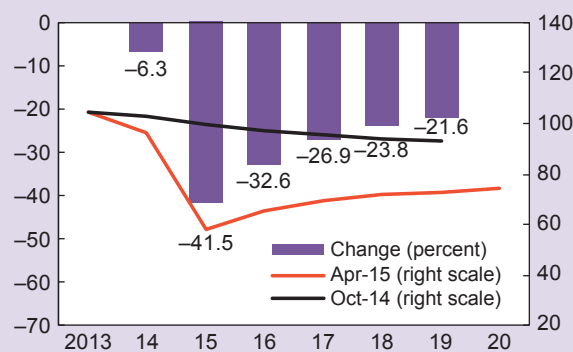
Global growth remains modest and uneven in the wake of lower oil prices and weaker medium-term growth prospects.

Real GDP Growth
(Percent; annual rate)

	2013	2014	Projections	
			2015	2016
World	3.4	3.4	3.5	3.8
Advanced economies	1.4	1.8	2.4	2.4
United States	2.2	2.4	3.1	3.1
Euro area	-0.4	0.9	1.5	1.7
Japan	1.6	-0.1	1.0	1.2
Emerging market and developing economies	5.0	4.6	4.3	4.7
China	7.8	7.4	6.8	6.3
Russia	1.3	0.6	-3.8	-1.1

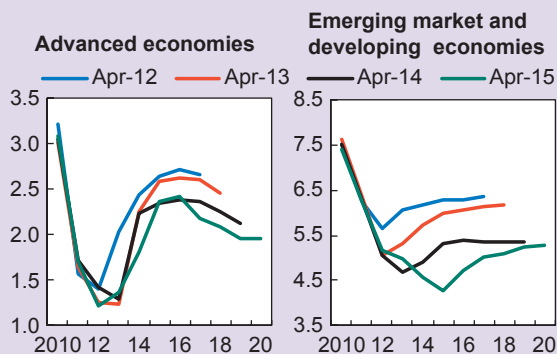
Oil Baseline Comparison

(U.S. dollars per barrel)



Real GDP Growth by World Economic Outlook Vintage

(Percent; annual rate)



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

This unusually large price decline mainly reflects higher-than-expected supply from both Organization of the Petroleum Exporting Countries and other oil producers, as well as weaker-than-expected economic activity and oil demand (especially in some emerging markets). A lower oil price, by itself, should provide an overall boost to the global economy through lower energy input costs for firms and higher disposable incomes for consumers. But the oil shock will have important redistribution effects, shifting income from oil exporters to importers, and will dampen already low global inflation. Other commodity prices also remain well below their recent peaks.

Global financial conditions—notably, low long-term bond yields—remain relaxed as further monetary easing by central banks in Europe and Japan combats deflationary pressures. Possible tensions with U.S. monetary policy aiming to lift rates later this year may, however, impart some market volatility.¹ Across major currencies, exchange rates have moved substantially in recent months led by a stronger U.S. dollar—reflecting different (expected) evolutions for growth and policy rates, as well as the price of oil (see Figure 1.2). Exchange rate movements, in principle, can be helpful by redistributing demand across countries but can also present risks when the dollar appreciates suddenly and sharply.

Overall, risks appear more balanced now than before around a lower global growth projection. A greater-than-anticipated boost to demand from oil prices is an upside risk, and downside risks from slower emerging market growth is reflected in the baseline. Key downside risks still include intensifying geopolitical tensions (notably in Russia and Ukraine) affecting major economies, disruptive asset price shifts as the configuration of accommodative monetary policies shifts, and risks of stagnation and low inflation in advanced economies. Across the major economies or regions:

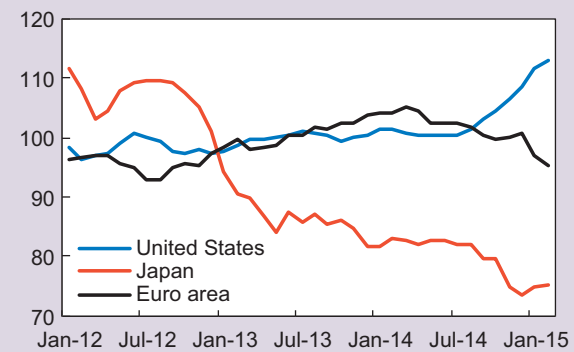
- Reflecting a stronger recovery, the *United States* is projected to grow about 3 percent in 2015–16, with above-trend growth and robust

¹ See April 2015 *Global Financial Stability Report*.

Figure 1.2

Nominal Effective Exchange Rates

(Index: 2010 = 100)



Source: IMF, Information Notice System.

private demand supported by lower oil prices, despite the projected gradual rise in interest rates and recent dollar appreciation (see the section that follows).

- After a mid-year trough in 2014 related to subdued private investment, growth in the *euro area* has shown signs of pickup, supported by lower oil prices, low interest rates, and a weaker euro. And after a disappointing 2014, growth in *Japan* is also projected to pick up, sustained by a weaker yen and lower oil prices.
- In emerging markets, *China's* slowdown in real estate investment has been somewhat sharper than anticipated. A continued gradual slowdown in growth is expected, alongside measured policy stimulus as authorities try to strike the right balance between supporting activity and reducing vulnerabilities from past rapid credit and investment growth. For *Russia*, a markedly weaker growth outlook reflects the impact of sharply lower oil prices and increased geopolitical tensions, while in other emerging market commodity exporters, weaker terms of trade are now forecast to take a heavier toll on medium-term growth.
- Against a backdrop of country-specific headwinds to growth, lower commodity prices but a stronger U.S. recovery, regional growth in *Latin America and the Caribbean* is expected to dip just below 1 percent—though with divergences

broadly along north-south lines. Specifically, downward revisions are concentrated in South America's commodity exporters, notably *Brazil* (see Chapter 2). In terms of fiscal and external balances, the commodity price shock can also have noticeable effects within the region (see Chapter 3).

Weaker Medium-Term Growth Prospects

Looking further ahead, medium-term prospects have become less favorable than before for advanced economies and, especially, for emerging markets, where activity has been slowing since 2010 (see Figure 1.1).

Concerns about slowing potential output in advanced economies reflect long-term factors such as demographics, as well as an unexpectedly protracted period of weak investment after the global financial crisis. In the euro area, for example, a legacy of high indebtedness and gradual bank balance sheet adjustment continues to hamper monetary transmission, credit flows, and investment, thus affecting growth.

Weaker-than-anticipated growth for emerging markets—extending a string of negative surprises over the past four years—reflect ongoing, protracted adjustment to diminished expectations regarding their medium-term growth prospects.²

In Latin America, dampened prospects for future growth and earnings—in a context of changing external conditions, notably lower commodity prices—are expected to weigh on investment decisions by domestic firms (see Chapter 4). While not a puzzle per se, restrained investment behavior will weigh on future growth prospects in the region.

More broadly speaking, several economies in Latin America and the Caribbean face significant growth challenges, in part due to a relatively narrow

economic base and lack of diversification toward more sophisticated, knowledge-intensive industries (see Chapter 5).

Policy Challenges

In this setting, raising actual and potential output continues to be a priority. Over the medium term, rebalancing in major economies will be important to help ensure the sustainability of growth.

In many advanced economies, accommodative monetary policy remains essential to support economic activity and to ward off the risk of further declines in inflation expectations, particularly in the euro area. There is also a strong case for increasing infrastructure investment in some economies, including the United States.

In many emerging markets, macroeconomic policy space to support growth remains limited. But in some, lower oil prices will help reduce inflation and external vulnerabilities, thereby relaxing pressure on central banks to raise policy interest rates. Structural reforms to boost potential output are urgently needed in both advanced and emerging market economies.

In Latin America, many of the same issues are pertinent given slower growth, softer commodity prices, and structural weaknesses. Limited economic slack and reduced policy space in most countries constrain the option for near-term policy stimulus and raise the stakes for medium-term structural reform to shoulder the burden for raising growth and boosting economic prosperity.

The United States: Recovery Gaining Further Strength

The U.S. economy picked up steam last year. GDP grew by more than 2½ percent (on an annual basis) during the second half of 2014, easily overcoming a weather-related contraction in the first quarter. Job growth accelerated to 260,000 per month for the year—the highest level since the global financial crisis—fueling robust consumption growth exceeding 4 percent (seasonally adjusted annual rate) at year end (see Figure 1.3).

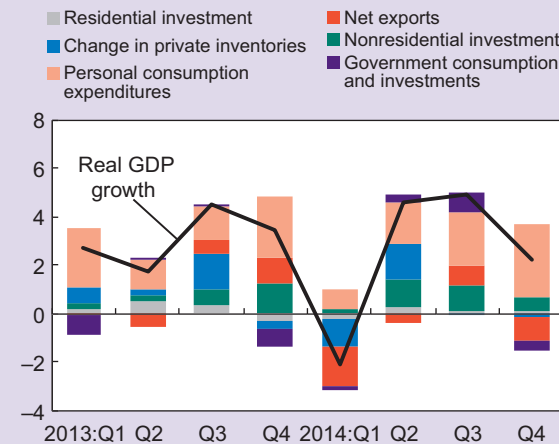
²These topics are also discussed in more detail in Chapter 3 (potential output) and Chapter 4 (investment) of the April 2015 *World Economic Outlook*.

Figure 1.3

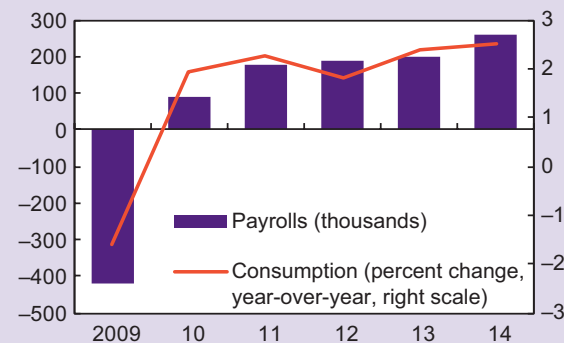
Led by consumption and strengthening labor markets, a strong U.S. recovery remains on track.

United States: Contribution to GDP Growth

(Percent change from previous quarter, seasonally adjusted annual rate)

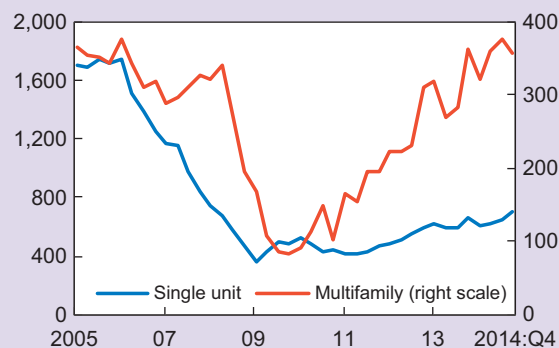


United States: Consumption and Payrolls



United States: Housing Starts

(Thousands, seasonally adjusted annual rate)



Sources: Haver Analytics; U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; and U.S. Census Bureau.

Consumer spending was further buttressed by improving household balance sheets, a rising stock market, and recovering house prices. A decline in mortgage rates boosted housing starts and permits to 1 million units. Foreclosure rates (as a share of mortgages) declined to a seven-year low.

Exports and business investment growth was less buoyant—pointing to the need for further rebalancing of the economy. Lower oil prices are helping the current account through the oil trade balance, but soft overseas demand and a stronger dollar dampened exports in an otherwise strong year for manufacturing. Businesses started to upgrade equipment with a steady rise in capacity utilization. Momentum slowed, however, toward year end as lower oil prices pulled down valuations in the energy sector—by about 20 percent in the second half of the year—and slowed investment spending in the fourth quarter.

The unemployment rate declined to 5.5 percent in February 2015. Nonetheless, wage growth remained subdued owing to still sizable labor underutilization and is muted in lower-skilled segments as previously discouraged job seekers re-enter the labor market. Core personal consumption expenditure inflation declined during the second half of 2014, reaching 1.3 percent in January, well below the Federal Reserve’s 2 percent goal with headline inflation even lower at 0.7 percent (reflecting falling energy prices).

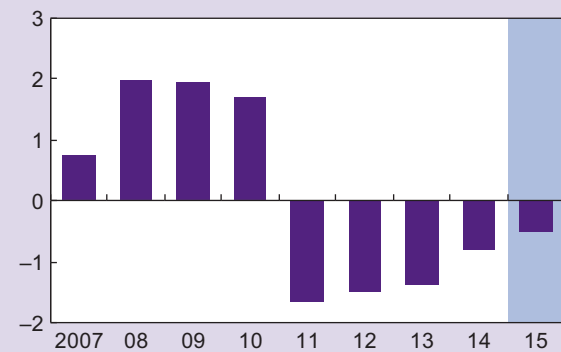
Robust Outlook and Private Demand

Consumers will continue to be the main driver of the recovery. Growth in 2015 is projected to reach 3.1 percent and remain there in 2016. Drivers of robust consumer spending include a further firming of the labor market, markedly lower energy prices, and tame core inflation boosting real incomes, as well as accommodative financial conditions. With earnings rising and an expected moderate rebound in household formation, housing starts for the large single units market will continue to pick up.

Figure 1.4

United States: Fiscal Impulse

(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff projections.
Note: The fiscal impulse is the negative of the change in the primary structural balance.

Businesses are expected to further upgrade their aging capital stock given high capacity utilization rates and substantial cash holdings. The exception is the energy sector where low energy prices are eroding profitability. Finally, fiscal withdrawal will continue this year, albeit with a reduced fiscal drag (see Figure 1.4).

Taken together, the firming of domestic demand is expected to more than offset the impact from a strengthening of the dollar on the tradable sector via greater overseas competition which, on its own, could deduct about $\frac{1}{2}$ percent from growth in 2015. Over the medium term, both factors could work against rebalancing and, over time, lead to a wider trade deficit.

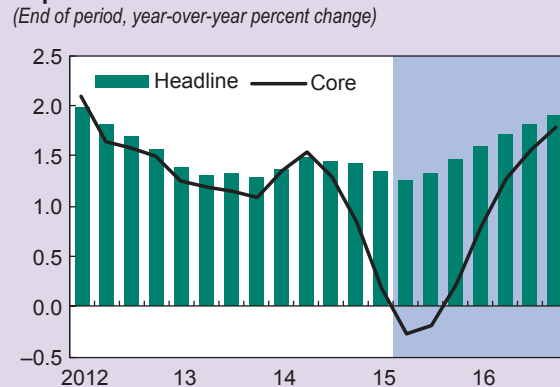
With respect to consumer prices, personal consumption expenditure inflation has declined significantly in recent months, but is expected to rebound as temporary effects from recent dollar price appreciation and lower energy prices wane. Core personal consumption expenditure inflation is expected to temporarily decline to 1.2 percent this year before rising to $1\frac{3}{4}$ percent in 2016 (see Figure 1.5). Rapid changes in terms of lower oil prices and a stronger dollar, however, have made the near-term inflation outlook more uncertain.

Because of the strong economy, especially private domestic demand, second-round effects on core

Figure 1.5

United States: Personal Consumption Expenditures Inflation

(End of period, year-over-year percent change)



Sources: Haver Analytics; U.S. Bureau of Labor Statistics; and IMF staff projections.

inflation from lower oil prices are estimated to be modest. The size of these spillovers are, however, hard to predict and depend on the perceived duration and severity of the commodity price shock—leaving greater uncertainty than usual about underlying inflation momentum. Also, wage inflation has been tame, but could pick up quickly as the unemployment rate drops further. Finally, actual inflation will likely remain below the 2 percent target for a longer time, potentially pulling down inflation expectations (although survey data suggests that expectations are still well anchored).

Amid subdued near-term inflation pressures, long-term interest rates have further declined and are strengthening monetary accommodation and underlying demand. The decline in the term premium reflects weaker external conditions, excess demand for safe assets, and expectations of future dollar strength—it may take time for these effects to recede.

The confluence of factors affecting inflation and employment complicates the assessment of the appropriate timing for lift-off of policy rates from the zero interest rate bound. In its recent communication, the Federal Reserve has explained that upon continued improvements in the labor market and given that it expects inflation to move back to 2 percent over the medium term, policy rates should rise, depending on incoming

information. Weighing these factors carefully, the Federal Reserve is appropriately planning to raise its policy rates, with lift-off expected later this year, only gradually.

Risks to the U.S. Recovery

Although developments point to a robust U.S. recovery, there are several downside risks:

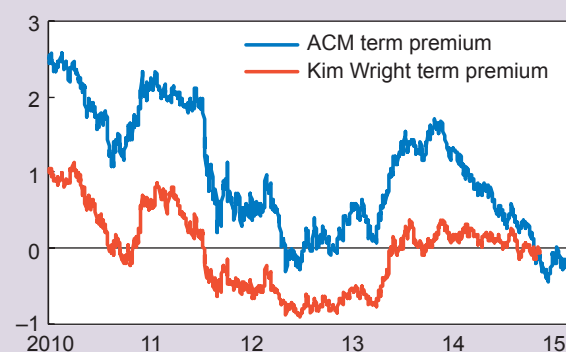
- A firmer dollar—particularly, a sudden and sharp appreciation—could suppress export growth in manufacturing more than anticipated, especially if overseas growth disappoints. Model estimates suggest that a further dollar appreciation in real effective terms by 10 percent could slow growth by $\frac{1}{2}$ percent to 1 percent and hinder rebalancing. Knock-on effects for business investment could further slow domestic demand. Low oil prices could exacerbate this by suppressing investment in the oil sector by more than forecast, with important regional implications for growth (see Box 1.1).
- Long-term interest rates could rise abruptly and harm the recovery, especially in housing. Compressed term premiums are partly related to global developments, which could reverse (see Figure 1.6). Similarly, the lift-off by the Federal Reserve from the zero interest bound or political

brinkmanship over the debt limit or the 2016 budget could lead to abrupt changes in the term premium or greater volatility of yields. Sharply rising mortgage rates could be a particular issue with first-time home buyers, as this market segment may be more interest rate sensitive.

- Financial vulnerabilities could come to the fore, despite progress on many fronts. With implementation of the Dodd-Frank Act, the financial system is better equipped to deal with systemic risk and the regulatory perimeter has been broadened. Risk management has improved through regular stress testing and there is better coordination among supervisory agencies, though the risk assessments should be broadened to the nonbanking financial sector. Repair of household balance sheets has progressed and banks' capital positions remain strong. But the prolonged period of low interest rates is creating pockets of vulnerabilities, especially in the non-bank financial sector. The insurance sector has been hurt by low interest rates and, because of a maturity mismatch between assets and liabilities, a rapid rise in interest rates could weaken its capital position. Mutual funds continued to grow, heightening their capacity to transmit liquidity shocks via funding channels, such as the repo market. Risks have also been building in high-yield bond and leveraged loan markets as weaker firms utilize relatively easy access to credit.

Figure 1.6

United States: Term Premium (Percent)



Sources: Federal Reserve Bank of New York; and Haver Analytics.

Note: ACM term premium refers to Adrian, Crump, and Moench (2013); Kim Wright term premium refers to Kim and Wright (2005).

U.S. Policy Priorities

The U.S. economy will not be able to carry the same momentum forward for long. Potential growth is estimated to be about 2 percent, weighed down by population aging and weaker innovation and productivity growth. Over the medium term, labor force growth is expected to slow for demographic reasons. The slowdown in information technology innovation (that appears to have contributed to the decline in U.S. total factor productivity growth) could have a more lasting effect on growth. Finally, fiscal sustainability concerns need to be addressed as the public debt-to-GDP ratio is substantially above its precrisis level and is expected to rise further under current policies.

Addressing these challenges will require the implementation of an ambitious agenda of supply-side policies in a fractious political environment. Forging agreement on a credible medium-term fiscal consolidation plan is a high priority to ensure that debt does not rise again with aging-related costs and to sustain confidence in stable financing conditions. This will require efforts to lower the growth of health care costs, reform social security, simplify the tax code, and increase tax revenues (through base broadening and, possibly, new indirect taxes).³

Policies should also be targeted toward raising labor force participation. Any reform package should include measures to incentivize work by expanding the earned income tax credit system, providing support for childcare, and enacting a skill-based immigration reform.

Productivity-enhancing innovation could be better induced through the tax system while skill-building could be fostered through better training programs at the state level and through partnerships with industry and higher education institutions. Finally, the October 2014 *World Economic Outlook* made a clear case that key infrastructure investment can be made in the United States at relatively modest near-term costs but with long-term growth benefits.

Canada: Rebalancing Amid Lower Oil Prices

The Canadian economy expanded at a solid pace of 2.5 percent in 2014. Net exports contributed positively to growth for a second consecutive year. But private consumption remained the single largest driver, alongside an overheated housing market, leaving the rebalancing of the Canadian economy toward stronger business investment incomplete (see Figure 1.7).

Leading the recovery, private consumption remained resilient. Supported by still easy financial conditions and rising disposable income, consumers increased purchases of durable goods such as

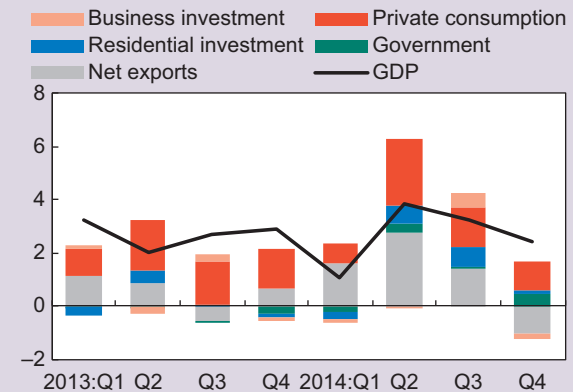
³ See the April 2015 *Fiscal Monitor* for further discussion of tax code reform.

Figure 1.7

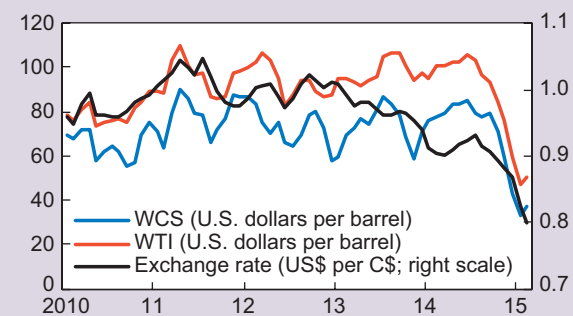
Solid growth in Canada is expected to slow because of lower oil prices, but a weaker Canadian dollar should support nonenergy exports.

Canada: Contributions to GDP Growth

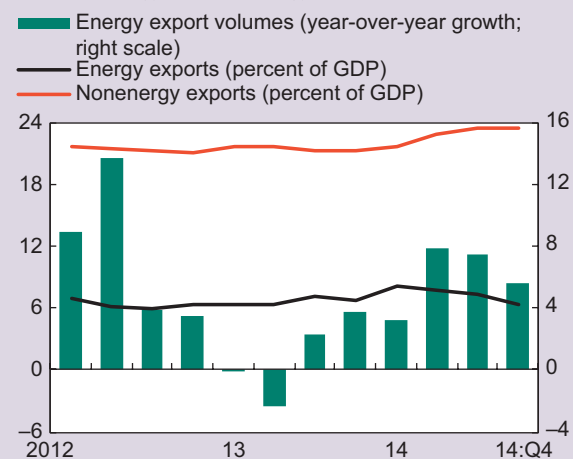
(Percentage change from previous quarter, seasonally adjusted annual rate)



Canada: Oil Prices and Exchange Rate



Canada: Energy and Nonenergy Exports



Sources: Bloomberg, L.P.; Haver Analytics; Statistics Canada; and IMF staff calculations.

Note: WCS = Western Canada Select; WTI = West Texas Intermediate.

automobiles and other household-related goods. Household indebtedness also continued to rise, with the debt-to-income ratio reaching a historical high of 157 percent in 2014.

Nonresidential business investment continued to be weak. Moreover, there are firm indications that the recent fall in oil prices will significantly reduce investment in the energy sector. Canadian prices for heavy crude oil—that is, Western Canadian Select (WCS) prices—have fallen broadly in line with their U.S. benchmark (see Figure 1.7, middle panel). Leading domestic energy companies have announced investment cuts in oil sands projects for this year. Investment in non-oil sectors may mitigate this reduction, however, particularly in energy-reliant sectors and sectors expected to benefit from the U.S. recovery and a weaker Canadian dollar, such as manufacturing.

The pickup in net exports has been encouraging over the past few years. Export volumes expanded by 5.4 percent in 2014, the strongest growth registered since 2010. Exports have been supported by depreciation of the Canadian dollar (10 percent in nominal effective terms since December 2013), a stronger U.S. recovery, and high energy demand (see Figure 1.7, bottom panel).

As a result, the current account deficit narrowed considerably to -2.2 percent in 2014 compared to -3.0 percent in 2013, mainly due to strength in the energy trade balance. In volume terms, energy exports grew strongly, reflecting a compositional shift in U.S. oil demand. Specifically, Canadian oil has gained substantial market share in the United States, rising from 22 percent in 2009 to 40 percent in 2014. The nonenergy trade balance improved as well, with exports rising above precrisis levels in value terms. In the last few months of 2014, however, with the decline in oil prices, the value of energy exports has substantially declined.

Fiscal consolidation continued in 2014. The federal government is broadly on track to achieving a balanced budget in fiscal year 2015/16. Adopting a neutral stance thereafter would be consistent with reaching its medium-term public debt objectives. Provincial governments remain committed to their

balanced budget legislation, and consolidation efforts have reduced their deficits by about $\frac{1}{2}$ percent of GDP in 2014. Fiscal positions vary considerably by province, however. Some will need to step up consolidation efforts. Eastern provinces, such as Ontario and Quebec, continue to face long-term fiscal challenges, while western provinces, such as Alberta, start with relatively strong public finances. The recent drop in crude oil prices, however, will significantly impact fiscal revenues from the oil sector in Alberta.

Dampened Outlook and Downside Risks

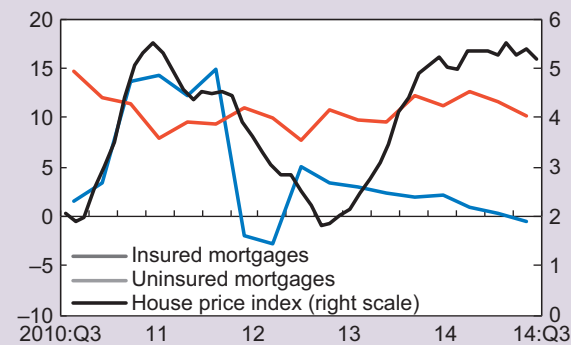
In 2015, growth in the wake of lower oil prices is expected to slow modestly to 2.2 percent, still somewhat above potential growth. Although the economic outlook for businesses linked to the energy sector has noticeably deteriorated, a stronger U.S. recovery and weaker Canadian dollar are expected to boost exports and investment in nonenergy sectors, leading to some rebalancing of growth. In this setting, a soft landing of the housing market is expected given a solid labor market and low mortgage rates.

Alongside slower growth, inflation is likely to decline. The fall in crude oil prices is expected to ease the rate of headline inflation to around 1 percent, though core inflation should remain closer to the Bank of Canada's 2 percent target.

Risks remain modestly tilted to the downside for Canada. Principal risks are the effects of substantially lower oil prices, tightening of global financial conditions, and a protracted period of slower growth in advanced and emerging market economies. Risk of lower-than-expected U.S. growth would be particularly relevant.

Domestically, high levels of household indebtedness and overvaluation in the housing sector represent the main domestic vulnerabilities. Signs of overheated housing markets have persisted, though they vary by region and market segment. House prices have risen between 5 percent and 6 percent (year over year; see Figure 1.8). This

Figure 1.8

Canada: House Prices and Mortgage Loans*(Year-over-year percentage change)*

Sources: Office of the Superintendent of Financial Institutions; and The Canadian Real Estate Association.

Note: Growth in insured mortgages in 2011:Q4–2012:Q4 is calculated as the rolling average of quarter-over-quarter annualized growth rates to adjust for a structural break in the series due to International Financial Reporting Standards reclassification of securitized mortgages in 2011:Q4.

has been driven principally by Calgary and by the single-family home and condominium markets in the greater Toronto and Vancouver areas. IMF staff analysis suggests a national real house price overvaluation between 7 and 20 percent.

With lower oil prices, however, some signs of cooling in housing markets have become visible, and risks of a harder landing need to be watched closely. A deeper downside scenario would be one where key domestic and external risks materialize in unison and interact.

Canada: Policy Challenges

Against this setting, the appropriate mix of policies will need to support both near- and medium-term growth by facilitating economic rebalancing while

mitigating risks in housing markets and from high household debt.

The Bank of Canada lowered its policy rate by 25 basis points in January, citing the sharp decline in oil prices and the need to provide insurance against downside risks to inflation. The policy action is in line with IMF staff advice to use available monetary policy space should adverse shocks intensify. Alongside lower oil prices and weaker terms of trade, a weaker Canadian dollar should also be helpful in terms of rebalancing toward the nonenergy sector.

Overall, maintaining monetary accommodation along with gradual fiscal consolidation at the general government level would be conducive to achieving growth led by stronger exports and investment in the economy, while targeted macroprudential policies would help address housing sector vulnerabilities as needed.

To reduce financial vulnerabilities, policymakers have taken several steps over the years to tighten macroprudential policy—with a visible impact on the growth of insured mortgages and the credit quality of borrowers. However, uninsured mortgages, not subject to the same regulatory tightening, have continued to grow apace, helping fuel housing demand and suggesting possible leakage from macroprudential tightening (see Figure 1.8). Further policy action on this front would be needed if financial risks resume rising.

Finally, Canada faces a number of longer-term challenges. These include low productivity, energy infrastructure bottlenecks, improving competition in network sectors, reducing barriers to interprovincial trade, and further enhancing financial sector resilience in line with recommendations of the 2013 Financial Sector Assessment Program.

Box 1.1

Is the U.S. Shale Boom Over?

What do low crude oil prices imply for the U.S. oil industry? Is the unconventional energy boom over? This box summarizes the recent evidence and discusses potential prospects for the U.S. oil sector: While in the short term, lower oil prices will clearly adversely impact the U.S. oil industry, over the medium term they may induce healthy restructuring through mergers and cost saving through improved technology.

Rise and Fall of Crude Oil Prices

The large and sustained rise in oil prices since the early 2000s, driven mainly by strong demand (coupled with a series of supply disruptions), eventually led to major shifts in the global energy landscape. Crude oil prices hovered around \$105 per barrel between 2011 and mid-2014, up from \$25 per barrel a decade before. North America (particularly the United States) emerged as a major producer from an unconventional energy revolution (see Box 1.2 in the April 2014 *Regional Economic Outlook: Western Hemisphere*). But the recent dramatic drop in oil prices may have a serious impact on the U.S. unconventional oil industry. Between August 2014 and February 2015, the West Texas Intermediate (WTI) spot oil price nearly halved to about \$50 per barrel, below most estimates of the “breakeven” price for the U.S. shale oil production. Currently, markets expect oil prices to modestly recover to about \$60 in 2016.

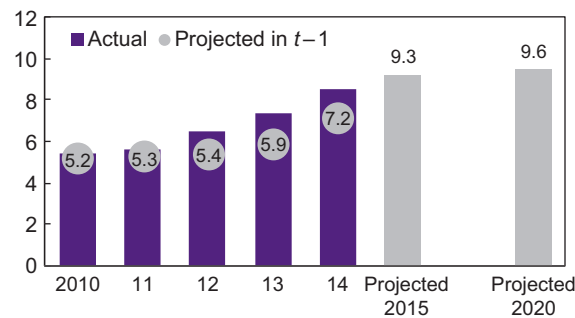
U.S. Oil Sector: Important But Still Small and Concentrated

Energy production in the United States had indeed responded strongly to high prices before and benefited from technological innovation. U.S. crude oil production has been rising steadily since 2008, surpassing 9 million barrels per day (mbd) by end-2014. Nearly all of the 4 mbd increase in production has been driven by “sweet grades” or light tight oil, which now represents over 50 percent of total U.S. oil production. In turn, oil production has consistently surprised on the upside in recent years (Figure 1.1.1) and has mainly been absorbed by reducing imports of similar oil grades while consumption has been mostly flat benefiting from rising energy efficiency (Figure 1.1.2).

Figure 1.1.1

U.S. Crude Oil Production

(Millions of barrels per day)

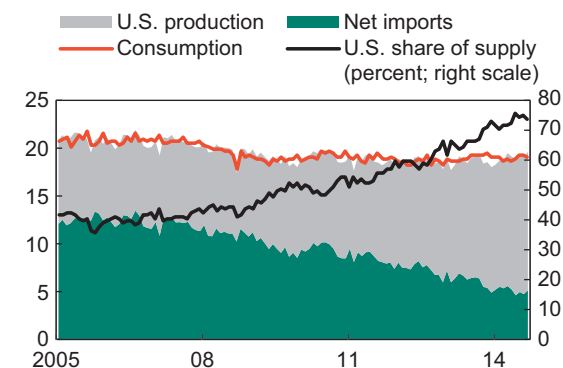


Source: U.S. Energy Information Administration.

Figure 1.1.2

U.S. Oil Production and Consumption

(Millions of barrels per day)



Source: U.S. Energy Information Administration.

Note: Refers to the production, consumption, and net import of petroleum. Petroleum consists of crude oil and petroleum products, which are unfinished oils, pentanes plus, and gasoline blending components.

For the U.S. economy, the oil and gas extraction sector amounts to 1½–2 percent of GDP. Investment in oil and gas extraction and support activities amounted to about 1 percent of GDP or 8½ percent of nonresidential

Note: This box was prepared by Lusine Lusinyan and Andrea Pescatori.

Box 1.1 (continued)

investment in recent years, contributing to 20 percent of its growth on average in 2011–13. But production is concentrated in a few states (see Figure 1.1.3). Even in North Dakota—one of the two main centers of the U.S. tight oil boom (after Texas)—the sector’s share in state GDP is below 5 percent. Employment share of the sector in total employment is small (0.6 percent).

In the Aftermath of the Oil Price Collapse

While lower oil prices are expected to have a net positive impact for the U.S. economy, the effects on the oil industry will be negative. So far, however, the oil price collapse has had a relatively modest impact on production, which continued rising and hit 9.3 mbd in February (the highest level since 1972). U.S. crude oil inventories are at all-time highs, but recent declines in gasoline and product stocks may suggest that lower crude prices are beginning to boost demand.

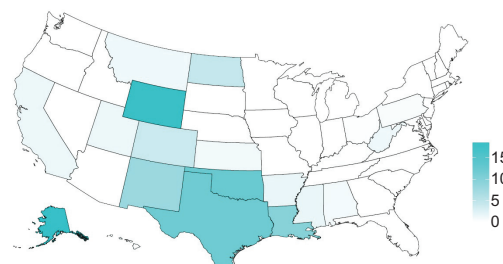
With a lag, employment in the oil sector has already started taking a toll,¹ and industry analysts estimate that investment in shale and tight oil drilling and exploration could be reduced by about 40 percent of the previously planned level for 2015. However, there is large uncertainty around these estimates as breakeven prices vary greatly by oil field, operating and financial costs also differ widely by operator, and companies may divert some of the planned investment in shale to more traditional investments. In general, given upfront costs, lower prices should affect new rather than existing investment projects. In addition, the effects of lower oil prices would be different in different segments of the oil industry, with support activities and oilfield services likely to be the hardest hit.

Challenges of a Low Price Environment

Tight oil projects are deemed to be more price sensitive: output from unconventional oil wells declines faster and requires continuous drilling of rigs. This implies that securing financing to continue production would be particularly challenging for smaller operators who are presently predominantly in the unconventional oil sector. Financial stability implications, however, seem to be limited given the relatively high underwriting standards applied for energy loans and the ability of producers to hedge oil price risk, at least at short horizons.

Lower oil prices will impact the U.S. oil industry by cutting investment in projects with the lowest return and likely shutting down operations that give a negative cash flow. However, the lower crude environment may not return the U.S. energy industry to its preshale revolution years, but it may actually induce a healthy restructuring of the industry by stimulating mergers and spurring cost-cutting technological improvements.

Figure 1.1.3
Share of Oil and Gas Extraction in State GDP
(Percent, average 2011–12)



Sources: U.S. Bureau of Economic Analysis; and IMF staff calculations.

¹ The energy sector was the main underperformer in the latest job reports: according to the Department of Labor’s payroll report, the number of workers in the mining sector, which includes oil and gas workers, fell by more than 9,000 in February and 5,000 in January. Nonfarm payrolls, by contrast, rose by 295,000 in February, with the unemployment rate reaching a six-year low at 5.5 percent.