

## CAPITAL MARKETS RESEARCH

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# Special Update



## Did Canadians Learn Much From the Global Crisis?

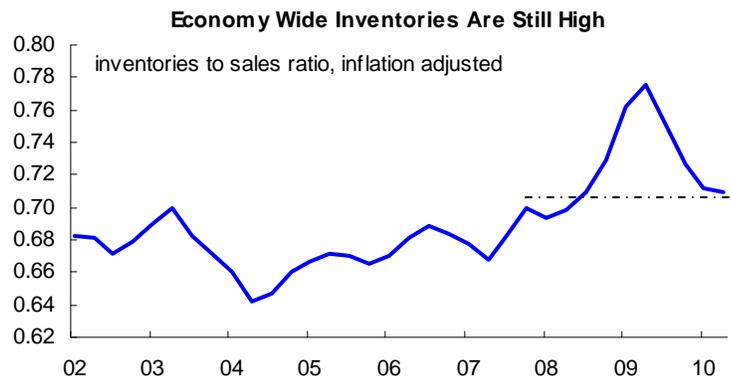
Canada deleveraged on public and corporate balance sheets in the 1990s before just about anyone else did, such that serendipity played a role in the country being able to outperform others over the past decade. But did that earlier painful experience, combined with the lessons of the current ongoing global crisis, impart greater wisdom onto Canadian businesses and households to stand them in good stead under current circumstances? Or did it facilitate a certain insouciance that resulted in the creation of current imbalances that could expose the country to risks going forward? We think the latter complacency angle has merit such that the net effect on the Bank of Canada should be mild further policy tightening but at a cautious pace that balances too-low-for-too-long against disrupting current imbalances in the Canadian economy.

### 1. Inventory Susceptibilities

The first issue speaks to how business inventories are being managed. The recession hit Canada not just through imported forces, but also because businesses were ill prepared with high inventories. That left Canada negatively exposed to the events that followed because the hit to sales emanating from the shocks to US supply chains required even greater cuts to production and employment than would have been necessary had inventories been kept leaner before the crisis. Inventories then really blew out. The inventory to sales ratio has since fallen from the peak (chart 1), but remains as high in fresh figures for 2010Q2 as it was going into the crisis.

Any perception that inventories are lean and the shelves are bare is simply false. The process of adjusting inventories lower relative to sales has halted through rapid production and job gains that may have been premature, thus leaving Canadian businesses with the same relatively high inventory positions they had in the summer of 2008. The results, of course, vary by sector as we explore in the first chart appendix, with lean inventories at wholesalers and auto dealers (though trended back up), but still fat inventories at manufacturers and retailers ex-auto dealers. A key added implication is that if inventories are not lean, then Canada is unlikely to get a sustained lift from inventory contributions to GDP growth as it did in Q2 when inventory investment added about 1.6 percentage points to annualized GDP growth in isolation of other influences.

Chart 1



Source: Statistics Canada, Scotia Capital Economics

### 2. Record High House Prices

Second, to say that Canadian house prices have become dear is an understatement. Resale (chart 2), new, and repeat sales measures are at all time highs in Canada in dollar terms, or adjusted for inflation, or compared to rental options, or compared to incomes. See Appendix 'B' for other measures. Resale prices always tended to move in lock step with the US, but have fundamentally parted company since mortgage innovation and low rates arrived. Converting to a common currency via the spot rate of exchange would not yield much difference, while converting using purchasing power parity rates of exchange would come nowhere close to bringing Canada back

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into line with the US. Over the past decade, Canadian house prices have doubled in a nationwide surge, or roughly on par with the US gains over 2000-2006. Much of this has been fed by a move toward a record high home ownership rate that likely stands at about 70% and that has come at the expense of future demand via the operative forces of very low fixed and variable rates, and mortgage innovation that began to be a significant influence in Canada after 2007. This would suggest that softer housing markets indeed lie ahead over the medium term scenario. The US homeownership rate had peaked at about 69%. Further, it is a myth that price increases were concentrated in a few select markets even if that is truer in very recent times, since prices were up at the provincial level over the full decade by between about 65% in PEI at the low end, to over 150% in Manitoba and Saskatchewan at the upper end. Ontario was up over 80%, and Quebec climbed by about 120%, just slightly behind BC.

We continue to believe that Canadian house prices face further correction risk as per what we warned about in our November 2009 paper “Is There a Canadian Housing Bubble?” that argued the greatest risks would be exposed after the Spring 2010 housing market.

**3. Stretched Household Finances**

Lastly, Canadian household finances are more stretched than ever before, and that should caution against reading too much into experiences drawn from past cycles. Within six months, Canadians will be more heavily indebted than Americans as US households deleverage while Canadians keep on leveraging higher toward debt equaling 150% of after-tax incomes (chart 3). This is arrived at through properly consolidating household and unincorporated business debts in both countries in order to make the figures comparable and to acknowledge that there is no limited liability on the debts of unincorporated businesses.

Mortgage principal payments as a share of incomes are about double now what they were in the early 1990s (chart 4). Canadians are currently putting 12% of after-tax incomes toward mortgage principal. This has floated around a record high in recent years, and does not include principal payments on other lending products nor interest payment components to mortgages and all other consumer lending products. The figure may have flattened in recent years because of the arrival of long amortization mortgages beyond the standard 25-year cookie cutter products of the past. Such products began to arrive in 2007 and allow principal to be spread out over a longer period of time, thus flattening this ratio but stretching the payment period. Note that the chart also shows the split between principal payments on insured mortgages with less than

Chart 2

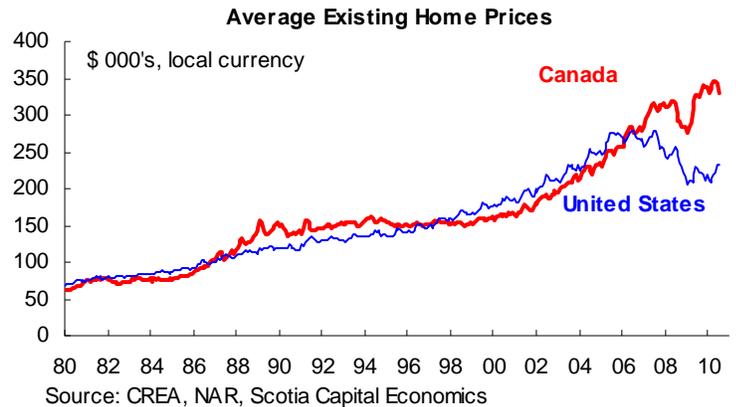


Chart 3

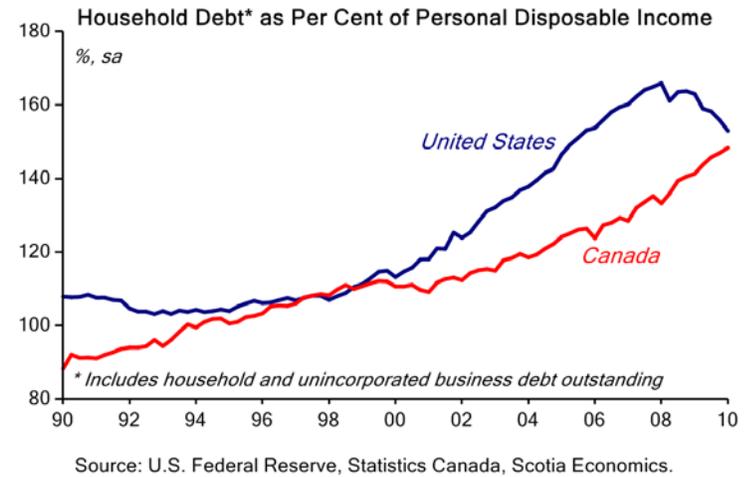
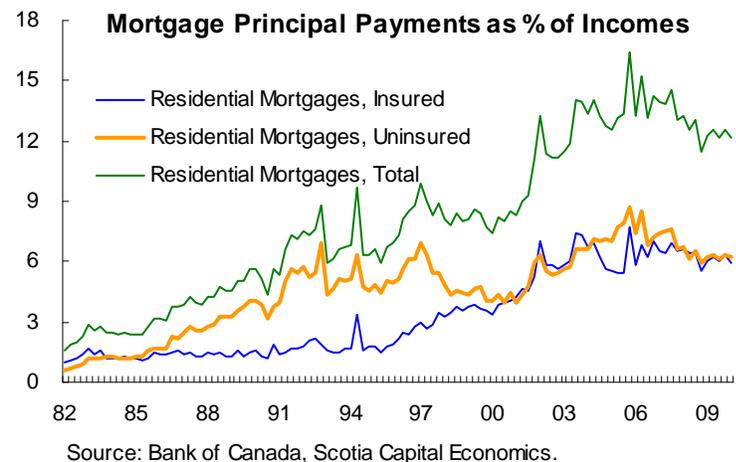


Chart 4



25% down now (20% in the past), and uninsured mortgages with more than 25% down. Almost all of the growth in the total principal payment ratio relative to incomes has come through the insured component over the past two decades, and this therefore brought into the housing market buyers who wouldn't have been able to afford higher down payment requirements in the past.

Further, the type of borrowing has become skewed toward revolving debt products that require interest only to be paid on bank lines of credit that have added over \$50 billion in balances outstanding since Lehman collapsed. Interest-only lines of credit have cannibalized fixed and variable rate installment loans requiring a principal component to repayment.

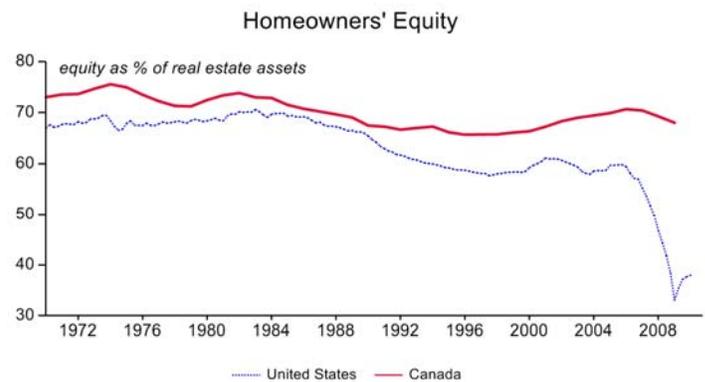
That said, there are some insulating considerations. Home equity is far stronger than the US, but can of course change rapidly (chart 5). Sizeable household cash buffers exist, but probably not in the hands of the most indebted. Leverage measured by debt as a share of assets is much lower in Canada at about 20% versus the US cycle top of 30% (chart 6), but the crisis taught us that liquidity and incomes are what matter so weight the debt-to-income ratio more so than a purist focus on the imperfections of comparing a stock concept like outstanding debt to a flow concept like incomes. The one key argument that does stand up to scrutiny is that the Canadian mortgage market is on much sounder microeconomic foundations than the US. Consider a few of many possible points in this regard that we have emphasized for some time:

- Banks are better capitalized in Canada, and dealer gearing ratios didn't push as high as in the US. More importantly, the mortgage securities were not placed in off-balance sheet SIV and CDO conduits and then leveraged to a much greater degree as they were in the US. So economy-wide leverage creation is far less significant in Canada, and thus downside risks to asset prices would not get leveraged across the economy to the same extent.
- Canada offers an explicit guarantee to the GSEs that have back-stopped the lower downpayment mortgages. Such mortgages represent risks to the sovereign, not the banking sector, and are priced in terms of premiums paid by borrowers.
- Outside of Alberta and Saskatchewan, strategic defaults are not an option in Canada as they are in some US states.
- The products are very different in that teaser mortgages like option ARMs and their reset problems are not the same issue in Canada as they were in the US.

## Conclusion

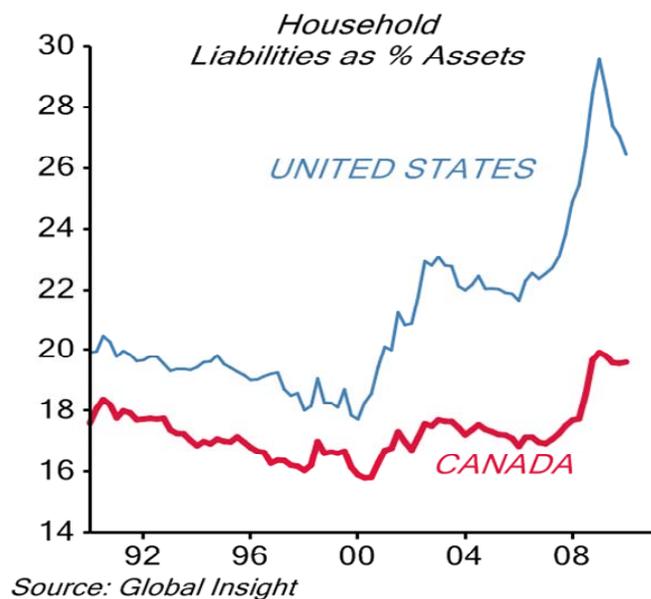
Overall, it is indeed possible that Canadian firms and households did not learn much of anything from many of the lessons imposed on firms and households elsewhere. In a turnabout from the 1990s, Canada's very strong nonfinancial corporate balance sheets, well-capitalized banking system, and a much better overall fiscal picture provide today's insulating factors. The key implication for the Bank of Canada lies in support of our call for further monetary policy tightening including a 25bps hike on September 8th, but followed by a gradual and measured pace of tightening that is cognizant of the balancing act between keeping rates too low for too long versus overly disrupting current imbalances that are already evident in the Canadian economy.

Chart 5



Source: Federal Reserve, Statistics Canada

Chart 6



**Appendix A: Inventory Charts**

Chart A1

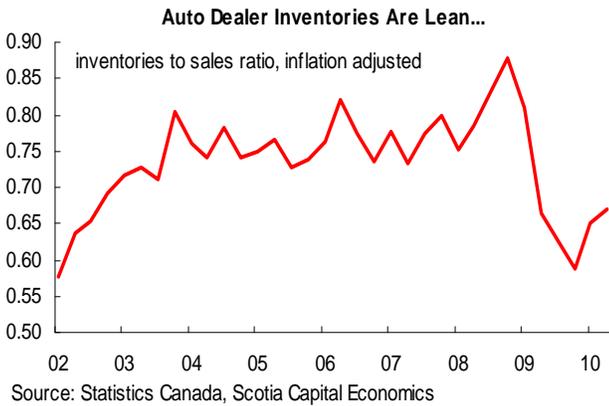


Chart A2

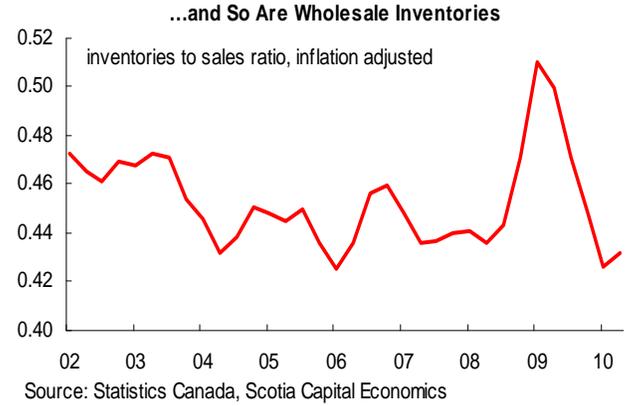


Chart A3

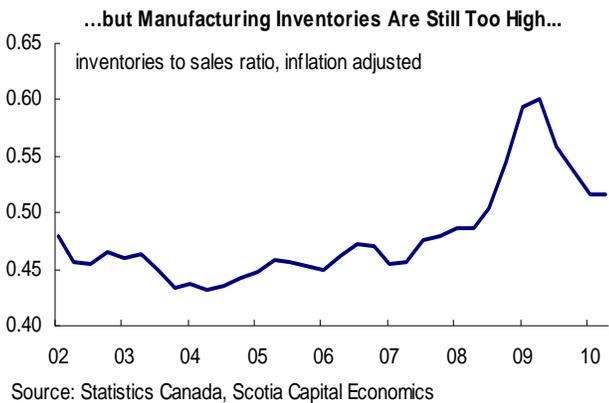
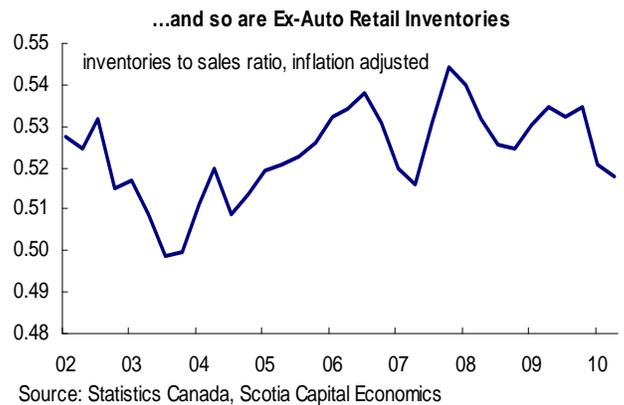


Chart A4





## Appendix B: House Price Charts

Chart B1 expresses the same nationwide price measures used in chart 2 in the body of the paper but puts them in relation to personal disposable income per capita. Here too, Canada sits well above the US.

Chart B2 switches to repeat-sales measures of house prices by comparing the Canadian Teranet measure against the US S&P Case-Shiller metric. Note that US house prices doubled over the 2000-2006 period, compared to the same performance in Canada over the past full decade.

Chart B3 compares new home prices in the two countries to an indexed starting point at the beginning of the decade (since Canada's measure is an index, versus the US measure that is a price). Here too, Canada is currently tied with its record and well above the US whether converted at spot or PPP rates of currency exchange.

We continue to believe that house prices face further correction risk. This is already evident in the average resale figures available from the Canadian Real Estate Association. It is not yet evident in the Teranet gauge because the latter measure lags behind resales data by about four months in our view. Teranet is reported on a three month moving average basis, versus the spot reports produced by CREA. Further, Teranet is based on land registry figures and there may be between a one- and two-month lag in reporting sales transactions to public land registry offices. Indeed, when we correlate monthly percentage changes in the Teranet and CREA measures, the best correlation arises from comparing current Teranet readings to CREA from four months prior. That said, the correlation is modest, and thus leaves open the possibility that CREA has begun to show price declines since May because it is impacted by compositional shifts that do not affect Teranet since the latter is based on repeat sales data.

Chart B1

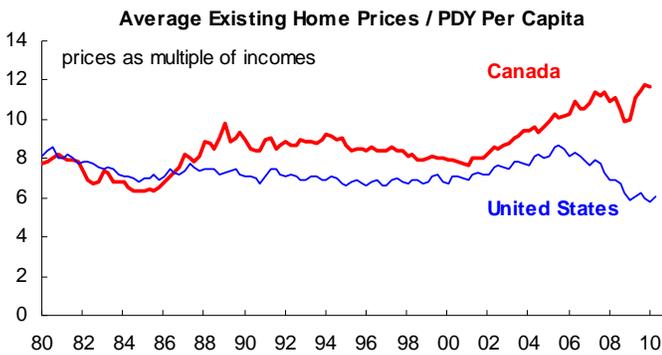


Chart B2

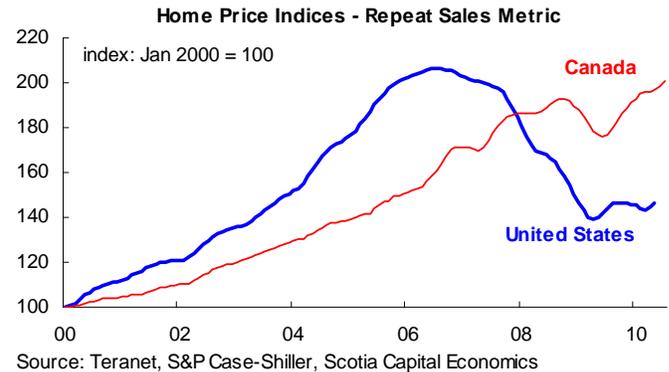


Chart B3

