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Greater Vancouver Board of Trade
Vancouver, British Columbia
21 March 2017**

Getting Down to Business: Investment and the Economic Outlook

Introduction

Thank you for the invitation to speak here today. My colleagues and I routinely consult the business community, and I welcome the opportunity to share our economic outlook with you and listen to your views. This consultation process is an important ingredient in our policy making.

To achieve our monetary policy goal of low, stable and predictable inflation at the 2 per cent target rate, our economy should operate at, or close to, its productive capacity. However, most advanced economies, including ours, have been running well below full capacity since the Great Recession of 2008–09 owing to a persistent deficiency in demand.

After years of serial disappointment, recent data suggest that the recovery in the global economy appears to be gaining traction. Notably, growth in the US economy is expected to remain solid, supported by robust fundamentals, including a strong labour market with gradually rising wages.

For the Canadian economy, estimates of the growth of gross domestic product (GDP) from Statistics Canada for the fourth quarter of 2016 came in somewhat stronger than we had anticipated in our January *Monetary Policy Report* (MPR). While the headline number is welcome news, a more detailed analysis suggests continued scope for caution. Exports continue to face ongoing competitiveness challenges. And despite recent gains in employment, subdued growth in wages and hours worked continues to reflect persistent economic slack in Canada, in contrast to the United States.

I would like to thank Russell Barnett for his help in preparing this speech.

In particular, one component of GDP that remains concerning is business investment. While investment in the energy sector now appears to be stabilizing after a painful adjustment to the decline in oil and other commodity prices that began in 2014, overall business investment in the economy remains weak. Statistics Canada also reported that non-residential business investment spending contracted by more than 15 per cent in the fourth quarter of 2016 and by almost 8 per cent for the year as a whole.

The current elevated level of geopolitical uncertainty, and the related prevailing uncertainties around the economic outlook, are likely contributing importantly to this continued underperformance in business investment. Therefore, it is still too early to assume that the worst is behind us.

So business investment is the topic I want to focus on today. It is, I am sure, top of mind for many of you, given the strength of business activity here in British Columbia. It is also top of mind for the Bank of Canada. Obtaining an up-to-date and better understanding of the investment intentions of the business community is critical for our outlooks for economic activity and inflation, which inform our monetary policy decisions.

Although business investment represents a relatively small share of GDP—about 12 per cent, on average—it is a key economic indicator that we track closely for three main reasons. First, it reflects your expectations about the future. Therefore, it is an economic bellwether—you will invest only when you are relatively certain that the demand for your goods and services will remain firm or increase. Second, fluctuations in business investment can drive the business cycle—roughly 50 per cent of the movements in quarterly GDP during the Great Recession and its aftermath were due to shifts in business investment. And third, investment adds to our stock of capital and increases the level of “potential output” or productive capacity—the level of output our economy can produce sustainably without generating inflationary or disinflationary pressures.

My talk consists of three main sections. I’ll start with an overview of the cyclical and structural forces affecting investment. Then I’ll review the impacts of these forces on investment in Canada since the 2008–09 recession, especially the period since mid-2014. Finally, I’ll discuss our base-case or most likely outlook for investment and the economy and our assessment of the risks to inflation.

Investment: Cyclical and Structural Forces

Cyclical forces

As I mentioned, business investment is a small and relatively volatile component of GDP, and investment across business sectors tends to crest and trough like the tides in response to shocks to demand. This ebb and flow reflects two related factors. First, investment projects are often large, require irreversible sunk costs, and take time to build and operate. Undertaking them depends on expectations of future demand. Second, the expectations of individual firms are often influenced by the behaviour of other firms and perceptions of overall business confidence. Consequently, common movements in expectations can become self-fulfilling. If many firms invest together, they will collectively boost demand for

their products. The famous British economist John Maynard Keynes called these shared psychological forces “animal spirits,” which he described as the “spontaneous urge to action rather than inaction.”¹

When these spirits are aroused and businesses start to see demand strengthening, economic momentum accelerates.² As sales improve and profits rise, businesses become more confident. As a result, they invest in machinery, equipment and buildings to expand capacity. Investment expenditures raise employment, household income and spending, which, in turn, boost demand and further stimulate businesses to invest.

The other factor that promotes the cyclical flows in investment spending is depreciation. Over time, capital assets depreciate or become obsolete and need to be replaced. During periods of weak or uncertain demand, firms typically delay their reinvestment decisions.³ However, they can do so for only so long. Thus, when it appears that the economic tide is turning, firms will take the opportunity to reinvest, and their collective actions will amplify the economic upswing.⁴

In practice, these psychological and economic forces often work in tandem and are self-reinforcing.

Structural forces

For the structural forces, or long-term determinants of the demand for capital and investment, it is useful to think about a typical firm’s production process. Firms combine labour, capital and technology to produce goods and services. Therefore, demographic forces that affect the growth of the labour force will also affect the demand for capital. For example, faster labour force growth will encourage firms to invest not only to meet greater demand but also to equip these additional workers with machines and other capital to raise their productivity.⁵ The rate of technological progress is also a key factor, since a faster pace of innovation raises the return on each additional unit of capital, stimulating firms to invest more. Indeed, fresh investment often embodies new technology and serves to further increase productivity.

¹ J. M. Keynes, *The General Theory of Employment, Interest, and Money* (London: Macmillan, 1936).

² American economist Paul Samuelson developed the multiplier-accelerator effect to model these cyclical movements. See P. A. Samuelson, “Interactions Between the Multiplier Analysis and the Principle of Acceleration,” *Review of Economics and Statistics* 21, no. 2 (1939):75–78.

³ Uncertainty increases the option value of waiting before incurring the sunk cost of investment projects. For information, see A. K. Dixit and R. S. Pindyck, *Investment Under Uncertainty* (Princeton: Princeton University Press, 1994).

⁴ Another factor that can amplify volatility in business investment over the cycle is the financial-accelerator effect. The balance sheets of firms improve when they experience rising sales and profits, which in turn gives them easier access to financing, and under better terms, thereby leading to more investment. See B. Bernanke, M. Gertler and S. Gilchrist, “The Financial Accelerator in a Quantitative Business Cycle Framework,” in *Handbook of Macroeconomics, Volume 1*, eds. John Taylor and Michael Woodford (Elsevier, 1999).

⁵ Faster labour force growth will also lower wages relative to the cost of capital, which will cause firms at the margin to substitute labour for capital, partially offsetting the positive impact on investment demand from the increase in the labour force.

The composition of investment matters too. The nature of the production process determines the amount and type of capital (and investment) required. Services, for example, generally require less investment than oil sands or motor vehicle production. Thus, the ongoing expansion of the service sector means we may see a shift from traditional forms of investment in structures, such as factories and heavy machinery, toward investment in intellectual property, such as software and research and development, as well as in human capital.⁶

And public investment can complement and thereby enhance the productivity of private investment. High-quality infrastructure in the form of transportation systems, power-generation facilities and, more recently, telecommunication networks (some of which may be provided privately) are essential to modern production processes, especially given the accelerating digital transformation of the global economy.⁷

Business Investment Since the Great Recession

As I mentioned earlier, business investment collapsed during the Great Recession, and its much-weaker-than-expected recovery since, despite historically low financing rates, has been a major source of disappointment in advanced economies.⁸

The challenge for policy-makers, including us at the Bank, is to assess how much of the weakness in business investment reflects the dynamics of the business cycle and how much is due to structural forces. This distinction is important for our projections for demand and for potential output or supply, which are critical to our monetary policy decision.

Focusing on Canada, let's consider the possible impacts of cyclical and structural forces on investment over this period.

Two key cyclical factors have affected business investment in Canada since the Great Recession: sharp movements in commodity prices and the subdued pace of the US recovery.

Although the collapse in investment was as acute in Canada as it was in other advanced economies, Canadian business investment bounced back relatively quickly, as the oil and gas sector benefited from a sizable rebound in commodity prices (**Chart 1**). Nowhere was this more apparent than in investments in non-residential structures, which by the end of 2010 had already surpassed their pre-crisis peak (**Chart 2**). Moreover, this had positive spillovers for investment in industries with strong connections to the commodity sector, even though we were continuing to see many firms in other industries closing their doors.

⁶ See S. S. Poloz, "From Hewers of Wood to Hewers of Code: Canada's Expanding Service Economy" ([Speech](#) to the C.D. Howe Institute, Toronto, Ontario, 28 November 2016).

⁷ W. Dong, J. Fudurich and L. Suchanek, "The Digital Economy—Insight from a Special Survey with IT Service Exporters," Bank of Canada [Staff Discussion Paper No. 2016-21](#) (November 2016).

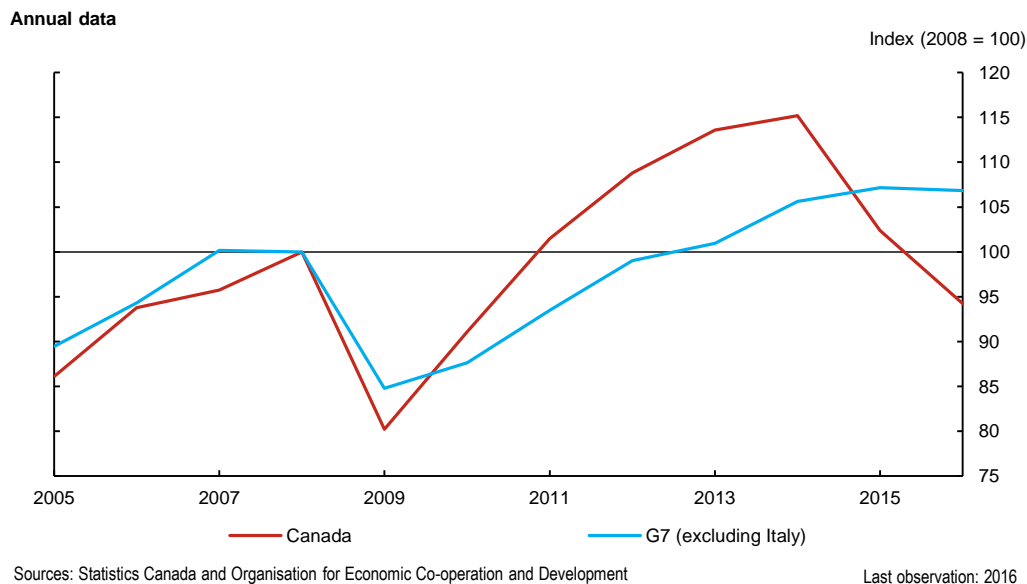
⁸ International Monetary Fund, [World Economic Outlook: Uneven Growth—Short- and Long-Term Factors](#) (Washington, April 2015).

By the middle of 2014, the level of Canadian investment had grown to 15 per cent above its pre-crisis peak. Then the oil price shock hit. Prices plummeted from above US\$100 a barrel in the first half of 2014 to around US\$35 a barrel by the end of 2015. This set off a complex set of adjustments to the Canadian economy, including a significant depreciation of the Canadian dollar, that are still at play today.⁹

The Bank estimates that over the past two years the level of investment in the oil and gas sector alone has declined by almost 50 per cent (**Chart 3**). In turn, sectors linked to the oil and gas industry curtailed their investment decisions. Consequently, investment in Canada has declined by more than 20 per cent since the middle of 2014.

The second cyclical factor that has had a major impact on our exports and business investment is the protracted recovery of the US economy—the slowest in the postwar period.¹⁰ When oil and other commodity prices rose in the years before the 2014 oil price shock, so did our dollar, making our non-commodity exports to the United States less competitive and reinforcing the ongoing shift from manufacturing to services. As I mentioned earlier, this is likely reducing the level of investment.

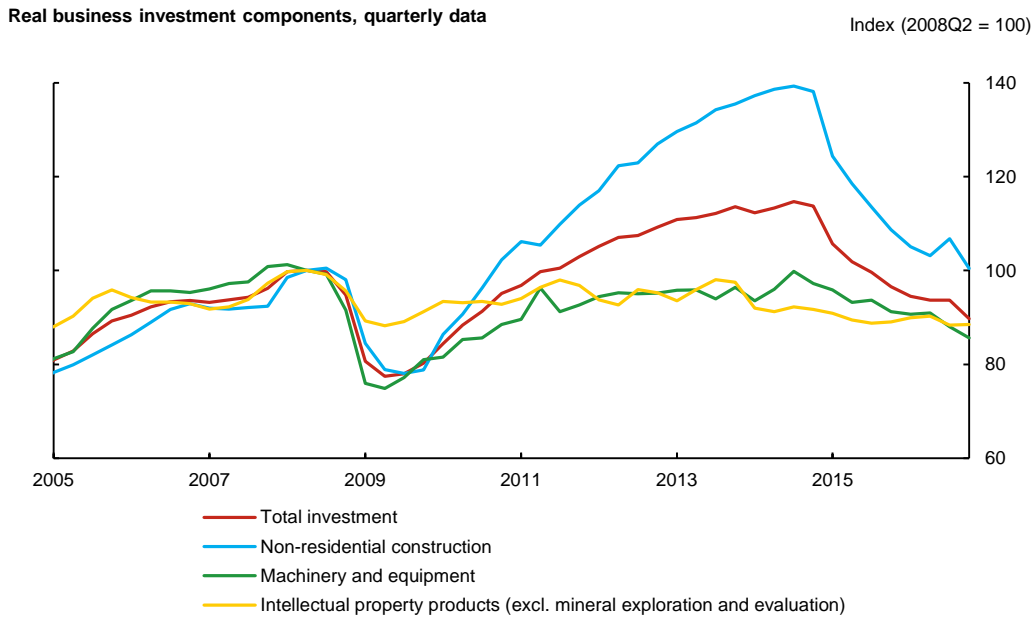
Chart 1: Following the crisis, Canadian business investment recovered faster than in other advanced economies...



⁹ See L. Patterson, “Adjusting to the Fall in Commodity Prices: One Step at a Time” ([Speech](#) to the Edmonton Chamber of Commerce, Edmonton, Alberta, 30 March 2016).

¹⁰ While Canadian exports have grown by about 4 per cent per year since the Great Recession of 2008–09, that growth rate is well below the rate of recovery for exports in the wake of previous recessions. For example, exports grew nearly 8 per cent per year over a similar length of time during the recoveries from the recessions of 1981–82 and 1990–91. See L. Schembri, “Wood, Wheat, Wheels and the Web: Historical Pivots and Future Prospects for Canadian Exports” ([Speech](#) to the Atlantic Institute for Market Studies, Halifax, Nova Scotia, 8 November 2016).

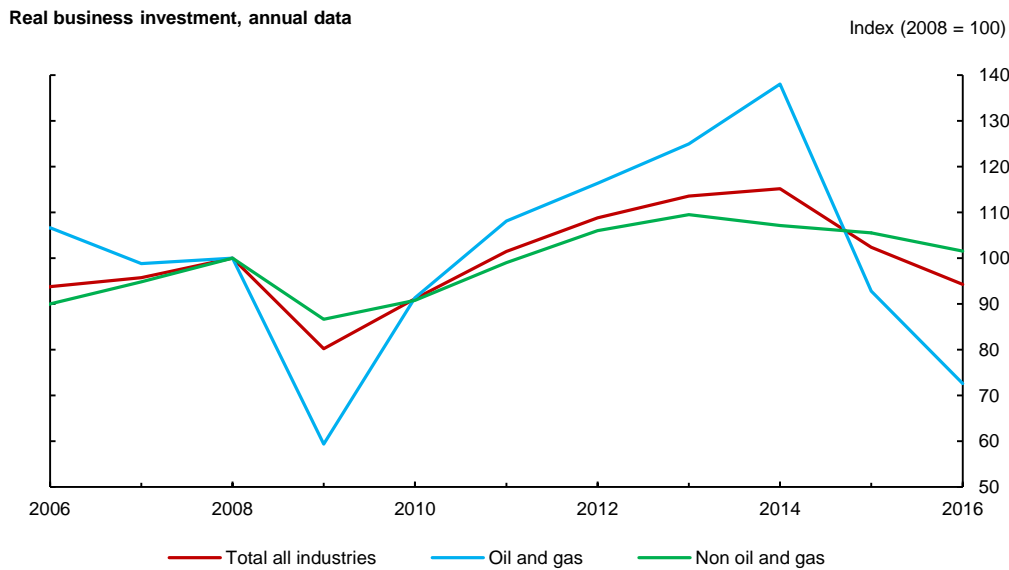
Chart 2: ...because of strong growth in non-residential construction, primarily in the resource sector



Sources: Statistics Canada and Bank of Canada calculations

Last observation: 2016Q4

Chart 3: Investment in the oil and gas sector has contracted significantly since the decline in oil prices in mid-2014



Note: 2016 values for oil and gas and non-oil and gas investment are Bank of Canada estimates.

Sources: Statistics Canada and Bank of Canada calculations

Last observation: 2016

Now, let's look at the structural factors that affected business investment during this period. I'll focus on two: demographics and productivity growth.

Population aging under way across most advanced economies has led to a marked slowdown in labour force growth, and this has been a strong headwind to investment. In Canada and the United States, for example, the annual growth rate of the labour force slowed from around 1 1/4 per cent in 2006 to less than 1/2 per cent in 2016.¹¹ This decline has reduced potential output growth and investment demand.

Low productivity growth since 2007 has also been a headwind on business investment. However, while demographic shifts are fairly predictable, it is less clear how much of the decline in productivity growth reflects a structural change and how much is a cyclical response to the subdued recovery. For example, the loss of existing firms and the low creation rate of new firms during and after the Great Recession have not only directly reduced investment but also impaired the dynamism of the private sector, causing persistent, adverse effects on productivity growth.¹²

All of these challenges have increased uncertainty about the strength of future demand and weighed on business confidence. As a result, Canadian firms have acted cautiously in their investment decisions, despite operating close to capacity in some industries. In some cases, they have met any increases in demand by hiring more labour.

So that's how we got to where we are. Let me now take you through our most recent economic outlook for Canada.

The Outlook for the Economy and Investment

Let me start by making two important points from our January *Monetary Policy Report* and March 1st policy rate announcement.

First, our outlook since mid-2016 for gradually increasing global growth is largely consistent with what we have seen in the data.

Second, heightened concerns about prospective protectionist measures mean that we should not presume that the economic disappointments we have experienced since the Great Recession are over.

That said, the adjustment to the decline in commodity prices is progressing, and activity in resource-related industries appears to have bottomed out.

Real GDP growth is expected to pick up from 1.4 per cent in 2016 to slightly above 2.0 per cent in 2017 and 2018, with the expansion of the service sector underpinning rising employment, household incomes and consumption.

¹¹ For the purpose of this speech, I am defining "labour force" as the working-age population, those aged 15–64.

¹² See R. A. Decker, J. Haltiwanger, R. S. Jarmin and J. Miranda, "Declining Business Dynamism: Implications for Productivity?" Hutchins Center Working Paper No. 23 (September 2016).

The strengthening US and global economies and the federal fiscal stimulus in Canada are also expected to support exports and domestic demand. Financial conditions remain accommodative for investment, despite a modest increase in longer-term borrowing costs since October.

Against this backdrop, investment is expected to slowly strengthen. Recent data on oil rig activity and the capital expenditure plans of oil and gas firms suggest that investment in the sector has begun to increase this year. Meanwhile, the growth of the service sector and a modest expansion in exports should continue to support moderate investment growth in other sectors in 2017 and 2018.

Inflation is projected to be near 2 per cent through 2017 and 2018 as the temporary effects of higher consumer energy prices and lower food prices dissipate and economic slack is absorbed.

Risks to Inflation

The outlook for inflation is subject to a number of risks that the Bank identifies as important. Let's start with two risks that could raise inflationary pressures and that are particularly significant for investment.

Stronger GDP growth in the United States

The ongoing US recovery, the new US administration's decision to restart the approval process for the Keystone XL pipeline and other energy projects, and further policy measures, including tax reform, deregulation and infrastructure spending, could boost both demand and business confidence, igniting animal spirits and leading to an acceleration in the rates of investment, firm creation and innovation. Stronger US household spending and public and private investment would have positive spillovers for Canadian exports and investment.

Higher commodity prices

Recently the prices of non-energy commodities have drifted higher, rising by roughly 2.7 per cent since we published our January *Monetary Policy Report*. If they were to continue to strengthen, this would improve Canada's terms of trade, wealth, and hence household spending and business investment.

Now, let's look at two risks that could exert downward pressure on inflation.

A shift toward protectionist trade policies

The new US administration and some political leaders in other jurisdictions have espoused policies that are inward looking, although precise measures remain to be determined. Such protectionist policies would dampen global trade and economic growth and either directly or indirectly reduce Canadian exports and business investment. They could also restrain or reverse the ongoing process of global economic integration, most notably the development of global value chains, which has supported growth in recent decades.

Sluggish business investment in Canada

The disappointing performance of business investment to date could reflect more sustained structural factors, such as slowing labour force growth, low productivity

growth and regulatory obstacles. Over time, weaker investment growth would reduce capital deepening and lower potential output growth.

Conclusion

Let me wrap up with three points.

First, the decline in oil and other commodity prices since mid-2014 has dramatically altered the paths of business investment in Canada and the United States. The two countries are now at different points in their respective business cycles (**Chart 4** and **Chart 5**). Although the Canadian economy has made good progress adjusting to the oil price shock, material slack in our economy remains, in contrast to the US economy, which is approaching its productive capacity. In our March statement we indicated that our current monetary policy stance remained appropriate to achieve our 2 per cent inflation target on a sustainable basis by around the middle of 2018, whereas US authorities have now begun to tighten. Our economic projection will be updated in the April *Monetary Policy Report*, and we will review the stance of monetary policy at that time.

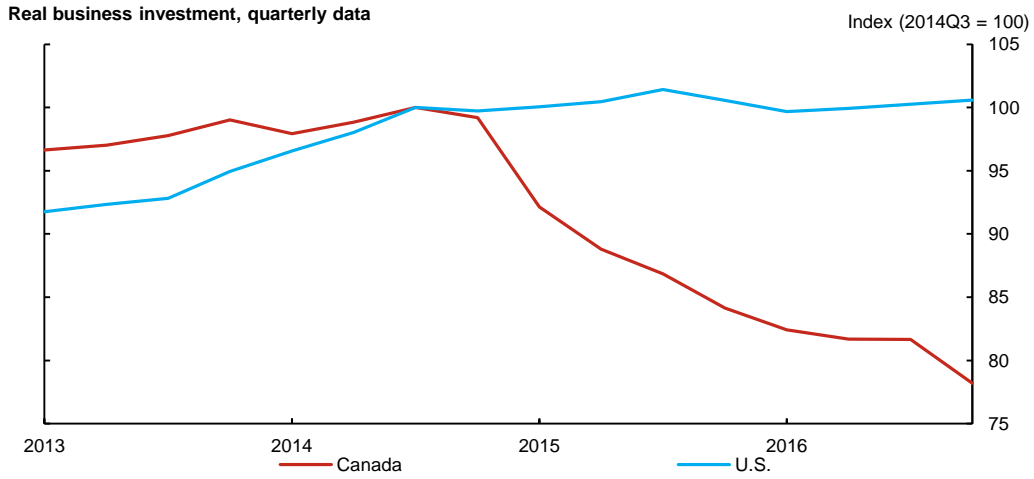
Second, recent economic data are largely consistent with our outlook of a gradual strengthening in global economic growth. However, uncertainty remains elevated because of prospective policies that put at risk the progress made in recent decades to liberalize trade and foster economic integration.

Canada, however, has resisted this protectionist tilt. We have just concluded a major free trade agreement with the European Union and are working toward lowering barriers to internal trade. We view these measures, as well as the recent changes to immigration policy,¹³ as positive steps that will increase growth over the medium-to-long term.

Third, and finally, I am sure many of you are considering whether this is the right time to invest and build your business. Such decisions are never easy, but at the Bank of Canada, we are committed to reducing the uncertainty you face and helping you make the best possible investment decisions by achieving our monetary policy goal of low, stable and predictable inflation.

¹³ The target for admission of immigrants has been increased from a range of 260,000 to 285,000 in 2015 to 300,000 for 2016 and beyond. In addition, an Express Entry system was introduced in January 2015, and subsequently widened, to speed up the processing of applications for permanent residency through different programs, such as the Federal Skilled Worker Program, Federal Skilled Trades Program and the Canadian Experience Class. And on 9 March 2017, the federal government announced a new initiative to help high-growth Canadian companies attract specialized global talent by providing more predictable, streamlined reviews and approvals for work permits. These changes are expected to add to labour force growth.

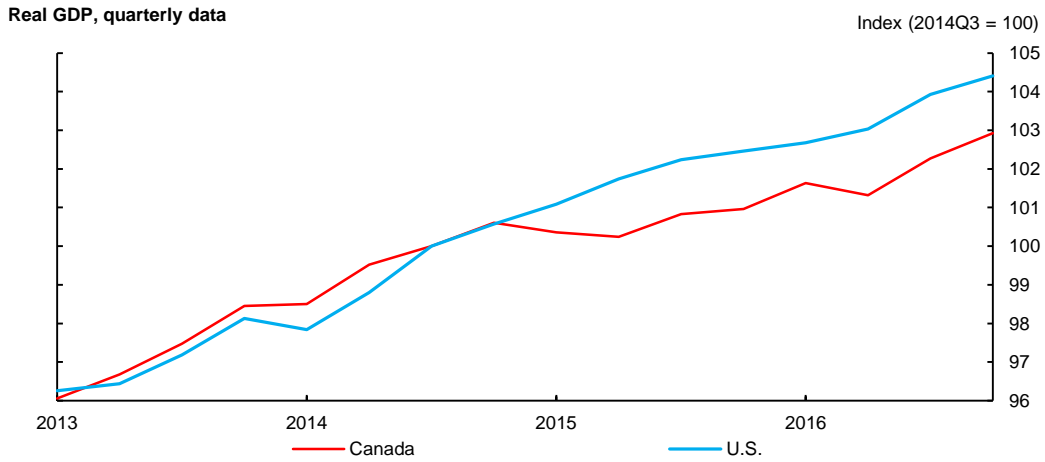
Chart 4: Business investment in Canada has been much weaker than in the United States since mid-2014



Sources: Statistics Canada and Haver Analytics

Last observation: 2016Q4

Chart 5: Canada and the United States are now at different points in their respective business cycles



Sources: Statistics Canada and Haver Analytics

Last observation: 2016Q4