RBC ECONOMIC RESEARCH

CANADIAN HOUSING HEALTH CHECK

January 2019

Largest four housing markets

Toronto — Stretched affordability is the top vulnerability. Higher interest rates are exacerbating the situation, while the stress test still represents a tough hurdle to clear. Regulatory changes made the market healthier—it is now balanced, well supported by economic and demographic fundamentals, and while condo building activity is elevated we see few signs of overbuilding. Downward pressure on prices has begun to subside.

Montreal — This remains one of Canada's stronger markets at present with a generally positive risk/vulnerability profile. Buyer interest has been quite resilient in the face of the stress test and rising interest rates. Demandsupply conditions are tight and prices are accelerating moderately. An erosion of affordability is a factor worth monitoring closely as is a rise in rental project construction.

Vancouver — Crisis-level affordability is the number one source of vulnerability. Recent policy measures continue to pose near-term risks. Demandsupply conditions have loosened markedly and buyers are now in command. Further modest price declines are expected near term. A re-acceleration of population growth tempers risks associated with high construction levels.

Calgary — The energy sector downturn is a concern. It is undermining housing market confidence. Demand-supply conditions are soft, and support for prices is weak. Property values are poised to remain under downward pressure in the near term. High condo inventories remain an issue, as is slower population growth.

Severe downturn remains unlikely despite higher interest rates increasing risk for Canada's housing market

Nation-wide: The probability of a steep and widespread housing downturn over the next 12 months is still low but has increased somewhat in recent months. The mortgage stress test and rising interest rates continue to exert pressure on homebuyers across Canada

Local housing markets: No major market appears to be at risk of a severe downturn although Vancouver, Calgary and other prairie markets exhibit some degree of imbalances that are undermining property values. Montreal (and Ottawa) continue to show mostly positive risk risk/vulnerability profiles while conditions are stabilizing in Toronto.

Interest rates: Prospects for higher interest rates are a central risk factor in the period ahead. High-priced Vancouver and Toronto are most exposed, as are areas where household debt is elevated such as in Alberta.

Housing policy: Adjustment to the new stress test is slow in many areas and will continue to pose short-term challenges in some markets. In British Columbia, market-cooling measures announced in 2018 added a further layer of policy adjustment risk. Longer term, the tightening of mortgage and housing policy rules will reduce risks.

Affordability: The high cost of homeownership in Vancouver, Toronto and, to a lesser degree, Montreal represents a significant vulnerability for Canada's major markets.

Unemployment: Labour market-related risks have eased in Alberta and Saskatchewan though they're still present. Labour market conditions are strong in the majority of other provinces and generally provide solid support for local housing markets.

Oil industry downturn: The sharp drop in oil prices and pipeline capacity issues have increased economic uncertainty in oil-producing provinces. This uncertainty—and the negative impact it has on confidence—poses a risk to housing markets in these regions.

Strong construction levels: Elevated levels of apartment construction in Vancouver, Toronto and Montreal raise some potential longer-term absorption issues. There's little risk near term as unsold inventories are low at the present time.

| Monitoring dashboard | | | | | |
|--|--------|-----------|---------|---------|----------|
| | Canada | Vancouver | Calgary | Toronto | Montreal |
| Affordability | | | | | |
| Resale market balance | | | | | |
| Rental market balance | | | | | |
| Interest rates | | | | | |
| Labour market | | | | | |
| Demographics | | | | | |
| New home inventory - singles New home inventory - multiples | | | | | |
| Homes under construction - singles Homes under construction - multiples | | <u> </u> | | | |

- Significantly outside historical norms and posing much higher risk than usual
 - Modestly outside historical norms and posing moderately higher risk than usual
 - Within historical norms or not posing any immediate threat



Background

Canadian Housing Health Check provides RBC Economics' assessment of key indicators of Canada's housing market that are deemed to offer early warning of potential imbalances. This monitoring exercise is one of the tools used regularly by RBC Economics to follow developments in this important sector of the Canadian economy. The report focuses on indicators that have been closely correlated (leading or coincident) with housing downturns and significant home price declines during housing cycles in the past three decades or so. While we believe that housing affordability and the sales-to-new listings ratio (and months' inventory) are the best indicators of market stress and price pressure, respectively, no single indicator provides perfect and accurate early warning signals of impending trouble. Accordingly, Canadian Housing Health Check emphasizes a 'dashboard' approach to convey the point that trouble in the housing market can arise from many directions and that it is imperative to monitor the situation broadly. This approach is complemented by a detailed review of individual indicators that includes a graphical depiction of the current situation within a historical context and a brief discussion of the rationale of our assessment.

About the graphics and risk 'zone' system

The dashboard graphics display the current values of the indicators (dark blue bar) within zones that we consider safe (green), concerning (yellow) or dangerous (red). The width of each graphics represents the range of values posted by the indicator during the past 30 years (or period of time available). The far left corresponds to the safest measure ever recorded and the far right, to the most extreme imbalance reached historically. For most indicators, the left corresponds to low values but for some (sales-to-new listings ratio and net immigration) to high values.

The yellow and red zones appearing in dashboard graphics and individual indicator charts generally were determined by analyzing past housing downturns and constitute our estimations of thresholds above (or, in some cases, below) which market imbalances and significant home price declines occurred at the national level in Canada. The yellow zone comprises a range of values that, historically, have been mostly associated with imbalances but not always with housing downturns (i.e. sustained price declines). In other words, these values give somewhat ambiguous and sometimes 'false' signals. The red zone, however, comprises values that represent imbalances much more clearly and of larger magnitude. An indicator in the red zone should be considered a source of worry. The farther to the right in the red zone in the dashboard graphics are the values, the more extreme is the imbalance, the more intense is the stress exerted on the market and, ultimately, the more severe the potential correction.

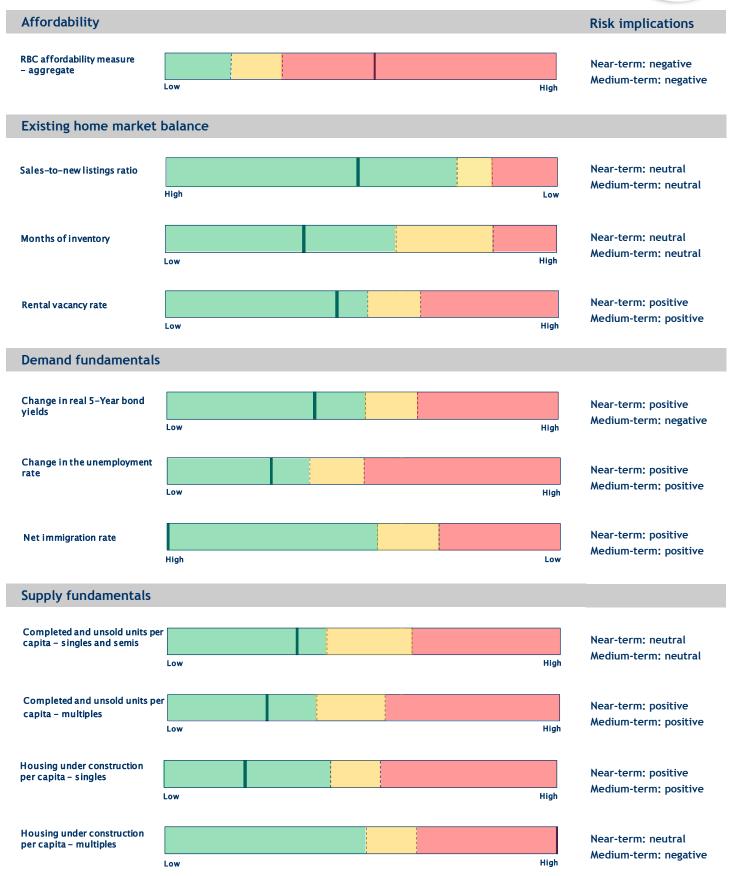
The specific rules at the national level are as follows:

- •RBC Affordability Measure for the aggregate of all housing types: yellow threshold = 41.5% (0.3 standard deviations above the long-term mean); and red at 45.1% (1.0 standard deviations above the mean).
- •Sales-to-new listings ratio: yellow threshold = 0.40; and red = 0.35.
- •Months of inventory: yellow threshold = 7.0; red = 8.5.
- •Rental vacancy rate: yellow threshold = 3.2% (long-term mean); and red = 3.7% (0.5 standard deviations above the mean).
- •Real 5-year bond yield relative to trailing 12-month average: yellow threshold = 1.0 percentage point (1 standard deviation above the mean); red = 2.0 percentage points (2 standard deviations).
- •Unemployment rate relative to trailing 12-month average: yellow threshold = 0.41 percentage points (0.6 standard deviation above the mean); red = 0.9 percentage points (1.5 standard deviations).
- •Net immigration per 1,000 population: yellow threshold = 6.5 (0.5 standard deviations above the mean); red = 5.0 (0.4 standard deviations below the mean).
- •Completed and unoccupied units per 1,000 population, singles and semis: yellow threshold = 0.29 (0.3 standard deviations above the mean); red = 0.36 (1.3 standard deviation above the mean).
- •Completed and unoccupied units per 1,000 population, multiples: yellow threshold = 0.36 (the mean); red = 0.47 (0.9 standard deviation above the mean).
- •Housing under construction per 1,000 population, singles: yellow threshold = 2.11 (0.5 standard deviations from the mean); red = 2.33 (1 standard deviation from the mean).
- •Housing under construction per 1,000 population, multiples: yellow threshold = 3.93 (0.5 standard deviations from the mean); red = 4.58 (1 standard deviation from the mean).

The areas shaded in grey in the indicator charts correspond to housing downturns – i.e., periods during which home prices (as defined as average prices of homes sold on the MLS system) fell by more than 5% from monthly peak to trough. It is important to note that the precise timing of these downturns can vary depending on the home price measure used. The grey shaded areas, therefore, should be seen as broad guidelines.



CANADA



CANADA

RBC

Affordability

RBC affordability measure - aggregate



1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009

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

Stretched affordability remains a significant source of vulnerability in Canada. Rising interest rates have exacerbated the situation.

The most recent reading of RBC's aggregate housing affordability measure (53.9% in Q3 2018) suggests the presence of significantly greater-than-average market stress for buyers in Canada though this is skewed by extremely poor affordability in Vancouver and Toronto. The situation is not alarming in most other markets.

Existing home market balance

Sales-to-new listings ratio Monthly, S.A., Canada 0.9 0.8 0.7 0.6 0.5 0.4 0.1 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 Source: RBC Economics Research, Canadian Real Estate Association

Months of inventory



Source: RBC Economics Research, Canadian Real Estate Association

Rental vacancy rate

%, total CMAs, purpose-built apartment buildings of three units or more, Canada



Source: RBC Economics Research, CMHC

Demand-supply conditions are balanced overall. This means that the odds of a broad-based material price decline are low.

Canada-wide, the sales-to-new listings ratio settled into the range consistent with balanced market conditions after climbing into seller's market territory in 2016. This re-balancing was largely engineered by policy as the introduction of Ontario's Fair Housing Plan in April 2017, the mortgage stress test and new market-cooling measures announced in BC last year cooled resales significantly. Rising interest rates also played a prominent role.

The for-sale inventory is well within historical norms and consistent with continued price increases.

A pick-up in active listings in Toronto and Vancouver (from historically low levels) amid a sharp drop in homebuyer demand returned the number of months of inventory in Canada closer to its long-run average of 5.3 from decade-low levels in early 2017.

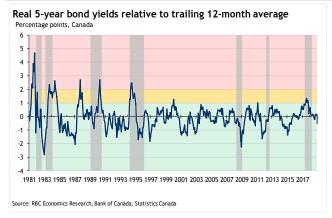
The rental market is tight overall in Canada and does not pose a threat to the home purchase market.

The rental vacancy rate in Canada fell to a seven-year low of 2.2% in October 2017 from 2.7% in 2017 and 3.4% in 2016. This is below the long-term average of 3.0%. The decline in the past two years was widespread across the country.

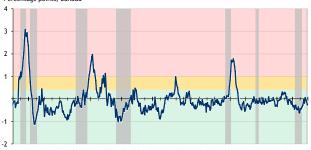
CANADA



Demand fundamentals



Unemployment rate relative to trailing 12-month average

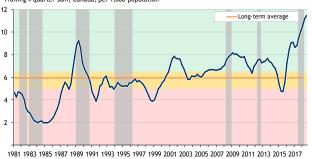


1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017

Source: RBC Economics Research, Statistics Canada

Net immigration rate

Trailing 4-quarter sum, Canada, per 1,000 population



Source: RBC Economics Research, Statistics Canada

The risk of an interest rate shock eased significantly in recent months thanks to a pullback in longer-term interest rates. We nonetheless continue to caution that future rate hikes could potentially be problematic for the market.

The rising trend in the five-year Government of Canada bond yield stalled in the late stages of 2018 as global investors cut their risk appetite amid increased financial market volatility. The real yield fell relative to its 12-month trailing average in December, which is positive for the housing market.

RBC's base case interest rate forecast calls for the overnight rate to rise by another 50 basis points in 2019. RBC expects longer-term rates to rebound from their recent dip and reach their highest levels in eight years later this year. This scenario would present increasing risks to the housing market in the period ahead.

Labour market conditions pose little risk nationally at this point.

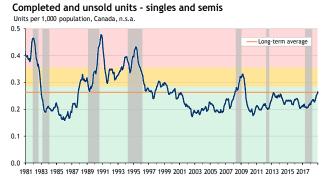
The national unemployment rate is at its lowest level since the mid-1970s and RBC Economics expects it to stay historically low this year and next. The rate has been below its trailing 12-month average over most of the period since May 2016.

Decades-high levels of immigration improve the risk profile of Canada's housing market.

The rate of net immigration in Canada (measured per 1,000 population) has surged since late-2015, which provides strong support for housing demand.

The rate is likely to remain elevated in light of the federal government boosting its target for new permanent residents from 300K in 2017 to 310K in 2018, and further to 330K in 2019, 340K in 2020 and 350K in 2021.

Supply fundamentals



 $Source: RBC\ Economics\ Research, Statistics\ Canada,\ Canada\ Mortgage\ and\ Housing\ Corporation$

There are no signs of excess supply of new single-detached units in Canada at this stage.

The unsold inventory remains historically low at 0.26 per 1,000 population in December 2018—matching the long-run average—although it has picked up since the middle of 2017.

CANADA

Supply fundamentals

Completed and unsold units - multiples



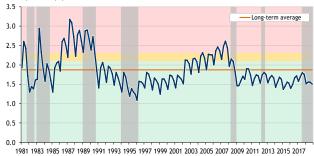
Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

On the multi-unit dwellings side, the inventory of completed but unsold condos shrunk significantly in the past four years in Canada and is no longer a source of concern.

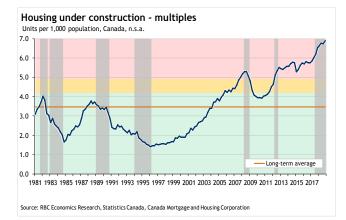
Market absorption has been solid over that period. This helped draw down the unsold inventory markedly to a 10-year low of 0.24 units per 1,000 population in April-October 2018 before picking up slightly in November-December. The latest reading is well below the long-term average of 0.36 units

Housing under construction - singles

Units per 1,000 population, Canada, n.s.a.



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation



We remain unconcerned about overbuilding in the single family home segment.

Construction levels are well below historical averages (when measured on a per 1,000 population basis).

On the multiples side, however, record-high levels of apartments under construction in Canada generate some degree of absorption risks over the medium term.

Nonetheless, strong apartment construction should be weighed against solid demand for lower-priced housing options in markets such Vancouver and Toronto.

Most of the units being built are in the Toronto (31% of total), Vancouver (17%) and Montreal (12%) areas.

The run-up in condo building over the past two decades in large part reflected structural changes that arose from policy (e.g. rules limiting urban sprawl) and affordability (condo apartments are the more affordable housing type) considerations, and therefore, represents a market share gain against single-family homes.



GREATER TORONTO AREA



GREATER TORONTO AREA

Affordability

RBC affordability measure - aggregate



RBC's measure of affordability for the GTA is excessively poor. It's in a zone that historically has been followed by a market correction.

We saw a slight improvement since late 2017 though this reversed only a small fraction of the deterioration that occurred in the previous two years.

Most of the affordability pressure is concentrated in the single-family home side of the market; however, some degree of stress has also built in the condo segment.

Stretched affordability is a more pressing issue in a interest rate environment. The Toronto-area market is more sensitive to a substantial rise in interest rates than most markets in Canada.

Existing home market balance

Sales-to-new listings ratio



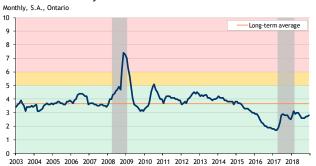
Source: RBC Economics Research, Canadian Real Estate Association

Demand-supply conditions have remained balanced this year despite the significant cooling of the market caused by the new stress test that came into effect January 1, 2018.

Ontario's Fair Housing Plan in April 2017 prompted a sharp re-balancing of demand and supply, with higher-end segments bearing the brunt of the adjustments.

Prices are stabilizing for the most part after ceding some ground in 2017 and parts of 2018. Property values continue to face downward pressure in some market segments (e.g. single-detached homes in some pockets of the region).

Months of inventory



Source: RBC Economics Research, Canadian Real Estate Association

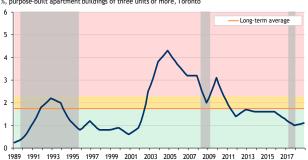
Inventories of homes for sales (active listings) indicate that some degree of market tightness persists.

Data available at the provincial level shows that there were 2.8 months' worth of inventory in Ontario, still noticeably lower than the long-run average of 3.7.

Separate data from the Toronto Real Estate Board show that the number of months of inventory in the Toronto area was 2.7 in December 2018, up from 1.9 a year earlier.

Rental vacancy rate

%, purpose-built apartr nent buildings of three units or more, Toronto



Source: RBC Economics Research, CMHC

GTA's rental market continues to be very tight with the vacancy rate at 1.1% in the fall of 2018—still near a 16-year low.

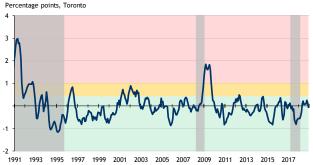
Toronto's condo boom hasn't flooded the rental market or cause vacancies to rise materially.

Toronto Real Estate Board statistics still show strong condo rental activity rising nearly 6% in Q3/2018 from a year earlier. Average rent continued to increase at a brisk pace (by 9.5% y/y for a one-bedroom apartment).

GREATER TORONTO AREA

Demand fundamentals

Unemployment rate relative to trailing 12-month average

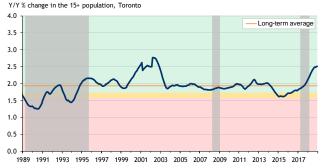


Labour market conditions in the GTA continue to be generally supportive for the area's housing market and pose little risks.

Toronto's unemployment rate is still trending downwardly. It ended 2018 at 6.0%, close to an 18-year low.

Source: RBC Economics Research, Statistics Canada

Adult population growth



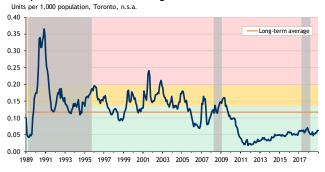
Demographic fundamentals are solid in the GTA. In fact, they strengthened even more in the past couple of years with the rate of growth in adult population accelerating to a 15-year high of 2.5% in the late stages of 2018.

A rate below 1.5% would be a source of concern.

Source: RBC Economics Research, Statistics Canada

Supply fundamentals

Completed and unsold units - singles and semis



There are no indications of overbuilding of single-family homes in the area at present.

Inventories of newly completed and unsold the single-family continue to be historically low.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Completed and unsold units - multiples



Absorption of newly built condos has been brisk in the GTA since late 2015 and the unsold inventory is now effectively entirely depleted.

The unabsorbed inventory fell to an all-time low of 0.02 units per 1,000 population in December 2018.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

GREATER TORONTO AREA

Supply fundamentals

Housing under construction - singles



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

There are no signs of any impending single-unit supply glut at this stage.

The number of single-detached units under construction in the GTA has fallen since the spring of 2017 as builders slowed down the pace of new starts following Ontario's Fair Housing Plan. The most recent level of single-unit construction activity was well below the long-term average for the area when measured in per 1,000 population terms.

Housing under construction - multiples



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

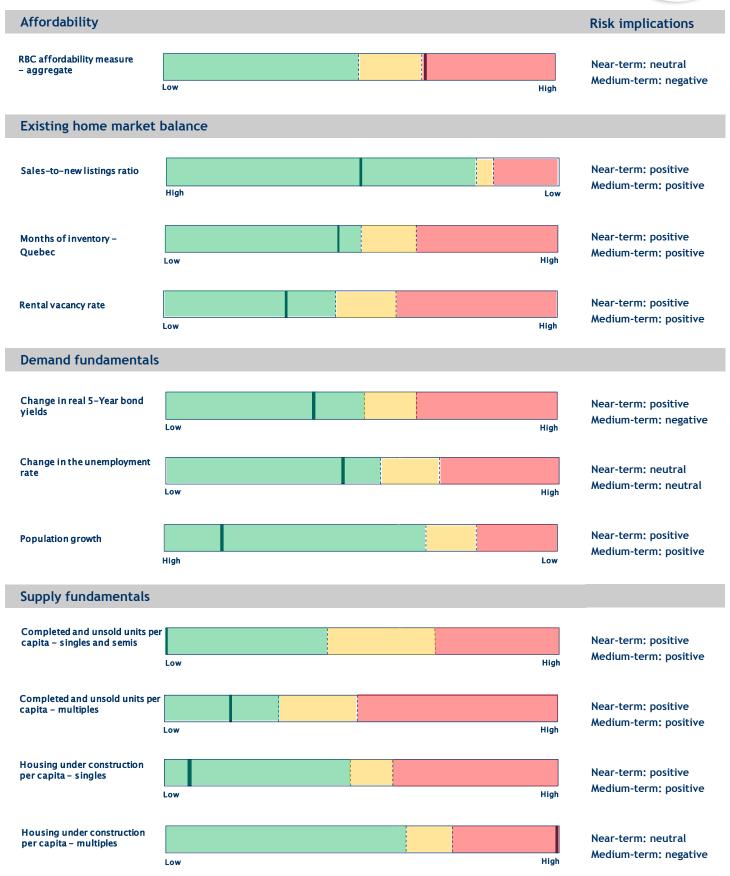
The number of multi-unit dwellings under construction continues to be historically high and in the 'high risk' zone.

However, the potential threat this poses to the market is tempered by the low level of unsold condo inventories and sustained demand in the existing condo market.

The potential for a wave of completions over a short period of time raises absorption risks for the condo resale and/or rental markets. So far, though, both of these markets have absorbed the increased supply handily.



GREATER MONTREAL AREA



GREATER MONTREAL AREA

Affordability

RBC affordability measure - aggregate



Affordability is now starting to strain Montreal buyers. Ownership costs have risen steadily since early 2015.

RBC's aggregate measure most recently was 45.2%, marginally above the threshold indicating higher vulnerability.

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

Existing home market balance

Sales-to-new listings ratio



Tight demand-supply conditions in the Montreal area suggests that prices will continue to rise solidly in the period ahead. The risk of a sharp decline is low in the near term.

Home resales were up by 7% y/y in the fourth quarter of 2018. Robust sales activity took place amid continued decline in the number of homes put up for sale each month, which resulted in a significant drawdown in inventories across all housing categories.

Source: RBC Economics Research, Canadian Real Estate Association

Months of inventory



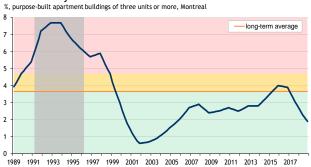
Inventory data provide further evidence of firming marked conditions and low risk of imminent price declines in Montreal.

The number of months' inventory continues to trend downwardly overall in Quebec and is now the 'low-risk zone'.

Greater Montreal Real Estate Board data show that the number of months' inventory was relatively low at 5.5 in December 2018 for single-detached homes and 6.9 for condos—both indicating that sellers are in command.

Source: RBC Economics Research, Canadian Real Estate Association

Rental vacancy rate



The risk of oversupply in Montreal's rental market diminished significantly in the last two years. The rental vacancy rate fell from 3.9% in October 2016 to a 14-year low of 1.9% in October 2018. It is now in low -risk territory.

That being said, a record-high 13,300 purpose-built rental units are under construction in the Montreal area. Completion of these units may put upward pressure on the vacancy rate in the coming years.

Source: RBC Economics Research, Statistics Canada

GREATER MONTREAL AREA

Demand fundamentals

Unemployment rate relative to trailing 12-month average

1 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017

Montreal's job market remains generally healthy and offers strong support for the housing market.

The unemployment fell to 5.9% in the late stages of 2018, near the lowest point on records dating back to 1987.

Source: RBC Economics Research, Statistics Canada

Adult population growth



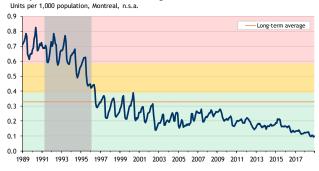
Overall demographic conditions pose little risks for the market at this stage.

Following a two year-long period of easing growth, Montreal's adult population has grown at a faster rate since mid-2015, widely exceeding its long-term average of 1.0% most recently.

Source: RBC Economics Research, Statistics Canada

Supply fundamentals

Completed and unsold units - singles and semis

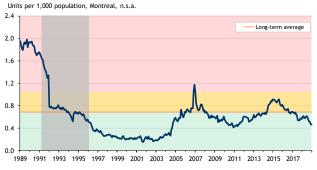


There's no evidence of overbuilding in the single-family market segment

The number of unsold newly completed homes are at all-time lows in the Montreal area.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Completed and unsold units - multiples



There are no signs of overbuilding on the multi-unit dwelling side either. Strong market absorption in the past couple of years cut the unsold inventory to healthy levels since the middle of 2017.

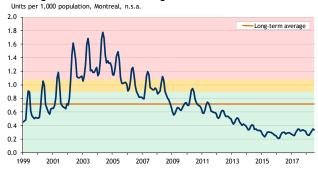
Unsold inventory fell to 0.46 units per 1,000 population in December 2018, the lowest level in more than seven years. It is well within the low-risk zone.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

GREATER MONTREAL AREA

Supply fundamentals

Housing under construction - singles



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Housing under construction - multiples

Units per 1,000 population, Montreal, n.s.a.



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

The risk of any overbuilding of single-family homes in the short term is extremely remote.

Current levels of construction are historically very low. This has been the case since 2015.

A potential risk of overbuilding of multi-unit dwellings is present in Montreal

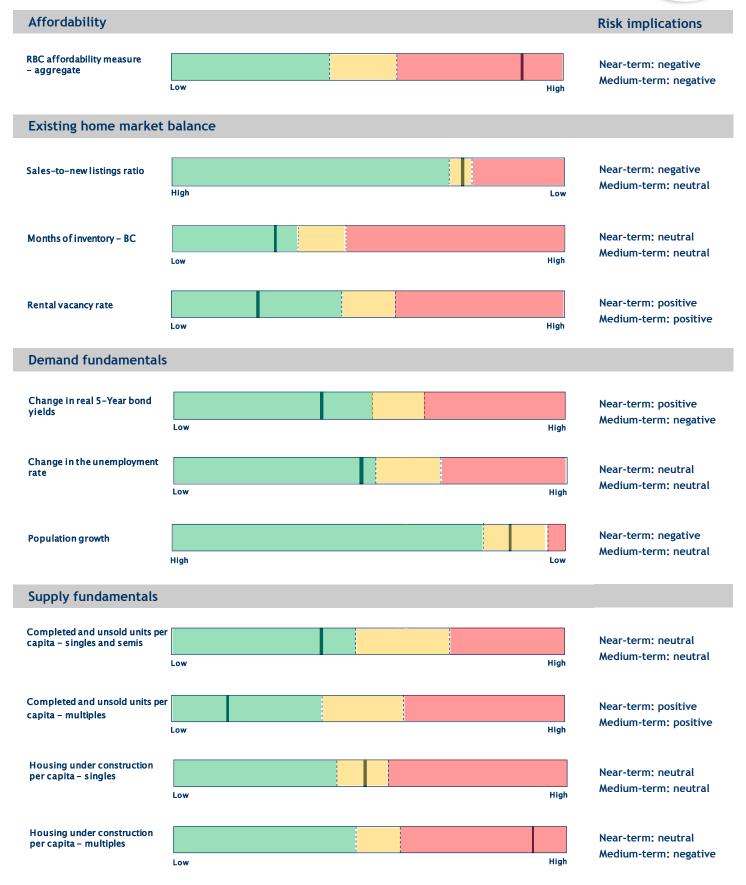
The number of multi-unit dwellings under construction was at a record high at the end of 2018.

This in large part reflects a significant increase in purpose-built rental apartment projects. Condo units under construction also rose since mid-2017 but remain below their peak reached between 2012 and 2014.

Strong construction activity of higher-density housing categories partly reflects a structural shift from single-detached toward multiple-unit forms of housing. This shift is supported by urban development policy and affordability advantage relative to single-family homes.



GREATER VANCOUVER AREA



GREATER VANCOUVER AREA

Affordability

RBC affordability measure - aggregate

100 90 80 70 60 50 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017

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

Housing affordability remains extremely poor and represents a major vulnerability for the Vancouver-area market.

Affordability stress is found in both single-family and condo apartment categories; however, it is far more intense in the former.

At 86.9% in Q3/2018, RBC's aggregate affordability measure for the area was near its worst level on record.

Poor affordability is likely among the factors that contributed to a significant moderation in home resales in the area since the winter of 2016. Policy changes—including the 15% foreign-buyer tax implemented in August 2016, OSFI's new stress test and a slew of additional market-cooling measures announced in the 2018 BC budget (including an increase to 20% of the foreign buyer tax)—as well as the rise in interest rates also likely contributed significantly.

Existing home market balance

Sales-to-new listings ratio



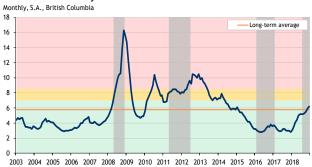
Source: RBC Economics Research, Canadian Real Estate Association

The significant cooling of activity has tilted the market in favour of buyers.

Current demand-supply conditions are consistent with moderately falling prices. Downward price pressure could intensify, however, if demand softens further and/or home listed for sale increases.

The sales-to-new listings ratio plummeted over the second half of 2018 to a level (0.37 by December) that suggests that buyers are in command.

Months of inventory



Source: RBC Economics Research, Canadian Real Estate Association

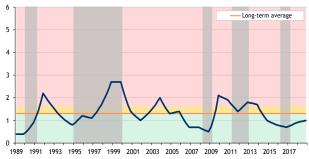
The inventory of homes for sale has been rising at a rapid clip though it has yet to reach excessive levels.

The number of months' inventory in British Columbia surged from a low of 2.8 at the end of 2017 to 6.2 in December 2018. Yet it remains just slightly above the long-run average of 5.8.

The Real Estate Board of Greater Vancouver also reports rising levels of active listings from historically-low in 2016 and 2017. Despite the recent increase, active listings are still approximately 30% below their levels in 2012-2013.

Rental vacancy rate

%, purpose-built apartment buildings of three units or more, Vancouver



Source: RBC Economics Research, CMHC

Vancouver's rental market shows no evidence of any looming surplus that would cause concerns for the home ownership market.

Conditions remain very tight in Vancouver's rental market.

The area's rental vacancy rate was 1.0% in October 2018—among the lowest ones in the country—up marginally from 0.9% in October 2017.

GREATER VANCOUVER AREA

Demand fundamentals

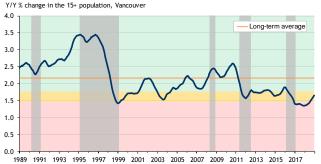
Unemployment rate relative to trailing 12-month average

Labour market developments do not pose any immediate threat to the housing market at this stage.

The job situation in Vancouver continues to be broadly positive. The unemployment rate (which averaged 4.2% in 2018) is the lowest among Canada's larger urban areas though it has picked up slightly since early 2018.

Source: RBC Economics Research, Statistics Canada

Adult population growth



Earlier concerns about a slowdown in Vancouver's population growth eased as the rate of growth re-accelerated in recent months. Still, the re-acceleration hasn't been strong enough to completely eliminate the risk amid historically elevated housing construction levels currently.

While the rate of growth in Vancouver's adult population (1.7% y/y in July 2018) is strong relative to most Canadian cities, it has slowed down noticeably in the past year and a half. It remains unclear whether this will be a temporary phenomenon or something more permanent caused by a fundamental issue such as poor affordability.

Source: RBC Economics Research, Statistics Canada

Supply fundamentals

Completed and unsold units - singles and semis



The Vancouver-area market shows few signs of being overbuilt or becoming so in the near term.

Absorption of single-detached and semi-detached units has been quite strong since early 2014, although there has been some modest easing in 2018. The number of recently completed and unsold units has risen moderately from 0.31 units per 1,000 population in April 2016 to 0.56 in December 2018—close to the long-range average of 0.59 units and still in the 'safe zone'

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Completed and unsold units - multiples



Similarly, the situation on the multi-unit dwelling side of the market remains safe as there are abnormally low levels of unsold units at this point.

The number of completed and unsold units has trended lower since early 2014, reaching a nine-year low in August 2016 and staying flat since then.

Historically-low inventories have persisted despite an increase in condo unit completions in 2017 and 2018.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

GREATER VANCOUVER AREA

Supply fundamentals

Housing under construction - singles



Source: RRC Economics Research Statistics Canada Canada Mortgage and Housing Corporation

Housing under construction - multiples



Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

An increase in single-detached home construction over the past three years poses moderate risk to the market though still-low inventories of unsold units act as a mitigating factor.

Builders boosted construction in response to earlier strong demand for single-family homes. This caused the number of units under construction to climb to it highest level in 23 years in the fall of 2017.

The sharp cooling of demand for high-priced properties this year led to a slight easing of single units under construction in 2018.

Record levels of multi-family dwelling construction signal a greaterthan-usual risk of imbalance in this market segment. However, such risk also is tempered by the low inventories of newly built and unsold units

Vancouver recorded its strongest ever levels of apartment starts in 2016, which resulted in a surge in the number of units under construction. Multiple unit starts moderated in both 2017 (down 4.1%) and 2018 (down 13.8%). This points to further easing of units under construction in the period ahead.



CALGARY AREA



CALGARY AREA

RBC

Affordability

RBC affordability measure - aggregate



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

Housing affordability continues to be a generally constructive factor for the Calgary market though less and less so since early 2015.

RBC's aggregate measure for the area is on a mildly deteriorating trend. Still, at 43.4% in Q3/2018, it remains within the safe zone.

The Calgary market faces a number of issues (e.g. energy sector downturn, drop of confidence, persistently high unemployment rate); however, affordability is unlikely to be one of them.

Existing home market balance

Sales-to-new listings ratio



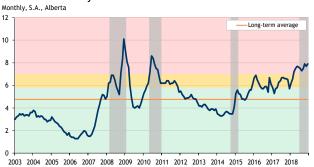
Source: RBC Economics Research, Canadian Real Estate Association

Demand-supply conditions are on the soft side which provides little support for prices.

Home resales in the area fell to their lowest level last year since 2000. Economic uncertainty, the mortgage stress test and rising interest rates weighed heavily on demand.

The sales-to-new listings ratio dipped below 0.40 (the threshold of a buyer's market) in the spring. While it has recovered slightly since then (to 0.47 by December), prices remain under mild downward pressure.

Months of inventory



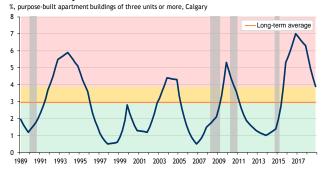
Source: RBC Economics Research, Canadian Real Estate Association

Plentiful for-sale inventories are an issue. This puts downward pressure on prices.

Last year, the number of months' inventory in Alberta jumped to an eightyear high of 7.9 since March 2018.

Active listings in the Calgary area were up 13% y/y in December 2018 according to the Calgary Real Estate Board. The strongest increases were for detached (up 27%) and attached (up 17%) homes.

Rental vacancy rate



Source: RBC Economics Research, Statistics Canada

Oversupply of rental units is improving.

The rental vacancy rate dropped materially from 6.3% in 2017 to 3.9% in 2018—still historically high.

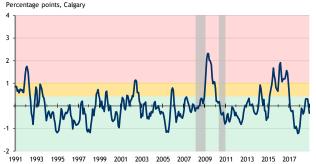
The decline in the vacancy rate relieved some of the downward pressure on rent values that prevailed over the 2015-2017 period. Average rent increased slightly by 1.9% in 2018.

CALGARY AREA

RBC

Demand fundamentals

Unemployment rate relative to trailing 12-month average

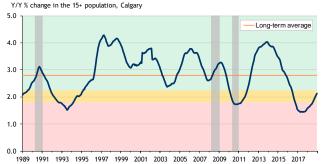


A still-high unemployment rate continues to weigh on Calgary's housing market though improvement in the labour market since 2016 has helped.

Calgary's labour market turned a corner in 2017 with the unemployment rate falling sharply from a modern-day high of 10.3% at the end of 2016. While the labour market recovery stalled in 2018, there is scope for further improvement once the provincial energy sector finds its footing.

Source: RBC Economics Research, Statistics Canada

Adult population growth



Demographics-related risks eased in the past year. Population flows in and out of the Calgary area have partly recovered.

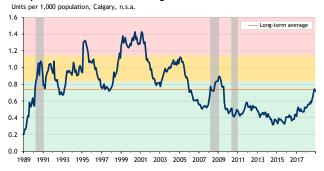
The 2015-2016 provincial economic slump led to a sharp slowdown in Calgary's adult population growth—from a cyclical high of 4.0% in early 2014 to a 23-year low of 1.4% in September 2017.

Adult population growth has since picked up, reaching 2.1% in December 2018—still below the longer-run average of 2.8%.

Source: RBC Economics Research, Statistics Canada

Supply fundamentals

Completed and unsold units - singles and semis



A persistent rise in unsold units isn't yet pointing to overbuilding in the single-detached segment.

Despite doubling in the past three years, the number of unsold single-detached and semi-detached units now only matches the long-run average of 0.74 per 1000 population.

That number is unlikely to rise much further because single-detached home starts weakened noticeably in 2018.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Completed and unsold units - multiples



However, there's strong evidence of a surplus in the multi-unit segment.

The number of unabsorbed units have surged since the spring of 2015 (when Calgary arguably had a supply shortage) to record-high levels throughout most of 2017 and 2018.

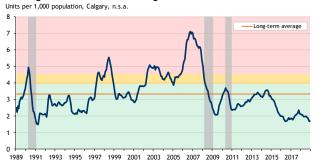
The stock of unsold units was driven higher by sharp increases in condo apartment completions in 2015 and 2016 at a time when demand turned cold. While declining materially, condo completions were still historically elevated in 2017 and 2018 (though to a lesser extent).

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

CALGARY AREA

Supply fundamentals

Housing under construction - singles



Relatively few single-detached units under construction presently pose little threat to the market.

The drop in single-detached home starts in the last four years sharply reduced the number of units under construction to historically low levels.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

Housing under construction - multiples



Risks associated with multi-unit dwelling construction are close to a worrying level; yet some improvement was noticed lately.

Strong rental apartment starts in 2017 and early 2018 boosted the number of units under construction in the Calgary area. Condo construction also picked up marginally last year.

The number of multi-dwelling units under construction showed signs of easing in the late stages of 2018. A slowdown in apartment starts over the second half of last year, if sustained, could point to further easing in the period ahead.

Source: RBC Economics Research, Statistics Canada, Canada Mortgage and Housing Corporation

The material contained in this report is the property of Royal Bank of Canada and may not be reproduced in any way, in whole or in part, without express authorization of the copyright holder in writing. The statements and statistics contained herein have been prepared by RBC Economics Research based on information from sources considered to be reliable. We make no representation or warranty, express or implied, as to its accuracy or completeness. This publication is for the information of investors and business persons and does not constitute an offer to sell or a solicitation to buy secu-