

## Housing affordability improves in 2019Q1 amid healthy labour market

By Matthieu Arseneau & Kyle Dahms

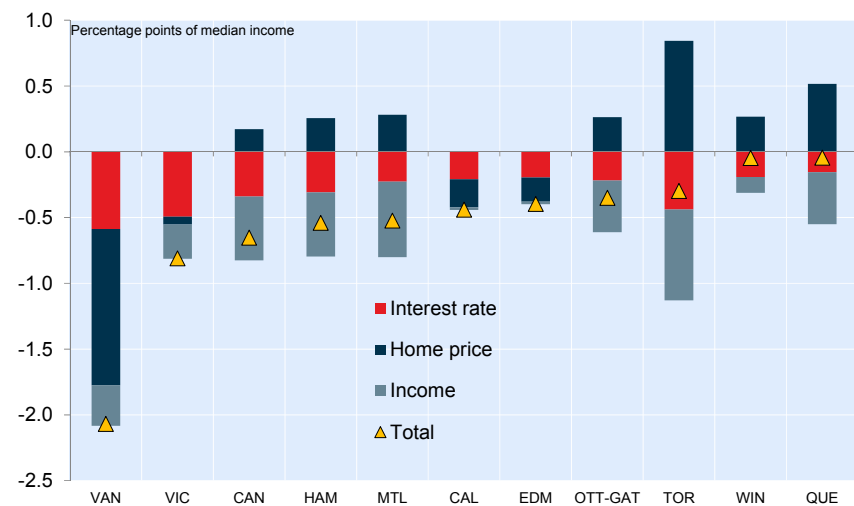
Affordability improved in Q1 by the most since 2014 as measured by the urban composite index as eight of the ten urban markets progressed in the quarter (left chart). The healthy labour market was the largest contributor to this development via a significant increase in income (+1.0%) that outpaced the increase in home prices (+0.3%) - left chart. Coincidentally, mortgage rates were not a drag on affordability for the first time in 7 quarters. Vancouver experienced the largest improvement in affordability among urban markets in Q1 but that was mostly due to declining home prices. We continue to expect price weakness in this market as resale conditions remain favourable to buyers in both the condo and non-condo segments so far in Q2. In Toronto, the composite is showing a slight improvement but this is solely due to the non-condo segment. Indeed, condo market affordability deteriorated further with prices jumping 2.0% in Q1 as the imbalance between supply and demand favoured sellers. Looking ahead, there is hope for further improvement in affordability in Canada in Q2 given the recent drop in mortgage rates.

### HIGHLIGHTS:

- Canadian housing affordability improved after four consecutive quarterly deteriorations in Q1 2019 (right chart), posting the largest one quarter progress in almost 5 years. The mortgage payment on a representative home as a percentage of income (MPPI) fell 0.7 points after a 1.4-point rise in Q4'18. Seasonally adjusted home prices increased 0.3% in Q1'19 from Q4'18; the benchmark mortgage rate (5-year term) fell 6 basis points; while median household income rose 1.0%.
- In the first quarter, affordability improved most in Vancouver, Victoria, Montreal and Hamilton. No markets showed a deterioration while Quebec and Winnipeg situation remained unchanged. Countrywide, affordability improved in both the condo segment and the non-condo portion.
- The time required to save for the down payment on a representative home at a savings rate of 10% fell 6 months to 342.1 months in Vancouver and a modest 0.3 month to 33.3 months in Montreal in Q1 2019. Toronto, on the other hand, experienced an increase of 0.7 month to 92.2 months.

### Canada: Q1 change in housing affordability in 10 metropolitan areas

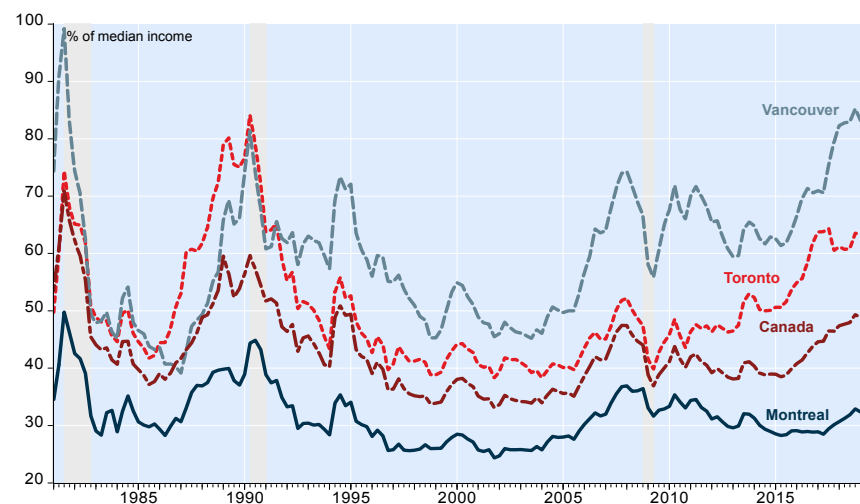
Q/Q change in mortgage payment on median-price home (25-year amortization, 5-year term)



NBF Economics and Strategy (data via Statistics Canada, Teranet-NBC)

### Canada : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)



NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank, CREA)

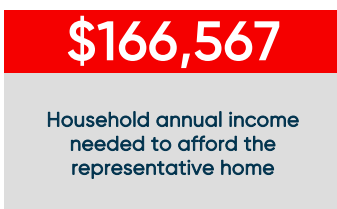
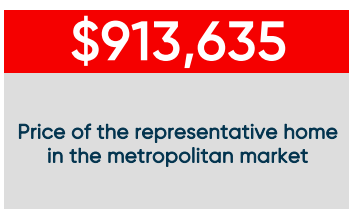
## Toronto

Toronto's housing affordability improved in the non-condo segment in the first quarter. Among all segments and regions covered, the condo segment in Toronto was the only deterioration in the first quarter of 2019. Home prices for condos were up sharply on a q/q (+2.1%) and y/y (+7.9%) basis. All in all, home price increases for all dwellings were more than offset by lower interest rates and rising incomes. As a result, the composite for all dwellings showed an improvement in the MPPI\* for the quarter (-0.3pp). \*See tables on page 12 for more information.

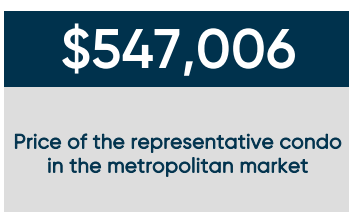
Mortgage payment as a % of income (MPPI)					
Non-Condo	67.3%	▼	-	0.4%	Q/Q
Condo	40.3%	▲	+	0.1%	Q/Q



**Non-  
Condo**



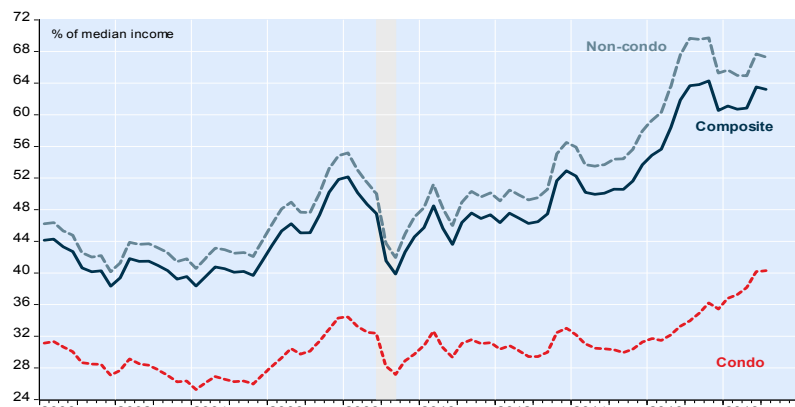
**Condo**



### Toronto : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

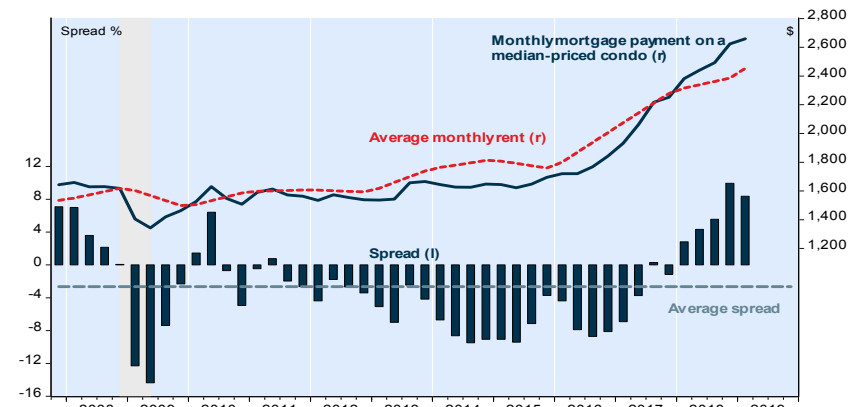
**TORONTO**



NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

### Toronto: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

## Montreal

In Montreal, affordability as measured by the MPPI improved for both the condo (-0.2pp) and non-condo (-0.6pp) segments. Prices continued their upward trajectory in this comparatively affordable city but was tamed by lower financing costs and higher incomes. Accordingly, for the aggregate of all dwellings, the MPPI\* reached 32.4 %, essentially on line with its historical average. On a yearly basis, home prices have risen by 4.8%, outpacing income growth which progressed 2.9 % in the same period. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>35.0%</b>	▼	- 0.6%	Q/Q
Condo	<b>26.5%</b>	▼	- 0.2%	Q/Q



**Non-Condo**

**\$371,755**

Price of the representative home in the metropolitan market

**\$67,775**

Household annual income needed to afford the representative home

**36**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$281,462**

Price of the representative condo in the metropolitan market

**\$51,314**

Household annual income needed to afford the representative condo

**27**

Months of saving required for the down payment (saving rate of 10%)

**12.5%**

Premium/discount for buying compared to renting a two-bedroom condo in Montreal

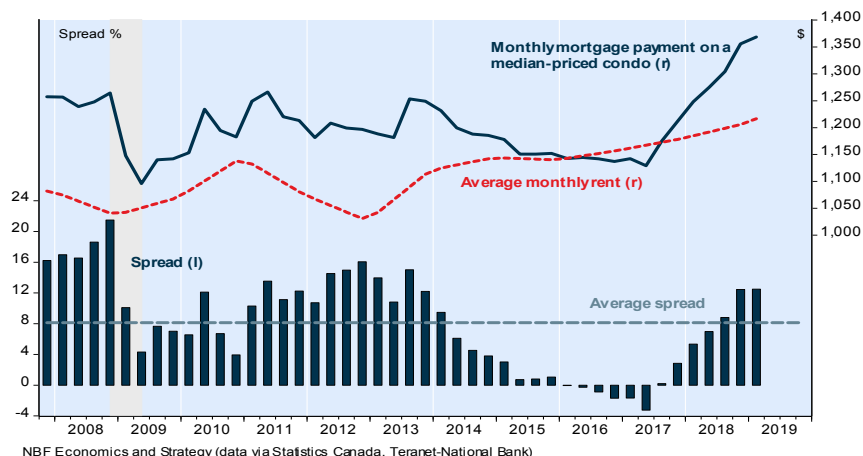
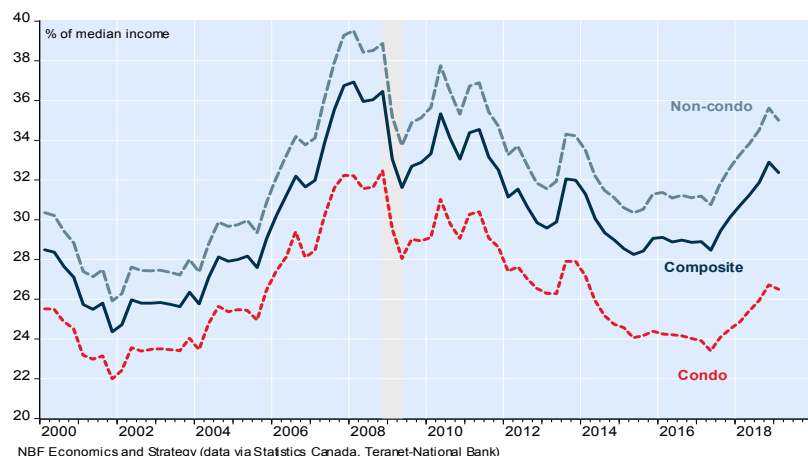
### Montreal : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

### Montreal: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo

**MONTREAL**



## Vancouver

Vancouver's housing affordability as quantified by the MPPI\* improved for both the condo and non-condo sectors in the first quarter (-0.5pp and -2.8pp respectively). This was the first improvement in 15 quarters for the condo segment. That said, a mortgage payment for the non-condo portion still requires more than the totality of the median household pre-tax income (101.1%) to service. This percentage fell this quarter on the back of lower interest rates and income growth but was mostly attributed to home prices which were down 1.7% in the quarter and -3.1% over the past year. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>101.1%</b>	▼	- 2.8%	Q/Q
Condo	<b>49.8%</b>	▼	- 0.5%	Q/Q



**Non-Condo**

**\$1,296,220**

Price of the representative home in the metropolitan market

**\$236,317**

Household annual income needed to afford the representative home

**416**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$638,564**

Price of the representative condo in the metropolitan market

**\$116,418**

Household annual income needed to afford the representative condo

**62**

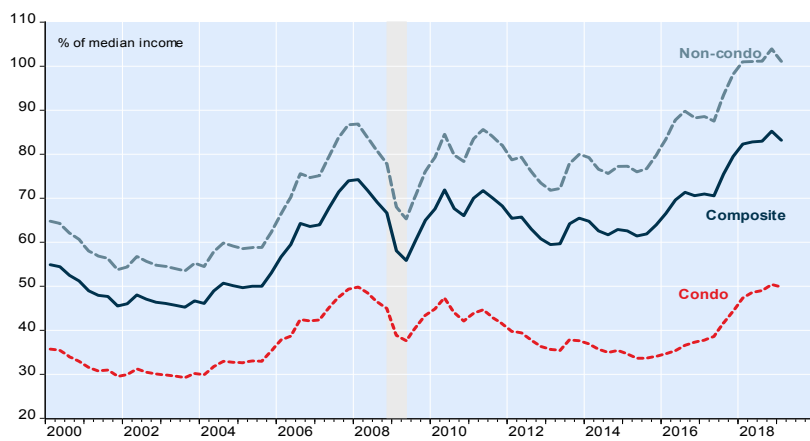
Months of saving required for the down payment (saving rate of 10%)

**49.6%**

Premium/discount for buying compared to renting a two-bedroom condo in Vancouver

### Vancouver : Perspective on housing affordability

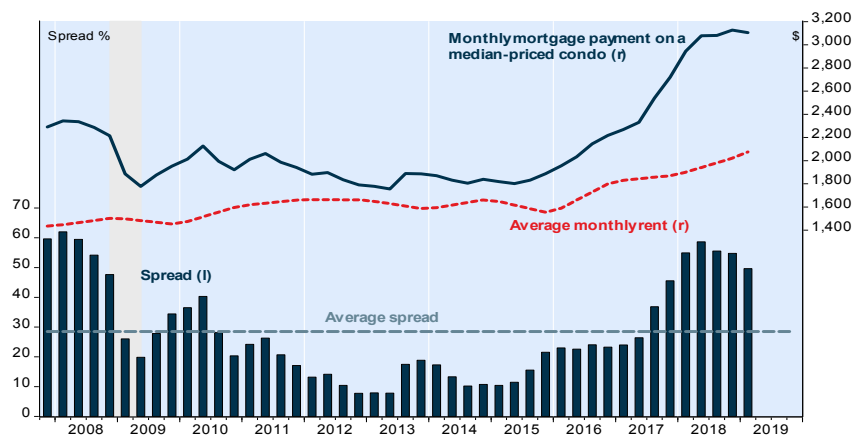
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

### Vancouver: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

**VANCOUVER**

## Calgary

Calgary also saw an improvement in the MPPI\* for both the non-condo (-0.4pp) and condo (-0.5pp) segments. Indeed, on a quarterly basis, the city composite experienced a decrease of 0.7 % in housing prices (-2.9% y/y, the largest drop of the observed cities), essentially stagnant incomes (+0.1%) and lower financing costs. While Calgary has become more affordable on a relative basis, the slowdown in home prices is indicative of economic woes in the province. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	<b>33.9%</b>	▼	- 0.4%	Q/Q
Condo	<b>17.9%</b>	▼	- 0.5%	Q/Q



**Non-  
Condo**

**\$492,871**

Price of the representative home in the metropolitan market

**\$89,856**

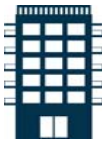
Household annual income needed to afford the representative home

**35**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$260,451**

Price of the representative condo in the metropolitan market

**\$47,483**

Household annual income needed to afford the representative condo

**18**

Months of saving required for the down payment (saving rate of 10%)

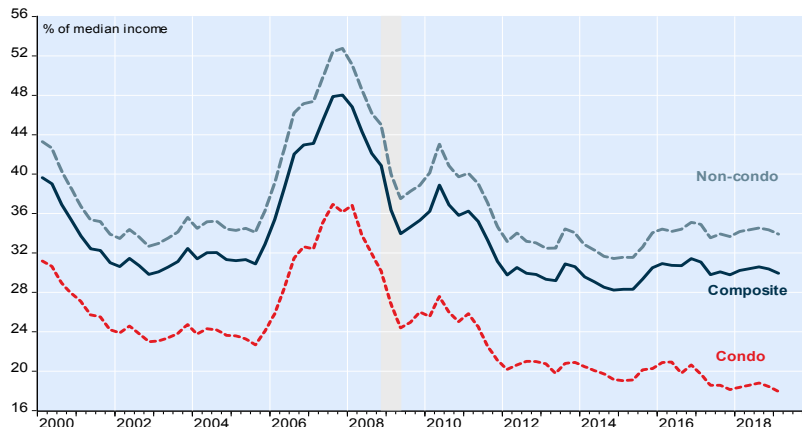
**-18.3%**

Premium/discount for buying compared to renting a two-bedroom condo in Calgary

### Calgary : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

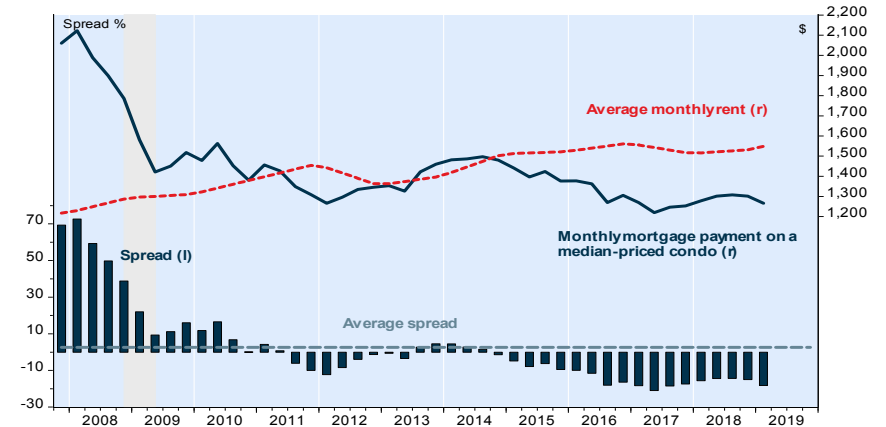
**CALGARY**



NBF Economics and Strategy (data via Statistics Canada, Teraret-National Bank)

### Calgary: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



NBF Economics and Strategy (data via Statistics Canada, Teraret-National Bank)

## Edmonton

Edmonton mirrored a similar situation as the one observed in Calgary. There was an improvement in affordability for both the condo and non-condo segments. The slowdown in the housing market can be seen by lower prices for all dwellings on both a quarterly and annual basis. Looking at the annual perspective, the MPPI\* for the composite fell by 0.4-points. That improvement was still below the urban composite, a result of slower income growth. \*See tables on page 12 for more information.



**Non-  
Condo**

**\$420,179**

Price of the representative home in the metropolitan market

**\$76,604**

Household annual income needed to afford the representative home

**31**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$231,214**

Price of the representative condo in the metropolitan market

**\$42,153**

Household annual income needed to afford the representative condo

**17**

Months of saving required for the down payment (saving rate of 10%)

**-20.5%**

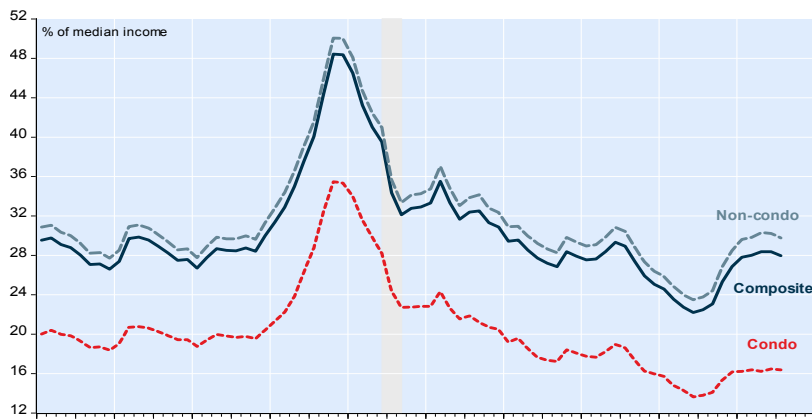
Premium/discount for buying compared to renting a two-bedroom condo in Edmonton

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>29.8%</b>	▼	- 0.5%	Q/Q
Condo	<b>16.4%</b>	▼	- 0.1%	Q/Q

### Edmonton : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

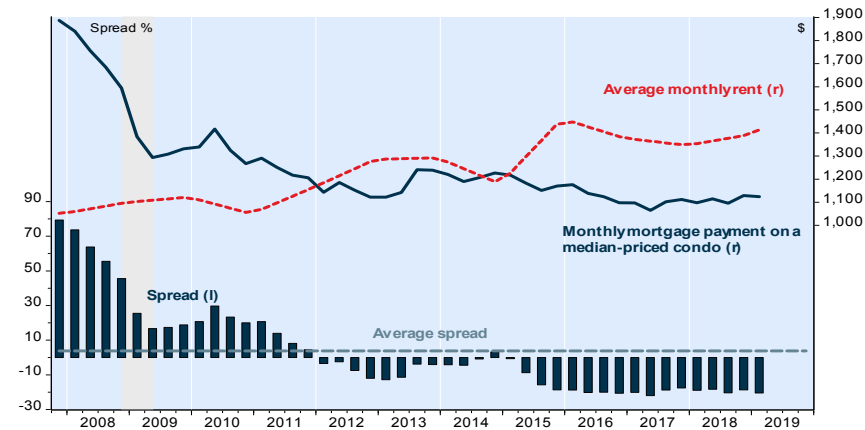
**EDMONTON**



NBF Economics and Strategy (data via Statistics Canada, Teraret-National Bank)

### Edmonton: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



NBF Economics and Strategy (data via Statistics Canada, Teraret-National Bank)

## Ottawa/Gatineau

In Ottawa-Gatineau, the MPPI\* for both the non-condo and condo segments showed an improvement in affordability of -0.4pp and -0.1pp, respectively. A rise in home prices for both segments of the market were not enough to offset rising incomes and lower interest rates. For the aggregate of all dwellings, this was the first improvement in affordability after worsening for 8 consecutive quarters. All told, the MPPI fell 0.4pp in the quarter but was up 2.0pp from a year ago. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>33.7%</b>	▼	- 0.4%	Q/Q
Condo	<b>20.8%</b>	▼	- 0.1%	Q/Q



**Non-Condo**

**\$431,931**

Price of the representative home in the metropolitan market

**\$78,746**

Household annual income needed to afford the representative home

**35**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$267,484**

Price of the representative condo in the metropolitan market

**\$48,766**

Household annual income needed to afford the representative condo

**21**

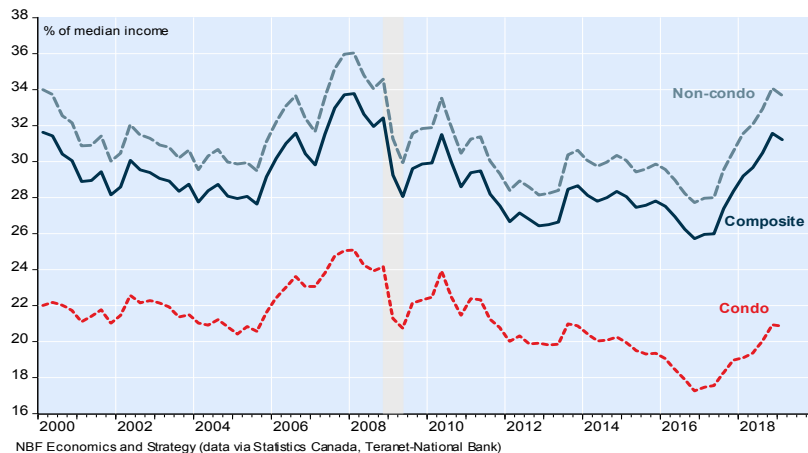
Months of saving required for the down payment (saving rate of 10%)

**-17.8%**

Premium/discount for buying compared to renting a two-bedroom condo in Ottawa/Gatineau

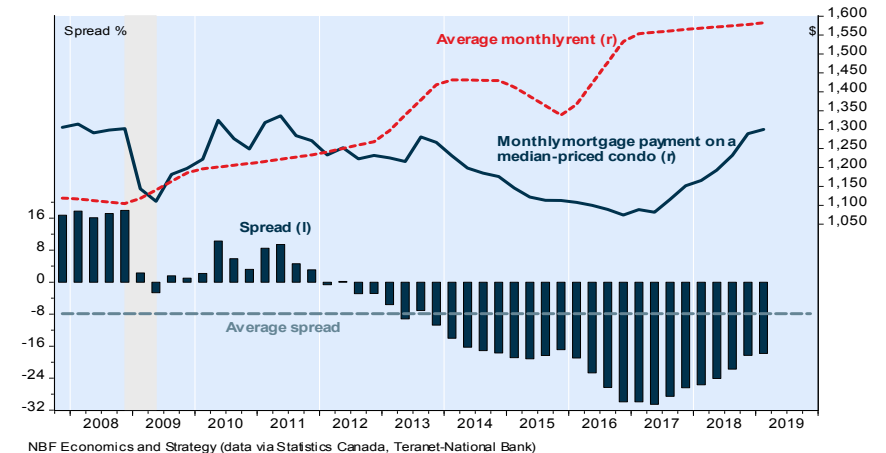
### Ottawa/Gatineau : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)



### Ottawa/Gatineau: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



## Quebec City

Canada's cheapest market was essentially unchanged in the quarter in terms of affordability. Quebec city's MPPI\* saw no change for non-condo dwellings (0.0pp) but improved in the condo (-0.3pp) segment. On a yearly basis for the composite of all dwellings, the MPPI rose 1.1-points, marking a second annual increase. This decline in housing affordability can be attributed to a 31 bps increase of the mortgage rate while home prices rose 4.3% in the year leading to the quarter. This was more than enough to offset rising incomes (+2.9% y/y). \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>23.2%</b>	▶	0.0%	Q/Q
Condo	<b>16.8%</b>	▼	-0.3%	Q/Q



**Non-Condo**

**\$294,510**

Price of the representative home in the metropolitan market

**\$53,693**

Household annual income needed to afford the representative home

**24**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$213,128**

Price of the representative condo in the metropolitan market

**\$38,856**

Household annual income needed to afford the representative condo

**17**

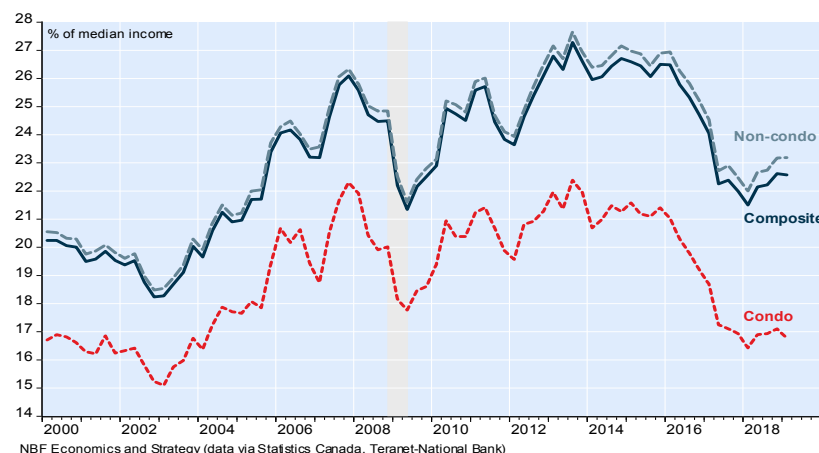
Months of saving required for the down payment (saving rate of 10%)

**-1.8%**

Premium/discount for buying compared to renting a two-bedroom condo in Quebec City

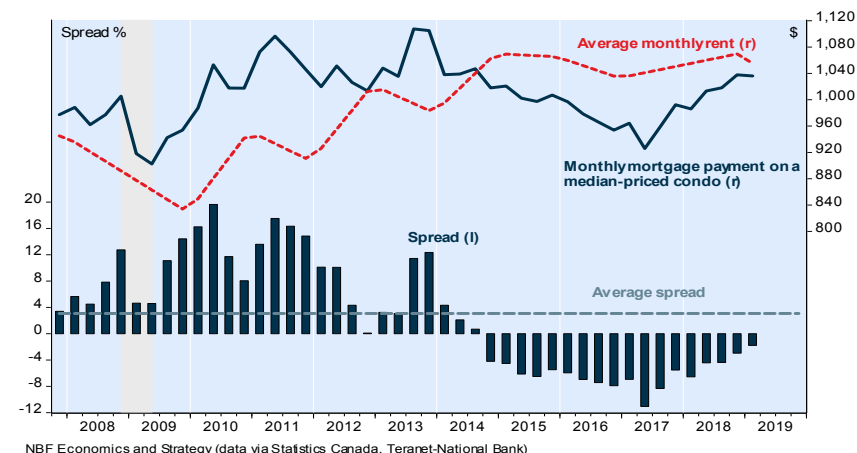
### Quebec city: Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)



### Quebec City: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



**QUEBEC CITY**



## Winnipeg

Winnipeg saw affordability essentially unchanged in the first quarter of the year. Indeed, the MPPI\* showed a flat reading for affordability in the non-condo (0.0pp) segment while the condo segment slightly improved (-0.2pp). For the aggregate of all dwellings, the flat print for the MPPI came after a 0.5-point increase in Q4. That said, the MPPI was up a meager 0.4-points in the year as a 3.2% jump in income was more than offset by a slight rise in home prices (+1.0%) and an increase of the mortgage rate. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>28.1%</b>	▶	0.0%	Q/Q
Condo	<b>19.3%</b>	▼	- 0.2%	Q/Q



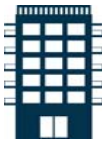
**Non-Condo**

**\$324,784**  
Price of the representative home in the metropolitan market

**\$59,212**  
Household annual income needed to afford the representative home

**29**  
Months of saving required for the down payment (saving rate of 10%)

**26.8%**  
Premium for buying compared to the national urban composite



**Condo**

**\$223,461**  
Price of the representative condo in the metropolitan market

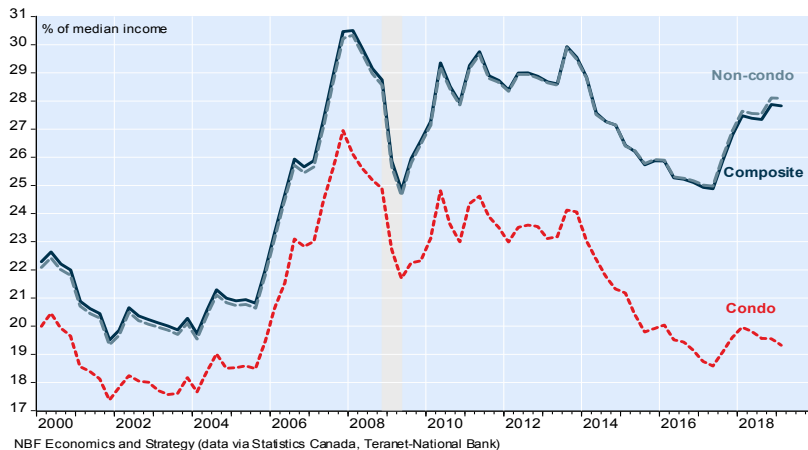
**\$40,740**  
Household annual income needed to afford the representative condo

**20**  
Months of saving required for the down payment (saving rate of 10%)

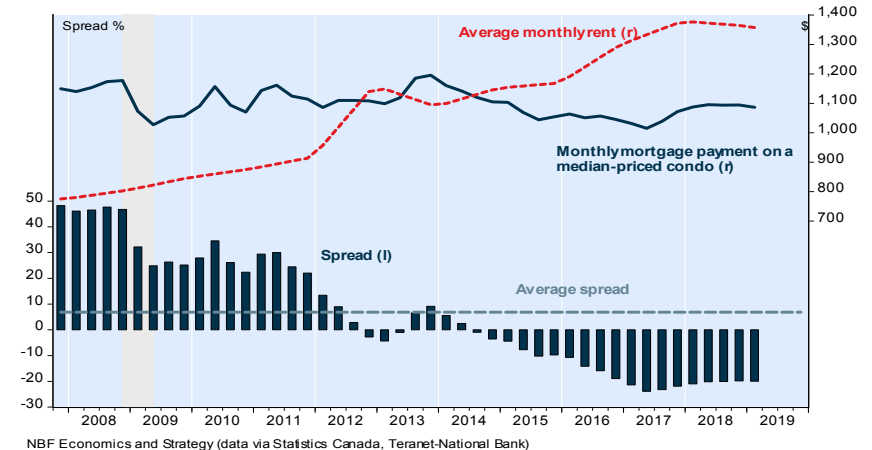
**-19.9%**  
Premium/discount for buying compared to renting a two-bedroom condo in Winnipeg

**Winnipeg: Perspective on housing affordability**  
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

**WINNIPEG**



**Winnipeg: Buying compared to renting**  
Premium/discount for buying compared to renting a two-bedroom condo



## Hamilton

In Hamilton, the MPPI\* for both the non-condo and condo segments showed an improvement in affordability of -0.6pp and -0.3pp respectively. For the aggregate of all dwellings, the MPPI fell by 0.5-points in Q1, the largest one quarter improvement in almost 4 years. Truth be told, the MPPI was up 2.2-points from a year earlier, higher than the 1.3 points rise for our urban composite. This can be credited to prices rising by +3.7% y/y combined with higher financing costs over that same period which were more than enough to offset modest income gains of 2.0% year on year. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>46.9%</b>	▼	- 0.6%	Q/Q
Condo	<b>35.1%</b>	▼	- 0.3%	Q/Q



**Non-  
Condo**

**\$601,472**

Price of the representative home in the metropolitan market

**\$109,656**

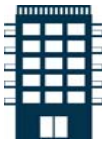
Household annual income needed to afford the representative home

**56**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$449,422**

Price of the representative condo in the metropolitan market

**\$81,935**

Household annual income needed to afford the representative condo

**36**

Months of saving required for the down payment (saving rate of 10%)

**56.9%**

Premium/discount for buying compared to renting a two-bedroom condo in Hamilton

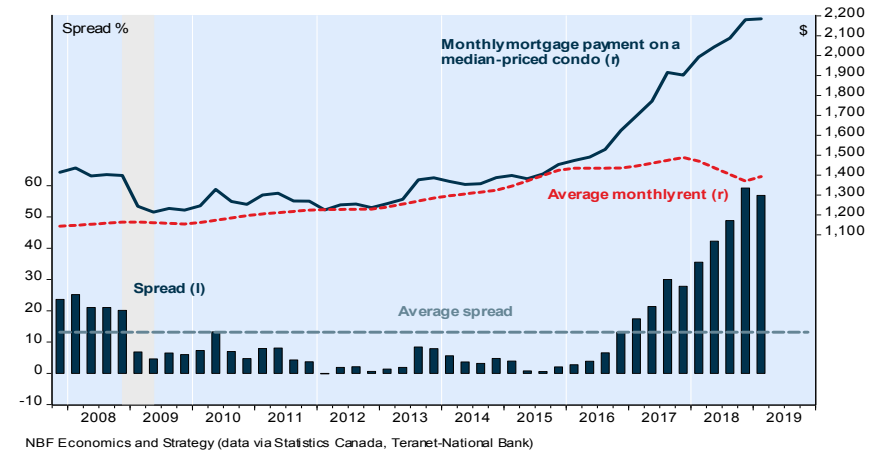
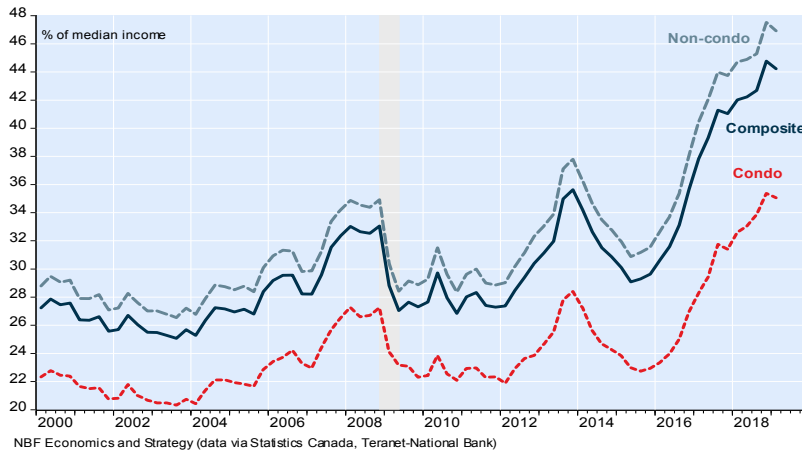
### Hamilton: Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

### Hamilton: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo

**HAMILTON**



## Victoria

Victoria experienced a significant improvement in affordability among the cities observed with the MPPI\* showing an enhancement for non-condos (-0.7pp) and the condo (-0.9pp) segment. For the composite of all dwellings, the MPPI fell by 0.8-points in Q1 down to 70.8%. This relatively unaffordable market was up 4.2-points from a year earlier due to higher interest rates and an increase in home prices (+2.8%) which more than offset lackluster growth in income (+0.1%, lowest y/y income growth in almost 3 years). \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>74.9%</b>	▼	- 0.7%	Q/Q
Condo	<b>42.3%</b>	▼	- 0.9%	Q/Q



**Non-Condo**

**\$851,168**

Price of the representative home in the metropolitan market

**\$155,179**

Household annual income needed to afford the representative home

**109**

Months of saving required for the down payment (saving rate of 10%)

**26.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$480,908**

Price of the representative condo in the metropolitan market

**\$87,676**

Household annual income needed to afford the representative condo

**44**

Months of saving required for the down payment (saving rate of 10%)

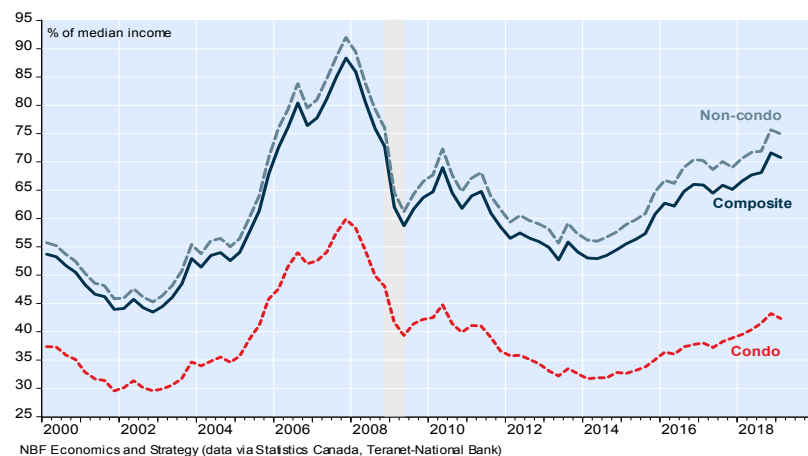
**37.2%**

Premium/discount for buying compared to renting a two-bedroom condo in Victoria

### Victoria: Perspective on housing affordability

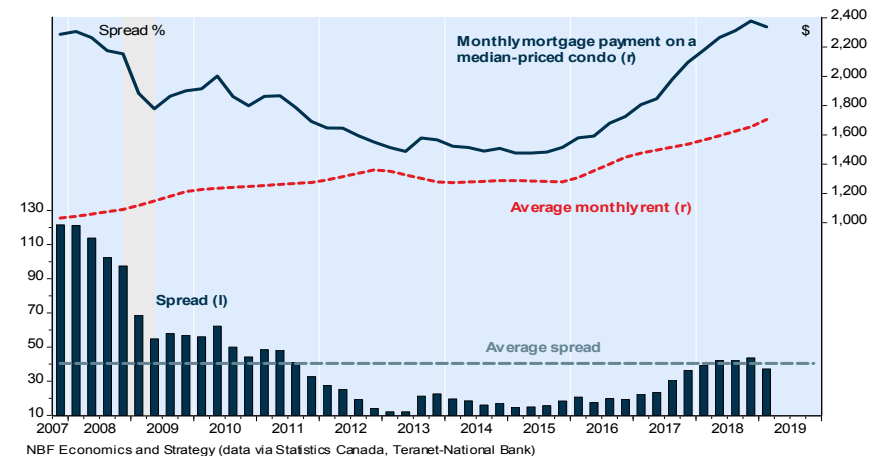
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

**VICTORIA**



### Victoria: Buying compared to renting

Premium/discount for buying compared to renting a two-bedroom condo



## Housing affordability statistics

Table 1

	A	B	C	D	E	F	G	H	I	J	K	L	M
All dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying annual Income	Median annual Income	Home-ownership rate (2016)	Monthly mortgage payment
<b>Urban Composite</b>	<b>\$ 574,270</b>	<b>0.3</b>	<b>1.1</b>	<b>56.6</b>	<b>34.1</b>	<b>48.7</b>	<b>-0.7</b>	<b>1.3</b>	<b>40.0</b>	<b>\$ 104,697</b>	<b>\$ 68,806</b>	<b>68%</b>	<b>\$ 2,792</b>
Toronto	\$ 858,257	1.3	1.9	92.2	44.8	63.2	-0.3	2.1	47.8	\$ 156,471	\$ 79,197	66%	\$ 4,173
Montreal	\$ 343,835	0.9	4.8	33.3	25.0	32.4	-0.5	1.7	30.2	\$ 62,685	\$ 61,957	56%	\$ 1,672
Vancouver	\$ 1,066,269	-1.4	-2.2	342.1	78.4	83.2	-2.1	0.9	61.9	\$ 194,394	\$ 74,803	64%	\$ 5,184
Calgary	\$ 435,041	-0.7	-2.9	30.8	26.9	29.9	-0.4	-0.3	33.6	\$ 79,313	\$ 84,793	73%	\$ 2,115
Edmonton	\$ 394,889	-0.6	-1.4	28.8	24.1	28.0	-0.4	0.2	30.4	\$ 71,993	\$ 82,362	70%	\$ 1,920
Ottawa/Gatineau	\$ 400,565	0.8	5.6	32.1	24.0	31.2	-0.4	2.0	29.1	\$ 73,028	\$ 74,846	67%	\$ 1,947
Quebec	\$ 286,713	2.3	4.3	23.2	19.5	22.6	0.0	1.1	23.1	\$ 52,271	\$ 74,100	60%	\$ 1,394
Winnipeg	\$ 321,787	1.0	1.0	28.6	21.2	27.8	0.0	0.4	25.3	\$ 58,666	\$ 67,465	67%	\$ 1,564
Hamilton	\$ 566,825	0.6	3.7	50.8	26.3	44.2	-0.5	2.2	30.4	\$ 103,339	\$ 74,780	70%	\$ 2,756
Victoria	\$ 804,250	-0.1	2.8	100.3	53.1	70.8	-0.8	4.2	60.7	\$ 146,625	\$ 66,289	63%	\$ 3,910

Table 2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Condo	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly mortgage payment	Monthly average rent
<b>Urban Composite</b>	<b>\$ 409,421</b>	<b>0.9</b>	<b>4.2</b>	<b>35.7</b>	<b>24.2</b>	<b>34.7</b>	<b>-0.3</b>	<b>1.9</b>	<b>29.4</b>	<b>\$ 74,642</b>	<b>\$ 68,806</b>	<b>9%</b>	<b>\$ 1,990</b>	<b>\$ 1,928</b>
Toronto	\$ 547,006	2.1	7.9	45.0	25.9	40.3	0.1	3.5	30.7	\$ 99,726	\$ 79,197	15%	\$ 2,659	\$ 2,454
Montreal	\$ 281,462	1.6	5.9	27.3	21.8	26.5	-0.2	1.6	26.4	\$ 51,314	\$ 61,957	11%	\$ 1,368	\$ 1,216
Vancouver	\$ 638,564	0.0	1.9	62.3	32.4	49.8	-0.5	2.5	38.2	\$ 116,418	\$ 74,803	22%	\$ 3,104	\$ 2,075
Calgary	\$ 260,451	-2.1	-4.3	18.4	19.0	17.9	-0.5	-0.4	24.2	\$ 47,483	\$ 84,793	14%	\$ 1,266	\$ 1,549
Edmonton	\$ 231,214	0.2	-1.1	16.8	15.9	16.4	-0.1	0.2	20.5	\$ 42,153	\$ 82,362	12%	\$ 1,124	\$ 1,413
Ottawa/Gatineau	\$ 267,484	1.5	7.8	21.4	17.4	20.8	-0.1	1.8	21.2	\$ 48,766	\$ 74,846	9%	\$ 1,300	\$ 1,582
Quebec	\$ 213,128	0.5	1.5	17.3	15.9	16.8	-0.3	0.4	19.0	\$ 38,856	\$ 74,100	9%	\$ 1,036	\$ 1,055
Winnipeg	\$ 223,461	0.0	-3.5	19.9	17.4	19.3	-0.2	-0.6	21.1	\$ 40,740	\$ 67,465	6%	\$ 1,086	\$ 1,357
Hamilton	\$ 449,422	0.9	5.9	36.1	20.6	35.1	-0.3	2.5	24.4	\$ 81,935	\$ 74,780	11%	\$ 2,185	\$ 1,393
Victoria	\$ 480,908	-1.0	3.7	43.5	31.1	42.3	-0.9	2.8	38.8	\$ 87,676	\$ 66,289	14%	\$ 2,338	\$ 1,704

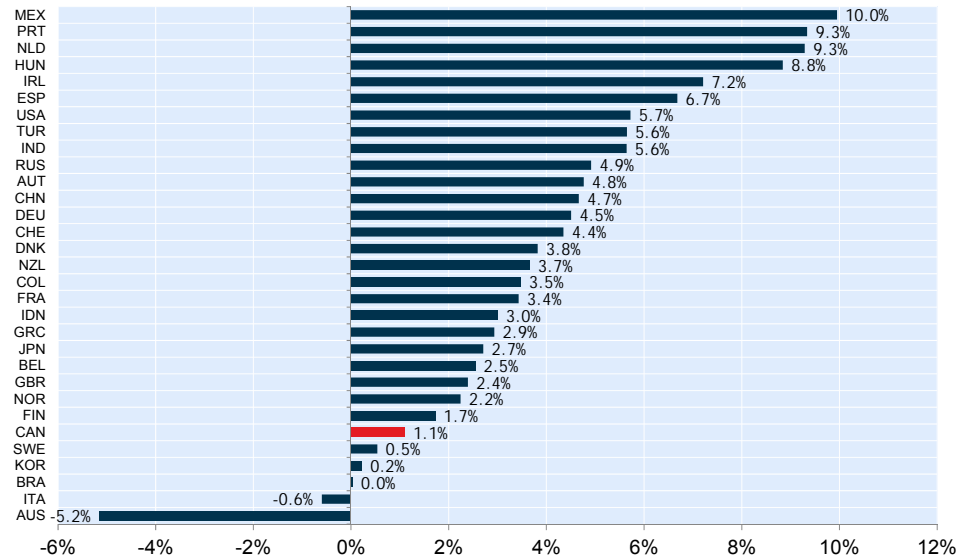
Table 3

	A	B	C	D	E	F	G	H	I	J	K	L	M
Non-condo	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly mortgage payment
<b>Urban Composite</b>	<b>\$ 720,651</b>	<b>0.3</b>	<b>0.6</b>	<b>82.1</b>	<b>44.6</b>	<b>61.1</b>	<b>-0.9</b>	<b>1.3</b>	<b>49.9</b>	<b>\$ 131,384</b>	<b>\$ 68,806</b>	<b>59%</b>	<b>\$ 3,504</b>
Toronto	\$ 913,635	1.2	1.0	100.6	48.4	67.3	-0.4	1.7	50.8	\$ 166,567	\$ 79,197	52%	\$ 4,442
Montreal	\$ 371,755	0.7	4.5	36.0	26.7	35.0	-0.6	1.7	32.3	\$ 67,775	\$ 61,957	45%	\$ 1,807
Vancouver	\$ 1,296,220	-1.7	-3.1	415.9	114.5	101.1	-2.8	0.1	74.2	\$ 236,317	\$ 74,803	42%	\$ 6,302
Calgary	\$ 492,871	-0.5	-2.7	34.9	29.8	33.9	-0.4	-0.2	37.2	\$ 89,856	\$ 84,793	59%	\$ 2,396
Edmonton	\$ 420,179	-0.8	-1.5	30.6	25.2	29.8	-0.5	0.1	31.8	\$ 76,604	\$ 82,362	57%	\$ 2,043
Ottawa/Gatineau	\$ 431,931	0.8	5.3	34.6	25.7	33.7	-0.4	2.1	31.1	\$ 78,746	\$ 74,846	58%	\$ 2,100
Quebec	\$ 294,510	2.5	4.8	23.8	19.8	23.2	0.0	1.2	23.5	\$ 53,693	\$ 74,100	51%	\$ 1,432
Winnipeg	\$ 324,784	1.0	1.3	28.9	21.2	28.1	0.0	0.4	25.3	\$ 59,212	\$ 67,465	61%	\$ 1,579
Hamilton	\$ 601,472	0.5	3.4	56.4	28.2	46.9	-0.6	2.2	32.3	\$ 109,656	\$ 74,780	60%	\$ 2,924
Victoria	\$ 851,168	0.1	2.6	108.8	56.4	74.9	-0.7	4.3	63.7	\$ 155,179	\$ 66,289	49%	\$ 4,138

## Global perspective on housing affordability

### World: Perspective on home price growth

Home price percentage change year over year (Last data available)



NBF Economics and Strategy (Data via OECD)

## Methodology

The National Bank Housing Affordability Report measures housing affordability in 10 major census metropolitan areas (CMAs) and summarizes the results in a weighted-average composite of the 10 CMAs. We track the **condo market**, **other dwellings** (single detached, semi-detached) and the **market as a whole**.

We measure two hurdles for the purchase of a home. First, a household must save the **down-payment** amount. We measure this requirement as the number of months a median-income household will require to save for the minimum cash down payment (CMHC insured mortgage) of the representative home at a savings rate of 10% of its pre-tax income. We evaluate the representative home using the Teranet–National Bank House Price Index for the market in question to calculate the home price for months before and after the median home price measured by the 2016 Census. For **median household income** in each CMA, we take the Statistics Canada annual data up to 2013. For subsequent months, we extend the series using average weekly earnings growth as a proxy.

The second hurdle for the purchase of a home is the monthly mortgage payment. We measure this as the monthly payment on a median-priced home assuming a 25-year amortization period and a 5-year term. The resulting amount is presented as a percentage of income calculated as described above (sometimes referred as **MPPi**). Note that we do not take the down payment into account in this calculation because there is an opportunity cost in a household's use of these funds for that purpose. Also, we do not wish policy changes in this regard to affect our indicator over time. We also calculate the income needed to purchase the median property assuming that household devote 32% of its pre-tax income for mortgage payment (defined as **qualifying income**). For the condo market, we also compare the monthly mortgage payment to the average rent for a two-bedroom condo in the same market. We calculate that rent from annual CMHC data, updated to the current month by the rent component of the Consumer Price Index. Note that data in the report was seasonally adjusted when necessary.

### Montreal Office

514-879-2529

#### Stéfane Marion

Chief Economist and Strategist  
stefane.marion@nbc.ca

#### Krishen Rangasamy

Senior Economist  
krishen.rangasamy@nbc.ca

#### Kyle Dahms

Economist  
kyle.dahms@nbc.ca

#### Matthieu Arseneau

Deputy Chief Economist  
matthieu.arseneau@nbc.ca

#### Paul-André Pinsonnault

Senior Fixed Income Economist  
paulandre.pinsonnault@nbc.ca

#### Jocelyn Paquet

Economist  
jocelyn.paquet@nbc.ca

#### Marc Pinsonneault

Senior Economist  
marc.pinsonneault@nbc.ca

#### Angelo Katsoras

Geopolitical Analyst  
angelo.katsoras@nbc.ca

### Toronto Office

416-869-8598

#### Warren Lovely

MD & Head of Public Sector Strategy  
warren.lovely@nbc.ca

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# Housing Affordability Monitor

Economics and Strategy

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