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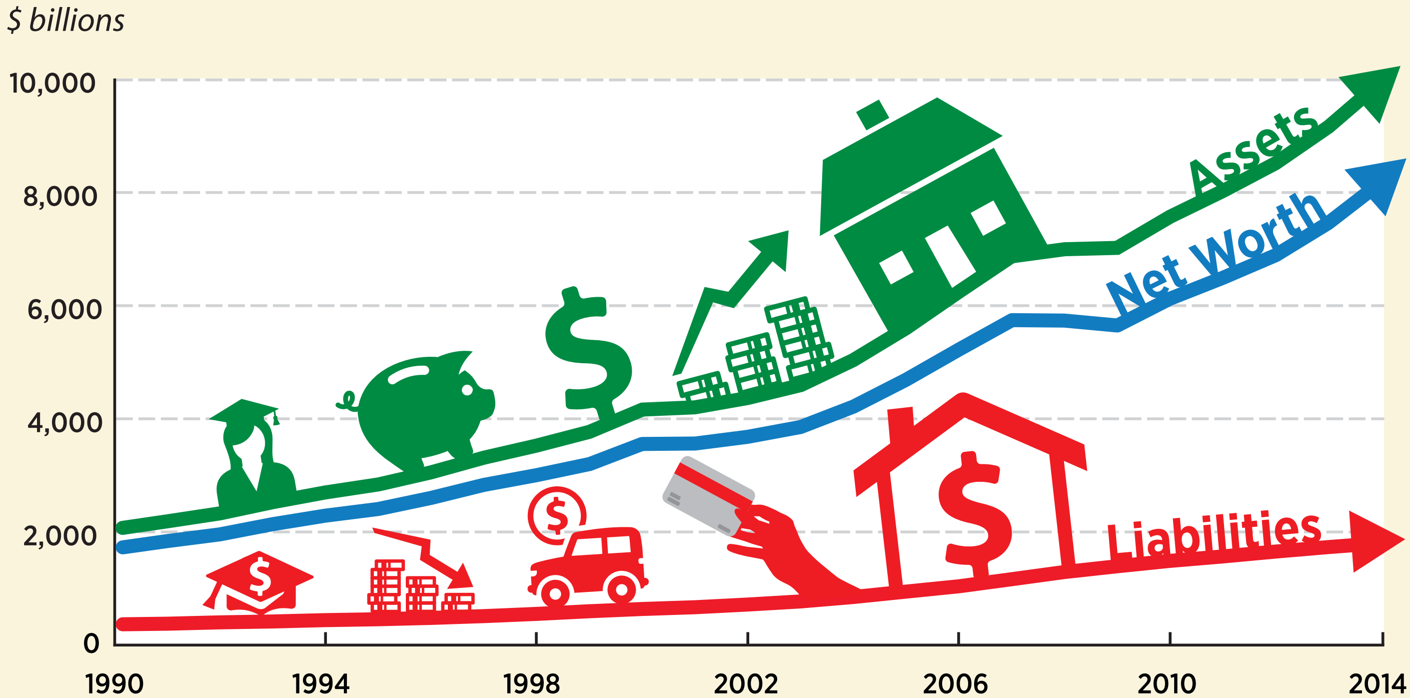

A Longer-term Perspective on Canada's Household Debt

by Philip Cross

Summary

- There is much concern about the increase in Canada of household debt to record levels. However, consumer credit is such a new device that debt has hit a record level in almost every year since 1961, so it is difficult to judge what is the optimal level.

- By several metrics, household debt in Canada is not excessive. The burden of servicing debt is at a record low. Debt is often used to create wealth, and household assets and net worth have increased much faster than debt. Despite lower interest rates, the rate of growth of debt has slowed by one-third since the recession.

- By international standards, the ratio of Canadian household debt to income is similar to that in the US but below that in many European countries. The problem with US debt leading up to its financial crisis was not that its ratio to income was high by international standards, but that its distribution was flawed, with too much issued by poorly capitalized financial institutions to high-risk borrowers. Lending standards have been tightened in Canada to prevent record low interest rates from tempting people and firms to take on excessive risk.

Introduction

Almost every day Canadians see headlines proclaiming that their debt levels have reached record highs. Frequently, comparisons are made with US debt levels. The implication of the comparison is that because Canada is approaching a level of debt relative to income similar to that reached in the US before its housing bust and recession means we risk suffering the same fate. The slant of such assertions is that the accumulation of household debt invariably has negative consequences. Conversely, reassuring analyses about the implications of household debt from economists at chartered banks are open to question, since banks have a self-interest in encouraging the growth of debt. As a leading scholar on banks noted bluntly, "The output of a bank is debt."[1]

The purpose of this research bulletin is to put recent developments in Canada's household debt in a longer-term perspective to better assess its risks. If the headline that "household debt has hit a record level" seems familiar, it is because it has been true for every year but one over the last half century. The upshot is that household borrowing, especially credit card debt, is such a recent innovation that economists have difficulty judging what its normal growth rate is or its maximum sustainable level.

Overall, there is little evidence that Canadian households (unlike some governments) are being irresponsible in taking on new debt. The long-term increase in household debt has been leveraged into a much larger gain in household assets, boosting both incomes and net worth. Despite the lure of record low interest rates, demand for both mortgages and consumer credit has slowed over the last four years to one-third its growth before the 2008-2009 recession, which clearly had a sobering effect on both the appetite households had for more debt and the willingness of lenders to issue new loans. Nor is the current level of debt onerous; thanks to low interest rates, the burden on incomes of servicing household debt has never been lower. Comparing Canadian households with those in other countries shows that our debt-to-income ratio is relatively modest compared with some European countries; what stands out in the international comparisons is how rapidly US households reduced their debt load in response to that country's housing and banking crisis.

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The evolution of household debt

There is not enough appreciation for how novel and recent the widespread use of household debt is, notably credit cards. The first credit card transaction in the world took place in 1950, when the founder of Diners Club Card charged his dinner at Major's Cabin Grill in New York.[2] The American Express credit card,

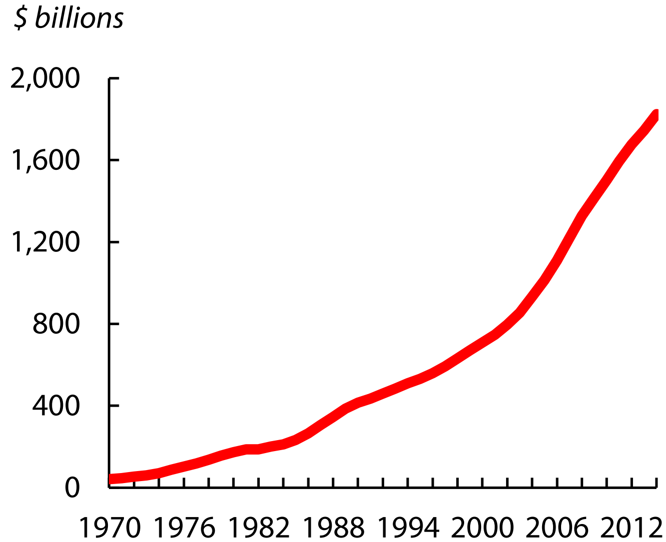
[1] Gary Gorton (2012), *Misunderstanding Financial Crises: Why We Don't See Them Coming*, Oxford University Press: 6.

[2] Cited by John Lanchester (2014, December 4), Credit. *Business Week*. Starting in the 1920s, before credit cards were invented, installment plans at department stores helped finance purchases.

the first general purpose card, began in 1958.[3] Visa and Mastercard created the national credit card system in 1968, ushering in what Ridley called the "democratization of credit."[4] This intitial expansion of credit was accompanied by incessant worries about its sustainability: Alan Greenspan, the former chair of the Federal Reserve Board, recalls that by the late 1950s many economists and policymakers were worried that "the American family was in danger of delinquency and default."[5] These concerns have never disappeared as debt levels constantly charted new territory.

As recently as 1961 (when Statistics Canada data on household debt begin, partly because it was not large enough to justify measuring before then), household debt amounted to only $16 billion.[6] Since then it has increased every year, save for a small dip during the severe recession in 1982, to reach $1.8 trillion at the end of 2014 (figure 1).[7] Two-thirds of it, or $1.2 trillion, is in the form of mortgage debt, with another $0.5 trillion in consumer credit and the remainder personal loans. The upward trend of debt has been almost equally spread between consumer credit and mortgages, both expanding four-fold over the past quarter century. This is noteworthy since consumer credit is the riskier form of debt; it is associated with more bankruptcies, partly because it has higher and more variable interest rates and is not backed by an asset as is the case for mortgages.[8]

Figure 1: Market value of household debt in Canada, 1970–2014



Source: Statistics Canada, CANSIM tables 378-0049 and 378-0121.

The long-term increase in household debt is one of the most revolutionary changes in our economy. It also means that, except for 1982, every year justified the headline that "household debt reached a record level." But at no

[3] David Graeber (2011), *Debt: The First 5,000 Years*, MelvilleHouse: 367.

[4] Matt Ridley (2010), *The Rational Optimist: How Prosperity Evolves*, Harper Collins: 254.

[5] Alan Greenspan (2007), *The Age of Turbulence*, Penguin Press: 346.

[6] Consumer credit data are available from 1961, but mortgages were not separated between residential and non-residential borrowers Consumer credit grew from $4.3 billion in 1961 to $11.6 billion in 1970, according to Cansim Table 378-0049. As well, data before 1990 include non-profit institutions and unincorporated business. Wherever possible, this study uses data for households only.

[7] Statistics Canada, National Balance Sheet Accounts. Cansim Table 378-0121.

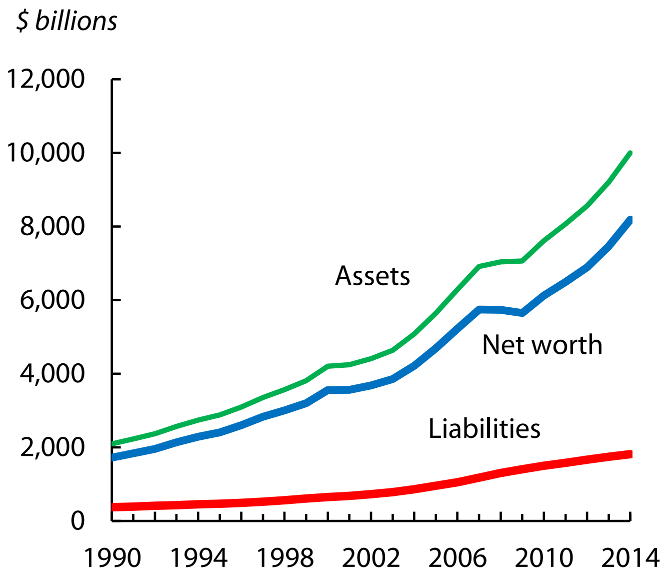
[8] James MacGee (2012), *The Rise in Consumer Credit and Bankruptcy: Cause for Concern?* C.D. Howe Commentary No. 346, C.D. Howe Institute: 2. <http://cdhowe.org/pdf/Commentary_346.pdf>, as of April 28, 2015.

time did household debt in Canada become the problem implied by these alarmist headlines.

Some of the steady rise in household debt in Canada reflects a generational shift in attitudes. People who grew up in the Depression of the 1930s and then during the Second World War were schooled that saving was virtuous and debt nearly a sin (the word debt traces its etymology in several European languages to concepts such as "fault," "sin" and "guilt").[9] Since then, each generation has become progressively more able to use debt rationally to improve their lives, whether by taking advantage of the saving from an item on sale or smoothing consumption over their lifetime. Some of the acceleration of debt levels after 2000 shown in figure 1 is associated with the passing of the population cohort raised in the 1930s and 1940s, followed by cohorts raised in a world where debt was increasingly accessible. According to Statistics Canada, 61% of debt in 2009 was held by individuals under 45 years old.[10]

Households most often use debt in three common ways to create wealth in our society: obtaining a post-secondary degree, starting a business, and buying a home (households earning more than $100,000 held 56% of all debt in 2009).[11] The use of debt to acquire or create wealth is why, even with rising debt liabilities, the net worth of Canadian households continues to soar, as the value of both their financial and non-financial assets has risen several times faster than nominal debt.[12] Statistics Canada's National Balance Sheet Accounts show that in 2014 Canadian households held $10.0 trillion of assets (mostly in the form of equities and real estate) and $1.8 trillion of liabilities (almost all mortgage and credit card debt), for a net worth of $8.2 trillion (see figure 2).

Figure 2: The net worth of Canadian households, 1990–2014



Source: Statistics Canada, CANSIM table 378-0121.

Higher household demand for credit is not the only factor in its growth. Improved information technology also has allowed firms to better assess the risk of lending to specific groups. Credit scoring systems designed in the 1970s were limited by a lack of computing power to five or six variables. With improved technologies for rating credit risk, credit growth has increased the most for lower and middle in-

9 Graeber, *Debt*: 121.

10 Raj Chawla and Sharanjit Uppal (20102), *Household Debt in Canada*. Perspectives on Labour and Income, Statistics Canada Catalogue no. 75-001-X (March): 6. Of course, besides generational differences in attitudes to debt, young people will always have more debt as they begin to accumulate assets.

11 Chawla and Uppal, *Household Debt*: 6.

12 Statistics Canada, Cansim Table 378-0121.

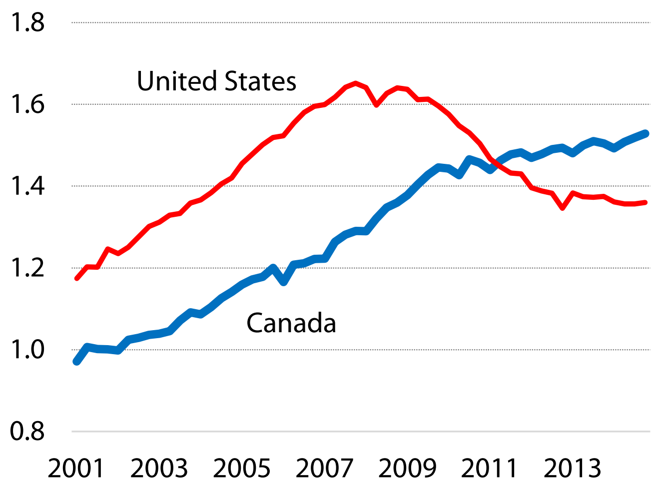
come people previously denied credit.[13] This is reflected in an increased dispersion of interest rates by income class. Rather than financial firms exploiting people lacking in financial sophistication, Statistics Canada found that "both financial literacy and self-assessed financial knowledge were associated with higher absolute debt levels."[14]

Will Canada repeat the US experience?

Much of the concern about household debt in Canada centres on the trends shown in figure 3, which compares the ratio of household debt to income in both Canada and the US (the data for Canada are adapted to US concepts to ensure comparability).[15] The US pattern shows the famous "Mount Fuji" trajectory of household debt in the US, with a steady rise prior to the recession that started in 2007 and then a steady unwinding of leverage throughout the recovery.[16] Since it is well-known that the US recession was driven by bad debts provoking the crisis in its under-capitalized financial system,[17] the fact that household debt in Canada is higher today (although still lower than the US peak ratio in 2007) is held up as *prima facie* evidence that it has reached a dangerous level.

However, this analysis ignores the fact that the problem in the US was not the overall level of debt, but its distribution. Too much household debt in the US was issued to households who were obviously a high risk for defaulting. (Part of this problem reflected government housing policy that "promoted lending to low-income families without good credit histories and im-

Figure 3: The ratio of household credit and market debt to disposable income in Canada and the US, 2001–2014



Source: STC Cansim Table 378-0121.

[13] MacGee, *The Rise in Consumer Credit*: 10.

[14] Chawla and Uppal, *Household Debt*: 12.

[15] Canada and the US calculate their debt-to-income ratio slightly differently, notably because the US includes non-profit institutions and calculates income slightly differently, which adds about 10 points to the US ratio. The concepts are standardized in figure 3. For more information, see *Reconciling Canadian-U.S. Measures of Household Disposable Income and Household Debt*, Statistics Canada, Catalogue No 13-605-X, June 11, 2013.

[16] Timothy Geithner (2014), *Stress Test: Reflections on Financial Crises*, Crown: 107 uses the term "Mount Fuji."

[17] Janet Yellen, chair of the Federal Reserve Board, admits to harbouring concerns about the US housing market before 2007 but not the risk to banks: "I absolutely did not see it as something that could take the financial system down." Quoted in Nicholas Lemann (2014, July 21), The Hand on the Lever, *The New Yorker*.

posed no down payment requirement."[18]) There is no indication that financial institutions in Canada have been anywhere near as lax in their lending standards as US firms were leading up to the 2007 crisis, while capital reserves have always been higher. Another difference with Canada is that US mortgage debt is non-recourse; when a homeowner defaults on their mortgage debt, lenders cannot seize anything other than the home. The proliferation of NINA (no income/no asset loans, where no income or assets were given on the loan application form) and so-called "liar loans" (which required little or no documentation) leading up to the crisis in the US suggests some people understood the implications of non-recourse all too well. Some swindlers had too much financial literacy, not too little; after all, it was the applicant, not the loan officer, who borrowed injudiciously or lied. In Canada, extending homeowner liability beyond the home discourages such abusive practices.

Canada's debt-to-income level might seem high compared with our recent history, but is dwarfed by the ratio in some other countries. In 2012 (the latest year of comparable data from the OECD) Norway had a household debt-to-income ratio of 210%, implying households were borrowing heavily to consume or buy homes against the value of the future stream of benefits from the wealth their government holds for them in the world's largest sovereign wealth fund. The debt-to-income ratio exceeded 300% in Denmark and the Netherlands, while Switzerland and Sweden's was approaching 200%. All of these countries have sound financial systems. The UK,[19] Australia, and South Korea also had higher debt-to-income ratios than Canada. It is striking that US households, long regarded as among the most profligate, have reduced their ratio of debt to income from 143% in 2007 to 115% in 2012, by far the largest drop in the OECD (the OECD data have a slightly different definition for debt than the US data used in figure 2).[20]

Canada's debt-to-income level might seem high compared with our recent history, but is dwarfed by the ratio in some other countries.

The surprise is that the US had debt problems in 2007, since its ratio of debt-to-income was not alarming by international standards. This underscores that it is very difficult, if not impossible, to judge how problematic debt is using only economy-wide data. It is the distribution of debt among individuals, and the capital solvency of the lending institution, that determines the risk debt poses to the economy.

Nor is lower debt unambiguously good for an economy.[21] The deleveraging of US households

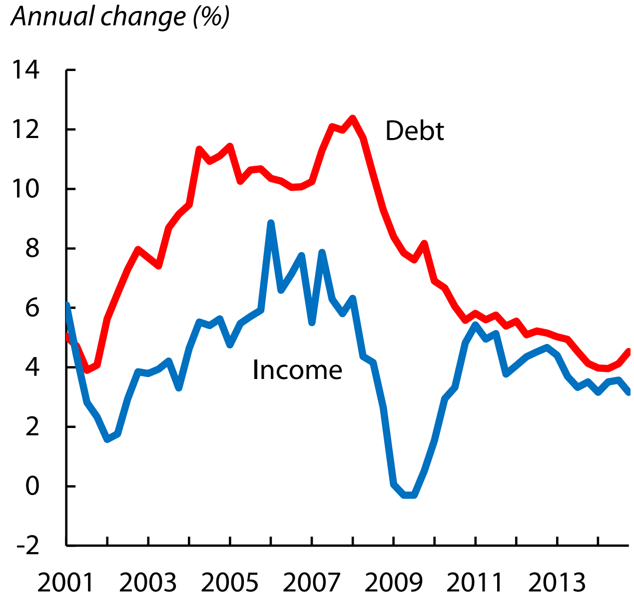
[18] Allan Meltzer (2012), *Why Capitalism?* Oxford University Press: 46.

[19] The latest UK comparison with Canada was for 2010, when UK debt levels were higher. It is likely more recent data will show Canadian household debt levels were higher.

[20] All the international comparisons of household debt come from the OECD *Factbook*, 2014, "Household Debt."

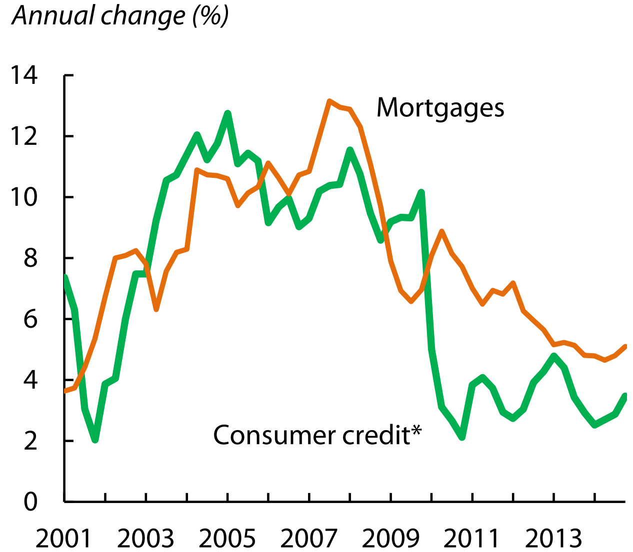
[21] See for example Karen Dynan (2012), *Is a Household Debt Overhang Holding Back Consumption?* Brookings Papers on Economic Activity (Spring).

Figure 4: Household debt and income growth in Canada, 2001–2014



Source: Statistics Canada CANSIM tables 378-0121 and 380-0073.

Figure 5: The annual change (%) of mortgages and consumer credit in household debt , 2001 to 2014



*Consumer credit includes personal loans.
Source: Statistics Canada CANSIM table 378-0181.

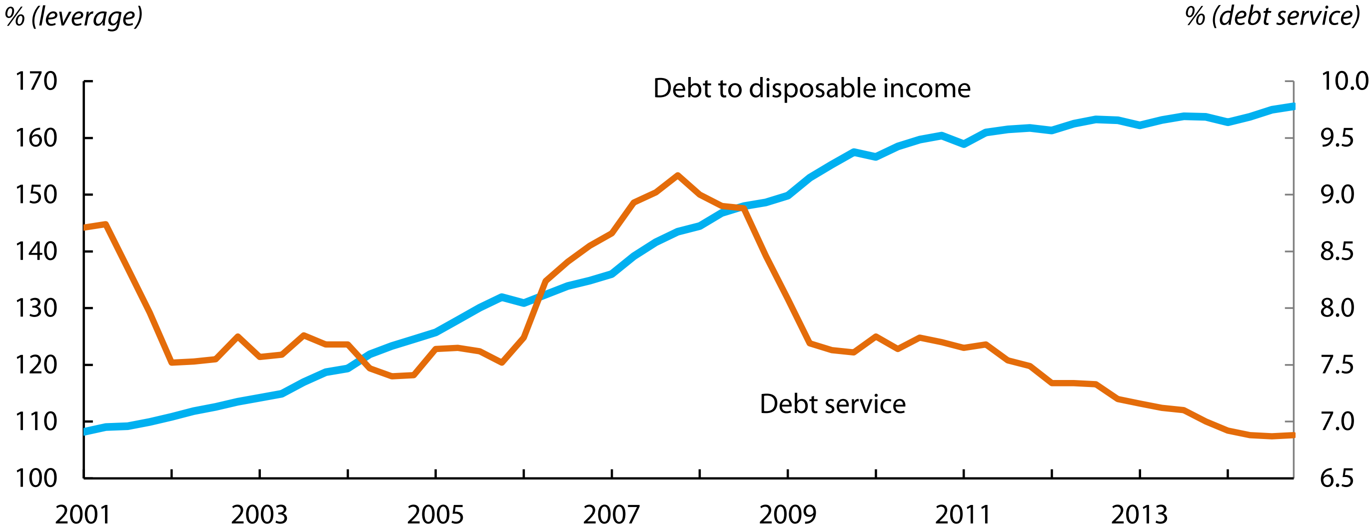
after 2008 was a major reason for the slowness of its recovery. This is consistent with Canada's experience when debt posted its only annual decline on record during the severe recession of 1982. Very low levels of debt are associated with low-income countries with weak financial infrastructure and poor financial literacy, such as Mexico, which has a debt-to-income ratio of less than 10%.

Household debt growth moderated after 2009

Why has the ratio of household debt to income in Canada reached a record high? Most of the increase occurred before 2010; over the past four years it has essentially levelled off. The largest increase in the debt-to-income ratio occurred during the recession, when income growth slowed even as households also reined in their borrowing. There has been a marked slowdown in the growth of household debt starting late in 2008, while income growth recovered after the recession ended in 2009 (see figure 4). Annual debt growth has slowed from a peak of 12% just before the recession to 4% in recent years, despite the lure of record low interest rates in the aftermath of the global financial crisis. Since 2011, household debt has risen at almost the same pace as incomes. The miniscule difference between the two is of interest only to headline writers, who seize the opportunity to proclaim debt-to-income ratios are setting new records every year.

Despite record low interest rates following the financial crisis, the growth of household debt has moderated. This deceleration is evident for both consumer credit and mortgage debt (figure 5). The slowdown for mortgage debt began during the recession in 2008. Consumer credit growth fell abruptly after the economy emerged from the recession, and has remained

Figure 6: Ratios of household debt and debt service to income in Canada, 2001-2014



Source: Statistics Canada CANSIM Tables 378-0123 and 380-0073.

below 4% even with record auto sales in 2013 and 2014. That consumer credit is growing more slowly than mortgages reduces the risk profile of households in debt, since the collateral of a home reduces the cost of debt. As well, mortgage debt locks in low interest rates for longer periods, insulating the exposure of households to possible future interest rate hikes.

The slowdown in the growth of household debt starting in 2008 accompanied numerous steps taken by federal agencies to reduce some of the risks that could arise from extremely low interest rates. Those steps include:

- Households that buy a home with less than a 20% down payment must buy mortgage insurance to protect the lender against default.
- The amortization period on insured loans was capped at 25 years, a reduction from up to 40 years (which banks had opposed in the first place).
- The Bank of Canada requires banks to qualify borrowers at a five-year fixed rate, even if variable rates are much lower.
- The Superintendent of Financial Institutions has recommended that lenders be more prudent in calculating the debt service ratios of borrowers.

The cost of servicing debt is at record lows

The elevated household debt-to-income ratio gives the impression that the burden of household debt is onerous. However, the share of household disposable income being diverted to debt service has fallen to a record low level of just under 7% (see figure 6).[22] The low cost of debt reflects both record low interest rates

[22] The Statistics Canada measure of the debt service ratio used in this paper only includes payments on

and the shift in the mix of debt from consumer credit to mortgages. The lighter burden of household debt is borne out by low loan delinquency rates at major chartered banks and a subdued number of personal bankruptcies.[23] In reviewing Canada's financial sector, the IMF concluded in 2015 that "non-performing loans are low and at their pre-crisis level."[24]

While the share of income needed to service debt can rise sharply with an increase in interest rates, as occurred between 2005 and 2007, the prospect is for a low interest rate environment for the foreseeable future. It is noteworthy that Canadian households demonstrated in 2007 that they could divert over 9% of their income to debt service without cutting back on spending; this implies they will be able to absorb the initial upturn in interest rates without depressing consumption.

The debt service ratio is the better metric for evaluating the burden of household debt than the ratio of debt to income (also in figure 6). Comparing all debt, including mortgages which are amortized over decades, to this year's income implies that the level of debt may have to be repaid with this year's income (debt is a stock concept, built up over decades; income is a flow concept, reflecting this year's addition to household purchasing power). Saying that a debt-to-income ratio of 160% is high implies that a couple earning $100,000 a year should not take out a mortgage of more than $160,000. This is not burdensome by any standard, and is not how financial institutions themselves evaluate how much debt individual households can reasonably support. Typically, lenders look at the percentage of household income devoted to debt service and how much that may rise if interest rates increase. The debt service ratio is a better measure of the burden debt places on households, although the ratio of debt to income points to the potential impact higher interest rates may have on the debt service ratio.

Nevertheless, there are risks in the current environment. The Bank of Canada estimates about 6% of households have debt service ratios above 40%.[25] Simulations by the Bank of Canada suggest that a three percentage point jump in the unemployment rate could lead to a doubling in the share of households in arrears of loan payments to just over 1.0%.[26] However, a three point hike in the unemployment rate implies a recession even more severe than the global economic downturn in 2008-2009, when the unemployment rate in Canada rose only 2.5 points. Such an event is unlikely, but if it occurred it would be symptomatic of much graver problems than household debt in Canada.

The biggest concern about household finances is about a possible bubble in the housing market, the evaluation of which is a separate matter from this paper's focus on debt. Of course, if house prices fell rapidly, this could reduce household wealth enough to slow household spending. In this regard, recent developments in Alberta are encouraging. In that province, the sudden and sharp correction to house prices has not caused households to buckle under

interest; the Bank of Canada includes repayments of principal.

23 For a discussion of bankruptcy in Canada, see MacGee, *The Rise in Consumer Credit*: 6.

24 International Monetary Fund (2015), *Canada*, IMF Country Report No. 15/22 (January).

25 Bank of Canada (2012), *Financial System Review* (June): 19.

26 Bank of Canada (2012), *Financial System Review* (December): 32.

their debt load, minimizing the impact on lending institutions.

Conclusion

Headlines that household debt is at record levels, or that debt is higher in Canada than the US, create the impression that individual Canadians are being irresponsible in managing their personal finances. It is difficult to judge what is the optimal ratio of household debt to income in Canada, because the trend to extensive and everyday use of debt is such a recent phenomenon. Compared with some European countries with sound financial systems, Canadian households have a relatively low ratio of debt to income. The problem with US debt before the recession was its distribution, not its level, and inadequate capital reserves in its financial system.

Despite the lure of record low interest rates, households in Canada have demonstrated a prudent attitude to debt. The growth of household debt has slowed markedly since 2009, notably for consumer credit. Together with record low interest rates, this has reduced the burden of servicing household debt to a record low share of incomes. Households also have prudently shifted the mix from consumer credit to mortgages, locking in lower interest rates. Most Canadians are managing their debt levels responsibly, with no evident strain to either their incomes or their balance sheets. Government is the only sector of our economy that has a structural problem managing its debt, notably the provinces, where debt levels continue to rise even before the largest demands of an aging population are made on our antiquated health care system.

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