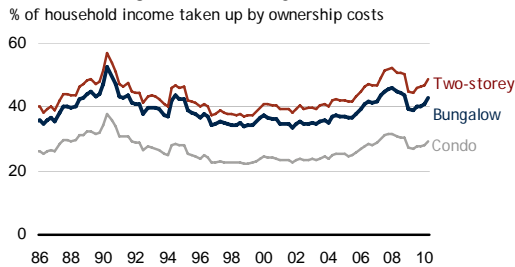


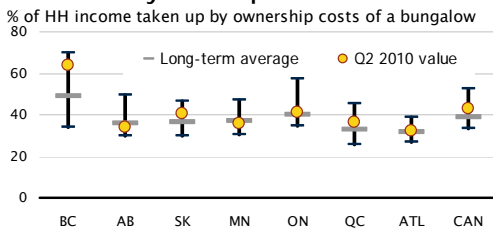
HOUSING TRENDS AND AFFORDABILITY

September 2010

RBC Housing Affordability Measures - Canada

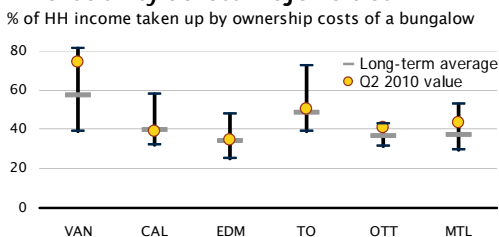


Affordability across provinces



Note: the top of each scale is the all-time high; the bottom, the all-time low.

Affordability across major cities



Note: the top of each scale is the all-time high; the bottom, the all-time low.

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Homeownership costs continue to climb in Canada

Despite a significant slowing in resale market activity in recent months, the cost of homeownership continued to climb across Canada in the second quarter of this year. The combination of higher home prices and mortgage rates strongly contributed to this increase by raising the monthly mortgage servicing charge on a typical home. At the national level, RBC Housing Affordability Measures rose for the fourth consecutive time, up between 1.1 and 2.1 percentage points, depending on the housing type (a rise represents a deterioration in affordability). In the second quarter of 2010, home prices still carried upward momentum fuelled by the impressive rebound in home resales last year when market conditions clearly favoured sellers. While housing demand has cooled considerably since winter, a matching decline in homes available for sale has kept markets in Canada sufficiently tight to allow further modest price increases. Housing affordability's deteriorating course in the past year has now reversed roughly half of the substantial improvement achieved during 2008 and early 2009. Current levels of affordability suggest some greater than usual stress weighing on Canadian homebuyers, but such tensions do not represent any immediate threat to the market at this stage. Affordability levels are still generally well below past extremes, although there are local exceptions.

Affordability erodes across the country

The increase in homeownership costs in the second quarter was widespread. Some improvements occurred in Alberta and Saskatchewan but were confined to specific housing types (condominiums in Alberta and townhouses in Saskatchewan). Ontario and British Columbia saw the most significant deterioration in affordability, largely because these provincial markets are the most sensitive to mortgage rate changes – their elevated property values amplify the increase in monthly mortgage charges relative to income when interest rates rise. All other provinces showed some modest erosion except for two-storey homes in Manitoba where the rise in the RBC Housing Affordability Measure was quite substantial.

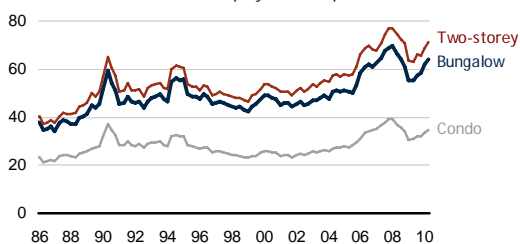
A few red flags but the majority of the markets is still in a safe range

By and large, the affordability situation remains within a safe range in Canada; however, there are local markets where the share of household income taken up by homeownership costs is at worrisome levels. In Vancouver, Canada's most expensive market, RBC Housing Affordability Measures are very close to their all-time high, which points to significant underlying stress and raises a red flag. Ottawa, Montreal and markets in Saskatchewan also show poor affordability levels relative to their own historical track records, although none stick out when compared to the national average. Affordability in all other major markets and regions in Canada continues to be very close to long-term averages – typically they are slightly worse than the average but marginally better in the cases of Calgary and Manitoba.

RBC Housing Affordability Measures

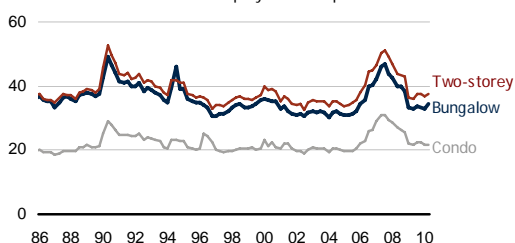
British Columbia

% of household income taken up by ownership costs



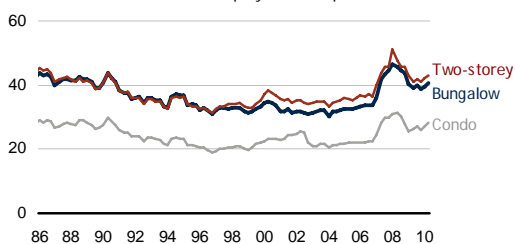
Alberta

% of household income taken up by ownership costs



Saskatchewan

% of household income taken up by ownership costs



Source: Statistics Canada, Royal LePage, RBC Economics Research

Near-term respite followed by further affordability erosion

Looking ahead, the recent decline in mortgage rates and increasing evidence that home prices have started to stabilize in many markets are anticipated to provide some respite from the deteriorating trend in affordability in the near term; however, this is expected to prove temporary. We project the overnight rate will continue to rise during the next 12 to 18 months, and this will eventually have a more sustained upward effect on mortgage rates, undermining affordability. An expected flattening of home prices (see our recent report titled *Canadian Home Resale Market Outlook: a Rollercoaster Ride but Staying on the Rails*) and rising household income will partly mitigate the detrimental effect.

Provincial overviews

British Columbia – Testing the limits

With housing market activity sinking since the start of this year, home prices have come under downward pressure in British Columbia. In the second quarter, either very weak price gains or small declines was registered depending on the housing type in the province, yet affordability deteriorated quite significantly again, reflecting the B.C. market's particular sensitivity to changes in mortgage rates (elevated property values relative to income amplify the effect of movements in mortgage rates on affordability). In the second quarter, RBC Housing Affordability Measures rose between 1.1 and 2.5 percentage points, representing some of the stronger increases among the provinces and were very close to the all-time high for all housing categories, signalling that homeownership is really testing the limits of B.C. households' budgets. Very poor affordability is likely to restrain demand in the period ahead.

Alberta – Mixed picture

Lacklustre housing market conditions in Alberta – even during last year's modest upturn in resale activity – have translated in considerable improvement in affordability in the province since early 2008. In the second quarter, with prices moving in opposite directions for different housing types, the affordability picture was mixed. RBC Housing Affordability Measures fell slightly (-0.3 percentage points) for condominiums but rose (by between 0.1 and 1.4 percentage points) for all other categories. Overall, homeownership remains affordable in Alberta, with RBC Housing Affordability Measures at or below long-term averages. This situation implies little downside risk to the market and augurs well for a strengthening in housing demand once the provincial job market shows more substantial gains.

Saskatchewan – Tensing up

While home resale activity in Saskatchewan has been on a declining trend in recent months, home prices have held up to a large extent. In the second quarter, prices either appreciated moderately or edged lower just marginally, depending on the housing type. With mortgage rates rising during the quarter, affordability generally eroded some more in the province. RBC Housing

Affordability Measures moved up between 0.6 and 1.5 percentage points (townhouses bucked the trend, edging lower by 0.1 percentage points). These increases pushed levels further above long-term averages, thereby indicating that some tensions may be building in the provincial market. Nonetheless, we expect that a strong rebound in the provincial economy this year and next will likely help ease such tensions.

Manitoba – Off the boil

The Manitoba market has come off its boil since early spring, with monthly resale activity slipping back to the low points attained during the late-2008 and early-2009 period. Sellers kept a firm hand on pricing by reducing the supply of homes available for sale, however. In the second quarter, home prices continued to appreciate in Manitoba with those for two-storey homes showing particularly strong increases. This result translated into further deterioration for housing affordability in the province – RBC Housing Affordability Measures rose between 0.5 and 2.2 percentage points in the quarter (two-storey homes represented the high end of the range). The levels of measures generally stand close to long-term averages (slightly below it in the case of bungalows), which corresponds to some moderate stress being felt by homebuyers.

Ontario – The calm after the rush

The strong headwinds finally got the better of the Ontario housing market this spring and summer. After setting new record-high marks this winter, home resales in the province have since fallen precipitously. The slowdown in activity largely reflected various transitory factors – the HST, changes in mortgage lending rules and the rush of first-time homebuyers to lock in low mortgage rates – that brought demand forward earlier this year. Nonetheless, the fact that housing affordability in Ontario continues to reverse the considerable improvements achieved in late 2008 and early 2009 also likely played a role. In the second quarter, RBC Housing Affordability Measures increased for a fourth consecutive time, up between 1.3 and 2.6 percentage points, representing some of the bigger rises among the provinces.

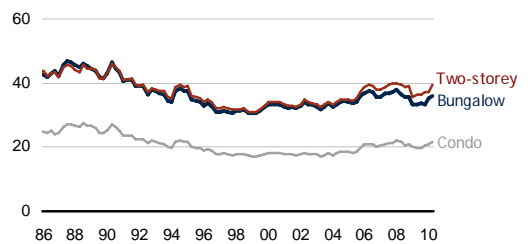
Quebec – Historic rally comes to an end

The unsustainable record-breaking rally in Quebec's resale market that took place last year and early this year came to an end this spring. Activity has since settled to a pace comparable to that which prevailed in 2006-2007, considered to be fairly vigorous at the time. Home prices, however, generally continued along their upward trend, even recording substantial gains (particularly for condos) during the second quarter. This situation hampered affordability in the province once again, which has been on a deteriorating course since the middle of 2009. Although the increases were modest in the second quarter – rising between 0.8 and 1.6 percentage points – RBC Housing Affordability Measures for Quebec are now at, or very close to, the pre-downturn peaks and exceed their long-term averages. Any further rise in

RBC Housing Affordability Measures

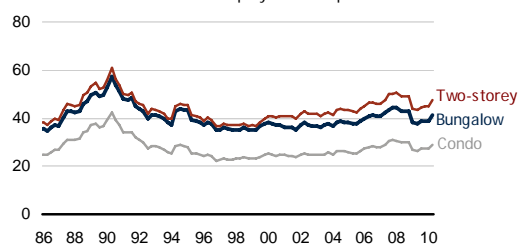
Manitoba

% of household income taken up by ownership costs



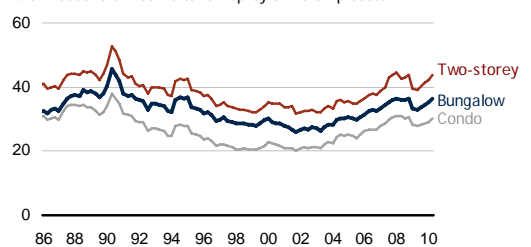
Ontario

% of household income taken up by ownership costs



Quebec

% of household income taken up by ownership costs

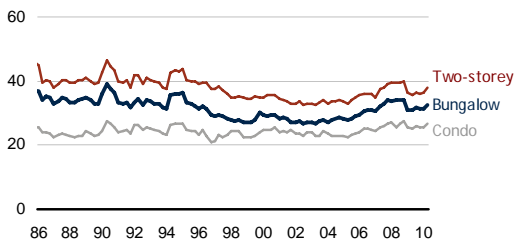


Source: Statistics Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measures

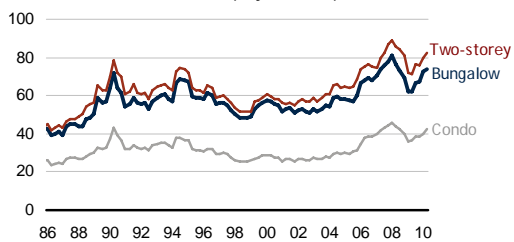
Atlantic Provinces

% of household income taken up by ownership costs



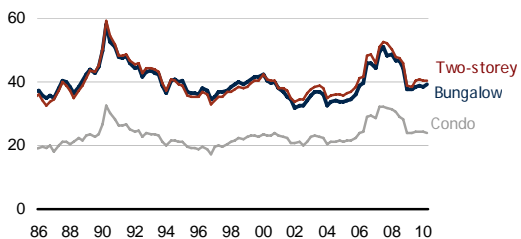
Vancouver

% of household income taken up by ownership costs



Calgary

% of household income taken up by ownership costs



Source: Statistics Canada, Royal LePage, RBC Economics Research

homeownership costs could have a more pronounced and adverse effect on housing demand in the province.

Atlantic – Not immune to the recent slowing

Atlantic Canada's housing market was not immune to the significant slowdown in activity that has swept across the country since spring. In the last few months, housing resales in the region fell back to the lows reached during the late 2008 to early 2009 downturn. The decline was felt across the board, including areas, such as St. John's, which were on a tear earlier this year. The cooling in demand loosened up market conditions a little – they were very tight at the start of this year – and restrained home price increases. In turn, this limited the rise in homeownership costs in the region. Depending on the housing type, RBC Housing Affordability Measures moved up between 1.1 and 1.5 percentage points in the second quarter and remain very close to long-term averages. Overall, housing affordability in Atlantic Canada continues to be quite attractive and signals little in the way of undue stress at this point.

Major city markets

Vancouver – Red flag raised

In various rankings of housing markets in Canada, the Vancouver area often comes out on top. These rankings include the highest valued residential properties, fastest rising prices during last year's rebound and highest homeownership costs relative to household income. Vancouver is also making the top of another list – the most at risk. In the second quarter, already extremely poor affordability deteriorated once more. RBC Housing Affordability Measures climbed 1.7 to 2.9 percentage points to levels that are rapidly closing in on all-time highs. Generally, we have dismissed the case of housing market bubbles in Canada, but the situation in Vancouver is probably the closest to one in the country. Poor affordability likely contributed to the steep drop in housing resales since the start of this year in the area (although other factors have probably dominated). While the Vancouver market is clearly vulnerable to a price correction, this does not imply that a collapse is imminent because supply (both in the existing and new home sides of the market) is well contained at this point.

Calgary – Affordable but buyers sit out

Still favourable housing affordability failed to attract new buyers into the Calgary market once the fairly subdued rebound in activity ran its course earlier this year. Home resales fell significantly in the city during the spring and summer, reaching levels only moderately higher than the low points reached at the end of 2008, during the worst of the housing downturn. Renewed weakness in demand has maintained downward pressure on home prices. In the second quarter, prices actually fell for most housing types. The upside has been a further lowering in the costs of homeownership in the city. Bucking the general Canadian trend, housing affordability in Calgary showed some slight improvement in the second quarter. RBC Housing Af-

fordability Measures edged lower in all but one housing category, down between 0.1 and 0.5 percentage points, except for bungalows, which showed a rise of 0.9 percentage points.

Toronto – Down to earth

The high-flying Toronto market could no longer defy gravity this spring and has come down to earth in the months since then. The ascent to record-high sales of existing homes at the start of this year – fuelled by buyers motivated to beat the upcoming HST, new mortgage lending rules and the spectre of interest rate increases – proved to be as fleeting an event as the heart-stopping drop the previous year. While the earlier lofty levels were clearly unsustainable, the wild downswing that followed could have caused some drama for the Toronto area's property values; however, a prompt retreat on the part of sellers has kept the demand-supply equation in balance. Home prices have thus largely resisted any emerging negative forces, although slight declines have been noted in some market segments (e.g., condominiums). The deteriorating trend in Toronto's housing affordability continued in the second quarter, with RBC Housing Affordability Measures climbing 1.2 to 3.1 percentage points, to levels that now exceed long-term averages.

Ottawa – Rude awakening

The spring was a rude awakening for the Ottawa area market, which had shown tremendous resilience and strength during the volatility of the past two years. The traditionally strong spring market vaporized this year, as seasonally-adjusted housing resales plummeted to depths even deeper than those reached at the worst of the 2008 downturn. While transitory factors (HST and others) undoubtedly brought much of the usual spring activity forward this year, the market's increasing unaffordability in the past year likely contributed in discouraging some buyers. In the second quarter, RBC Housing Affordability Measures rose between 1.6 and 3.6 percentage points, representing some of the larger increases among major Canadian cities. Affordability levels are moving closer to all-time highs for the area (although these are low by national standards), and this could well become a prominent factor deterring buyers going forward.

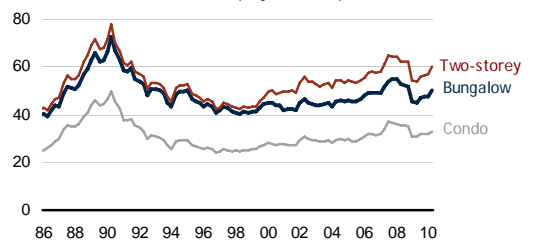
Montreal – Unaffordability starting to bite?

The Montreal housing market has long been known to be quite affordable by big city standards. While its cost of homeownership remains far less expensive – both in dollar terms and relative household income – than Canada's priciest markets Vancouver and Toronto, it has risen substantially in the past decade. In fact, Montreal has become increasingly more expensive compared with the national average, including further divergence in the past year. By the city's own historical standards, affordability has reached poor levels. In the second quarter, RBC Housing Affordability Measures further rose above long-term averages for a fourth straight time, up moderately between 1.2 and 1.9 percentage points. In the case of two-storey homes, the measure is closing in on the all-time high. Mounting unaffordability has likely been a factor contributing to the sharp drop in housing resales since early spring. It could well continue to weigh on demand in the period ahead.

RBC Housing Affordability Measures

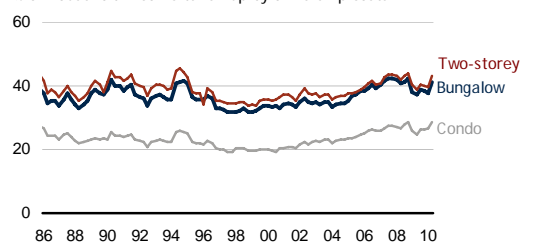
Toronto

% of household income taken up by ownership costs



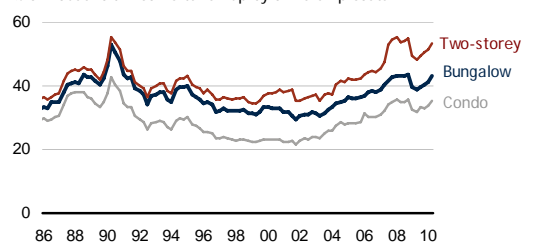
Ottawa

% of household income taken up by ownership costs



Montreal

% of household income taken up by ownership costs



Source: Statistics Canada, Royal LePage, RBC Economics Research

Summary tables

Detached bungalow

Region	Average Price		Qualifying Income (\$) Q2 2010	RBC Housing Affordability Measure			
	Q2 2010 (\$)	Y/Y % ch.		Q2 2010 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	330,000	10.8	76,000	42.9	1.9	4.0	39.0
British Columbia	561,600	15.4	116,700	63.8	1.7	8.8	48.8
Alberta	347,900	5.2	77,900	34.3	1.4	1.4	36.1
Saskatchewan	313,100	6.4	73,600	40.8	1.5	1.6	36.6
Manitoba	249,500	10.0	62,800	36.0	0.8	2.7	36.8
Ontario	342,200	10.3	81,200	41.2	2.3	3.6	40.1
Quebec	221,100	11.6	53,500	36.5	1.3	3.7	32.9
Atlantic	196,000	4.5	49,700	32.4	1.1	1.4	31.6
Toronto	472,800	10.9	105,900	50.2	2.4	5.0	48.2
Montreal	267,200	11.0	63,200	43.2	1.8	4.3	36.8
Vancouver	688,600	18.0	140,500	74.0	1.7	11.7	57.2
Ottawa	354,100	11.7	86,800	41.2	3.6	4.0	36.6
Calgary	420,000	4.6	89,200	39.2	0.9	1.6	39.9
Edmonton	335,700	9.6	77,000	34.7	2.5	2.4	33.9

Standard two-storey

Region	Average Price		Qualifying Income (\$) Q2 2010	RBC Housing Affordability Measure			
	Q2 2010 (\$)	Y/Y % ch.		Q2 2010 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	374,200	10.1	86,600	48.9	2.1	4.3	43.3
British Columbia	625,400	12.0	130,100	71.2	2.5	8.3	54.0
Alberta	373,900	4.9	85,100	37.5	0.7	1.5	38.6
Saskatchewan	319,900	8.4	77,500	43.0	0.6	2.2	38.0
Manitoba	276,000	10.7	68,500	39.3	2.2	3.1	37.7
Ontario	393,000	9.8	93,500	47.4	2.6	4.0	43.7
Quebec	263,100	12.3	64,000	43.7	1.6	4.5	38.8
Atlantic	224,000	6.5	58,000	37.8	1.5	2.1	38.1
Toronto	564,600	10.7	126,600	60.0	3.1	5.9	53.4
Montreal	331,400	9.5	77,900	53.3	1.9	4.9	41.6
Vancouver	768,700	14.3	156,700	82.6	2.9	11.2	62.4
Ottawa	358,600	12.7	90,600	43.0	3.5	4.3	39.0
Calgary	422,100	5.5	91,600	40.2	-0.1	1.8	40.3
Edmonton	373,600	8.1	86,400	39.0	1.2	2.3	37.0

Standard townhouse

Region	Average Price		Qualifying Income (\$) Q2 2010	RBC Housing Affordability Measure			
	Q2 2010 (\$)	Y/Y % ch.		Q2 2010 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	261,500	8.6	60,500	34.1	1.1	2.6	30.5
British Columbia	418,200	9.2	87,300	47.7	1.1	4.6	36.6
Alberta	258,100	3.0	58,000	25.5	0.1	0.6	25.1
Saskatchewan	235,000	3.8	56,800	31.5	-0.1	0.6	27.7
Manitoba	173,200	16.8	43,100	24.7	1.1	2.8	22.9
Ontario	282,400	9.7	66,900	33.9	1.6	2.8	31.2
Quebec	180,100	8.4	44,200	30.2	0.8	2.4	27.9
Atlantic	172,900	7.0	43,100	28.1	1.1	1.7	28.6
Toronto	400,600	8.9	89,100	42.2	1.9	3.7	37.6
Montreal	234,100	9.6	55,300	37.8	1.2	3.4	31.8
Vancouver	495,600	12.1	101,700	53.6	2.3	6.3	41.9
Ottawa	273,200	10.3	69,000	32.7	1.6	2.8	27.7
Calgary	335,800	8.4	71,200	31.3	-0.1	2.2	28.8
Edmonton	214,100	-3.9	50,500	22.8	-0.4	-0.7	22.9

Standard condominium

Region	Average Price		Qualifying Income (\$) Q2 2010	RBC Housing Affordability Measure			
	Q2 2010 (\$)	Y/Y % ch.		Q2 2010 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	222,400	8.6	51,900	29.3	1.1	2.3	26.8
British Columbia	297,500	10.8	63,200	34.6	1.1	3.7	28.0
Alberta	214,000	-1.8	48,800	21.5	-0.3	-0.3	22.2
Saskatchewan	214,400	11.2	50,700	28.1	0.8	1.9	24.4
Manitoba	148,400	13.5	37,600	21.6	0.5	2.0	21.0
Ontario	236,300	10.2	56,800	28.8	1.3	2.5	27.7
Quebec	187,800	8.0	44,400	30.3	1.4	2.4	26.9
Atlantic	167,400	8.8	41,300	26.9	1.4	1.9	24.4
Toronto	304,800	6.5	69,700	33.0	1.2	2.3	31.1
Montreal	220,800	10.0	51,400	35.1	1.4	3.3	29.2
Vancouver	388,800	14.8	80,000	42.2	2.3	5.8	31.7
Ottawa	247,600	20.3	60,400	28.7	1.9	4.2	23.4
Calgary	251,800	-0.2	54,400	23.9	-0.5	0.1	23.0
Edmonton	191,600	-4.8	45,100	20.4	-0.4	-0.7	18.2

* Population weighted average

Source: Royal LePage, Statistics Canada, RBC Economics Research

How the RBC Housing Affordability Measures work

The RBC Housing Affordability Measures show the proportion of median pre-tax household income required to service the cost of mortgage payments (principal and interest), property taxes and utilities on a detached bungalow, a standard two-storey home, a standard town house and a standard condo (excluding maintenance fees).

The qualifier 'standard' is meant to distinguish between an average dwelling and an 'executive' or 'luxury' version. In terms of square footage, a standard condo has an inside floor area of 900 square feet, a town house 1,000 square feet, a bungalow 1,200 square feet and a standard two-storey 1,500 square feet.

The measures are based on a 25% down payment and a 25-year mortgage loan at a five-year fixed rate and are estimated on a quarterly basis for each province and for Montreal, Toronto, Ottawa, Calgary and Vancouver metropolitan areas. The measures use household income rather than family income to account for the growing number of unattached individuals in the housing market. The measure is based on quarterly estimates of this annual income, created by annualizing and weighting average weekly earnings by province and by urban area. (Median household income is used instead of the arithmetic mean to avoid distortions caused by extreme values at either end of the income distribution scale. The median represents the value below and above which lie an equal number of observations.)

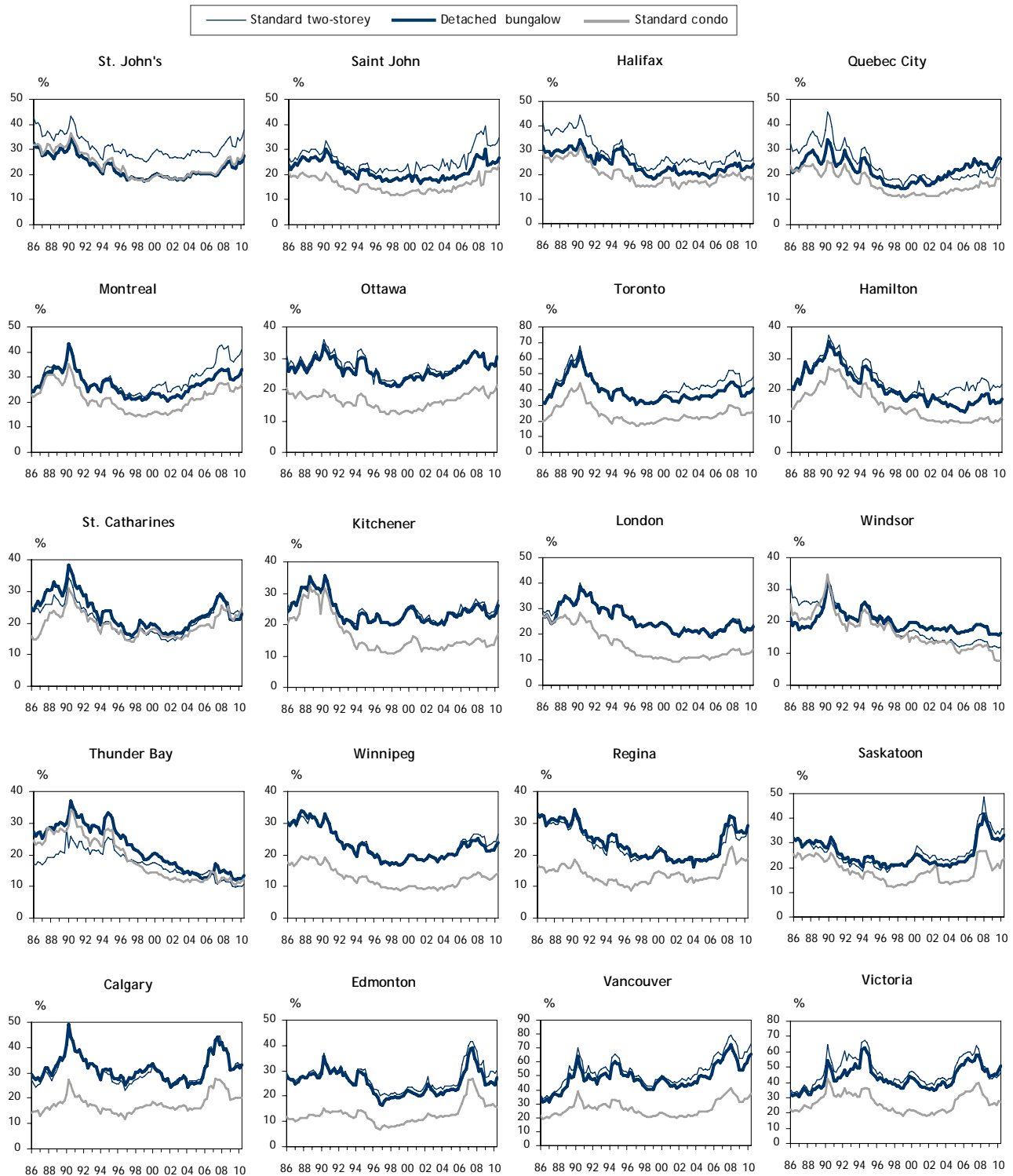
The RBC Housing Affordability Measure is based on gross household income estimates and, therefore, does not show the impact of various provincial property tax credits, which can alter relative levels of affordability.

The higher the measure, the more difficult it is to afford a house. For example, an affordability measure of 50% means that home ownership costs, including mortgage payments, utilities and property taxes, take up 50% of a typical household's pre-tax income.

Qualifying income is the minimum annual income used by lenders to measure the ability of a borrower to make mortgage payments. Typically, no more than 32% of a borrower's gross annual income should go to 'mortgage expenses' — principal, interest, property taxes and heating costs (plus maintenance fees for condos).

Mortgage carrying costs by city

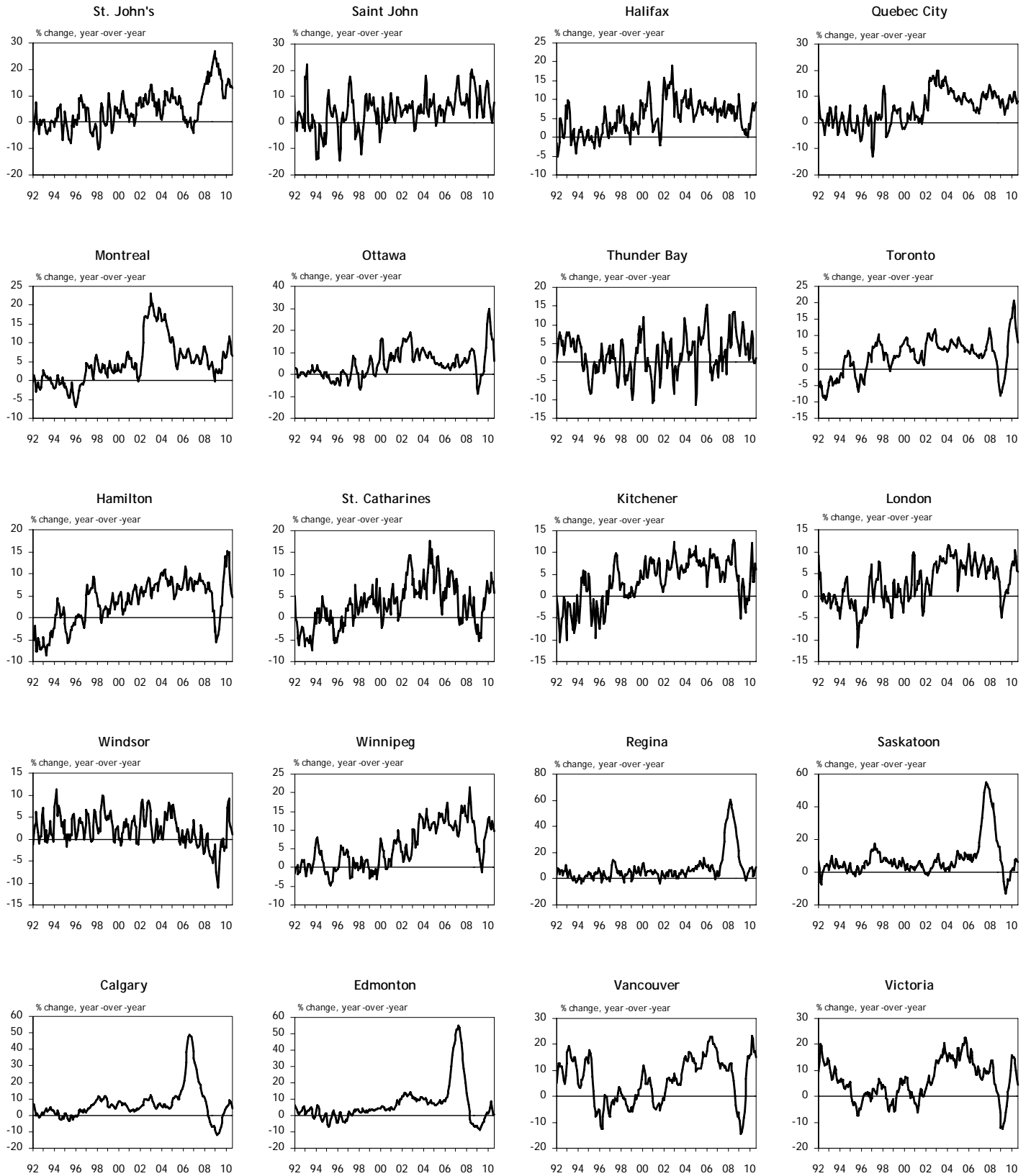
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at going market prices, including principal and interest, property taxes and utilities; the modified measure used here includes the cost of servicing a mortgage, but excludes property taxes and utilities due to data constraints in the smaller CMA's. This measure is based on a 25% down payment and a 25-year mortgage loan at a five-year fixed rate and is estimated on a quarterly basis. The higher the measure, the more difficult it is to afford a house.



Source: Statistics Canada, Royal LePage, RBC Economics Research



Home prices

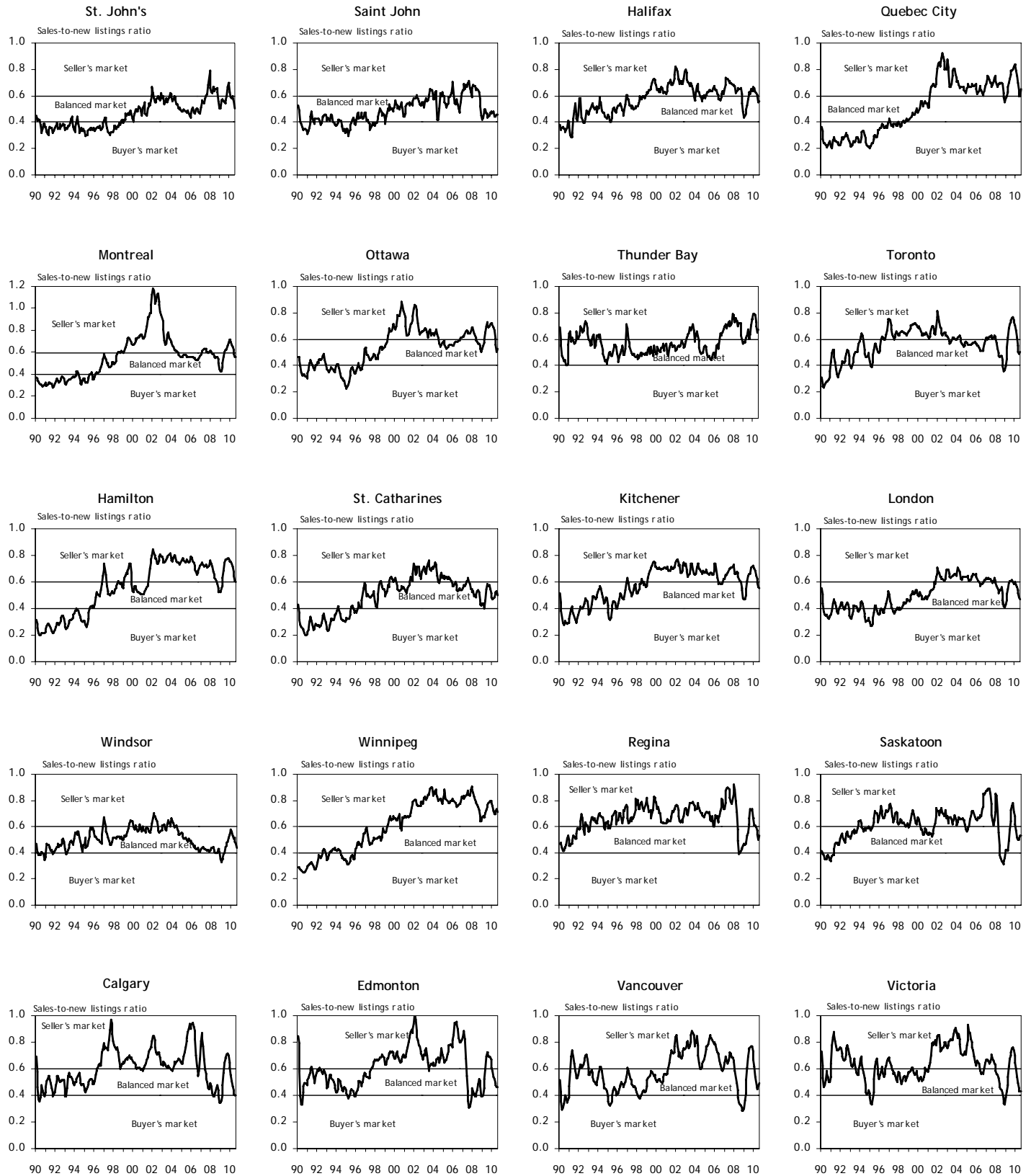


House prices are based on a three-month moving average.

Source: Canadian Real Estate Association, RBC Economics Research



Home sales-to-new listings ratio



House prices are based on a three-month moving averages.

Source: Canadian Real Estate Association, RBC Economics Research



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