

Home affordability improved slightly in Q1 2020

By Kyle Dahms & Alexandra Ducharme

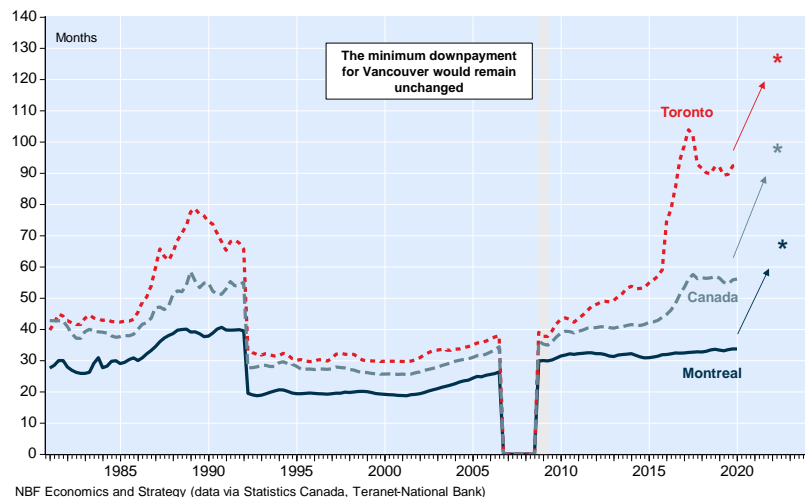
Housing affordability in Canada's large urban centres improved in the first quarter of 2020. Although mortgage interest rates remained essentially unchanged from Q4 2019, an increase in income was able to offset the rise of home prices for the urban composite. The latter registered a second consecutive 1.5% gain in prices in the quarter. But this is now old news as the economy has entered a recession which could significantly shake the Canadian housing market and therefore affordability. Interest rates are unlikely to provide much relief for homebuyers as they have in previous economic crisis'. Indeed, interest rates were already very low before the crisis, and given the zero lower bound for central banks, they have very little room to move lower. The 5-year mortgage rate has declined only 17 basis points from the beginning of the present crisis, which is very little compared to the declines of other recessions. Moreover, incomes should face some headwinds as we expect the unemployment rate to hover near 9% over the coming year with production capacity being destroyed due to the current lockdown. In such a context, we foresee a marked drop in home prices, about 10% nationally, sharper than in any of the country's last three recessions (see [report](#) for more details). Of course, this scenario assumes that the CMHC refrains from raising the minimum down payment as suggested on May 15th. In our view, such a policy in the context of a recession would amplify the risk of home-price deflation by excluding potential homebuyers (see left chart).

HIGHLIGHTS:

- In the first quarter of 2020, Canadian housing affordability improved following a quarter of deterioration in Q4'19. The mortgage payment on a representative home as a percentage of income (MPPI) fell 0.3 point after a 0.7-point increase in Q4'19. Seasonally adjusted home prices increased 1.5% in Q1'20 from Q4'19; the benchmark mortgage rate (5-year term) edged up 1 basis point; while median household income rose 2.3%.
- Among the ten markets covered, affordability deteriorated only in Hamilton in the first quarter. All other markets showed no change or an improvement with Victoria, Calgary and Quebec leading the advance (see chart on the right). Vancouver remained at its most affordable level since 2016. Countrywide, affordability remained the same in the condo segment while the non-condo portion improved. See detailed statistics on page 12.

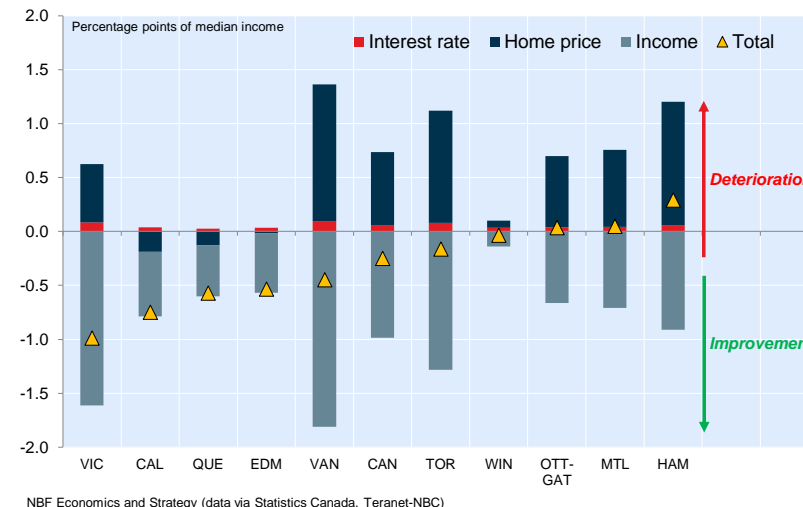
Canada: Impact of changing the minimum downpayment for savers

Number of months required to accumulate the minimum down-payment assuming a 10% saving rate



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)



Toronto

Toronto's housing affordability deteriorated slightly for condos in the first quarter (MPPI* +0.1 pp) but improved for non-condo homes (-0.2 pp). For all dwellings, affordability as measured by MPPI* improved by 0.2 pp, with a 2.3% q/q increase in income offsetting a 1.8% increase in home prices (condos +2.3%, non-condos +1.7%). First-quarter prices for all dwellings were up 4.7% from a year earlier. Overall, the composite for all dwellings showed MPPI* improvement from the previous quarter (-0.3 pp) and from a year earlier (-5.2 pp). *See tables page 12

Mortgage payment as a % of income (MPPI)					
Non-Condo	60.7%	▼	-	0.2%	Q/Q
Condo	37.5%	▲	+	0.1%	Q/Q



Non-Condo

\$950,472

Price of the representative home in the metropolitan market

\$196,680

Household annual income needed to afford the representative home

100

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

28.8%

Premium for buying compared to the national urban composite



Condo

\$586,180

Price of the representative condo in the metropolitan market

\$123,438

Household annual income needed to afford the representative condo

48

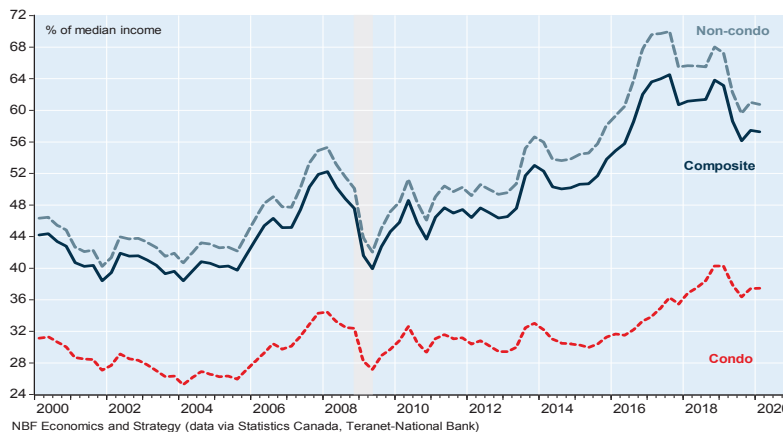
Months of saving required for the down payment (saving rate of 10%)

4.7%

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

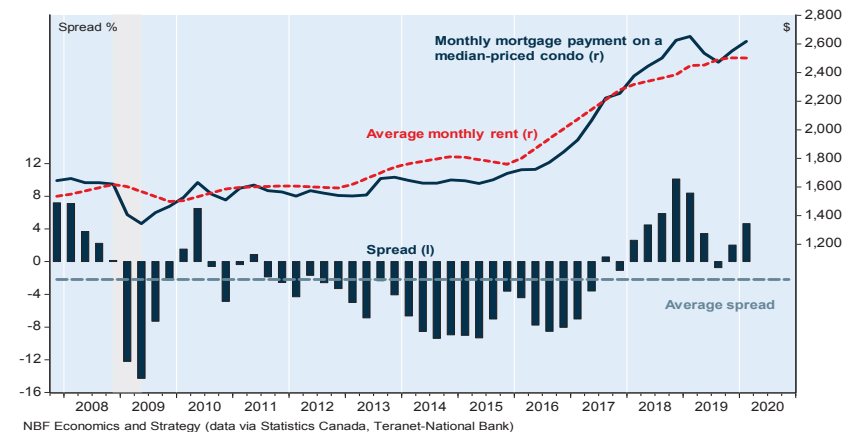
Toronto : Perspective on housing affordability

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



Toronto: Buying compared to renting

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



Montreal

In the Montreal market, condo prices were up 2.1% q/q, non-condo prices 2.4%. The increase was offset by an equal rise in median income, leaving affordability as measured by MPPI* unchanged for both categories. MPPI* for all dwellings is thus unchanged at 30.0%, close to its long-term average. Overall, affordability has improved by 2.3 pp from a year earlier, less than our urban composite. *See tables page 12

Mortgage payment as a % of income (MPPI)			
Non-Condo	32.5%	▶	0.0% Q/Q
Condo	24.7%	▶	0.0% Q/Q



Non-Condo

\$397,449

Price of the representative home in the metropolitan market

\$84,348

Household annual income needed to afford the representative home

36

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

-46.2%

Premium for buying compared to the national urban composite



Condo

\$302,381

Price of the representative condo in the metropolitan market

\$64,172

Household annual income needed to afford the representative condo

28

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

8.2%

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

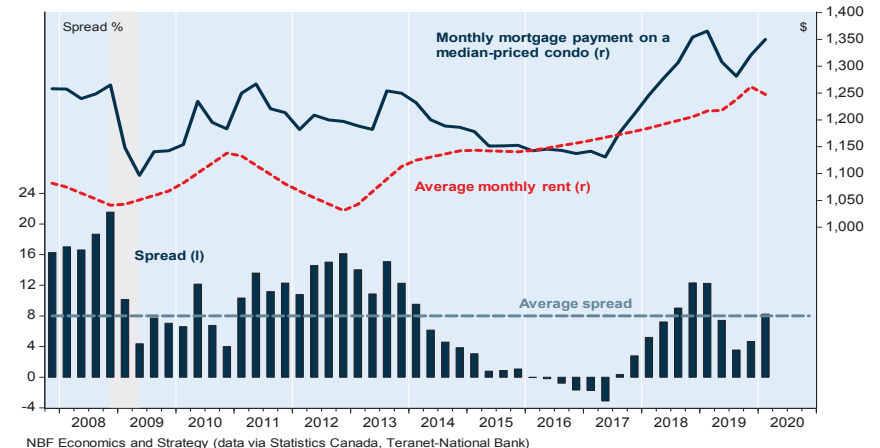
Montreal : Perspective on housing affordability

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 measured by MPPI* improved for both condos (-0.3 pp) and non-condos (-0.6 pp). It was the fifth consecutive quarterly improvement for all dwellings, the first such run since 2009. MPPI* for all dwellings was 14.3 pp better than a year earlier, the rise in prices more than offset by a rise in incomes. Overall, first-quarter home prices were up 1.8% from the previous quarter and down 2.2% from a year earlier. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	83.4%	▼	- 0.6%	Q/Q
Condo	40.8%	▼	- 0.3%	Q/Q



Non-Condo

\$1,266,333

Price of the representative home in the metropolitan market

\$226,311

Household annual income needed to afford the representative home

374

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

71.6%

Premium for buying compared to the national urban composite



Condo

\$619,676

Price of the representative condo in the metropolitan market

\$130,173

Household annual income needed to afford the representative condo

55

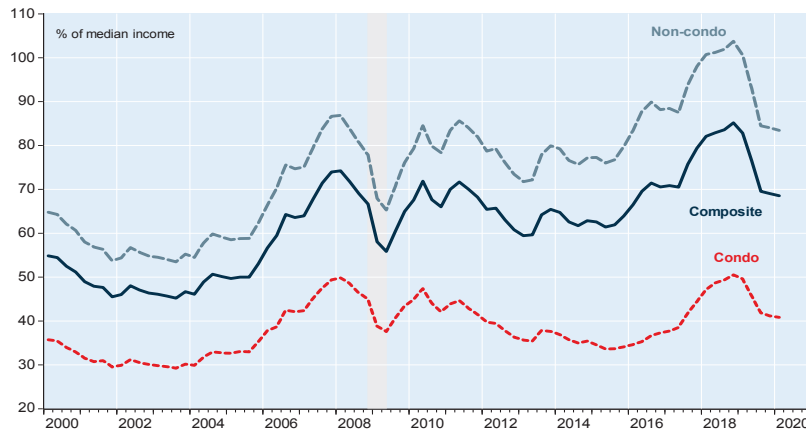
Months of saving required for the down payment (saving rate of 10%)

26.6%

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

Vancouver : Perspective on housing affordability

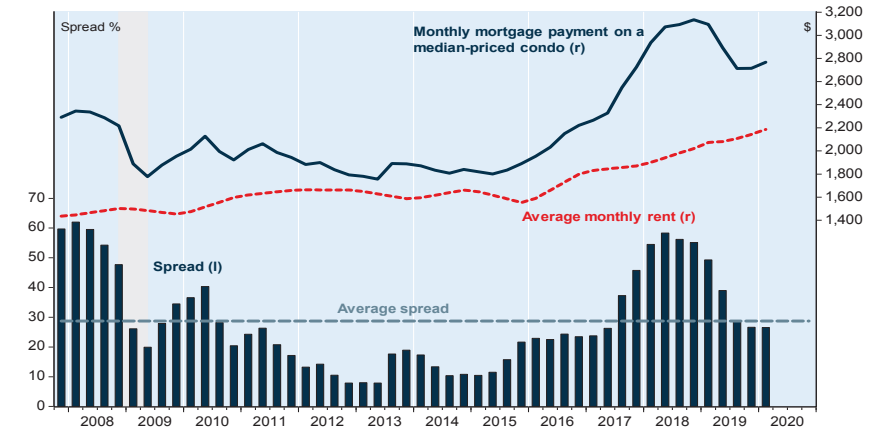
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



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

For Calgary, MPPI* improved for both condos (-0.1 pp) and non-condo dwellings (-1.0 pp). The cooling of this housing market is reflected in a 0.7% quarterly decline of home prices, while incomes rose 2.3%, the same as the countrywide average. The rise in incomes combined with the retreat of prices improved MPPI* by 0.7 pp from the previous quarter, more than the countrywide average.
*See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	29.7%	▼	- 1.0%	Q/Q
Condo	16.0%	▼	- 0.1%	Q/Q



Non-Condo

\$485,126

Price of the representative home in the metropolitan market

\$102,955

Household annual income needed to afford the representative home

33

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

-34.3%

Premium for buying compared to the national urban composite



Condo

\$260,614

Price of the representative condo in the metropolitan market

\$55,308

Household annual income needed to afford the representative condo

18

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

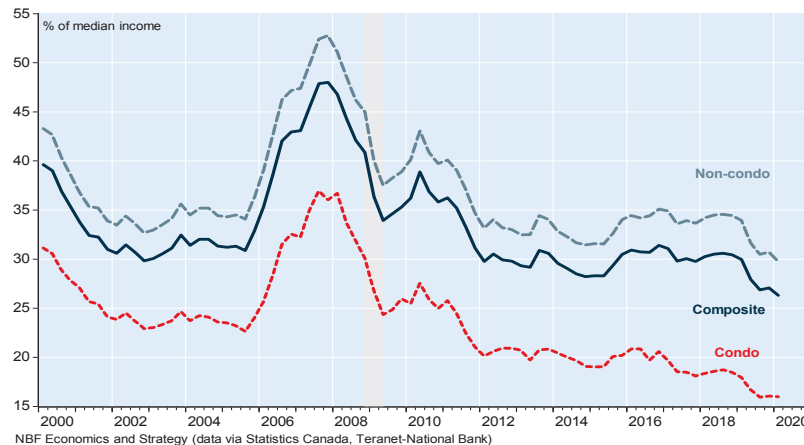
-24.1%

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

Calgary : Perspective on housing affordability

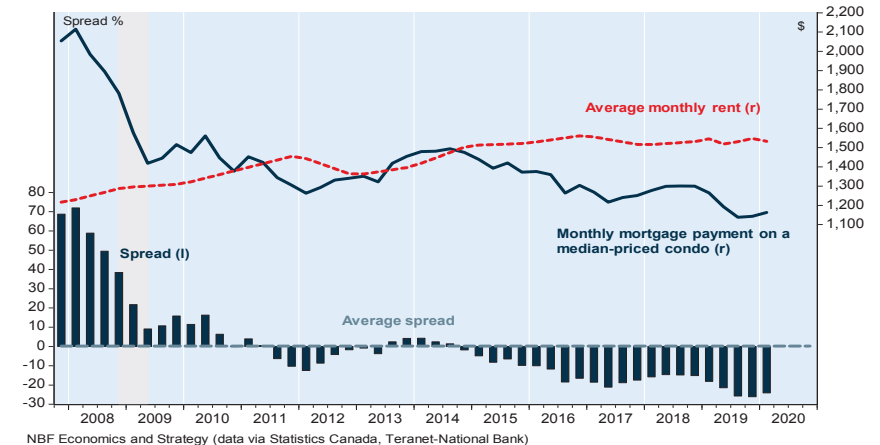
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

CALGARY



Calgary: Buying compared to renting

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



Edmonton

In the Edmonton market, affordability improved for both condos (-0.2 pp) and non-condo dwellings (-0.6 pp). The cooling of this market is reflected in a decline of home prices (all dwellings) of 0.1% quarterly and 1.5% from a year earlier. Its Q1 MPPI* was down 3.5 points from a year earlier, trailing the improvement of the urban composite as a result of slower income growth. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	26.2%	▼	- 0.6%	Q/Q
Condo	14.0%	▼	- 0.2%	Q/Q



Non-Condo

\$415,257

Price of the representative home in the metropolitan market

\$88,127

Household annual income needed to afford the representative home

29

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

-43.7%

Premium for buying compared to the national urban composite



Condo

\$221,157

Price of the representative condo in the metropolitan market

\$46,935

Household annual income needed to afford the representative condo

16

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

-31.1%

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

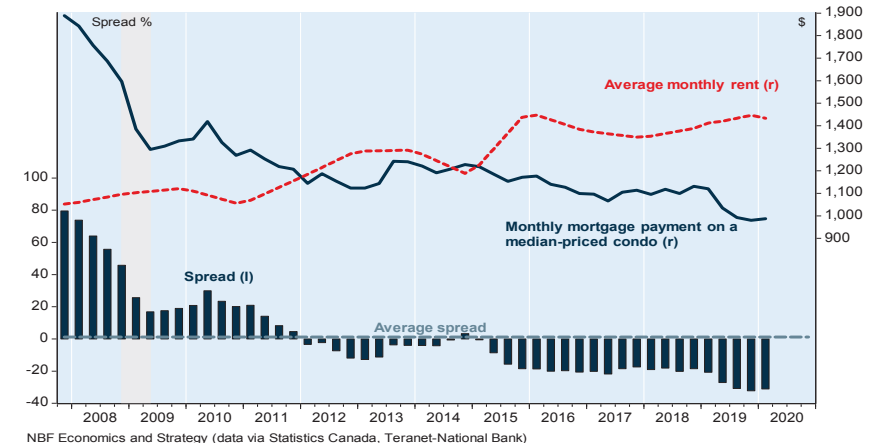
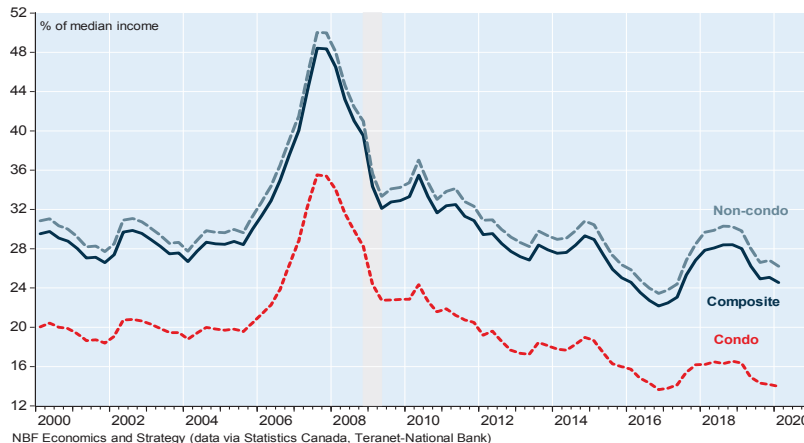
Edmonton : Perspective on housing affordability

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, MPPI* for condos deteriorated (+0.4 pp) while that for other dwellings was unchanged. Home prices were up 9.2% from a year earlier, the steepest 4-quarter rise since 2010 Q3. A 6.1% rise of incomes from a year earlier helped offset that increase. Overall, MPPI* was unchanged from the previous quarter and down 1.7 pp from a year earlier. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	31.8%	▶	0.0%	Q/Q
Condo	20.2%	▲ +	0.4%	Q/Q



Non-Condo

\$470,615

Price of the representative home in the metropolitan market

\$99,875

Household annual income needed to afford the representative home

36

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

-36.2%

Premium for buying compared to the national urban composite



Condo

\$298,587

Price of the representative condo in the metropolitan market

\$63,367

Household annual income needed to afford the representative condo

23

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

-19.3%

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

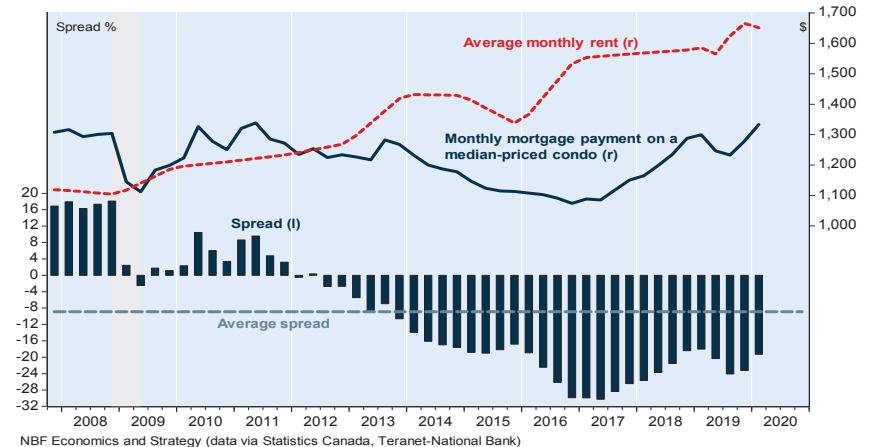
Ottawa/Gatineau : Perspective on housing affordability

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 most affordable market, Quebec City, got more affordable in Q1. MPPI* improved for both condos (-0.3 pp) and other dwellings (-0.6 pp). MPPI* for all dwellings was down 3.1 points from a year earlier, as home prices slipped 0.5% and incomes rose 6.0%. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	20.0%	▼	- 0.6%	Q/Q
Condo	14.3%	▼	- 0.3%	Q/Q



Non-Condo

\$293,025

Price of the representative home in the metropolitan market

\$62,187

Household annual income needed to afford the representative home

22

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

-60.3%

Premium for buying compared to the national urban composite



Condo

\$208,832

Price of the representative condo in the metropolitan market

\$44,319

Household annual income needed to afford the representative condo

16

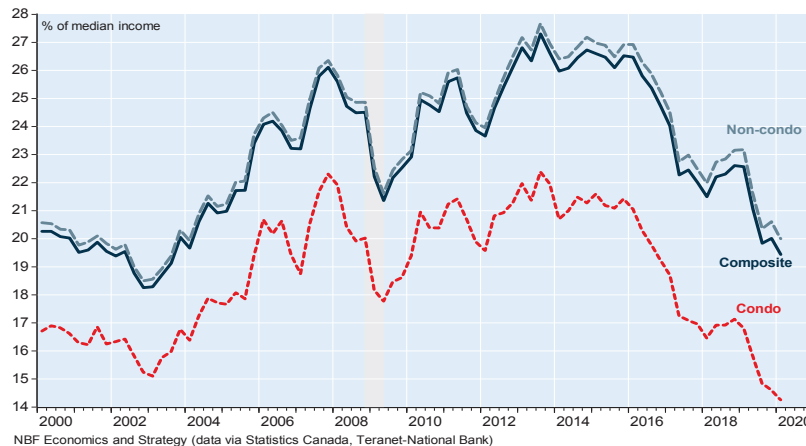
Months of saving required for the down payment (saving rate of 10%)

-13.3%

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

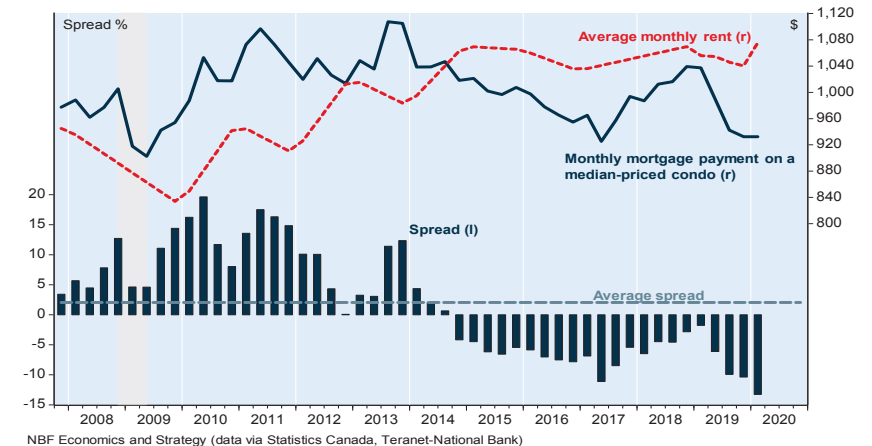
Quebec city: Perspective on housing affordability

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's affordability was unchanged in Q1 – MPPI* was flat for both condos and non-condos. Prices for all dwellings were also flat from the previous quarter, with incomes growing slowly and interest rates relatively unchanged. Affordability as measured by MPPI* was 2.9 points better than a year earlier, as median income increased 2.9% while home prices were relatively flat (+0.5%). *See tables page 12

Mortgage payment as a % of income (MPPI)			
Non-Condo	25.1%	▶	0.0% Q/Q
Condo	17.5%	▶	0.0% Q/Q



Non-Condo

\$325,276

Price of the representative home in the metropolitan market

\$69,031

Household annual income needed to afford the representative home

28

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

-55.9%

Premium for buying compared to the national urban composite



Condo

\$226,657

Price of the representative condo in the metropolitan market

\$48,102

Household annual income needed to afford the representative condo

20

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

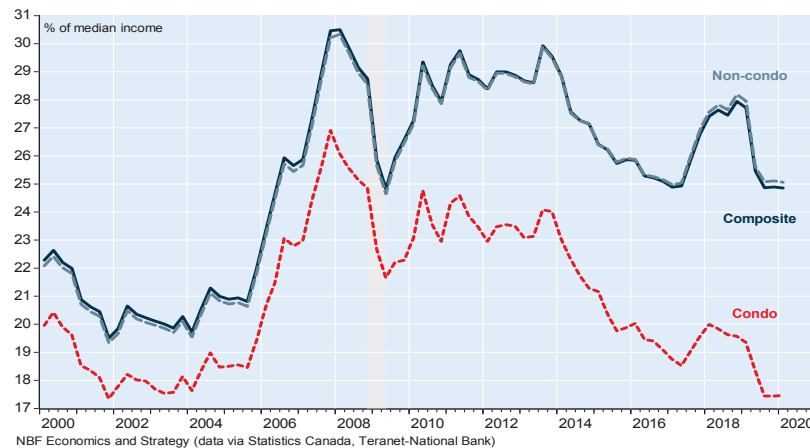
-29.2%

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

Winnipeg: Perspective on housing affordability

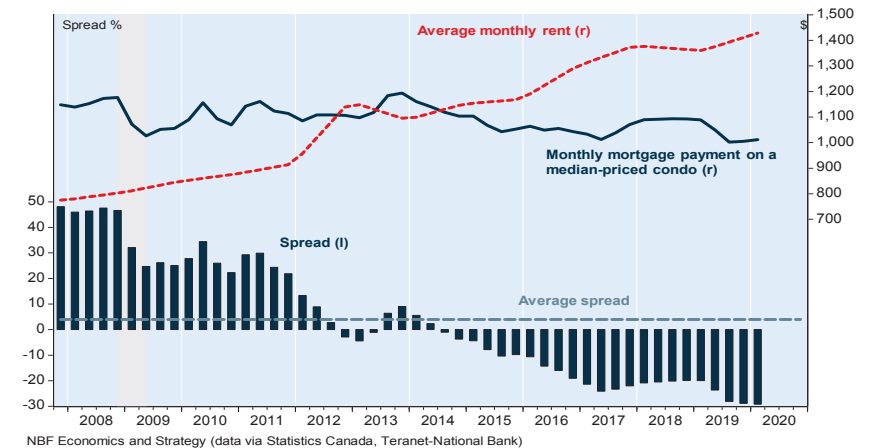
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

WINNIPEG



Winnipeg: Buying compared to renting

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



Hamilton

In Hamilton, affordability as measured by MPPI* deteriorated 0.2 pp for condos and 0.3 pp for non-condos, for a deterioration of 0.3 pp for all dwellings. It was a second straight quarterly decline of affordability. MPPI* was down 3.1 points from a year earlier, less than the urban composite MPPI* decline of 5.2%, thanks to a 7.2% rise of home prices exceeding the 6.0% rise of incomes over the period. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non-Condo	43.6%	▲ +	0.3%	Q/Q
Condo	32.6%	▲ +	0.2%	Q/Q



Non-Condo

\$644,691

Price of the representative home in the metropolitan market

\$135,202

Household annual income needed to afford the representative home

60

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

-12.7%

Premium for buying compared to the national urban composite



Condo

\$481,527

Price of the representative condo in the metropolitan market

\$102,191

Household annual income needed to afford the representative condo

36

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

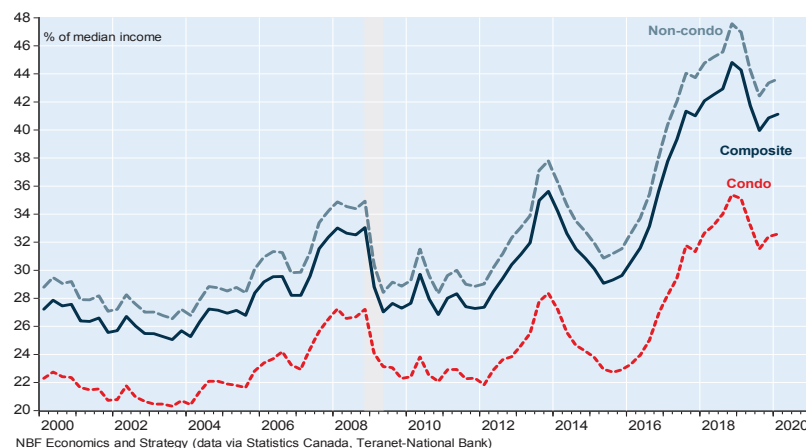
51.5%

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

Hamilton: Perspective on housing affordability

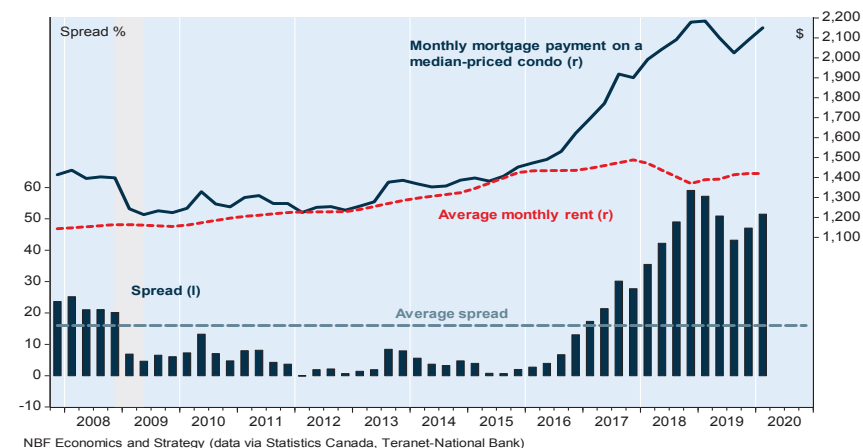
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

HAMILTON



Hamilton: Buying compared to renting

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



Victoria

Affordability in Victoria deteriorated slightly for condos (MPPI* +0.1 pp) and improved for non-condo dwellings (-1.3 pp) in Q1, for an overall 1.0-point improvement of MPPI* to 60.5%. In this relatively expensive market, MPPI* was 10.1 points better than a year earlier, thanks in large part to an 8.6% rise of incomes versus a 1.4% rise of home prices over the period. *See tables page 12

Mortgage payment as a % of income (MPPI)				
Non- Condo	63.7%	▼	- 1.3%	Q/Q
Condo	37.4%	▲	+ 0.1%	Q/Q



**Non-
Condo**

\$857,170

Price of the representative home in the metropolitan market

\$177,922

Household annual income needed to afford the representative home

101

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

16.1%

Premium for buying compared to the national urban composite



Condo

\$503,449

Price of the representative condo in the metropolitan market

\$106,805

Household annual income needed to afford the representative condo

42

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

27.9%

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

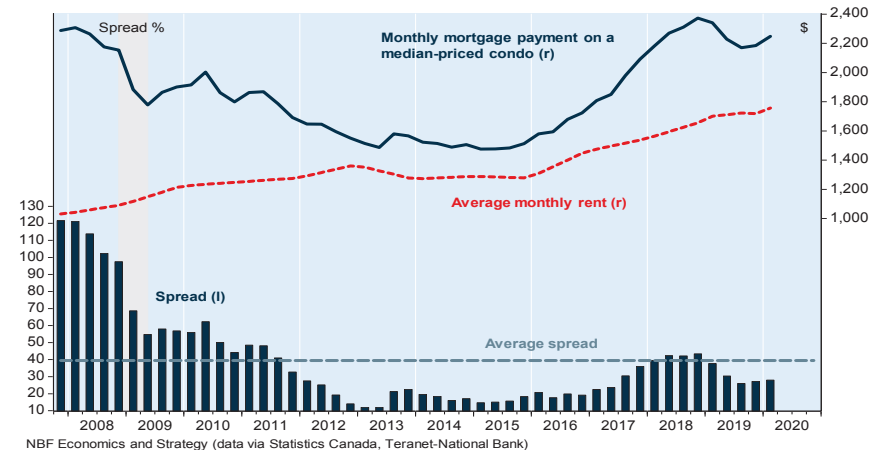
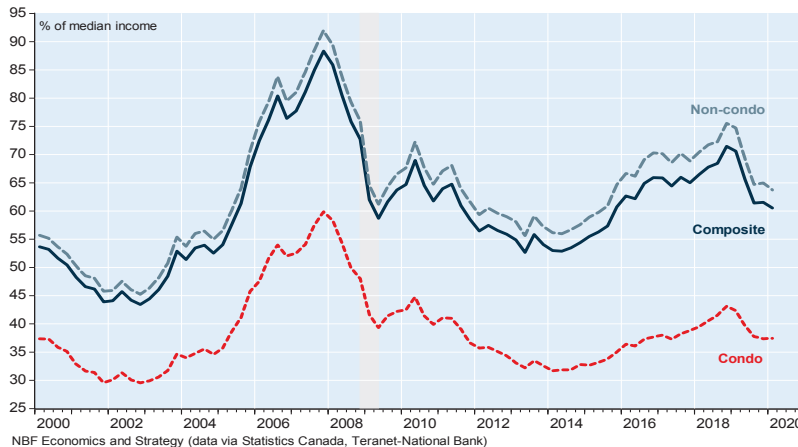
Victoria: Perspective on housing affordability

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 Monitor

Economics and Strategy

Housing affordability statistics

Table 1

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
All dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment \$	Downpayment: Months of saving	Avg. Since 2000	Monthly mortgage payment	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)
Urban Composite	\$ 588,721	1.5	2.7	\$ 33,872	56.0	35.1	\$ 2,629	43.5	-0.3	-5.2	40.2	\$ 123,949	\$ 72,543	68%
Toronto	\$ 896,348	1.8	4.7	\$ 64,635	92.5	47.2	\$ 4,002	57.3	-0.2	-5.9	48.3	\$ 185,798	\$ 83,834	66%
Montreal	\$ 367,890	2.4	7.1	\$ 18,394	33.6	25.4	\$ 1,643	30.0	0.0	-2.3	30.2	\$ 78,075	\$ 65,622	56%
Vancouver	\$ 1,040,473	1.8	-2.2	\$ 208,095	307.0	90.1	\$ 4,645	68.5	-0.5	-14.3	62.3	\$ 185,947	\$ 81,334	64%
Calgary	\$ 429,161	-0.7	-1.3	\$ 21,458	29.5	27.1	\$ 1,916	26.3	-0.7	-3.6	33.3	\$ 91,078	\$ 87,376	73%
Edmonton	\$ 388,857	-0.1	-1.5	\$ 19,443	27.5	24.3	\$ 1,736	24.5	-0.5	-3.5	30.1	\$ 82,524	\$ 84,870	70%
Ottawa/Gatineau	\$ 437,479	2.2	9.2	\$ 21,874	33.1	24.4	\$ 1,953	29.5	0.0	-1.7	29.1	\$ 92,843	\$ 79,322	67%
Quebec	\$ 284,739	-0.6	-0.5	\$ 14,237	21.8	19.6	\$ 1,271	19.4	-0.6	-3.1	23.0	\$ 60,428	\$ 78,482	60%
Winnipeg	\$ 322,587	0.3	0.5	\$ 16,129	27.8	21.6	\$ 1,440	24.9	0.0	-2.9	25.3	\$ 68,460	\$ 69,531	67%
Hamilton	\$ 607,539	2.8	7.2	\$ 35,754	54.2	27.6	\$ 2,713	41.1	0.3	-3.1	30.9	\$ 127,733	\$ 79,158	70%
Victoria	\$ 814,311	0.9	1.4	\$ 56,431	94.0	55.1	\$ 3,636	60.5	-1.0	-10.1	60.7	\$ 169,305	\$ 72,077	63%

Table 2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Condo	Median home price	Q/Q % change	Y/Y % change	Downpayment \$	Downpayment: Months of saving	Avg. Since 2000	Monthly mortgage payment	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 average rent
Urban Composite	\$ 422,124	2.0	3.3	\$ 21,106	34.9	24.7	\$ 1,885	31.2	0.0	-3.5	29.5	\$ 89,584	\$ 72,543	9%	\$ 1,986
Toronto	\$ 586,180	2.3	7.4	\$ 33,618	48.1	26.9	\$ 2,617	37.5	0.1	-2.8	31.0	\$ 123,438	\$ 83,834	15%	\$ 2,501
Montreal	\$ 302,381	2.1	7.7	\$ 15,119	27.6	22.1	\$ 1,350	24.7	0.0	-1.8	26.4	\$ 64,172	\$ 65,622	11%	\$ 1,247
Vancouver	\$ 619,676	1.8	-2.6	\$ 36,968	54.5	33.6	\$ 2,767	40.8	-0.3	-8.7	38.4	\$ 130,173	\$ 81,334	22%	\$ 2,186
Calgary	\$ 260,614	1.7	0.1	\$ 13,031	17.9	18.9	\$ 1,164	16.0	-0.1	-2.0	23.8	\$ 55,308	\$ 87,376	14%	\$ 1,532
Edmonton	\$ 221,157	0.6	-4.0	\$ 11,058	15.6	15.9	\$ 987	14.0	-0.2	-2.4	20.2	\$ 46,935	\$ 84,870	12%	\$ 1,433
Ottawa/Gatineau	\$ 298,587	4.1	11.7	\$ 14,929	22.6	17.6	\$ 1,333	20.2	0.4	-0.7	21.1	\$ 63,367	\$ 79,322	9%	\$ 1,651
Quebec	\$ 208,832	-0.1	-2.1	\$ 10,442	16.0	15.9	\$ 932	14.3	-0.3	-2.6	18.8	\$ 44,319	\$ 78,482	9%	\$ 1,075
Winnipeg	\$ 226,657	0.6	1.2	\$ 11,333	19.6	17.5	\$ 1,012	17.5	0.0	-1.9	20.9	\$ 48,102	\$ 69,531	6%	\$ 1,428
Hamilton	\$ 481,527	2.8	7.2	\$ 24,076	36.5	21.3	\$ 2,150	32.6	0.2	-2.5	24.7	\$ 102,191	\$ 79,158	11%	\$ 1,419
Victoria	\$ 503,449	2.7	4.5	\$ 25,345	42.2	31.6	\$ 2,248	37.4	0.1	-4.9	38.8	\$ 106,805	\$ 72,077	14%	\$ 1,757

Table 3

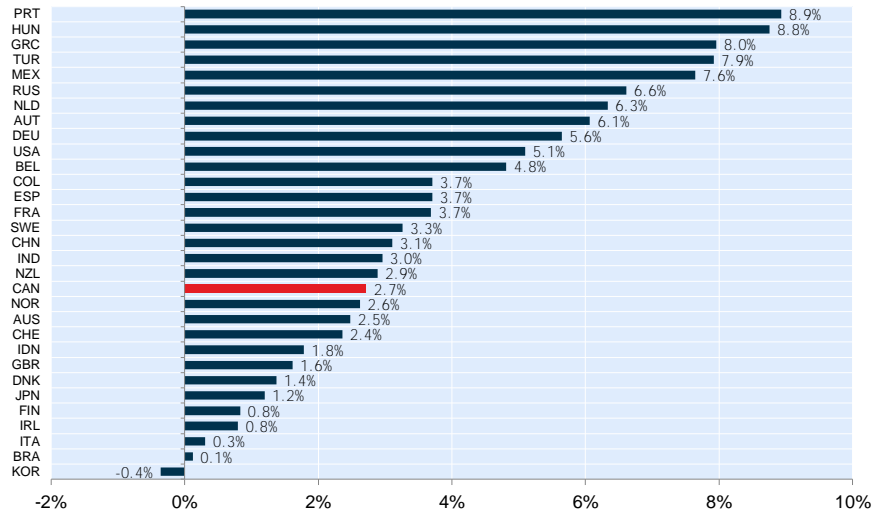
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Other dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment \$	Downpayment: Months of saving	Avg. Since 2000	Monthly mortgage payment	Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)
Urban Composite	\$ 738,094	1.5	2.6	\$ 48,809	80.7	46.4	\$ 3,295	54.5	-0.4	-6.5	50.2	\$ 153,981	\$ 72,543	59%
Toronto	\$ 950,472	1.7	4.3	\$ 70,047	100.3	51.0	\$ 4,244	60.7	-0.2	-6.5	51.4	\$ 196,680	\$ 83,834	52%
Montreal	\$ 397,449	2.4	7.0	\$ 19,872	36.3	27.2	\$ 1,775	32.5	0.0	-2.6	32.3	\$ 84,348	\$ 65,622	45%
Vancouver	\$ 1,266,333	1.8	-2.1	\$ 253,267	373.7	127.8	\$ 5,654	83.4	-0.6	-17.3	74.8	\$ 226,311	\$ 81,334	42%
Calgary	\$ 485,126	-1.1	-1.5	\$ 24,256	33.3	30.1	\$ 2,166	29.7	-1.0	-4.2	36.9	\$ 102,955	\$ 87,376	59%
Edmonton	\$ 415,257	-0.2	-1.2	\$ 20,763	29.4	25.4	\$ 1,854	26.2	-0.6	-3.6	31.5	\$ 88,127	\$ 84,870	57%
Ottawa/Gatineau	\$ 470,615	2.0	9.0	\$ 23,531	35.6	26.1	\$ 2,101	31.8	0.0	-1.9	31.1	\$ 99,875	\$ 79,322	58%
Quebec	\$ 293,025	-0.7	-0.3	\$ 14,651	22.4	20.0	\$ 1,308	20.0	-0.6	-3.2	23.4	\$ 62,187	\$ 78,482	51%
Winnipeg	\$ 325,276	0.2	0.5	\$ 16,264	28.1	21.5	\$ 1,452	25.1	0.0	-2.9	25.3	\$ 69,031	\$ 69,531	61%
Hamilton	\$ 644,691	2.8	7.2	\$ 39,469	59.8	29.7	\$ 2,878	43.6	0.3	-3.3	32.8	\$ 135,202	\$ 79,158	60%
Victoria	\$ 857,170	0.6	0.8	\$ 60,717	101.1	58.6	\$ 3,827	63.7	-1.3	-11.0	63.8	\$ 177,922	\$ 72,077	49%

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

Global perspective on housing affordability

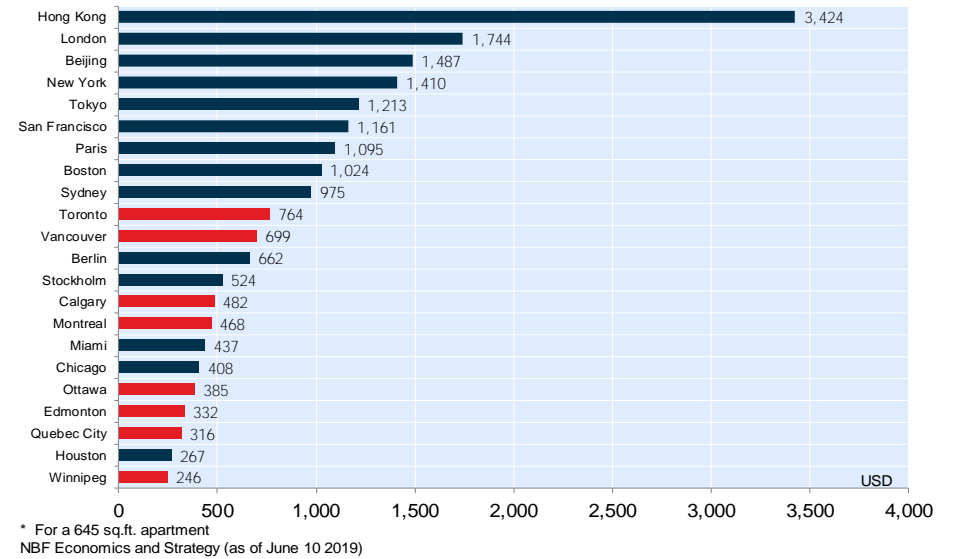
World: Perspective on home price growth

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 a household devotes 32% of its pre-tax income for a mortgage payment at the posted rate (defined as **qualifying income** and is adjusted for the down-payment). 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.

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Housing Affordability Monitor

Economics and Strategy

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