

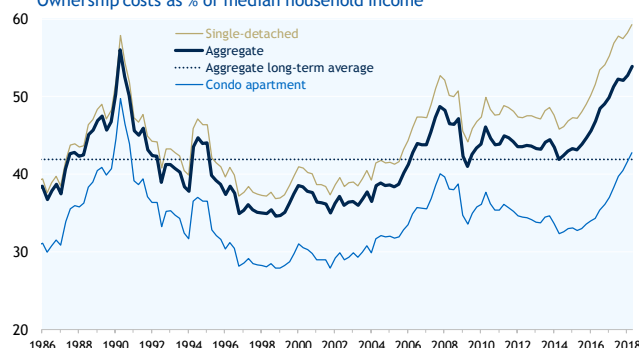
HOUSING TRENDS AND AFFORDABILITY

September 2018

Rising interest rates continue to squeeze affordability in Canada

- **RBC's affordability measure hasn't been this bad since 1990.** The ownership costs to carry a home bought in the second quarter of 2018 would have taken up 53.9% of a typical household's income. This is up sharply from 43.2% three years ago.
- **Blame interest rates for the rise in ownership costs in the past year.** Mortgage rates increased in each of the past four quarters and accounted for the entire rise in RBC's aggregate measure for Canada over that period.
- **Unaffordability is off the charts in Vancouver, Toronto and now Victoria.** Interest rates have a big impact in these high-priced markets. The situation is much less strained in other markets, although affordability deteriorated in all markets in Canada in the past year.
- **It'll probably get worse.** We expect further interest rate hikes in the period ahead. This is poised to drive ownership costs even higher across Canada. Household income increases will soften the blow for buyers.

RBC Housing Affordability Measures - Canada
Ownership costs as % of median household income



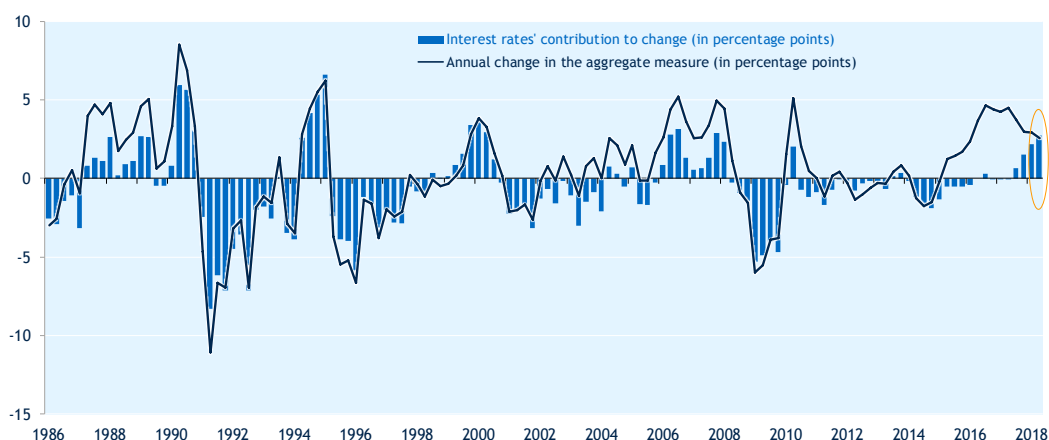
The share of income a household would need to cover ownership costs (in %)

Canada	Vancouver	Calgary	Edmonton	Toronto	Ottawa	Montreal
53.9	88.4	43.9	28.4	75.9	38.6	44.1

Second quarter 2018

Higher interest rates were the swing factor behind the loss of affordability in the past year

Annual percentage-point change in RBC's aggregate measure for Canada and interest rates' contribution to the change



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

All about interest rates

From overheating to correction to the onset of recovery, we've seen pretty much everything in the past three years in Canada's housing market. Yet an eye-watering loss of affordability has been a constant. Over that period, RBC's aggregate measure jumped by 10 percentage points to 53.9%, its highest level since 1990s (a rise in the measure represents a loss of affordability). Surging prices in Vancouver and Toronto jacked up ownership costs substantially between 2015 and early 2017. Since the middle of 2017, it's been rising



interest rates that have been the main factor squeezing affordability. We've seen a material rise in mortgage rates since the Bank of Canada launched its hiking campaign in July 2017 and this kept ownership costs on a steep upward trajectory despite home prices stabilizing. The higher borrowing costs in fact accounted for virtually the entire 2.6 percentage-point increase in RBC's measure in the past year and most of the 1.1 percentage point advance in the second quarter of 2018. Add the stress test on top of this and the picture gets even more daunting for many Canadian buyers. Clearly, affordability—or rather, the lack thereof—remains a big issue in some of Canada's major markets.

High-priced markets now face the worst affordability conditions ever...

Unsurprisingly, ownership costs rose the most in high-priced markets last quarter. That's because mortgage payments are very sensitive to interest rates in these markets. RBC's aggregate measure increased by 1.6 percentage points 88.4% in the Vancouver area, 1.8 percentage points to 75.9% in the Toronto area and 2.4 percentage points to 65.0% in Victoria. These represented the worst ever levels on record since the mid-1980s in all three markets. No wonder the current generation of local buyers feels overwhelmed—no other generation has faced as much affordability pressure in this country.

...though higher interest rates affected nearly all markets

Of course, the impact of rising interest rates extended far beyond the boundaries of Vancouver, Toronto and Victoria. All markets that we track experienced a loss of affordability over the past year arising primarily (albeit not exclusively) from higher interest rates. Only St. John's saw a marginal improvement in the second quarter due to weak market conditions and a drop in prices. For the most part, the rise in RBC's aggregate measure was modest and levels remain close to historical norms. So ownership costs continue to be manageable in the majority of local markets in Canada. Montreal could become an exception, though, if prices accelerate further in the area. RBC's measure for Montreal is above its long-run average by a fairly wide margin, which could be a sign that affordability pressures are building.

Condo affordability is slipping fast

One interesting development over the past year is that affordability eroded more for condos than for single-detached homes in Canada. This reflected a sharp turn of events in the Toronto area where detached home prices fell (following a significant run-up the previous year) while condo prices continued to rise rapidly. Demand for condos has been fueled by affordability issues plaguing the single-detached segment that diverted buyers toward lower-priced housing categories. This phenomenon subsided somewhat in the second quarter of 2018, as single-detached home prices began to rise again and condo price gains slowed.

No real relief in sight

The outlook for affordability isn't very promising. We expect the Bank of Canada to proceed with further rate hikes that will raise its overnight rate from 1.50% currently to 2.25% in the first half of 2019. This will keep mortgage rates under upward pressure and boost ownership costs even more across Canada in the period ahead. We estimate that, everything else remaining constant, a 75 basis-point increase in mortgage rates would lift RBC's aggregate affordability measure for Canada by roughly 2.8 percentage points. Growing household income will provide some partial offset. So potential buyers hoping to get a meaningful break will likely be disappointed. We expect intensifying affordability pressures to restrain homebuyer demand over the coming year.



British Columbia

Victoria – Joining the unaffordable club

The boom that propelled prices to mountain-high levels over the past two and a half years gave Victoria its ticket to Canada's unaffordable market club. RBC's aggregate affordability measure for Victoria deteriorated sharply over that period, including in the second quarter when it recorded the biggest increase (2.4 percentage points) among the markets that we track in Canada. At 65.0%, the measure is the third highest in the country after Vancouver and Toronto. Poor affordability, the mortgage stress test and other market-cooling measures introduced by the BC government have weighed heavily on buyers this year. Home resales fell 20% over the first eight months.

Vancouver area – Calling it a crisis is no exaggeration

The word 'crisis' is often being used these days to describe the affordability situation in the Vancouver area. And why not—RBC's aggregate measure is at a never-seen-before level (88.4%) anywhere in Canada, and continuing to rise rapidly (up 8.2 percentage points in the past year, including a 1.6 percentage point rise in the second quarter). Buying a single-detached home is for the rich only (it would take almost 120% of a typical household's income to cover ownership costs). And settling for a condo also increasingly looks like a luxury for many. Worse, the situation is poised to deteriorate further as interest rates continue to rise. This means that rental housing will become the only viable option for a growing proportion of households. Whether the record 8,100 rental units currently under construction will meet that demand is an open question.

Alberta

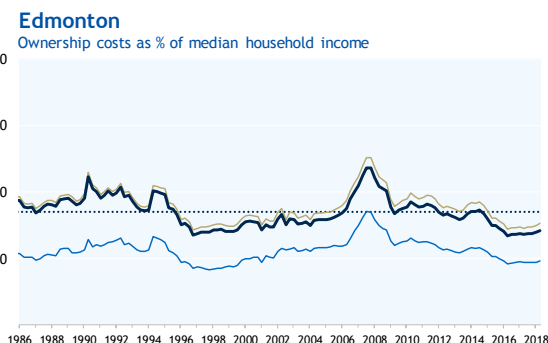
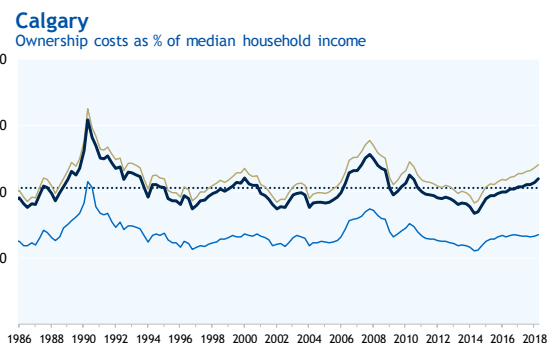
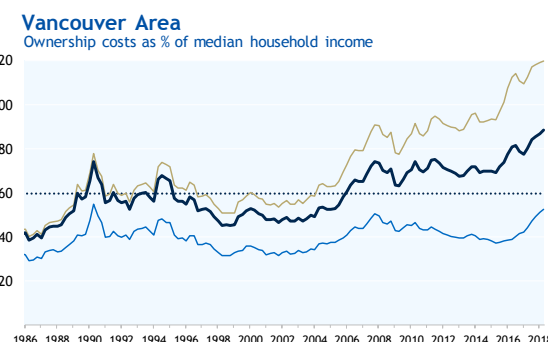
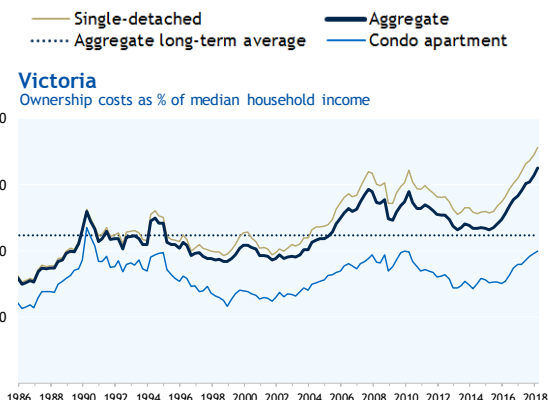
Calgary – Homebuyers don't get a break

Rising interest rates are depriving Calgary homebuyers from the benefits of stagnating home prices. Higher rates have boosted home ownership costs in the past year and kept RBC's aggregate affordability measure on a modest upward trajectory. The measure rose by 1.1 percentage points to 43.9% in the second quarter—just above the long-run average of 41.0%. While not as expensive as in Vancouver, Toronto and Victoria, Calgary home prices are still among the highest in the country. This makes ownership costs in the area quite sensitive to interest rate hikes. It also means that the mortgage stress test has a greater impact than in lower-priced markets, which has been a key factor depressing home resale activity in Calgary this year.

Edmonton – Don't blame affordability for the market's softness

Affordability pressures still aren't a big issue in Edmonton. RBC's aggregate measure for the area, at 28.4% in the second quarter, remains well below its long-term average of 34.1% despite rising slightly by 0.5 percentage points from the first quarter. Buyers appear to be unimpressed, however. Many of them opted for the sidelines this year, which drove home resales to a seven-year low in the second quarter. The degree of softness was surprising considering the steady progress in the provincial economy's recovery. The new stress test could well be the factor sending buyers to the sidelines.

RBC Housing Affordability Measures



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



RBC Housing Affordability Measures

Saskatchewan

Saskatoon – Tentative signs of a turnaround

At last, there have been tentative signs lately that Saskatoon's market is beginning to turn around. Home resale activity picked up this summer and, perhaps more importantly, demand and supply are finally coming back into balance. Unsold inventories have come down materially from elevated levels previously and no longer pose a concern. Gradual improvement in the area's job market certainly plays a positive role in revitalizing homebuyer demand. Affordability isn't really an issue at this stage. RBC's aggregate affordability measure remains close to its long-run average so it's unlikely to be swaying buyers one way or another. The measure inched slightly higher by 0.5 percentage points to 34.0% in the second quarter.

Regina – Struggles persist

Recent signs haven't been as encouraging in Regina's market as they were in Saskatoon. Resale activity in Regina continues to trend lower and inventories remain plentiful. Sellers still hold a strong hand in setting prices in the current environment. Like in Saskatoon, though, affordability isn't likely to be a central issue for buyers at the moment. Despite a slight uptick in the past couple of quarters, the share of income required to carry ownership costs is well within historical norms—as it has been for several years. RBC's aggregate measure rose by 0.5 percentage points to 30.5% in the second quarter. A setback in Regina's job market since spring no doubt is a bigger worry for buyers.

Manitoba

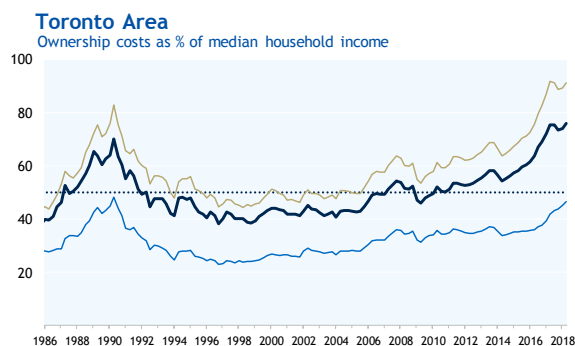
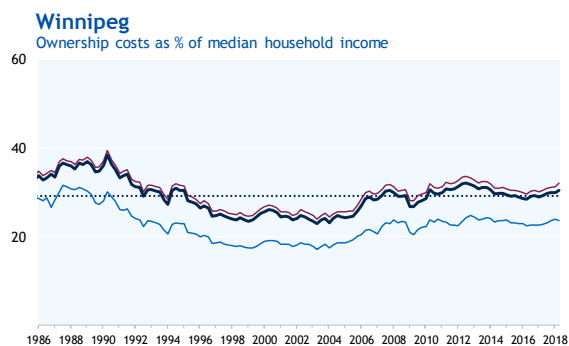
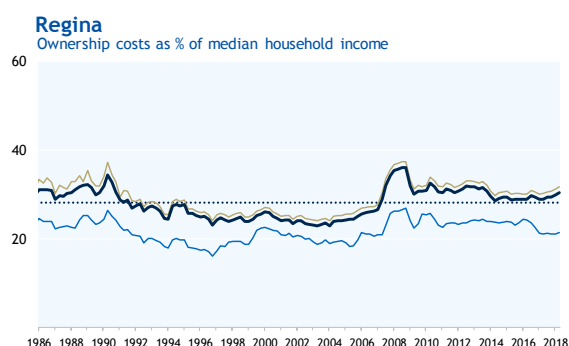
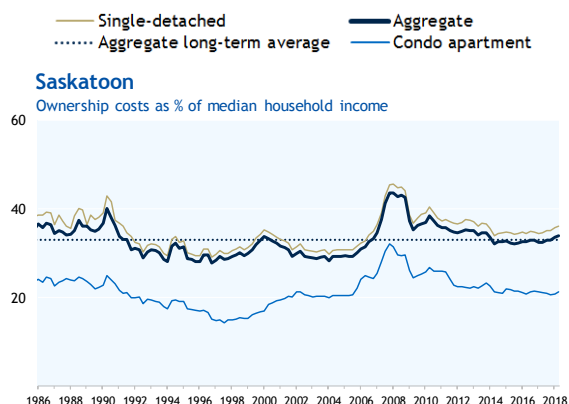
Winnipeg – Landing softly

Winnipeg's market is landing softly this year after reaching record-high sales levels in 2016 and 2017. This is unfolding in an orderly fashion with demand and supply remaining in balance. Still, there has been a modest increase in the for-sale inventory, which is helping to keep price pressures at bay. Buying a home is generally affordable in the Winnipeg area. In the aggregate, ownership costs represented 30.5% of household income in the second quarter. Although this was up 0.6 percentage points from the first quarter, it was still within striking distance of the long-run average of 29.2% in the area.

Ontario

Toronto area – Here we go again

In the end, the affordability relief Toronto-area homebuyers got late last year and early this year was both small and short-lived. It all went up in smoke in the second quarter when RBC's aggregate measure resumed its upward trajectory with a 1.8 percentage-point rise. So homebuyers must spend a record share of their income again (75.9% in the aggregate!) to cover ownership costs. The reason for the deterioration isn't so much that prices appreciated—although they did slightly after three quarterly declines—but rather because higher interest rates raised mortgage carrying costs. The prospect of further rate hikes doesn't bode well for buyers in the period ahead. Affordability pressures are likely to become an even bigger issue for them, which we believe will limit how much home resale activity will rebound from its recent cyclical low.



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

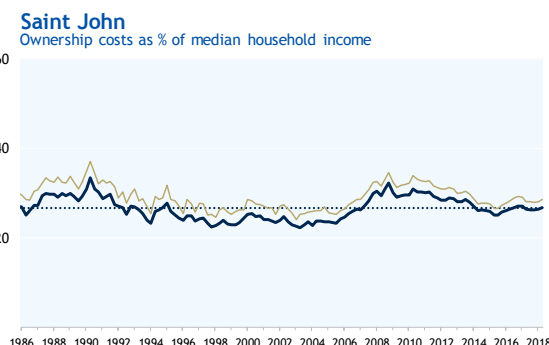
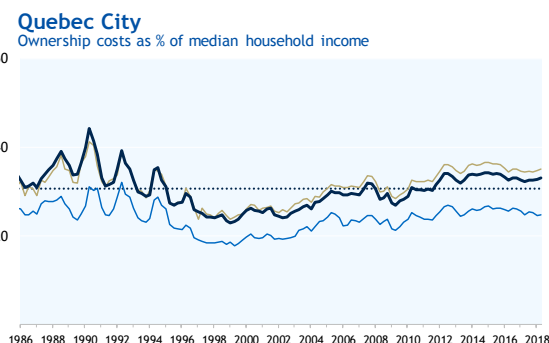
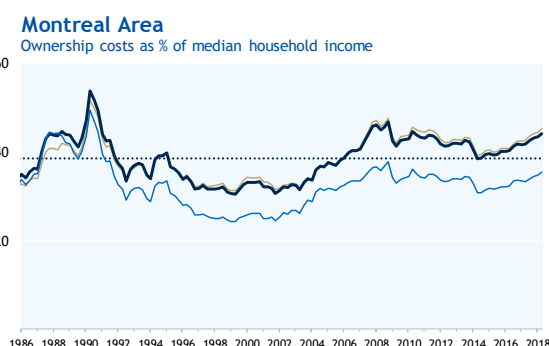
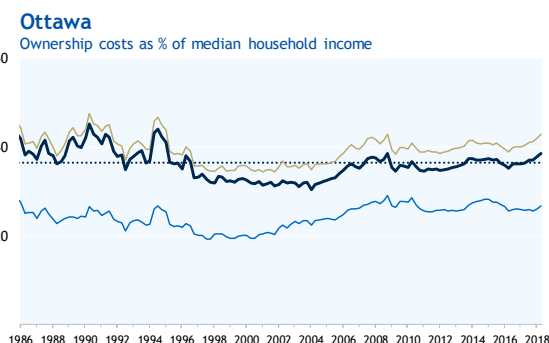


Ottawa – Good times keep rolling in the nation's capital

There's definitely a buzz about Ottawa's market this year. Home resales and prices are both up from a year ago, and demand-supply conditions are as tight as they've been in the area in nearly a decade. Contrary to the experience in most other markets in Canada, the volatility generated by the new stress early in the year dissipated quickly in Ottawa. Ownership costs are on the rise but buyers don't seem to mind at this point. A strong regional job market has kept their confidence up at very healthy levels. RBC's aggregate affordability measure rose for a fifth-straight time in the second quarter. The 0.7 percentage-point increase took the measure to 38.6%, or just a little above its 36.4% long-run average. Further deterioration is likely in the near term given the market's current tightness.

RBC Housing Affordability Measures

— Single-detached — Aggregate
 Aggregate long-term average — Condo apartment



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

Quebec

Montreal area – Could affordability trouble be near?

The vigour of Montreal's housing market continues to impress. Home resales keep extending their record streak and prices keep climbing at a measured pace. Montreal's strong economy clearly maintains a positive environment for the market at this stage. Yet some affordability issues could be lurking beneath the surface. Ownership costs have risen steadily over the past three years. RBC's aggregate measure reached an eight-year high of 44.1% in the second quarter following a 0.7 percentage-point increase in the latest period. Further deviation from the long-run average of 38.6% could signal problematic conditions for some buyers. Affordability pressures in Montreal, however, would still pale in comparison to those prevailing in Vancouver, Toronto and Victoria.

Quebec City – Re-energized

Quebec City's market showed more energy since spring after a listless winter marked by flat resales. Activity picked up in the second quarter with sales advances recorded in both the single-detached and condo segments. Yet still-plentiful for-sale inventories kept buyers largely in charge of the haggling over prices. This led to the same outcome as in the past six years—minimal property appreciation. Buyers therefore continue to benefit from a fairly stable affordability picture in the area. RBC's aggregate measure increased slightly for only the third time in the past two years in the second quarter, inching up by 0.4 percentage points to 33.1%.

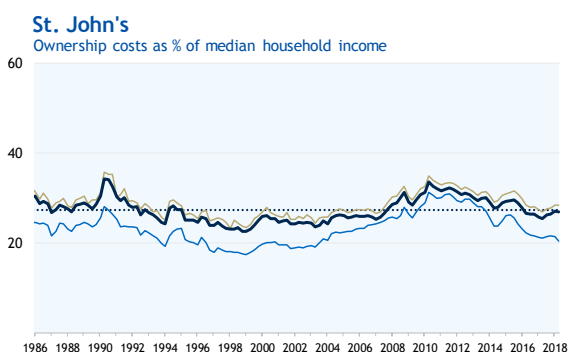
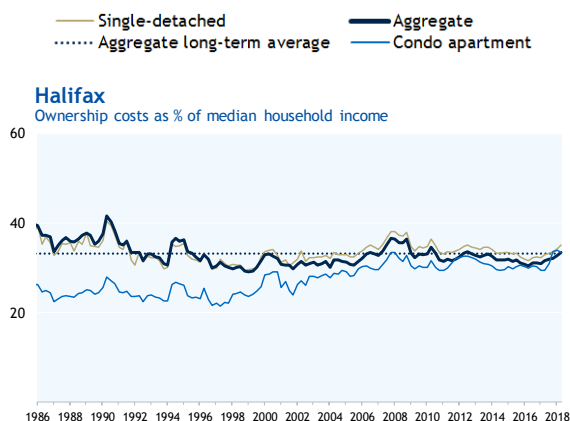
Atlantic Canada

Saint John – Regaining its footing

Saint John's market has regained its footing after a slow start to the year when the new stress test and turbulence in the local job market dampened activity. Home resales rebounded solidly by more than 9% in the second quarter, which reversed most of the 15% drop in the first quarter. This tightened demand-supply conditions and further drew down inventories. Active listings in the area in fact reached a decade low in August. This will eventually lend stronger support to home prices. For now, price pressures remain contained. This keeps Saint John as the most affordable market that we track. RBC's aggregate measure for the area was 26.8% in the second quarter, up 0.4 percentage points from the first quarter.



RBC Housing Affordability Measures



Halifax – Holding up well all-round

Halifax's market is holding up well so far this year. It's been one of the few markets in Canada unfazed (or just barely fazed) by the new stress test. Home resales are on pace for a fourth-straight annual gain. Demand-supply conditions are even a little tight now and for-sale inventories reached at multi-year lows this summer. This is beginning to heat up property values albeit from relatively low temperatures. A slight firming of price gains and higher interest rates boosted ownership costs somewhat in the second quarter. RBC's aggregate affordability measure rose by 0.7 percentage points to 33.4%—effectively on par with the long-term average of 33.2%. Affordability considerations don't appear to be an impediment for Halifax buyers at this stage and are unlikely to become an obstacle in the near term.

St. John's – Bucking the trend—not for the right reasons

St. John's was the only market that we track where affordability improved in the second quarter—though just barely. RBC's aggregate measure for the area fell marginally by 0.1 percentage points to 26.9%, nearly tying Saint-John's 26.8% as the lowest measure in Canada. Yet it will take much more than that to get local buyers hopping. Buyers' focus no doubt continues to be on the area's job prospects, which continue to disappoint. The improvement in affordability last quarter essentially reflects St. John's weak housing market fundamentals. Soft homebuyer demand and plenty of homes available for sale apply intense downward pressure on property values. Unfortunately, we see little in the near term that would turn such fundamentals around.

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

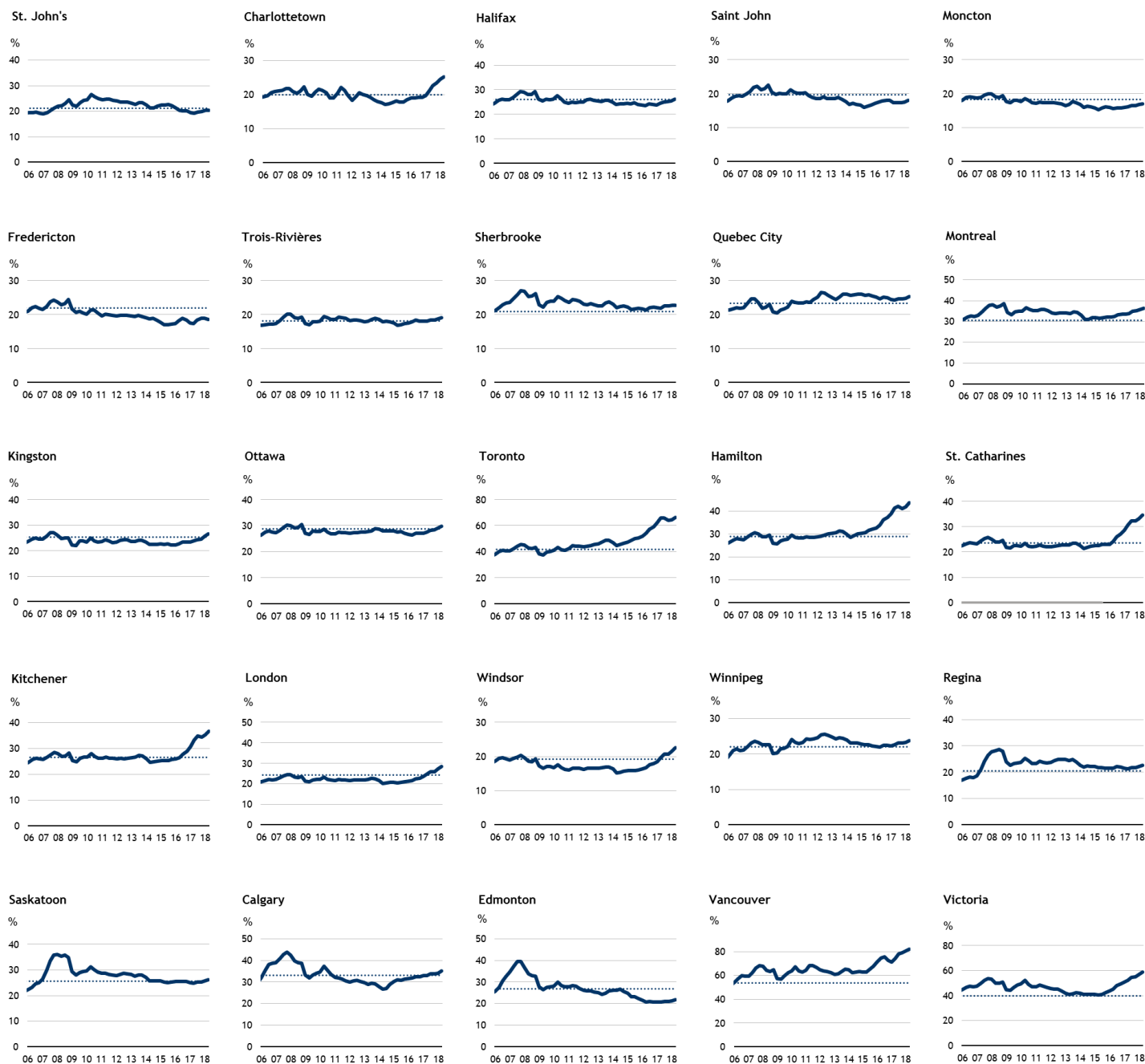
Aggregate of all categories							
Market	Price			RBC Housing Affordability Measure			
	Q2 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	566,600	1.4	2.4	53.9	1.1	2.6	42.0
Victoria	802,100	2.4	8.1	65.0	2.4	6.9	44.8
Vancouver area	1,149,600	0.4	6.1	88.4	1.6	8.2	59.6
Calgary	511,600	1.4	2.0	43.9	1.1	2.4	41.0
Edmonton	409,000	0.6	0.7	28.4	0.5	1.2	34.1
Saskatoon	367,600	0.1	-0.4	34.0	0.5	1.5	33.1
Regina	328,900	0.5	0.4	30.5	0.5	1.5	28.1
Winnipeg	308,000	1.9	1.6	30.5	0.6	1.2	29.2
Toronto area	861,300	1.7	-2.2	75.9	1.8	0.4	50.1
Ottawa	432,700	1.4	5.0	38.6	0.7	2.1	36.4
Montreal area	406,600	1.2	5.1	44.1	0.7	2.4	38.6
Quebec City	296,400	0.8	1.5	33.1	0.4	0.8	30.7
Saint John	213,100	1.2	0.7	26.8	0.4	0.5	26.6
Halifax	322,200	1.3	1.2	33.4	0.7	1.9	33.2
St. John's	310,700	-0.6	0.9	26.9	-0.1	1.4	27.4

Single-family detached							
Market	Price			RBC Housing Affordability Measure			
	Q2 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	620,700	1.1	1.4	59.3	1.1	2.4	44.7
Victoria	879,400	2.0	7.8	71.2	2.2	7.4	47.9
Vancouver area	1,582,200	-0.7	2.3	119.9	1.0	7.5	70.9
Calgary	562,500	1.2	2.4	48.2	1.1	2.7	44.0
Edmonton	436,200	0.9	1.3	30.5	0.6	1.4	35.9
Saskatoon	383,800	-0.1	-0.7	36.1	0.4	1.5	34.9
Regina	334,200	0.5	0.8	31.8	0.5	1.6	29.4
Winnipeg	317,500	2.7	3.2	32.1	0.8	1.7	30.4
Toronto area	1,044,600	1.4	-3.5	91.3	2.0	-0.6	58.3
Ottawa	474,700	1.6	5.4	42.9	0.8	2.5	39.7
Montreal area	407,200	1.2	5.8	45.2	0.7	2.7	38.5
Quebec City	306,700	0.6	1.4	35.1	0.3	0.7	31.4
Saint John	221,000	1.4	0.7	28.6	0.4	0.5	29.2
Halifax	332,000	1.8	2.0	35.1	0.8	2.2	33.7
St. John's	322,000	0.2	1.0	28.4	0.0	1.4	28.7

Condominium apartment							
Market	Price			RBC Housing Affordability Measure			
	Q2 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q2 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	454,800	2.1	9.9	42.8	1.2	4.5	34.1
Victoria	477,800	0.6	7.7	40.0	0.8	4.0	31.9
Vancouver area	662,600	1.4	15.5	52.5	1.4	8.2	39.4
Calgary	290,500	0.5	-2.1	27.1	0.5	0.6	27.2
Edmonton	260,400	0.9	-2.5	19.1	0.3	0.3	22.4
Saskatoon	217,100	1.8	-5.6	21.2	0.5	0.1	21.5
Regina	227,700	0.5	-3.9	21.5	0.4	0.4	21.8
Winnipeg	240,100	-2.6	0.1	23.5	-0.4	0.7	22.7
Toronto area	516,300	3.1	10.7	46.6	1.6	4.8	31.9
Ottawa	302,800	1.8	1.9	26.7	0.5	0.9	24.5
Montreal area	331,300	1.2	5.3	35.4	0.6	2.1	32.5
Quebec City	229,100	-0.2	-2.3	24.7	0.1	-0.1	24.0
Saint John	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Halifax	344,000	-3.2	9.8	33.3	-0.6	4.0	27.4
St. John's	237,600	-6.5	-9.9	20.4	-1.1	-0.7	23.3

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

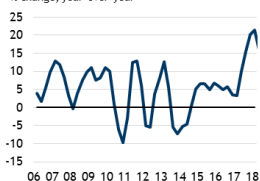
St. John's

% change, year-over-year



Charlottetown

% change, year-over-year



Halifax

% change, year-over-year



Saint John

% change, year-over-year



Moncton

% change, year-over-year



Fredericton

% change, year-over-year



Trois-Rivières

% change, year-over-year



Sherbrooke

% change, year-over-year



Quebec City

% change, year-over-year



Montreal

% change, year-over-year



Kingston

% change, year-over-year



Ottawa

% change, year-over-year



Toronto

% change, year-over-year



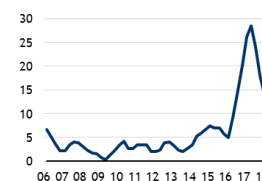
Hamilton

% change, year-over-year



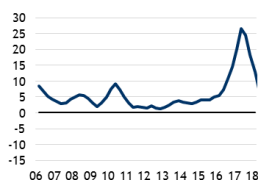
St. Catharines

% change, year-over-year



Kitchener

% change, year-over-year



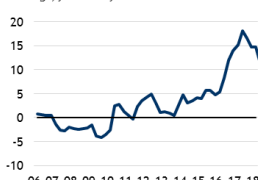
London

% change, year-over-year



Windsor

% change, year-over-year



Winnipeg

% change, year-over-year



Regina

% change, year-over-year



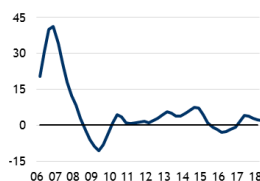
Saskatoon

% change, year-over-year



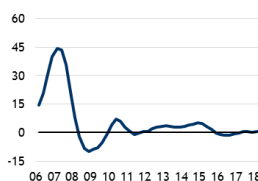
Calgary

% change, year-over-year



Edmonton

% change, year-over-year



Vancouver

% change, year-over-year



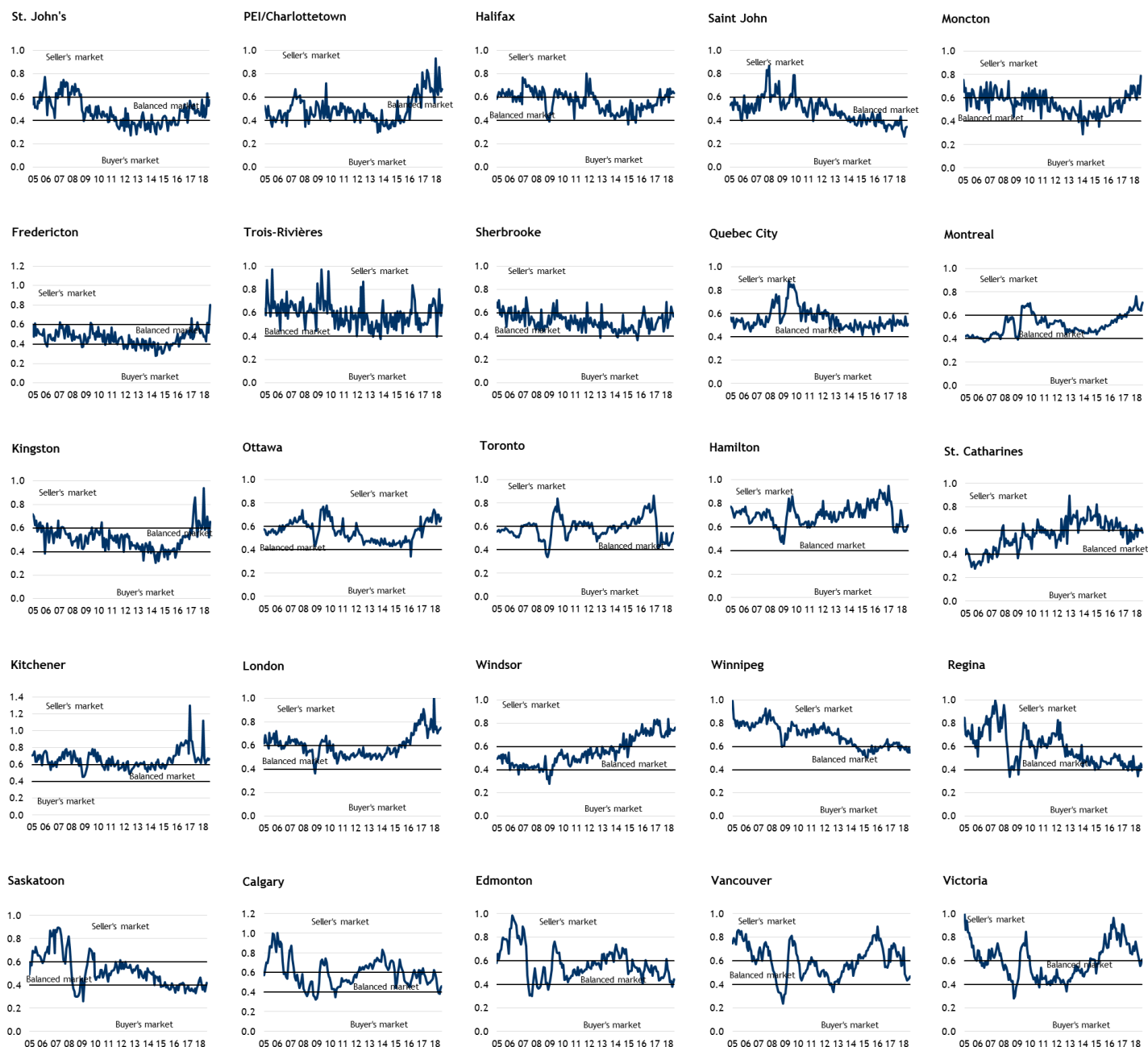
Victoria

% change, year-over-year



Source: RPS, RBC Economics Research

Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics Research

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