OBSERVATION

TD Economics

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CANADIAN HOUSEHOLDS MORE INDEBTED THAN U.S. HOUSEHOLDS, BUT ONLY AFTER THE RECENT U.S. DELEVERAGING

Highlights

- Debt and income statistics released in Canada and the U.S. are often used to calculate debt-to-personal disposable income ratios. In Canada, the measure most cited in the press sits at a record 162%. In the U.S., the most frequently quoted ratio reached a peak of 163% but fell to 140% in the wake of the housing collapse and consumer deleveraging.
- However, the most commonly cited debt-to-income statistics in Canada and the U.S. are not directly comparable. There are differences in the methodologies used to calculate both debt and income. There are also differences in how health care is funded in Canada and the U.S. that should be factored into the amount of personal disposable income households have to help service their debt.
- After making adjustments to bring these measures more in line, the Canadian indebtedness ratio comes down to 156%, compared to a 177% peak reached in the U.S. leading up to the recession and the current U.S. level is 152%. The implication being that while Canadian households are still highly indebted, on an apples-to-apples comparison, they are still less indebted than U.S. households were prior to the financial crisis and the ratio of debt-to-income is roughly equivalent after the recent U.S. deleveraging.

Despite some recent progress made by Canadian households in slowing their rate of borrowing, the elevated level of indebtedness continues to generate concern. In particular, many analysts continue to shine the spotlight on the fact that the Canadian average household debt to income ratio has risen to above the U.S. peak reached just prior to the 2008-09 financial crisis. Just as one must be careful not to put too much stock into one metric, the same should be said for inter-country comparisons. This reflects the different ways data are compiled across borders.

In this note, we examine some of the key differences in how the debt-to-income measures in the U.S. and Canada are calculated, and as best we can, make adjustments for these methodological variations. In doing so, we are still left with the conclusion that Canadian households remain more indebted than Americans, but only after the latter population went through a painful deleveraging process. In other words, the adjusted average debt level in Canada appears to remain significantly below the pre-recession peak Stateside. What's more, other measures – including the affordability of debt – put Canadian household finances in a better light.

TABLE 1: CANADIAN HOUSEHOLD DEBT-TO-PERSONAL DISPOSABLE INCOME (%)

	Canada		U.S.	
	2007	**Current**	2007	**Current**
Traditional Measure (as reported by Statistical Agencies)	138	**162**	163	**140**
Adjusted for Methodological Differences in Canada/U.S. Calculations (comparing apples-to-apples)	126	**151**	163	**140**
Removing Household Out-of-Pocket spending on Health Services from PDI	131	**156**	177	**152**

Source: Statistics Canada, Federal Reserve, Bureau of Economic Analysis

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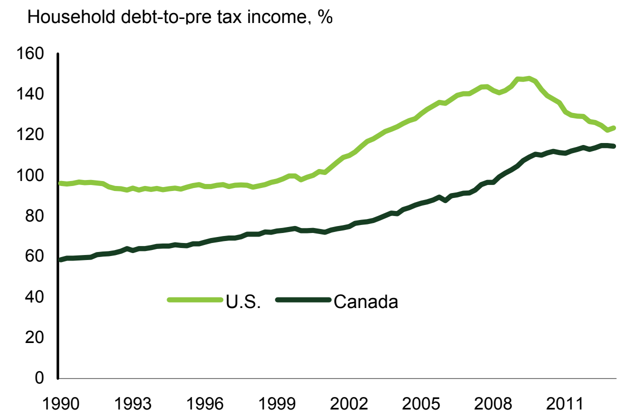
CHART 1: HOUSEHOLD INDEBTEDNESS



Source: Statistics Canada, Federal Reserve, Bureau of Economic Analysis

The traditional measure of household indebtedness

Canadian debt and income statistics are calculated by Statistics Canada, while U.S. income is provided by the U.S. Bureau of Economic Analysis, and U.S. debt statistics by the Federal Reserve. The debt used to calculate the ratio is credit market debt, which includes mortgages, credit cards, personal lines of credit and loan plans.

For income – the denominator of the ratio – total income from employment and investment property is sometimes used(see Chart 1). This calculation suggests that Canadians are far less indebted than U.S. households are or have been in the past.

However, the traditional benchmark is to apply after tax income, also known as personal disposable income (PDI), because the ability of households to pay off debt is a function of the income households have left over for spending and savings after income taxes and other non-discretionary expenses have been deducted. In addition, personal disposable income makes for a better U.S./Canada comparison because different tax structures in the U.S., including lower personal income taxes and the deductibility of mortgage interest costs means that American households can hold more debt relative to their pre tax income than Canadians.

Chart 2 shows the evolution of the measure most commonly reported by the various statistical agencies. On this basis, Canadian household indebtedness has reached the level the U.S. ratio peaked at prior to the recession. After the deleveraging process, the U.S. version is 140% – 20 percentage points lower than that in Canada.

Bringing the measures more in line

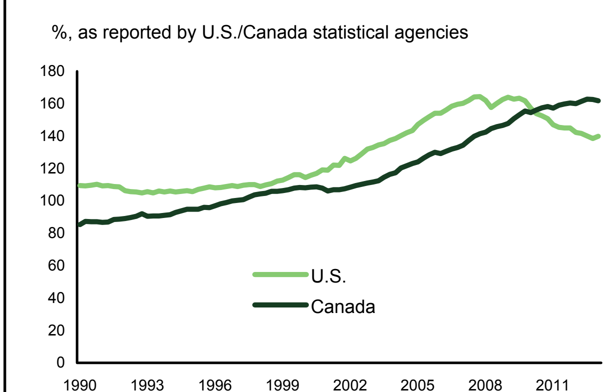
Chart 2 tends to set off alarm bells, as it suggests that Canadian households are faced with the risk of a major deleveraging. However, comparing the headline numbers is not appropriate. For one, the events in the U.S. since 2009 were a function of more than just excessive debt. The underlying riskiness of lending practices in the U.S. (which Canadian banks did not partake in) played a role. And, the adjustment was exacerbated by other economic factors, including a deterioration in global financial conditions.

More importantly, the traditional measures of the household debt-to-income ratios are not directly comparable. Statistics Canada offers a methodology for creating a Canadian household debt-to-PDI ratio that is more comparable to the U.S. version. This paper can be found here: http://www.statcan.gc.ca/pub/13-605-x/2012005/article/11748-eng.htm.

In its analysis, Statistics Canada makes some important adjustments to the calculation of debt and personal disposable income in both countries. First, in Canada, interest paid on non-mortgage loans is removed when calculating household disposable income. The reasoning is that households are obliged to make their monthly debt payments, which detracts from how much is left over as disposable income at the end of the month. In the U.S., nonmortgage interest costs are not removed. As such, we must add back in non-mortgage interest payments to Canadian personal disposable income, which lowers the Canadian indebtedness ratio.

Second, the U.S. debt-to-PDI ratio is calculated using both debt accumulated and income earned by households, unincorporated businesses and nonprofit institutions servicing households (ie, non-government funded schools, hos-

CHART 2: HOUSEHOLD DEBT-TO-PERSONAL DISPOSABLE INCOME



Source: Statistics Canada, Federal Reserve, Bureau of Economic Analysis
*For U.S., a household consists of household, unincorporated business and nonprofit institutions. In Canada, household does not include nonprofit institutions.

CHART 3: HOUSEHOLD INDEBTEDNESS

Source: Statistics Canada, Bank of Canada, Federal Reserve Board
*Canada is adjusted to match U.S. methodology

pitals and community recreational centers). The Canadian measure includes unincorporated businesses, but does not include nonprofit institutions – debt and income for this sector is reported separately. Since data are not available to remove this sector from the U.S. calculation, the only option is to add the debt and income of nonprofit institutions to the Canadian data. This is not ideal since a purer measure of household debt would exclude them.

In both the U.S. and Canada, nonprofit institutions tend to be less indebted than households and unincorporated businesses, so including them into the calculation reduces the debt-to-PDI ratio on both sides of the border. This is especially true in the U.S. where nonprofit institutions tend to be much larger and may have a different structure.

Accounting for these differences in the definitions of debt and PDI lowers the Canadian ratio by 10 percentage points (see chart 3). Based on this adjusted measure, the Canadian household debt-to-income ratio has surpassed that in the U.S., but only after the U.S. economy went through a deleveraging process. The Canadian debt-to-personal disposable income ratio is still 10 percentage points below the peak U.S. level prior to the 2008/2009 crisis.

Accounting for health spending

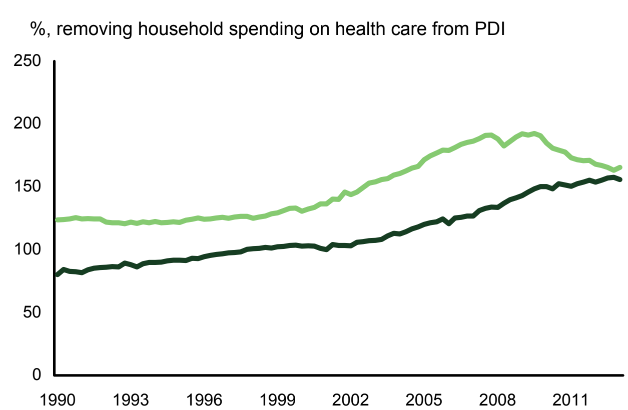
Even once you have corrected for some of the key methodological variances, there is a debate about what is considered disposable income. There is a good case to be made that for the most part health spending is not a discretionary cost and should be fully accounted for in the debt-to-income ratio. Canadians certainly pay more taxes, which leaves them with less after-tax income. However, higher taxes support more government spending on social programs, like health care. In addition, Canadian households also spend money on health care items out-of pocket, like annual eye checkups or to receive health care through a private clinics. However, health services paid for directly by households accounts for just 4% of income.

In the U.S., households pay less taxes, but the flipside to that is that more of their health care costs are paid directly out of their own pockets. Some analysts have calculated an adjusted personal disposable income measure by simply deducting total household spending on health services (a component of personal consumption expenditures) from personal disposable income. Chart 4 shows that, based on this ratio, Canadians currently are – and have been – less indebted than U.S. households.

The personal health spending measure used to calculate the debt-to-PDI ratio in chart 4 overstates actual out of pocket costs paid for by U.S. households. In particular, a portion of the health spending as directly reported by the BEA as a component of household spending is actually funded by government sponsored programs like Medicare and Medicaid. In order to create an appropriate measure of out-of-pocket costs for households we must remove Medicade and Medicare from health spending.

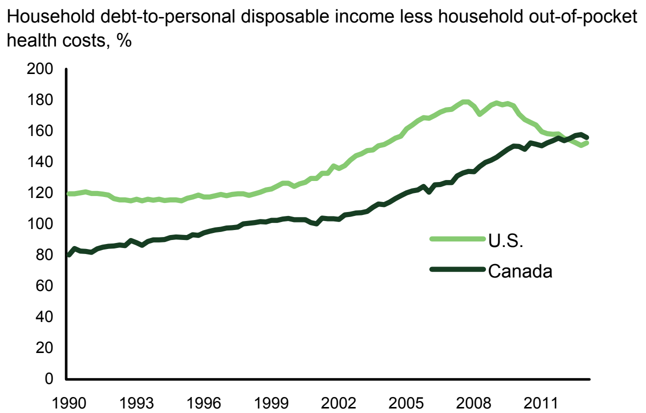
Private health insurance is another cost that must be factored into the personal disposable income calculation. Data on health insurance premiums are not available in Canada. That said, we can surmise that this is a relatively small piece of overall health costs in Canada and would have a negligible impact on the calculation of the household debt-to-income ratio. In the U.S., however, private health

CHART 4: HOUSEHOLD INDEBTEDNESS



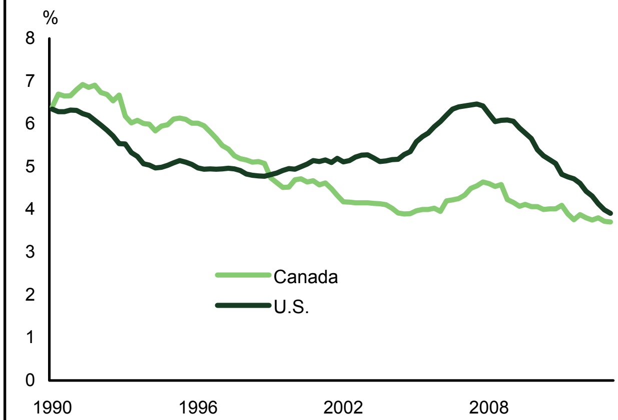
Source: Statistics Canada, Federal Reserve, Bureau of Economic Analysis

CHART 5: HOUSEHOLD INDEBTEDNESS



Source: Statistics Canada, Federal Reserve, Bureau of Economic Analysis
*Household health spending in the U.S. is net of medicade and medicare transfers and health insurance benefits paid to households.

CHART 6: MORTGAGE INTEREST PAYMENTS AS A % OF PERSONAL DISPOSABLE INCOME



Source: Statistics Canada, Federal Reserve Board

insurance is a notable cost for many households. Luckily, the data are available and we can deduct net health insurance premiums from PDI. Net health insurance premiums are defined as premiums paid by households less benefits received.

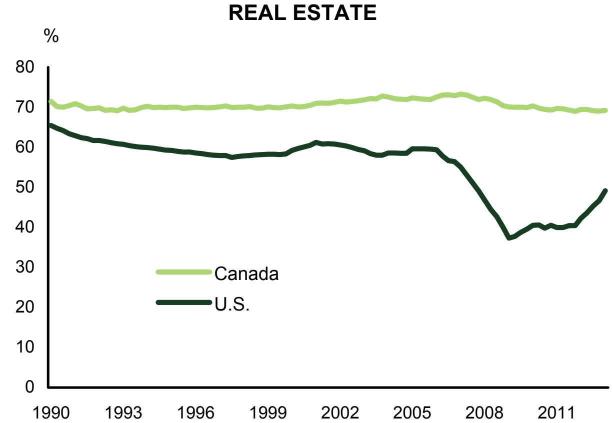
Overall, health spending costs paid for by households directly accounts for 8% of personal disposable income in the U.S., twice the share of that paid by Canadians. Chart 4, shows how significantly higher private-out-of pocket health spending in the U.S. impacts the indebtedness comparison. The story doesn't change much from the one told in Chart 2.

Other measures

Using the Canadian/U.S. indebtedness comparison is certainly useful for estimating risks associated with household indebtedness. However, as we have argued in past reports, the household debt-to-income ratio has its pitfalls as a measure of the overall health of household balance sheets. Other metrics should be considered, some of which show Canada is in a better spot. For instance, Canadian households face lower interest rates than U.S. households did back in 2007, which has kept the cost of carrying debt much lower for Canadians. As Chart 5 shows, the carrying cost of a mortgage is still lower in Canada despite the higher debt burden.

Another common measure of indebtedness includes the share of homeowner's equity (value of one's home less the mortgage attached to that house) as a share of residential property. Chart 5 shows that Canadians still hold significantly more equity in their homes than their U.S. counterparts, now and heading into the crisis.

CHART 7: HOMEOWNER'S EQUITY AS A % OF REAL ESTATE



Source: Statistics Canada, U.S. Federal Reserve

Bottom line

There is no perfect apples-to-apples comparison of Canada and U.S. household indebtedness. However, after making adjustments to bring these measures more into line, we still find that Canada's household debt ratio remains elevated and higher than that currently prevailing in the U.S. At the same time, however, Canadians appear to be far less indebted that U.S. households were before they got into trouble in 2008-09. Similarly, other metrics of household financial positions – such as debt serve ratios and homeowner's equity – put Canadian households in a better light, especially compared to U.S. households prior to the recession.