



TD Economics

Housing Bubble Watch

April 4, 2006

THE GREAT DIVIDE: SPECULATION PICKS UP IN THE WEST, SOFT-LANDING UNFOLDING IN CENTRAL CANADA

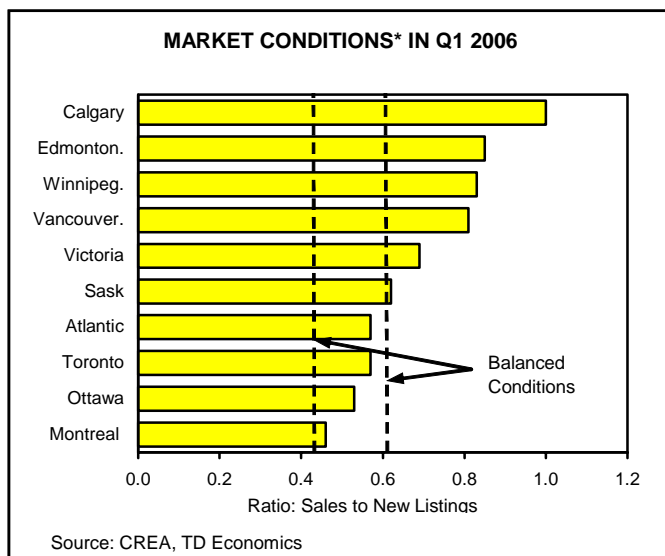
Canada's housing markets remain robust in early 2006, despite slightly higher mortgage rates. With new listings hard pressed to keep up with the elevated level of existing home sales, real estate conditions are relatively tight in aggregate. As a result, the national average price of existing homes continues to climb at a vigorous pace, rising in the first quarter at an estimated 10% year-over-year – not much different from the national average experienced over the past few years and well above any assessment of a sustainable rate. However, like so many other recent economic indicators, these national figures significantly mask a great divide emerging from a regional perspective.

East of Manitoba, house prices are now experiencing softer growth than the national average, with the annual rate of appreciation in several markets cooling to the mid-single digits. But it's important to note that this is not a reflection of any substantial drop in sales activity. Indeed,

This quarterly report monitors for the presence of a speculative housing bubble in local markets across Canada. In this regard, several indicators are used to look for generally agreed upon characteristics of bubble behaviour: i.e., whether the level of home prices are being bid up beyond what is consistent with underlying fundamentals and whether homebuyers are doing so with the expectations of future price increases. It is important to note, however, that it is, by definition, impossible to identify a bubble before it bursts, since rational investors would refuse to hold any asset whose price was certain to fall.

with affordability still attractive from a historical perspective, existing home purchases remain near record levels in a number of markets. Instead, potential buyers have been given more choice, as an increasing supply of product (both from the new and resale housing market) is helping to alleviate the strong price pressures that hung over the market in the past. This “soft-landing” in price growth provides some evidence that these markets did not previously experience a speculative bubble that required a correction – an argument we have been making for more than a year.

Meanwhile, housing conditions in Western Canada remain very tight. Activity has become so intense that home price growth has accelerated to over 20% in year-over-year terms in some markets. Much of this outsized growth can be attributed to surging commodity prices, which have lit a fire under the economies of the resource-based West, raising housing demand relative to available supply. Thus, strong economic fundamentals, together with capacity con-



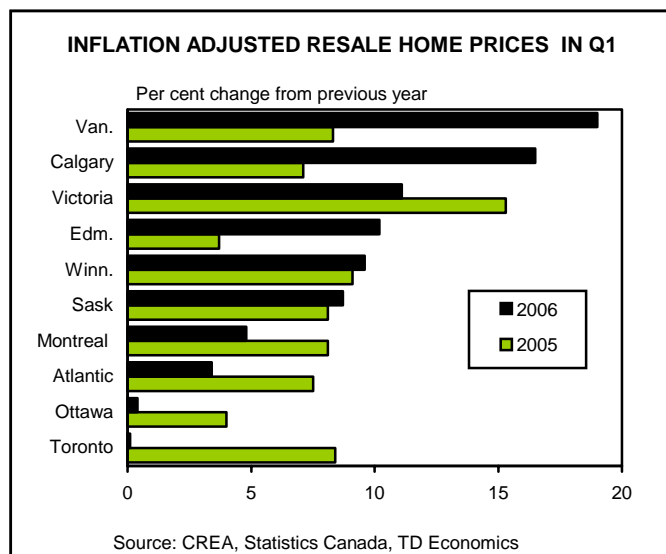
straints on the supply side, largely explain the lofty price growth in most Western markets. However, when economic conditions are booming, it can also create the perfect breeding ground for speculative price bubbles to form. That's because in such an environment, housing market participants are at greater risk of developing a case of "irrational exuberance," especially if they expect that such exorbitant price gains will continue indefinitely.

To this end, the focus of this edition of *Bubble Watch* will be a review of regional housing market conditions across Canada, with the emphasis on the risks of any "over heating" in four of the largest western Canadian markets and the "soft landing" emerging in the biggest housing markets east of Manitoba.

Vancouver and Victoria – Is psychology driving the market more than economics?

There is no denying that British Columbia is currently enjoying one of the strongest economic booms in its recent history. Unemployment rates have sunk to all-time lows, while the province is poised to once again sit at the top end of the provincial economic growth tables in 2006. Vancouver is unquestionably benefiting from this provincial economic renaissance, with the city receiving a big economic jolt from a number of infrastructure investments now occurring, some of which are related to the 2010 Winter Olympics.

Consequently, it is not too surprising that Vancouver's housing market remains on fire. This city currently leads the country in terms of price growth, up a whopping 22% year-over-year in the first quarter of this year and with the



Irrational Exuberance Indicator

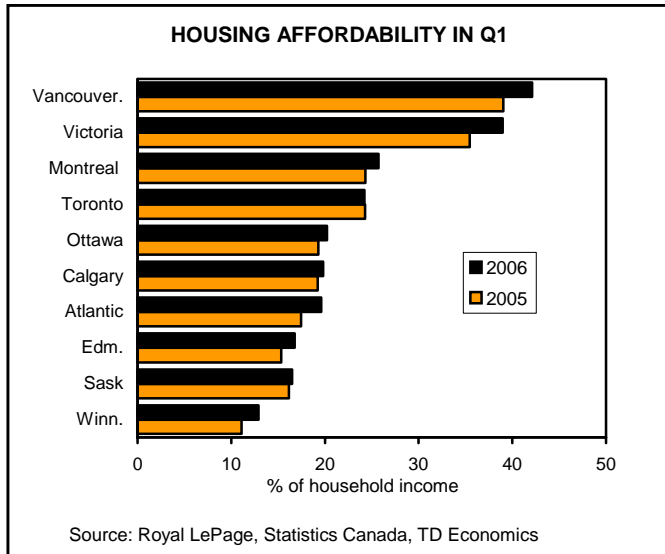
The ratio between the twelve month percentage increase in inflation-adjusted average home prices and underlying supply and demand conditions. The latter term is estimated as the ratio between sales to new listings in the representative market. The Irrational Exuberance Indicator effectively suggests to what degree home prices are growing in relation to market conditions. For example, an indicator greater than 10, suggests that prices are growing faster than what market conditions would warrant, implying increasing risk of speculative activity. Conversely, an indicator less than -10 would suggest greater negative sentiment than the market would imply.

average home price fetching an all-time high of close to a half a million dollars – also the highest in the country. But in addressing the matter of a speculative housing bubble, the more important question to answer is: are these robust economic fundamentals in Vancouver strong *enough* to support such price gains? Based on a number of indicators, we still don't think so.

For example, while Vancouver's housing market remains quite tight, the elevated level of its irrational exuberance indicator (see box for definition) suggests that inflation-adjusted prices are actually growing faster than what underlying supply and demand conditions would warrant. And despite today's historically low mortgage rates, affordability continues to deteriorate in Vancouver. For example, five-year mortgage rates averaged a still low 6.38% in the first quarter of this year, yet it took a whopping 42.1% of median pre-tax household income to own an average home in this city. That compares to "only" 39.8% in 1995 when five year mortgage rates were closer to 9.00%. This is not a rational outturn, since lower mortgage rates should help to keep the housing market affordable (just as it has done in most other regions of the country) – not worsen it.

And while Vancouver's labour market is indeed very strong, the steady deterioration of affordability in the city also suggests that income growth has not been robust *enough* to provide a sufficient offset to the rapid ascent of home prices – as an aside this is in sharp contrast to cities like Calgary where home prices are also accelerating, yet extremely robust income growth has helped to keep that city's affordability rates relatively stable.

So how are potential buyers able to afford homes in



Vancouver? The provincial personal savings rate provides a clue, as it sank to an all time low of -7.9% in 2004 and likely retreated further since then. That's also the worst rate in the country and suggests that, on average, potential homebuyers in Vancouver may be forced to carry a far greater debt load than other Canadians simply to own housing. Why potential homebuyers would choose to do so when it is considerably cheaper to rent a comparable property is hard to reconcile, but many may be doing so with the belief that if they did not "they would be priced out of the market forever." Such a fear is an inherent feature of all speculative bubbles.

Still, some observers have defended Vancouver's current outsized price gains on the basis of the recent pick-up in population growth. Population growth is no doubt a long-term driver of housing demand, but it's worth noting that the recent pick-up in Vancouver has been much weaker than in other periods when the economy was booming. In fact, interprovincial migration (a key driver of new housing demand) turned slightly negative in the last quarter of 2005 and remains well below levels seen in previous cycles.

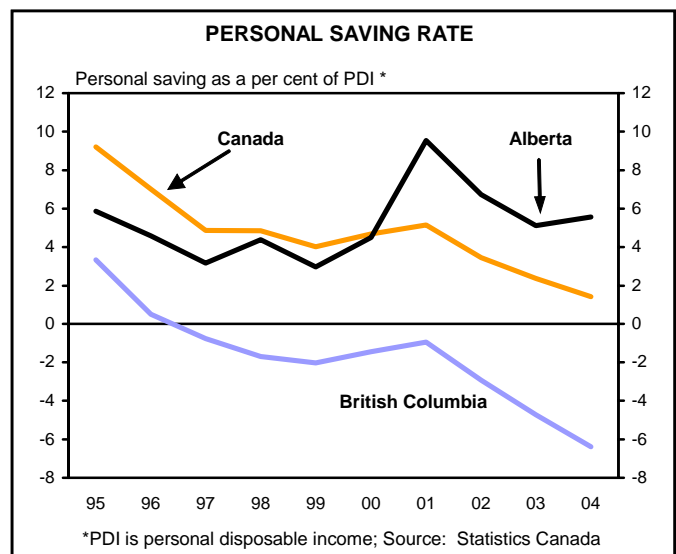
While there have also been signs of frothiness in Victoria's housing market, the good news is that home price appreciation slowed to an estimated 13% year-over-year pace in the first quarter from about 23% late last year.

This softer rate of growth can be partly attributed to the improving balance between supply and demand. However, another big factor relates to less speculative demand from south of the border. Over the last few years, Victoria

increasingly became an extension of the hot U.S. housing market, given that the city has attracted interest from American buyers looking for secondary or "recreational" properties. With higher interest rates beginning to cool off the bubbly U.S. housing market and with the past rise in the Canadian dollar, it should be no surprise to also see U.S. speculative interest in resort properties beginning to recede.

Although we think housing markets in Vancouver and Victoria have shown signs of a bubble, it's important to note that any softening in these markets is not likely to be triggered by a deterioration of economic fundamentals. Indeed, we expect strong economic growth in the province to continue over the next few years. For a comprehensive overview of the outlook for the B.C. economy please see the TD Economics Special Report: *British Columbia's Golden Decade: Can this Period of Prosperity Take on a Longer Life?*, March 29, 2006.

Instead, a significant change in the price environment would likely require a reversal in the overly exuberant attitude of buyers on Canada's West Coast. While forecasting such changes in psychology is extraordinarily difficult, one key trend could provide a catalyst. There are already signs that overheated U.S. housing markets are cooling. Mortgage refinancing, housing starts and existing home sales are all down significantly from their peaks. Moreover, inventories of home for sales have been rising, which is a usual precursor to weaker housing prices. If the U.S. housing markets continue to weaken, as we expect they will, this could act to temper the speculative ac-



tivity in B.C. real estate markets, as the U.S. media coverage will remind buyers that prices don't just go up.

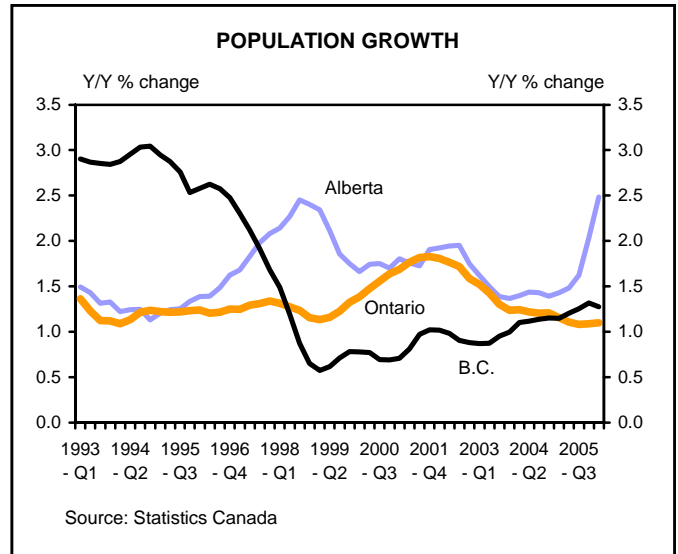
Calgary and Edmonton – Capacity constraints could give way to speculation

Like its western neighbours in British Columbia, housing markets remain on fire in Calgary and Edmonton with average home prices growing by about 20% and 13%, respectively, over a year ago. Certainly, Alberta's robust economy has much to do with this significant price growth. Specifically, a booming oil patch and the resulting promise of well paying jobs have attracted a significant inflow of new arrivals to the province, boosting housing demand considerably. Meanwhile, the supply of available housing (both from the new and resale market) has struggled to keep up.

As a reflection of these tight market conditions, Calgary's sales-to-new listings ratio in January and February was actually slightly higher than one – a well balanced market should see a comparable ratio of about 0.6. This effectively means that for every new listing on the market there was one (or slightly more) sales transaction occurring. Market conditions were almost as tight in Edmonton. Such capacity pressures in the face of booming demand certainly raises the question of whether housing markets are ultimately on the verge of overheating in Alberta. In other words, is a housing bubble brewing in Calgary and Edmonton?

The answer is a cautious “no” based on two important factors. First, according to our indicators, incidents of irrational exuberance in Alberta, though now slightly higher, are still a fair bit lower than more dizzying markets like Vancouver and Victoria. As we noted above, that's because the rapid rise in price growth is more indicative of tight market conditions than outright speculation.

Second, and perhaps more importantly, housing affordability has not deteriorated by much in Alberta, suggesting that the rapid ascent of home prices can be more fundamentally supported. The reason for this is that Alberta's booming economy has also generated significantly stronger income growth. In 2004, and for the first time ever, Alberta families with two or more people had the highest median after-tax income in the country. Moreover, half of all families in Alberta had after-tax income of \$61,800 or more, up 4% from 2003. With extremely tight labour markets in Alberta putting considerable pressure on wages over 2005, those income levels are likely to have



risen even higher. To this end, we estimate that only Winnipeg and the Atlantic are more affordable than Calgary and Edmonton, but only because home prices in the former two are considerably cheaper than their Alberta counterparts.

Still, there is the potential for speculative activity to increase in Alberta, especially if capacity constraints such as shortages of skilled labour, ultimately prevent a protracted improvement in new housing supply. Expectations of future price increases could become ingrained in the minds of potential homebuyers, sparking increased incidents of house “flipping” for quick profits. The good news is that periods of housing shortages in Calgary and Edmonton's recent history have usually been followed by a return to more moderate and sustainable price growth once a pick-up in new supply came on stream. Thus, in order to expand the capacity of new homebuilding and reduce the risk of a speculative price bubble from forming, it is vitally important for Alberta to continue drawing in skilled construction labour, even if it is from abroad.

Winnipeg and Saskatchewan – Hot but not speculative

Housing markets in Winnipeg and Saskatchewan have also been extremely strong, but there are no warning signs that a bubble has formed. After stripping off inflation, real home prices in Winnipeg are rising at a 9.6% year-over-year pace, just slightly above their performance a year earlier. In Saskatchewan, the picture is similar, with annual price growth of 8.7% in early 2006, up modestly from the same period in 2005.

These price gains have not been matched by income

growth, with the result that affordability in both cities has deteriorated. However, few home buyers are likely being priced out of the market. Indeed, affordability remains high, particularly in Winnipeg where only 12.9% of pre-tax income is going to home ownership costs. The ratio is higher in Saskatchewan, at 16.5%, but this is not excessive when compared to other jurisdictions in Canada.

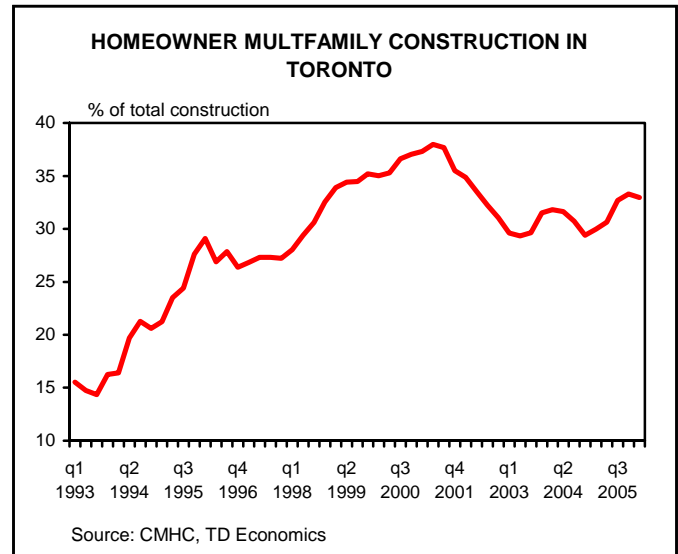
Our irrational exuberance indicator has increased in both markets, but a comparison of the cost of renting compared to home ownership still suggests that real estate markets have not become out of touch with reality. So, while home prices cannot continue to rise at their recent pace indefinitely, there is a good chance that when the moderation comes it will not be a major retrenchment, which is what we are already seeing play out to the east of Manitoba.

Toronto and Ottawa – The soft landing will continue to unfold

Home sales remain near record high levels in most major markets in Ontario, which should not be too surprising given that affordability has not deteriorated by very much. While that's partly because mortgage rates remain near historical lows, despite some recent modest increases, it is also true that a significant easing of house price growth has been a major contributing factor. Indeed, the annual rate of home price appreciation is now only about 3-4% in these cities.

The major reason for this slower rate of price increase has been the emergence of more balanced market conditions thanks to an increasing supply of homes (both from the existing and new home market), which has given prospective buyers more choice. As a result, homebuyers are finding themselves in a stronger position to negotiate on prices compared to the past few years. In addition, buyers in these markets are also increasingly gaining the luxury of taking more time to find a home that is right for their needs, without fear of losing out to another buyer due to a potential bidding war or simply being priced out of the market because they waited a little while longer to make a decision. Such calmer conditions are reflected in our irrational exuberance indicator, which is now at negligible levels in both Toronto and Ottawa.

Thus, a “soft landing” in Toronto and Ottawa’s housing markets has already begun to occur and this provides evidence that no major correction was needed in these regions because of a previous housing bubble. However, a



key question to ask is: will this soft landing continue or is the market still prone to major price declines? The answer has a lot to do with the new housing market.

As long as developers stay attuned to prevailing market conditions (i.e., do not engage in any speculative-building) the housing markets in Toronto and Ottawa can stay relatively balanced and supportive of overall home prices.

So what's the outlook for new home construction in Ontario? Typically, the cue for new projects depends largely on factor costs, in particular interest rates, profit margins (which are reliant upon relative price growth in the resale market and therefore is also a proxy for anticipated demand) and current inventory levels. Since overall home price growth has begun to moderate in Toronto and Ottawa, it should act as a major signal to developers to ease back on new projects over the medium term.

Another indicator that should signal some moderation in new construction is a recent softening in rental rates in Toronto and Ottawa. Indeed, slightly weaker rents have been the impetus for a modest increase in both the own vs. rent indicator and the P/E ratio in each of these cities. Since imputed rents should reflect all fundamental factors affecting a property (including expected economic, geographic and demographic conditions), any softening should also reflect weaker future demand for new housing. On this front, economic growth in Ontario is poised to lag behind the Canadian average this year, as its manufacturing sector struggles to remain competitive amidst a higher dollar, elevated energy prices and a prospective weakening of U.S. demand by the second half of the year.

This comparably weaker economic profile is thereby reflected by the recent steady outflow of migrants from Ontario to other provinces (particularly to Alberta and British Columbia).

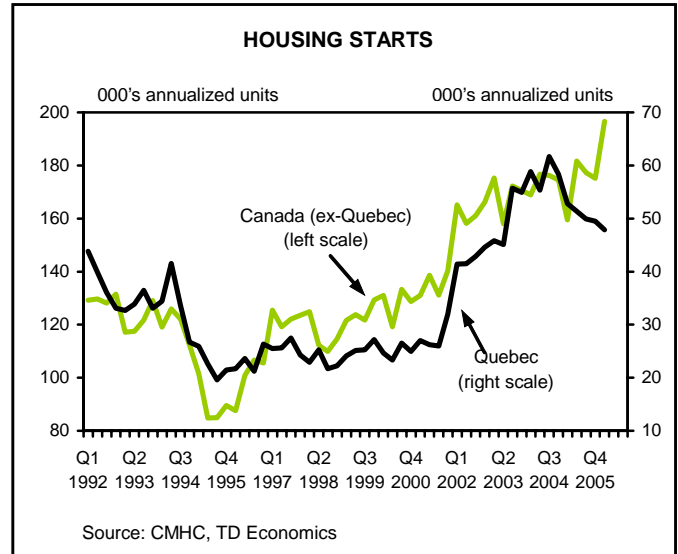
That said, it is important to note that this broad moderation of price growth and new construction will not be evident across all housing markets and types of dwellings in Ontario. That's because supply pressures such as zoning/building restrictions will keep some pressure on single detached home prices in certain regions of the GTA, like the downtown core and around the "Green Belt". As a result, price pressure could continue to support a relatively high level of more affordable multi-unit (condo) development in these areas over the near term. Strong international immigration to the city of Toronto should also continue to bolster the GTA housing market.

Montreal & Quebec – Affordability deteriorating

Home prices have begun to moderate in Quebec along the lines of the soft landing occurring in Ontario. In fact, only two years ago home prices were appreciating in Montreal at an annual rate of just over 20%. In the first quarter of this year, that rate has slowed down to about 7%. Again, much of this slower growth can be owed to a solid increase in housing supply relative to still elevated levels of demand. This has effectively put the market into balance territory from a seller's market two years ago.

Although some may be concerned that home prices may be growing somewhat faster than underlying market conditions would warrant (as indicated by a reading of about 11 on the irrational exuberance indicator), it is important to note that Montreal's home prices were sorely undervalued through the 1990's. As such, some continued outsized price gains can still be tolerated. Nevertheless, with affordability currently eroding to levels not seen since the early 1990's in Montreal, houses price growth is likely to cool down further through the rest of the year.

Looking ahead, we think Quebec's economic fundamentals should ensure more moderate activity in the province's housing market. Indeed, Quebec's large export-oriented manufacturing sector will continue to face a number of challenges this year which will result in modest investment and employment growth and thereby weaker hous-



ing demand. Fortunately, homebuilders have been cognizant of this economic environment, with recent housing starts in Quebec posting some of the biggest declines compared to the rest of the country. Such softer new housing activity should ensure that the now balanced market conditions do not eventually give way to the flat price growth characteristic of a buyer's market.

Atlantic Canada – housing markets cool, but less so than in Central Canada

Last, but not least, housing markets in Atlantic Canada look to be cooling as well. Real (after-inflation) home price growth slowed in early 2006 to a 3.4% pace, down from a 7.5% rate a year-earlier. The moderation has been accompanied by a significant drop in our irrational exuberance indicator. Affordability has still deteriorated, reflecting the fact that home prices are rising faster than income and mortgage rates have increased modestly. Nevertheless, real estate markets in the region look to be coming in for a soft landing, albeit a bit less aggressively than the moderation taking place in Ontario.

*Craig Alexander, VP & Deputy Chief Economist
416-982-8064*

Carl Gomez, Economist

BUBBLE WATCH INDICATORS - First Quarter of Each Year (Unless Otherwise Stated)										
	Atlantic	Montreal	Ottawa	Toronto	Winn.	Sask	Calgary	Edm.	Van.	Victoria
Average Existing Home Price (\$)										
1989 (annual average)	79,900	108,800	136,700	251,700	82,100	70,300	110,000	87,900	204,700	138,400
1995 (annual average)	87,500	107,500	143,100	195,900	82,000	73,500	132,100	110,900	310,500	212,100
2005	137,900	198,300	245,000	333,600	126,100	116,900	236,500	185,000	397,000	356,000
2006	145,100	212,600	252,200	343,700	140,200	127,600	279,600	207,000	480,300	407,000
Real Annualized Price Gain (%)										
1989 (annual average)	0	1.2	1.9	14	-3.4	-2.2	5.7	2.6	26.2	13.7
1995 (annual average)	-3.4	-5.3	-5.0	-4.2	-4.3	-0.7	-3.1	-3.8	1.0	-5.5
2005	7.5	8.1	4.0	8.4	9.1	8.1	7.1	3.7	8.3	15.3
2006	3.4	4.8	0.4	0.1	9.6	8.7	16.5	10.2	19.0	11.1
Irrational Exuberance Indicator										
1989 (annual average)	0.2	4.7	4.1	33	-10.7	-5.8	8	3.7	42.1	17.1
1995 (annual average)	-15.8	-29.7	-21.2	-6.3	-21.5	-7.7	-11.9	-15.4	16.1	-14.9
2005	13.9	14.9	7.0	14.8	10.8	13.4	10.5	5.4	11.1	17.7
2006	6.0	10.5	0.7	0.1	11.6	14.1	16.5	11.9	23.4	16.2
P/E Ratio										
1989 (annual average)	N/A	12.0	10.5	14.4	8.8	N/A	N/A	8.5	11.6	N/A
1995 (annual average)	9.5	11.0	9.2	12.2	8.4	8.8	N/A	10.4	15.1	N/A
2005	9.5	13.2	11.8	12.6	8.2	N/A	N/A	11.6	20.1	N/A
2006	10.5	13.6	13.0	13.2	9.7	N/A	N/A	13.7	21.6	N/A
OWN vs. RENT Ratio										
1989 (annual average)	N/A	115.8	101.6	138.6	84.6	N/A	N/A	81.9	111.7	N/A
1995 (annual average)	71.3	82.9	69.6	91.7	63.3	66.1	N/A	78.7	113.9	N/A
2005	56.3	78.4	69.9	75.0	48.7	N/A	N/A	68.8	119.5	N/A
2006	63.0	81.6	77.9	79.6	58.0	N/A	N/A	82.3	129.9	N/A
Affordability (%)										
1989 (annual average)	N/A	28.7	20.7	49.2	20.6	19.7	21.9	15.9	34.0	32.5
1995 (annual average)	19.3	23.0	18.1	27.3	13.0	13.8	17.2	16.2	39.8	43.2
2005	17.4	24.3	19.3	24.3	11.1	16.1	19.2	15.3	39.0	35.5
2006	19.6	25.7	20.2	24.2	12.9	16.5	19.8	16.8	42.1	39.0

N/A = not available

INDICATOR DEFINITIONS

Real Annualized Price Gain: The twelve-month increase in average home prices deflated by the consumer price index (CPI). Sources: Canadian Real Estate Association, Statistics Canada, TD Economics.

Price to Earnings (P/E) Ratio: This indicator measures the price of a benchmark property (townhouse) in relation to its expected future cash flow. For real estate, this is broadly thought to be the imputed rent yielded by the property. On this basis, imputed rents should theoretically reflect all fundamental factors affecting the property including expected economic conditions. An increase in the P/E ratio suggests that a property's price may have risen faster than what the underlying earnings of that property could generate, potentially implying some overvaluation. A standard townhouse is chosen as a benchmark property since it conceivably represents a median housing choice in the housing market (i.e., this property contains attributes that are similar to both condos and single-family homes). It is also a property type that is consistently found in most urban markets thereby allowing for regional comparisons. Source: Royal LePage, Statistics Canada, TD Economics.

OWN vs. RENT Indicator: The ratio between the estimated monthly ownership costs of a benchmark townhouse and its imputed monthly rent. Ownership costs only consist of principal and interest payments for the property based on the current 5 year average mortgage rate and a 25 per cent down payment amortized over 25 years. The further the indicator moves above 100, the cheaper it is to rent that property type, all else equal. Sources: Royal LePage, Statistics Canada, TD Economics

Irrational Exuberance Indicator: The ratio between the twelve month percentage increase in inflation-adjusted average home prices and underlying supply and demand conditions. The latter term is estimated as the ratio between sales to new listings in the representative market. The Irrational Exuberance Indicator effectively suggests to what degree home prices are growing in relation to market conditions. For example, an indicator greater than 10, suggests that prices are growing faster than what market conditions would warrant, implying increasing risk of speculative activity. Conversely, an indicator less than -10 would suggest greater negative sentiment than the market would imply. Source: Canadian Real Estate Association, TD Economics.

Affordability Indicator: The percentage of household income needed to service the ownership costs of a benchmark property (townhouse). Ownership costs only consist of monthly principal and interest payments based on the current 5 year average mortgage rate and a 25 per cent down payment for the property amortized over 25 years. Household income is based on median total income for all economic family types. The greater this indicator, the more income it takes to service the costs of ownership. Source: Royal LePage, Statistics Canada, TD Economics