



HOUSING TRENDS AND AFFORDABILITY

September 2017

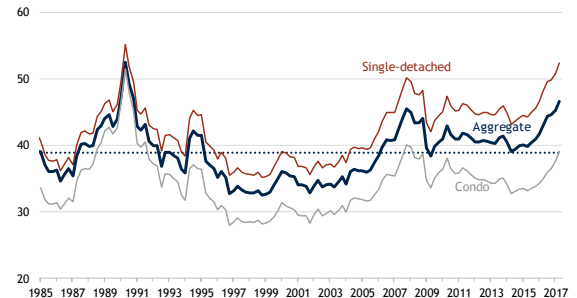
Housing affordability strains intensified in Canada in the second quarter of 2017

Little relief in sight as interest rates begin to rise

- RBC’s housing affordability measure eroded for an eighth consecutive quarter in Canada to its worst level since the end of 1990.
- The Toronto area experienced the biggest deterioration among the local markets tracked by RBC. RBC’s measure has never been this poor in Toronto.
- Victoria also saw significant erosion, extending a year-long trend.
- In the Vancouver area, home ownership costs rose again after declining in the previous two quarters.
- Affordability pressures generally were in line with long-run averages outside Ontario and British Columbia.
- Rising interest rates are poised to weigh on home ownership costs across Canada in the period ahead.
- Affordability in high-priced markets will be most sensitive to interest rate hikes.

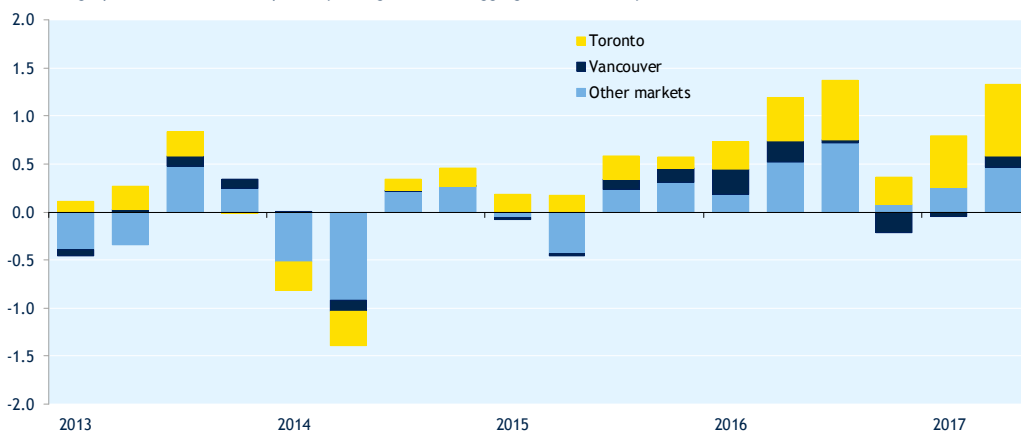
RBC Housing Affordability Measures - Canada

Ownership costs as % of median household income



Toronto accounted for most of the rise in RBC's affordability measure in the first half of 2017

Percentage point contribution to quarterly changes in RBC's aggregate affordability measure for Canada



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

Concerning trends in Toronto still front and centre

Developments in the Toronto area continued to be the more powerful force moving the affordability needle at the national level in the second quarter. Toronto recorded another significant increase in home ownership costs as home prices escalated further over this period. Buyers and sellers instantly reacted to Ontario’s Fair Housing Plan introduced in April drew although the impact on prices wasn’t felt immediately. Evidence of price moderation in the Toronto region emerged too late to make a difference

in the second quarter. As a result, RBC’s aggregate housing affordability measure for the Toronto area kept skyrocketing to yet a new record-high level of 75.4% (a rise in the measure represents a loss of affordability). The increase was the main contributor to an eighth-straight, 1.4 percentage-point rise in Canada’s aggregate measure to 46.7%. This represented the most strained level of affordability nationwide since the end of 1990. It must be said, however, that extremely poor affordability in parts of Ontario and British Columbia skew Canada’s overall picture. Outside of these two provinces, housing affordability trends generally have been more stable.

So much for affordability relief in Vancouver

Since giving up the title as Canada’s most overheated market to the Toronto region in the second half of last year, Vancouver experi-

enced some affordability relief. This was largely thanks to the introduction of policies designed to cool the market down—including a foreign buyer tax in August 2016. But that period of relief came to a quick end in the second quarter as home prices began to rise faster again. In the end, the decline in ownership costs that took place in the fourth quarter of 2016 and first quarter of 2017 made little difference for most buyers—owning a home at market price is still out of the reach of most Vancouver households. The prospects of further affordability deterioration in the area will re-elevate concerns about the Vancouver market in the period ahead. Policymakers no doubt will pay close attention.

Victoria on Vancouver's trail

Policymakers will want to monitor developments in Victoria closely as well. Housing affordability pressures in that market have intensified steadily in the past year. Victoria, in fact, has seen the second-largest decrease in affordability since the second quarter of 2016 after the Toronto area. Events in Vancouver's market—including the introduction of the foreign-buyer tax—contributed significantly to fuel property values in Victoria. The rebound in activity in Vancouver could be another event with similar implications.

Affordability trends mostly stable outside Ontario and British Columbia

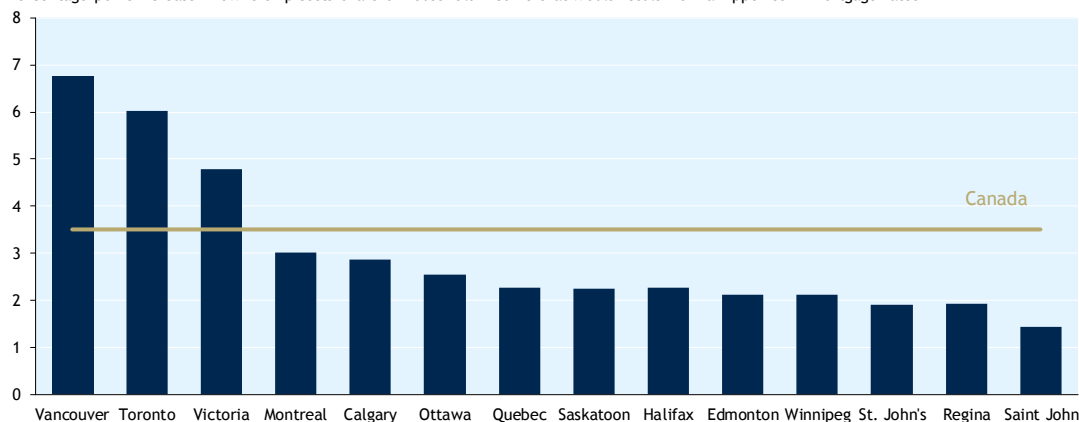
There's little new to report in markets outside of southern Ontario and British Columbia. Affordability trends continue to be subdued for the most part, showing slight improvements in many Prairie markets and marginal deterioration in most of Quebec and the Atlantic region. Calgary is an exception in the West where affordability eroded modestly in the past year. And St. John's is an exception in the East where ownership costs have declined from a year ago. Overall, we find little evidence of undue affordability stress across these markets. At the margin, affordability may be a little stretched in Ottawa, Montreal and Quebec City based on their RBC measures exceeding long-run averages but we see nothing that concerns us much.

Rising interest rates will weigh on affordability

The days of ultra low interest rates in Canada are over. Back-to-back increases in the overnight rate by the Bank of Canada in June and September made it clear. These increases are just the beginning of a hiking campaign. We expect the Bank of Canada to raise its overnight rate one more time before year-end and three times in 2018 for a total increase of 100 basis points. And we expect longer-term rates to follow suit. Mortgage rates are already on the move and will continue to track an upward trajectory. Rising interest rates could have significant implications for housing affordability in Canada. We estimate that, everything else remaining constant, a 100 basis point increase in mortgage rates would lift RBC's aggregate measure for Canada by approximately 3.5 percentage points. All markets would be affected but the effect would be most substantial in high-priced markets—almost 7 percentage points in the case of Vancouver. This would occur at a time when housing affordability is already stretched in some of Canada's largest markets. 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 at least of part of the impact.

Ownership costs in Canada's expensive cities are the most sensitive to a rise in interest rates

Percentage-point increase in ownership costs' share of household income that would result from a 1 ppt rise in mortgage rates



Source: Brookfield RPS, Statistics Canada, RBC Economics Research

British Columbia

Victoria – Lack of affordability is a growing issue for buyers

The homeownership bar continued to rise in Victoria in the second quarter. Property values in the area appreciated quickly for an 11th consecutive quarter amid still-tight demand-supply conditions. RBC's aggregate affordability measure jumped by 1.8 percentage points to a near record-high of 58.6%. This is the third-highest measure among the markets that we track in Canada after the Vancouver and Toronto areas. Clearly, the lack of affordability is a growing issue for would-be buyers. Home resales activity cooled noticeably by almost 23% in the past year. The silver lining of this correction, however, is that the market tightness is easing, and more balanced conditions are in sight. This should help ease some of the upward price pressure in the period ahead.

Vancouver area – Is that all for affordability relief?

Any buyer hoping for a major affordability breakthrough in the Vancouver area will be disappointed. RBC's aggregate measure rebounded by 2.6 percentage points in the second quarter after back-to-back declines. At 80.7%, the measure still remained the highest in Canada by far. The rise in the second quarter reflected a tightening of demand-supply conditions. Home resales picked up following a year-long correction as the dampening effect of policy measures introduced last year to cool the market—which included a 15% tax on purchases by foreign nationals—waned. With demand-supply conditions back in favour of sellers, home prices resumed an upward trajectory this spring. This means that the window for a meaningful improvement in affordability in the Vancouver area likely has closed for now. The cumulative decline of 5.8 percentage points in RBC's measure between the fourth quarter of 2016 and first quarter of 2017 looks like all the relief local buyers will get this cycle. Worse—this relief may well be temporary. Not only are prices on the rise again but interest rates have begun to climb as well. The prospects for further rate hikes in the period ahead will put growing upward pressure on home ownership costs in Vancouver.

Alberta

Calgary – Soft patch to be temporary

Growing evidence that Alberta's economic turnaround is solidly on track has been positive for Calgary's housing market. Yet, the recovery process in Calgary hasn't been smooth. A case in point: activity hit a soft patch in the second quarter coinciding with a fresh bout of global oil price volatility. This likely will prove to be a minor setback because oil prices have mostly recovered since then and Calgary's market fundamentals continue to improve. In particular, economic momentum is gathering, demand-supply conditions have returned to balance overall and housing affordability is broadly favourable for buyers. RBC's aggregate affordability measure, which was unchanged at 39.2% in the second quarter, remains below the long-run average for the area (40.9%). The very modest pace of home price increases is poised to keep home ownership affordable in the short term.

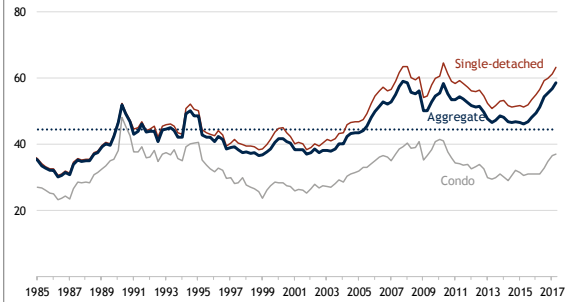
Edmonton – Affordability not a concern, unemployment is

Housing market developments in Edmonton have been quite similar to those in Calgary lately. The year-old recovery paused in the second quarter. Home resales eased relative to first-quarter levels—although they were still solidly above year-ago levels—and properties listed for sale increased. Yet demand-supply conditions stayed in balance and prices continued to rise at a slow pace. Housing affordability was little changed at favourable terms for local

RBC Housing Affordability Measures

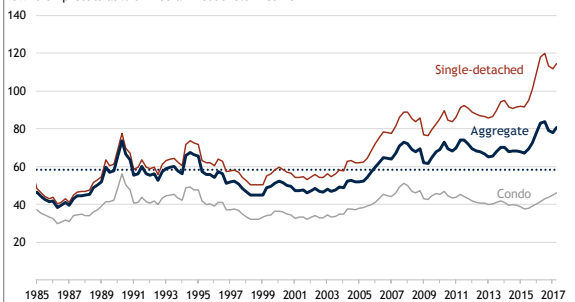
Victoria

Ownership costs as % of median household income



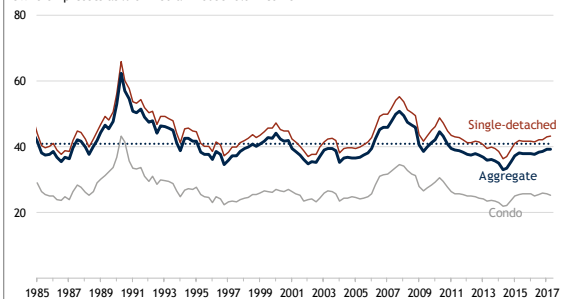
Vancouver Area

Ownership costs as % of median household income



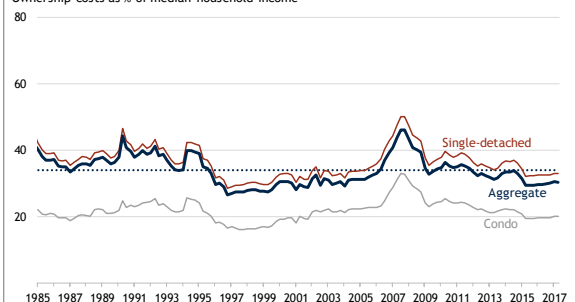
Calgary

Ownership costs as % of median household income



Edmonton

Ownership costs as % of median household income

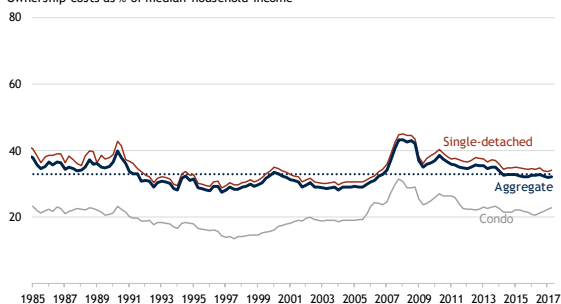


Source: Brookfield RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measures

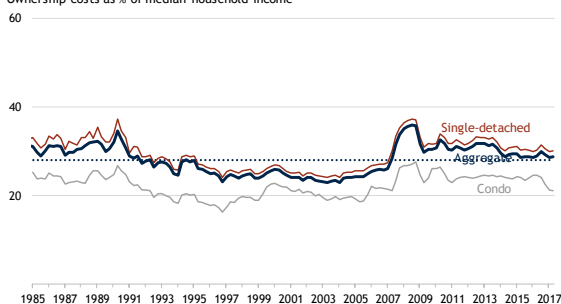
Saskatoon

Ownership costs as % of median household income



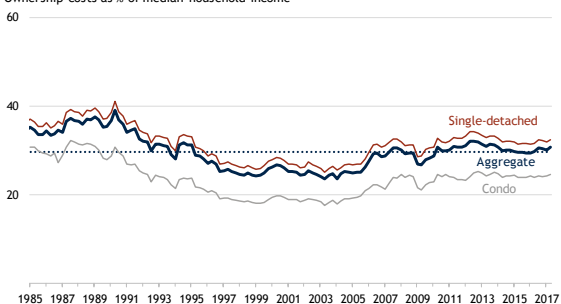
Regina

Ownership costs as % of median household income



Winnipeg

Ownership costs as % of median household income



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

buyers. RBC's aggregate measure slipped marginally by 0.2 percentage points to 30.3%. This continued to be noticeably lower than the long-term average of 34.0% in the area. Prospects for further recovery in Edmonton's housing market aren't as bright as they are for Calgary, however. That's because Edmonton's job market has yet to begin healing. The area's unemployment rate is still rising whereas Calgary's rate has trended downwardly since late-2016.

Saskatchewan

Saskatoon – Good affordability not enough to shake off market slump

Times are tough for Saskatoon's housing market. Home resale activity fell to a seven-year low in the second quarter. Buyers are in full command of the market and continue to drive prices lower. Yet too few of them are motivated—or able—to jump into the market. Clearly, poor job prospects are a demoralizing factor. Saskatoon's unemployment rate is not only high (at 8.3% most recently), it is still trending upwardly. Affordability is unlikely to be an issue for buyers, however. It has improved steadily in the past several years and compares well relative to historical norms. RBC's aggregate affordability measure inched slightly higher by 0.2 percentage point in the second quarter to 32.1%.

Regina – Activity stabilizes but remains weak

Times aren't much better in Regina's housing market. Home resale activity in Regina stabilized near an eight-year low in the second quarter. This followed a sharp 12% drop in the first quarter. Demand-supply conditions clearly favour buyers at this stage. But buyers lack confidence. Earlier hopes for an improvement in the local job market were dashed more recently as Regina's unemployment rate jumped to a 10-year high in August. As is the case in Saskatoon, housing affordability generally is not a major obstacle for local buyers. It remains in line with historical norms for the area. RBC's aggregate measure barely budged in the second quarter, rising marginally by 0.1 percentage point to 28.7%. With prices poised to soften further in the near term, affordability is unlikely to deviate from its long-running improving trend.

Manitoba

Winnipeg – Riding on stronger job market and neutral affordability

Neutral affordability conditions continue to support brisk housing activity in Winnipeg. Home resales in the area are on pace to equal, if not surpass, last year's record high. They rose back-to-back in the first and second quarters of this year alongside a significant firming of the job market. Winnipeg's unemployment rate dropped by a full percentage point during the first half of 2017. The increases in home resales led to a tightening of demand-supply conditions and a build-up in price pressure. The impact on affordability was contained by gains in household income, however. RBC's aggregate measure rose by 0.6 percentage points to 30.7% in the second quarter. This was still very close to the long-run average of 29.7%.

Ontario

Toronto area – Definitely cooling but still far from affordable

After reaching dangerously overheated conditions early this year, the Toronto-area market reacted swiftly to Ontario's Fair Housing Plan introduced on April 20. Sellers rushed to list properties for sale and buyers ran to the side-

lines in the weeks that followed the announcement. Home resales plummeted by 44% between April and July, and earlier super-tight demand-supply conditions loosened dramatically to benefit buyers. Yet the impact on prices wasn't immediate. It took a little longer for them to soften such that quarterly average prices continued to escalate in the second quarter. This took a further substantial toll on housing affordability in the area. RBC's aggregate measure jumped by 4.3 percentage points to 75.4% in the latest period. It was a 12th-straight increase, and a new record high for the measure. Clearly, home ownership remains out of reach for many would-be buyers in the area. The good news is that some relief is on the way. Recent downward pressure on prices is poised to lower ownership costs in the period ahead. The bad news, unfortunately, is that rising interest rates will take some of that relief away.

Ottawa – Strong market run despite deteriorating affordability

Ottawa's housing market is on a roll. Demand is strong and home resales are on pace to surpass last year's record level. The only factor that might get in the way of setting a new mark this year is a shortage of properties available for sale. New listings dropped to six-year lows in the first half of 2017. Demand-supply conditions have tightened considerably in the past year. Sellers have gained the upper hand and prices are rising at a faster clip. Yet not much seems to bother buyers at this point. They've been undeterred by an erosion of affordability since early last year. RBC's aggregate measure in the second quarter was up 1.4 percentage points from a year ago, including a 0.4 percentage-point increase from the first quarter of 2017. Perhaps buyers focused on the fact that, at 37.3%, the measure still wasn't that far off historical norms for the area. Or perhaps, they felt comforted that it was about half of Toronto's measure.

Quebec

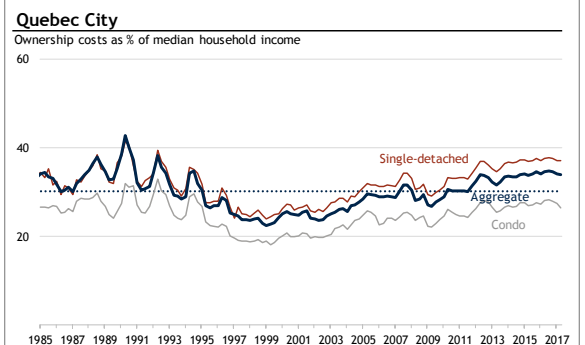
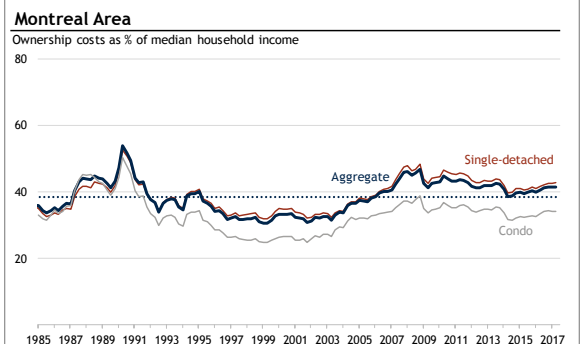
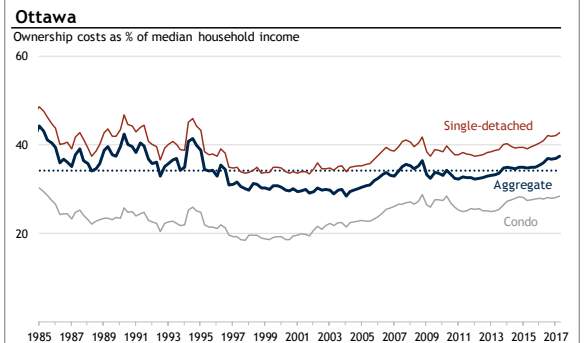
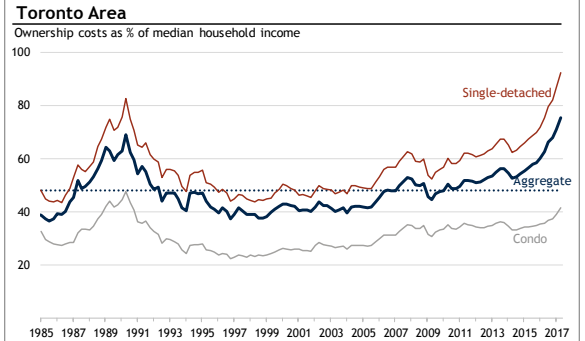
Montreal area – Measured market upswing keeps affordability on track

So far it's been a good year for Montreal's housing market. Activity has been brisk—even setting new record highs in some months over the spring and summer. Previously high inventories in some market segments (e.g. condos) are being drawn down and prices are strengthening modestly. In contrast to what occurred in other markets such as Toronto and Vancouver, Montreal's market upswing to date has been measured and orderly. Gradually rising prices have squeezed housing affordability somewhat but not enough to put undue stress on buyers. In the second quarter, RBC's aggregate measure for the area rose slightly by 0.2 percentage point to 41.5%. This was above the long-run average of 38.6% but only modestly so. Buyers are more likely to take their cues from a reinvigorated regional economy and strong labour market.

Quebec City – Affordability improves but buyers aren't biting yet

Somewhat strained affordability may be holding back Quebec City buyers. Home resales in the area softened in the second quarter and barely grew in the 12 months ending in June. This occurred despite generally positive labour market conditions. Quebec City continued to boast one of the lower unemployment rates in the country at 4.4% in the second quarter—little changed in the past year. If affordability is an issue for buyers, the good news is that the situation has improved since late last year, albeit slightly. RBC's aggregate measure eased in the past three quarters— inching 0.1 percentage point lower to 34.0% in the latest period. These successive declines have brought the measure closer to its long-run average of 30.1%. And with demand-supply

RBC Housing Affordability Measures

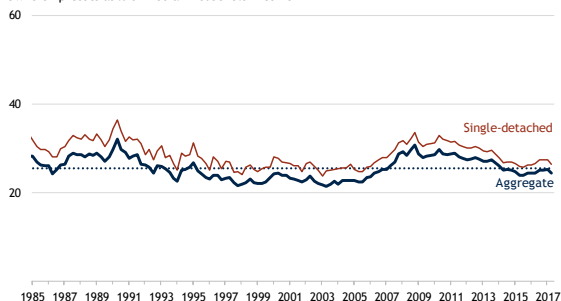


Source: Brookfield RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics Research

RBC Housing Affordability Measures

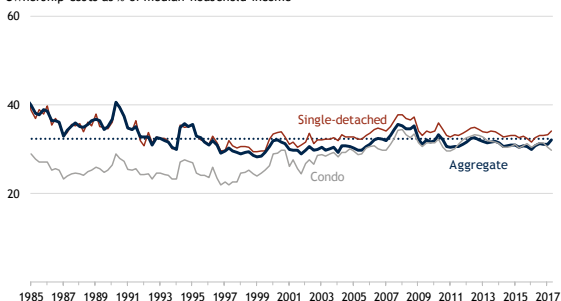
Saint John

Ownership costs as % of median household income



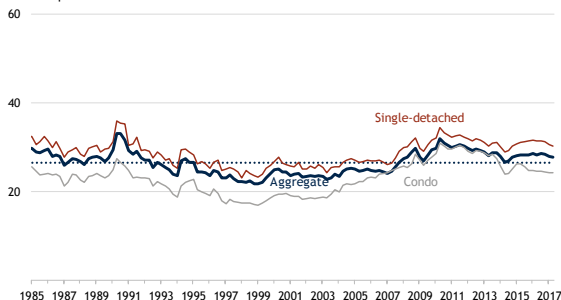
Halifax

Ownership costs as % of median household income



St. John's

Ownership costs as % of median household income



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

conditions still favouring buyers, there's scope for further realignment. Upward price pressures are likely to remain contained in the near term.

Atlantic Canada

Saint John – Taking a breather

Saint John's housing market has been on an impressive upswing since 2015 but took a breather recently. After reaching a nine-year high in the first quarter, home resales fell by 7.5% in the second quarter. This may be just a temporary setback, however. A sharp drop in Saint John's unemployment rate—to an eight-year low of 6% in the second quarter—and attractive affordability conditions are poised to continue to stimulate home buyer demand in the area in the period ahead. RBC's aggregate measure dropped by 0.8 percentage points to 24.5% in the second quarter. This represented the lowest level among the markets we track in Canada.

Halifax – A burst of activity put sellers in control

Solid activity amid low levels of homes for sale this spring tightened demand-supply conditions significantly in the Halifax-area market. This put sellers in the driver's seat and led to stronger price gains in the second quarter. It's not clear what specifically motivated more buyers to jump into the market this spring but Halifax's rising population growth may have been a contributing factor. Reasonably good affordability also may have played a role. RBC's aggregate measure for the area, at 32.1% in the second quarter, remains well below the national average of 46.7%. Halifax's measure rose by 1.0 percentage point in the latest period but still matched closely the long-run average for the area (32.4%).

St. John's – Poor economy is top of mind, not improving affordability

Housing affordability in St. John's improved for the third-straight time in the second quarter. RBC's aggregate measure fell by 0.3 percentage points (to 27.7%), more clearly breaking the static trend that prevailed since 2014. Yet easing home ownership costs aren't likely to fire up buyers in the area. Substantial economic uncertainty across the province no doubt weighs more heavily in the balance. St. John's unemployment rate remains among the higher ones in the country—although it has come down from its cyclical peak reached at the end of last year. Home resale activity has been depressed this year and there's little that would suggest a turnaround any time soon. The market is oversupplied and bound to remain so in the short term. The outlook, therefore, is for the persistence of downward price pressure and further affordability improvement in the period ahead.

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 Brookfield 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							
Market	Price			RBC Housing Affordability Measure			
	Q2 2017 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2017 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	491,200	4.5	12.5	46.7	1.4	3.7	38.9
Victoria	738,800	4.5	18.5	58.6	1.8	7.3	44.4
Vancouver area	1,022,400	4.6	-1.6	80.7	2.6	-2.4	58.2
Calgary	491,900	1.8	4.5	39.2	0.0	1.5	40.9
Edmonton	402,900	0.9	2.0	30.3	-0.2	0.6	34.0
Saskatoon	369,600	-0.1	-1.3	32.1	0.2	-0.5	33.0
Regina	326,500	-0.3	0.3	28.7	0.1	-0.2	28.1
Winnipeg	299,800	3.4	5.8	30.7	0.6	1.0	29.7
Toronto area	874,800	7.5	26.1	75.4	4.3	12.7	48.1
Ottawa	387,000	2.5	7.1	37.3	0.4	1.4	34.2
Montreal area	380,000	1.0	5.7	41.5	0.2	0.8	38.6
Quebec City	283,700	0.4	0.8	34.0	-0.1	-0.6	30.1
Saint John	199,000	-4.7	-0.1	24.5	-0.8	0.1	25.6
Halifax	310,400	4.2	7.5	32.1	1.0	1.4	32.4
St. John's	304,300	-0.7	-0.4	27.7	-0.3	-0.6	26.5

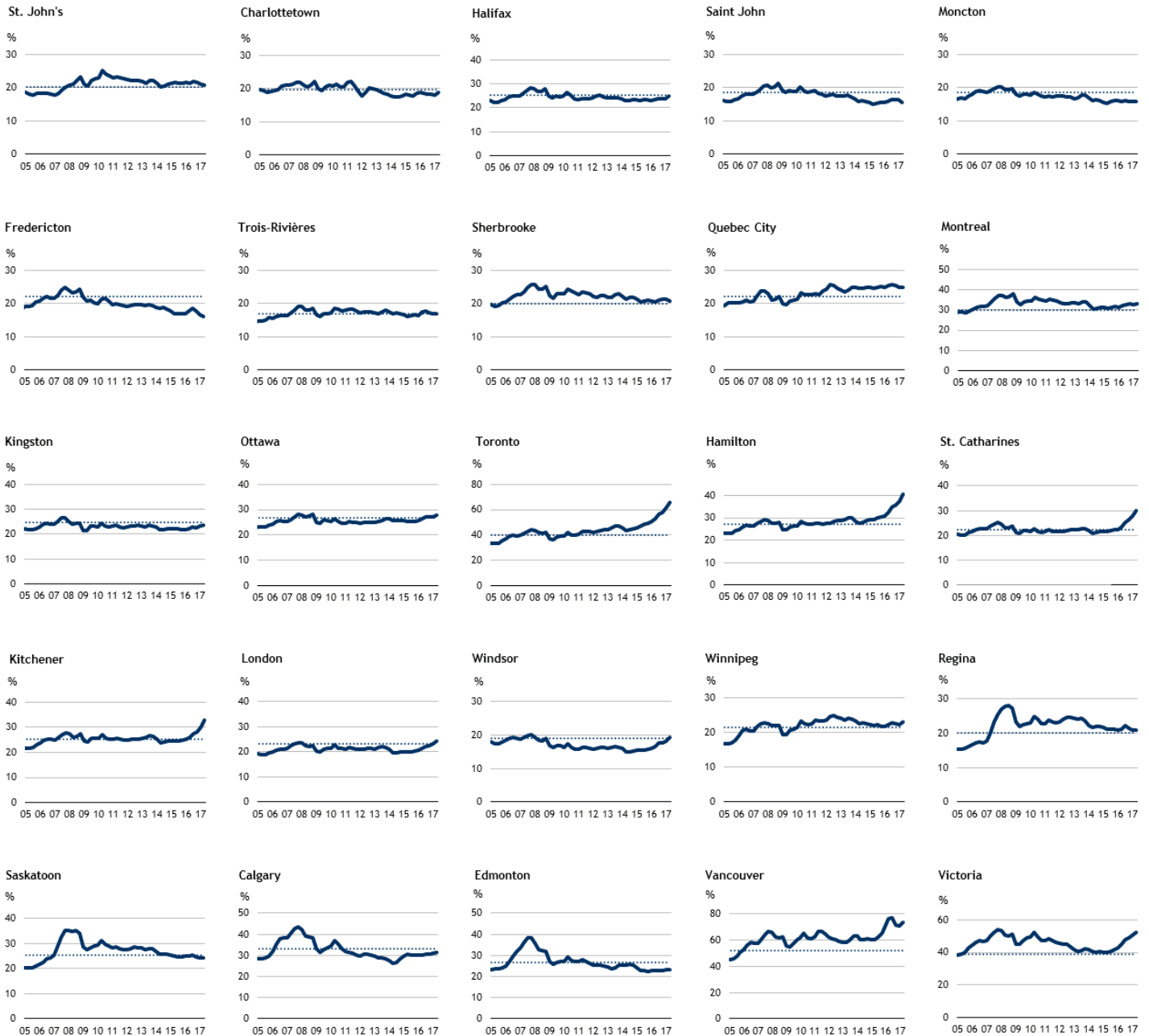
Single-family detached							
Market	Price			RBC Housing Affordability Measure			
	Q2 2017 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2017 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	551,200	4.6	12.9	52.4	1.6	4.3	42.2
Victoria	794,800	4.6	15.8	63.2	2.0	6.8	47.1
Vancouver area	1,484,300	3.7	-1.3	114.6	2.8	-3.3	68.9
Calgary	541,100	1.9	4.5	43.1	0.1	1.6	44.0
Edmonton	437,500	1.2	1.4	33.0	-0.1	0.5	36.5
Saskatoon	385,400	1.0	-0.5	34.1	0.4	-0.3	34.8
Regina	333,400	-0.1	0.2	30.2	0.2	-0.1	29.4
Winnipeg	310,500	3.2	5.2	32.5	0.6	0.9	31.6
Toronto area	1,083,600	8.1	28.9	92.4	5.7	17.1	56.6
Ottawa	441,900	2.7	7.8	42.8	0.7	1.8	38.8
Montreal area	381,500	1.2	6.4	42.7	0.2	1.0	39.2
Quebec City	303,100	0.6	1.4	37.0	-0.1	-0.5	31.8
Saint John	208,800	-5.7	-1.4	26.4	-1.0	-0.1	28.6
Halifax	324,800	4.1	8.2	34.1	0.9	1.6	33.6
St. John's	328,100	-1.1	-2.8	30.2	-0.4	-1.2	28.7

Condominium apartment							
Market	Price			RBC Housing Affordability Measure			
	Q2 2017 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2017 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	421,200	5.5	16.2	39.0	1.4	4.1	34.3
Victoria	450,600	2.8	26.0	37.0	0.5	6.1	32.5
Vancouver area	562,400	4.5	14.8	46.2	1.3	4.6	39.8
Calgary	294,800	-0.9	0.0	25.3	-0.5	0.2	27.1
Edmonton	250,500	1.6	2.0	20.1	-0.1	0.4	21.9
Saskatoon	259,700	2.5	16.0	22.9	0.6	2.3	20.7
Regina	239,700	-1.3	-17.4	21.2	0.0	-3.4	22.2
Winnipeg	246,700	2.9	5.5	24.6	0.4	0.7	23.4
Toronto area	458,600	8.0	21.7	41.4	2.4	5.6	31.0
Ottawa	306,200	1.7	4.7	28.4	0.3	0.7	23.9
Montreal area	321,900	0.7	6.0	34.2	0.0	0.8	33.2
Quebec City	233,300	-3.4	-4.3	26.5	-0.9	-1.6	24.6
Saint John	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Halifax	304,000	-3.0	-3.7	29.7	-0.8	-1.3	27.9
St. John's	280,100	0.5	0.6	24.3	0.0	-0.3	23.1

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

Mortgage carrying costs by city

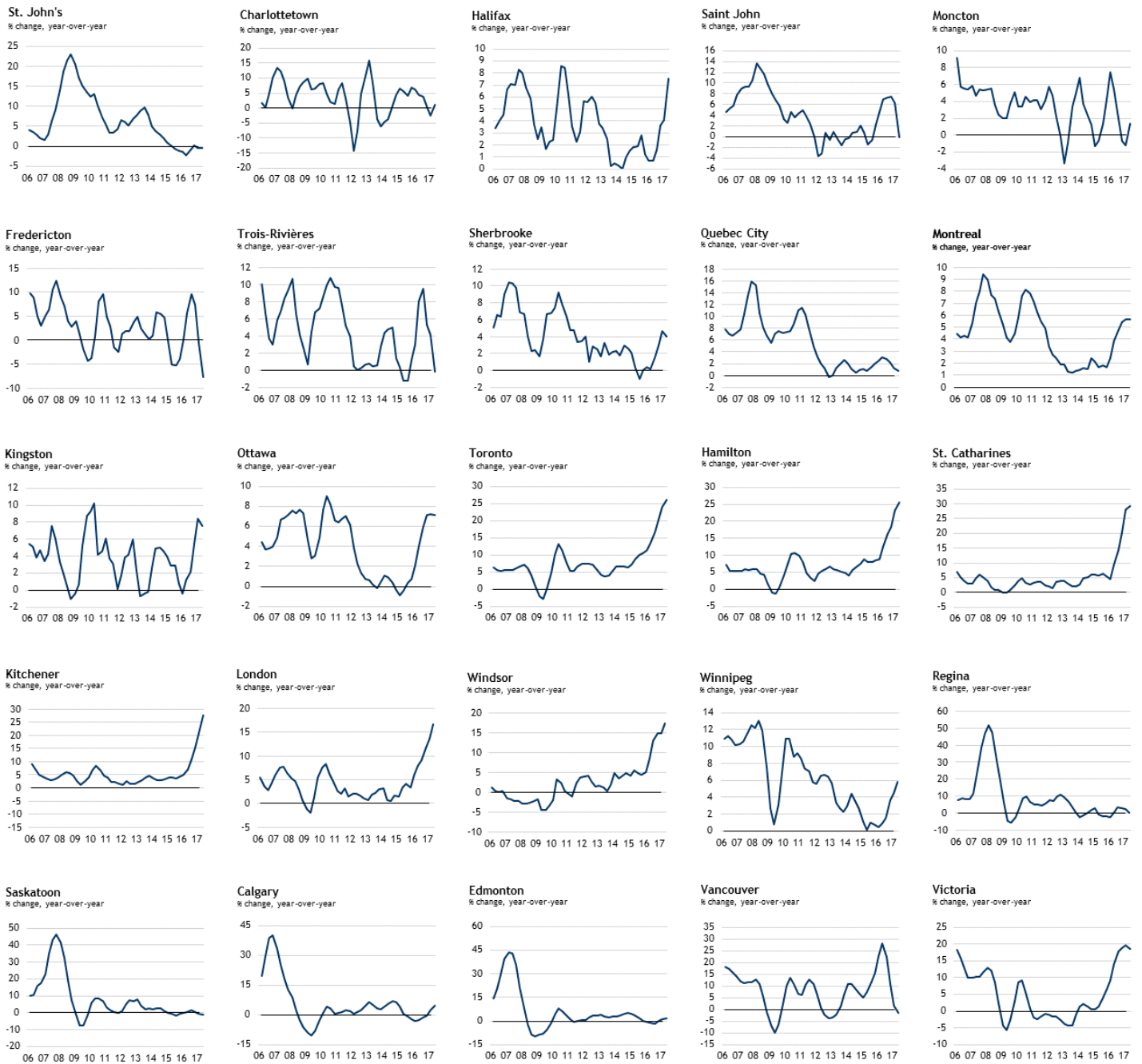
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at market prices, including principal and interest, property taxes and utilities; the modified measure used here includes the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



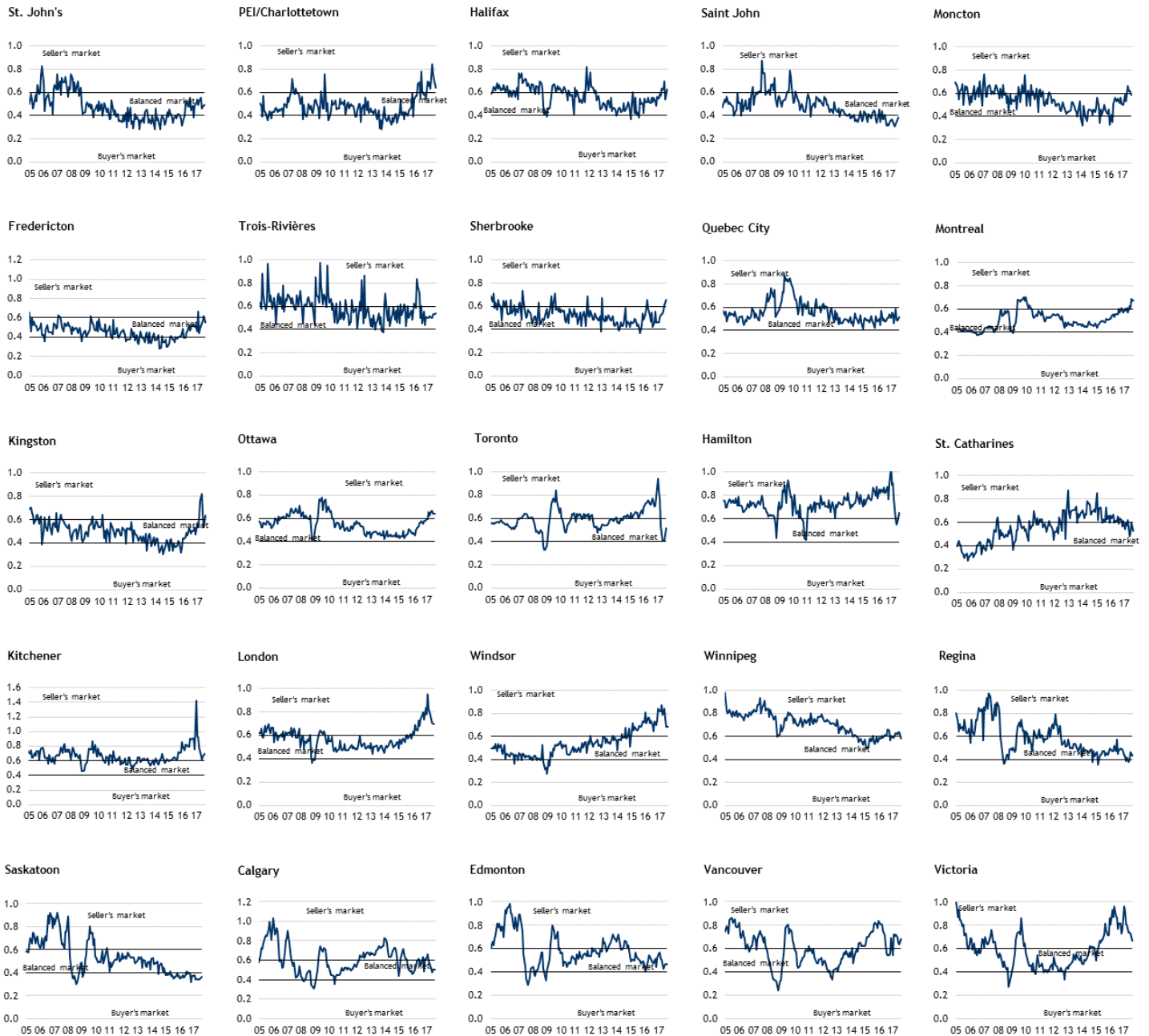
Aggregate home price



Source: Brookfield RPS, RBC Economics Research



Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics Research

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