



# Consumer Watch Canada

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## Mortgage Risk — Canada vs. US

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The US housing market is in recession. The news from the US mortgage market is getting worse by the day, and it is starting to affect the economic mood well beyond the housing market. The key message here is that things can, and do change dramatically almost overnight, with gloom quickly taking over exuberance.

Is the Canadian mortgage market at risk? So far, there are no indications that the Canadian market is facing any major difficulties. But given the speed at which prospects have changed south of the border, it is important to look beyond the headline numbers in search for any clouds in the horizon — using the recent US experience as a benchmark and a guide.

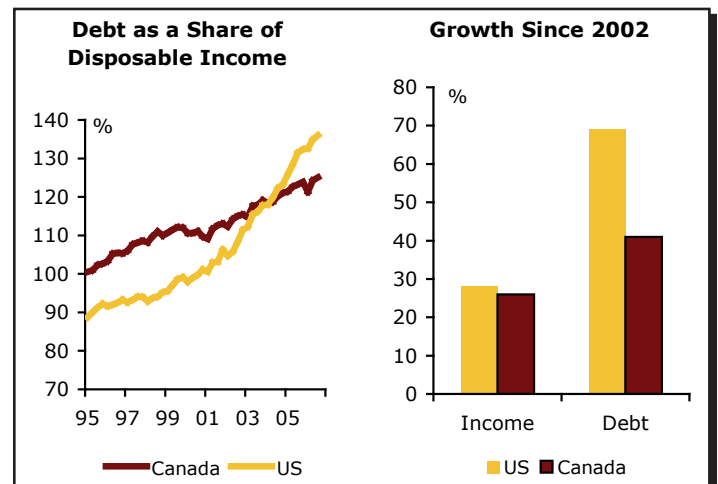
Accordingly, the following discussion examines some key credit and mortgage market indicators — zooming in on the relative performance of Canada vs. the US. While aggregate numbers such as the ratio of debt to income in both economies are necessary for such an analysis, they are clearly insufficient. Those indicators must be supplemented by a closer micro look at the distribution and the characteristics of the different sub-segments of the mortgage market.

**Debt to income ratio** — This commonly used indicator measures the level of total household debt in the economy as a share of disposable income. The absolute level of this measure is almost meaningless since it compares the stock of debt to the flow of income. But the rate of the increase of this ratio provides us with some information about the relative speed at which debt rises vs. income. As illustrated in Chart 1, the increase in the Canadian ratio over the past twenty years has been relatively

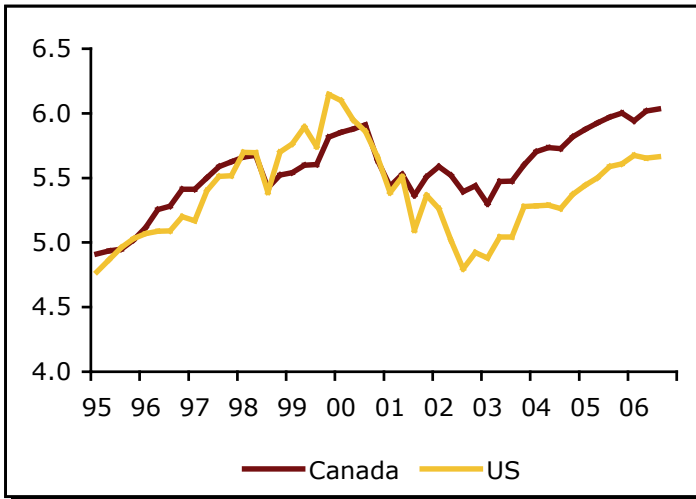
linear, while the American ratio was more volatile. More specifically, the debt to income ratio in the US has accelerated notably since 2002 to surpass the Canadian ratio in 2004. The gap between the two ratios reflects similar income growth between the two countries since 2002, but a significantly faster pace of debt accumulation in the US. Total American household debt rose by just under 70% over the past four years, notably faster than the 40% increase seen in Canada.

**Net Wealth as a Share of Disposable Income** — An important ratio, probably a better indicator than the debt to income ratio, since it looks at the difference between assets and liabilities as opposed to focusing only on debt. Note that the American ratio is lower than the Canadian ratio — despite a faster pace of growth in asset valuations. The reason for the American under-performance is,

Chart 1  
Debt To Income Ratio



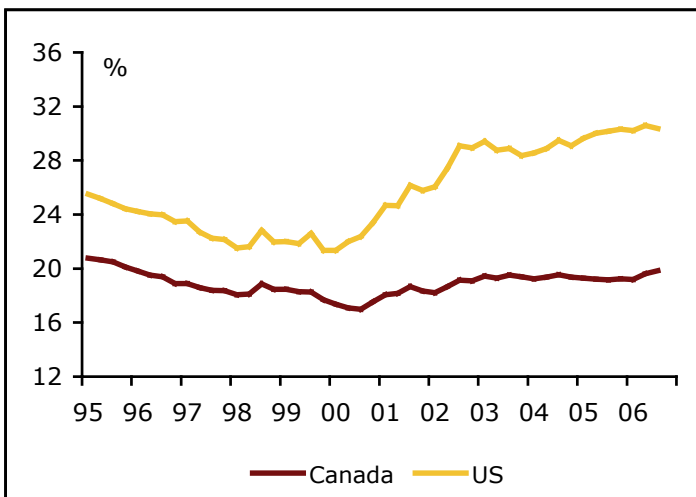
**Chart 2**  
**Net Worth To Income Ratio**



once again, a much faster pace of debt accumulation. Also note that the net worth ratio in Canada has now surpassed the level seen during the 2000 boom, while in the US this ratio is still below that level (Chart 2).

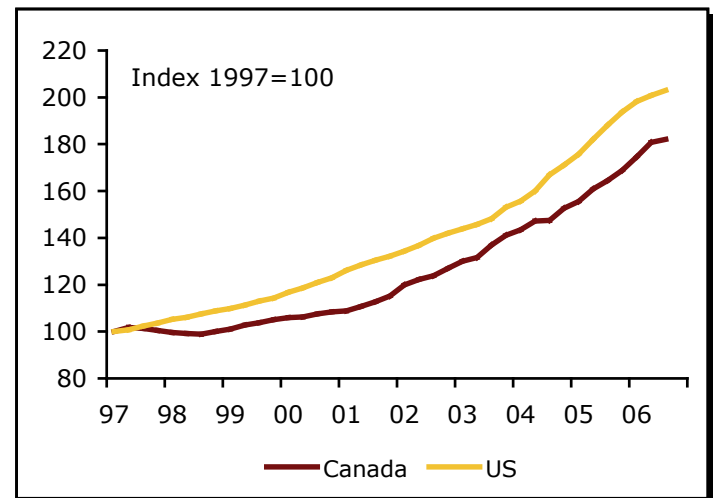
**Share of Real Estate in Total Household Assets** — As illustrated in Chart 3, the share of real estate holdings in total Canadian household assets is notably lower than in the US — not a big surprise given the tax-deductibility factor south of the border. The key message here is that in 2001, Canada was able to avoid a recession partly due to the fact that relative to the US, it was less exposed to the Information Technology sector. Today, the situation is similar — simply replace IT with Real Estate, which is clearly the catalyst of the current slowing in the US. The lower exposure of Canadian households to real estate is a benefit in such an environment.

**Chart 3**  
**Share of Real Estate in Household Assets**



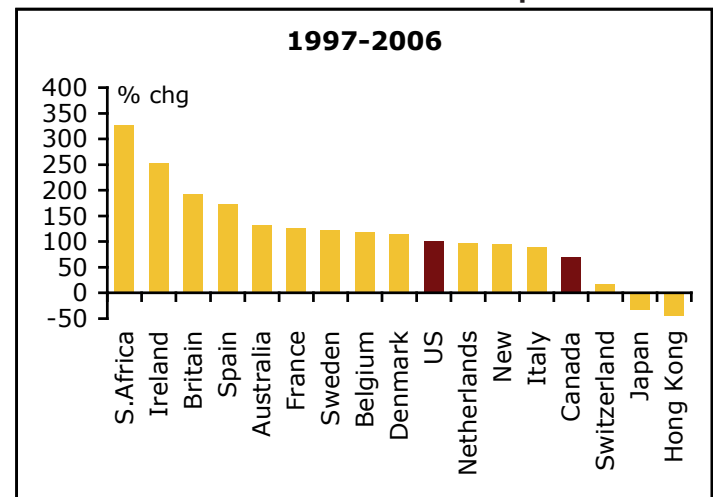
**House Prices** — Clearly, this is the focus of attention among many observers. It is well known that over the past decade, US house values have risen faster than in Canada. But in the past two years, Canada has been closing the gap, reflecting some slowing in US prices and impressive resiliency in the Canadian housing market, led by Western Canada (Chart 4). Note, however, that the speed of house price appreciation is not necessarily an indicator of troubles ahead. An international perspective shows that the rise in US real estate values paled by comparison to many other countries such as South Africa, the UK and Australia (Chart 5). While those countries experienced a notable slowing in the pace of price appreciation, none of them so far has faced the same difficulties as we are now currently witnessing in the US. (Note, however, that conditions in France and Spain are probably consistent with a housing market bubble.)

**Chart 4**  
**House Prices**



Sources: CREA, OFHEO

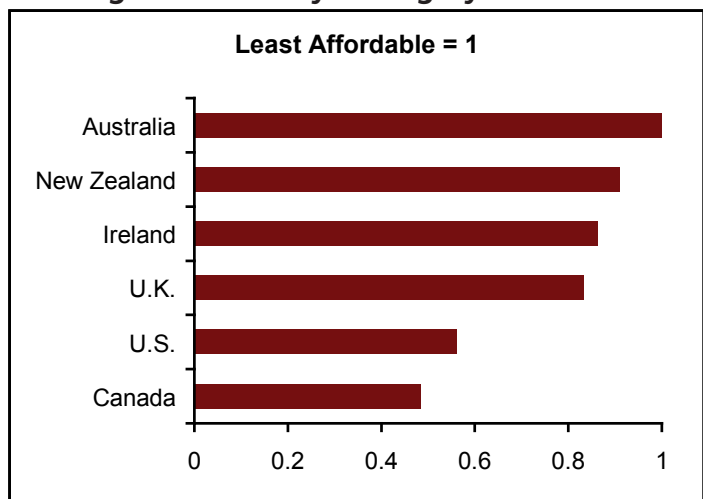
**Chart 5**  
**House Prices — International Perspective**



Source: The Economist

**Affordability** — Always an interesting statistics as it measures the cost of carrying a house as a share of income. In Canada, the share is roughly 40% while in the US it is close to 45%. Note, however, that since 2002 the deterioration in the affordability index in the two countries was more or less equivalent. While this statistics is widely used in both counties, it is not a good indicator of troubles ahead. Again, an international comparison reveals that the US market, in aggregate, is much more affordable than many other countries that so far have not faced similar difficulties (Chart.6).

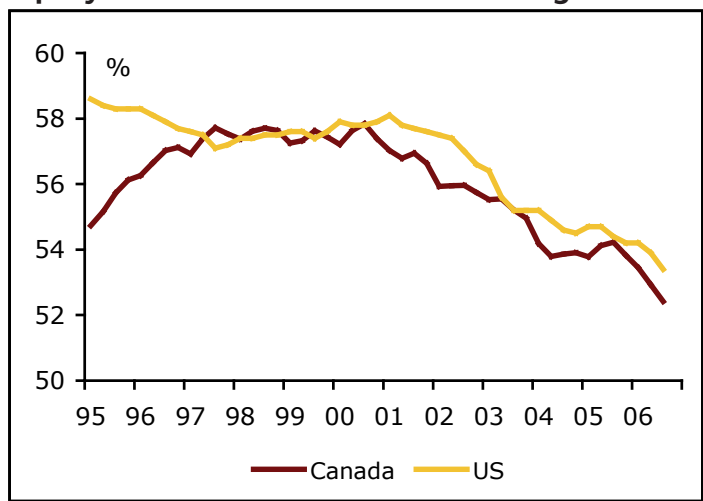
**Chart 6**  
**Housing Affordability Rating by Nation**



Source: CIBCWM based on Demographia 2007

**Household Equity Position in Real Estate** — That is, how much of total real estate assets held by Canadians is equity and how much is debt. Interestingly, Chart 7 reveals that the situation in the US and Canada is roughly the same. In both countries the equity position fell by 4-5

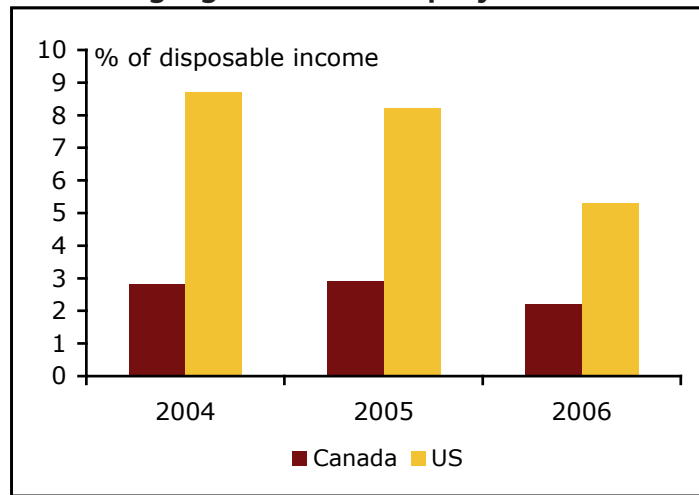
**Chart 7**  
**Equity Position in Real Estate Holdings**



percentage points since 2001 and as of December 2006, Canadian homeowners had, in fact, marginally lower equity position on their houses compared to American households.

**Borrowing Against Home Equity** — An important factor in the US housing saga over the past few years. In both 2004 and 2005, borrowing against home equity mushroomed to a record high of no less than 8% of disposable income. Since then, borrowing has been slowing notably and all indications are that in 2007, the pace of home equity withdrawal will fall back to 1%-2% of disposable income — roughly in line with its long-term average. In Canada, borrowing against home equity also played an important role in overall mortgage market activity, but as illustrated in Chart 8, the relative importance of this factor was roughly half of that seen south of the border.

**Chart 8**  
**Borrowing Against Home Equity**

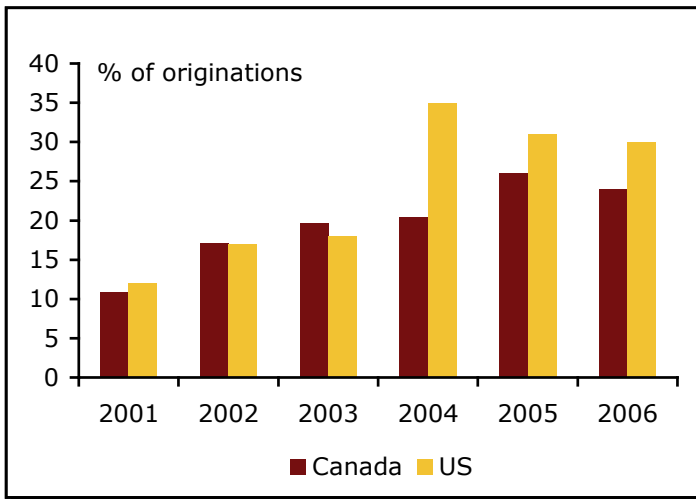


Sources: Federal Reserves, CIBCWM

**Liquidity** — Since 2001, both countries have seen a significant increase in cash and cash equivalent positions held by households. We estimate that in Canada, households still sit on no less than \$45 billion of extra cash while in the US the number is roughly \$570 billion. From a macro perspective this amount of cash can be seen as an insurance for potential difficulties in the credit market in both countries. But a closer look at the numbers suggest that most of this extra cash is being held by individuals age 55+ who carry very little debt. In other words, the people with the money are not the same people with the debt. So neither in the US nor in Canada, the liquidity factor provides an additional insurance against credit market problems.

**Variable / Fixed Split** — From debt service perspective, a high proportion of variable rate mortgages suggests increased vulnerability to higher interest rates. Note that until 2003, the share of variable rate mortgages in Canada was roughly in line with what it was in the US. But since 2004, adjustable rate mortgages in the US rose in popularity and at a much faster pace than in Canada (Chart 9). But before we conclude that it is a negative for the US, we have to investigate the nature of those individuals that took those adjustable rate mortgages. After all, to the extent that those adjustable rate mortgages were taken by low-risk borrowers as a prudent debt management/cash flow practice, then such action is not only reasonable but, in fact, desirable.

**Chart 9**  
**Variable Rate Mortgages**

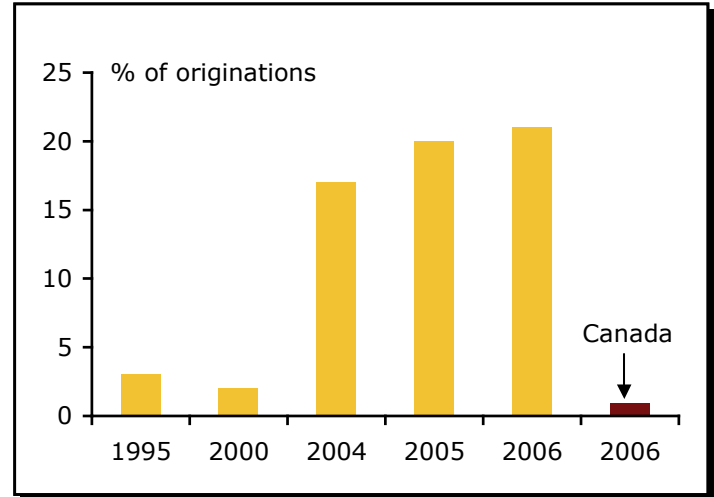


Sources: HHS 2006, MBA, Financial Monitor, CIBCWM

**Interest-Only Mortgages** — Interest-only mortgages in the US are not something new, they have been around for many years. But in recent years, they reached a record high of no less than 20% of mortgage originations. Furthermore in the US, more than one-third of adjustable rate mortgages originated in 2005 were also interest-only — adding another dimension of risk to this portfolio. In Canada, interest-only loans are just in their infancy. As of 2006, interest-only mortgages accounted for less than 1% of the mortgage originations (Chart 10). No doubt this new product will grow fast in Canada, but for now, it is not a risk issue for the Canadian mortgage market.

**Sub-Prime** — Until recently this term was known only among mortgage professionals. Now every casual newspaper reader knows very well what a sub-prime mortgage means. The rising delinquency rate in the US sub-prime market is at the heart of the difficulties facing the American mortgage market, with some negative

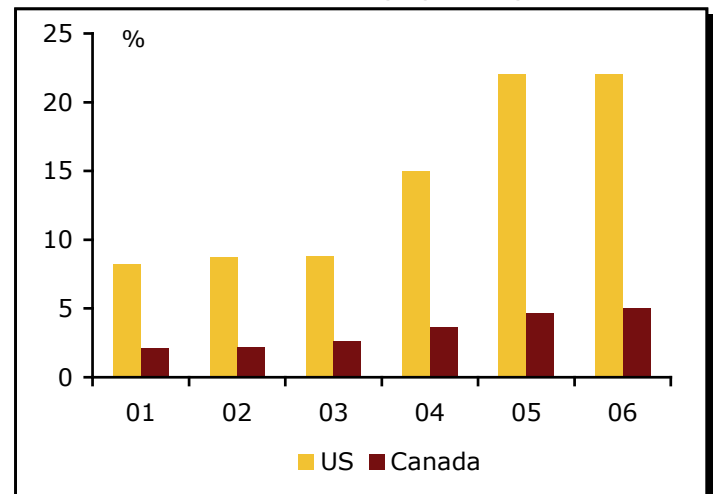
**Chart 10**  
**Interest-Only Mortgages (US)**



implications for the stock market as a whole. At this point, it is far from clear that the sub-prime problem in the US will filter through to prime businesses and the economy as a whole. But the very existence of such a risk is a clear negative for consumer and business sentiment.

How relevant is this issue for Canada? Our recent research on the topic suggests that the sub-prime market in Canada currently accounts for roughly 5% of total mortgage originations — well below the 22% for the US market (Chart 11). With total mortgage outstanding at an estimated 3%, the Canadian market is also significantly smaller than the 13% share seen in the US. Note that the sub-prime market in Canada, however, is rising fast (roughly 25% on a year-over-year basis) but given its relatively small size, the impact on the market as a whole is still marginal at best.

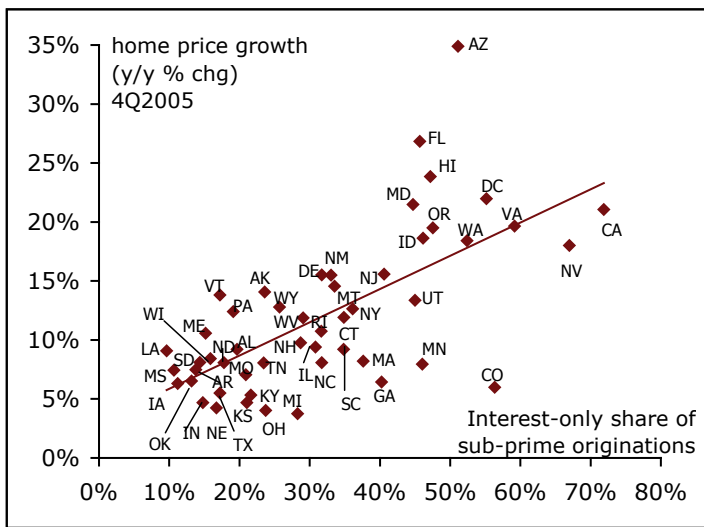
**Chart 11**  
**Sub-Prime Share in Mortgage Originations**



Sources: HHS 2006, MBA, Financial Monitor, CIBCWM

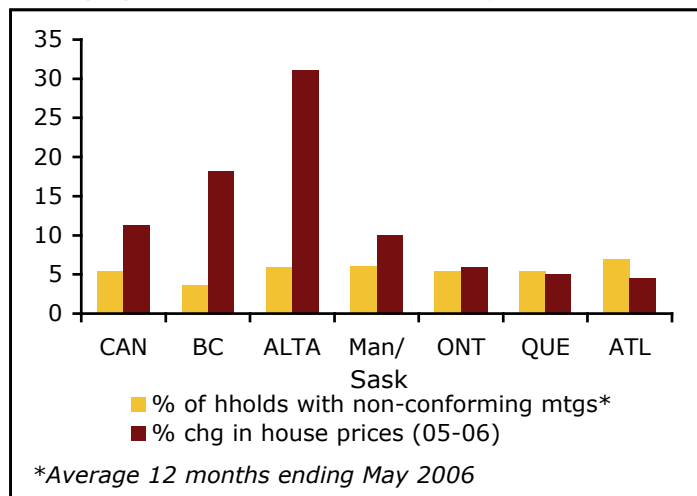
Also note that the characteristics of the sub-prime in Canada are more conservative than the ones seen south of the border. For example, only 22% of sub-prime borrowers in Canada use variable rate mortgages — half the rate seen in the US. As well, as illustrated in Chart 12, there has been a very high correlation between the use of exotic mortgages and the increase in house prices in the US — suggesting that many of those mortgages were largely used for affordability reasons. In Canada so far, there is no evidence pointing to this trend, as sub-prime usage is not highly correlated with house price appreciation (Chart 13).

**Chart 12**  
**US Exotic Mortgages Most Popular Where Prices Rose Fast**



Sources: Loan Performance Corporation, CIBCWM

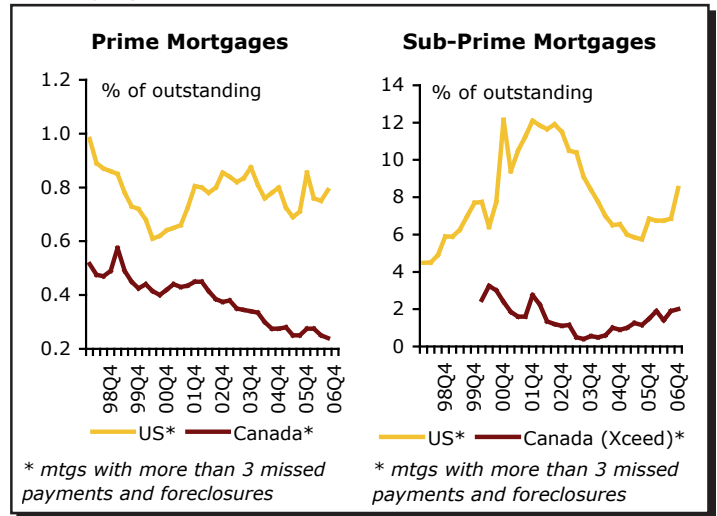
**Chart 13**  
**% of Households with Non-Conforming Mortgages vs. House Prices — By Province**



Sources: Financial Monitor, CREA

**Loan Defaults** — The current focus is on the rapidly rising default rate in the sub-prime category in the US. So far, we have not seen a significant increase in default rates in US prime mortgages but even at their current low level, they are well above the rates seen in Canada for prime mortgages — which are currently at a record low (Chart 14, left). As for the sub-prime default Canada/US comparison, there is no national data available for Canada, but using information obtained from Xceed, one of Canada's largest sub-prime providers, and to the extent that those figures represent the sub-prime industry as a whole, one can learn that so far the Canadian sub-prime market is not experiencing any significant surge in mortgage defaults (Chart 14, right).

**Chart 14**  
**Mortgage Defaults**



Sources: MBA, XCEED, CIBCWM

**Bottom Line**

Based on the discussion above (as summarized in Table 1), it appears that the Canadian mortgage market is in a much better shape than the US. Our view is that the price appreciation in the US housing market over the past two years was, in many ways, artificial — boosted by aggressive lending and irresponsible borrowing. The Canadian market by comparison has been much more boring during the housing market boom of the past ten years. Granted, some of those exotic mortgages are now being offered in Canada, but their share in the market is too small to have any material impact. And while we expect housing market activity in Canada to level off in the coming year or two, all the indicators suggest that it will be a relatively soft landing, with limited damage to the quality of the mortgage business as a whole.

**Table 1**  
**Mortgage Risk Table**

<u>Risk Indicator</u>	Canada More at Risk	US More at Risk	Same Degree of Risk
Debt to income ratio		x	
Net wealth as a share of disposable income		x	
Share of real estate in total household assets		x	
House prices		x	
Affordability			x
Household equity position in real estate			x
Borrowing against home equity		x	
Liquidity			x
Variable / Fixed split		x	
Interest-Only mortgages		x	
Sub-prime		x	
Default Rates		x	

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