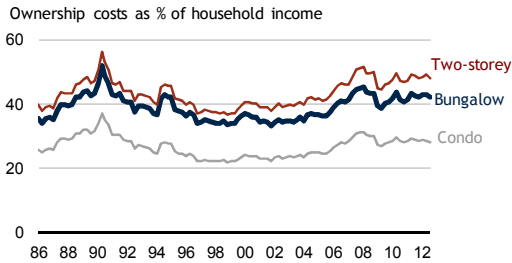


HOUSING TRENDS AND AFFORDABILITY

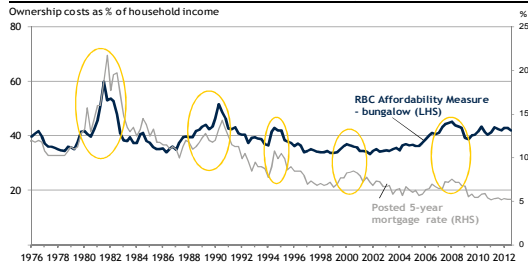
November 2012

RBC Housing Affordability Measures - Canada



Source: Statistics Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measure for a bungalow - Canada



Source: Royal LePage, Statistics Canada, Bank of Canada, RBC Economics Research

Housing affordability extended directionless trend in Canada in the third quarter of 2012

The overall trend in housing affordability in Canada continued to show a lack of direction in the third quarter of 2012. In the past two years or so, there have been alternating periods of improvement and erosion with regards to affordability, which, on net, left the general trend essentially flat on the basis of the national data. True to this pattern, housing affordability in the third quarter fully reversed two successive quarters of mild erosion in Canada, and returned (for the most part) to levels that prevailed at the end of 2011 – and were little changed relative to levels at the start of 2010. The improvement reflected modest declines in home prices and mortgage rates, as well as further household income gains. At the national level, RBC’s housing affordability measures fell in all three categories in the third quarter of 2012 (a decline represents an improvement in affordability). The detached bungalow benchmark eased by 1.0 percentage point to 42.0%, two-storey home by 1.2 percentage points to 47.8% and condominium apartment by 0.6 percentage points to 28.0%.

Slightly greater-than-average affordability tensions persist

Despite the improvement, the latest readings still point to slightly greater-than-average affordability pressures in Canada, with such imbalances being somewhat more intense in the two-storey home segment. The RBC measures continue to exceed their long-term averages modestly, although the national figures are exaggerated by extremely poor affordability in the Vancouver-area market. Excluding Vancouver, affordability measures for detached bungalows and condominium apartments in Canada just slightly surpass their long-term average, while the measure for two-storey homes remains more visibly in excess.

Widespread affordability improvement in the third quarter

The costs of owning a home at current market prices took a smaller bite of household budget in all major markets in Canada in the third quarter of 2012. The decline was greatest in the Vancouver-area market, where home prices dropped notably in the single-family home categories. Despite this decline, the Vancouver-area market remained, by far, the least affordable in Canada – RBC’s measures for Vancouver were the highest in the country by a wide margin, just barely coming off their recent peaks. RBC’s measures for other markets show that housing affordability also improved noticeably in Manitoba, Saskatchewan and Ontario (in the two-storey home segment) in the third quarter. In the case of Manitoba and Saskatchewan, the declines in homeownership costs reversed substantial increases in the previous quarter. A marginal deterioration in the detached bungalow measure in Montreal was the lone exception in Canada in the

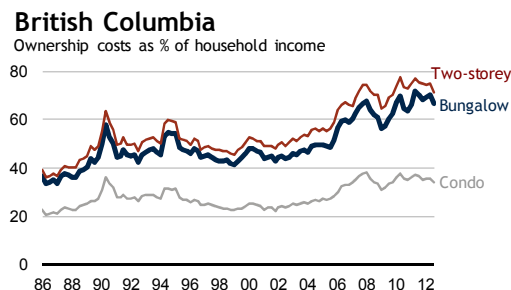
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RBC Housing Affordability Measures



Source: Statistics Canada, Royal LePage, RBC Economics Research

most recent quarter.

Divergences across local markets

Along with Vancouver, there appears to be some affordability strain persisting in the single-family home segments in the Toronto-area market, although the situation remains significantly less severe than it was in the late 1980s when the area was in the midst of a housing bubble. In Montreal, the two-storey home segment also shows some signs of mild affordability strain. At the other end of the spectrum, markets in Alberta and Atlantic Canada continue to benefit from neutral to modestly attractive affordability levels.

Housing market activity cooled further in the third quarter

The cooling in housing market activity that began in Canada in the second quarter of this year accelerated in the third. Home resales were depressed late in the summer, in large part, by the implementation of a fourth round of rule changes to government-backed mortgage insurance on July 9, which effectively raised the bar for first-time homebuyers. We expect the restraining effects from these mortgage insurance rule modifications to ease shortly, leading to stable resale activity in 2013. More recent data, in fact, suggests that home resales may have already stabilized this fall. While market conditions remain balanced in the majority of markets in Canada, price gains have moderated in recent months. We expect this moderation to persist in the period ahead and result in generally flat prices overall in 2013 (although there will be substantial regional variances).

Affordability picture vulnerable to a rise in interest rate

As we pointed out in past issues of Housing Trends and Affordability, the main factor threatening to erode housing affordability going forward is a rise in interest rates. As history since the mid 1970s demonstrates, affordability normally erode (sometimes sharply) during periods of significant mortgage rate increases. With interest rates currently at generational lows, the scope for increases during the coming years is substantial. We expect the Bank of Canada to begin the process of raising its overnight rate in the third quarter of next year, assuming that the European crisis remains contained and that the US fiscal challenges are addressed. We anticipate, however, that the central bank will proceed gradually and that household income will continue to grow, both considerations working to lessen the risk of marked erosion in affordability. Exceptionally low interest rates have been the key reason that kept affordability from reaching dangerous levels in Canada in recent years.

Provincial overviews

British Columbia – Affordability hurdles still tough to clear

Housing affordability remains poor, overall, in British Columbia but showed some improvement in the third quarter of 2012. Following back-to-back quarterly increases, the RBC measures fell in the province between 2.0 percentage points and 3.7 percentage points, representing the largest drops among the

provinces. The BC market has been under intense downward pressure this year, experiencing an 11% drop in resales, year to date, and price declines ranging between 2.0% and 3.7% in the third quarter. While prospective homebuyers received some affordability relief in the latest period, still-high home prices in markets such as Vancouver set extremely tough hurdles to clear on their way to home ownership. The situation, however, is much less severe elsewhere in the province, where the share of income needed to carry the costs of a mortgage at market prices in Victoria, for instance, is almost half the share in Vancouver for some housing types.

Alberta – Attractive affordability contributes to market’s renaissance

The Alberta housing market enjoyed an unusual mix of factors in the third quarter: firm and steady resale activity, balanced demand-supply conditions (if marginally tight), moderate home price increases, and attractive and *improving* housing affordability. Such favourable circumstances are a far cry from the prolonged slump that followed the mid-2000s boom. The market’s recent renaissance – underpinned by a vibrant provincial economy and strengthening population growth – is likely to be just at its initial stages. Strong economic growth is forecasted to continue into 2013, which bodes well for further advances next year. In the third quarter, the RBC affordability measures continued to be below both their long-term averages in province and the national averages, thereby painting a quite attractive picture. Moreover, the measures edged slightly lower (between 0.2 percentage points and 0.4 percentage points) for all housing categories.

Saskatchewan – Little evidence of undue affordability induced strain

Significant deteriorations in housing affordability in the second quarter in Saskatchewan were largely reversed in the third with RBC measures in the province falling between 0.9 percentage points and 1.3 percentage points. The measures stood just above their long term averages for all housing categories, thereby indicating little in the way of undue affordability induced strain on the market. The share of household income needed to carry the costs of owning a home at market price spiked in the second quarter because home prices surged in markets such as Saskatoon and Regina. While properties continued to appreciate for the most part in the third quarter in the province, gains were comparatively more modest (condo prices even fell slightly) and any hit on affordability was easily offset by rising household income. Home resales are on pace to set a new record high in Saskatchewan this year; however, activity has moderated since spring which has contributed to ease the market tightness that prevailed earlier this year.

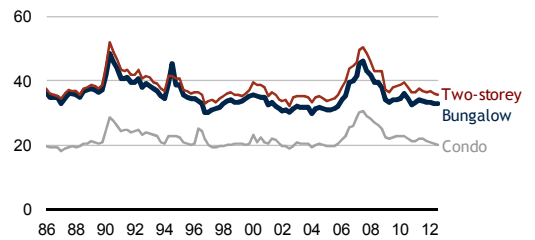
Manitoba – Market losing some of its steam

Housing market activity in Manitoba lost some of its steam through the spring and summer of this year, and this cooling contributed to an easing in demand-supply conditions in the province in the third quarter and the partial reversal of the substantial home price gains in the second quarter. In turn, these price declines led to a notable improvement in housing affordability in

RBC Housing Affordability Measures

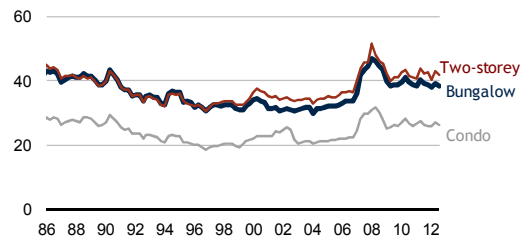
Alberta

Ownership costs as % of household income



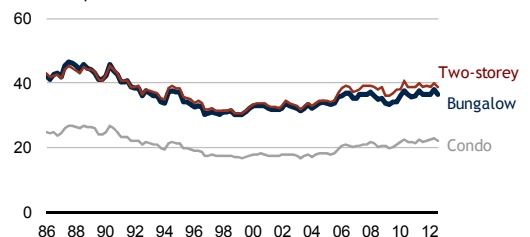
Saskatchewan

Ownership costs as % of household income



Manitoba

Ownership costs as % of household income

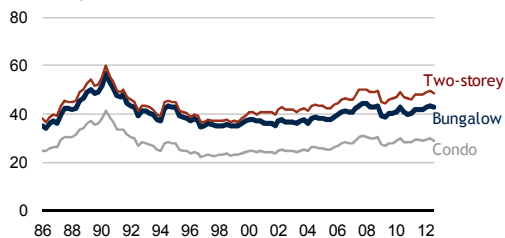


Source: Statistics Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measures

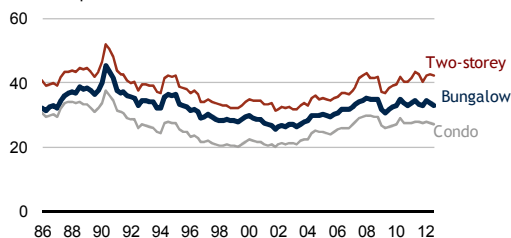
Ontario

Ownership costs as % of household income



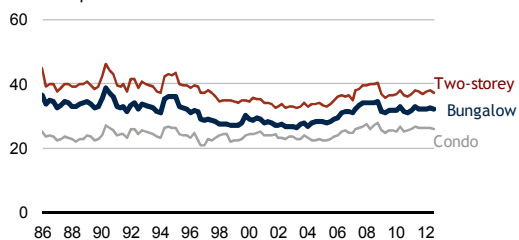
Quebec

Ownership costs as % of household income



Atlantic Provinces

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

the third quarter in the province – RBC’s measures fell between 0.6 percentage points and 1.6 percentage points – which fully undid the deterioration that occurred in the previous quarter. Affordability levels in the province are just slightly worse than they have been on average since the mid 1980s but they remain still well below the corresponding national averages (even if we exclude Vancouver). The current levels of RBC measures in Manitoba, thus, suggest minimal affordability strain at the moment.

Ontario – More balanced conditions help to ease affordability stress

The Ontario market continues to be under some mild affordability related stress – more visibly so in the two-storey home segment – but such stress eased in the third quarter. RBC measures declined between 0.5 percentage points and 1.1 percentage points in the province, which, in effect, rolled back the two consecutive quarterly increases that took place in the first half of this year. Slower home resale activity through the spring and summer amid greater availability of homes for sale released much of the heat that prevailed earlier this year in the provincial market and caused a notable moderation in the rate of property appreciation in the third quarter. In fact, the two-storey and condominium apartment categories showed some price declines relative to the second quarter. More balanced market conditions provide scope for further easing in affordability related stress in the near term in Ontario.

Quebec – Second straight affordability improvement

Housing affordability improved for the second straight quarter in Quebec in the third quarter of 2012. The RBC measures edged lower across all housing types – by between 0.6 percentage points and 0.8 percentage points – to the levels that prevailed late in 2011 in the province. For the most part, these levels are just slightly worse than they have been on average historically, thereby indicating that prospective homebuyers in Quebec would feel minimally stretched, budget-wise, if they bought a home at current market prices. Owning a two-storey home might impose greater than usual strain, however. As was the case in many other provinces, home resale activity softened in Quebec in the second and third quarters of this year, which dampened upward pressure on prices. Market conditions, while loosening somewhat recently, remained generally within balanced territory.

Atlantic – Affordability position remaining quite stable

Housing affordability changed little in Atlantic Canada in the third quarter – it improved slightly across the board with RBC’s measures in the region inching lower by 0.2 percentage points to 0.7 percentage points relative to the previous quarter. Affordability measures have been quite stable in the past three years in the region, showing no discernable trends either on the up or down sides. Atlantic Canada’s affordability position, therefore, continues to be ‘average’ from a historical perspective and attractive when compared to the majority of other provinces. Despite minimal apparent affordability stress, home resale activity moderated in the region in the third quarter, thereby causing market conditions to erode slightly – though still considered balanced. Resales fell in

the majority of local markets, including Halifax, Moncton and Saint John, as well as in Newfoundland.

Major city markets

Vancouver – Sharp declines in RBC measures; yet still unaffordable

The most significant improvement in housing affordability among Canada's largest cities in the third quarter barely dented Vancouver's unaffordable status and did little to stop the market correction that has been unfolding in the area market since spring. In the third quarter, RBC's affordability measures for Vancouver plunged by 2.0 percentage points to 5.8 percentage points, representing some of the biggest quarterly declines of the past two years in Canada. While these declines were likely welcomed news for would-be buyers in the area, the share of household income needed to cover the costs of owning a home at market prices – at 87.0% for a two-storey home, 83.2% for a detached bungalow and 42.2% for a condominium apartment – still places the ownership bar at hard-to-attain levels. We expect poor affordability to continue to weigh heavily on homebuyer demand and apply sustained downward pressure on home prices in the near term.

Calgary – Affordability at a multi-year best

The Calgary-area market both bucked and matched trends in other markets in Canada in the third quarter. It bucked the slowing trend in home resales by experiencing steady activity relative to the second quarter. At the same time, it matched the broad based improving trend in housing affordability. In the third quarter, RBC measures eased between 0.2 percentage points and 0.7 percentage points in the Calgary area to multi-year lows. The last time the measure for two-storey homes was this low (39.3%) in the area, for instance, was in early 2009. We need to go even further back to late 2005 to find the last time we saw the current level for condominium apartments (22.7%). A significant pick up in resale activity during the first half of this year tightened market conditions noticeably in Calgary. This tightening may eventually lead to stronger upward pressure on home prices in the area.

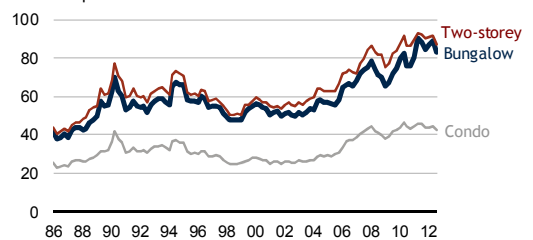
Toronto – Market cooling continues; affordability strain easing but still present

The cooling of activity in the Toronto-area market that began in the second quarter of this year intensified in the third, with home resales tumbling by nearly 12% quarter-over-quarter in the area. More subdued demand and plentiful supply of homes available for sale significantly weakened the earlier strong hand of sellers, which led to modest quarterly price declines for condominium apartments and two-storey homes. In turn, this loss of pricing momentum made things a bit easier for prospective homebuyers in the area. The share of household budget needed to cover the costs of owning a home at market prices fell for the first time this year. RBC's affordability measures declined between 0.7 percentage points and 1.3 percentage points in the third quarter, although they remained modestly above their long-term averages (particular for two-

RBC Housing Affordability Measures

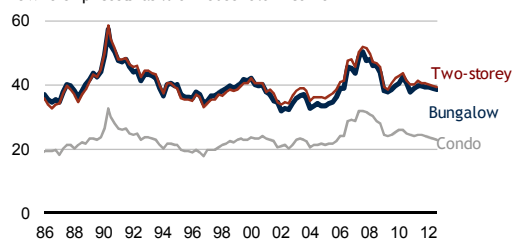
Vancouver

Ownership costs as % of household income



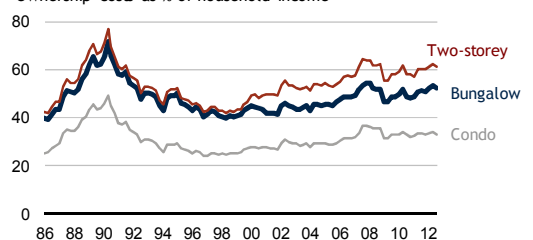
Calgary

Ownership costs as % of household income



Toronto

Ownership costs as % of household income

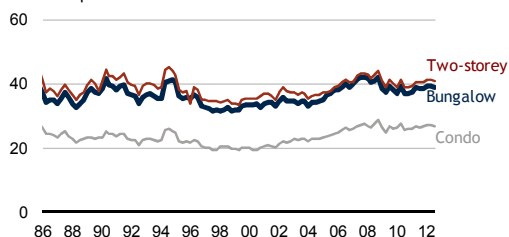


Source: Statistics Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measures

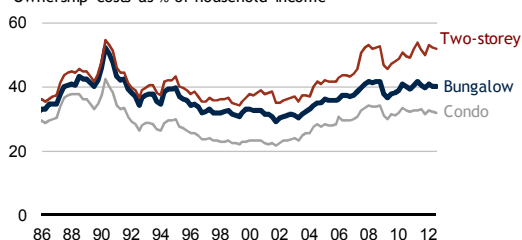
Ottawa

Ownership costs as % of household income



Montreal

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

storey homes). Affordability, therefore, still exerted some greater than usual stress on the local market.

Ottawa – Activity slowing down

After holding steady in the second quarter, housing affordability improved in the third quarter in the Ottawa-area market. The RBC measures edged down in all housing categories in the area: by 0.5 percentage points for two-storey homes, 0.4 percentage points for detached bungalows and 0.1 percentage points for condominium apartments. The costs of owning a home at market prices in Ottawa represented a slightly larger share of household income in the third quarter than they did on average since the mid 1980s, thereby hinting that local homebuyers may be facing greater than usual affordability strain. While any such strain eased in the latest period, it nonetheless might have been among the factors weighing on housing activity in recent months. Home resales fell 5.4% in the area in the third quarter, constituting the largest quarterly decline since the middle of 2010.

Montreal – Mirroring developments elsewhere in the country

Developments in the Montreal-area housing market were quite similar to those of the majority of markets in Canada in the third quarter. Home resales fell, demand-supply conditions loosened slightly but stayed balanced, price increases generally moderated, and housing affordability remained a little stretched but improved modestly for the most part. The only exception to this picture has been a very slight deterioration in the affordability of detached bungalows, as the RBC measure in this category inched higher by 0.1 percentage points in the third quarter in Montreal. The measures for the two other categories both fell by 0.5 percentage points. Since about 2007, poorer than usual affordability of two-storey homes has become the source of some stress in the area – the RBC measure for this segment rose to exceed both its long-term average and the national average. There has been little evidence of undue affordability stress beyond this market segment, however.

How the RBC Housing Affordability Measures work

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

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 bungalow 1,200 square feet, and a standard two-storey 1,500 square feet.

The measures are based on a 25% down payment, 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, Edmonton, 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 lays an equal number of observations.)

The RBC Housing Affordability Measure is based on gross household income estimates and, therefore, does not show the effect of various provincial property-tax credits, which could 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).

Summary tables

Detached bungalow

Region	Average Price			Qualifying Income (\$) Q3 2012	RBC Housing Affordability Measure			
	Q3 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q3 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	362,100	-0.8	3.8	78,100	42.0	-1.0	-0.4	38.8
British Columbia	611,400	-3.7	-1.8	117,800	66.5	-3.7	-3.9	49.4
Alberta	357,900	1.0	4.3	77,000	32.7	-0.3	-0.9	35.6
Saskatchewan	342,200	1.4	4.7	74,300	38.2	-0.9	-0.8	36.4
Manitoba	281,000	-2.8	6.6	64,700	36.5	-1.6	0.2	36.4
Ontario	388,000	0.4	6.4	86,000	42.6	-0.6	0.6	40.2
Quebec	233,700	-1.3	4.0	53,100	33.0	-0.8	-0.1	32.5
Atlantic	218,700	1.5	5.6	53,300	32.3	-0.2	0.0	31.5
Toronto	547,100	0.3	7.7	113,400	52.4	-0.7	1.4	48.1
Montreal	294,100	2.3	4.5	64,400	40.2	0.1	-0.1	36.6
Vancouver	805,300	-4.9	-1.8	151,100	83.2	-5.8	-5.0	58.5
Ottawa	390,800	0.2	5.1	89,800	38.7	-0.4	0.4	36.5
Calgary	434,300	0.4	2.5	88,500	38.3	-0.7	-1.5	39.6
Edmonton	330,200	0.0	2.3	73,500	31.1	-0.6	-1.2	33.5

Standard two-storey

Region	Average Price			Qualifying Income (\$) Q3 2012	RBC Housing Affordability Measure			
	Q3 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q3 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	408,900	-0.9	3.2	88,800	47.8	-1.2	-0.7	43.2
British Columbia	652,200	-2.7	-1.3	126,500	71.4	-3.3	-3.9	54.6
Alberta	378,400	0.6	2.6	83,500	35.4	-0.4	-1.5	38.2
Saskatchewan	367,300	0.5	6.5	81,100	41.7	-1.3	-0.4	37.9
Manitoba	300,200	-0.8	6.5	68,800	38.9	-1.0	0.3	37.4
Ontario	438,600	-1.0	5.5	97,900	48.5	-1.1	0.3	43.9
Quebec	302,200	0.5	2.6	67,700	42.0	-0.6	-0.6	38.5
Atlantic	245,300	-0.2	5.5	61,600	37.3	-0.7	-0.1	37.8
Toronto	632,500	-0.5	6.5	132,100	61.0	-1.3	1.0	53.7
Montreal	385,400	0.8	5.5	82,900	51.7	-0.5	0.2	41.8
Vancouver	836,200	-3.4	-1.3	158,000	87.0	-4.7	-4.9	63.7
Ottawa	398,300	0.0	4.9	94,200	40.6	-0.5	0.3	38.8
Calgary	431,500	1.4	4.1	90,700	39.3	-0.2	-1.0	40.2
Edmonton	368,800	0.2	-1.1	82,900	35.1	-0.5	-2.3	36.7

Standard condominium

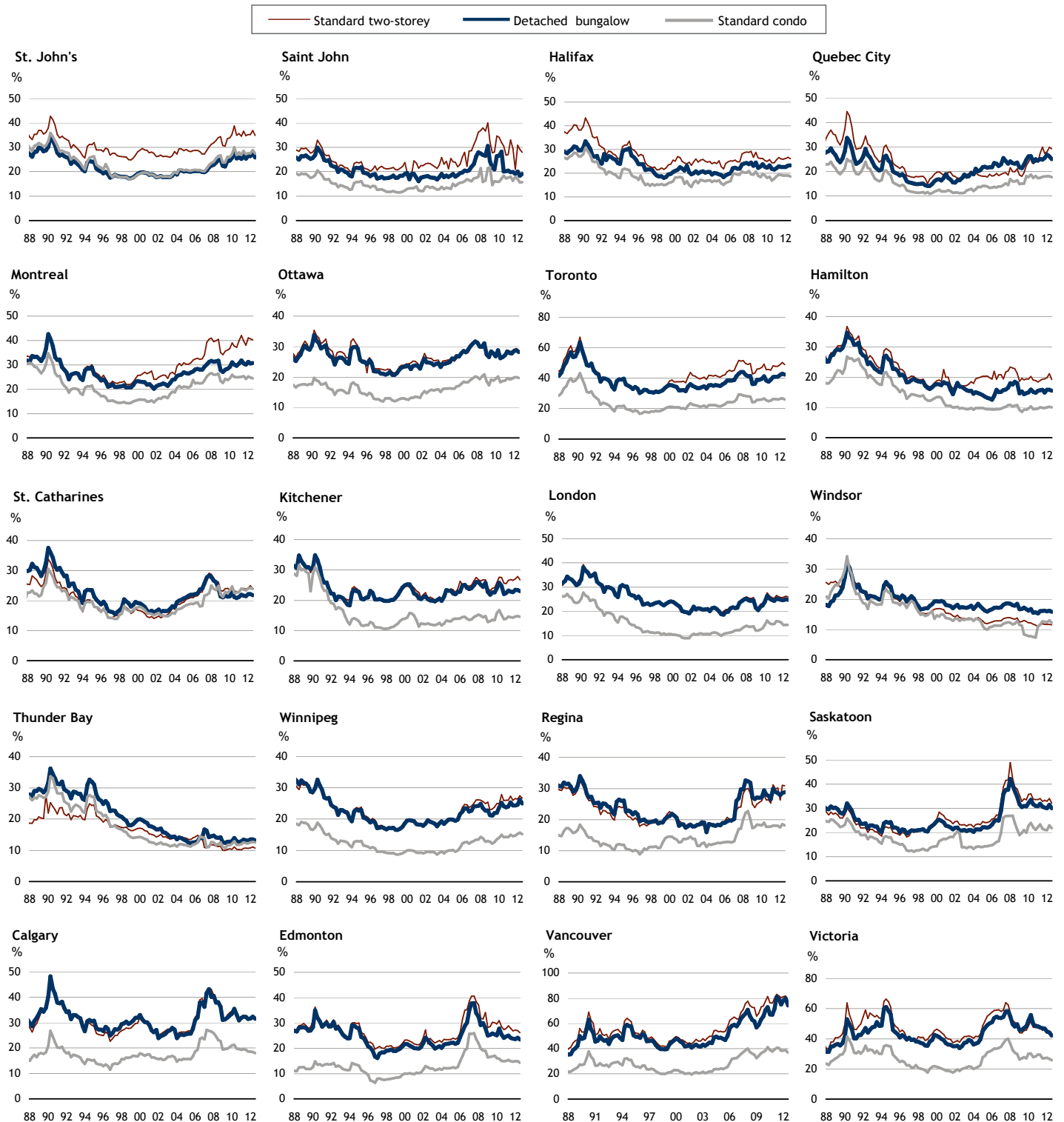
Region	Average Price			Qualifying Income (\$) Q3 2012	RBC Housing Affordability Measure			
	Q3 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q3 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	236,300	-0.6	1.3	52,000	28.0	-0.6	-0.8	26.7
British Columbia	303,700	-2.0	-3.0	60,400	34.1	-1.3	-2.4	28.0
Alberta	213,400	0.6	-2.8	47,400	20.1	-0.2	-1.8	22.0
Saskatchewan	233,900	-0.2	7.0	51,000	26.2	-1.0	-0.2	24.3
Manitoba	170,700	-0.7	8.3	39,400	22.2	-0.6	0.4	20.9
Ontario	260,300	-0.4	3.3	58,800	29.2	-0.5	-0.2	27.6
Quebec	194,700	-0.8	0.8	43,400	27.0	-0.6	-0.7	26.6
Atlantic	179,700	-0.2	3.5	43,000	26.0	-0.5	-0.4	24.4
Toronto	334,700	-1.1	2.4	71,600	33.1	-0.8	-0.4	31.1
Montreal	233,700	0.2	0.2	50,800	31.7	-0.5	-1.1	29.0
Vancouver	399,500	-2.6	-4.7	76,700	42.2	-2.0	-3.8	32.2
Ottawa	272,700	0.8	6.1	62,300	26.9	-0.1	0.5	23.5
Calgary	249,200	0.9	-2.1	52,500	22.7	-0.3	-1.8	23.0
Edmonton	200,600	-1.1	0.6	45,500	19.3	-0.4	-1.0	18.3

* Population weighted average

Source: Royal LePage, Statistics Canada, RBC Economics Research

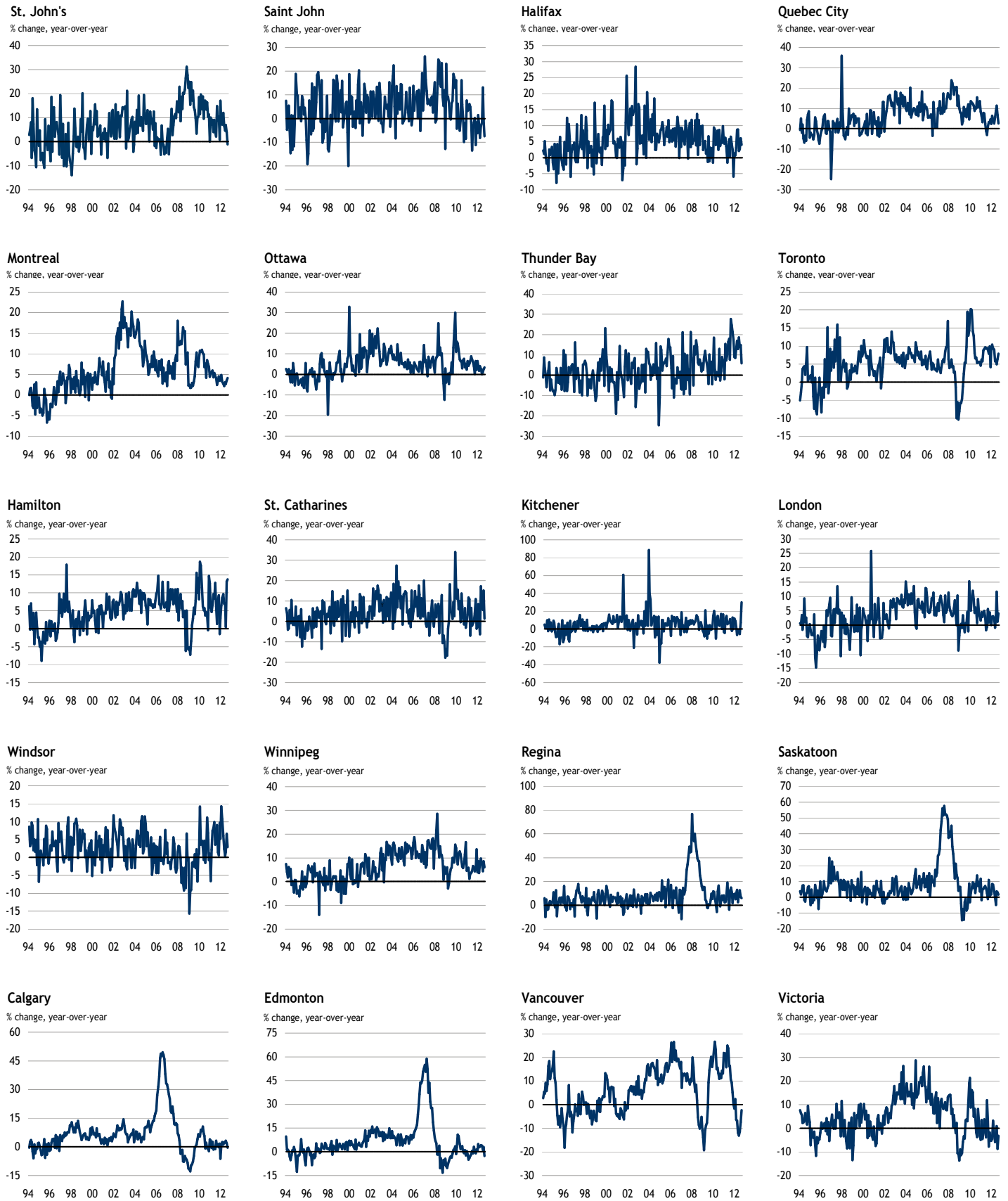
Mortgage carrying costs by city

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 constraint in the smaller CMAs. This measure is based on a 25% down payment, 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

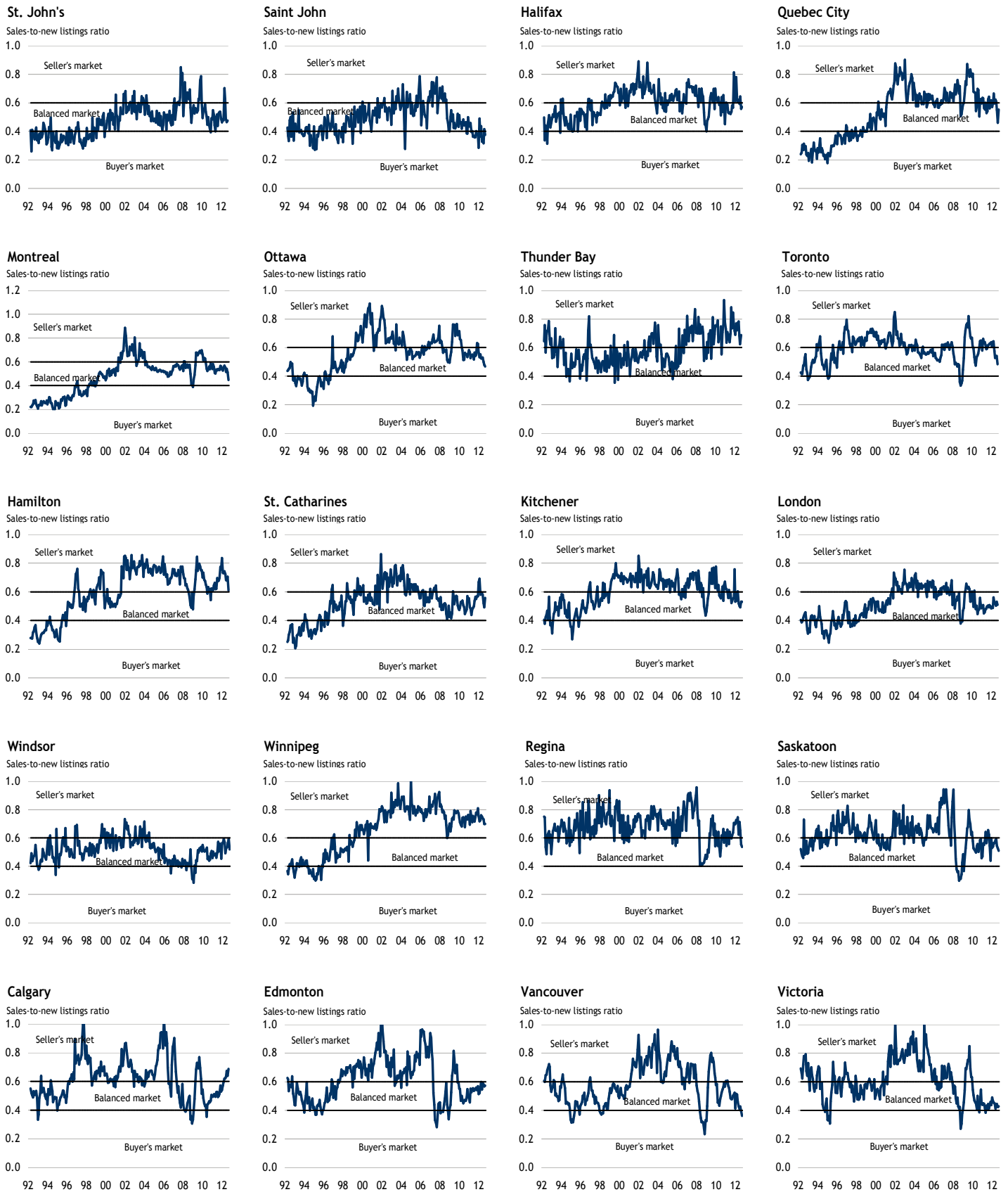
Average price of homes sold on the MLS system



Source: Canadian Real Estate Association, RBC Economics Research



Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics Research



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