

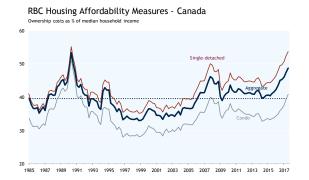
HOUSING TRENDS AND AFFORDABILITY

December 2017

Same old, same old: housing affordability deteriorated across Canada in the third quarter of 2017

Toronto buyers not enjoying any relief yet

- **A familiar refrain**: RBC's housing affordability measure eroded for a ninth consecutive quarter in Canada to its worst level since the end of 1990.
- **Broad-based deterioration**: all local markets but one saw a rise in homeownership costs in the third quarter.
- Worst-ever affordability levels: in Vancouver, Victoria and Toronto. Still!
- **Tensions rising**: for buyers in Montreal and Ottawa, though affordability isn't yet problematic.
- Close to neutral: in the Prairies and Atlantic region ownership costs aren't a significant issue for local buyers.
- Affordability pressures to intensify: our expectations of interest rate increases would raise home ownership costs across Canada in the year ahead.



Housing affordability eroding but less of a concern outside Vancouver, Toronto and Victoria RBC aggregate affordability measure: ownership costs as % of median household income



Ownership affordability is still overstretched in Vancouver, Toronto and Victoria...

Vancouver, Toronto and Victoria—in that order—continue to be where local buyers are least able to afford a home in Canada. That capability decreased further in all three markets in the third quarter as RBC's affordability measures rose in each case (a rise in the measure represents a loss of affordability). For Vancouver, it was the second-straight increase after a short, but welcome period of relief in the late stages of 2016 and early 2017. The deterioration in the latest two quarters,

in fact, put Vancouver buyers in the worst affordability position ever recorded in Canada. For Toronto, the further erosion in the third quarter was a disappointment. There was scope for some improvement given the significant cooling in resale activity since April's Fair Housing Plan. All we got was the slimmest rise in ownership costs in two years. Price declines this fall should finally bring some affordability relief in the near term. In Victoria, rapidly-rising property values continued to erode buyers' purchasing power sharply—a trend that started two years ago.

...and perhaps becoming so in Ottawa and Montreal?

Some affordability tensions may be emerging in Ottawa and, to a lesser extent, Montreal. RBC's affordability measures for both markets are trending increasingly above their respective long-run averages. While this is the result of strong market activity in the past

year, it's also a possible sign that more and more buyers face unmanageable stress. That being said, neither market is in the same league as Vancouver, Toronto and Victoria when it comes to the toll homeownership costs take on buyers. Relative to household income, the share of ownership costs was 39.2% in Ottawa and 43.5% in Montreal in the third quarter—fractions compared with 87.9% in Vancouver, 78.4% in Toronto and 64.5% in Victoria, and below the national average of 48.7%.

Canada's overall affordability picture is skewed by Canada's expensive markets

The deterioration in affordability conditions in the third quarter was broadly based across the country. RBC's aggregate measures rose in all markets that we track except Saint John. This reflected generally increasing prices and an uptick in mortgage rates. The five-year fixed mortgage rate inched higher for the first time in a year. Yet developments in Vancouver, Toronto and Victoria, remained the bigger influences on the national measure. RBC's aggregate measure for Canada rose by 1.3 percentage points to 48.7% in the third quarter. This represented the ninth increase in a row. Vancouver, Toronto and Victoria are the only markets with a measure above the national average.

The picture in the Prairies and Atlantic region isn't bad at all for buyers

Despite generalized deterioration in the third quarter, affordability isn't really an issue in large parts of the country. Trends in the Prairies and the Atlantic region continue to be mostly subdued near long-run averages. For buyers in these markets, other considerations—for example, a soft economy—often are bigger obstacles to home ownership than the actual costs of owning a home.

Rising interest rates to challenge affordability in 2018

The rise in mortgage rates that we saw in the third quarter won't be the last. Our view is that the days of ultra-low interest rates in Canada are over. We expect the Bank of Canada to build on the increases it made to its overnight rate in July and September by hiking it again three times in 2018 by a total of 75 basis points. And we expect longer-term rates to rise in tandem. Higher interest rates could have significant implications for housing affordability in Canada. We estimate that, everything else remaining constant, a 75 basis point increase in mortgage rates would lift RBC's aggregate measure for Canada by approximately 2.5 percentage points. All markets would be affected but the effect would be more substantial in high-priced markets—more than 5 percentage points in the case of Vancouver. While high sensitivity to a rise in interest rates highlights material vulnerability, the reality is bound to be less threatening as other factors such as income gains will mitigate part of the impact. Household income would need to climb by 8.5% to fully cover the increase in homeownership costs arising from a 75 basis-point hike in mortgage rates. Rising interest rates and more stringent qualifying rules for uninsured mortgages coming into effect in January are poised to raise the bar significantly for many buyers in Canada.



British Columbia

Victoria – Affordability continues to erode but strong economy lends support to the market

Victoria's housing market loosened up since the beginning of 2017 but not enough to take away sellers' control over prices. This sustained intense upward price pressure through the third quarter of 2017 kept housing affordability on a sharply deteriorating trend. RBC's aggregate affordability measure rose for a 10th consecutive time last quarter, jumping by 2.7 percentage points to a record-high of 61.5%. Victoria's measure, in fact, recorded the second-largest increase relative to a year ago (7.2 percentage points) among the markets we track in Canada after Toronto. Deteriorating affordability no doubt weighs on home resale activity in area. Resales fell nearly 18% year over year in the third quarter. Nonetheless, the risk of a full-blown derailment is low. Victoria's economy is vibrant with steady job creation and one of the lower unemployment rates of the country. This will continue to lend support to the housing market.

Vancouver area – On the front burner... and affordability passes the boiling point

Prices are tracking an upward trajectory again in the Vancouver area—although it must be noted that condo prices never really stopped rising—and the overstretching of affordability has resumed in earnest. The area experienced the sharpest affordability drop among Canada's major markets between the second and third quarters. RBC's aggregate measure surged by 5.3 percentage points to 87.5%. This represents a new record high for any market in Canada. Demand-supply conditions were tight in the third quarter—entrenched in sellers' market territory—and will continue to keep the heat on prices in the near term in the area. And with interest rates poised to rise in the year ahead, the outlook for affordability is grim. Any relief is unlikely to occur on its own. We see further downside to Vancouver's home ownership rate in the period ahead. The rate fell from 65.5% in 2011 to 63.7% in 2016.

Alberta

Calgary – Market struggles to recover despite being affordable

Becoming a home owner should be within reach for many Calgary households. Yet this isn't enough of a draw to get more Calgarians back into the housing market. Home resale activity softened mid-year after showing encouraging signs of recovery through most of 2016 and early 2017. This is likely to be just a bump on the road to recovery, however. Alberta's economy is on the mend, and as jobs prospects improve more and more, confidence about Calgary's housing market will rebuild. RBC's aggregate measure rose by 0.8 percentage points in the third quarter to 40.6%. This is still below the long-run average of 41.4% in the area.

Edmonton - Good affordability helps to spur resale activity

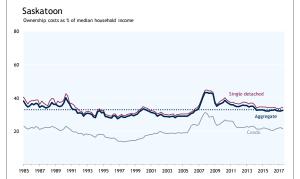
Edmonton market's year-old recovery resumed in the third quarter after a brief pause in the second quarter. Attractive affordability conditions continued to be a favourable factor supporting homebuyer demand. RBC's aggregate measure, at 31.2% in the third quarter, still stood well below the historical norm (34.6%) in the area. The slight erosion that occurred in the latest period—the measure inched higher by 0.4 percentage points—reflected a firming of demand-supply conditions and prices. The outlook for the market is improving. Edmonton's job market finally began to heal in recent months, which bodes well to boost consumer confidence in the period ahead.

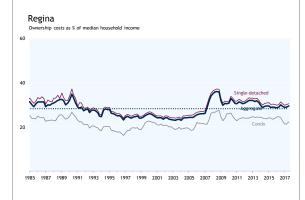
RBC Housing Affordability Measures Victoria Vancouver Area 100 Calgary Edmonton

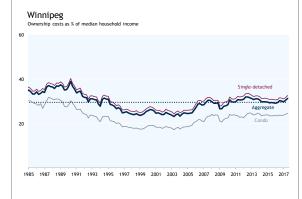


Source: RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics

RBC Housing Affordability Measures









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

Saskatchewan

Saskatoon - Lack of confidence trumps affordability advantage

The story hasn't changed in the third quarter for Saskatoon's housing market unfortunately. Poor job prospects—albeit improving slightly—continue to weigh on homebuyer demand. Home resales slumped further to a seven-year low. Buyers remained in full command of the market and drove prices lower still. Housing affordability is relatively attractive in the area, which should normally be a positive factor for sales. But this doesn't count for much these days when the unemployment rate is still near a multi-decade high and consumer confidence is low. RBC's aggregate affordability measure climbed slightly higher by 0.3 percentage point in the third quarter to 32.5%. This is below the long-term average of 33.0%.

Regina - Light at the end of the tunnel?

In Regina, the news has been a little more encouraging lately. Home resales rose for a second-straight time at a fairly brisk rate of 4.7% in the third quarter. This contributed to re-balance the market after demand-supply conditions tipped into sellers favour in the previous quarter. Prices inched higher, reversing part of their decline since the middle of 2016. A sharp drop in Regina's unemployment rate in November, should it be sustained, bodes well for the budding market recovery to continue. It would help boost consumer confidence. Housing affordability generally still isn't a major obstacle for local buyers at this stage. It remains in line with historical norms for the area. RBC's aggregate measure rose by 0.6 percentage points to 29.5%.

Manitoba

Winnipeg - Market stays busy although some affordability erosion looms

It's been another very busy year in the Winnipeg housing market. Home resales are on track to equal, or possibly surpass, last year's record high. Buyers and sellers took a pause to catch their breath in the third quarter but this is likely to be short-lived. The economic landscape is positive. Among other things, Winnipeg's job market is healthy. The unemployment rate is down by more than one percentage points from a year ago. Home ownership costs, while not really cheap, aren't likely to deter buyers at this stage. RBC's aggregate affordability measure for the area remains close to its long-run average. Still, the measure increased by 0.9 percentage points to 31.3% in the third quarter, which denotes a slight deterioration in affordability. With tighter demand-supply conditions giving a stronger hand to sellers, further modest deterioration may be in the cards in the near term.

Ontario

Toronto area - Calmer but still unaffordable

It's been a wild ride for Toronto's housing market in 2017. But the more balanced demand-supply conditions that emerged post-Fair Housing Plan have yet to temper affordability tensions in the area. RBC's aggregate measure continued to rise in the third quarter, albeit by the smallest extent—1.3 percentage points—in almost two years. This was the 13th-consecutive quarterly increase. The level of 78.4% in the measure in the third quarter constitutes yet another record high for the area. The costs of owning a home clearly are well beyond the means of many local buyers. Recent downward pressure on prices should bring a little bit of relief in the period ahead. The bad news, unfortunately, is that rising interest rates will take some of that relief away. For an



increasing number of households in the Toronto area, renting may be the only viable housing option—if they can find an apartment in which to live, that is.

Ottawa - Riding high... at the expense of affordability

2017 is shaping up to be the strongest year ever for Ottawa's housing market. Home resales are on pace to set a new record high. Demand-supply conditions are tighter with sellers now calling the shots. Prices are rising at their fastest rate in seven years and likely to continue to do so in the near term. It's great to see such vitality in the market considering how soft things were as recently as 2014 and 2015. But one of the few drawbacks is that it's becoming less affordable for local buyers to buy a home in the area. RBC's aggregate measure has increasingly deviated from its long-run average (35.1%) in the past year. In the third quarter, the measure rose by 0.9 percentage points to 39.2%. This represents the highest level since 1995. For now, buyers aren't overly fussed by this. They're fired up by better job prospects in the region. Their attitude may change if interest rates rise, though.

Quebec

Montreal area – All abuzz despite home-buying becoming less affordable

The buzz is definitely back in Montreal's housing market. Resale activity is the strongest we've seen in years—if not ever. Buyers must move more quickly to make deals. Sellers have a stronger hand in setting prices. Even sellers of condo apartments, who previously had to contend with high forsale inventories, have more sway. Confidence in the market rose on the back of a reinvigorated regional economy and strong labour market. The buzz is likely to persist in the near term, although tighter mortgage lending rules and the spectre of higher interest rates may put a damper on things later in 2018. Modestly eroding housing affordability may also be a factor. RBC's aggregate measure for the area is now above its long-run average of 39.5%. The measure rose for a fifth time in the past six quarters in the third quarter. It climbed by 0.9 percentage point to 43.5%.

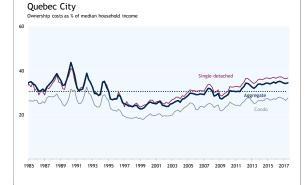
Quebec City – Demand-supply mismatch a symptom of affordability tensions

Generally speaking, homebuyers are in the driver's seat when it comes to setting prices in Quebec City. Buyers have plenty of options to choose from and use this advantage to resist price increases. The main exceptions are in the lower-priced market segments where demand exceeds supply. This state of affairs illustrates the way affordability tensions play out in Quebec City's market: facing significant affordability hurdles at the more expensive price points, homebuyers pile up at the lower end of the market. Soft prices, in the aggregate, have more to do with the mismatch between demand and supply than outright slumping demand. In fact, total home resale activity in the area has been quite robust this year notwithstanding a lull mid-year. And with the area's unemployment rate reaching a decade low recently, demand is poised to remain vibrant in the near term. There's been little change in housing affordability in the past year and a half in Quebec City. RBC's aggregate measure inched higher by 0.4 percentage points to 34.5% in the third quarter. Yet this was down marginally from a year ago.

RBC Housing Affordability Measures





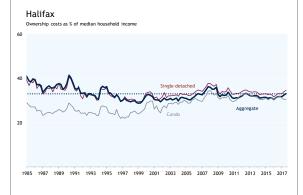


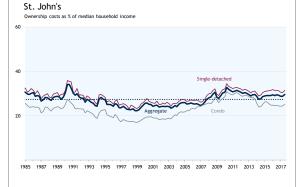
Source: RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics Research



RBC Housing Affordability Measures

Saint John Ownership costs as % of median household income 60 40 Aggregate 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017





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

Atlantic Canada

Saint John - Most affordable market in Canada has plenty to offer

As the most affordable market that we track in Canada, Saint John has plenty to offer to local homebuyers. And their numbers have been on the rise throughout most of 2017. Home resales in the area are on pace to be the strongest since 2008. Much improved job prospects will continue to support the upswing in the near term. The market is balanced. Yet prices have softened this year, although this is largely payback for a rapid run-up in 2016. We expect prices to firm somewhat in the period ahead. RBC's aggregate affordability measure eased for a second-straight time by 0.3 percentage points to 24.5% in the third quarter.

Halifax – Market momentum at risk of slowing though affordability is not a factor

Halifax's housing market carries substantial momentum as 2017 draws to a close. In fact, 2017 could be the best year since 2012 in terms of home resales in the area. Tighter demand-supply conditions have put prices on their steepest trajectory since 2010. The market may lose some momentum, however, if headwinds in Halifax's job market persist. The unemployment rate surpassed the 7.0% mark this fall for the first time in 15 years. This could affect confidence negatively. Housing affordability plays a largely neutral role at this stage. RBC's aggregate measure was 33.1% in the third quarter—that is virtually at the longer-run average of 33.0% in the area. This was up by 0.6 percentage points from the previous quarter.

St. John's - Signs of life likely to be fleeting

St. John's housing market gave some signs of life in the third quarter after slumping to the lowest activity levels in a decade over the first half of this year. However, with jobs still declining steadily and the unemployment rate remaining stubbornly high at this point, the pick-up in home resales in the third quarter is unlikely to be sustained. The outlook for St. John's market remains grim unfortunately. Buyers are in full control of the market. There are too many properties for sale relative to the number of buyers. Prices are flat at best. They're declining for single-detached homes because their higher points relative to other housing categories make it more difficult for buyers to afford. Overall affordability has been largely static since 2015. RBC's aggregate measure increased by 1.0 percentage point in the third quarter to 29.7%. This level was little changed from a year ago.



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 based on the average market price for single-family detached homes and condo apartments, as well as for an overall aggregate of all housing types in a given market.

Current home prices are sourced from RPS, and established from sales prices from monthly transactions, which are filtered to remove extreme values and other outliers.

The aggregate of all categories includes information on prices for housing styles not covered in this report (semi-detached, row houses, townhouses and plexes) in addition to prices for single-family detached homes and condominium apartments. In general, single-family detached homes and condo apartments represent the bulk of the owned housing stock across Canadian markets.

The affordability 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 14 major urban markets in Canada and a national composite. 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 home. 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.

Summary tables

Aggregate of all categories								
	Price			RBC Housing Affordability Measure				
Market	Q3 2017	Q/Q	Y/Y	Q3 2017	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada	511,100	2.0	11.1	48.7	1.3	3.7	39.6	
Victoria	771,100	3.2	16.1	61.5	2.7	7.2	44.4	
Vancouver area	1,106,500	4.9	4.2	87.9	5.3	2.6	59.2	
Calgary	501,300	1.0	4.3	40.6	0.8	1.6	41.4	
Edmonton	410,400	0.5	1.8	31.2	0.4	0.7	34.6	
Saskatoon	374,200	-0.4	-1.4	32.5	0.3	-0.4	33.0	
Regina	335,400	1.2	-1.5	29.5	0.6	-0.4	28.1	
Winnipeg	309,900	1.7	5.6	31.3	0.9	1.1	29.4	
Toronto area	898,000	0.6	19.2	78.4	1.3	10.3	49.6	
Ottawa	403,300	2.1	6.2	39.2	0.9	1.2	35.1	
Montreal area	406,600	2.0	5.5	43.5	0.9	1.2	39.5	
Quebec City	294,000	0.7	0.0	34.5	0.4	-0.5	30.4	
Saint John	198,300	-1.9	-4.5	24.5	-0.3	-0.9	25.8	
Halifax	322,600	1.8	6.4	33.1	0.6	1.4	33.0	
St. John's	316,400	0.3	-1.4	29.7	1.0	0.3	27.3	

Single-family detached								
	Price			RBC Housing Affordability Measure				
Market	Q3 2017	Q/Q	Y/Y	Q3 2017	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada	561,600	1.9	11.5	53.7	1.3	4.2	42.2	
Victoria	823,500	3.2	15.0	65.9	2.9	7.2	46.8	
Vancouver area	1,545,200	3.6	2.3	120.7	6.0	1.5	68.8	
Calgary	546,000	0.7	4.4	44.3	0.8	1.8	44.3	
Edmonton	439,000	0.5	1.7	33.5	0.4	0.6	36.7	
Saskatoon	389,100	0.5	0.2	34.4	0.5	0.0	34.5	
Regina	336,400	0.6	-2.5	30.5	0.5	-0.7	29.2	
Winnipeg	314,900	1.7	5.2	32.5	0.8	0.9	30.8	
Toronto area	1,081,300	0.3	21.6	93.8	1.3	13.9	57.2	
Ottawa	450,600	2.2	7.1	44.2	1.0	1.7	39.2	
Montreal area	392,400	2.5	7.1	43.3	1.1	1.7	38.6	
Quebec City	303,900	0.7	0.5	36.6	0.3	-0.4	31.2	
Saint John	206,200	-1.5	-5.7	26.2	-0.2	-1.2	28.4	
Halifax	330,100	1.8	7.1	34.6	0.6	1.6	33.6	
St. John's	329,300	0.2	-2.6	31.5	1.0	0.1	28.7	

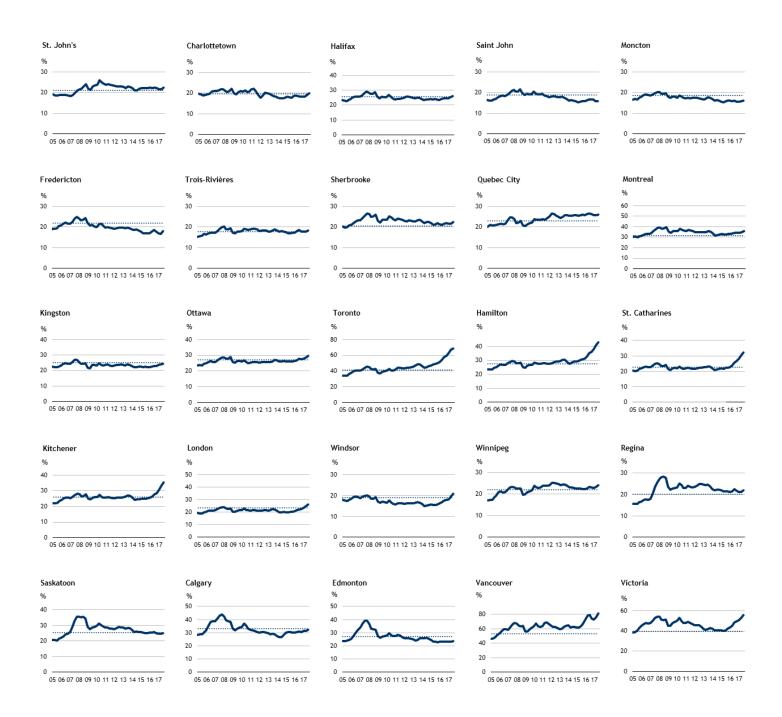
Condominium apartment								
	Price			RBC Housing Affordability Measure				
Market	Q3 2017	Q/Q	Y/Y	Q3 2017	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada	439,000	3.6	17.7	40.9	1.7	5.0	34.3	
Victoria	467,300	1.3	23.1	38.5	1.1	6.0	32.2	
Vancouver area	608,000	6.4	20.2	50.1	3.5	7.2	39.6	
Calgary	299,100	1.2	0.4	26.1	0.5	0.3	27.3	
Edmonton	251,600	1.0	3.1	20.5	0.3	0.6	22.0	
Saskatoon	238,200	-5.4	2.9	21.5	-0.6	0.4	20.5	
Regina	255,700	4.5	-8.7	22.3	1.0	-1.7	22.1	
Winnipeg	246,900	0.4	5.4	24.5	0.4	0.8	22.9	
Toronto area	475,800	3.4	22.6	43.4	1.6	6.2	31.3	
Ottawa	313,000	2.7	6.5	29.4	0.8	1.1	24.1	
Montreal area	324,900	1.0	3.6	34.3	0.5	0.5	32.8	
Quebec City	247,400	4.7	0.1	27.5	1.1	-0.4	24.3	
Saint John	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Halifax	313,600	-0.3	-3.2	30.5	0.1	-1.1	27.9	
St. John's	279,300	-0.1	0.3	25.2	0.8	0.6	23.1	

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



Mortgage carrying costs by city

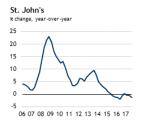
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at market prices, including principal and interest, property taxes and utilities; the modified measure used here includes the 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.



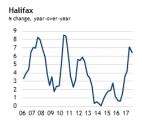
The dashed line represents the long-term average for the market. Source: RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics Research

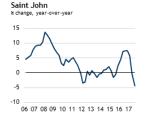


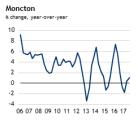
Aggregate home price









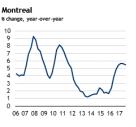


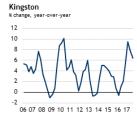


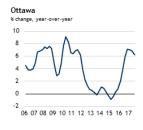


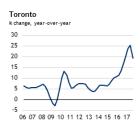


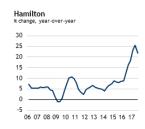


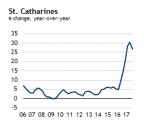




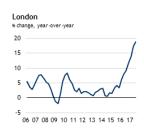










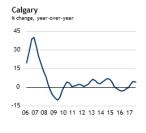


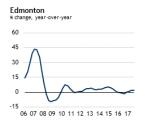












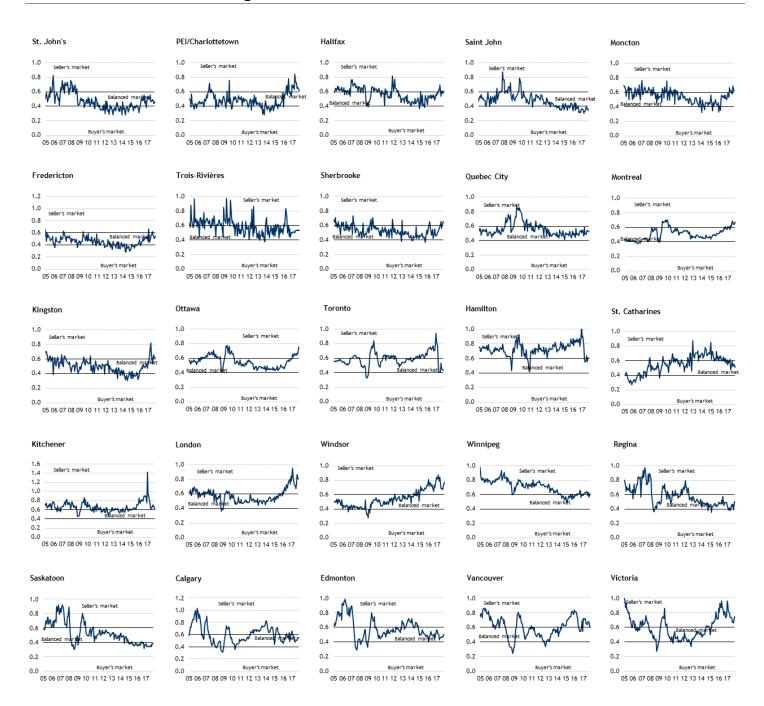




Source: RPS, RBC Economics Research



Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics Research

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