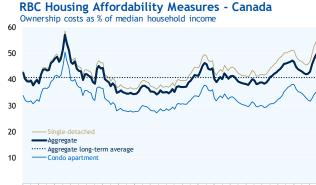


HOUSING TRENDS AND AFFORDABILITY

March 2022

Housing affordability spiraling to worrisome levels

- Market frenzy drives up ownership costs to extremes: RBC's aggregate affordability measure for Canada was at its worst level in 31 years in the fourth quarter of 2021, rising 1.6 percentage points to 49.4%. The deterioration over the past year is a near-record 7.2 percentage points—exceeded only once in 1990.
- Seriously tighter squeeze in Toronto, Vancouver and Victoria: Soaring prices are crushing affordability in those markets, as well as others in southern Ontario. The deteriorating trend, however, is widespread with the RBC measure up in all markets we track in the past 12 months.
- Situation isn't as strained in the Prairies and some east-coast markets: Ownership costs in these regions still generally look manageable so far. Halifax is an emerging exception.



1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021

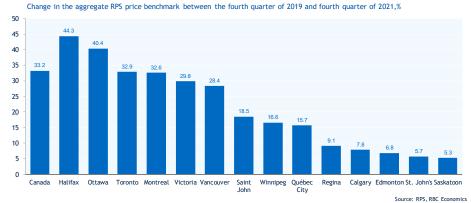
The outlook for affordability is grim: Rapid price escalation in the early months of 2022 has already raised the bar to impossible levels for many homebuyers. And with the Bank of Canada now in the
process of hiking interest rates materially—we expect a total increase of at least 150 basis points in the coming year—ownership
costs look set to spiral even higher. Worst-ever affordability levels could well ensue, putting buyers in a precarious spot.

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

Canada	Vancouver	Calgary	Edmonton	Toronto	Ottawa	Montreal
49.7	73.9	32.9	25.8	68.6	41.3	41.3

Fourth quarter 2021

Soaring home prices during the pandemic...



Home prices detached from buyer reality in many areas

Price gains recorded during the pandemic have been nothing short of stunning across Canada, surpassing 30% nationwide and far more in several markets. There were good reasons for prices to go up: changing housing needs, strong household incomes (including government pandemic supports), and rock-bottom interest rates have supercharged demand while regulatory and administrative obstacles significantly held back the supply response, creating market imbalances of epic proportions. Increased investor participation further stirred up the buying frenzy and widened the gulf between demand and supply. Still, the extent to which prices have appreciat-



ed clearly went beyond what solid fundamentals would suggest in many parts of the country. In the fourth quarter of 2021, the aggregate price in Canada exceeded by 17% what the value would have been if Canadians had dedicated the same proportion of their income toward ownership costs (RBC's affordability measure) as just before the pandemic. In other words, Canadians paid a 17% premium over late-2019 valuations—which were already quite steep. That premium was considerably more in Halifax (26%), Ottawa (24%) and Toronto (22%), and slightly less—though still substantial—in



Vancouver (16.7%), Montreal (15%) and Victoria (13%). We see large departures from historical norms as signs that prices have detached from local buyers' realities. Whether lofty valuations can be sustained will largely depend on how long demand-supply conditions remain ultra tight and market sentiment stays bullish. We think a large (and likely rapid) increase in interest rates in time will bring about significant changes: cooler demand, easing imbalances and possibly dampening expectations.

Higher sensitivity to interest rates to add stress

Canadian homebuyers are a lot more sensitive to interest rate changes than they were 10 or 15 years ago as today's sky-high prices amplify the impact on mortgage payments. A one percentage-point rise in rates currently would boost payments by \$315 per month for a standard home in Canada (valued at \$775,000), or roughly double what the increase would have been 10 years ago. Relative to household income, the impact is two-thirds larger now. Everything else equal, a 150 basis-point rise in rates—our call for the Bank of Canada—would propel RBC's composite affordability measure for Canada by more than 7 percentage points (a rise represents a loss of affordability). While income gains will provide a partial offset, it's entirely possible RBC's measure could spike to all-time highs in the year ahead. A shock of this magnitude would severely stress homebuyers and exert significant downward pressure on demand.

Vancouver, Toronto and Victoria more sensitive to rate hikes

Every buyer across the country will feel the pinch of rising rates. But buyers in the most expensive markets will feel it most. That's because interest rate fluctuations affect mortgage payments more in Vancouver, Toronto and Victoria where mortgage sizes significantly exceed the national average. RBC's aggregate affordability measure could easily surpass previous peaks in all three markets. Buyers in Montreal, Ottawa and, to a lesser extent, Halifax also face further material erosion of affordability. Most of Atlantic Canada and the Prairies, on the other hand, are relatively less sensitive, containing downward pressure on demand.

Many coping mechanisms available

We expect many buyers will shift their preferences to keep their ownership dream alive in a rising rate environment. This may include looking for a more modest home or a different type of home (for example, a condo instead of a single family home); considering more affordable neighborhoods, cities or provinces; opting for a type of mortgage with a lower rate (variable instead of fixed) or longer amortization; renting out part of the property to generate additional income; exploring co-ownership or other alternative ownership arrangements; and asking mom and dad for a gift (or a larger gift) toward down payment. These coping mechanisms would cushion the impact of rising rates on demand. Soaring immigration—with Canada further upping its immigration targets for the next three years—is also poised to soften the blow to a certain degree.



British Columbia

Victoria - Third-most expensive market in Canada

Victoria saw some of the fastest price appreciation among the markets we track in the past year. This considerably dented the market's affordability, which had improved markedly before the pandemic. RBC's aggregate measure soared 8.2 percentage points since late-2020 to 54.8%. This included a fourth-straight increase of 2.4 percentage points in the fourth quarter of 2021. Strong demand and low inventories so far in 2022 continue to apply intense upward price pressure. We expect that pressure to ease later this year as rising interest rates and deteriorating affordability cool demand.

Vancouver area - Ownership costs jump

The period of affordability relief ended a year ago for Vancouver buyers. Ownership costs have escalated rapidly since then, driving up RBC's aggregate measure an astounding 9.0 percentage points (including 2.9 percentage points in the latest period) to 73.9%—the poorest level in Canada. The condo segment, though, bucked the trend. It remains significantly more affordable than single-family homes, at levels that have deteriorated only modestly. Buyers have taken notice and directed increasing attention to this segment, making it the fastest-growing category over the past year. We expect this to continue.

Alberta

Calgary - Getting (much) hotter

Demand has exploded in the area since late last year, propelling activity to never-before-seen levels. Competition between buyers has heated up tremendously as a result, and prices have gained momentum. Still, price increases so far have been short of those recorded in Ontario, BC, and parts of Quebec and Atlantic Canada. The upshot is that affordability remains generally good in Calgary despite some erosion recently. RBC's aggregate measure, at 32.9%, is still well below its long-term average of 38.6%. We expect further erosion in the period ahead.

Edmonton – Bright affordability picture starting to dim

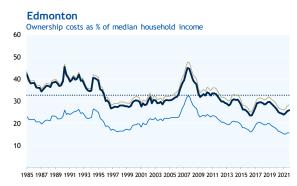
Edmonton, too, saw a spike in resale activity and considerably tighter demandsupply conditions over the past several months. And area prices, too, have picked up. This has led to some worsening in housing affordability. Yet buyers still face historically favourable conditions. RBC's aggregate measure (25.8%) remains comfortably below its long-run average (32.5%). With strong upward price pressure likely to persist in the near term and interest rates on their way up, we expect ownership costs to rise, further weighing on affordability.

RBC Housing Affordability Measures





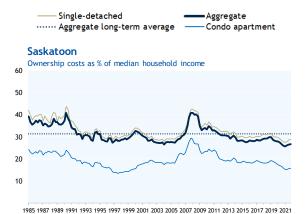


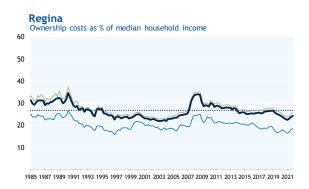


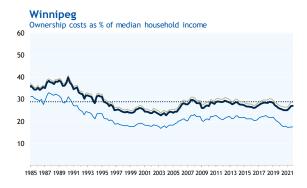
Source: RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics



RBC Housing Affordability Measures









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

Saskatoon - Solid all-round

Saskatchewan

The market maintains a very solid pace of activity and inventories aren't keeping up. Yet price reaction to tight demand-supply conditions has been contained so far (especially compared to other Canadian markets). The rate of price appreciation continues to be modest, leaving the area's relatively favourable affordability picture largely intact. RBC's aggregate measure was little changed in the fourth quarter, edging up just 0.1 percentage points to 26.6%. We expect more significant affordability erosion in the period ahead though this would be unlikely to stress buyers excessively.

Regina - Retaining its attractive standing

The situation is broadly similar in Regina where home resales track far above pre-pandemic levels—around all-time highs, in fact—and supply has become increasingly short. Upward price pressure is building but this has yet to push up property values exceedingly and undermine affordability to a significant degree. RBC's aggregate measure rose in the past three quarters, reaching 24.1% in the latest period—still the best among the Western markets we track. We think Regina will retain its attractive standing despite further expected deterioration in affordability in the near term.

Manitoba

Winnipeg - Affordability stays well-behaved but for how long?

The market continues on its historic run. Home resales hover at sky-high levels and prices keep setting new records month after month. And activity could arguably be even stronger were there more sellers. Demand-supply conditions are the tightest they've been since 2007-2008. Yet affordability remains remarkably well behaved amidst all this. RBC's aggregate measure rose only 2.0 percentage points in the past year. At 27.0%, it's still below its long-run average (28.7%). This is likely to change, however. We expect the measure to rise materially in the period ahead.

Ontario

Toronto area - Affordability is taking a beating... and it's not over yet

Soaring prices and the rapid loss of affordability so far haven't done much to rebalance Toronto's market. Inventories are in fact near historical lows as legions of buyers snap up properties as soon as they're put up for sale. The frenzy's persistence is perplexing considering the beating the area's affordability is taking. RBC's aggregate measure has jumped an astounding 10.8 percentage points in the past year to 68.6%—second only to the 71.4% peak in 1990. And this trend isn't over. We expect the measure will go further up (likely by a lot) as prices continue to escalate near term and interest rates increase. With the ownership bar rising so much, though, an increasing number of buyers will be forced to reset their expectations.



Ottawa - Buyers so far unperturbed by loss of affordability

Ottawa is among markets experiencing the strongest price increases in the past year, and this has taken a toll on the area's affordability. RBC's aggregate measure jumped 5.8 percentage points since late-2020 to 41.3%, its highest (worst) level in 27 years. Buyers so far seem unperturbed, staying extremely active in the market and competing fiercely on price in the face of scarce supply. We expect the affordability picture will get even more challenging for them in the period ahead. Prices are poised to rise further under the current tight demand-supply conditions, and rising interest rates will add weight to mortgage carrying costs. We think rapidly deteriorating affordability will increasingly hold back buyers.

Quebec

Montreal area - Buyers increasingly stressed

It hasn't been so unaffordable to purchase a home in the Montreal area since 2008. RBC's aggregate measure in the fourth quarter surpassed the 41% mark for the first time in 13 years, up a solid 5.5 percentage points from a year ago. Unfortunately, it's about to become even less affordable. We see property values appreciating some more as the market remains tilted in favour of sellers with higher interest rates amplifying the impact on ownership costs. We believe this will dial down buyers' fervour. The moderating resales trend since mid-2021, in fact, may be a sign buyers are already adjusting.

Quebec City - Solid underpinnings keep activity brisk

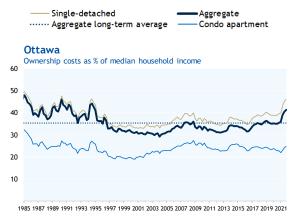
Quebec City buyers continue to benefit from a generally positive affordability picture despite a slight deterioration in the past three quarters. RBC's aggregate measure stood at 25.0% in the fourth quarter, up 1.9 percentage points from a year ago albeit still comfortably below the 29.1% long-term average. Good affordability underpinnings are sustaining strong buyer interest and participation in the market. Brisk activity in the past year has tightened demand-supply conditions considerably and put sellers in the driver's seat. We expect prices will stay on an upward trajectory in the near term.

Atlantic Canada

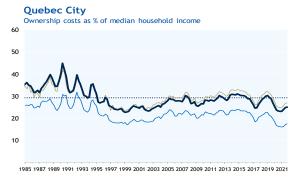
Saint John - Has much to offer, including good affordability

The market is red hot with home resales last year blasting through their previous all-time high (set in 2020) by 21% and prices soaring at their fastest pace ever. Saint John offers much to buyers—great amenities, lifestyle, economic opportunities. But it's biggest draw is easily its excellent affordability. RBC's aggregate measure (24.2%) is the third-best among the markets we track. It's also still below its long-run average (26.1%) despite rising 2.6 percentage points in the past year. With so many buyers now in the market, though, demand-supply conditions are poised to stay tight for a while, sustaining intense upward price pressure. We expect this will further erode affordability in the period ahead.

RBC Housing Affordability Measures





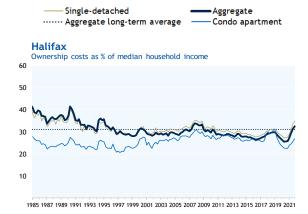


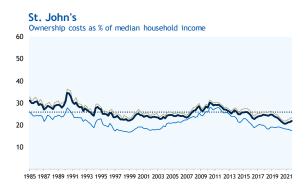


Source: RPS, Statistics Canada, Bank of Canada, Royal LePage, RBC Economics



RBC Housing Affordability Measures





Halifax - Canada's hottest market?

Move over, Toronto and Vancouver. Halifax may be the hotter market right now. Certainly the rate of price appreciation—more than 27% in the past year—places Halifax up there among Canada's housing hotspots. And like these other markets, affordability is under siege in Halifax. RBC's aggregate measure surged 6.7 percentage points since late-2020, representing the biggest deterioration on record in the area. The positive news is this took place from a good starting position so the measure (at 32.5%) still doesn't pose a major hurdle for buyers. But further erosion—as we expect—would make the situation increasingly challenging.

St. John's - On a historic run

It may not grab the national headlines but St. John's housing market is on a historic run. Home resales have yet to let up since rebounding from the initial shock of the pandemic in the spring of 2020, recently reaching levels nearly double those prevailing in 2019. Attractive affordability—the best among markets we track—is no doubt stoking homebuyer demand. The ownership costs of a typical home take up just 21.8% of pre-tax household income in the area (RBC's aggregate measure), or less than half the national average (49.7%). Despite demand-supply conditions recently the tightest they've in 15 years, home prices have appreciated only modestly in the past year. This may change in the period, though.

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



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 cover mortgage payments (principal and interest), property taxes, and utilities based on the benchmark 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.

The aggregate of all categories includes information on semi-detached, row houses, townhouses and plexes—categories not covered in this report—in addition to single-family detached homes and condominium apartments. In general, single-family detached homes and condo apartments represent the bulk of the housing stock (excluding purpose-built rental buildings).

Mortgage payments are based on a 20% down payment, a 25-year mortgage loan and a five-year fixed mortgage rate. The latter is a weighted average of 5-year fixed rates charged by chartered banks on new insured and uninsured mortgages.

Benchmark prices are sourced from RPS Real Property Solutions.

RBC's affordability measures use household income rather than family income to account for unattached individuals. Pre-tax income don't show the effect of various provincial property-tax credits, which could alter relative levels of affordability. Quarterly income is obtained by interpolating annual data. We apply the growth in average weekly earnings to extend the income series to the latest period. The median income represents the value below and above which lays an equal number of observations.

The higher the measure, the less affordable owning a home is. For example, an affordability measure of 50% means that home ownership costs, including mortgage payments, utilities, and property taxes would take up 50% of a typical household's pre-tax income at current price and interest rate levels.

Summary tables

Aggregate of all categories									
	Price				RBC Housing Affordability Measure				
Market	Q4 2021	Q/Q	Y/Y	Q4 2021	Q/Q	Y/Y	Avg. since '85		
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)		
Canada	775,300	3.0	18.6	49.7	1.8	7.5	40.9		
Victoria	1,025,500	3.0	18.5	54.8	2.4	8.2	44.0		
Vancouver area	1,293,600	2.4	13.9	73.9	2.9	9.0	58.5		
Calgary	528,600	0.4	5.8	32.9	0.3	2.0	38.6		
Edmonton	425,500	0.8	5.3	25.8	0.3	1.5	32.5		
Saskatoon	389,900	-0.4	3.1	26.6	0.1	0.8	31.2		
Regina	349,200	2.1	8.1	24.1	0.5	1.4	26.5		
Winnipeg	365,200	0.8	9.4	27.0	0.1	2.0	28.7		
Toronto area	1,188,600	3.4	18.4	68.6	2.9	10.8	48.9		
Ottawa	666,400	0.2	17.5	41.3	0.8	5.8	35.4		
Montreal area	597,000	2.5	16.3	41.3	0.8	5.5	37.5		
Quebec City	351,200	1.6	9.5	25.0	0.2	1.9	29.1		
Saint John	259,600	3.4	16.8	24.2	0.6	2.6	26.1		
Halifax	487,200	3.8	27.1	32.5	1.1	6.7	31.1		
St. John's	313,300	0.8	5.4	21.8	0.5	1.2	25.8		

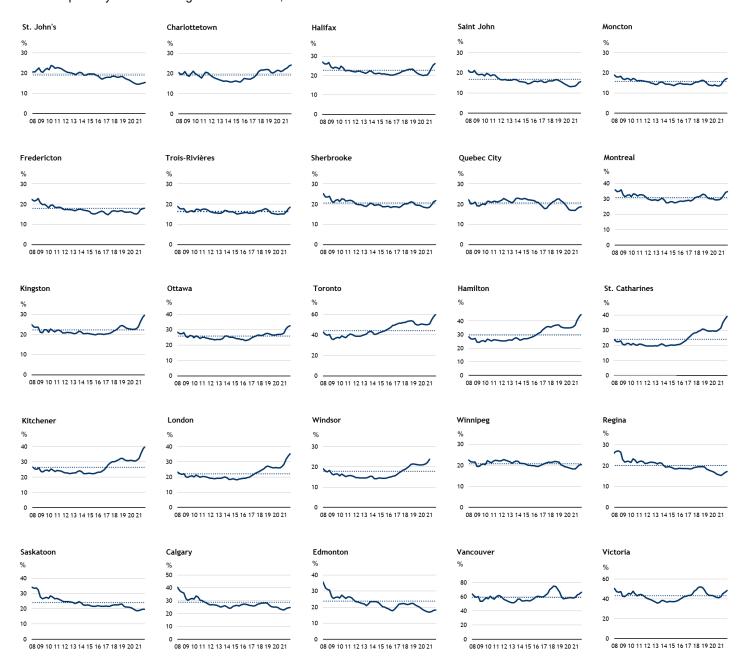
Single-family detached								
	F		RBC Housing Affordability Measure					
Market	Q4 2021	Q/Q	Y/Y	Q4 2021	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada	847,700	3.1	19.8	54.6	2.0	8.6	43.3	
Victoria	1,162,600	3.7	19.9	61.9	3.0	9.8	47.4	
Vancouver area	1,779,300	2.4	16.1	99.7	3.9	13.9	69.7	
Calgary	588,100	1.2	6.7	36.5	0.6	2.5	41.5	
Edmonton	464,000	1.2	7.0	28.2	0.4	2.0	34.2	
Saskatoon	417,100	0.3	4.3	28.8	0.2	1.0	32.9	
Regina	359,400	2.7	8.5	25.5	0.6	1.5	27.8	
Winnipeg	380,500	1.1	10.2	28.6	0.1	2.2	29.9	
Toronto area	1,450,900	3.2	19.5	83.1	3.5	13.7	56.5	
Ottawa	736,100	0.3	18.1	46.0	0.9	6.5	38.2	
Montreal area	638,600	3.0	19.7	44.5	1.0	6.8	37.8	
Quebec City	371,700	1.8	10.2	27.0	0.2	2.2	29.8	
Saint John	266,000	3.3	13.2	25.6	0.5	2.2	28.5	
Halifax	515,800	4.8	28.4	34.8	1.4	7.3	31.5	
St. John's	328,100	1.3	6.9	23.3	0.6	1.5	27.0	

Condominium apartment								
Price				RBC Housing Affordability Measure				
Market	Q4 2021	Q/Q	Y/Y	Q4 2021	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.	% ch.	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada	542,800	2.1	8.8	35.1	1.0	3.1	33.0	
Victoria	592,700	2.6	9.7	33.0	1.3	2.8	31.4	
Vancouver area	689,300	2.0	6.0	41.4	1.5	2.6	39.0	
Calgary	257,600	-1.6	-0.2	18.7	0.0	0.4	25.4	
Edmonton	225,200	-0.5	-4.1	15.7	0.1	0.1	21.2	
Saskatoon	211,900	1.2	0.5	15.8	0.2	0.1	19.5	
Regina	269,800	2.9	13.8	18.4	0.4	1.6	20.4	
Winnipeg	223,800	0.1	-3.9	17.4	0.0	-0.3	22.2	
Toronto area	663,300	2.2	8.9	39.7	1.4	3.7	31.3	
Ottawa	386,500	0.9	8.1	24.7	0.6	2.0	23.8	
Montreal area	445,900	2.6	12.6	30.8	0.6	3.4	31.5	
Quebec City	250,300	4.1	9.5	17.6	0.5	1.4	22.3	
Saint John	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Halifax	410,700	5.1	18.3	26.8	1.2	4.3	25.6	
St. John's	258,200	-5.0	-8.9	17.5	-0.3	-0.8	21.6	



Mortgage carrying costs by city

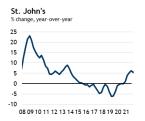
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at market prices, including principal and interest, property taxes and utilities; the modified measure used here includes the 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 20% 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.



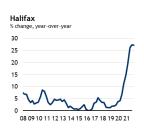
The dashed line represents the long-term average for the market. Source: RPS, Statistics Canada, Bank of Canada, RBC Economics



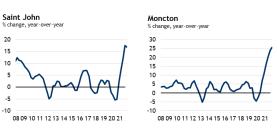
Aggregate home price



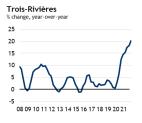


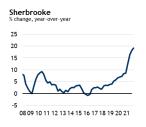


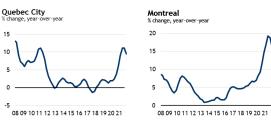
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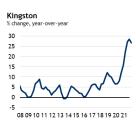


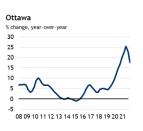


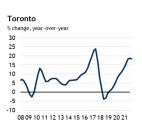


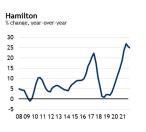


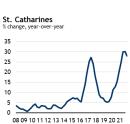




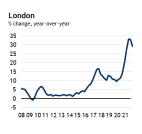






















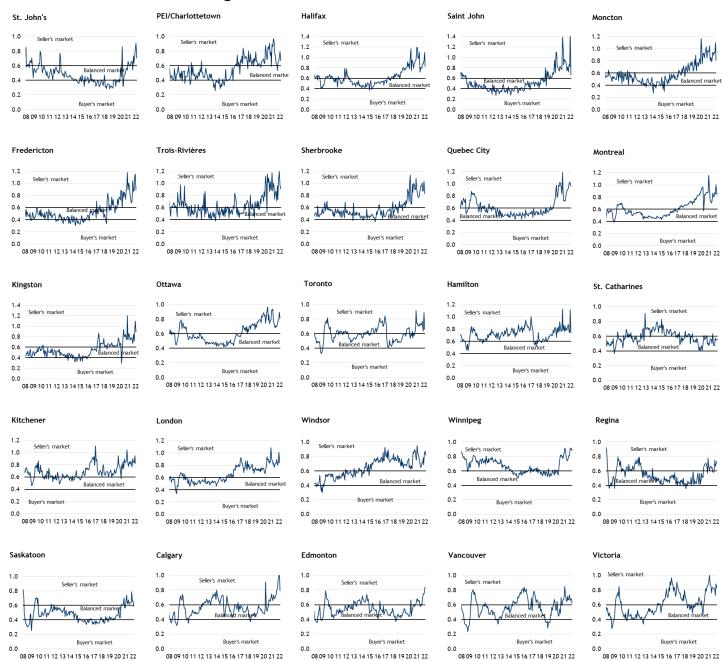




Source: RPS, RBC Economics



Home sales-to-new listings ratio



Source: Canadian Real Estate Association, RBC Economics