HOUSING MARKET ASSESSMENT

Canada

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Canada

CMHC SCHL

Highlights

- The Housing Market Assessment (HMA)[1] continues to rate Canada as having a high degree of vulnerability for the sixth consecutive quarter due to the detection of overvaluation and price acceleration.
- A high degree of vulnerability is maintained for Victoria, Vancouver, Hamilton and Toronto because of the detection of price acceleration and strong evidence of overvaluation.
- House prices are broadly in line with fundamentals in Calgary, Edmonton, Saskatoon and Regina, but evidence of overbuilding remains high in these Census Metropolitan Areas.
- The HMA is detecting low vulnerability for housing markets in Manitoba, Québec and the Atlantic.

What is CMHC's Housing Market Assessment?

The objective of CMHC's Housing Market Assessment (HMA) is to identify locations in which there are heightened vulnerabilities to housing market instability from the level of house prices and/or from factors that are known to influence house prices.

The HMA is an analytical framework that provides a comprehensive view of housing market vulnerabilities, relying on a combination of indicators of housing market conditions for several metropolitan areas across Canada, and for Canada as a whole[2].

Specifically, the framework considers four main factors with different possible degrees of vulnerability[3] that may provide an early indication of imbalances in housing markets:

1. **Overheating:** Sales greatly outpace new listings in the market for existing homes.
   - **Moderate:** Sales-to-listings ratio lies above the threshold of overheating for at least two quarters over the past three years.
   - **Low:** Otherwise.
2. Sustained **acceleration** in house prices: Fast-rising prices often indicate that expectations of house-price appreciation may be excessive.
   - **Moderate:** The Augmented Dickey-Fuller (ADF) test statistic stands above the critical threshold for at least one quarter during the past three years.
   - **Low:** Otherwise.
3. **Overvaluation:** house prices are higher than levels supported by personal disposable income, population, interest rates, and other fundamentals.
   - **High:** The average of the gaps obtained from a group of selected models is above the critical threshold for at least two quarters during the past year. The gap measures the distance between the actual price and the price level estimated from fundamental variables.
   - **Moderate:** At least one of the selected models exhibits overvaluation.
   - **Low:** Otherwise.
4. **Overbuilding:** Apartment rental vacancy rates and/or inventory of newly built and unsold housing units are higher than normal.
   - **High:** The inventory of newly completed and unsold units is above the threshold for at least two quarters during the past year, while the annual rental apartment vacancy rate is also above the threshold.
   - **Moderate:** Either the inventory of newly completed and unsold units is above the threshold for at least two quarters during the past year or the rental apartment vacancy rate is above the threshold.
   - **Low:** None of the previous conditions is present.

[1] Results are based on data as of the end of September 2017 and market intelligence as of the end of December 2017.

[2] The data for Canada include areas beyond the 15 Census metropolitan areas covered in this report.

[3] The colour scale extends to red only for those factors that have multiple indicators that identify imbalances. As a result, only overvaluation and overbuilding receive a red rating, since they are assessed yellow and red.

Overall assessment

Assess the degree of market vulnerability considering the combination of multiple factors.[4]

- **High:** More than one factor of price acceleration, overvaluation or overbuilding exhibits moderate or strong evidence of imbalances.
- **Moderate:** The rating reflects three scenarios. The first is when the overall assessment is red in the past six quarters. The second is when only one of the factors of overbuilding or overvaluation is assessed red for at least two quarters during the past year. The last is when one factor is showing moderate evidence of imbalances, but another factor lies slightly below the threshold.
- **Low:** Otherwise.

HMA Results for Canada and 15 Census Metropolitan Areas

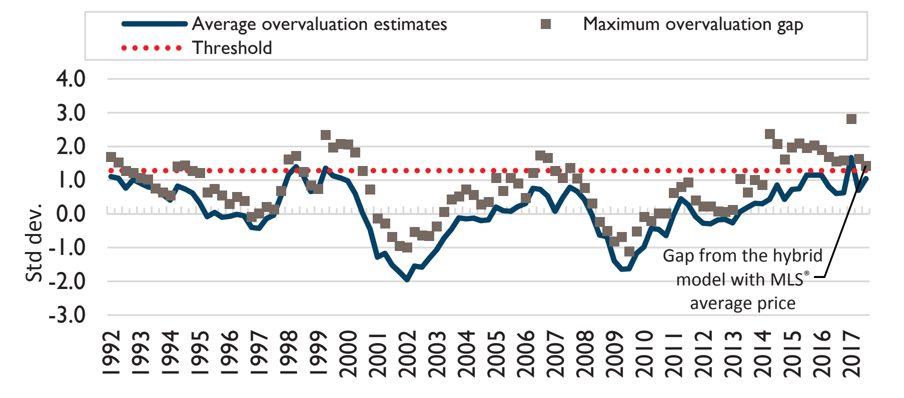
Canada: High degree of vulnerability

CMHC's HMA continues to show a high degree of vulnerability for the housing market at the Canada level for the sixth straight quarter. The rating is a result of the combination of price acceleration and overvaluation.

As shown in Figure 1, the estimate of overvaluation using the average gaps obtained from the selected models lies slightly below the threshold of overvaluation. However, the estimate of overvaluation using the MLS® average price and the hybrid model remains above the threshold. As a result, we detect moderate evidence of overvaluation for Canada. The hybrid model includes both demand and supply factors as predictive variables of house prices. The gap measures the distance between the actual price and the price level supported by fundamental factors such as income and population. Price acceleration was detected in the first quarter of 2016 and the rating is kept for three years (see Figure 2). Note that a three-year

Figure 1

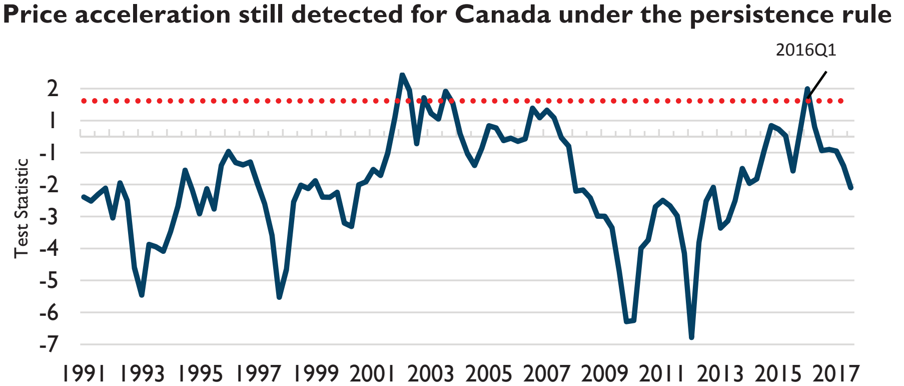
Moderate overvaluation at the national level



Sources: CREA, Statistics Canada, Teranet and National Bank of Canada, and calculations by CMHC.
Note: The average estimate of overvaluation is the average gap between actual house prices and price levels estimated from a group of selected models. These include demand, supply, hybrid, and affordability models, each of which is estimated using four measures of house prices to generate sixteen unique estimates of overvaluation. The selection of models is conducted with a set of cointegration tests, and the selected models are estimated with Dynamic Ordinary Least Squares (DOLS). The maximum overvaluation gap is obtained from the model that has the largest gap between the actual price and the estimated price. The threshold is fixed at a critical value of 1.29 for a confidence level of 80%. Overvaluation is signaled when overvaluation estimates lie above the threshold.

Figure 2

Price acceleration still detected for Canada under the persistence rule



Source: CREA and calculations by CMHC.
Note: The test is done using the MLS® average price. Other price indices are also monitored.

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4 The framework was tested against CMHC's mortgage insurance claims rate. The results show that the detection of more than one HMA factor is more problematic for insurance claims than the detection of just one factor. Therefore, the individual factors are jointly analysed to provide an overall assessment of the state of a given housing market, which is rated on our three-coloured scale (green, yellow, and red).

rolling window is also used for the statistical tests to detect explosive growth in house prices.

After adjusting for inflation, the MLS® average price and average household disposable income increased by a year-over-year rate of 1.6% and 1% in the third quarter of 2017, down from 3.2% and 2.3% in the second quarter of 2017, respectively. The young adult population[5] increased by 1.7% in the third quarter of 2017 from a year ago.

Only weak signs of overbuilding and overheating were detected for Canada as a whole. Apartment rental vacancy rates decreased to 3% compared to 3.7% a year ago, according to CMHC's Rental Market Survey in October 2017. The inventory of completed and unsold units per 10,000 population slightly dropped to 3.9 units in the fourth quarter of 2017 from 4 units in the third quarter of 2017. The sales-to-new listings ratio slightly increased to 57 in the fourth quarter of 2017 from 55.8 in the third quarter 2017.

Regional disparities remain, especially in terms of overvaluation. Some centres in BC and Ontario are still highly overvalued with the overall assessment of a high degree of vulnerability. Vancouver and Victoria continue to be rated as having a high degree of vulnerability with price acceleration and overvaluation being detected. Despite the recent price adjustments, the ratings of high degrees of vulnerability are maintained in Toronto and Hamilton where house prices are not fully supported by fundamentals. House prices are broadly in line with the price levels supported by fundamentals in Calgary, Edmonton, Saskatoon and Regina, but evidence of overbuilding in these CMAs remains high with both the inventory of completed and unsold and rental vacancy rates above the thresholds of overbuilding. The housing markets in Manitoba, Quebec and the Atlantic are rated as showing low vulnerability.

Victoria: High degree of vulnerability

CMHC continues to rate the Victoria housing market as having a high degree of vulnerability. We continue to detect strong evidence of overvaluation as house prices are elevated compared to fundamentals. Evidence of overbuilding remains weak. The inventory of completed and unsold units relative to population increased slightly to 1.8 units in the fourth quarter of 2017 from 1.4 units in the previous quarter. The rental apartment vacancy rate remained low at 0.7% in October 2017. Moderate evidence of overheating is maintained though the sales-to-new listings ratio trended downwards.

Vancouver: High degree of vulnerability

The Vancouver CMA housing market continues to be rated as having a high degree of vulnerability. CMHC's valuation models continue to signal strong evidence of overvaluation as house prices exceed fundamentals. Builders have responded to growing prices with higher starts, but evidence of overbuilding remains weak. Both the inventory of unabsorbed new homes and apartment rental vacancy rates remain low. Overheating continues to be detected, as demand for multi-family units remains elevated, largely due to their relative affordability compared to single-detached homes. As a result, inventories of both new and resale multi-family units are at or near all-time lows.

Edmonton: Moderate degree of vulnerability

Evidence of overbuilding in the Edmonton housing market remained high as imbalances in both the ownership and rental markets were detected. The inventory of completed but unsold units, mainly concentrated in the apartment sector, essentially remained at its threshold level indicating overbuilding. In the rental market, the 2017 apartment vacancy rate remained just above its threshold level as growth in rental demand was practically matched by additional rental supply. Low evidence of overheating, price acceleration and overvaluation continued as their respective indicators remained below threshold levels.

Calgary: Moderate degree of vulnerability

The HMA framework detected a moderate degree of vulnerability in the Calgary housing market. House prices of repeat sales in the third quarter of 2017 were relatively stable compared to the previous quarter, with year-over-year gains slightly above the rate of inflation. Growth in employment and in the young adult population have helped support housing demand and price levels in Calgary. While there was low evidence of overheating, price acceleration, and overvaluation, there continues to be imbalances in the area of overbuilding. Apartment rental vacancy rates, and multiple new home inventories remain at elevated levels.

[5] Numbers are subject to data revisions.

Saskatoon: Moderate degree of vulnerability

Evidence of overvaluation decreased from moderate to low as house prices moved closer to levels warranted by economic and demographic fundamentals. Overall, the HMA framework detected a moderate degree of vulnerability in Saskatoon's housing market, an improvement over the previous quarter's assessment. Nonetheless, evidence of overbuilding remained high, with both new home inventory and the rental vacancy rate above their respective long-term thresholds.

Regina: Moderate degree of vulnerability

Overall, the HMA framework continued to detect a moderate degree of vulnerability in Regina's housing market. As was the case in the previous quarter's assessment, evidence of overvaluation in house prices, overheating of demand and acceleration in the growth of house prices remained low. However, evidence of overbuilding continued to be high due to the combination of an elevated inventory of completed and unsold homes and a high rental vacancy rate.

Winnipeg: Low degree of vulnerability

The overall degree of vulnerability moved from moderate to low in the Winnipeg CMA, as the evidence of overbuilding decreased. The inventory of completed and unsold units remained below the problematic threshold for overbuilding as absorption levels in the new home market continued to be strong. In addition, the apartment rental vacancy rate in October 2017 remained stable as increasing supply was offset by growing demand. Balanced resale market conditions and strengthening employment resulted in no change to the assessment for overheating, price acceleration, or overvaluation.

Hamilton: High degree of vulnerability

The HMA framework continued to detect a high degree of vulnerability in the Hamilton housing market. The assessment is primarily due to evidence of overvaluation and price acceleration. Hamilton house prices remained much higher than levels supported by economic and demographic fundamentals, such as average personal disposable income and population growth. Also, there remained moderate evidence of overheating although the sales-to-new-listings ratio trended downwards. Finally, there is still moderate evidence of price acceleration, thereby supporting the overall assessment of a high degree of vulnerability.

Toronto: High degree of vulnerability

We continue to detect moderate evidence of price acceleration in the third quarter of 2017. During this quarter, the average MLS® house price increased by 3.6% on a year-over-year basis, the smallest rate of growth in almost five years. While house price growth has slowed, house price levels remained high relative to underlying economic fundamentals such as income and population growth. Therefore, we continue to find strong evidence of overvaluation.

We detect low evidence of overbuilding, as the number of completed and unsold units declined close to an all-time low, and well below the threshold. Strong ownership and rental demand, as well as tight construction financing requirements, continue to ensure that there is no excess supply of unsold units at completion.

Sales in the Greater Toronto Area (GTA) continued to trend down in the fourth quarter of 2017. The supply of new listings followed in the same direction, thus averting further easing of market conditions. The sales-to-new listings ratio inched up slightly to 45.5%. Moderate evidence of overheating was detected although this indicator was well below the 70% threshold. If the sales-to-new listings ratio continues to stay below the threshold, eventually the evidence of overheating will dissipate. Resale single-detached homes, which experienced the strongest rebalance earlier this year, maintained their sales-to-new listings ratio at 39%, while condominium apartments retained the highest ratio of 60%.

Ottawa: Low degree of vulnerability

We detect low evidence of overbuilding in Ottawa as the number of completed and unsold condominium apartments has been steadily declining since mid-2016, pointing to improved demand conditions for such dwellings. The decline in condominium apartment starts activity over the last two years translated into significantly lower completions in 2017 compared to recent highs, easing up the inventory overhang. Demand for resale condo apartments also expanded strongly in recent months. We detect low evidence for all other indicators of vulnerability as the Ottawa market is supported by steady employment and earnings growth.

Montréal: Low degree of vulnerability

The degree of vulnerability of the Montréal CMA housing market remained low for a fourth straight quarter. Although evidence of overheating is increasing on the Montréal resale market, given the tightening relationship between supply and demand, for the moment, there is weak evidence of price acceleration. As well, the level of personal disposable income, combined with accelerated population growth among young adults, indicates that house prices have remained at levels supported by fundamentals. Finally, evidence of overbuilding on the Montréal housing market remained weak: the inventory of completed and unsold condominiums continued to decrease, while the rental apartment vacancy rate recorded its strongest decline in over 15 years.

Québec: Low degree of vulnerability

The overall degree of vulnerability of the Québec-area housing market remained low. Evidence of overbuilding is reduced to low from moderate compared to the previous quarter as both the inventory of completed and unsold homes and apartment rental vacancy rates are above the thresholds of overbuilding. However, monitoring is required on apartment rental vacancy rates due to the large number of recent conventional rental housing starts. Moreover, a significant number of units recently completed or under construction will be added to existing supply. As a result, growth in rental apartment supply could overtake growth in demand, and that would put upward pressure on the vacancy rate.

Moncton: Low degree of vulnerability

Strong existing homes sales in Moncton have helped draw down the high inventory levels seen in early 2017. The increased market liquidity – that is the ease with which a seller finds a buyer at their expected price – pushed growth in the MLS® House Price Index back above the inflation rate. With the inventory of completed and unsold homes at its lowest point in over a decade, we do not detect any major imbalances related to overbuilding in the Moncton area.

Halifax: Low degree of vulnerability

After recording strong price growth in the second quarter, house prices in Halifax fell back in the third quarter of 2017. Although the number of new listings on the market continues to remain low, a slowing in sales this quarter caused the sales-to-listings ratio to decline from the 5-year high recorded in the second quarter of 2017. With construction on the new home market picking up pace this year, inventories of completed and unsold units relative to the population climbed in the third quarter of 2017 to 5.75 units, but declined to 5.3 units in the fourth quarter of 2017, still below the threshold for overbuilding of 5.8 units. Rental apartment vacancy rates declined to 2.3% in October 2017 from 2.6% a year ago. Evidence of overbuilding is low, but inventory monitoring is required.

St. John's: Low degree of vulnerability

Year-over-year house price declines have subsided with price stability emerging slowly within the housing market. Despite ongoing declines in housing starts, the inventory of completed and unsold units relative to the population increased to 6.3 units in the third quarter of 2017 from 5.8 units during the second quarter, but declined to 5.6 units in the fourth quarter. Previous to this, the inventory of completed and unsold units relative to the population declined for five straight quarters, so ongoing monitoring of this indicator will be required. Weaker relative housing market activity overall is attributed to a lack of economic growth, only marginal growth in the young-adult population and flat real personal disposable income, which is in line with labour market pressures and economic weaknesses throughout 2017.

Table 1

Comparisons between the October 2017 and January 2018 reports

	Overheating		Price Acceleration		Overvaluation		Overbuilding		Overall Assessment	
	Oct.17	Jan.18	Oct.17	Jan.18	Oct.17	Jan.18	Oct.17	Jan.18	Oct.17	Jan.18
Canada	Low	Low	Moderate	Moderate	Moderate	Moderate	Low	Low	High	High
Victoria	Moderate	Moderate	Moderate	Moderate	High	High	Low	Low	High	High
Vancouver	Moderate	Moderate	Moderate	Moderate	High	High	Low	Low	High	High
Edmonton	Low	Low	Low	Low	Low	Low	High	High	Moderate	Moderate
Calgary	Low	Low	Low	Low	Low	Low	High	High	Moderate	Moderate
Saskatoon	Low	Low	Low	Low	Moderate	Low	High	High	High	Moderate
Regina	Low	Low	Low	Low	Low	Low	High	High	Moderate	Moderate
Winnipeg	Low	Low	Low	Low	Low	Low	Moderate	Low	Moderate	Low
Hamilton	Moderate	Moderate	Moderate	Moderate	High	High	Low	Low	High	High
Toronto	Moderate	Moderate	Moderate	Moderate	High	High	Low	Low	High	High
Ottawa	Low	Low	Low	Low	Low	Low	Moderate	Low	Low	Low
Montréal	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Québec	Low	Low	Low	Low	Low	Low	Moderate	Low	Low	Low
Moncton	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Halifax	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
St. John's	Low	Low	Low	Low	Low	Low	Moderate	Moderate	Low	Low

Degree of vulnerability Low Moderate High

Note 1: Colour codes indicate the degree of market vulnerability. The HMA reflects a comprehensive framework that not only tests for the presence or incidence of signals of imbalances (that is, how far the indicator is from its historical average), but also considers the intensity and the persistence of these signals over time. Generally, low intensity and persistence are associated with a lower vulnerability. As the number of persistent signals increases, the evidence of an imbalance increases.

Note 2: Results at the CMA level are not segmented by housing type or neighbourhood. They represent an assessment of the entire CMA. However, specific CMA reports provide further detailed analysis of these markets.

Note 3: The colour scale extends to red only for those factors that have multiple indicators that can identify imbalances. As a result, only overvaluation and overbuilding can receive a red rating, since they are assessed using more than one indicator.

Note 4: To ensure the framework is as current as possible, on a regular basis, we undertake a model selection process whereby our house price models for overvaluation are tested for statistical significance at the national and CMA level. The result of this process may change the number of indicators showing vulnerability from the previous assessment.

Overview of the Housing Market Assessment analytical framework

To obtain an accurate picture of the overall state of the housing market, it is important to consider multiple data points and lines of evidence rather than relying on just one measure or indicator.

The Housing Market Assessment (HMA) analytical framework provides a comprehensive and integrated view that relies on a combination of signals from several indicators to detect imbalances in housing markets.

Specifically, the framework considers four main factors that may provide an early indication of vulnerability in the housing market: (1) overheating (when demand outpaces supply); (2) sustained acceleration in house prices; (3) overvaluation of house prices in comparison to levels that can be supported by housing market fundamentals (listed below); and, (4) overbuilding (when the inventory of available housing units is elevated).

For each factor, the framework tests for: (1) the incidence of signs of vulnerability, but also considers; (2) the intensity of the signals, i.e. how their magnitude compares with their historical average or how consistent they are with known or suspected house price bubbles, such as for Toronto in the late 1980s and early 1990s; and, (3) the persistence of signals over time.

Generally, a situation in which we detect few signals with low intensity or lack of persistence is associated with a low degree of vulnerability. Conversely, as the intensity, number, and/or persistence of the signals increases, so does the evidence of imbalances in the housing market.

The framework takes into account demographic, economic, and financial determinants of the housing market such as population, personal disposable income, and interest rates to detect vulnerability. The framework also takes into account developments in both resale and residential construction markets.

The framework was developed on the basis of its ability to detect vulnerable housing market conditions in historical data, such as the house price bubble Toronto experienced in the late 1980s and early 1990s. The ability of the HMA to detect vulnerabilities relies on the assumption that historical relationships between prices and fundamental drivers of housing markets have not changed.

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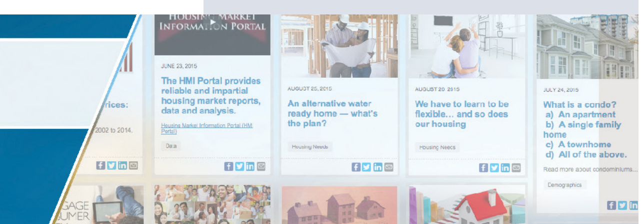

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