



Economics

Assessing Vulnerabilities in the Canadian Housing Market

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In economics often underlying details are more important than headlines. That is certainly the case when trying to understand the impact that higher interest rates will have on the Canadian housing market. In order to better analyze this issue we have developed a home ownership affordability index that doesn't just measure the cost of carrying a home on an aggregate basis, but digs deeper into differences based on demographics and mortgage type. The resulting findings are not only surprising, but do a better job of assessing which segments of the Canadian mortgage market are more vulnerable to tighter monetary policy.

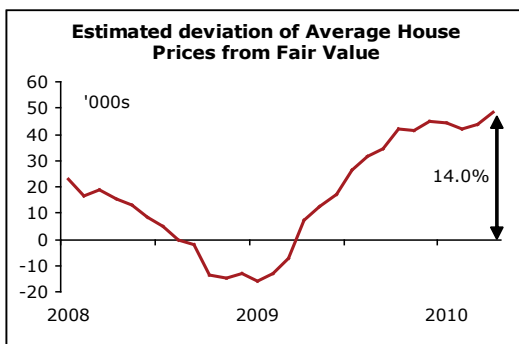
Affordability—Prices, Rates, Income

To assess the affordability of housing in Canada we need to look at a number of key factors such as the price of homes, interest rates and income. When it comes to prices, by almost any measure, Canadian home prices are overshooting their fair value. The average price of a house has risen by almost 23% since reaching its

recent cyclical low in January 2009, and it is now almost 7% above the level seen before the recession. This pace of appreciation has been quicker than justified by housing market fundamentals such as income, rent or demographic changes. Using a recent IMF housing market model and updating it to take into account the most recently available data (April 2010) we estimate that, on average, Canadian home prices are now around 14% over their "fair" value (Chart 1). What's more, this double digit overvaluation is not only limited to western Canada, where strong commodity prices in the lead-up to the last recession had fueled a real estate boom, but also to all regions (Chart 2).

At least 1.5 million houses in Canada are now overvalued, and this represents just over 17% of all dwellings (Chart 3, left). Of those homes, about 760K are overvalued by more than 5%. However, their geographic distribution is far from uniform, with many more houses in western Canada overvalued relative to market size than in other parts of Canada. In fact, more than one out of five houses in both British Columbia and Alberta

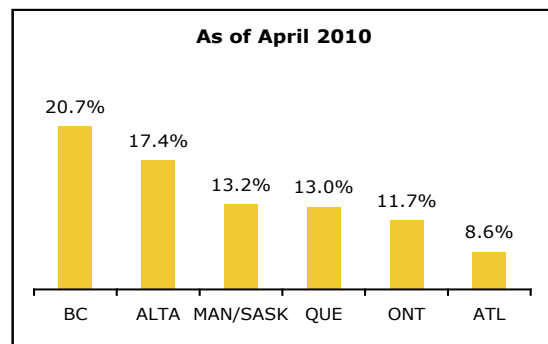
Chart 1
House Prices Overshooting



Source: IMF, CREA, CIBC Calculations

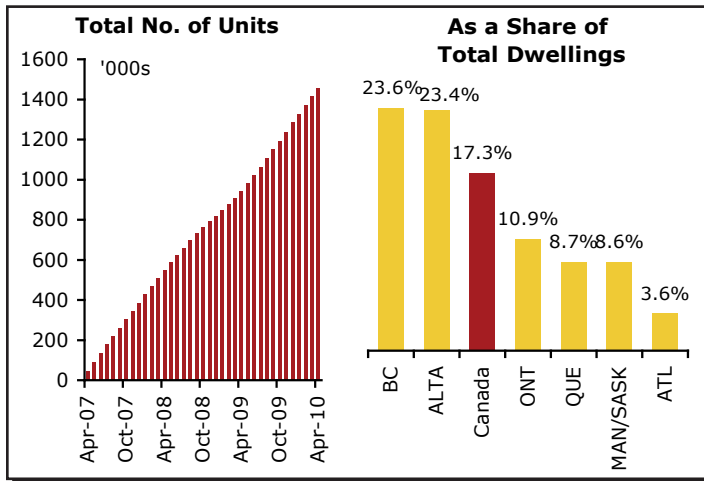
<http://research.cibcwm.com/res/Eco/EcoResearch.html>

Chart 2
House Prices Overshooting by Province



Source: CREA, CIBC Calculations

Chart 3
Cumulative No. of Houses That Have Overshot



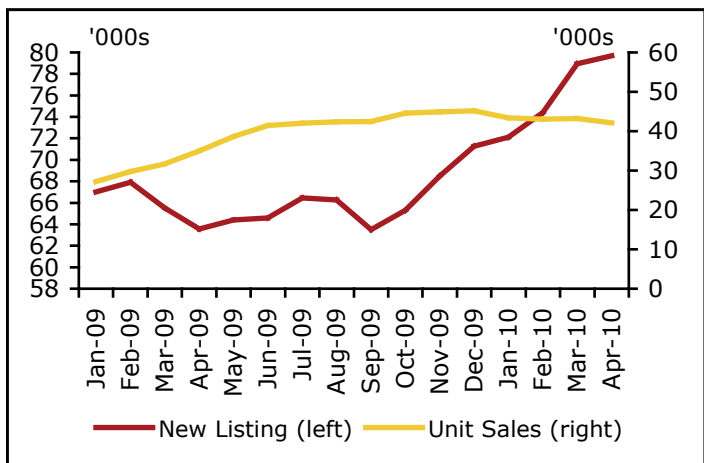
Source: CREA, Statistics Canada, CIBC Calculations

are above their fair value, while the ratio in the rest of the country is much lower (Chart 3, right).

The Market is Adjusting

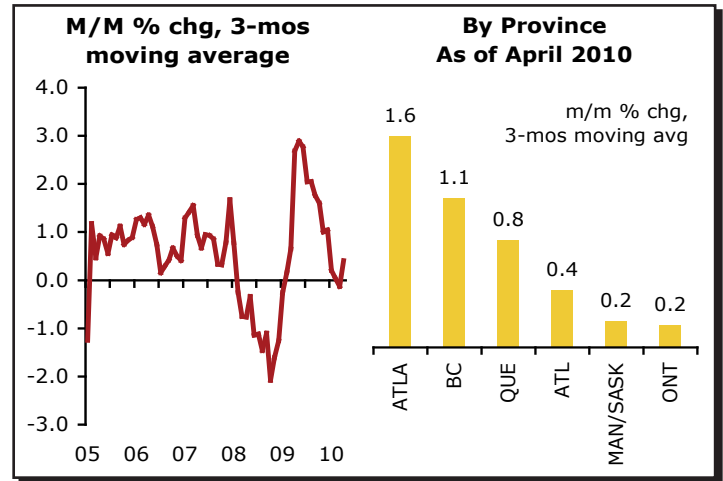
Despite these troubling valuation statistics, a closer look at recent developments in the housing market shows that stabilizing forces are already at play. Housing supply is actually on the rise with April's new listings climbing by close to 3.4% on a smoothed month-over-month basis. The current pace of monthly increases in new units is the fastest seen since early 1990. At the same time, unit sales are now falling on a month-over-month basis following a very strong increase in mid-2009 (Chart 4). Not surprisingly, home prices are starting to respond,

Chart 4
Housing Supply on the Rise



Source: CREA, CIBC

Chart 5
House Prices Are Softening



Source: CREA, CIBC

with the 3-month moving average growth decelerating rapidly over the past six months (Chart 5).

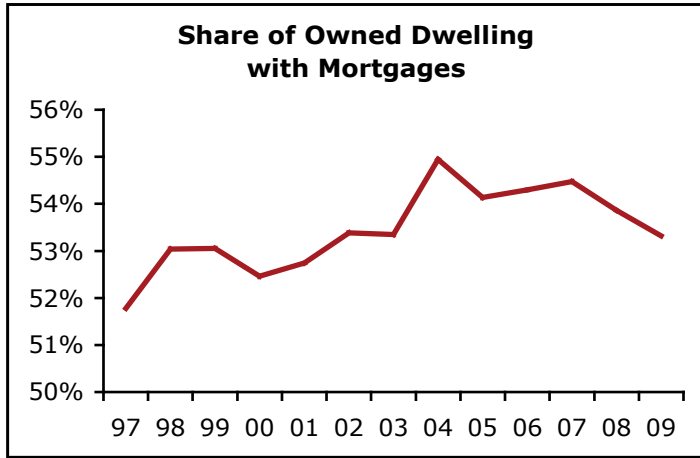
While the booming housing market is starting to come back to earth, the fact that prices are overvalued today does not necessarily mean that they will crash tomorrow. After all, a violent market correction needs a trigger such as the sub-prime crisis which ignited the US real estate meltdown, or abnormally high interest rates as was the case during the 1991 property crash in Canada. Fortunately, that is not on the horizon this time around.

While the Bank of Canada is very clear about its intention to raise rates soon, an array of limiting factors including a strong dollar, the end of fiscal stimulus, a slower pace of economic activity in the US, and a more rate-sensitive household sector suggest that rates will only climb very slowly over the next two years.

Not only will the Bank move cautiously, but unlike the US, only a very small portion of the Canadian mortgage market is vulnerable to higher financing costs in the first place. Note for example that contrary to popular belief and the situation in the US, recent low interest rate environment in Canada did not lead to a surge in the number of mortgage borrowers in Canada. In fact the share of home owners with a mortgage fell from 54.9% in 2004 to the current 53.3% (Chart 6). In part this reflects increased propensity of baby boomers to accelerate their mortgage payments due to abnormally low interest rates. That phenomenon is observable across most of the country, with the only exception being Atlantic Canada (Chart 7).

Chart 6

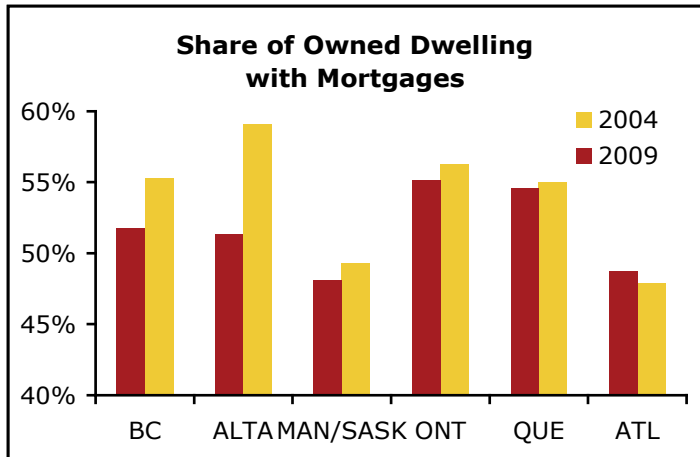
Share of Household with Mortgages Has Fallen in Recent Years



Source: Statistics Canada, CFM, CIBC

Chart 7

Share of Household with Mortgages by Province (2004 vs. 2009)



Source: CFM, Statistics Canada, CIBC

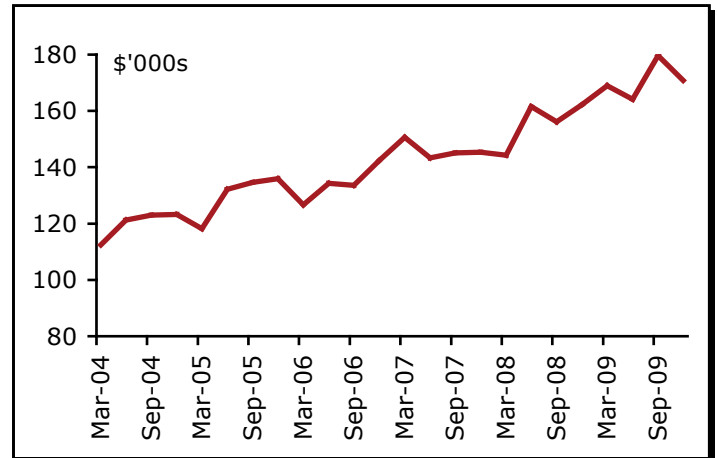
over the past few years was not due to an increase in the number of borrowers, but rather to a dramatic jump in the average size of individual mortgages themselves. In 2004, the average mortgage size in Canada was \$120,000, but now it is close to \$170,000—a 42% increase (Chart 8).

Relating Carrying Costs To Income

The next step is to relate the cost of carrying these mortgages to household income. Using survey information obtained from Ipsos Reid we have developed a home ownership affordability index which estimates the carrying cost of owning a house in Canada as a share of gross income. As opposed to typical affordability measures, our

Chart 8

Size of Average Mortgages on the Rise



Source: CFM, CIBC

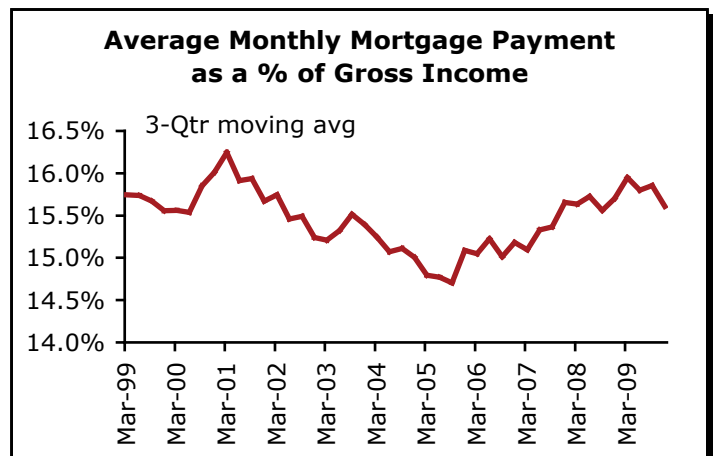
estimate does not assume a synthetic mortgage (such as 25% down-payment in today's prices) but rather looks at actual transactions. Access to real data allows us to take a closer look at affordability by income group, age and even by type of mortgage. This kind of micro analysis is essential for a better understanding of real dynamics in the mortgage market.

The following is a brief discussion of the main findings:

- As of January 2010, only 15.6 % of average gross personal income was consumed by mortgage payments (Chart 9). When we add in hydro bills and property/municipal taxes, the ratio rises to 22% of gross income.

Chart 9

Home Ownership Affordability

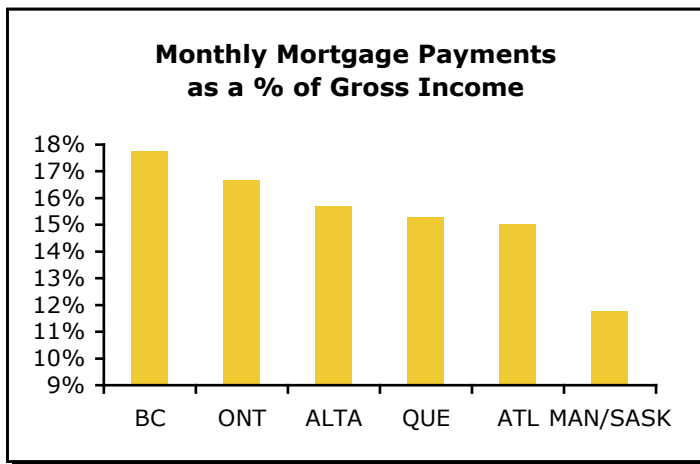


Note: higher number means lower affordability
Source: CREA, CFM, CIBC

- It is hardly a surprise that British Columbia has the worst affordability reading in the nation. But note that the gap between British Columbia and Ontario is not as large as most people think (Chart 10). Despite strong housing markets, Manitoba and Saskatchewan still enjoy the best home ownership affordability in the nation.
- Zooming in on affordability by income group reveals a significant difference between households with

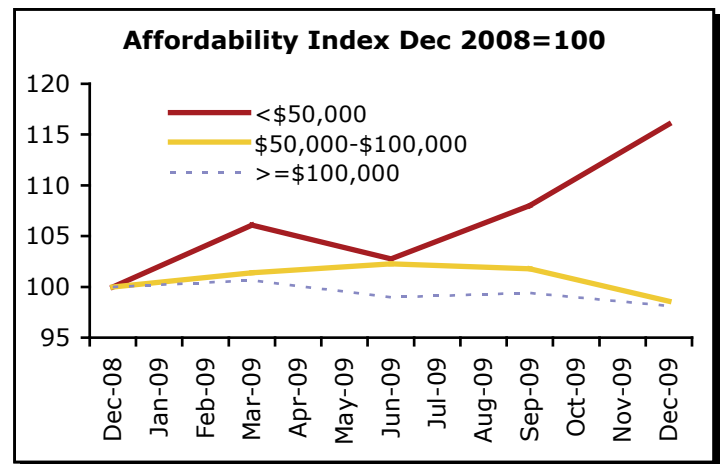
combined annual income of less than \$50,000, where close to 51% of income is consumed by mortgage and fixed housing expenses when compared to households with higher incomes (Chart 11). While this is hardly a surprise, the more revealing finding is that the relative stability in the affordability measure in recent years masks two diverging trends, with affordability among lower income households deteriorating materially while affordability among higher income households improving (Chart 12).

Chart 10
Home Ownership Affordability by Province (Dec 2009)



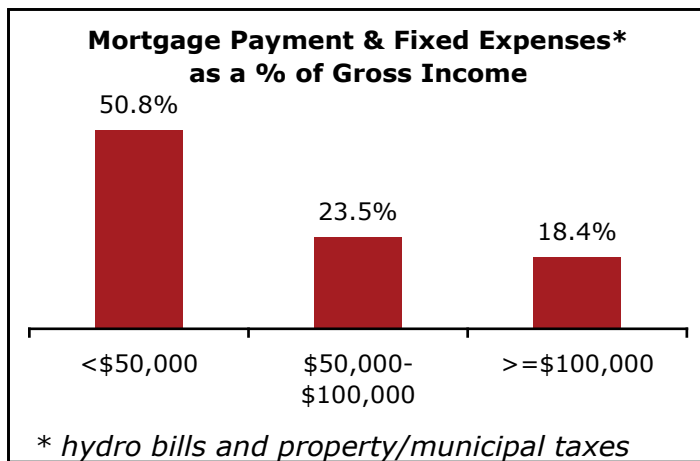
Note: higher number means lower affordability
Source: CFM, CIBC

Chart 12
Relative Stability in Affordability Masks Diverging Trends by Income Group



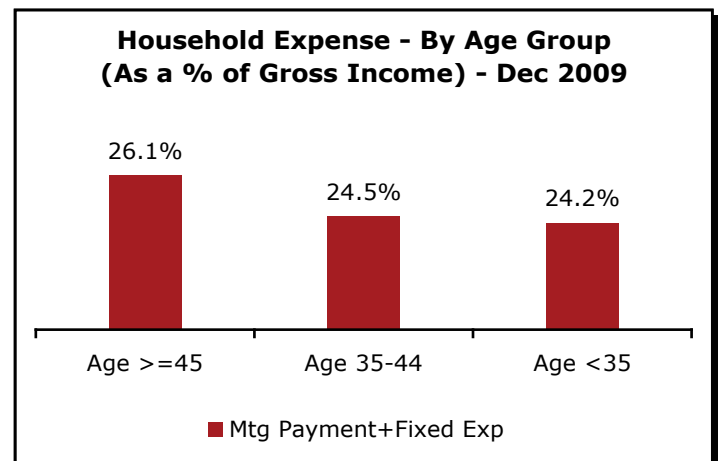
Note: higher number means lower affordability
Source: CFM, CIBC

Chart 11
Home Ownership Affordability by Income Group (Dec 2009)



Note: higher number means lower affordability
Source: CFM, CIBC

Chart 13
Home Ownership Affordability by Age Group (Dec 2009)



Note: higher number means lower affordability
Source: CFM, CIBC

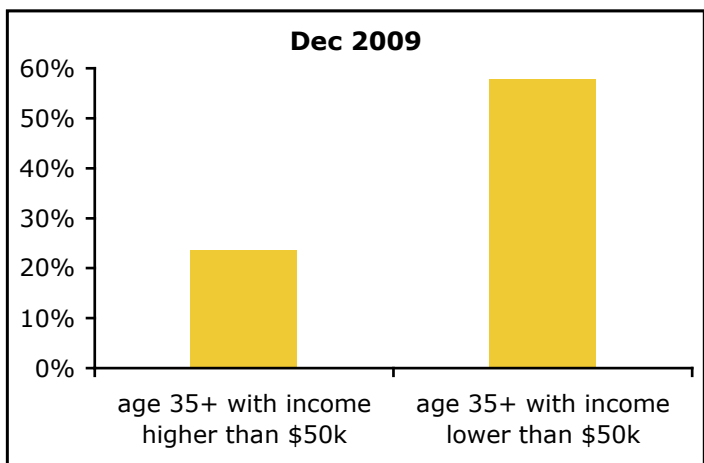
- Given that on average young Canadians make less than older Canadians, one might assume that affordability would improve by age group. But a glance at Chart 13 suggests that this is not the case. In fact, it appears that all age groups have relatively similar affordability readings.
- Combining the information from the previous two observations suggest that the vast majority of home owners in Canada regardless of their age have not experienced any worsening in affordability despite the rapid increase in prices. The only sub-group of households that have seen some deterioration in their affordability position is older Canadians with average income of less than \$50,000. Zooming in on this group we find that on average they spend close to 60% of their gross income on mortgage payments, property taxes and electricity costs. This is three times the average ratio seen among households at the same age groups but with income of over \$50,000 (Chart 14). Note, however, that as opposed to the situation in the US and to a common misconception, the share of this vulnerable group in total mortgage holders in Canada is on the decline—currently accounting for just over 13% of all mortgages in Canada, down from 19% five years ago (Chart 15). Also note that the share of the least vulnerable group (older/higher income) is on a clear upward trajectory. The practical

implication of this finding is that the composition of the mortgage market in Canada has, in fact, improved over the past few years.

- Interestingly, there is no significant difference in affordability between households with fixed rate mortgages and those with variable rate mortgages. While variable mortgage holders enjoy lower interest rates, the average mortgage they carry is 7% larger.

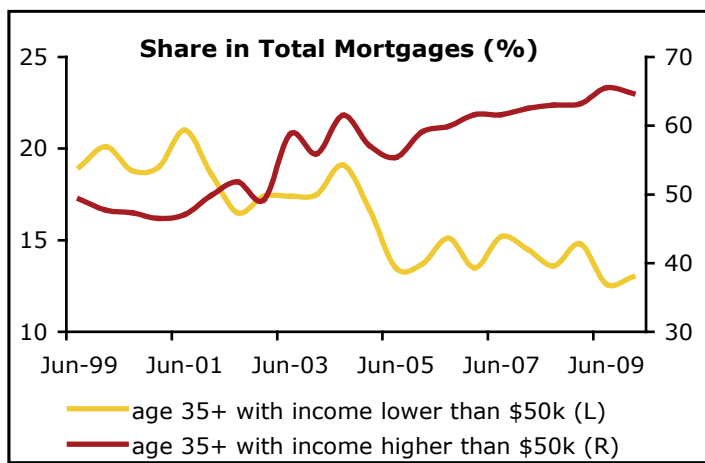
While one cannot ignore the risk of an outright decline in home prices in the coming 12-18 months, nothing in the data supports a market crash. As opposed to the US, the share of mortgage holders in Canada has in fact declined in recent years, while the increase in the average size of mortgage has not coincided with a significant worsening in affordability. While higher interest rates will clearly erode affordability, our detailed look at the distribution of mortgage payments as a share of income does not reveal major pockets of vulnerability. Accordingly, the most likely scenario is that higher interest rates will lead to a modest decline in prices (probably in the magnitude of 5%-10%) in the coming year or two. But given relatively modest rate hikes and the current balanced affordability position, the more significant adjustment will be in housing market fundamentals that are likely to catch up with prices in the coming years—paving the way for a healthier housing market by mid decade.

Chart 14
Costs of Carrying a House as a Share of Gross Income



Source: CFM, CIBC

Chart 15
Composition of Mortgage Market Is Improving



Source: CFM, CIBC

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