



B A C K G R O U N D E R S

# Household Spending and Debt

Household spending accounts for close to 65 per cent<sup>1</sup> of total spending in Canada and is, therefore, a very important driver of the economy. Households purchase a variety of goods (e.g., food, clothing, houses, cars) and services (e.g., insurance, entertainment). They pay for these goods and services using earnings from employment, savings and income from investments, and borrowed funds, particularly for purchases of big-ticket items such as houses and cars.

## “Prudent” household borrowing makes economic sense

Prudent borrowing can enhance the overall economic welfare of households, by “smoothing” consumption across different stages of their life cycle. When income is relatively low in the early adult years, households borrow to support higher consumption than they can finance from current income alone. As income rises through middle life, households save and reduce their debt to build up their wealth for retirement. Borrowing can also act as a “buffer,” allowing households to maintain a relatively stable level of consumption during a temporary loss of income due, for example, to a layoff or prolonged illness. Sustaining household consumption this way can help support overall activity in the economy during difficult times, such as the recent global financial and economic crisis.

Because households are such an important component of our economy, the strength or weakness of their finances has a significant effect on Canada’s overall economic well-being and financial stability. While measured, cautious borrowing can enhance household and

<sup>1</sup> Household spending includes personal expenditures (consumption) and housing, as reported in the National Accounts.

national welfare, excessive debt can make households more vulnerable to shocks and increase risks to the financial system and the economy, as the recent experience in other advanced economies has shown. That is why the evolution of household debt is of interest and relevance to the conduct of Canadian monetary policy.

## Canadian household debt has been rising steadily in recent years—to a record high

Household borrowing has been on a steady upward trend in recent years and the **aggregate ratio of household debt to personal disposable (after taxes and interest payments) income** currently stands at a little over 160 per cent. Please see footnote for important information regarding recent revisions affecting this ratio and its comparability with previous estimates and with corresponding U.S. data.<sup>2</sup>

<sup>2</sup> In October 2012, Statistics Canada published revised data for household debt relative to personal disposable income, showing an upward shift in this series since 1990. These revisions reflect the adoption of the new International System of National Accounts. Changes in definitions and methodology affect both household debt and household income, with changes in the latter accounting for most of the upward revision in the household debt-to-disposable income ratio. On the debt side, a more accurate allocation of mortgages between the household and corporate sectors has resulted in a modest increase in household credit-market debt. ((Credit-market debt to disposable income is the measure that the Bank uses for its analysis and reporting. It excludes trade accounts, i.e., short-term credit that suppliers extend to small businesses, normally interest free, to facilitate commerce). On the income side, personal disposable income is significantly lower than before, primarily because it now excludes not only taxes but also interest payments on outstanding debt. N.B.: the above changes make direct comparisons with previous data on household debt to disposable income difficult. Comparisons with U.S. household debt data are equally tricky, given that the United States has not yet adopted the new international accounting principles. See also Box 1 in the December 2012 *Financial System Review*.





**Mortgage credit**, which includes financing for house purchases and mortgage refinancing, accounts for close to 70 per cent of total outstanding household credit. **Consumer credit**, which comprises secured home-equity lines of credit (HELOCs), unsecured personal loans, car loans and credit card debt, makes up the rest.

Until the mid-1990s, the rise in the debt-to-income ratio was driven mainly by growth in mortgage credit. Since then, consumer credit, and especially credit backed by home equity has also been a contributing factor.

## What explains the upward trend in household debt?

Several factors have been behind the rapid growth of household debt in recent years.

The surge in mortgage credit is consistent with the increase in population and homeownership, as well as with improved mortgage affordability. Although house prices have risen (reducing affordability), other factors—for example, income gains and lower interest rates—have boosted overall affordability and improved access to mortgage financing.

Income growth and low interest rates have also supported the expansion of consumer credit in recent years. As well, significant gains in house prices, which have raised the amount of home equity against which households can borrow, have encouraged strong growth in secured consumer borrowing (HELOCs). Also driving consumer credit is financial innovation, which has expanded the range and marketing of credit products, making them more appealing and accessible to households.

## Uses of borrowed funds and policy-implications

How households use borrowed funds is important because this can materially affect national economic outcomes, especially during periods of unusual stress, and is therefore an issue for policy consideration.

Credit is used for a variety of purposes: house purchases, consumption and home renovations—all of which affect total household spending and, consequently, overall economic growth. Credit is also used for financial investments (e.g., purchasing an RRSP), which do not represent household spending and do not contribute to output growth.

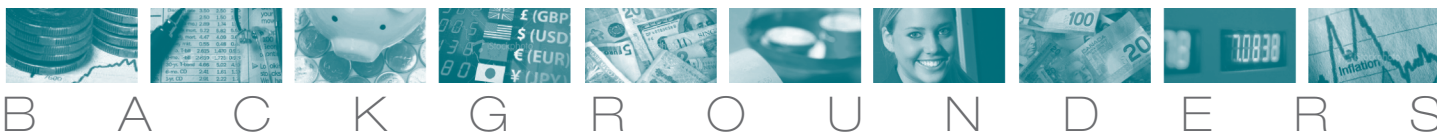
Since 2000, a significant share of borrowed funds—mostly against home equity—has been used for consumption and home renovations. What are the implications of this type of borrowing? If the supportive conditions that prevailed during most of that period are reversed—with tighter lending conditions and declining house prices—there could be a sizeable limiting effect on these expenditures and on the economy more broadly. Therefore, the Bank needs to take these links between credit and spending into account when assessing the economic impact of monetary policy actions.

## Ratio of debt-to-disposable income: What does it tell us? What other metrics should we be looking at?

The debt-to-income ratio mentioned above is the most frequently reported measure of household debt. But what does it actually tell us? Are there other metrics that are more relevant?

An aggregate debt-to-income ratio of, say, 160 per cent tells us that the accumulated debt of an average Canadian household significantly exceeds one year's worth of its income. Put another way, a debt-to-income ratio of 160 says that it would take more than one and a half times the annual income of an average household to fully pay off its debt. Of course, in practice, households are not expected to pay off their debt (especially a mortgage) in a single year. Rather, they do so by drawing on a stream of income over a number of years. This is an important point to keep in mind.





Equally important to remember is that, as an average, the debt-to-income ratio conceals as much as it reveals. For example, not every Canadian household has a debt-to-income ratio of 160. There are households whose ratio is much lower than that, and there are others that are well above 160.

To get a better reading of financial vulnerabilities, it is useful to look at how debt is *distributed* among households. Furthermore, in terms of their financial health, the critical issue is not the level of debt, but whether they have difficulty servicing that debt. In this sense, the **debt-service ratio (DSR)**, which measures a household's debt-servicing costs<sup>3</sup> as a percentage of its disposable income, is a better indicator of financial stress than the aggregate debt-to-income ratio.<sup>4</sup>

Household-level data suggest that the majority of Canadian households have modest debt burdens—DSRs of between 10 and 30 per cent. Households with a DSR above 40 per cent, while relatively few (currently less than 10 per cent of all indebted households), are considered to be the most vulnerable to shocks and at high risk of failing to meet their obligations. These households are of particular interest to policy-makers when assessing risks to the economy and the financial system from household debt.

Twice a year, the Bank of Canada conducts a stress test to estimate the impact on household finances of a hypothetical sharp and persistent economic shock, e.g. a 3 percentage-point-rise in the unemployment rate.<sup>5</sup> Such a shock would depress income growth, the housing market

and household net worth, which would then increase the number of vulnerable households that would find it difficult to make their debt payments. Under this extreme scenario, household loans in arrears would roughly double.

In addition to the debt-to-income ratio and the debt-service ratio, analysts also look at other indicators of the financial health of households, such as the **debt-to-asset ratio** and **household net worth**.<sup>6</sup> These measures focus on both sides of a household's balance sheet—debt and assets. This is fitting and relevant because households with liquid assets (e.g., cash, chequing and savings accounts, GICs) may draw on such assets to service their debt and ease financial strain during a serious economic shock.<sup>7</sup>

## Putting it all together

No matter how one looks at it, household debt in Canada is at a record high. Debt at this level can make certain households, the economy and the financial system more vulnerable to shocks, such as a surge in unemployment, falling incomes and house prices, and rising interest rates.

Although the results of the Bank's stress test mentioned above are purely illustrative, they do highlight the need for all-around caution. Households need to be well informed when they take on debt and they need to ensure that they will be able to continue servicing their debt down the road, recognizing that interest rates will

<sup>3</sup> The Bank's DSR measure includes principal and interest payments on all loans (mortgages, personal lines of credit, other personal loans, car loans and credit card debt). Statistics Canada's aggregate DSR measure excludes principal payments.

<sup>4</sup> Economists might add that the debt-to-disposable-income ratio mixes outstanding debt, which is a *stock* concept, with disposable income, which is a *flow*. In the case of the DSR, debt-servicing costs and disposable income are both flows.

<sup>5</sup> The results of these tests are reported in the Bank's *Financial System Review*, published semi-annually, in June and December.

<sup>6</sup> Assets minus liabilities of the household sector: *non-financial assets* (mainly real estate) and *financial assets and liabilities* (e.g., deposits, bonds, shares, GICs, mortgages and consumer credit).

<sup>7</sup> Under the new accounting system, household net worth was also revised up modestly, reflecting a higher estimated value for unlisted shares and for housing. Although, in theory, higher net worth reduces the vulnerability of households, it should be noted that unlisted shares may not be easy to liquidate in times of market stress and home equity can quickly dwindle when house prices are falling.





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be moving up to more normal levels from their current historical lows. At the same time, financial institutions are responsible for assessing the risk and the ability of their clients to service their debts. Regulatory authorities have taken measures to strengthen mortgage rules since 2008 and continue to monitor closely the financial situation of households. In addition, other government bodies have developed useful information to [educate households](#) and sensitize them to the risks of over-indebtedness. Some of this information can be accessed through links provided on the Bank of Canada's website.

For additional reading, refer also to the [Bank of Canada Review](#), Special Issue: Household Finances and Financial Stability (Winter 2011–12).

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