



ARE CANADIAN HOUSE PRICES DUE FOR A MAJOR CORRECTION?

- *Canadian house prices have not risen by as much as other countries over the past 10 years. But given underlying fundamentals, Canada's housing market should still be considered modestly overvalued.*
- *Lower levels of subprime activity in Canada do not preclude a negative adjustment in our home prices and a 10% correction from peak to trough may be required for the national average.*
- *Given that all housing markets are local, the required corrections will vary across the country. In Alberta and BC home prices may need to fall by as much as 25-30%, while Ontario's required correction is similar in scope to the national average.*
- *Further, all markets in Canada are facing deteriorating economic conditions that are likely to either accelerate or cause a larger than required cumulative decline in house prices. As always, the extent of price declines will depend on local supply and demand conditions.*

Amidst the meltdown in US house prices, Canadians are growing increasingly concerned about what is in store for our own housing market. Will house prices in Canadian cities eventually see the rapid 20-30% annual price declines currently occurring in Los Angeles, Phoenix and Miami?

Some have suggested that Canada should not necessarily see such a correction because our house prices have not increased by as much as other "bubbly" markets around the world.

To illustrate, consider that Canadian house prices grew only about 80% between 1997 and 2008. This pales in comparison to the 200% increases seen in countries like Britain and Spain who are now in the throes of a major price correction. It is also dwarfed by the 190% cumulative increase seen in US house prices between 1997 and 2006. (Note that falling house prices in the US since 2007 have reduced some of those cumulative gains as of Q1 2008 and will continue to do so going into 2009).

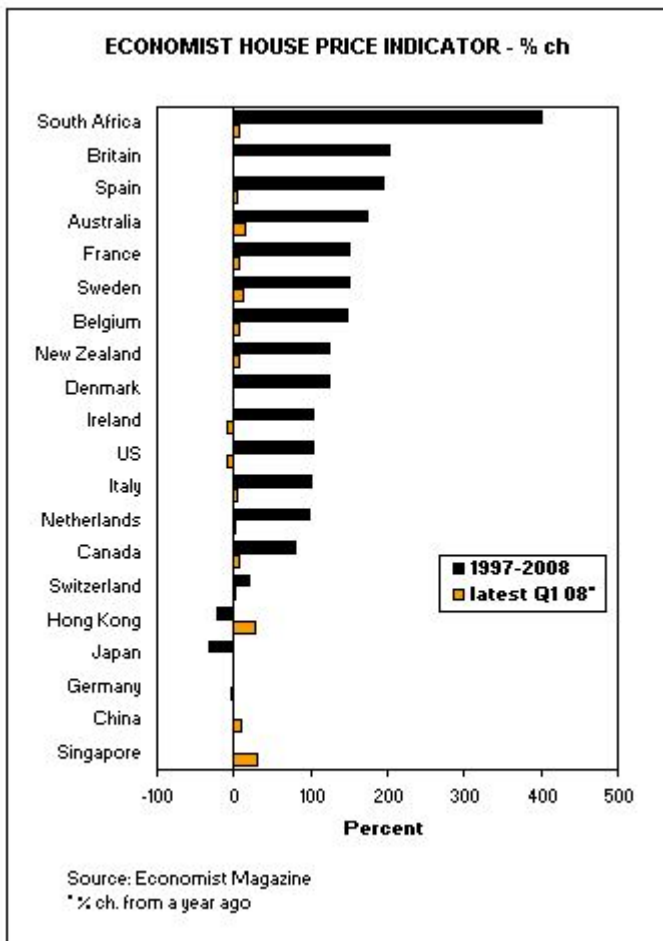
Relative valuation is the most important indicator

A major shortcoming of looking at house price changes in isolation is that it fails to account for the fundamental factors that are responsible for house price changes in the first place. All else equal, countries with strong population and/or income growth should fundamentally see faster growing house prices. As such, a major price correction may be less likely in these countries since at least part of the increase in values can be justified by strong fundamentals. This is the basis of relative valuation.

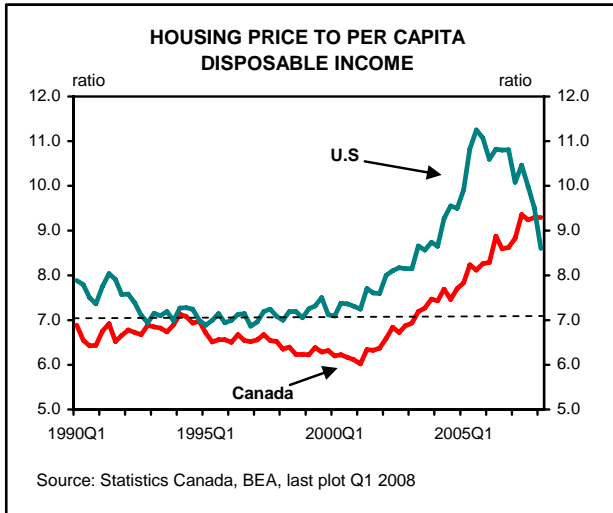
One quick and dirty way to "relatively value" housing is to compare national house prices with per capita disposable income. In effect, this is analogous to a Price Earnings (P/E) ratio used in stock market analysis since disposable income growth serves as a proxy for the underlying growth in the "cash flows" supporting house prices.¹

There are two benefits from using this type of analysis. First, it helps to standardize housing prices across different jurisdictions so that a fair comparison can be made. Second, it helps to address whether house prices appear to be "high" from an historical standpoint.

The chart on the following page shows average house prices in Canada and the U.S. relative to per capita disposable income from 1990 to early 2008. Note that we use disposable income per person in the labour force rather than the broader population. The chart indicates that between 1990 and 2001, house prices in both



Canada and the US remained range-bound at about 7X income. This level could generally be thought of as a useful historical benchmark to gauge a fairly valued housing market.



The chart also reveals that US house prices rose to a level of more than 11X income by 2005 – a record high. From a valuation standpoint, it is fairly obvious that prices had grown significantly larger than what might be justified by underlying fundamentals like income growth alone. To be sure, standard valuation models suggest that as mortgage rates drift downward, expected future returns will be discounted less heavily. As a result, valuations measure like Price/Income ratios can, by definition, trend higher given lower mortgage rates which help to improve housing affordability all else equal.

However, even as mortgage rates remained low, affordability continued to deteriorate in the US mostly because speculation continued to sharply drive up house prices. Speculation was, itself, supported by easy credit (ie., subprime lending and other exotic mortgages), which allowed consumers who could not otherwise afford housing, to get into the market faster. “Cheap financing” also allowed individuals to speculate on housing by keeping holding costs low and easing the “flipping” process.

In Canada, house prices were valued at about 9.5X income as of early 2008. Given that this is higher than long term averages of about 7X income, it would not be unreasonable to conclude that Canada’s housing market may have also experienced some speculation which helped to drive home prices above underlying fundamentals like income growth. In fact, with the US housing market now in correction mode, one could consider housing in Canada as of early 2008, to be more overvalued than the US.

Admittedly, the valuation ratio for Canada did not move up as swiftly as the US. Moreover, the absolute level of Canada’s ratio as of early 2008 is not as big as it was in the US during the peak of their bubble in 2005. One major reason for these differences is that exotic lending (ie., non-traditional mortgages); lax

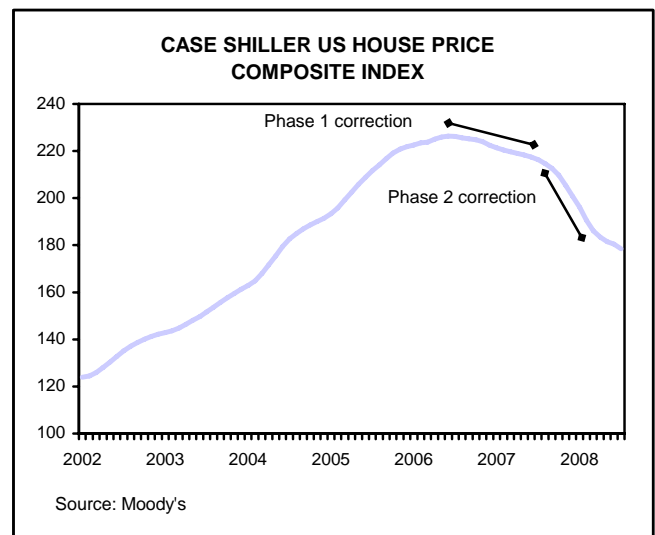
underwriting and easy credit never became as significant a force in Canada as it was in the US. For example, subprimes and other exotic mortgages accounted for nearly a third of all new mortgage originations in the US at the peak of their bubble in 2005. In contrast, non-conforming mortgages in all of Canada reached a peak of just 5% of originations.

Subprime lending did not burst the US bubble

It may be tempting to conclude that since it did not see as many exotic mortgage originations as the US, that Canada’s housing market could escape a price correction. However, this argument puts the “horse before the cart.” Exotic lending may have helped to create the bubble in the US, but it didn’t actually cause prices to initially fall. What did was a realization in early 2006 by some potential US homebuyers that home prices were becoming fundamentally overvalued. As a result, falling demand in relation to relatively high levels of supply triggered a modest drop in house prices, particularly in bubbly cities such as San Diego and Miami. As the chart below shows, this could be considered the less severe, Phase 1 stage of the US price correction.

Remember that had house prices actually continued to rise, many subprime mortgages could have been reset at higher rates without much damage. After all, the whole subprime mortgage industry was predicated on rising home prices. Unfortunately, modestly lower prices along with higher reset rates resulted in a substantial wave of foreclosures which only added to already bloated housing inventories. This reinforced downward pressure on house prices (the more severe Phase 2 of the correction) where the annual rate of price declines intensified to as much as 30% in some US cities by 2008.

In a rather perverse and painful way, the rash of foreclosures now occurring in the US has helped to speed up the realignment of house prices back to fundamental values. With cumulative price declines of about 20% already registered, US house price may need to fall by *only* another 10% before they are back to fair values.



The lesson for Canada is that when prices become overvalued, they ultimately correct. According to our analysis, and assuming income growth slows down to just slightly ahead of inflation, average home prices in Canada may need to fall by about 10% from peak to trough. On the surface, this may not look like much and it falls in line with the consensus view among economists that Canada shouldn't see as big an overall correction as the US.

All housing markets are local

One problem with slapping a single number onto a potential correction in Canada is that national housing markets are made up of smaller local markets with different degrees of activity. It would therefore be erroneous to simply assume that all regional markets in Canada will follow the profile of the national correction. This is particularly true for Canada because national house price data tends to be heavily dominated by the large province of Ontario (and more specifically the Greater Toronto region).²

When the national data on home prices and income are disaggregated, a very different regional picture emerges. As the chart below indicates, the ratio between home prices and per capita disposable income in Ontario was about 9X in early 2008, higher than its long term average of about 7X. This is fairly similar (if not slightly lower), than the valuation multiple for the national average profile we noted earlier. As such, the economists' consensus view for the national picture could be reasonably applied to Ontario.

It is extremely important to note that a potential fall in per capita disposable income would by definition necessitate a larger decline in prices than noted above. Indeed, the recent deterioration of macro economic conditions and the potential for deflation to affect all asset prices in the current environment could potentially result in Ontario home prices falling by even more than the expected 10%.

In Alberta and BC, housing markets have seen substantially higher valuations relative to their respective histories. This suggests that a larger degree of speculation may have developed compared to Ontario or Quebec. For example, house prices in BC, which historically averaged around 9X income, shot up to just over 14X in the last few years. In Alberta, historical valuations have consistently averaged around 4X income for the past 22 years, but have only recently increased to more than 8X income.³

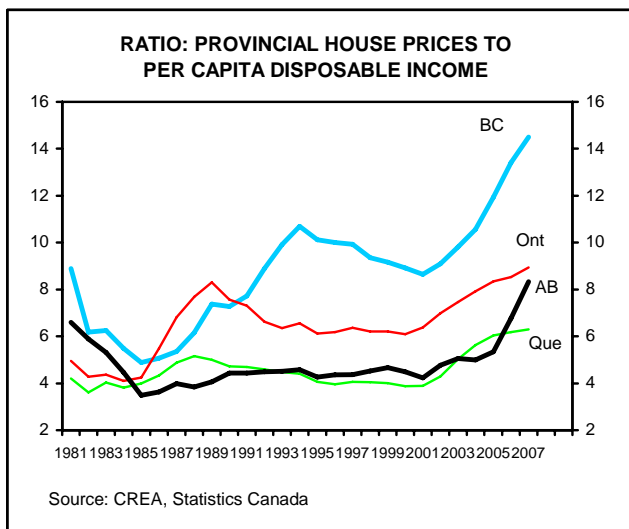
In order to restore valuations back to trend levels, average home prices in BC would need to fall by about 25-30% (roughly back to 2004 levels) to be fairly priced. Theoretically BC would need to see a cumulative 38% rise in per capita disposable income to put house prices back to historic valuation levels. This is clearly a tall order considering that it previously took about 10 years for income in that province to grow by this amount. Moreover, with macroeconomic conditions now also weakening, these required adjustments might occur at a far faster rate than other overvalued markets have seen. More on this will be discussed in the next section.

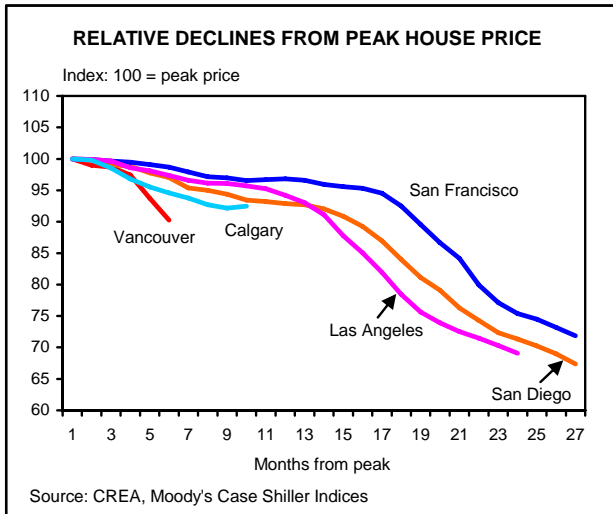
All else equal, we estimate that house prices in Alberta would also need to fall about by about 30% in order to bring them back to historic valuation levels. However, should one believe that historic valuation levels in Alberta previously reflected an undervalued housing market – a plausible argument given the province's recent prosperity in the energy patch – then the required correction may not need to be as large as in BC.

Supply and Demand

It must be emphasized that the lack (or smaller share) of subprime activity in Canada does not preclude a significant or sustained fall in house prices. What ultimately governs local price dynamics are the immutable laws of supply and demand. As such, the pace of any potential price decline almost always depends on what margin local housing supply outpaces local demand at any given period of time.

In a number of US cities, price declines have accelerated in the last year due to two major factors. First, a rapid escalation of foreclosed homes has been added to existing supply at a time when demand is already weak. Second, in a number of states like California that have non-recourse mortgage markets (meaning that in the case of default, the lender is stuck with the house and has no further claim) homeowners (who owe more on their mortgages than their houses are worth) have simply opted to default and walk away from their homes. These forces continue to intensify the US housing supply glut. Unfortunately, this also suggest that the expected floor for house prices could be pushed well below fundamental values.





In most Canadian provinces, the foreclosure rate has remained low and homeowners do not have an incentive to walk away from their homes since lenders in most provinces have recourse.

But even without a rash of foreclosures or defaults, a surge in new home supply has still managed to make its way onto Canadian housing markets. For example, in Vancouver, the inventory of unsold homes recently hit an all time high. What likely triggered this surge was a wave of panic among potential sellers who may have wanted to realize gains at "the top of the market". Interestingly, this supply surge may have also been tacit acknowledgement that the Vancouver market had simply become too overvalued.

At the same time, sales in Vancouver have fallen by more than 50% from the year before. This is likely the result of a significant downturn in consumer confidence in the face of a weakening macroeconomic environment together with a pricing level that is simply unaffordable for the average would-be purchaser. Together with the supply run-up, this has resulted in average home prices that are now already 6% lower than the end of last year and 10% off the peak in Vancouver's house prices over this cycle. As the chart above suggests, this rate of decline has been even more rapid than the initial corrections seen in some previously bubbly US cities like San Diego.

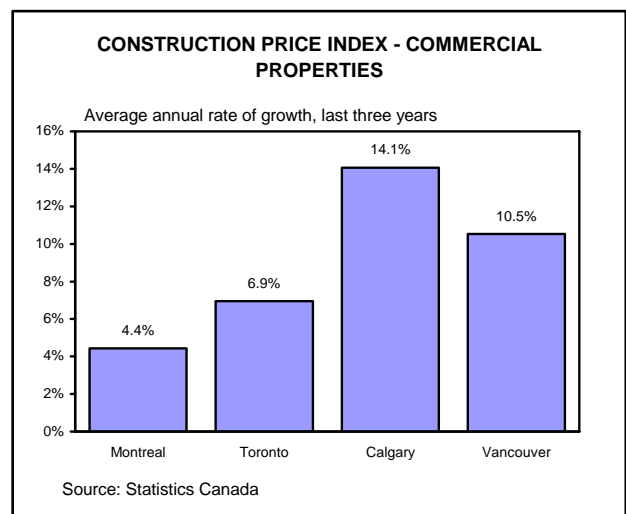
How Vancouver's correction continues to play out in the months ahead will, as always, depend on the dynamics between local supply and demand conditions. Assuming that job losses do not intensify or exogenous factors (like a sharp increase in interest rates) do not occur, which could ultimately drive up housing supply even further relative to demand then the annual rate of price declines may not continue to be as severe as some US cities like Los Angeles are currently experiencing.

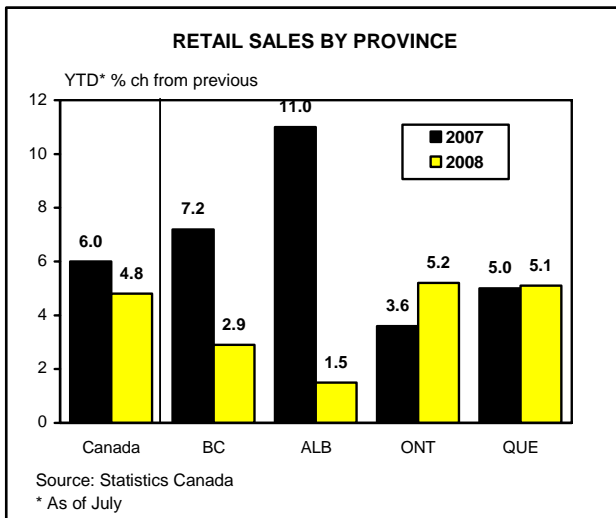
Implications for commercial real estate

As recent experiences south of the border have shown us, falling house prices have both direct and indirect implications for commercial real estate. In terms of direct consequences, the most important channel comes from the impact on input costs for new construction. Residential construction effectively competes with commercial real estate for precious resources such as materials and labour. Indeed, construction costs, particularly land and labour, have soared over the last few years, principally in Western Canada where, as we have noted earlier, housing activity has been especially exuberant.

As house prices fall and new residential construction settles down in response, demand for land and labour should also ease and this would eventually lower these input costs for non-residential construction too. The main consequence of this is that the implied pricing of recently developed non-residential structures could ultimately begin to exceed effective (or what some might term "sustainable") replacement costs. A price correction for newer non-residential developments should then be warranted.

A more indirect impact of falling house prices on commercial real estate comes via its impact on consumer spending. Strong housing activity is usually accompanied by a marked increase in retail spending, particularly on discretionary goods like furniture and other home-related purchases. After all, when consumers buy new homes, they usually have to "fill it up" and/or do a number of renovations to it. In turn, this usually helps to drive up the performance of retail properties.





As housing markets reverse course and fall in value, so too does discretionary consumer spending and the adjustment usually happens swiftly. Thus, it's not surprising to see that retail sales have already come off significantly in Western Canada where house prices have begun to fall the most. As the current situation in the US has shown us, a sustained decline in house prices could indefinitely hobble consumer spending via the reverse wealth effect. Just as rising house prices makes homeowners feel wealthier, falling house prices would make them feel poorer and this would largely prevent homeowners from spending on anything more than basic necessities.

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¹ A more appropriate proxy for the underlying earnings of a home is the rental income generated by the property. Unfortunately, most homes are owner-occupied and therefore consistent data for imputed rents are often difficult to obtain. .

² Interestingly in the early 1990s the bursting of Toronto's housing bubble dominated the national statistics and implied the bursting of a national housing bubble even though a number of regions across the country did not experience one.

³ Historical valuations in each province have differing average levels because of relative differences in specific supply factors in each province. For example, BC (and more specifically Vancouver and Victoria) have various land constraints that have resulted in a historically higher premium on single detached house prices than in other provinces like Alberta with considerably more developable land.