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RECENT TRENDS IN INVESTMENT AND LONG-TERM FINANCING IN CANADA

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RECENT TRENDS IN INVESTMENT AND LONG-TERM FINANCING IN CANADA

By: James Tebrake and Patrick O’Hagan

1. Introduction

Over the last 30 years investment has been a key contributor to Canada’s economic growth. The picture changed significantly at the start of the global financial crisis. In 2008-2009 foreign demand for Canadian goods and services fell dramatically as did corporations’ willingness to invest in plant and equipment. Governments acted on two fronts. First they were required to stabilize financial markets in order to ensure adequate access to funds, and second they launched large infrastructure projects as a means to stimulate economic growth. Corporations reacted by halting all major investment initiatives as they dealt with the growing uncertainty in the Canadian economy. Similarly, households held back on making major purchases as uncertainty around future job prospects caused a sharp decline in investment in residential structures.
Since the global financial crisis there has been a significant amount of discussion among Canadian policy makers regarding the level of investment taking place in the Canadian economy. The debate generally centers on the following two questions: Why are non-financial corporations’ investing so little in productive capacity at a time when their balance sheets are relatively healthy; and, why are households continuing to invest in real estate in the face of an unprecedented level of household debt? The corollary to these questions is whether the demand for long-term financing or access to long-term financing is playing a role in the seemingly contradictory behaviour of these sectors.

This note exploits data in the Canadian System of Macroeconomic Accounts (CSMA) and explores recent trends in Canadian investment and long-term financing with the aim of shedding some light on these important policy questions. For the purposes of this note investment is defined as capital formation, and long-term financing includes mortgages and bonds of all terms given. The CSMA does not provide a breakdown by term to maturity at this time.

2. Trends in Investments

2.1. Trends in Non-Financial Corporation Investment

Decomposing the investment estimates in Figure 1 by industry provides additional insight into the recent trends. Figure 2 looks at the share of the stock of non-residential capital (the accumulation of prior period investments) held by the mining, quarrying and oil and gas extraction sector and compares it to the manufacturing sector for the period 1980 to 2013. It is clear that towards the end of the 1990s there was a considerable shift in investment away from manufacturing towards the natural resource sector. In 1980, both mining, quarrying and oil and gas and manufacturing accounted for approximately 13% of Canada total stock of non-residential assets. By 2013 the mining, quarrying and oil and gas sector share has grown to over 25% while the manufacturing share has fallen below 10%. Given investment in the natural resource sector is tied to commodity prices, policy makers are concerned that the most recent drop in oil prices will have a downward impact on Canadian investment in the mining, oil and gas industry. Similarly, with the rise in global production arrangements some of the slowdown in investment in the manufacturing sector can be an ‘exporting’ of what could have been Canadian investment to other countries where products are being manufactured and assembled at reduced costs. This point will be elaborated later in this note.
The recent trend in investment can also be examined from a geographical perspective. As noted above much of the investment over the last decade was in the oil and gas industry. Given Canada’s natural resource are not equally distributed across the country a number of provinces benefitted more than others. In the 1980’s Alberta accounted for approximately 13% of national GDP. In the 2010s their share increased to an average of almost 18% and is now approaching Quebec as the nation’s second largest economy. An important component and driver of this growth is a significant increase in investment. In 2013, Alberta accounted for 39.4% of the total Canadian investment in non-residential assets. The provinces with the second largest share were Ontario at 19.9% followed by Quebec at 12.6%. Ontario and Quebec are Canada’s most populace provinces.
Over the last 15 years Canada has also seen a shift in the type of investment that is taking place in the economy. Between 1980 and 2000 the majority of investment undertaken by non-financial corporations was investment in machinery and equipment. Since 2000 this trend has changed with investment shifting from machinery and equipment to engineering structures.
As for why non-financial corporation investment may have slowed in the last couple of years, it is evident from the above charts that investment in Canada has become highly concentrated in terms of assets (engineering structures), industries (oil and gas) and geography (natural resource rich provinces). In the post crisis and recession period, the uncertainty in the natural resource sector, resulting from relatively more volatile energy prices, may have led to firms to scale back their investment plans.

2.2. Trends in Household Investment

Households have also contributed significantly to the investment picture in Canada. Investment in residential structures has steadily increased over the last 20-25 years, in a period of lower and more stable interest rates. The growth in residential investment has been more stable than that of non-residential investment. The ratio of residential investment to non-residential investment has fluctuated from a low of 35% in the early 1980s to a high of almost 70% in the late 2000s. While the global financial crisis resulted in a slight contraction in residential investment, since late 2010 it has continued a steady growth trajectory that began in the early 2000s. While this has been a key component in Canadian economic growth, concerns have been expressed about the financial vulnerabilities across income classes that may result in terms of debt loads and housing bubbles, as household demand for mortgages continues to increase.

Both the slowdown in the non-financial corporations’ investment and the steady growth in residential investment has led further examinations into the role financing may have in both these phenomena. Is the lack of investment in the non-financial corporation sector due to a lack of financing, excess liquidity, or some other factor; and, is the steady growth in household investment in residential real estate encouraged by more liberal rules around home financing? The second part of this note will explore trends in long-term financing.
2.3. Trends in Government Investment

Government plays an important role in the Canadian economy. Various levels of government are responsible for delivering services such as education, health, transportation and defence. As a result, government investment plays a significant role in the overall level of investment taking place in the economy. In general, the government’s share of total investment since 1981 has remained relatively stable and counter-cyclical to the business cycle. Government’s share of total investment climbed to around 20% in the early 1980s, 1990s and late 2000s, periods of economic contraction in Canada.

![General Government investment as a share of Total Investment](image)

During the period 2008-2010 the Federal (Central) government in Canada implemented the Canadian Economic Action Plan. Part of the focus of the action plan was to stimulate growth through investment in infrastructure projects. For the most part, the federal government raised the funds and then transferred these funds to lower levels of government who in turn invested in local infrastructure such as roads, schools and hospitals.

![Investment in Fixed Capital - Local Governments](image)
3. Trends in Long-Term Financing

The demand for long-term financing has steadily increased in Canada over the last fifteen years. This increase in demand for funds is characterized by a steady increase in the demand for long-term funds by households combined with a more pronounced cyclical and counter-cyclical demand by the non-financial corporate and government sectors, respectively.

![Chart: Total funds raised by domestic non-financial sectors](chart1)

![Chart: Demand for Long-Term Financing - Non-Financial Sectors](chart2)
3.1 Trends in Long-Term Financing in the Corporate Sector

While the long-term financing picture is relatively straight forward in the housing sector there are a few more dynamics at play in the non-financial corporations’ sector – a sector which is heavily relied upon to generate employment and growth, by adding productive capacity to the economy. By way of background, corporations began generating large net lending positions beginning in 2000. Earnings have been the driver of the levels of corporate net lending in the majority of years over the past decade, led by consumer demand and (in some sectors) foreign demand. Except for a few interruptions (the high-tech bust in 2001 and the financial crisis in 2008-09) corporate earnings have been on an upward trend since about 1997. Non-financial corporations have driven the net lending position.
Let us consider uses of funds first. A significant factor on the corporate balance of net lending / borrowing has been slower capital expenditure. Non-financial corporations’ dominate business capital investment, and a significant inverse relationship between new fixed capital investment and net lending is evident.

The above suggests a modification in corporate investment behaviour; and, certainly, it is clear that corporate investment patterns have evolved as the surplus expanded. One change that the data support is a shift into financial investment as an increasing use of funds. Both portfolio and inter-company investment have contributed to notable acquisitions of financial instruments.

Major flows of financial investment have been directed to liquid assets and other portfolio investments since 2000. In particular, currency and bank deposits (domestic and foreign) and various other types of portfolio investments have trended sharply upward since the late 1990s. This development has substantially improved the liquidity position of non-financial corporations. In policy circles, this has often been referred to as “dead money” of the corporate sector that could be used for capital expenditure.

The last 20 years has seen a surge in inter-company investment reflecting a boom period in corporate mergers and acquisitions (M&A) that began in the late 1990s. Notably, a significant proportion of Canadian inter-company investment was directed abroad in this period. This suggests that corporations have continued to invest in non-financial capital, but seemingly at an increasing rate outside of Canada – which helps explain the strong growth in Canadian direct investment abroad over most of the period since

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1 This is reflected as corporate claims in the Financial Flow Accounts and National Balance Sheet Accounts. Corporate claims cover investment in shares, marketable debt securities and loans and advances in associated corporations.

2 While there is no one-to-one mapping between non-financial firms’ inter-company investment and Canadian direct investment abroad, it is assumed that the majority of CDIA undertaken by Canadian corporations takes place within their same respective industry; for example, an energy parent would invest in an energy subsidiary. However, it is possible that a holding company in the financial sector may invest in a non-financial industry. A certain amount of precision is foregone at this juncture to underline an important trend. The detail by industry for CDIA is available on an ‘industry invested in’ basis from Canada’s Balance of International Payments, Statistics Canada, Catalogue no. 67-001.

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the late 1990s. In fact, Canadian Direct Investment Abroad has outpaced Foreign Direct Investment in Canada since the late 1990s.

Inter-company investment placed abroad is an indirect method of adding to a globally-oriented firm’s productive capital by acquiring other firms, so as (i) to achieve an overall reduction in operating costs, (ii) to assume larger market share, or (iii) to become more vertically or horizontally integrated to take advantage of medium-term opportunities. It could be argued that corporate takeovers are a more efficient means of acquiring capital, so as to avoid excess capacity in the face of fluctuating demand.

![Canadian direct investment abroad / Foreign direct investment in Canada](image)

This is not surprising given the growth in global production and distribution activities, led by Multinational Enterprises. This raises an interesting question that is beyond the scope of this note: Whether globalization-led Canadian direct investment abroad is shifting capital formation from Canada to other parts of the world.

However, what we can conclude from the above is that the statistics show that the uses of funds of corporations have evolved over time.

Let us turn to sources of funds, and also consider the effects on the financial positions of non-financial corporations. One issue that is clear from the above analysis is that corporations have been able to fund capital investment out of internal funds (undistributed earnings), such that the reliance on external funds has been reduced in comparison to earlier decades. This has led to an improvement in the financial position of the non-financial corporate sector.

On the financing side there are three points worth noting. First, the growth in internally-generated funds dampened corporations’ recourse to credit markets, and the demand for funds via debt has slowed. However, there has been some increase in debt issuance in the last two years, as business investment and foreign demand for Canadian debt instruments have strengthened. Second, the recourse to short-term paper versus bonds (for those enterprises that have access to these markets) has been strongly dependant on interest rate expectations, with longer-term financing returned to a more normal prominence under a more stable interest rate regime. Third, share issuance has replaced borrowing as the main source of external finance. This has reflected a generally strong domestic institutional investors’ demand and a relatively small, but growing, foreign demand for Canadian equities.
It is clear that corporate balance sheets over the last 10 years are in the best shape in decades. This should bode well for capital spending, but the gains in domestic fixed capital investment that have been expected by analysts have not fully materialized.

3.2. Trends in Long-Term Financing in the Household Sector

The Canadian household debt to household disposable income ratio has continued to climb over the last 25 years. Growth in housing prices has outstripped that of incomes driving up household leverage. Canadians seem largely undeterred by the increase in housing prices and continue to accumulate debt. This increase in household debt has been identified as one of the largest financial stability risks in the Canadian economy. Given that the largest asset on the household balance sheet is residential real estate, policy makers are concerned that a sudden change in housing prices or interest rates would have a major impact on household consumption and overall Canadian economic growth.
One of the key reasons households continue to access long-term financing to purchase homes is a steady decline in the servicing charge on this debt. The household debt service ratio has fallen from a high of 12% in 1990 to below 7% in 2014. While the size of household debt has increased – their capacity to finance the debt has not kept pace. The concern for policy makers is therefore, if interest rates increase will households be able to manage these increased debt levels.

As a means to rein in the overall growth in the demand for mortgages, the Canadian government has gradually tightened new lending rules related to government-backed insured mortgages over the last number of years.\(^3\)

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>October 2008</td>
<td>• A 5% minimum down payment on the purchase of residential real estate imposed (up from a 0% down payment)</td>
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<td></td>
<td>• The maximum amortization period was reduced from 40-years to 35-years</td>
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<tr>
<td></td>
<td>• Total Debt Service ratio should not exceed 45%</td>
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<tr>
<td></td>
<td>• Buyers must have minimum 620 credit score</td>
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<tr>
<td>April 2010</td>
<td>• Buyers looking to get variable rate mortgages or terms less than five years must qualify for their mortgage using the posted 5-year fixed rate.</td>
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<td></td>
<td>• 90% LTV limit on insured refinances (down from 95%)</td>
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<td></td>
<td>• 50% of rental income can be claimed when qualifying for a mortgage</td>
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<tr>
<td>March 2011</td>
<td>• The maximum amortization period was reduced from 35 years to 30-years</td>
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<td></td>
<td>• 85% LTV limit on insured refinances (down from 90%)</td>
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<tr>
<td></td>
<td>• Elimination of government insurance program on Home equity lines of credit (HELOCS)</td>
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<tr>
<td>July 2012</td>
<td>• The maximum amortization period was reduced from 30 years to 25-years</td>
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<tr>
<td></td>
<td>• 80% LTV limit on insured refinances (down from 85%)</td>
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<tr>
<td></td>
<td>• Gross Debt Service ratio should not exceed 39%</td>
</tr>
<tr>
<td></td>
<td>• Total Debt Service ratio should not exceed 44% (down from 45%)</td>
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<tr>
<td></td>
<td>• Limit availability of mortgage insurance on homes greater than $1,000,000</td>
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<tr>
<td>August 2013</td>
<td>• Limits banks, credit unions and other mortgage lenders to $350 million per lender under the National Housing Act Mortgage-Backed Securities (NHA MBS) program</td>
</tr>
<tr>
<td>April 2014</td>
<td>• $1,000,000 maximum purchase price when the loan-to-value ratio is greater than 80%</td>
</tr>
<tr>
<td></td>
<td>• 5% minimum down payment on single-family and two-unit dwellings</td>
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<tr>
<td></td>
<td>• 10% minimum down payment on three or four-unit dwellings</td>
</tr>
<tr>
<td></td>
<td>• Gross Debt Service ratio should not exceed 32% (down from 39%)</td>
</tr>
<tr>
<td></td>
<td>• Total Debt Service ratio should not exceed 40% (down from 44%)</td>
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</tbody>
</table>

\(^3\) These are insured mortgages where the down payment is less than 20% of the loan. A mortgage with a down payment greater than 20% of the loan can be uninsured.
These successive rule changes have had a dampening effect on the household demand for mortgages. For the most part the rule changes have limited the number of people that could qualify for a government insured mortgage. The annual flow of mortgages in the household sector has declined from 80 billion in 2007 to around 60 billion in 2014.

3.3. trends in Long-Term Financing in the Government Sector

The net lending/net borrowing of the federal general government in Canada has changed significantly over the last number of decades. Throughout the 1980s and early 1990s, the Federal government was a net borrower from the other sectors of the economy. The general decline in interest rates starting in the mid-1990s along with the addition of value added taxes that served to increase government revenues moved the federal general government from a net borrower to a net lender. This trend continued throughout most of the late 1990s and early to mid 2000s. With the onset of the global financial crisis the federal government had to again borrow.
The heavy borrowing by the federal general government has added substantially to federal government debt levels with most of the borrowing. Since the 2008-2009 global financial crisis the federal general government added around $200 billion in long-term debt securities to its balance sheet.

The provincial, territorial and local levels of government have seen their debt levels increase at an even faster rate since the 1990s. Unlike the Federal government the other levels of government did not experience a period of net lending and as such they have seen a steady increase in their stock of debt liabilities – mainly long term provincial and territorial government bonds.

The supply of much of the recent financing to the Canadian government sector has been from the non-resident sector. Since the second quarter of 2009, non-residents invested an average of $14.8b per quarter in Canadian government bonds.
4. Conclusions

Canadian non-financial corporations, general governments and households have a significant impact on the performance of the national economy through their ability to invest. Corporations tend to invest on a large scale in productive capacity with a subsequent role in generating income and employment.

The changing relationship between debt and equity and the strength of internally-generated funds have combined to drive non-financial corporate leverage to historic lows. All else being equal, lower leverage indicates that non-financial corporations are better equipped to confront unanticipated economic shocks, deal with interest rate fluctuations and/or to pursue new economic opportunities. The seeming reluctance to pursue the latter in the form of stronger domestic fixed capital formation is at issue for analysts and policy-makers.

The opposite is occurring in the household sector. The main concern among policy makers is a weakening of the household sector and the potential risk changes in interest rates and housing prices pose.

Government have generally acted to stabilize overall investment and financing in the Canadian economy – mainly picking up the slack from declines in business investment.

The ultimate question is what this current situation implies for the economy, looking forward – specifically, with respect to the outlook for investment and economic growth. In this light, it seems evident that the shift in Canadian non-financial corporations’ sources and uses of funds and corresponding strengthened financial position is therefore worthy of in-depth analysis, beyond the scope of this paper.

At the same time, studies of increasing outward focus of multinationals in the context of globalization and global production also seem warranted, in relation to uses and sources of funds. This can include the performance of firms, in terms of profits, capital, financial position, trade flows (both exports and imports) and foreign direct investment – activities of multinational enterprises, both those engaging in Canadian Direct Investment Abroad (including foreign affiliates) and those benefitting from Foreign Direct Investment in Canada. Toward this end, Statistics Canada has been expanding its details for outward foreign affiliate statistics and is poised to launch new estimates of inward foreign affiliate statistics – both
with rich micro datasets underlying them. This is the subject of keen interest among policy-makers and analysts.

With respect to further research on the supply of funds, this note has argued for the development of “from-whom-to-whom” sub-instrument details, in order to further identify sectoral inter-relationships – that is, who is lending to whom (particularly with respect to securities, loans and inter-company investment). This is now an international recommendation, related to both domestic and international financial stability, arising from the global financial crisis. Statistics Canada is on its way to meeting this objective.

In short there are opportunities to extend existing statistics to further shed light on the outlook for investment spending and, in the process, support highly relevant policy-analytic research.