ECONOMIC VIEWPOINT

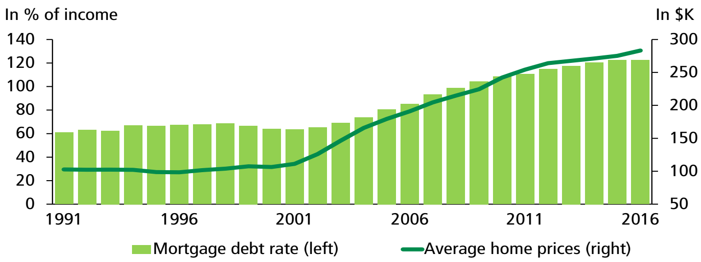
The Financial Position of Quebec Households[1]

Household debt has been rising much faster than income since the start of the 2000s. This widely reported debt ratio even shattered a historic peak in Quebec, but it still below the level of Ontario and Canada. Should we be concerned? Other, more comprehensive indicators are not nearly as alarming. If we consider the low interest rates and the sharp growth in asset values in the past 15 years, Quebecers are in a sound financial position overall. What's more, the share of households that may be unable to repay their loans is still relatively contained. As household debt climbed, so did the value of their assets, but at a somewhat faster pace, thus improving their financial standing. But the economic and financial environment can sometimes change in a blink, and the risk of households' financial position deteriorating is nevertheless a concern.

Home prices play a key role

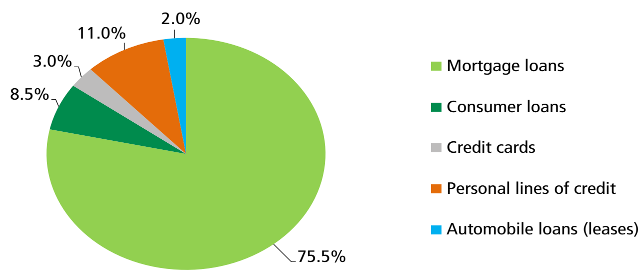
The homeownership movement that began in the early 2000s and the sharp increase in residential property prices helped inflate households' mortgage debt and, by extension, their overall financial commitments. For example, the average price of a home in Quebec has soared from $106,468 in 2000 to $283,288 in 2016—almost triple! Household mortgage debt clearly reflected soaring home prices (graph 1). Given the size of mortgage loans (graph 2), they have the biggest influence over the total debt ratio.

GRAPH 1
Soaring home prices have pushed Quebec's mortgage debt rate higher



Sources: Statistics Canada, Canada Mortgage and Housing Corporation, Bank of Canada, Institut de la statistique du Québec, Québec Federation of Real Estate Boards via Centris® and Desjardins, Economic Studies

GRAPH 2
Composition of Quebecers' debt in 2016



Sources: Ipsos Reid and Desjardins, Economic Studies

Based on the traditional debt ratio (box 1 on page 2), or individuals' total outstanding debt over personal after-tax income, the situation in Quebec is less of a concern than in Canada as a whole and in Ontario (graph 3 on page 2). While household incomes are lower in Quebec, that alone is not enough to account for the divergence in debt ratios. In 2016, the average home price was about $285,000 in Quebec, close to $500,000 in Canada and north of $535,000 in Ontario. The relatively lower home prices, reflected in the size of mortgage loans, is the main reason for Quebec's lower debt ratio.

[1] See also on the topic: *The financial situation of Quebec households*, Desjardins, Economic Studies, *Economic Viewpoint*, August 25, 2016, 4 p.

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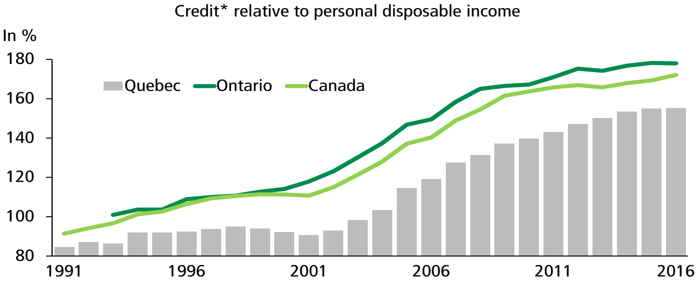
BOX 1
An incomplete and alarming ratio

What exactly does this debt ratio measure? The outstanding debt of all types of consumer loans, credit card balances, personal lines of credit, mortgage loans contracted by individuals and automobile financing (leases). All these loans are usually repaid over several years, especially mortgage loans, which can be amortized over a period of up to 25 years.

This number is then compared to households' annual after-tax income, as if all contracted debt had to be repaid based on a single year's after-tax income! For example, a household with an after-tax income of $75,000 and total debts of $150,000 automatically has a debt ratio of 200%. This debt-to-income ratio therefore compares amounts over different periods of time, muddling its interpretation.

This debt metric, which is widely used because of its simple calculation and data availability, has a major flaw: it does not account for the interest rates that partly determine a borrower's repayment capacity. As such, it is an incomplete metric for gauging a household's financial position.

GRAPH 3
Debt growth has outpaced income growth for the past 15 years



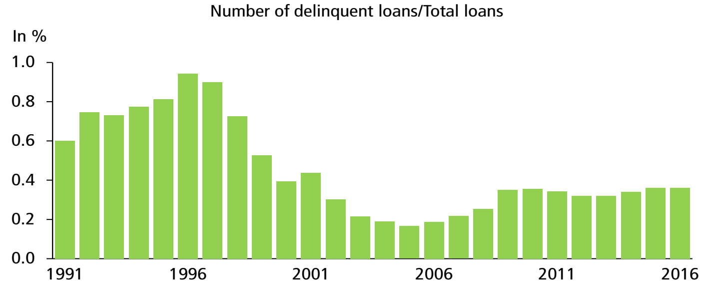
Note: Ontario data begin in 1993.
*Total outstanding consumer and residential mortgage loans.
Sources: Statistics Canada, Canada Mortgage and Housing Corporation, Bank of Canada, Institut de la statistique du Québec and Desjardins, Economic Studies

Interest charges tip the scales

The debt-to-income ratio has rocketed in recent years, but this does not necessarily mean households are struggling. The persistently low interest rates of the past few years and the strong labour market, which provides workers steady employment income, have kept the situation under control. But the economic and financial environment can sometimes change in a blink, and the risk of households' financial position deteriorating is nevertheless a concern.

The example from the 1990s speaks volumes: at that time, the ratio of household debt to personal disposable income was relatively low, i.e. less than 100%, at a time when mortgage rates were about 10%. The result: many households were unable repay their debt and the ratio of delinquent mortgage loans soared (graph 4). In the early 1990s, interest payments on all types of credit ate up a large share of household income (graph 5), and many households were financially strapped. The high unemployment rate that accompanied this severe recession was yet another financial blow for households. The high level of interest rates still kept many borrowers from meeting their obligations.

GRAPH 4
The number of delinquent mortgage loans in Quebec is relatively low



Sources: Canadian Bankers Association, and Desjardins, Economic Studies

GRAPH 5
The burden of interest* has eased in recent years in Quebec

*Interest paid on mortgage loans and all other consumer loans.
Sources: Statistics Canada and Desjardins, Economic Studies

The reverse is now taking place. For the past few years, the debt-to-income level has been breaking records while interest rates are floundering at historic lows. Never has the burden of households' interest payments compared to their income been so light. Low interest rates mean that a bigger share of monthly payments is applied directly to borrowed capital, helping accumulate net worth more quickly.

In short, the two aforementioned household debt indicators, i.e. the debt-to-income ratio and the interest rate burden, paint two different pictures. On one hand, the debt-to-income ratio that only takes into account the burden of amounts borrowed has reached a new peak in Quebec. On the other, the ratio of interest payments to income has shrunk in recent years. Each of these metrics is incomplete, making it difficult to fully capture the scope of financially vulnerable households (section 1 of box 2).

Stable capacity to repay

The sum of principal and interest payments relative to income is what best reflects a household's capacity to meet its obligations (section 2 of box 2). This indicator, known as the debt service ratio (DSR), enables us to correctly evaluate whether the burden of monthly payments in households has increased. In fact, the average DSR has fluctuated very little in Quebec over the last 15 years, barely moving from an average of 16.7% (graph 6 on page 4). The proportion of gross income allocated to paying down debt (principal and interest) has remained the same for the total of households in the province. Based on this more comprehensive indicator, the capacity of households to repay their debt has been stable over the years, as has the risk of payment default.

Beyond the general debt trend, the distribution of households creates a clearer picture of the proportion of households that carry too much debt. According to the microdata collected by the Ipsos Reid *Canadian Financial Monitor* survey, the proportion of gross income allocated to debt repayment can be calculated for every household in the sample. If the monthly payments eat up a high percentage of gross income, chances are the borrower will be unable to fulfil his financial commitments. The Bank of Canada has clearly established the comfort zone in this regard. Households where the DSR exceeds the critical threshold of

BOX 2

Section 1 – Two incomplete measures of household indebtness

Debt to after-tax income ratio

Characteristics:

- The most frequently used in the media and readily available via Statistics Canada.
- Special Desjardins compilation for Quebec and Ontario.
- Imperfect: Different periods for debts and income.
- Incomplete: Does not take interest rates into account.
- Tracks changes over time and compares variances with Canada and Ontario.

Source: Desjardins, Economic Studies

Ratio of interest payments to after-tax income

Characteristics:

- Data readily available at Statistics Canada for all provinces.
- Suitable annual benchmark period for interest and income.
- Incomplete: Does not account for the principal to be repaid.
- Assesses the burden of interest payments compared to loans.
- Tracks changes over time and compares variances between the provinces and Canada.

Source: Desjardins, Economic Studies

Section 2 – Two relevant measures of household indebtness

Weight of principal and interest payments compared to gross income

Characteristics:

- Data not as readily available.
- Special Desjardins compilation for Quebec with detailed data from the Ipsos Reid survey.
- Complete ratio: Takes debts, interest rates and income into account.
- Proportion of income allocated to debt repayment calculated for each household in the sample.
- Allows a breakdown of households based on their risk level.

Source: Desjardins, Economic Studies

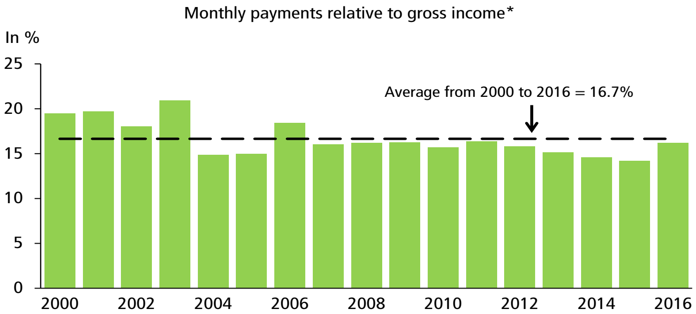
Debt-to-asset ratio

Characteristics:

- Data not as readily available.
- Special Desjardins compilation for Quebec with detailed data from the Ipsos Reid survey.
- Complete ratio: To assess whether assets are sufficient to cover debts.
- Debt-to-asset ratio calculated for each household in the sample.
- Allows a breakdown of households based on their risk level.

Source: Desjardins, Economic Studies

GRAPH 6
The burden of principal and interest payments in households has not grown in Quebec

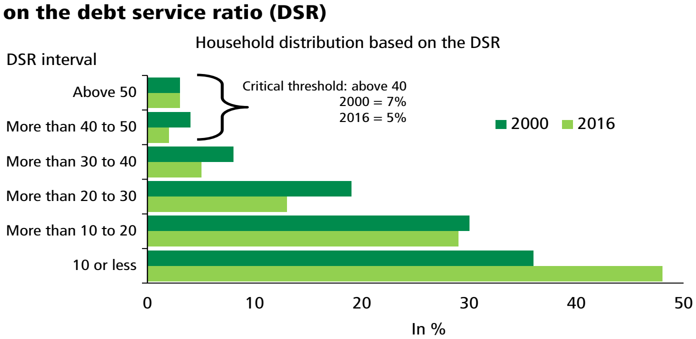


*Debt service ratio.
Sources: Ipsos Reid and Desjardins, Economic Studies

40% are considered vulnerable; in other words, they might have difficulty making their monthly payments. This does not mean they are all doomed to declare personal bankruptcy.

There are few households with a high debt burden compared to income. Last year, however, 5% of indebted households had a DSR above the critical threshold of 40% (graph 7); this percentage has held fairly steady for several years now. Households with a DSR between 30% and 40% also present a potential risk since they could quickly find themselves in a precarious position should an unforeseen situation arise; more than 5% of households were in this situation in 2016. The larger the share of income that is eaten up by monthly debt payments, the more sensitive that household is to certain life events, such as a separation, serious illness or job loss. Generally speaking, a change in the economic environment that triggers an interest rate increase or mass layoffs can also upset a household's financial position.

GRAPH 7
Breakdown of households in Quebec based on the debt service ratio (DSR)



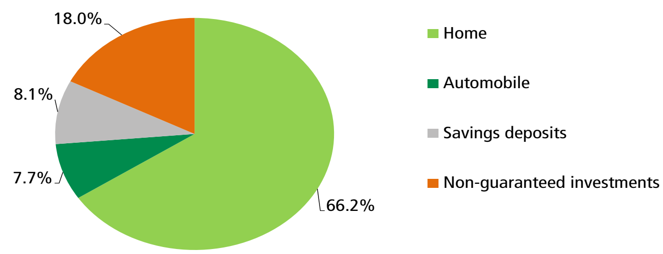
Sources: Ipsos Reid and Desjardins, Economic Studies

Even if the overall debt burden is contained, some Quebecers have little leeway to deal with an unexpected setback, such as a sudden drop in employment income. The financial safety net of many Quebec households is inadequate when it comes to absorbing a job loss. This also makes it tougher to keep up with the monthly payments. Since the average unemployment period is relatively long in Quebec, many households find it even more difficult to cope. It can take around six months to find another job, and that requires enough savings to get through this period without experiencing serious financial setbacks.

Asset values are also up

Households that are suffocating under their debt burden sometimes have enough assets to ensure their financial security. Before reaching the point of insolvency, households can sell their assets, be it their home or some of their investments (graph 8). To have a complete picture of households' financial position, we need to assess the value of their assets as well as their debts.

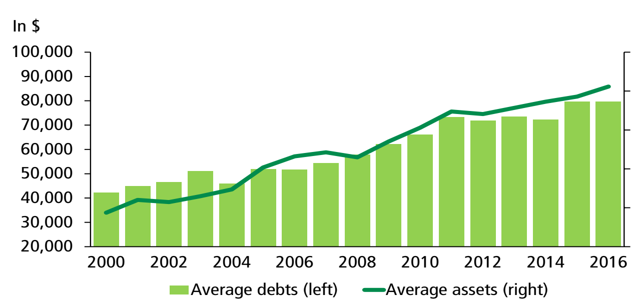
GRAPH 8
Asset mix of Quebecers' indebted households in 2016



Sources: Ipsos Reid and Desjardins, Economic Studies

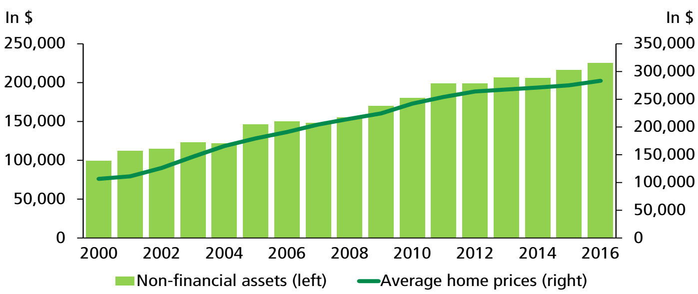
According to the Ipsos Reid *Canadian Financial Monitor* survey, the sharp growth in debt has been supported by a sustained increase in the value of assets in the last 15 years (graph 9), mostly due to soaring home prices that propped up the value of non-financial assets (graph 10 on page 5). Homes can serve as a bank of last resort, but selling times make it tough to access cash quickly if financial difficulties strike. In 2016, it took an average of about four months to sell a single-family home in Quebec, and two weeks extra for a condo. While it cannot be immediately tapped for cash, the value of real estate assets offers

GRAPH 9
Asset growth is outpacing debts incurred by indebted households in Quebec



Sources: Ipsos Reid and Desjardins, Economic Studies

GRAPH 10
Indebted households' non-financial assets have increased alongside home prices in Quebec

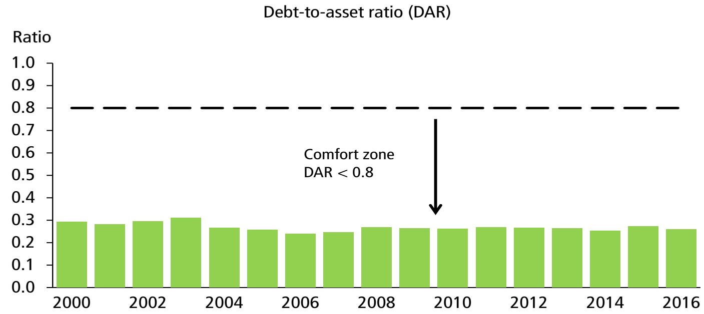


Sources: Ipsos Reid, Québec Federation of Real Estate Boards via Centris® and Desjardins, Economic Studies

the advantage of being fairly stable, unlike financial assets that fluctuate with the ups and downs of the stock market.

The debt-to-asset ratio (DAR) determines whether assets are sufficient to limit the risk of borrowers defaulting on their payments (section 2 of box 2 on page 3). According to Statistics Canada, a ratio of 0.8 is considered high, with the comfort zone lying below this threshold. Over the past 15 years, the DAR of all households in general has fluctuated within a comfortable range, or between 0.2 and 0.3 (graph 11). Thus, the burden of debt relative to assets still leaves households in a generally sound position. The critical threshold for this ratio—2—is the level that by and large leads to major problems. Quebec consumers who declare bankruptcy or who offer their creditors a proposal to settle their debts usually have twice as many debts as assets. The vast majority of Quebecers, over 85%, fall within the financial security zone (DAR of 0.8 or lower), which is quite reassuring. But the proportion of households in the discomfort zone (DAR above 0.8 and below 2.0) is considerable, at 10%.

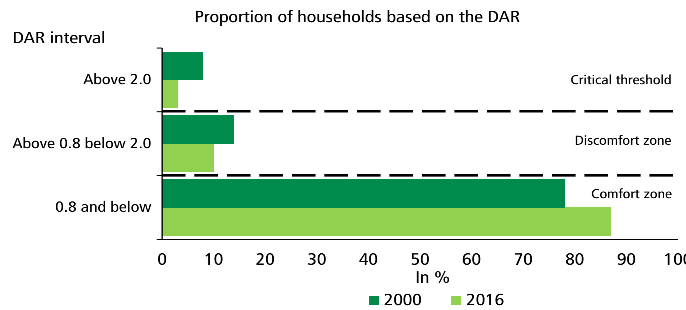
GRAPH 11
The debt-to-asset ratio in Quebec's indebted households has been quite low for the past 15 years



* Debt service ratio.
Sources: Ipsos Reid and Desjardins, Economic Studies

Lastly, 3% of households are beyond the critical threshold (DAR above 2) that more frequently leads to insolvency. When we consider the value of both debts and assets, the proportion of indebted households at risk is small (graph 12).

GRAPH 12
Breakdown of indebted households in Quebec based on the debt-to-asset ratio (DAR)



Sources: Ipsos Reid and Desjardins, Economic Studies

BOX 3
Two measures of households indebtness

Findings on incomplete measures

Debt to after-tax income ratio:

- In 2016, the ratio of 155.3% in Quebec was lower than in Ontario (178.0%) and in Canada (172.1%). A historic peak was reached in all three cases.
- Sharp rise since the beginning of the 2000s, in step with soaring home prices.

Interest payments to after-tax income ratio:

- Weight of interest payments at its lowest level since the early 1990s.
- Does not take the principal to repay into account.

Source: Desjardins, Economic Studies

Findings on relevant measures

Weight of principal and interest payments to gross income:

- Stable for many years despite the increase in the amounts borrowed.
- Low interest payments kept monthly payments contained.
- Proportion of vulnerable households did not grow.

Debt-to-asset ratio:

- The value of assets has slightly outpaced debts since the beginning of the 2000s, ratio down slightly.
- The number of households in the financial discomfort zone or at risk has declined.

Source: Desjardins, Economic Studies

Conclusion

Not all household debt indicators are sending the same signals (box 3 on page 5). The debt-to-income ratio has reached an all-time high, making headlines regularly. However, since this ratio does not take interest rates into account, it cannot be used to measure a household's capacity to repay its debts. The low interest rates have kept the burden of monthly payments at a reasonable level for many years now.

Household balance sheets should not only focus on loans, but on the assets accumulated over time as well. Surging home prices and stock market advances, with some interruptions at certain points in time, have boosted the value of Quebecers' net worth since the start of the 2000s.

According to the most relevant debt indicators, household balance sheets have remained sound overall. The proportion of vulnerable households has not grown in the last 15 years. In any case, Quebecers are not immune from a sharp downturn in the economic environment that could push many households into a more precarious situation. Different risks that can affect a household's financial situation—a sharp spike in interest rates or plummeting home prices—will be studied in an upcoming *Economic Viewpoint*.

Hélène Bégin, Senior Economist