

## Affordability improved in Q4 despite higher mortgage rates

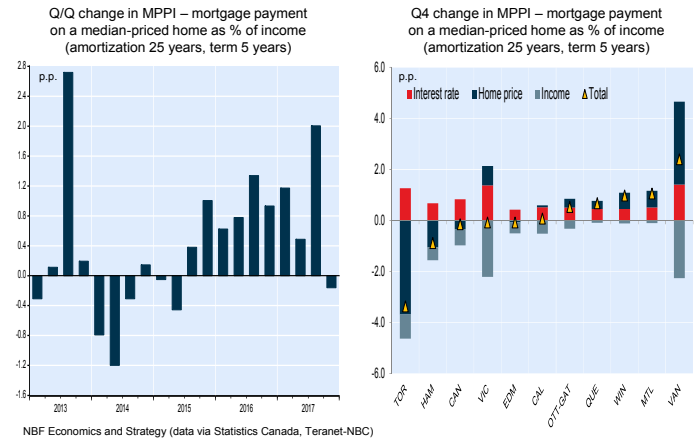
**Mortgage payment as % of income:**  
**Q4 quarter-to-quarter change: -0.2 percentage points**  
**Q4 change from year earlier: +3.5 percentage points**

**NUMBERS:** Canadian housing affordability improved slightly in Q4, the first quarterly improvement since 2015Q2 (top charts). The mortgage payment on a representative home as a percentage of income (MPPI) fell 0.2 points (the lower the MPPI the more affordable the home) after a 2.0-point rise in Q3. The strongest improvements were in Toronto (-3.4 points) and Hamilton (-0.9 points). The worst deteriorations were in Vancouver (+2.3 points), Montreal (+1.1 points) and Winnipeg (+1.0 points). Countrywide, affordability worsened in the condo segment (+0.5 points) and improved for other housing (-0.4 points). Seasonally adjusted home prices fell 0.7% in Q4 from Q3; the benchmark mortgage rate (5-year term) rose 0.16 points; and median household income rose 1.4% (5.7% annualized). The MPPI was up 3.5 points from a year earlier, with a 2.9% rise of median income more than offset by a 7.9% rise of home prices and a 27-bps rise of the mortgage rate. The time required to save the down payment on a representative home at a savings rate of 10% was 56.5 months, versus 50.5 months a year earlier.

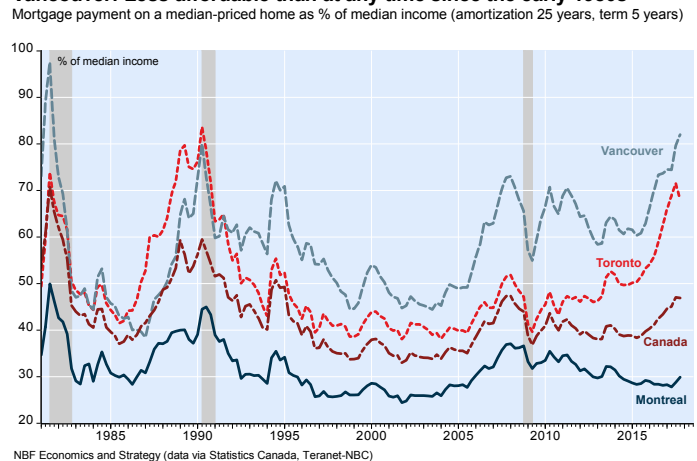
**OPINION:** Labour market oomph has arrived just in time to offset rate rises. The countrywide Q4 wage growth of 5.7% annualized was the strongest in more than three years. This rise was broad-based, topping 4% in seven of the 10 markets surveyed. The vigour will need to last to mitigate the hit from further interest-rate rises in 2018. The quarterly average benchmark mortgage rate rose 43 bps in the second half of 2017 and has risen another 15 bps since then. The most expensive markets such as Toronto and Vancouver are the most sensitive to interest rate hikes. In Toronto, the rate rise combined with the tax on foreign purchases seems to have suppressed demand; prices were down in Q4 and are likely to continue falling in 2018. Vancouver is another story, at least so far. This market is now less affordable than at any time since the early 1980s (middle chart). The resale market remains very tight and prices continued to rise steeply in Q4 (bottom chart). There is reason to think that the tougher eligibility criteria for uninsured mortgage loans that came into effect January 1 (B-20) prompted some borrowers to close their purchases earlier in order to avoid them. This measure combined with a higher foreign purchaser tax (raised to 20% from 15%) and the new speculation tax (2% of property value) is likely to lower prices in the Vancouver market in 2018.

Matthieu Arseneau / Kyle Dahms

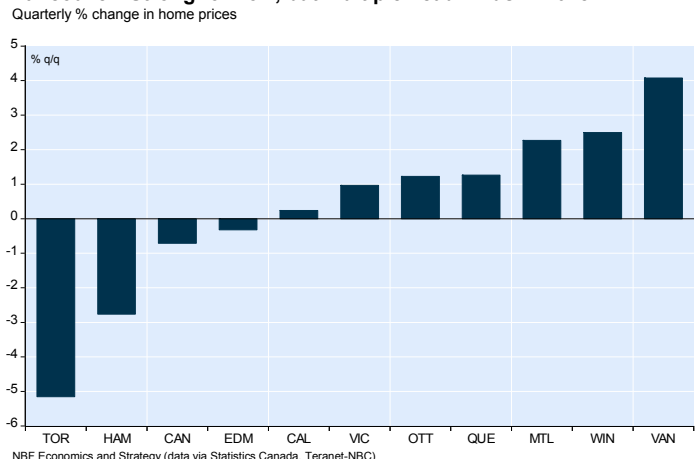
### Canada: First quarterly improvement in more than three years



### Vancouver: Less affordable than at any time since the early 1980s



### Vancouver: Strong for now, but multiple headwinds in 2018



# Housing Affordability Monitor

## 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>\$ 560,787</b>	<b>-0.7</b>	<b>7.9</b>	<b>56.5</b>	<b>32.4</b>	<b>46.9</b>	<b>-0.2</b>	<b>3.5</b>	<b>39.3</b>	<b>\$ 96,676</b>	<b>\$ 65,955</b>	<b>68%</b>	<b>\$ 2,578</b>
Toronto	\$ 834,219	-5.2	8.6	103.8	42.0	68.1	-3.4	5.8	46.9	\$ 143,814	\$ 67,552	66%	\$ 3,835
Montreal	\$ 324,130	2.3	5.9	32.5	24.4	29.9	1.1	1.7	30.1	\$ 55,878	\$ 59,886	56%	\$ 1,490
Vancouver	\$ 1,059,021	4.1	12.8	356.7	59.7	82.0	2.3	8.3	59.8	\$ 182,568	\$ 71,251	64%	\$ 4,868
Calgary	\$ 446,500	0.2	0.4	32.1	26.5	29.5	0.1	-0.2	33.8	\$ 76,974	\$ 83,506	73%	\$ 2,053
Edmonton	\$ 401,772	-0.3	0.3	26.0	23.6	23.9	-0.1	-0.2	30.5	\$ 69,263	\$ 92,680	70%	\$ 1,847
Ottawa/Gatineau	\$ 375,035	1.2	4.4	31.4	23.6	28.9	0.5	1.4	29.1	\$ 64,653	\$ 71,555	67%	\$ 1,724
Quebec	\$ 280,614	1.3	2.0	28.3	19.5	26.0	0.7	0.6	23.5	\$ 48,376	\$ 59,460	60%	\$ 1,290
Winnipeg	\$ 318,744	2.5	3.7	28.9	20.6	26.5	1.0	1.0	25.0	\$ 54,949	\$ 66,277	67%	\$ 1,465
Hamilton	\$ 539,575	-2.8	12.1	43.6	24.2	37.4	-0.9	4.2	29.1	\$ 93,019	\$ 79,685	70%	\$ 2,481
Victoria	\$ 764,838	1.0	12.8	114.0	50.9	77.9	-0.1	7.9	60.8	\$ 131,853	\$ 54,172	63%	\$ 3,516

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>\$ 381,896</b>	<b>1.3</b>	<b>12.3</b>	<b>34.7</b>	<b>23.4</b>	<b>31.9</b>	<b>0.5</b>	<b>3.6</b>	<b>29.0</b>	<b>\$ 65,836</b>	<b>\$ 65,955</b>	<b>9%</b>	<b>\$ 1,756</b>	<b>\$ 1,261</b>
Toronto	\$ 488,948	-0.9	18.4	43.4	24.8	39.9	-0.2	6.4	30.1	\$ 84,291	\$ 67,552	15%	\$ 2,248	\$ 1,340
Montreal	\$ 264,037	1.5	3.4	26.5	21.5	24.3	0.7	0.9	26.6	\$ 45,518	\$ 59,886	11%	\$ 1,214	\$ 797
Vancouver	\$ 591,080	5.0	19.0	57.4	30.2	45.8	1.7	6.8	37.1	\$ 101,898	\$ 71,251	22%	\$ 2,717	\$ 1,474
Calgary	\$ 273,889	-0.7	-6.8	19.7	18.9	18.1	-0.1	-1.5	24.6	\$ 47,217	\$ 83,506	14%	\$ 1,259	\$ 1,231
Edmonton	\$ 243,855	-0.6	-1.6	15.8	15.9	14.5	-0.1	-0.4	20.8	\$ 42,039	\$ 92,680	12%	\$ 1,121	\$ 1,231
Ottawa/Gatineau	\$ 249,071	1.6	4.0	20.9	17.1	19.2	0.4	0.8	21.2	\$ 42,938	\$ 71,555	9%	\$ 1,145	\$ 1,210
Quebec	\$ 216,108	2.0	0.9	21.8	16.0	20.0	0.7	0.2	19.4	\$ 37,255	\$ 59,460	9%	\$ 993	\$ 812
Winnipeg	\$ 232,859	1.2	-0.5	21.1	17.1	19.4	0.5	-0.1	21.0	\$ 40,143	\$ 66,277	6%	\$ 1,070	\$ 1,075
Hamilton	\$ 413,204	-3.3	13.6	31.1	19.2	28.6	-0.9	3.6	23.3	\$ 71,234	\$ 79,685	11%	\$ 1,900	\$ 1,053
Victoria	\$ 456,141	4.0	17.8	50.5	30.6	46.5	1.3	6.5	38.9	\$ 78,636	\$ 54,172	14%	\$ 2,097	\$ 1,203

Table 3

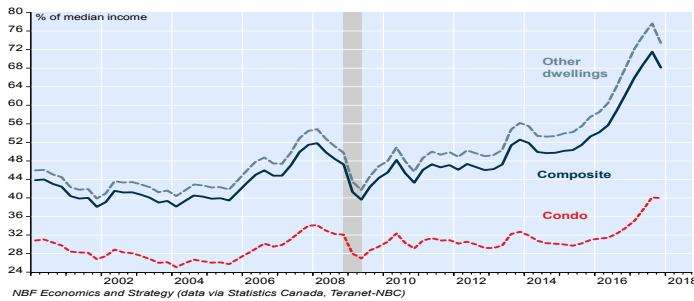
	A	B	C	D	E	F	G	H	I	J	K	L	M
Other dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying income	Median income	Home-ownership rate (2016)	Monthly mortgage payment
<b>Urban Composite</b>	<b>\$ 709,033</b>	<b>-1.0</b>	<b>7.2</b>	<b>83.5</b>	<b>41.9</b>	<b>59.3</b>	<b>-0.4</b>	<b>4.1</b>	<b>49.1</b>	<b>\$ 122,232</b>	<b>\$ 65,955</b>	<b>59%</b>	<b>\$ 3,260</b>
Toronto	\$ 899,385	-5.8	7.2	115.4	45.2	73.4	-4.2	5.3	49.8	\$ 155,048	\$ 67,552	52%	\$ 4,135
Montreal	\$ 350,776	2.4	6.4	35.1	26.1	32.3	1.2	2.0	32.1	\$ 60,471	\$ 59,886	45%	\$ 1,613
Vancouver	\$ 1,307,636	3.9	11.4	440.5	93.7	101.2	2.7	9.2	71.6	\$ 225,427	\$ 71,251	42%	\$ 6,011
Calgary	\$ 504,041	0.4	1.6	36.5	29.3	33.3	0.1	0.1	37.2	\$ 86,893	\$ 83,506	59%	\$ 2,317
Edmonton	\$ 425,601	-0.3	0.5	27.6	24.7	25.3	-0.1	-0.2	31.8	\$ 73,371	\$ 92,680	57%	\$ 1,957
Ottawa/Gatineau	\$ 404,681	1.2	4.4	33.9	25.2	31.2	0.6	1.5	31.1	\$ 69,764	\$ 71,555	58%	\$ 1,860
Quebec	\$ 286,753	1.2	2.1	28.9	19.8	26.6	0.7	0.6	23.8	\$ 49,434	\$ 59,460	51%	\$ 1,318
Winnipeg	\$ 320,476	2.6	4.0	29.0	20.5	26.7	1.0	1.1	24.9	\$ 55,248	\$ 66,277	61%	\$ 1,473
Hamilton	\$ 575,098	-2.7	11.9	49.0	25.8	39.8	-0.9	4.5	30.8	\$ 99,143	\$ 79,685	60%	\$ 2,644
Victoria	\$ 810,027	0.5	12.0	124.1	54.0	82.5	-0.5	7.9	63.8	\$ 139,643	\$ 54,172	49%	\$ 3,724

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

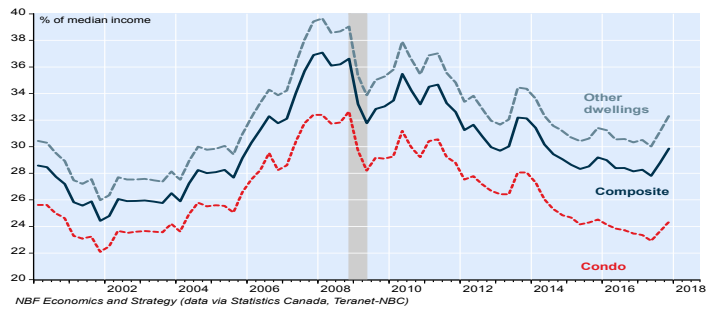
# Housing Affordability Monitor

## Mortgage payment for a representative home as a % of income

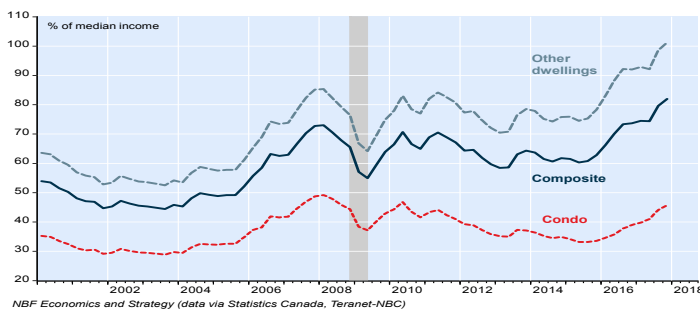
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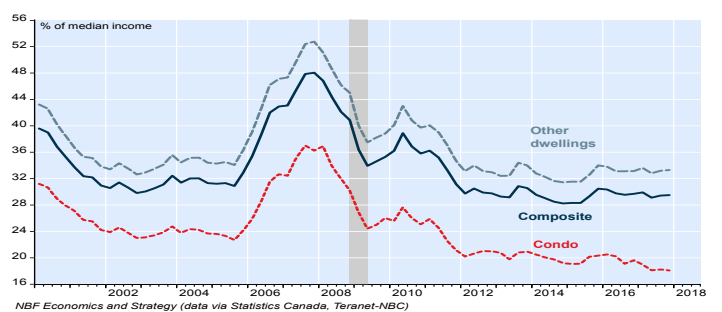
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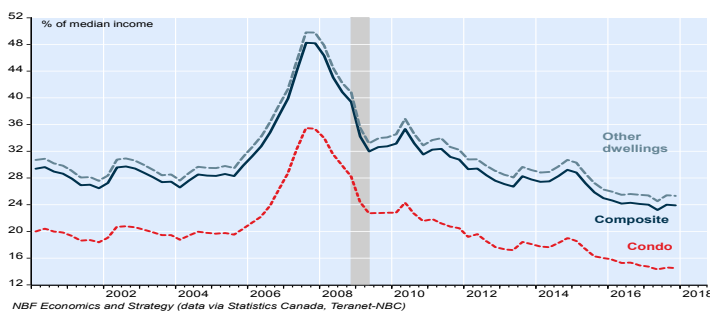
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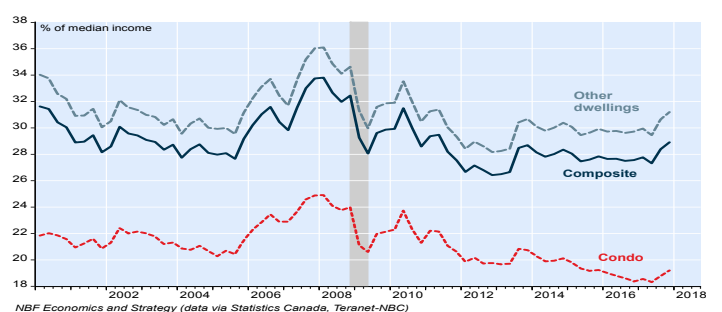
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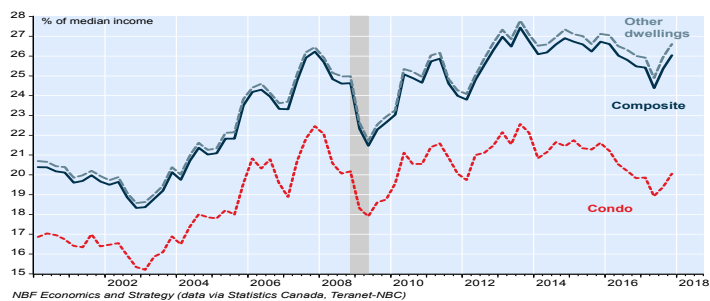
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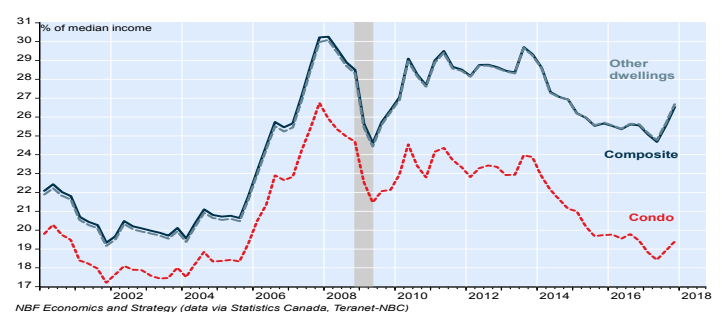
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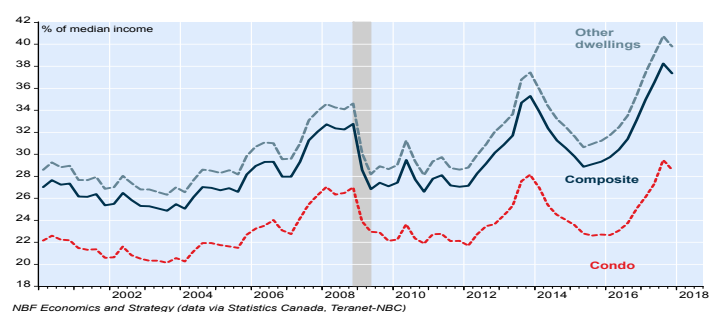
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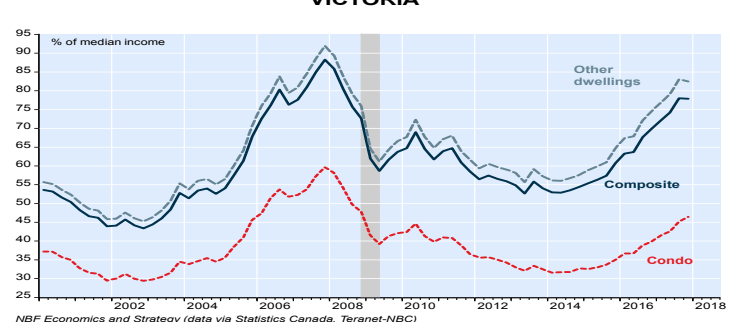
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**HAMILTON**



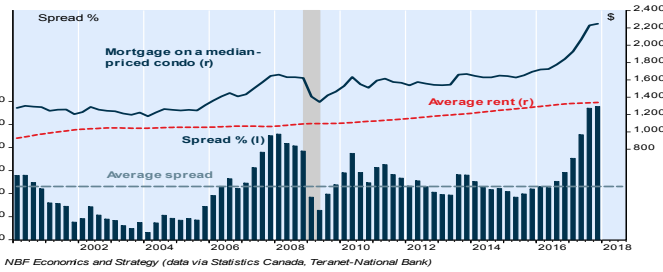
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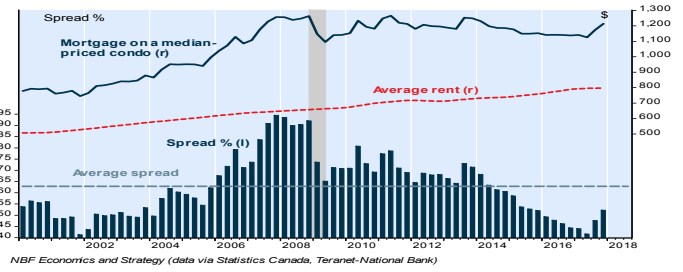
# Housing Affordability Monitor

## Monthly rent vs. mortgage payment for a condo

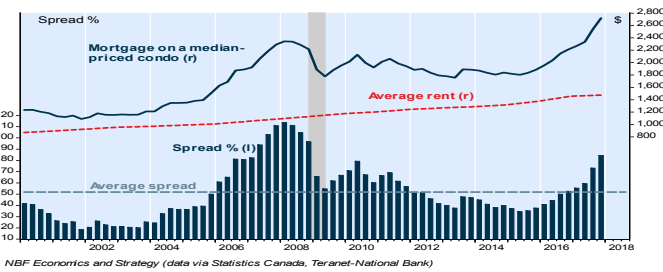
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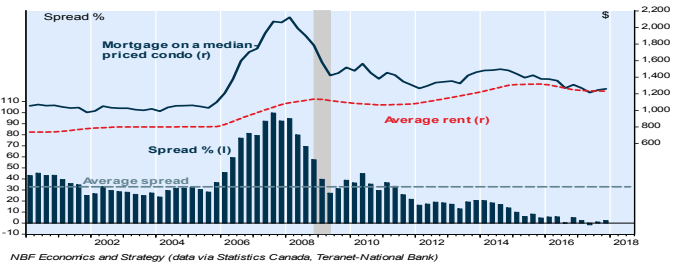
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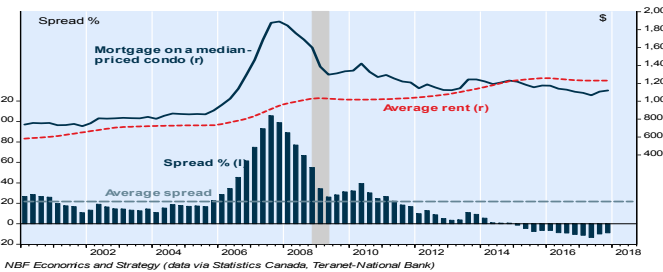
**VANCOUVER**



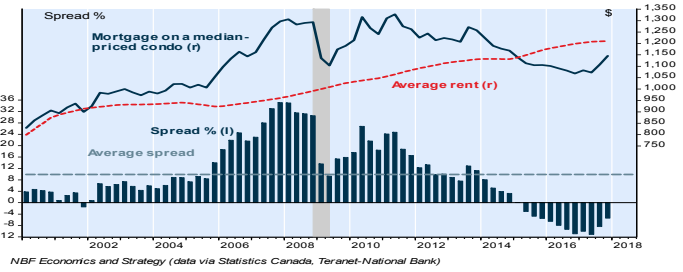
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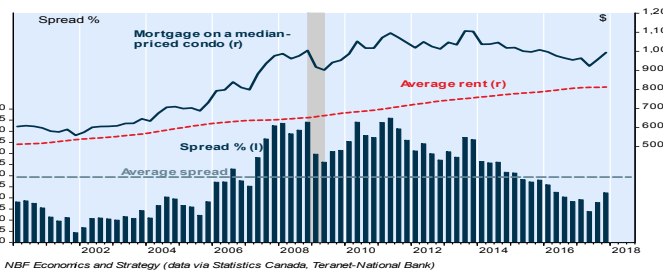
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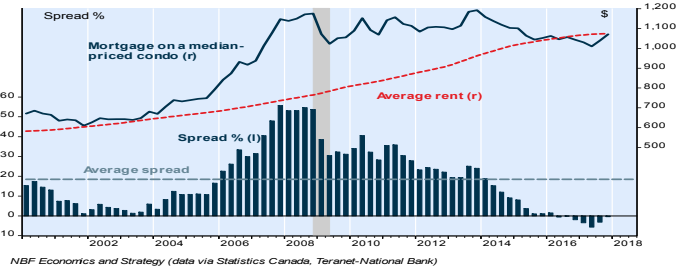
**OTTAWA/GATINEAU**



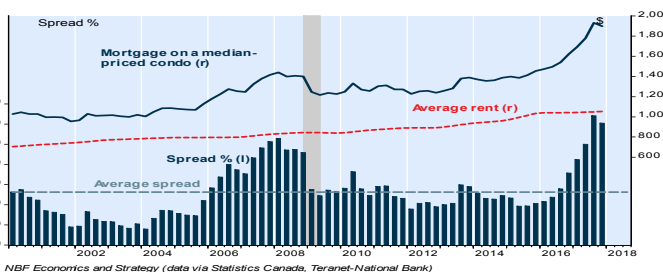
**QUEBEC CITY**



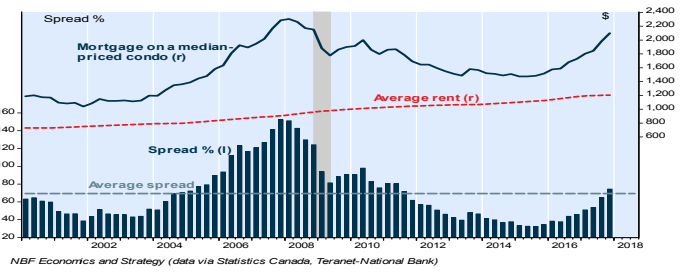
**WINNIPEG**



**HAMILTON**



**VICTORIA**



## 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 apartment 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.

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# Housing Affordability Monitor

## Economics and Strategy

### Montreal Office 514-879-2529

**Stéfane Marion**

*Chief Economist and Strategist*  
stefane.marion@nbc.ca

**Paul-André Pinsonnault**

*Senior Fixed Income Economist*  
paulandre.pinsonnault@nbc.ca

**Krishen Rangasamy**

*Senior Economist*  
krishen.rangasamy@nbc.ca

**Marc Pinsonneault**

*Senior Economist*  
marc.pinsonneault@nbc.ca

**Matthieu Arseneau**

*Senior Economist*  
matthieu.arseneau@nbc.ca

**Angelo Katsoras**

*Geopolitical Analyst*  
angelo.katsoras@nbc.ca

**Kyle Dahms**

*Economist*  
kyle.dahms@nbc.ca

**Jocelyn Paquet**

*Economist*  
jocelyn.paquet@nbc.ca

### Toronto Office 416-869-8598

**Warren Lovely**

*MD, Public Sector Research and Strategy*  
warren.lovely@nbc.ca

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# Housing Affordability Monitor

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