

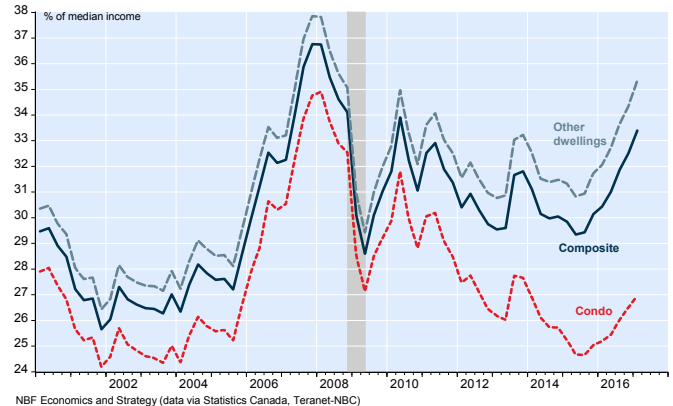
## Worst affordability in a generation for TOR and VAN

*Mortgage payment as % of income:  
Q1 quarter-to-quarter change: +0.9 percentage points  
Q1 change from year earlier: +3.0 percentage points*

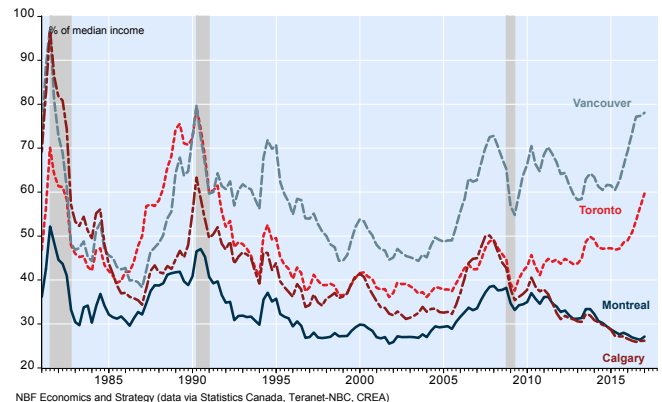
**NUMBERS:** A recurring theme in Canadian housing, affordability continued to deteriorate in Q1. The mortgage payment on a representative home as a percentage of income (MPPI) increased 0.9 percentage points (a higher MPPI means lower affordability) after a 0.6-point rise in Q4. The markets with the worst deterioration were Toronto (+3.1 points), Victoria (+1.9 points) and Hamilton (+1.9 points). In three markets affordability improved: Winnipeg (-0.6 point), Edmonton (-0.3 point) and Quebec (-0.1 point). Countrywide, the MPPI rose in both the condo segment (+0.4 point) and the non-condo segment (+1.0 point). Seasonally adjusted Q1 home prices were up 3.1% from Q4; the benchmark mortgage rate (5-year term) was essentially unchanged; and median household income was up 0.5%. The annual increase in the MPPI was 3.0 points, as a 20-basis-point decline of the mortgage rate and a 0.9% rise of median income were more than offset by a 13.2% rise of home prices. The time required to accumulate the down payment on a representative home at a savings rate of 10% was 37.4 months, versus 33.4 months a year earlier.

**OPINION:** The worsening of affordability in Q1 was the seventh in a row, the longest run in almost 30 years. As a result, our national composite is the least affordable in 7 years (top chart). There is still a significant divergence across the major markets with Vancouver and Toronto being the most expensive since the early 1990's, while Montreal and Calgary remain affordable on a historical basis (middle chart). For some time, the problem of affordability in Vancouver and Toronto was limited to the non-condo segment but the housing boom has spread to the condo portion as well. As a result, the condo market in those cities is also the least affordable in several years. Against this backdrop, homeowners and potential first time homebuyers are now even more vulnerable to a payment shock from rising mortgage rates. An increase in interest rates of 100 bps on a 5 year term would represent a rise of 496\$ for the monthly mortgage payment in the Vancouver market (to 4778\$) and 400\$ in Toronto (to 3853\$). With housing affordability problem in these markets being already acute, we doubt current home prices could resist such an interest rate hike.

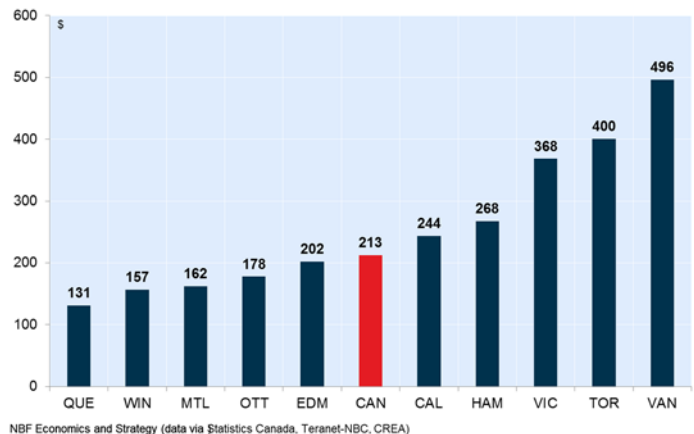
**Canada : The least affordable market in almost 7 years**  
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



**Canada : Housing affordability in the four largest markets**  
MPPI - Monthly mortgage payment on median home price (25 year amortization, 5-year term)



**Could ON and BC housing markets withstand a 100 bps rate hike?**  
Monthly mortgage payment increase if mortgage rate rise by 100 basis points



# 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 (2011)	Monthly mortgage payment
<b>Composite</b>	<b>\$ 411,096</b>	<b>3.1</b>	<b>13.2</b>	<b>37.4</b>	<b>24.2</b>	<b>33.4</b>	<b>0.9</b>	<b>3.0</b>	<b>30.2</b>	<b>\$ 68,789</b>	<b>\$ 65,916</b>	<b>69%</b>	<b>\$ 1,834</b>
Toronto	\$ 773,867	5.6	24.1	90.5	36.5	59.7	3.1	10.6	43.3	\$ 129,492	\$ 69,449	68%	\$ 3,453
Montreal	\$ 313,592	3.5	4.0	30.4	24.8	27.1	0.7	-0.4	31.1	\$ 52,474	\$ 61,885	55%	\$ 1,399
Vancouver	\$ 959,452	1.1	16.1	129.3	50.6	78.0	0.7	8.7	59.1	\$ 160,546	\$ 65,829	65%	\$ 4,281
Calgary	\$ 471,448	1.0	0.5	29.4	26.8	26.2	0.1	-0.4	34.9	\$ 78,888	\$ 96,317	74%	\$ 2,104
Edmonton	\$ 391,070	-0.5	-0.8	29.5	23.2	26.3	-0.3	-0.7	30.2	\$ 65,438	\$ 79,665	71%	\$ 1,745
Ottawa/Gatineau	\$ 343,644	2.6	5.7	28.3	21.7	25.3	0.6	0.7	27.2	\$ 57,502	\$ 72,852	68%	\$ 1,533
Quebec	\$ 252,875	0.3	0.1	25.0	18.1	22.3	-0.1	-1.2	22.2	\$ 42,314	\$ 60,596	60%	\$ 1,128
Winnipeg	\$ 303,374	-0.2	2.2	27.1	19.8	24.2	-0.6	-0.5	24.5	\$ 50,764	\$ 67,094	68%	\$ 1,354
Hamilton	\$ 517,162	5.6	19.8	43.4	23.8	37.5	1.9	5.6	29.3	\$ 86,537	\$ 73,835	71%	\$ 2,308
Victoria	\$ 712,025	3.2	17.6	97.6	48.0	67.1	1.9	8.2	60.1	\$ 119,144	\$ 56,791	65%	\$ 3,177

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 (2011)	Monthly mortgage payment	Monthly average rent
<b>Composite</b>	<b>\$ 331,743</b>	<b>2.1</b>	<b>10.3</b>	<b>30.2</b>	<b>21.8</b>	<b>26.9</b>	<b>0.4</b>	<b>1.8</b>	<b>27.5</b>	<b>\$ 55,511</b>	<b>\$ 65,916</b>	<b>9%</b>	<b>\$ 1,480</b>	<b>\$ 1,224</b>
Toronto	\$ 431,226	4.4	14.5	37.3	23.7	33.2	1.4	3.6	29.3	\$ 72,158	\$ 69,449	14%	\$ 1,924	\$ 1,301
Montreal	\$ 248,827	1.6	2.2	24.1	20.8	21.5	0.2	-0.7	26.2	\$ 41,637	\$ 61,885	9%	\$ 1,110	\$ 768
Vancouver	\$ 508,639	1.8	18.5	47.1	29.1	41.4	0.7	5.4	36.7	\$ 85,111	\$ 65,829	23%	\$ 2,270	\$ 1,397
Calgary	\$ 295,417	-3.4	-5.8	18.4	19.1	16.4	-0.7	-1.3	25.4	\$ 49,432	\$ 96,317	14%	\$ 1,318	\$ 1,285
Edmonton	\$ 251,083	-1.5	-4.9	18.9	16.4	16.9	-0.3	-1.2	21.7	\$ 42,014	\$ 79,665	13%	\$ 1,120	\$ 1,254
Ottawa/Gatineau	\$ 217,873	0.8	-0.8	17.9	15.2	16.0	0.1	-0.6	19.1	\$ 36,457	\$ 72,852	10%	\$ 972	\$ 1,186
Quebec	\$ 211,633	0.0	-2.9	21.0	15.8	18.7	-0.1	-1.6	19.4	\$ 35,413	\$ 60,596	8%	\$ 944	\$ 797
Winnipeg	\$ 209,743	-1.7	-0.9	18.8	15.3	16.7	-0.7	-0.9	19.1	\$ 35,097	\$ 67,094	6%	\$ 936	\$ 1,054
Hamilton	\$ 371,007	4.0	17.5	30.1	18.3	26.9	1.0	3.6	22.6	\$ 62,081	\$ 73,835	11%	\$ 1,655	\$ 1,052
Victoria	\$ 399,869	4.3	16.8	42.2	28.9	37.7	1.5	4.4	37.8	\$ 66,911	\$ 56,791	14%	\$ 1,784	\$ 1,147

Table 3

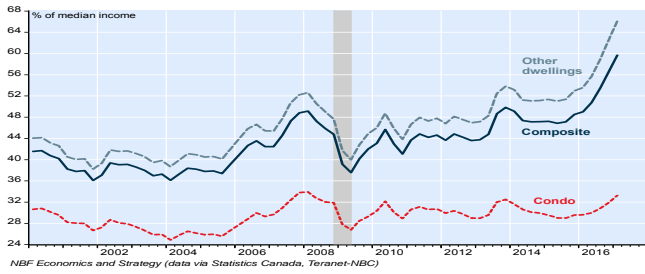
	A	B	C	D	E	F	G	H	I	J	K	L	M
Other dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2011)	Monthly mortgage payment
<b>Composite</b>	<b>\$ 434,968</b>	<b>3.3</b>	<b>13.7</b>	<b>39.6</b>	<b>25.1</b>	<b>35.3</b>	<b>1.0</b>	<b>3.3</b>	<b>31.3</b>	<b>\$ 72,784</b>	<b>\$ 65,916</b>	<b>60%</b>	<b>\$ 1,941</b>
Toronto	\$ 856,802	5.8	25.7	104.8	39.6	66.1	3.5	12.5	46.4	\$ 143,370	\$ 69,449	54%	\$ 3,823
Montreal	\$ 327,533	3.8	4.3	31.8	25.6	28.3	0.8	-0.3	32.2	\$ 54,807	\$ 61,885	46%	\$ 1,462
Vancouver	\$ 1,174,199	0.9	15.4	428.1	78.9	95.5	0.7	10.1	69.4	\$ 196,480	\$ 65,829	42%	\$ 5,239
Calgary	\$ 513,564	1.6	1.3	32.8	28.7	28.6	0.3	-0.2	37.3	\$ 85,935	\$ 96,317	60%	\$ 2,292
Edmonton	\$ 430,564	-0.3	-0.2	32.4	25.3	28.9	-0.3	-0.6	32.8	\$ 72,047	\$ 79,665	58%	\$ 1,921
Ottawa/Gatineau	\$ 376,830	2.8	6.4	31.0	23.5	27.7	0.7	0.9	29.5	\$ 63,055	\$ 72,852	58%	\$ 1,681
Quebec	\$ 263,740	0.4	0.5	26.1	18.8	23.3	-0.1	-1.2	23.1	\$ 44,132	\$ 60,596	51%	\$ 1,177
Winnipeg	\$ 305,620	-0.1	2.4	27.3	19.8	24.4	-0.5	-0.4	24.5	\$ 51,140	\$ 67,094	63%	\$ 1,364
Hamilton	\$ 559,347	5.8	20.1	50.3	25.6	40.6	2.2	6.1	31.4	\$ 93,596	\$ 73,835	61%	\$ 2,496
Victoria	\$ 788,635	3.0	17.7	113.8	52.9	74.4	2.0	9.2	65.6	\$ 131,963	\$ 56,791	51%	\$ 3,519

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

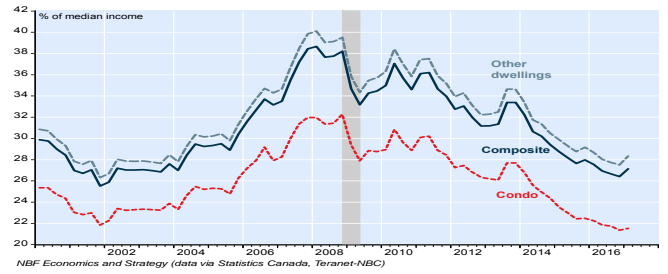
# Housing Affordability Monitor

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

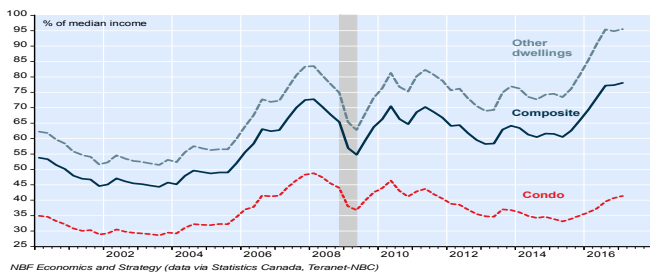
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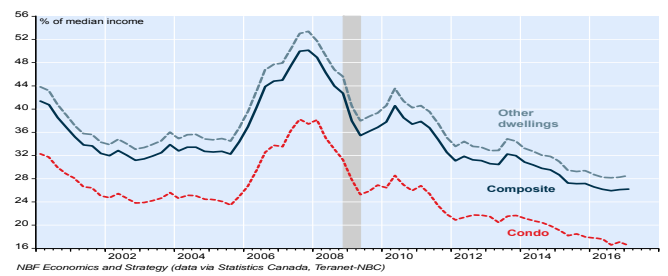
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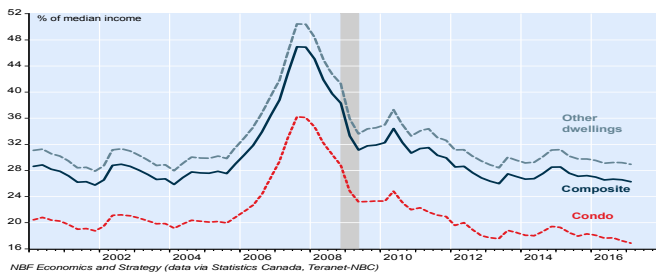
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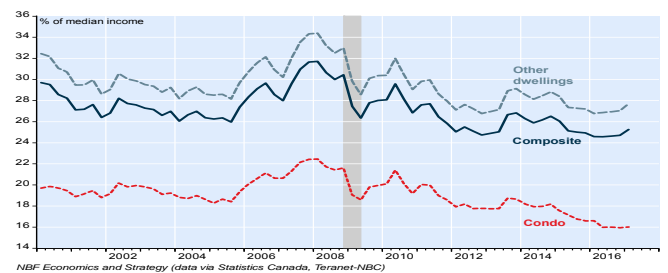
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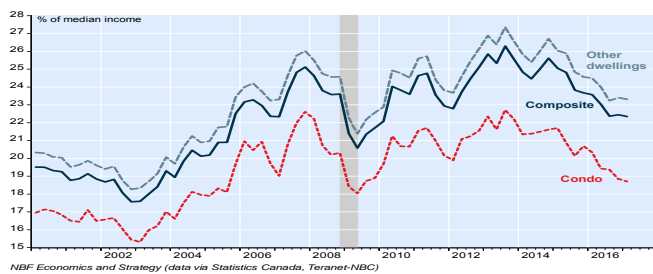
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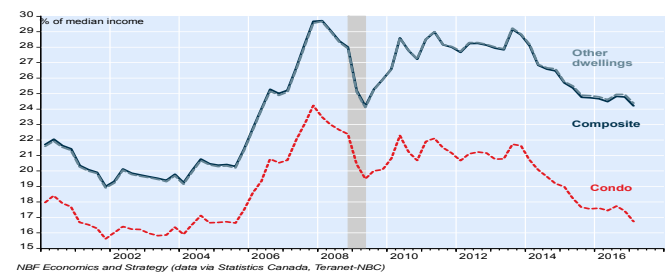
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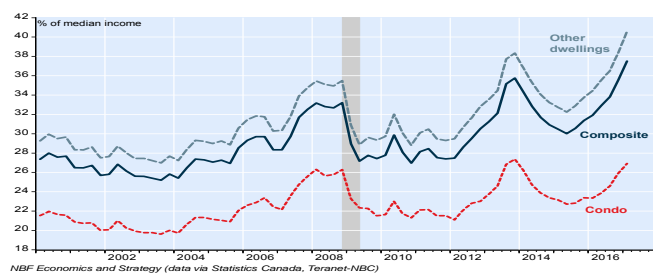
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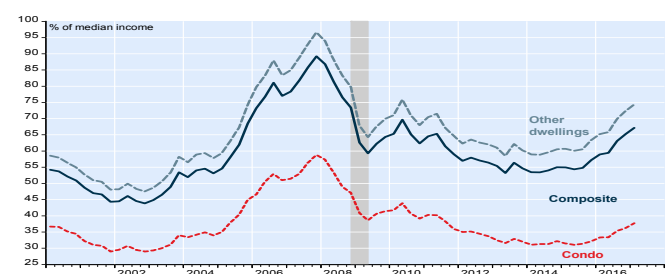
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**HAMILTON**



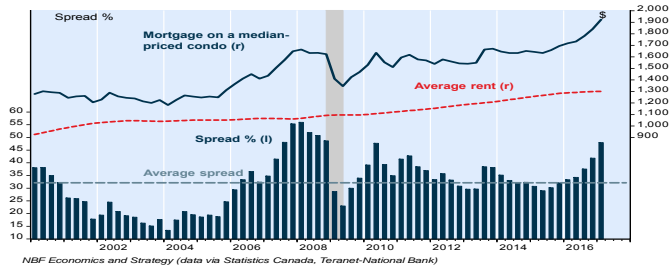
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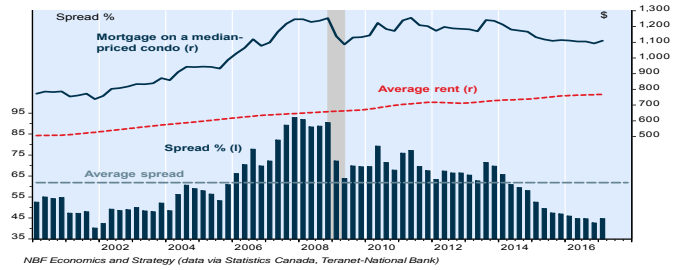
# Housing Affordability Monitor

## Monthly rent vs. mortgage payment for a condo

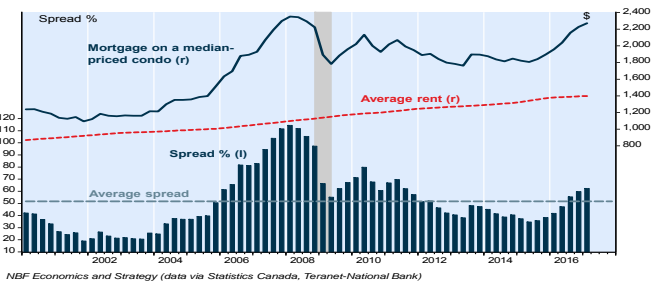
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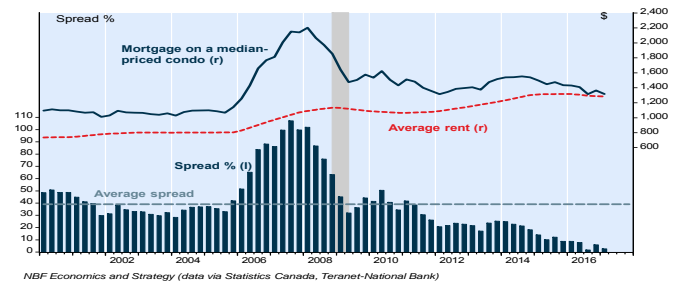
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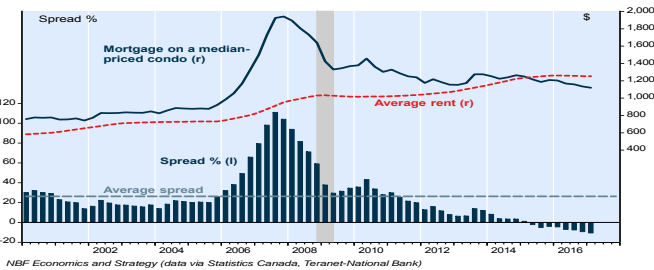
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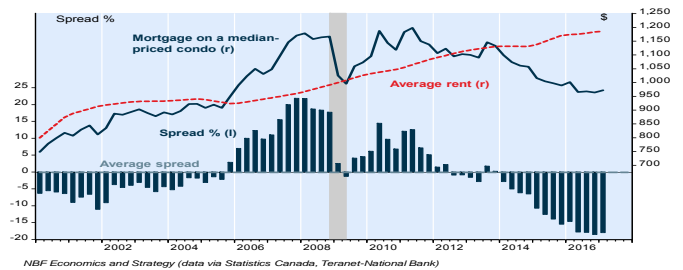
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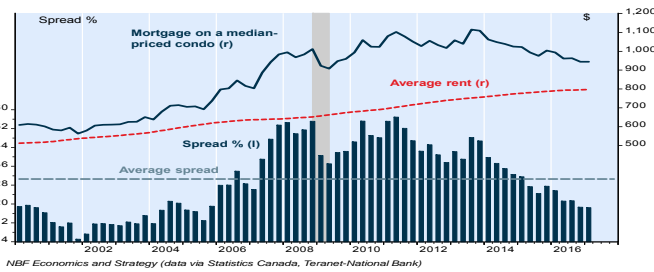
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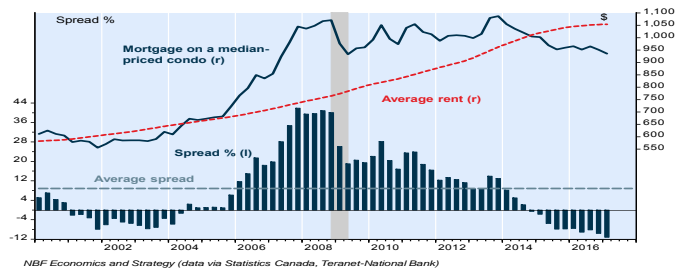
**OTTAWA/GATINEAU**



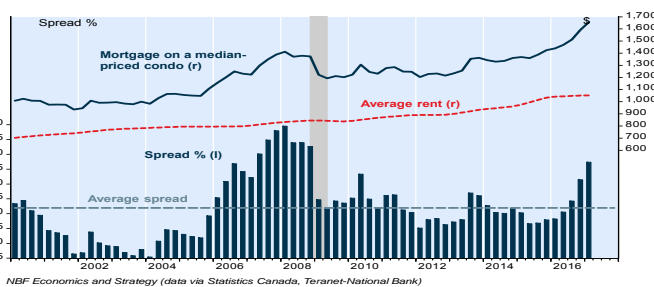
**QUEBEC CITY**



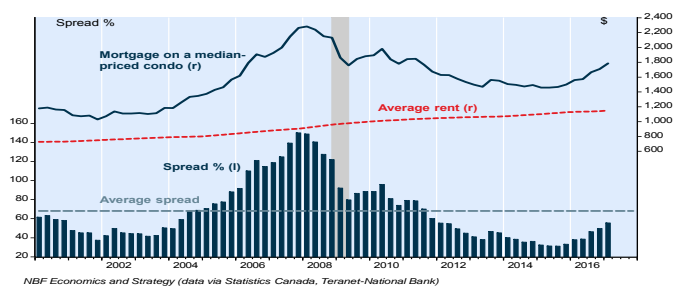
**WINNIPEG**



**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 Statistics Canada National Household Survey of 2011. 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.

# Housing Affordability Monitor

## Economics and Strategy

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