

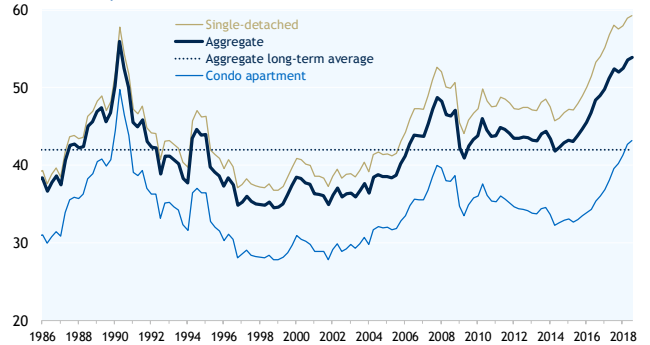
HOUSING TRENDS AND AFFORDABILITY

December 2018

It just keeps on getting less affordable to own a home in Canada

- **No relief in the third quarter: RBC's affordability measure deteriorated to its worst level in Canada since 1990.** It would have taken 53.9% of a typical household's income to carry the ownership costs of average home bought last quarter. This is up 1.5 percentage points from a year ago.
- **Rising interest rates still the main culprit.** Mortgage rates increased for a fifth straight quarter and accounted for the entire rise in RBC's aggregate measure for Canada over that period.
- **Affordability at crisis levels in Vancouver and Toronto but eroded most in Montreal in the third quarter.** Home prices continued to rise at a brisk pace in Montreal, whereas they were flat at best in Vancouver and Toronto.
- **The outlook isn't promising.** We expect that further interest rate hikes will keep upward pressure on ownership costs in 2019. Softening prices in key markets and rising household income increases will provide some offset, however.

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



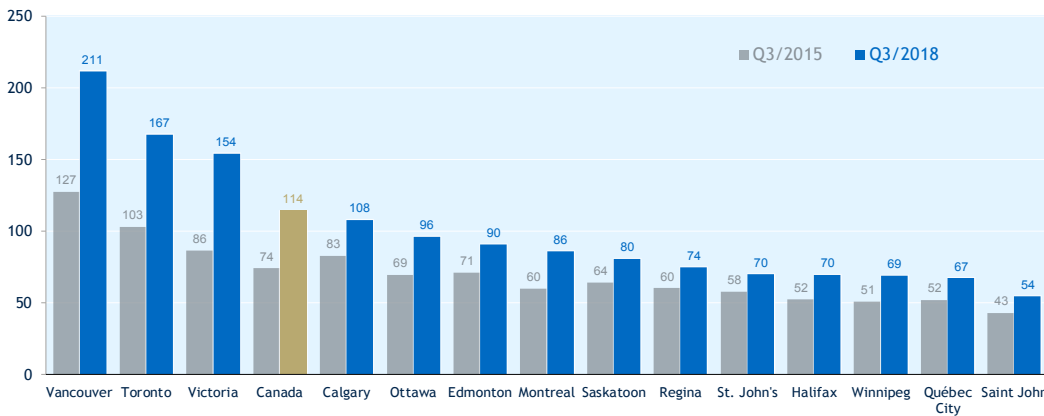
The share of income a household would need to cover ownership costs (in %)

Canada	Vancouver	Calgary	Edmonton	Toronto	Ottawa	Montreal
53.9	86.9	43.4	28.2	75.3	38.6	45.2

Third quarter 2018

Canadian households now need much higher income to qualify to buy a home

Income required to cover the costs of owning an average home with a 25% down payment and clear the mortgage stress test, thousand \$



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

Are only the rich able to buy a home these days?

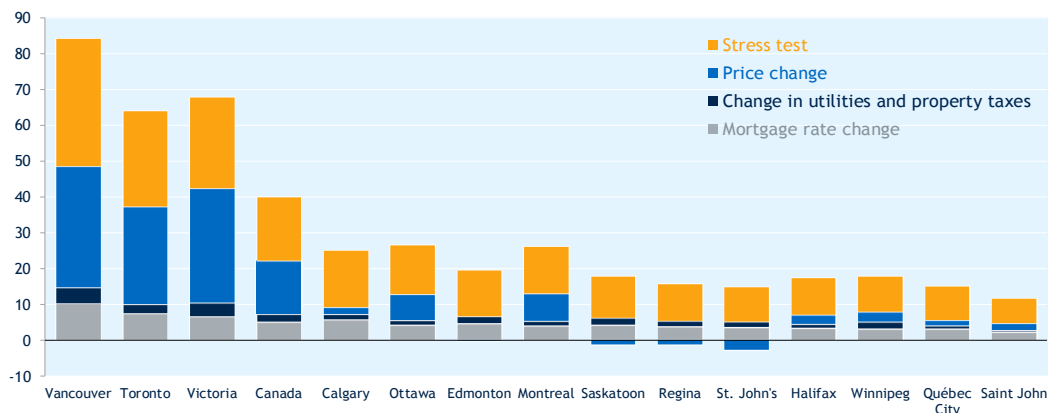
That certainly looks like it in Canada's most expensive markets. Buyers in Vancouver, Toronto and Victoria needed between two and three times the median household income to qualify to purchase an average home. In Vancouver, for example, the income necessary to cover ownership costs and clear the mortgage stress test was \$211,000 in the third quarter. This is clearly at the higher end of the income scale. The qualifying income was \$167,000 in Toronto and \$154,000 in Victoria. What's



perhaps more troublesome is the extent to which the qualifying income increased over the past three years. In Vancouver, it surged by \$84,000 (or 66%), whereas it rose by \$64,000 in Toronto and \$68,000 in Victoria. No wonder so many buyers fear that their ownership dream is slipping away in those markets. Price increases accounted for a big part of the increases. Since the third quarter of 2015, higher prices added between \$27,000 (Toronto) and \$34,000 (Vancouver) to the qualifying income. But this

Stress test and price increases have been the main factors driving up qualifying income

Increase in qualifying income to buy a typical home between Q3/2015 and Q3/2018, by contributing factor, thousand \$



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

year's stress test—which required mortgage borrowers to qualify at a significantly higher interest rate than their offered rate—raised the bar by at least as much. In Vancouver, for example, the stress test added almost \$36,000 to the qualifying income needed to buy an average priced home (\$1.1 million). The amounts were \$27,000 in Toronto (for an average home of \$857,000) and \$25,000 in Victoria (\$813,000). And the other major implication of the stress test is that it was felt across the country—in contrast to price increases which primarily impacted Canada's expensive markets. Thousands of dollars more in income are now needed to buy a home with a mortgage in every market across the country because of the stress test.

Buyers focus on more affordable options

This loss of affordability of the average-priced home in the past three years prompted many buyers to focus instead on lower-priced housing options. We saw strong demand for condo apartments in Canada's largest markets, as this type of housing is usually a more affordable choice. But for buyers this created a Catch 22 because strong demand resulted in higher condo prices, which in turn led to some erosion of condo affordability. Over the past year, RBC's affordability measure for condos in Canada increased by 3.6 percentage points compared to only 1.2 percentage points for the single-family detached measure (an increase in the measure represents a loss of affordability). With a measure of 43.2% at the national level, condos are still the more affordable housing type in Canada, compared to 59.2% for single-detached, though the advantage has narrowed.

Montreal sees further erosion though situation in Vancouver and Toronto still the most worrying

Higher interest rates continued to squeeze affordability in the third quarter pushing it to the worst level in a generation in Canada. RBC's aggregate affordability measure posted a third-straight increase of 0.3 percentage points and at 53.9% hit a high-water mark since 1990. Stretched conditions nation-wide mainly reflect extremely poor affordability in Vancouver and Toronto that makes it nearly impossible for some buyers (often young households) to enter these housing markets. Yet it was in Montreal where RBC's aggregate measure went up the most in the third quarter. The area has been one of the stronger markets in Canada in the past year—another being Ottawa—that saw solid price gains amplify the effect of higher interest rates on ownership costs. Despite some deterioration in the latest period, owning a home remains affordable in the majority of other markets in Canada.

2019 unlikely to bring meaningful affordability relief

Those hoping to get a meaningful break in 2019 will likely be disappointed. We expect the Bank of Canada to hike the overnight rate two more times next year, which will sustain upward pressure on ownership costs. Still, we don't think that affordability is set to erode significantly either. A generally soft environment for prices and rising household income will contain some of that pressure.



British Columbia

Victoria – Third-least affordable market in Canada

RBC's aggregate affordability measure stalled in the third quarter (down marginally by 0.1 percentage points) but the fact remains that ownership costs in Victoria are the third-highest in Canada. So local buyers continue to struggle to find something they can afford. An average home would take 65.3% of their income to carry. Add in the mortgage stress and market-cooling measures introduced by the BC government and it's not a surprise that home resales fell 20% this year.

Vancouver area – Crisis-level affordability weighs heavily on the market

The home ownership bar is still incredibly high for Vancouver buyers—pretty much the highest it's ever been in Canadian history. At least, it didn't rise further in the third quarter. RBC's aggregate measure eased by 1.7 percentage points to 86.9%. Crisis-level affordability weighed heavily on the market this year. Resale activity plunged 31% from a year ago with few signs so far that the bottom has been reached. Demand has weakened so much that the few buyers out there are now able to get some price concessions from sellers. We expect prices to decline somewhat in 2019.

Alberta

Calgary – Rising interest rates stunt the recovery

The story didn't really change in Calgary in the third quarter—unfortunately. Rising interest rates continued to deprive Calgary homebuyers from the benefits of stagnating home prices. RBC's aggregate affordability measure increased for a fifth consecutive quarter by 0.2 percentage points to 43.4%. This slow erosion in affordability isn't helping the market to recover. On the contrary, it contributed to stunt the recovery process this year. Resales to date slumped nearly 13% from a year ago. The recent turmoil in Alberta's energy sector doesn't bode well to get things back on track in 2019.

Edmonton – Affordability isn't a big issue

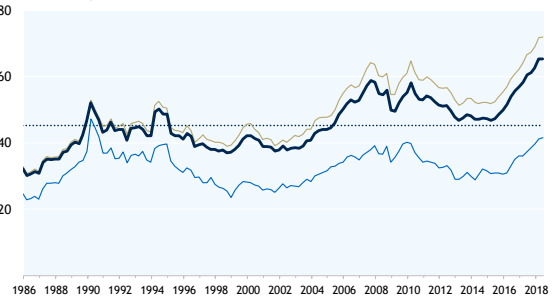
Affordability also is on a slow eroding trend in Edmonton although the share of household income needed to cover ownership costs (28.2% in the third quarter) remains historically low in the area. So affordability is unlikely to be a big issue in Edmonton at this point. The new stress test could be, however. Higher qualifying interest rates for a mortgage could have kept many buyers on the sidelines this year as home resales fell 2.7%.

RBC Housing Affordability Measures

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

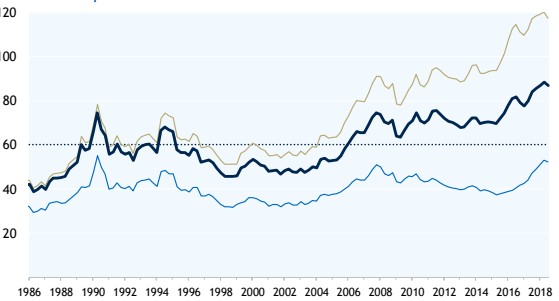
Victoria

Ownership costs as % of median household income



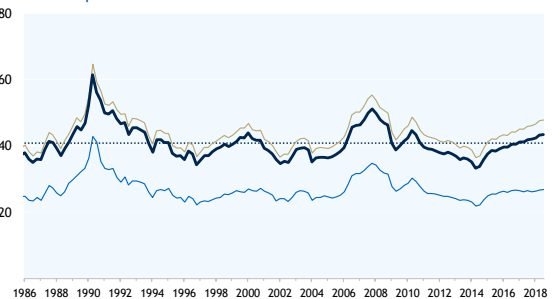
Vancouver Area

Ownership costs as % of median household income



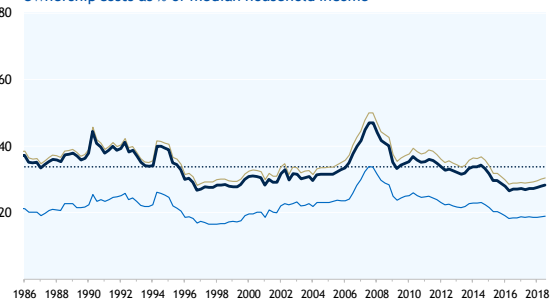
Calgary

Ownership costs as % of median household income



Edmonton

Ownership costs as % of median household income



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

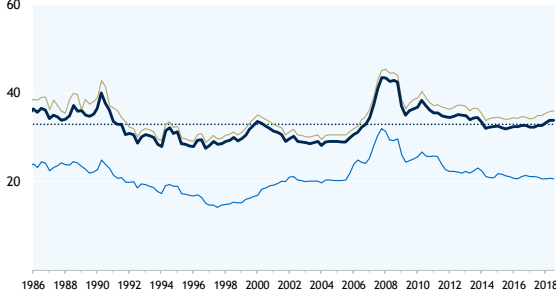


RBC Housing Affordability Measures

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

Saskatoon

Ownership costs as % of median household income



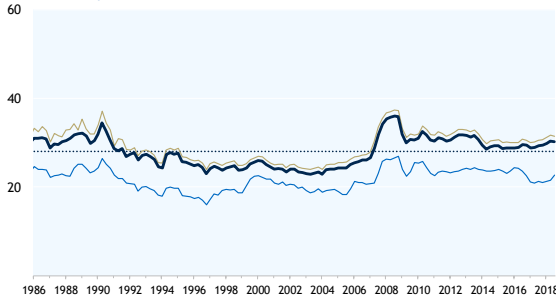
Saskatchewan

Saskatoon – Market softness persists

Earlier signs pointing to a turnaround in Saskatoon's market have been mixed more recently. Resale activity eased this fall after showing a promising pick-up in the summer, and demand-supply conditions softened up again, further pressuring prices down. The good news remains that unsold inventories are still trending lower and no longer pose a concern. Affordability is unlikely to be the issue holding buyers back. RBC's aggregate affordability measure was unchanged at 33.8% in the third quarter, still near its long-run average of 32.9%.

Regina

Ownership costs as % of median household income

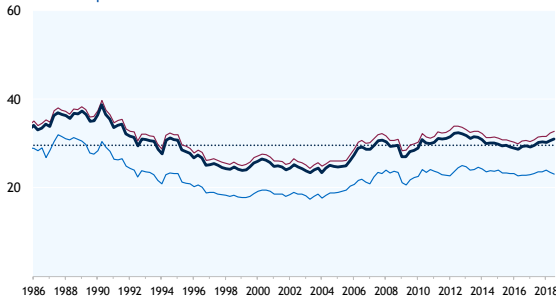


Regina – Stagnant labour market is a bigger deal than affordability

Likewise, affordability is probably not a huge factor for most Regina buyers at this stage. Despite a slight uptick in the past year, the share of income required to carry ownership costs (30.2% in the third quarter) is close to historical norms. A stagnant job market no doubt is a bigger weight on homebuyer demand. Resales are down by more than 6% in 2018 and prices are declining slightly.

Winnipeg

Ownership costs as % of median household income



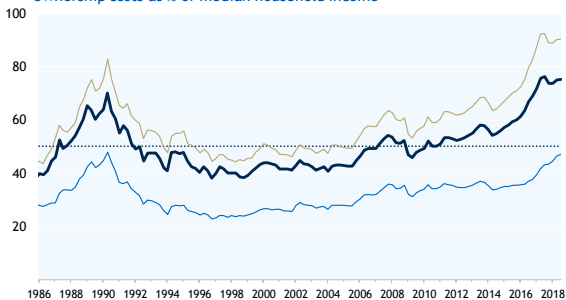
Manitoba

Winnipeg – Ownership costs remain well under control

Winnipeg's market is still on course to land softly after reaching sales heights in 2016 and 2017. The moderation this year may have more to do with the mortgage stress test than ownership costs, which remain well under control. RBC's aggregate measure didn't look abnormal for the area at 31.0% in the third quarter. It was up 0.4 percentage points from the previous quarter but still closely approximated the long-run average of 29.5%. The slowdown in activity in 2018 has been orderly with demand and supply remaining in balance overall, although the condo segment showed more visible signs of weakness.

Toronto Area

Ownership costs as % of median household income



Ontario

Toronto area – Things aren't getting any easier for buyers

It's easy to understand why many Toronto-area buyers feel frustrated. Even with prices leveling off this year, purchasing a property isn't getting any easier. In large part that's because the mortgage stress test and rising interest rates raised the ownership bar higher for them than buyers in every other market in Canada except Vancouver. Affordability has practically never been this poor in the area. It would have taken an astounding 75.3% of a typical household's income to cover the ownership costs of an average-priced home in the third quarter. This was up 0.3 percentage points from the previous quarter. So it's not really a shock that resale activity slumped almost 16% in 2018. Don't hold your breath for a meaningful rebound in 2019.

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

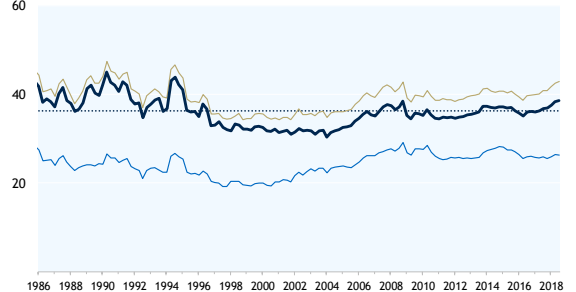


RBC Housing Affordability Measures

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

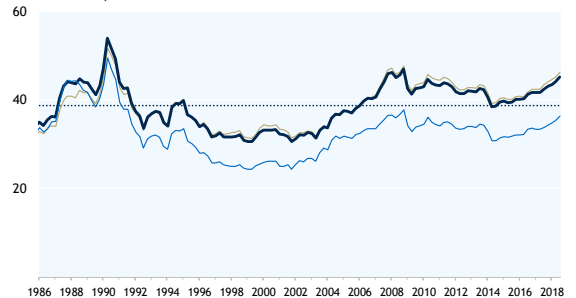
Ottawa

Ownership costs as % of median household income



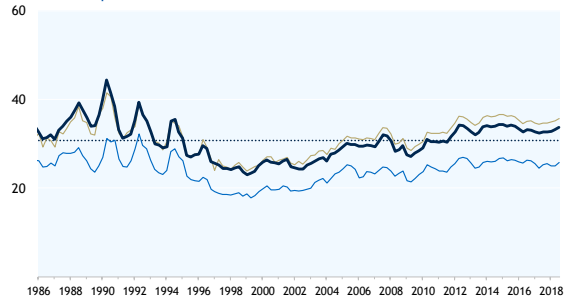
Montreal Area

Ownership costs as % of median household income



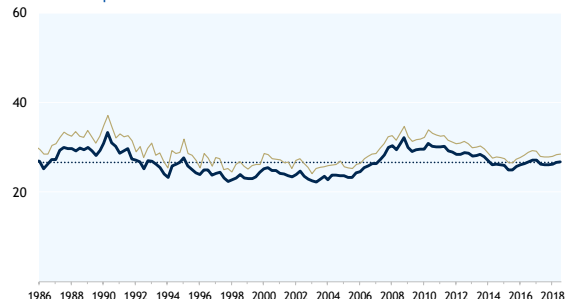
Quebec City

Ownership costs as % of median household income



Saint John

Ownership costs as % of median household income



Ottawa – In the limelight

Ottawa's market continues to thrive. Home resales and prices still track a firm upward trajectory, and demand-supply conditions are as tight as they've been in the area in nearly a decade. Ownership costs are on the rise but buyers don't seem to mind much at this point. RBC's aggregate affordability measure rose for a sixth-straight time in the third quarter. The 0.3 percentage-point increase took the measure to 38.6%. Further deterioration is likely in the near term given the market's current tightness.

Quebec

Montreal area – Affordability pressures are building

Along with Ottawa, Montreal has been one of the stronger housing markets in Canada in 2018. Home resales are on pace to set a new record high for the area and price gains have been solid all-round. The flip side, though, has been a rise in ownership costs. In fact, upward pressure on those costs has been building for three years and affordability issues are now beginning to emerge. RBC's aggregate measure reached a 10-year high of 45.2% in the third quarter, following 1.0 percentage point rise from the second quarter—the largest increase among markets that we track.

Quebec City – Stable affordability picture despite uneven activity

It's been an uneven year for Quebec City's market. Activity started slowly as buyers dealt with the new stress test. Then things picked up in the spring before easing again in the third quarter. Plentiful inventories were a constant, however, which kept price increases to a minimum. Buyers continued to benefit from a fairly stable affordability picture in the area. RBC's aggregate measure tracked a mainly flat trend over the past six years. The measure rose slightly by 0.6 percentage points in the third quarter to 33.7%.

Atlantic Canada

Saint John – Looking pretty solid at this point

Were it not for the rough patch early on—no doubt related to the introduction of the new mortgage stress test—2018 probably would have been the strongest year in a decade for Saint John's housing market. Fall activity was especially solid, which led to a sharp tightening in demand-supply conditions. If sustained, sellers will gain greater command of prices in the period ahead. For now, Saint John is still the most affordable market that we track. RBC's aggregate measure for the area was 26.7% in the third quarter, up just 0.1 percentage points from the second quarter.

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

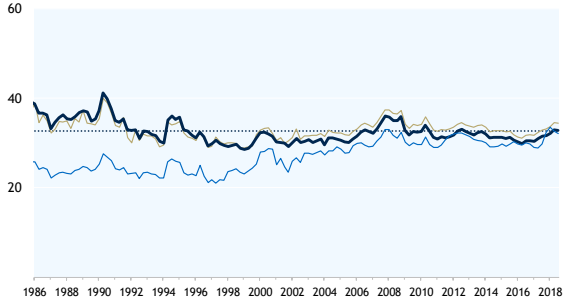


RBC Housing Affordability Measures

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

Halifax

Ownership costs as % of median household income

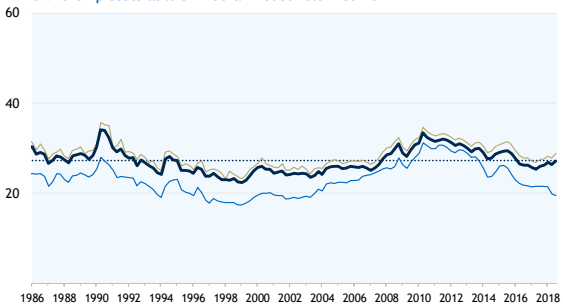


Halifax – In a good spot

Despite a bout of volatility in the fall, home resales in the Halifax area are set to reach a six-year high in 2018. Brisk activity kept demand-supply conditions quite tight throughout most of the year as for-sale inventories fell to multi-year lows since summer. Yet property values haven't deviated from their slow and steady pace of appreciation. This helped to contain ownership costs in the area. RBC's aggregate affordability measure was little changed in the third quarter at 32.8%—effectively on par with the long-term average of 33.6%.

St. John's

Ownership costs as % of median household income



St. John's – Tough times

Times are tough for St. John's market. The number of properties changing hands will drop for a third-straight year in 2018 to a 12-year low. Despite plenty of for-sale options, buyers aren't biting. Confidence just isn't there as the local job market continues to be fragile. This isn't really an affordability story. Owning a home in the area is still largely affordable. RBC's aggregate measure, at 27.1% in the third quarter, is the second-lowest among the markets that we track—and in line with the long-run average of 27.2% for the area.



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			
	Q3 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q3 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	567,600	0.6	1.2	53.9	0.3	1.5	42.0
Victoria	813,800	1.5	7.3	65.3	-0.1	4.8	45.2
Vancouver area	1,139,000	-0.7	2.0	86.9	-1.7	2.7	60.2
Calgary	508,400	0.0	0.7	43.4	0.2	1.6	40.8
Edmonton	409,200	0.4	0.4	28.2	0.2	1.0	33.8
Saskatoon	365,300	-0.7	-0.9	33.8	0.0	1.2	32.9
Regina	323,800	-1.3	-1.3	30.2	-0.1	0.9	28.1
Winnipeg	310,700	1.1	1.6	31.0	0.4	0.8	29.5
Toronto area	857,000	0.5	-3.0	75.3	0.3	-0.9	50.1
Ottawa	436,500	1.1	4.7	38.6	0.3	1.8	36.3
Montreal area	415,300	2.0	5.8	45.2	1.0	2.7	38.7
Quebec City	300,400	1.4	2.4	33.7	0.6	1.1	30.7
Saint John	215,400	2.0	3.2	26.7	0.1	0.6	26.6
Halifax	325,500	1.1	1.1	32.8	-0.1	1.4	32.6
St. John's	306,000	-1.0	-0.4	27.1	0.7	1.1	27.2

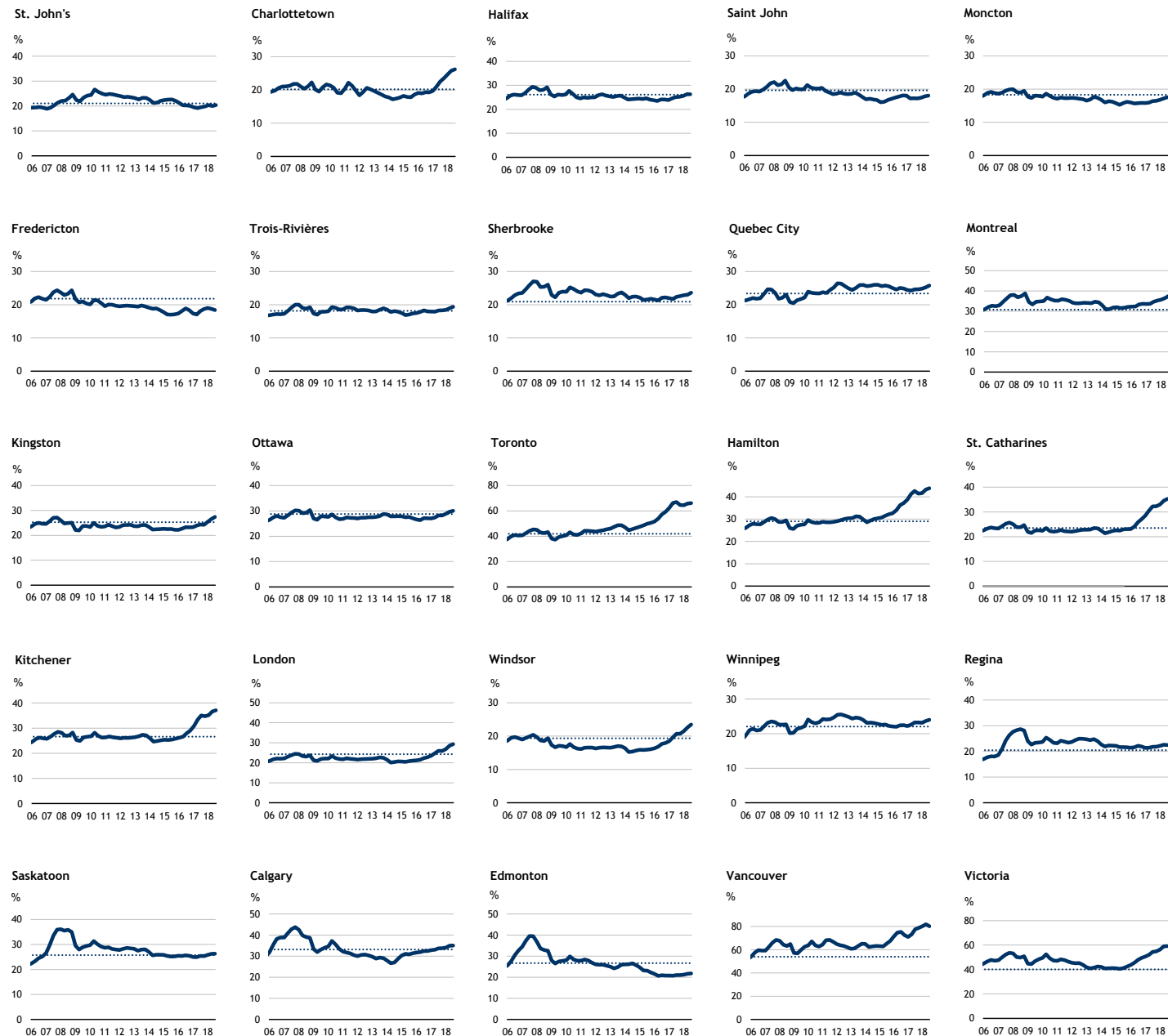
Single-family detached							
Market	Price			RBC Housing Affordability Measure			
	Q3 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q3 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	621,700	0.6	0.4	59.2	0.3	1.2	44.7
Victoria	896,200	1.8	7.4	71.9	0.1	5.3	48.4
Vancouver area	1,562,300	-1.2	-1.2	117.3	-2.9	0.2	71.6
Calgary	560,600	0.1	1.3	47.8	0.2	1.9	43.8
Edmonton	437,600	0.6	1.2	30.3	0.3	1.2	35.6
Saskatoon	380,800	-0.8	-1.8	35.9	0.1	1.0	34.7
Regina	327,500	-1.7	-1.4	31.5	-0.1	1.0	29.4
Winnipeg	321,400	1.3	3.6	32.7	0.4	1.3	30.7
Toronto area	1,037,300	0.4	-4.1	90.4	0.2	-2.2	58.4
Ottawa	479,700	1.4	5.3	42.9	0.4	2.1	39.5
Montreal area	415,900	2.1	6.1	46.2	1.1	2.8	38.7
Quebec City	310,600	1.1	2.2	35.7	0.5	1.0	31.5
Saint John	223,600	2.5	3.3	28.5	0.2	0.6	29.1
Halifax	335,200	1.2	1.8	34.4	-0.1	1.6	33.1
St. John's	319,000	-0.3	0.6	28.8	0.9	1.4	28.5

Condominium apartment							
Market	Price			RBC Housing Affordability Measure			
	Q3 2018 (\$)	Q/Q % ch.	Y/Y % ch.	Q3 2018 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada	460,600	1.2	8.3	43.2	0.5	3.6	34.1
Victoria	503,000	2.6	12.0	41.6	0.4	4.4	32.2
Vancouver area	667,000	0.2	11.2	52.4	-0.6	5.4	39.8
Calgary	290,400	0.0	-1.9	26.8	0.1	0.4	26.9
Edmonton	258,300	-0.2	-3.1	18.8	0.0	0.1	22.2
Saskatoon	208,500	-1.7	-8.0	20.6	-0.1	-0.4	21.4
Regina	242,900	5.6	3.1	22.6	1.0	1.4	21.8
Winnipeg	230,600	-3.0	-4.6	23.0	-0.5	-0.5	23.0
Toronto area	523,700	1.8	9.0	47.0	0.7	3.9	31.9
Ottawa	298,700	-0.7	0.1	26.3	-0.2	0.4	24.4
Montreal area	339,900	2.4	7.0	36.3	0.9	2.5	32.6
Quebec City	239,400	3.1	1.0	25.8	0.8	0.6	24.0
Saint John	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Halifax	336,800	-0.6	5.1	32.1	-0.5	2.4	27.0
St. John's	217,900	-6.9	-17.0	19.5	-0.4	-2.0	23.1



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

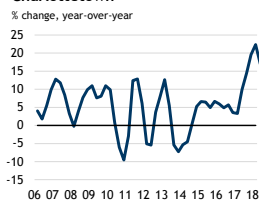


Aggregate home price

St. John's



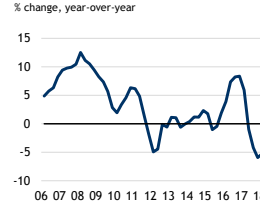
Charlottetown



Halifax



Saint John



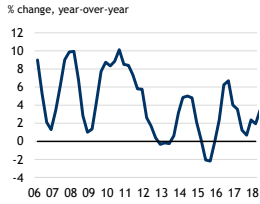
Moncton



Fredericton



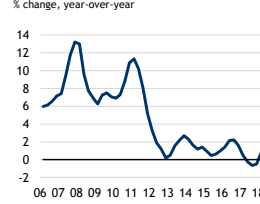
Trois-Rivières



Sherbrooke



Quebec City



Montreal



Kingston



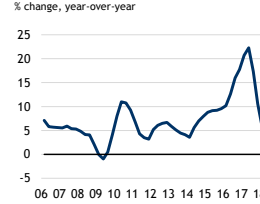
Ottawa



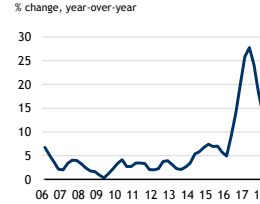
Toronto



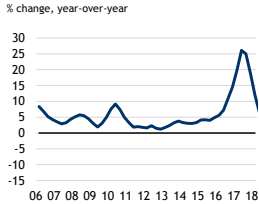
Hamilton



St. Catharines



Kitchener



London



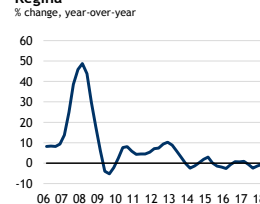
Windsor



Winnipeg



Regina



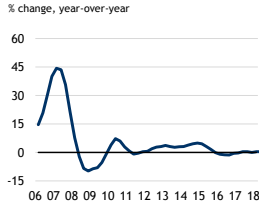
Saskatoon



Calgary



Edmonton



Vancouver



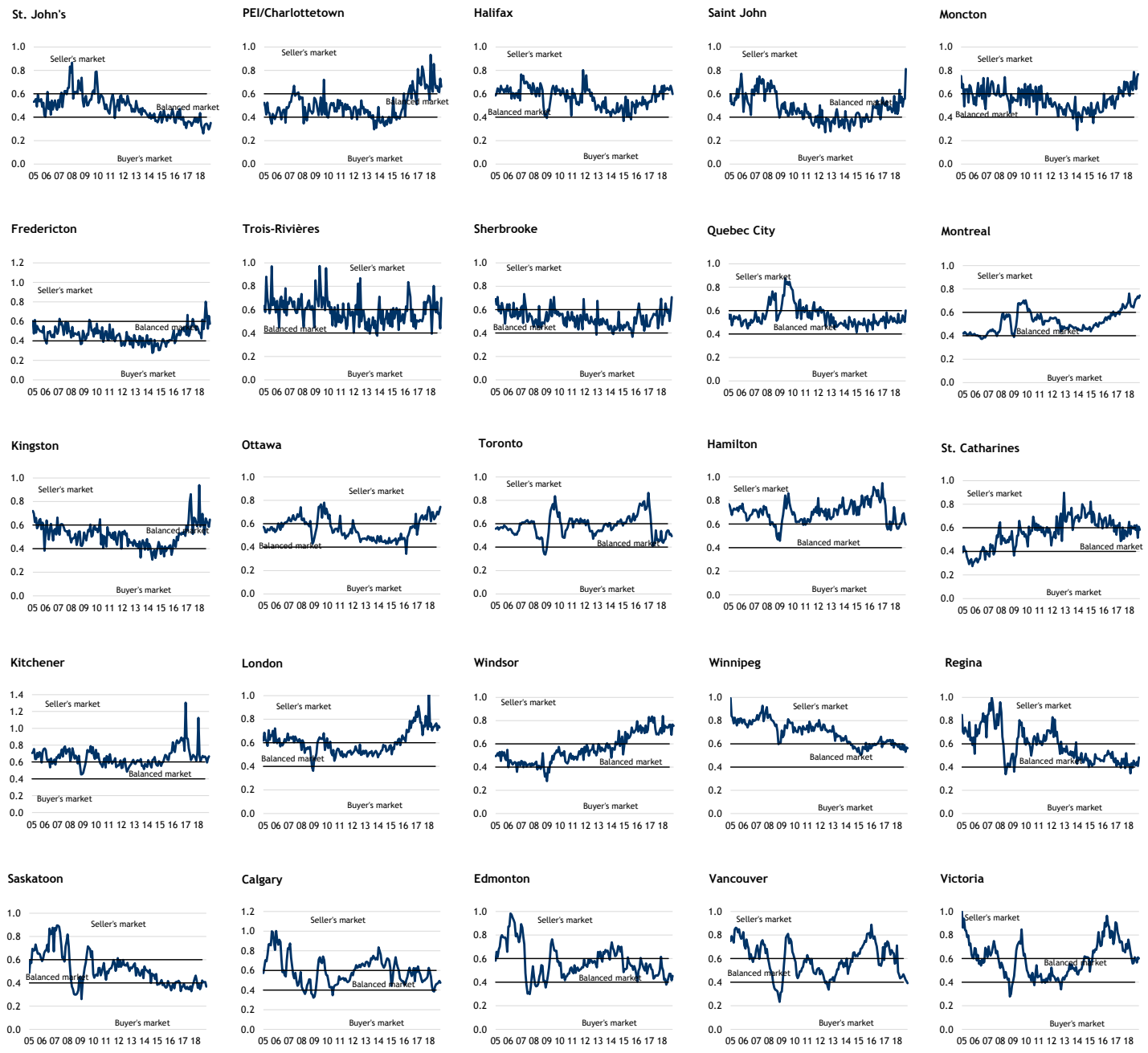
Victoria



Source: RPS, RBC Economics Research



Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics Research

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