

## Biggest improvement in a decade for housing affordability

By Matthieu Arseneau & Kyle Dahms

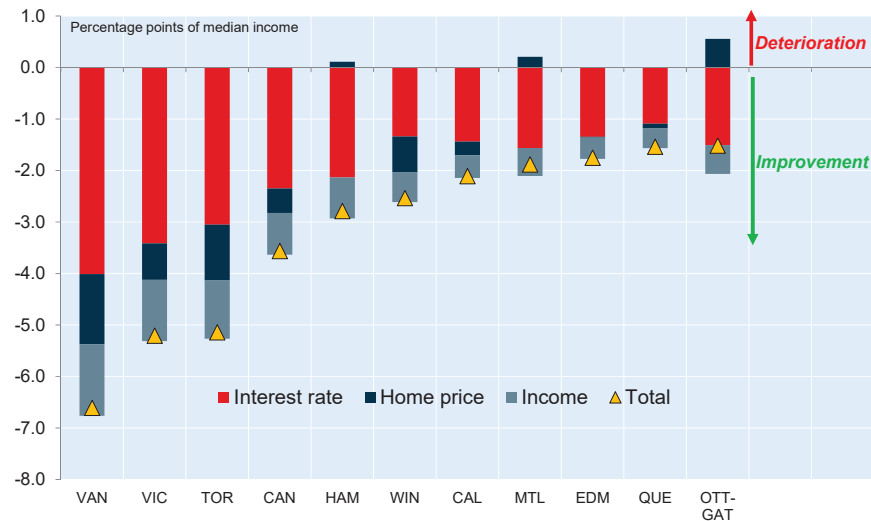
Affordability improved in Q2 by the most since 2009 as measured by the urban composite index. All the observed markets registered an amelioration in the quarter (left chart). The most significant factor to this development was the decline in mortgage rates. Indeed, the free-fall in financings costs was the most substantial since 2010Q3. This combined with a healthy labour market producing income growth on the scale of 1.7% in the quarter and home prices declining 1.0% meant that all inputs contributed to the improvement in housing affordability. Vancouver experienced the largest progression in affordability among urban markets in Q2. Toronto essentially mirrored the situation in Vancouver with a large improvement in the non-condo market and some progress also in the condo market. The decline in mortgage rates combined with a robust labour market reduced the risk of a correction in home prices in the coming months. That being said, there are still some headwinds limiting upside on home prices. Despite the recent progress in Vancouver and Toronto, these markets remain unaffordable on a historical basis (right chart). Moreover, while the contractual mortgage rate declined 68 basis points since last December, the qualifying rate declined only 15 basis points meaning that most potential new buyers excluded by B-20 measures still are.

### HIGHLIGHTS:

- Canadian housing affordability improved for a second consecutive quarter in Q2 2019, posting the largest one quarter progress since Q1 2009. The mortgage payment on a representative home as a percentage of income (MPPI) fell 3.6 points after a 0.7-point decline in Q1'19. Seasonally adjusted home prices decreased 1.0% in Q2'19 from Q1'19; the benchmark mortgage rate (5-year term) fell 45 basis points; while median household income rose 1.7%.
- In the second quarter, affordability improved most in Vancouver, Victoria, Toronto and Hamilton. No markets showed a deterioration with Quebec City and Ottawa/Gatineau posting the smallest improvements. Calgary is now at its most affordable level on record. 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 11 months to 330.9 months in Vancouver, 3.8 months to 88.4 months in Toronto and a modest 0.3 month to 33 months in Montreal in Q2 2019.

### Canada: Q2 change in housing affordability in 10 metropolitan areas

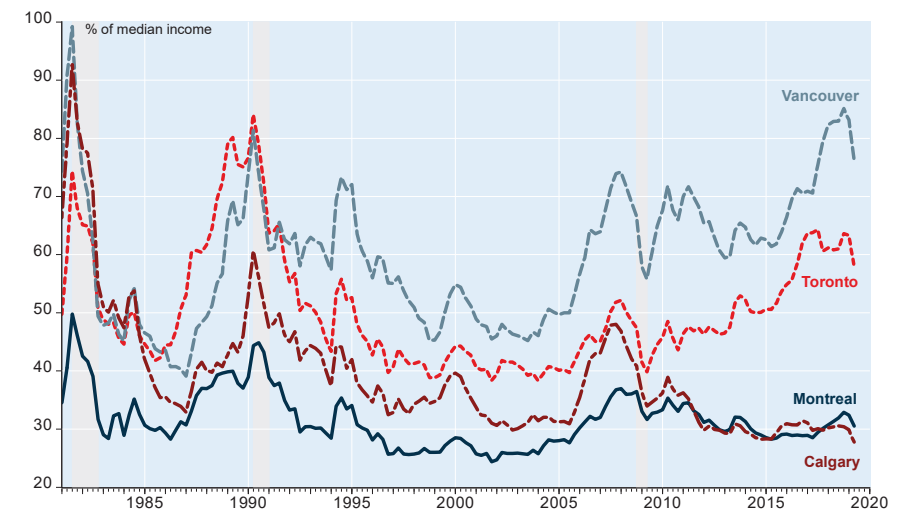
Q/Q change in mortgage payment on median-price home (25-year amortization, 5-year term)



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)

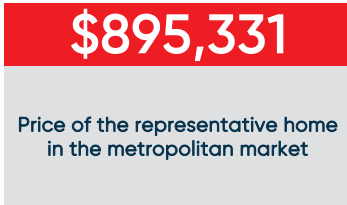
## Toronto

Toronto's housing affordability improved in both the non-condo and condo segments in the second quarter. This was partly due to a decrease in home prices for condos (-0.1% q/q) and other dwellings (-2.0% q/q). Home prices for all dwellings fell -1.7% on a quarterly basis but were still up +1.2% from a year ago. Still, lower interest rates and rising incomes have contributed to improving affordability in Canada's largest city. As a result, the composite for all dwellings showed an improvement in the MPP<sup>1</sup> for the quarter (-5.1pp, largest since the recession) and the year (-2.7pp).  
\*See tables on page 12 for more information.

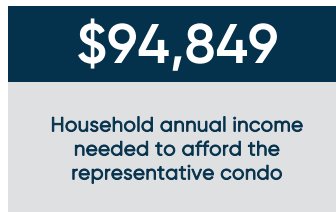
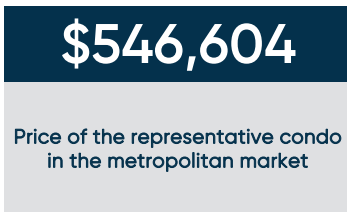
Mortgage payment as a % of income (MPP <sup>1</sup> )				
Non-Condo	<b>61.7%</b>	▼	- 5.6%	Q/Q
Condo	<b>37.7%</b>	▼	- 2.7%	Q/Q



**Non-Condo**



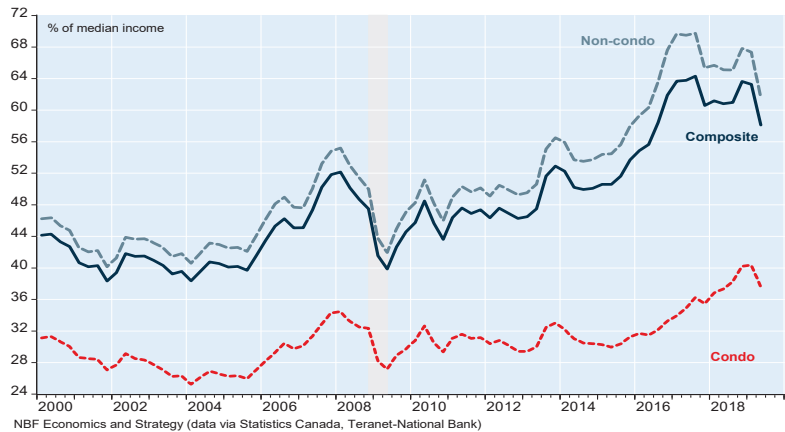
**Condo**



### Toronto : Perspective on housing affordability

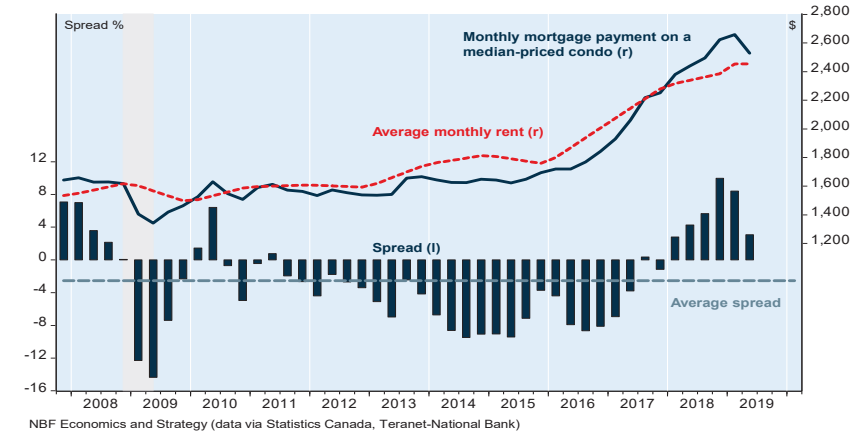
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

**TORONTO**



### Toronto: Buying compared to renting

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



## Montreal

In Montreal, affordability as measured by the MPPI improved for both the condo (-1.7pp) and non-condo (-2.0pp) segments. Prices continued their upward trajectory in this comparatively affordable city but were tamed by lower financing costs and higher incomes. Accordingly, for the aggregate of all dwellings, the MPPI\* dropped to 30.5 %, essentially on line with its historical average. On a yearly basis, home prices have risen by 5.2%, slightly outpacing income growth which progressed 4.7 % in the same period. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>33.0%</b>	▼	- 2.0%	Q/Q
Condo	<b>24.9%</b>	▼	- 1.7%	Q/Q



**Non-Condo**

**\$374,315**

Price of the representative home in the metropolitan market

**\$64,953**

Household annual income needed to afford the representative home

**36**

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

**-47.5%**

Premium for buying compared to the national urban composite



**Condo**

**\$281,945**

Price of the representative condo in the metropolitan market

**\$48,924**

Household annual income needed to afford the representative condo

**27**

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

**7.4%**

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

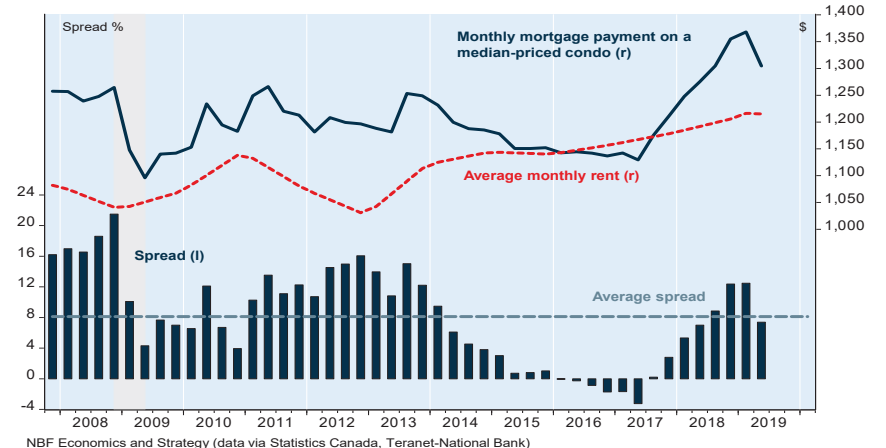
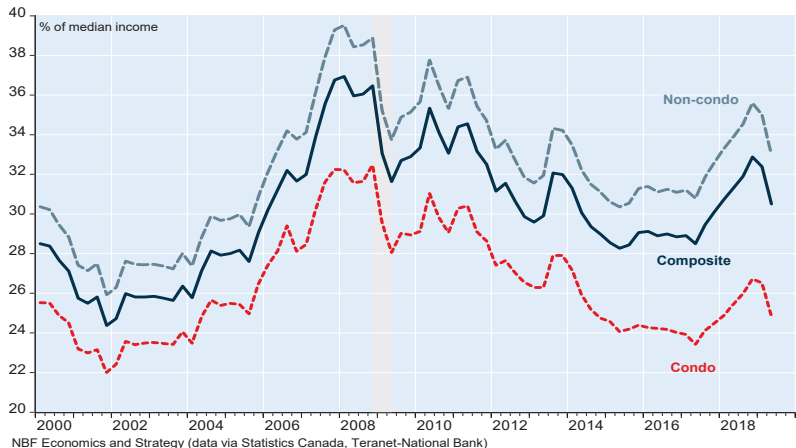
### Montreal : Perspective on housing affordability

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 second quarter (-4.1pp and -8.0pp respectively). This was largest improvement in the condo segment since 2009. Moreover, the mortgage payment for the non-condo portion now requires slightly less than the totality of the median household pre-tax income (93.1%) to service. This percentage fell this quarter on the back of lower interest rates, declining home prices and income growth. Home prices for the aggregate are now down 1.6% in the quarter and -4.6% over the past year. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	93.1%	▼	- 8.0%	Q/Q
Condo	45.7%	▼	- 4.1%	Q/Q



**Non-Condo**

**\$1,276,031**

Price of the representative home in the metropolitan market

**\$221,422**

Household annual income needed to afford the representative home

**403**

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

**79.0%**

Premium for buying compared to the national urban composite



**Condo**

**\$626,063**

Price of the representative condo in the metropolitan market

**\$108,637**

Household annual income needed to afford the representative condo

**59**

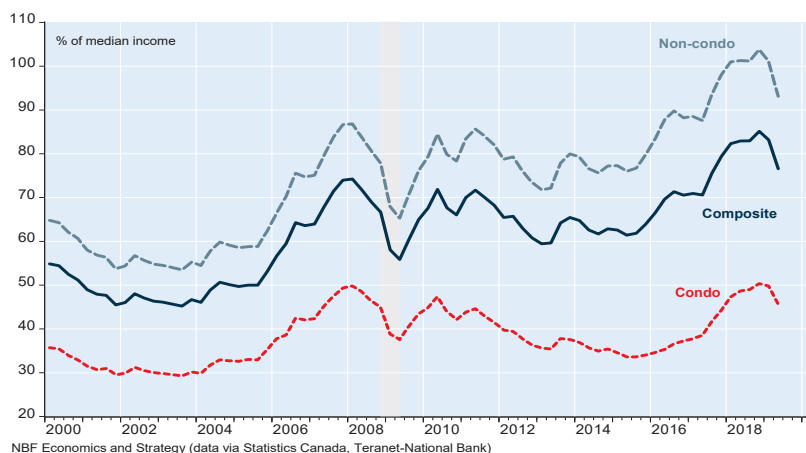
Months of saving required for the down payment (saving rate of 10%)

**39.3%**

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

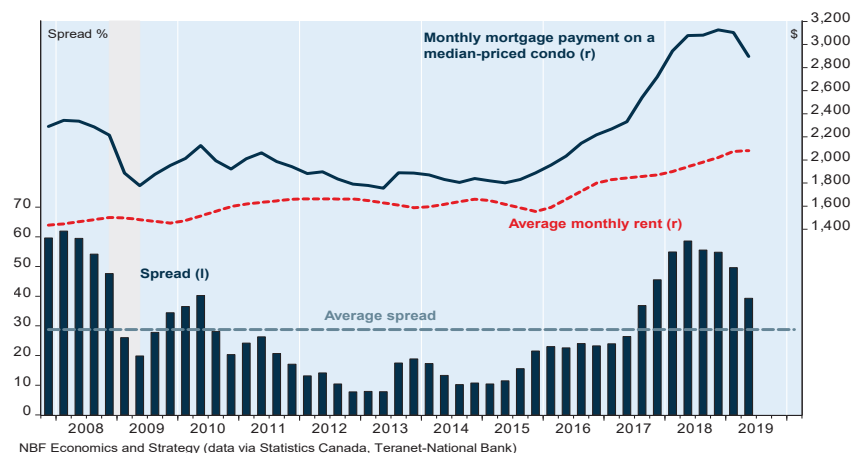
### Vancouver : Perspective on housing affordability

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



### Vancouver: Buying compared to renting

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



## Calgary

Calgary also saw an improvement in the MPPI\* for both the non-condo (-2.4pp) and condo (-1.2pp) segments. Indeed, on a quarterly basis, the city composite experienced a decrease of 0.9 % in housing prices (-3.5% y/y), incomes rising at a decent pace (+1.5%) and much lower financing costs. While Calgary has become more affordable on a relative basis, the decline 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>31.5%</b>	▼	- 2.4%	Q/Q
Condo	<b>16.7%</b>	▼	- 1.2%	Q/Q



**Non-Condo**

**\$488,252**

Price of the representative home in the metropolitan market

**\$84,724**

Household annual income needed to afford the representative home

**34**

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

**-31.5%**

Premium for buying compared to the national urban composite



**Condo**

**\$258,654**

Price of the representative condo in the metropolitan market

**\$44,883**

Household annual income needed to afford the representative condo

**18**

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

**-21.0%**

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

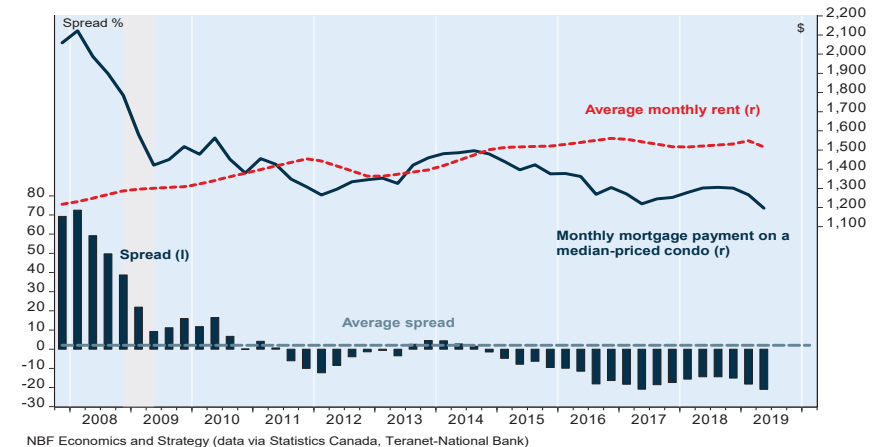
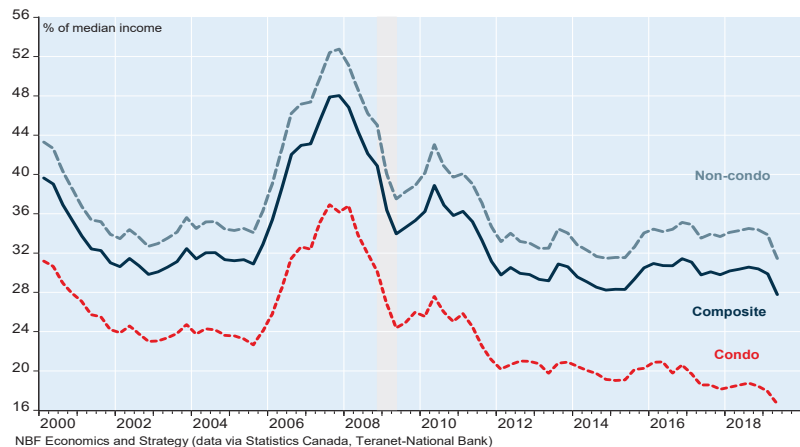
### Calgary : Perspective on housing affordability

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

### Calgary: Buying compared to renting

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

**CALGARY**



## 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 an annual basis (prices were flat in Q2). Looking at the annual perspective, the MPPI\* for the composite fell by 1.8-points. That improvement was still below the urban composite, a result of slower income growth and stable home prices. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	27.9%	▼	- 1.7%	Q/Q
Condo	14.8%	▼	- 1.6%	Q/Q



**Non-Condo**

**\$421,179**  
Price of the representative home in the metropolitan market

**\$73,085**  
Household annual income needed to afford the representative home

**30**  
Months of saving required for the down payment (saving rate of 10%)

**-40.9%**  
Premium for buying compared to the national urban composite



**Condo**

**\$222,951**  
Price of the representative condo in the metropolitan market

**\$38,687**  
Household annual income needed to afford the representative condo

**16**  
Months of saving required for the down payment (saving rate of 10%)

**-27.3%**  
Premium/discount for buying compared to renting a two-bedroom condo in Edmonton

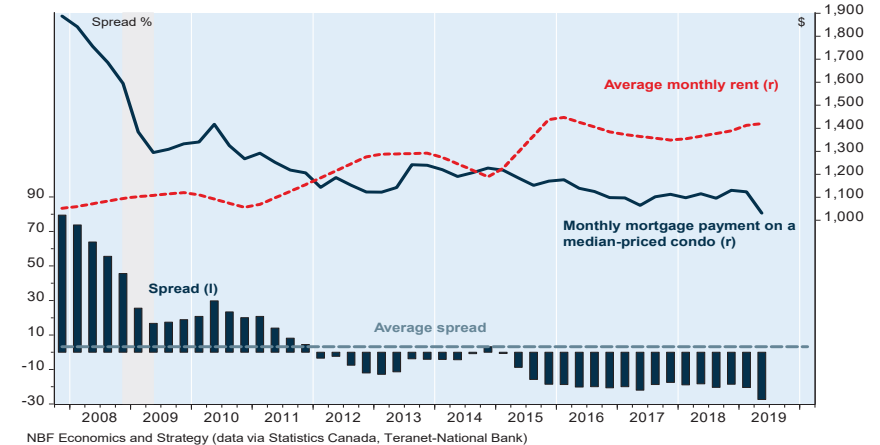
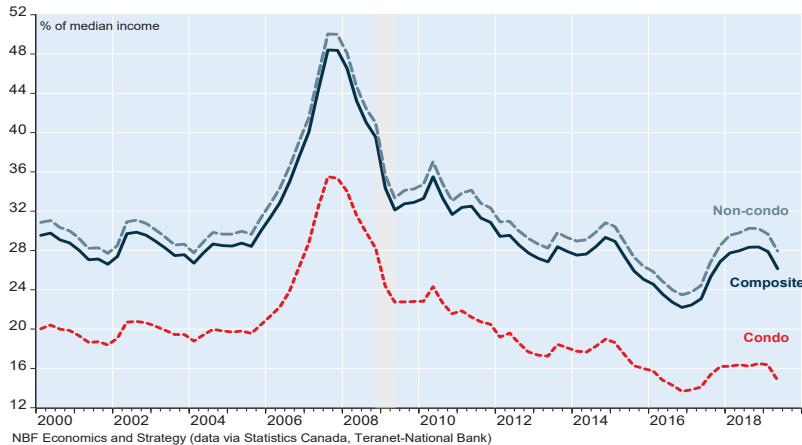
### Edmonton : Perspective on housing affordability

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

### Edmonton: Buying compared to renting

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

**EDMONTON**



## Ottawa/Gatineau

In Ottawa-Gatineau, the MPPI\* for both the non-condo and condo segments showed an improvement in affordability of -1.6pp and -1.3pp, respectively. Rising incomes and lower interest rates were more than enough to offset a rise in home prices for both segments of the market. For the aggregate of all dwellings, this was the second improvement in affordability after worsening for 8 consecutive quarters. All told, the MPPI fell 1.5pp in the quarter and was flat from a year ago. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	<b>32.1%</b>	▼	- 1.6%	Q/Q
Condo	<b>19.6%</b>	▼	- 1.3%	Q/Q



**Non-  
Condo**

**\$440,204**  
Price of the representative home in the metropolitan market

**\$76,386**  
Household annual income needed to afford the representative home

**35**  
Months of saving required for the down payment (saving rate of 10%)

**-38.3%**  
Premium for buying compared to the national urban composite



**Condo**

**\$268,458**  
Price of the representative condo in the metropolitan market

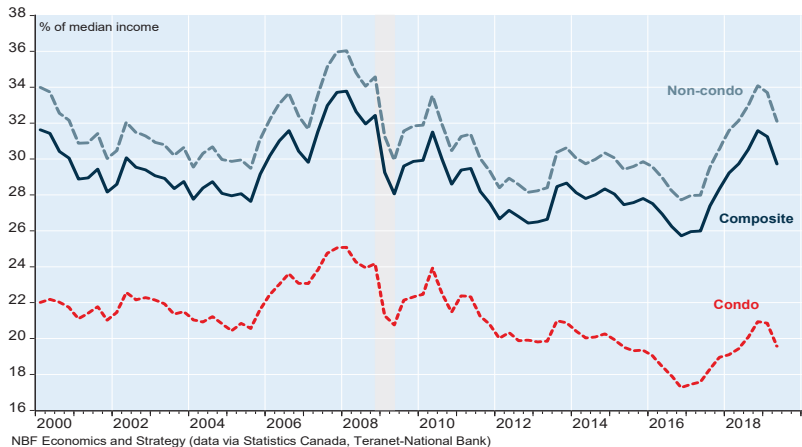
**\$46,584**  
Household annual income needed to afford the representative condo

**21**  
Months of saving required for the down payment (saving rate of 10%)

**-20.3%**  
Premium/discount for buying compared to renting a two-bedroom condo in Ottawa/Gatineau

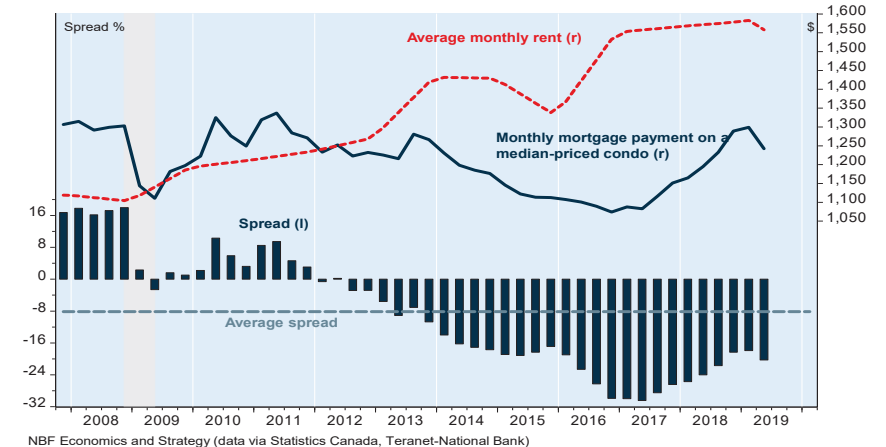
### Ottawa/Gatineau : Perspective on housing affordability

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 became even less expensive in the quarter. Quebec city's MPPI\* improved for both non-condo dwellings (-1.6pp) and the condo (-1.0pp) segment. On a yearly basis for the composite of all dwellings, the MPPI fell 1.2-points, and allowed the later to reach its lowest level since 2005Q1. This improvement in housing affordability can be attributed to a 27 bps decrease of the mortgage rate while incomes rose 4.7% in the year leading to the quarter. These factors were more than enough to offset rising home prices 2.2% y/y. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>21.5%</b>	▼	- 1.6%	Q/Q
Condo	<b>15.8%</b>	▼	- 1.0%	Q/Q



**Non-Condo**

**\$292,193**

Price of the representative home in the metropolitan market

**\$50,703**

Household annual income needed to afford the representative home

**23**

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

**-59.0%**

Premium for buying compared to the national urban composite



**Condo**

**\$214,229**

Price of the representative condo in the metropolitan market

**\$37,174**

Household annual income needed to afford the representative condo

**17**

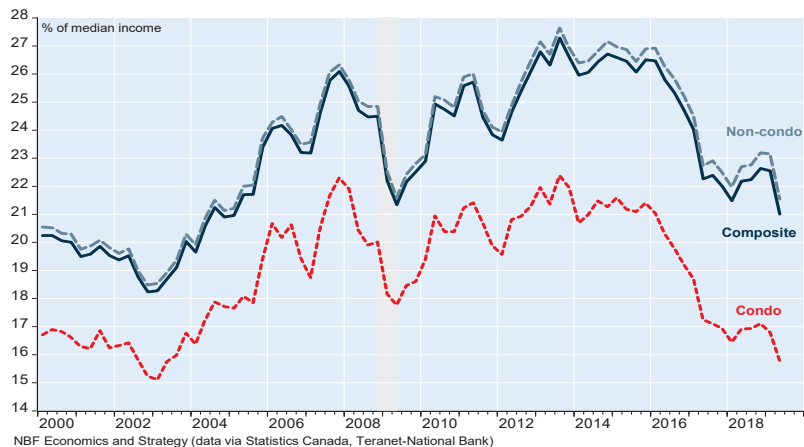
Months of saving required for the down payment (saving rate of 10%)

**-5.9%**

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

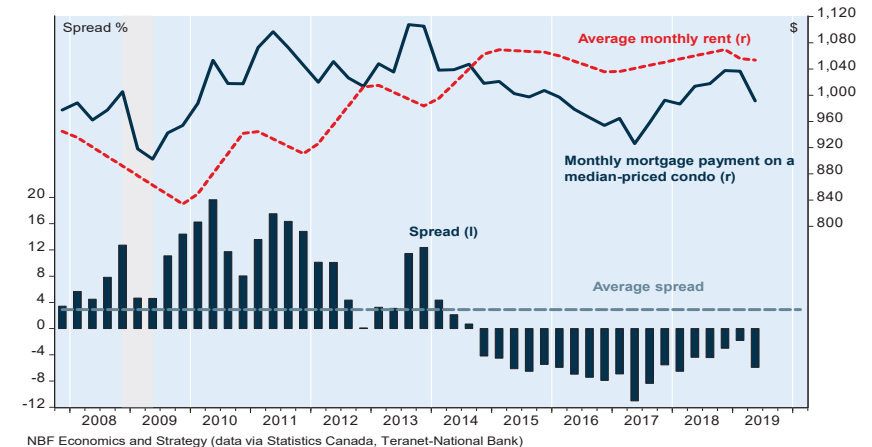
### Quebec city: Perspective on housing affordability

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 improve significantly in the second quarter of the year. Indeed, the MPPI\* showed a rosier situation for affordability in the non-condo (-2.6pp) segment and the condo segment (-1.0pp). For the aggregate of all dwellings, the strong improvement for the MPPI was the largest since the recession. In addition, the MPPI was down 2.2-points in the year as a 4.0% jump in income combined with a 1.4% decline in home prices and a decrease of the mortgage rate. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>25.4%</b>	▼	- 2.6%	Q/Q
Condo	<b>18.3%</b>	▼	- 1.0%	Q/Q



**Non-Condo**

**\$315,264**

Price of the representative home in the metropolitan market

**\$54,706**

Household annual income needed to afford the representative home

**27**

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

**-55.8%**

Premium for buying compared to the national urban composite



**Condo**

**\$227,390**

Price of the representative condo in the metropolitan market

**\$39,458**

Household annual income needed to afford the representative condo

**20**

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

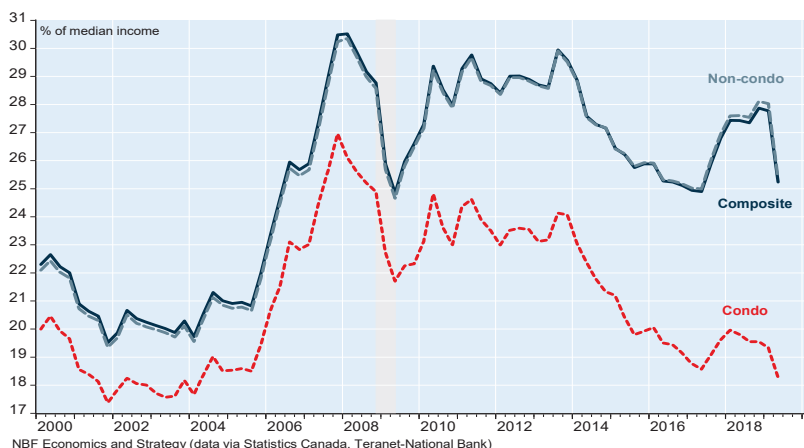
**-23.3%**

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

### Winnipeg: Perspective on housing affordability

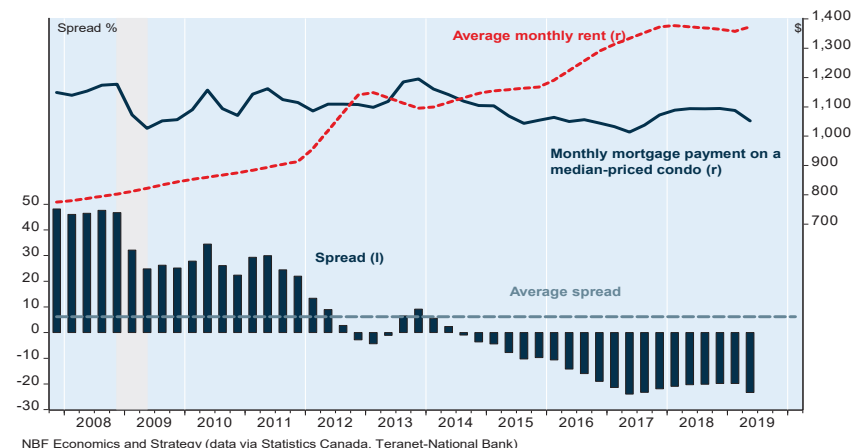
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

**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 -3.0pp and -2.0pp respectively. For the aggregate of all dwellings, the MPPI fell by 2.8-points in Q2, the largest one quarter improvement in the post-recession period. Still, the MPPI was down a tepid 0.8-points from a year earlier, less than the 2.6 points decline for our urban composite. This can be credited to home prices rising by +3.9% y/y which were more than enough to offset modest income gains of 2.7% year on year. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>44.0%</b>	▼	- 3.0%	Q/Q
Condo	<b>33.1%</b>	▼	- 2.0%	Q/Q



**Non-  
Condo**

**\$602,749**

Price of the representative home in the metropolitan market

**\$104,592**

Household annual income needed to afford the representative home

**56**

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

**-15.5%**

Premium for buying compared to the national urban composite



**Condo**

**\$453,801**

Price of the representative condo in the metropolitan market

**\$78,745**

Household annual income needed to afford the representative condo

**36**

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

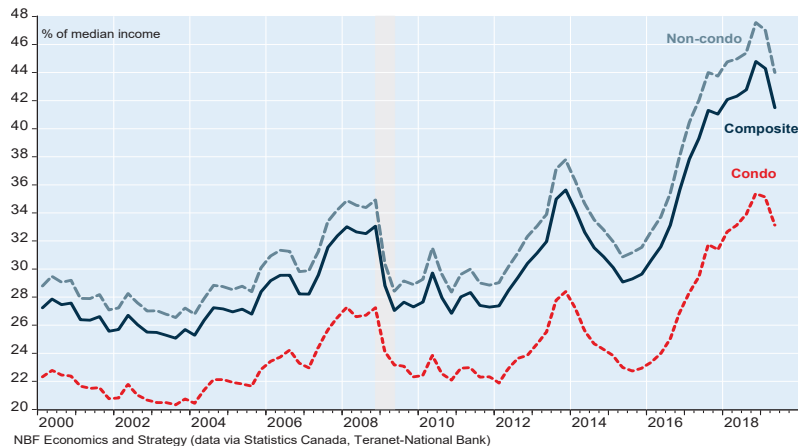
**50.8%**

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

### Hamilton: Perspective on housing affordability

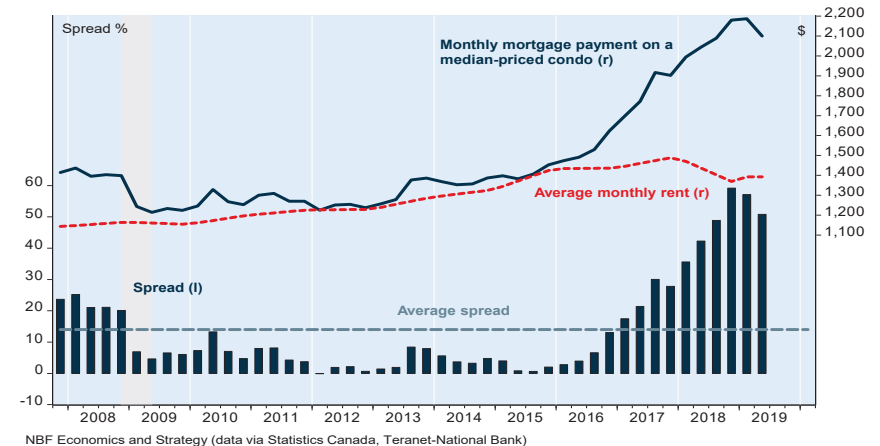
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

**HAMILTON**



### Hamilton: Buying compared to renting

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



## Victoria

Victoria experienced a substantial improvement in affordability among the cities observed with the MPPI\* showing an enhancement for non-condos (-5.6pp) and the condo (-2.7pp) segment. For the composite of all dwellings, the MPPI fell by 5.2-points in Q2 down to 65.6%. This relatively unaffordable market was down 2.2-points from a year earlier essentially thanks to lower interest rates as both home prices and income growth were mostly flat. \*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	<b>69.3%</b>	▼	- 5.6%	Q/Q
Condo	<b>39.6%</b>	▼	- 2.7%	Q/Q



**Non-Condo**

**\$841,021**

Price of the representative home in the metropolitan market

**\$145,938**

Household annual income needed to afford the representative home

**105**

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

**18.0%**

Premium for buying compared to the national urban composite



**Condo**

**\$481,228**

Price of the representative condo in the metropolitan market

**\$83,505**

Household annual income needed to afford the representative condo

**43**

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

**30.1%**

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

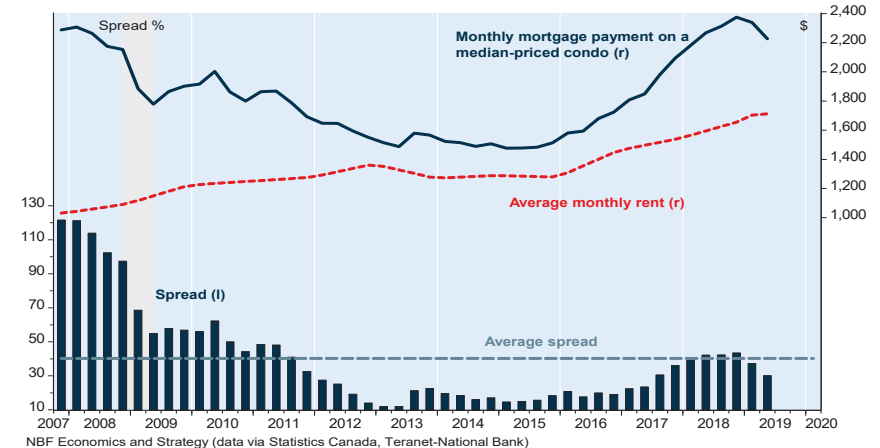
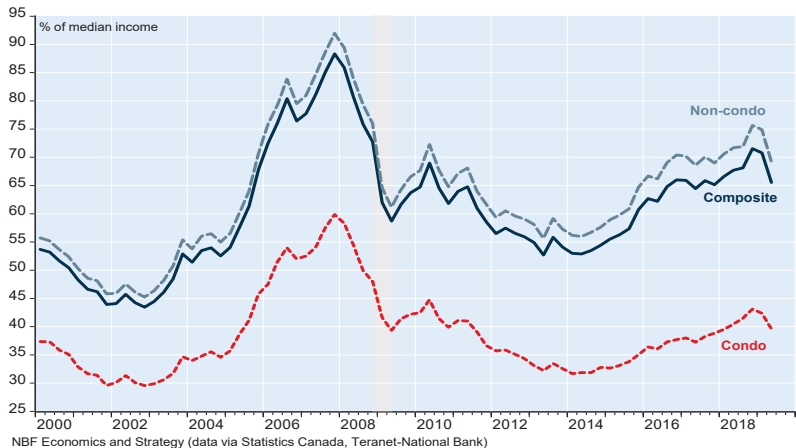
### Victoria: Perspective on housing affordability

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

### Victoria: Buying compared to renting

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

**VICTORIA**



## 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>\$ 568,466</b>	<b>-1.0</b>	<b>0.2</b>	<b>54.6</b>	<b>34.3</b>	<b>45.1</b>	<b>-3.6</b>	<b>-2.6</b>	<b>40.1</b>	<b>\$ 98,643</b>	<b>\$ 69,937</b>	<b>68%</b>	<b>\$ 2,630</b>
Toronto	\$ 843,219	-1.7	1.2	88.4	45.4	58.1	-5.1	-2.7	47.9	\$ 146,319	\$ 80,559	66%	\$ 3,902
Montreal	\$ 345,924	0.6	5.2	33.0	25.1	30.5	-1.9	-0.8	30.2	\$ 60,026	\$ 62,962	56%	\$ 1,601
Vancouver	\$ 1,048,909	-1.6	-4.6	330.9	81.6	76.6	-6.6	-6.4	62.0	\$ 182,011	\$ 76,083	64%	\$ 4,854
Calgary	\$ 431,116	-0.9	-3.5	30.0	26.9	27.8	-2.1	-2.6	33.6	\$ 74,809	\$ 86,197	73%	\$ 1,995
Edmonton	\$ 394,101	0.0	-1.5	28.2	24.1	26.1	-1.8	-1.8	30.3	\$ 68,386	\$ 83,725	70%	\$ 1,824
Ottawa/Gatineau	\$ 407,648	1.8	6.4	32.1	24.1	29.7	-1.5	0.0	29.1	\$ 70,737	\$ 76,139	67%	\$ 1,886
Quebec	\$ 284,950	-0.4	2.2	22.7	19.5	21.0	-1.5	-1.2	23.1	\$ 49,446	\$ 75,302	60%	\$ 1,319
Winnipeg	\$ 313,428	-2.5	-1.4	27.3	21.3	25.2	-2.5	-2.2	25.4	\$ 54,387	\$ 68,961	67%	\$ 1,450
Hamilton	\$ 568,514	0.3	3.9	50.2	26.6	41.5	-2.8	-0.8	30.6	\$ 98,651	\$ 76,066	70%	\$ 2,631
Victoria	\$ 796,061	-1.0	0.0	97.2	53.6	65.6	-5.2	-2.2	60.7	\$ 138,136	\$ 67,423	63%	\$ 3,684

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>\$ 406,638</b>	<b>-0.7</b>	<b>2.1</b>	<b>34.9</b>	<b>24.3</b>	<b>32.3</b>	<b>-2.4</b>	<b>-1.2</b>	<b>29.4</b>	<b>\$ 70,562</b>	<b>\$ 69,937</b>	<b>9%</b>	<b>\$ 1,882</b>	<b>\$ 1,926</b>
Toronto	\$ 546,604	-0.1	6.9	44.2	26.1	37.7	-2.7	0.4	30.8	\$ 94,849	\$ 80,559	15%	\$ 2,529	\$ 2,454
Montreal	\$ 281,945	0.2	5.5	26.9	21.9	24.9	-1.7	-0.6	26.4	\$ 48,924	\$ 62,962	11%	\$ 1,305	\$ 1,215
Vancouver	\$ 626,063	-1.9	-3.0	59.3	32.7	45.7	-4.1	-3.0	38.2	\$ 108,637	\$ 76,083	22%	\$ 2,897	\$ 2,080
Calgary	\$ 258,654	-0.7	-5.3	18.0	19.0	16.7	-1.2	-1.9	24.1	\$ 44,883	\$ 86,197	14%	\$ 1,197	\$ 1,515
Edmonton	\$ 222,951	-3.5	-4.7	16.0	15.9	14.8	-1.6	-1.6	20.4	\$ 38,687	\$ 83,725	12%	\$ 1,032	\$ 1,420
Ottawa/Gatineau	\$ 268,458	0.5	7.2	21.2	17.4	19.6	-1.3	0.1	21.2	\$ 46,584	\$ 76,139	9%	\$ 1,242	\$ 1,558
Quebec	\$ 214,229	0.5	0.8	17.1	15.9	15.8	-1.0	-1.1	18.9	\$ 37,174	\$ 75,302	9%	\$ 991	\$ 1,053
Winnipeg	\$ 227,390	1.6	-0.8	19.8	17.4	18.3	-1.0	-1.5	21.1	\$ 39,458	\$ 68,961	6%	\$ 1,052	\$ 1,373
Hamilton	\$ 453,801	0.9	5.9	35.8	20.8	33.1	-2.0	0.0	24.5	\$ 78,745	\$ 76,066	11%	\$ 2,100	\$ 1,393
Victoria	\$ 481,228	0.0	1.2	42.8	31.2	39.6	-2.7	-0.8	38.9	\$ 83,505	\$ 67,423	14%	\$ 2,227	\$ 1,711

Table 3

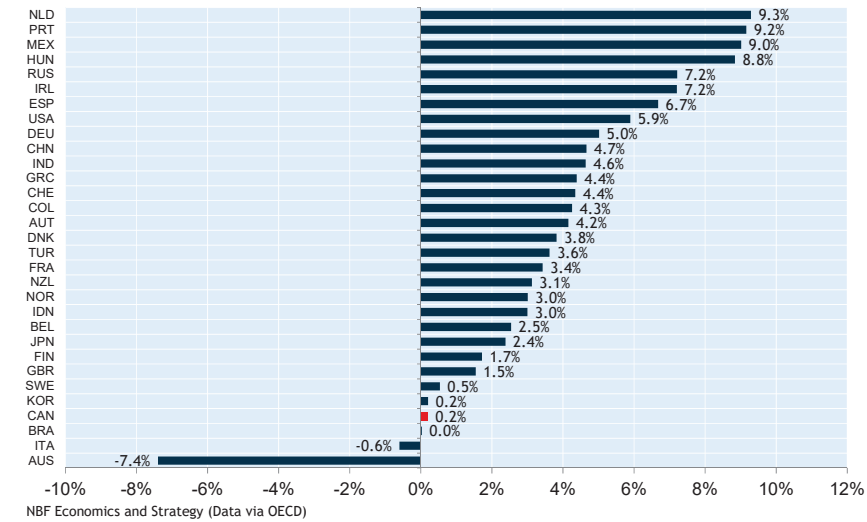
	A	B	C	D	E	F	G	H	I	J	K	L	M
Non-condo	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly mortgage payment
<b>Urban Composite</b>	<b>\$ 712,972</b>	<b>-1.0</b>	<b>-0.1</b>	<b>79.4</b>	<b>45.1</b>	<b>56.6</b>	<b>-4.5</b>	<b>-3.4</b>	<b>50.0</b>	<b>\$ 123,718</b>	<b>\$ 69,937</b>	<b>59%</b>	<b>\$ 3,299</b>
Toronto	\$ 895,331	-2.0	0.4	96.1	49.0	61.7	-5.6	-3.4	51.0	\$ 155,362	\$ 80,559	52%	\$ 4,143
Montreal	\$ 374,315	0.7	5.1	35.7	26.9	33.0	-2.0	-0.9	32.3	\$ 64,953	\$ 62,962	45%	\$ 1,732
Vancouver	\$ 1,276,031	-1.6	-5.0	402.5	118.2	93.1	-8.0	-8.1	74.5	\$ 221,422	\$ 76,083	42%	\$ 5,905
Calgary	\$ 488,252	-0.9	-3.3	34.0	29.9	31.5	-2.4	-2.8	37.1	\$ 84,724	\$ 86,197	59%	\$ 2,259
Edmonton	\$ 421,179	0.4	-1.1	30.2	25.3	27.9	-1.7	-1.9	31.7	\$ 73,085	\$ 83,725	57%	\$ 1,949
Ottawa/Gatineau	\$ 440,204	1.9	6.3	34.7	25.8	32.1	-1.6	0.0	31.1	\$ 76,386	\$ 76,139	58%	\$ 2,037
Quebec	\$ 292,193	-0.6	2.4	23.3	19.8	21.5	-1.6	-1.2	23.4	\$ 50,703	\$ 75,302	51%	\$ 1,352
Winnipeg	\$ 315,264	-2.8	-1.4	27.4	21.3	25.4	-2.6	-2.2	25.3	\$ 54,706	\$ 68,961	61%	\$ 1,459
Hamilton	\$ 602,749	0.2	3.6	55.6	28.6	44.0	-3.0	-1.0	32.4	\$ 104,592	\$ 76,066	60%	\$ 2,789
Victoria	\$ 841,021	-1.2	-0.2	105.2	57.0	69.3	-5.6	-2.4	63.8	\$ 145,938	\$ 67,423	49%	\$ 3,892

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

## Global perspective on housing affordability

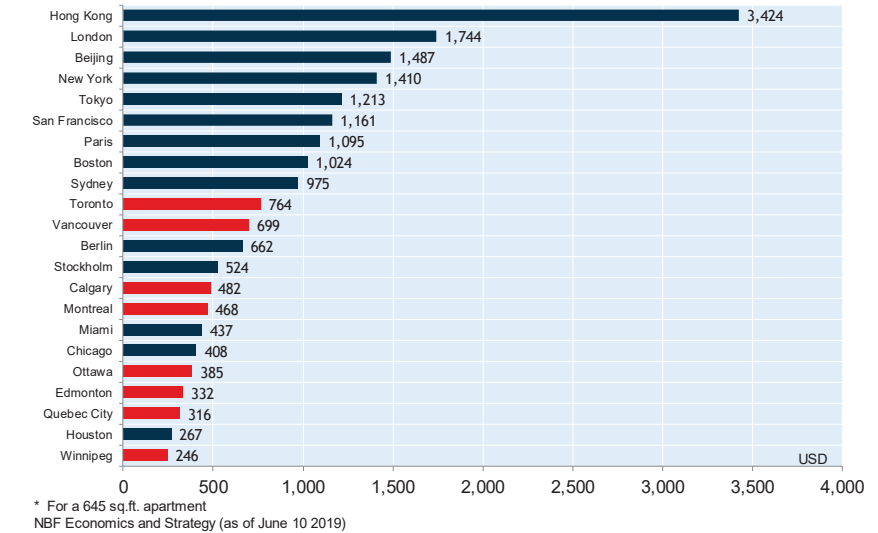
### World: Perspective on home price growth

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



### World: Home prices do not seem extreme in Canada

Price per square feet in USD for downtown living\* (June 2019)



## 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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