

November 9, 2021

Housing affordability deteriorates for a third consecutive quarter in Q3 2021

By Kyle Dahms & Alexandra Ducharme

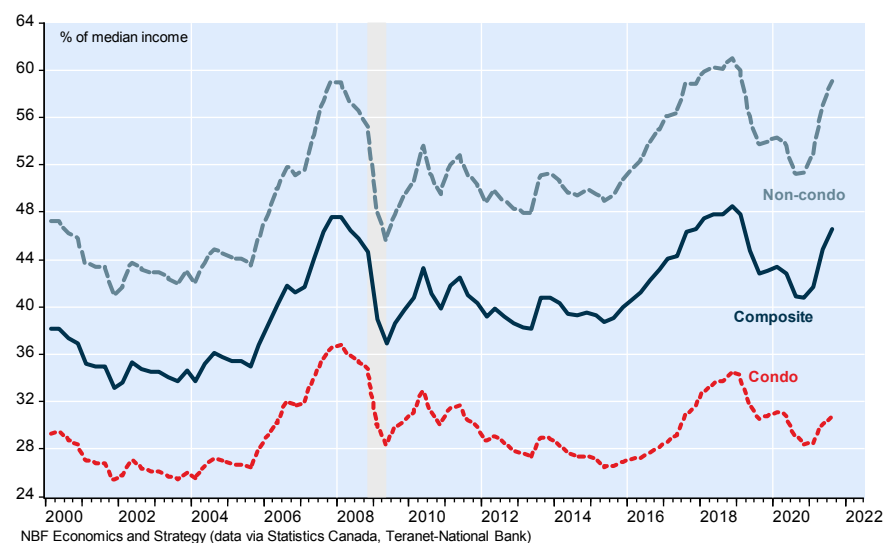
Housing affordability in Canada worsened by 1.7 points in Q3'21, marking a third consecutive deterioration since the beginning of the year. Over the last 12 months, affordability has worsened the most in a decade. It would now take 46.5% of income for a representative household to service the mortgage on a representative home in Canada. Although interest rates were essentially unchanged in the quarter and income continued to grow at a decent pace, a strong jump in home prices was more than enough to reduce affordability. Indeed, home prices continued their relentless upward trajectory rising 4.6% in the quarter and 18.6% year on year. That annual figure was the most it has ever been since 1989. Although mortgage rates were not a factor for affordability this quarter, the outlook is not particularly bright for new home buyers. Looking at data for November, mortgage interest rates have moved up nearly 25 bps with the potential for further increases as monetary policy normalization intensifies. We estimate that a hypothetical 100bps increase in rates represents approximately a 12% reduction in buying power for the same payment. While this will be a headwind for home prices going forward, the recent evolution already represents a challenge for buyers entering the market not only for the monthly payment but also for the down payment. For the representative dwelling in Canada, it would now take 74 months at a 10% savings rate for the median pre-tax household income, double the 37-month average since 2000.

HIGHLIGHTS:

- Canadian housing affordability deteriorated for a third consecutive quarter in Q3'21. The mortgage payment on a representative home as a percentage of income (MPPI) rose 1.7 points after a 3.2-point increase in Q2'21. Seasonally adjusted home prices increased 4.6% in Q3'21 from Q2'21; the benchmark mortgage rate (5-year term) was essentially unchanged, while median household income rose 0.8%.
- Affordability deteriorated in all the ten markets covered in Q3. On a sliding scale of markets from worst deterioration to least: Vancouver, Victoria, Toronto, Ottawa-Gatineau, Hamilton, Montreal, Calgary, Quebec, Winnipeg, and Edmonton (see chart on the right). This was the third consecutive quarter with a worsening in all markets. Countrywide, affordability deteriorated 0.7 pp in the condo portion vs. a 2.3 pp deterioration in the non-condo segment. See detailed statistics on page 12.

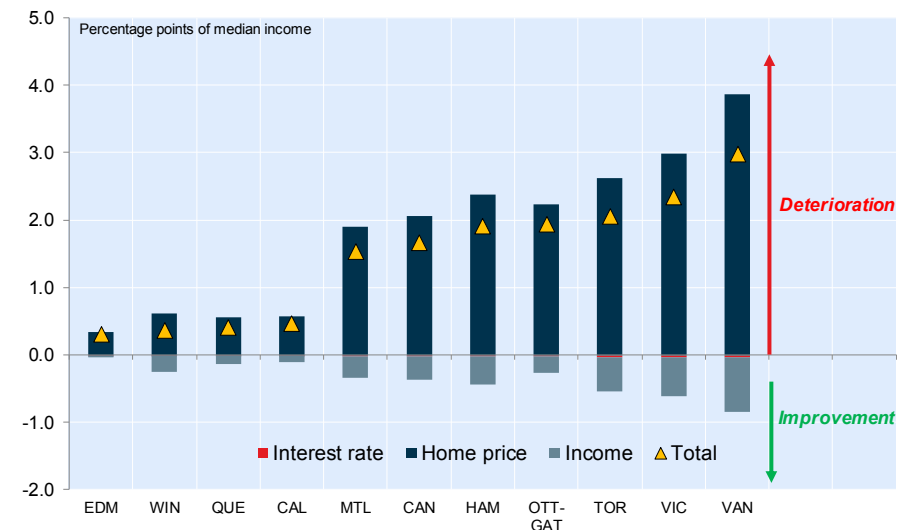
Canada : Perspective on housing affordability

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



Canada: Q3 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

In the third quarter of 2021, a deterioration in housing affordability brought the MPPI* to early 2019 levels in Toronto, dragged by both dwelling segments (MPPI* edged up +0.7 pp for condos and +2.3 pp for non-condos). Once again, this deterioration was mostly attributable to higher home prices, which rose for the ninth consecutive quarter (+4.3%), while income rose 0.8%. Both condo prices and non-condo prices jumped in the quarter (+2.8% and +4.5%, respectively). For all types of dwellings, however, the price increases were just below the respective urban composite average. On an annual basis, though, home prices in Toronto edged up 19.5%, surpassing the index's mean increase of 18.6%. Interest rates were essentially unchanged. Overall, the MPPI* rose 2.0 pp in the quarter and 8.0 pp over the year, both of which were worse than the composite index over this period. Monthly mortgage payments amounted for 63.4% of the median pre-tax household income, which was far greater than the average for the period since 2000 (49.2%) and the average for the composite index (46.5%).*See tables page 12.

Mortgage payment as a % of income (MPPI)					
Non-Condo	68.1%	▲	+	2.3%	Q/Q
Condo	38.1%	▲	+	0.7%	Q/Q



Non-Condo

\$1,195,754

Price of the representative home in the metropolitan market

\$205,342

Household annual income needed to afford the representative home

330

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

30.8%

Premium for buying compared to the national urban composite



Condo

\$669,593

Price of the representative condo in the metropolitan market

\$134,726

Household annual income needed to afford the representative condo

58

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

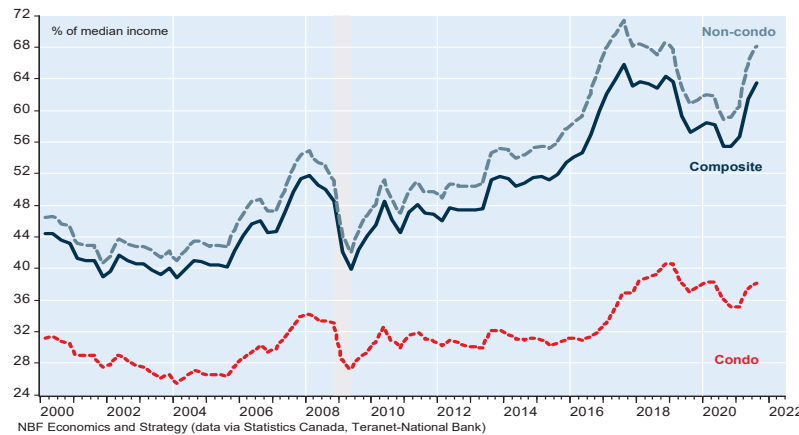
12.0%

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

Toronto : Perspective on housing affordability

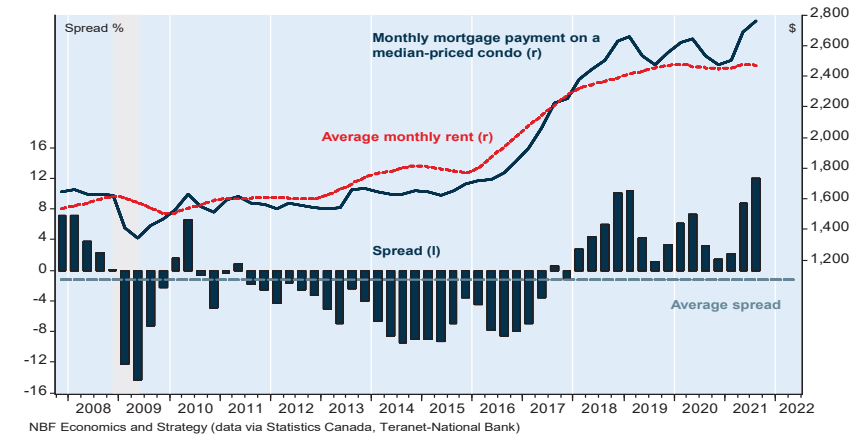
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

TORONTO



Toronto: Buying compared to renting

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



Montreal

Montreal saw home prices rise 5.9% in the quarter, the second highest quarterly increase among the markets covered after Ottawa/Gatineau. The increase in prices of condos clocked in at 3.5%, while the prices of other dwellings rose 6.3%. On an annual basis, home prices increased 23.5%, the third highest growth among all markets covered and above the growth of prices of the urban composite, which came in at 18.6%. This was also the fastest annual progress in home prices for Montreal since 1983. The MPPI* was up 0.6 pp from the previous quarter for the condo segment and 1.8 pp for the non-condo segment, both of which were lower than the urban composite helped by a faster increase in the median household income (+1.0% compared to 0.8%) and lower price levels. In the market as a whole, housing affordability thus deteriorated with the MPPI* rising 1.5 pp to 33.7%, its highest print in 10 years but still below the urban composite. On an annual basis, housing affordability also deteriorated in Montreal, although at a slower pace than the urban composite (the MPPI* swelled 5.0 pp and 5.7 pp respectively). *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non- Condo	36.9%	▲ +	1.8%	Q/Q
Condo	25.9%	▲ +	0.6%	Q/Q



**Non-
Condo**

\$524,515
Price of the representative home in the metropolitan market

\$106,699
Household annual income needed to afford the representative home

47
Months of saving required for the down payment (saving rate of 10%)

-42.6%
Premium for buying compared to the national urban composite



Condo

\$369,004
Price of the representative condo in the metropolitan market

\$75,249
Household annual income needed to afford the representative condo

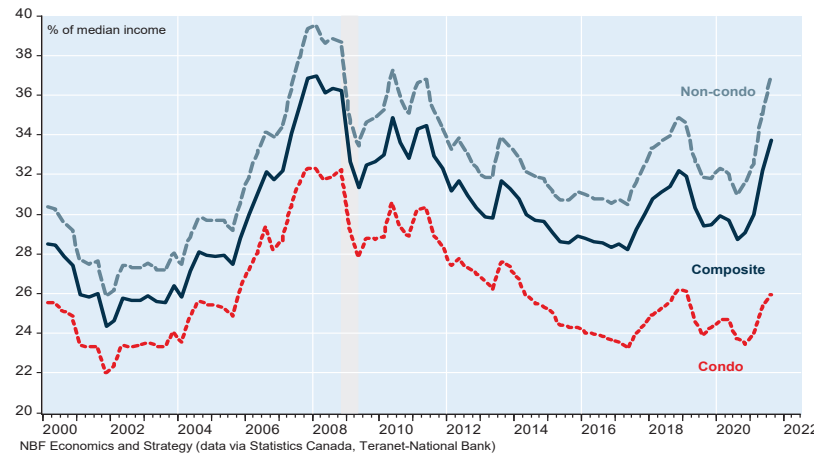
31
Months of saving required for the down payment (saving rate of 10%)

14.7%
Premium/discount for buying compared to renting a two-bedroom condo in Montreal

Montreal : Perspective on housing affordability

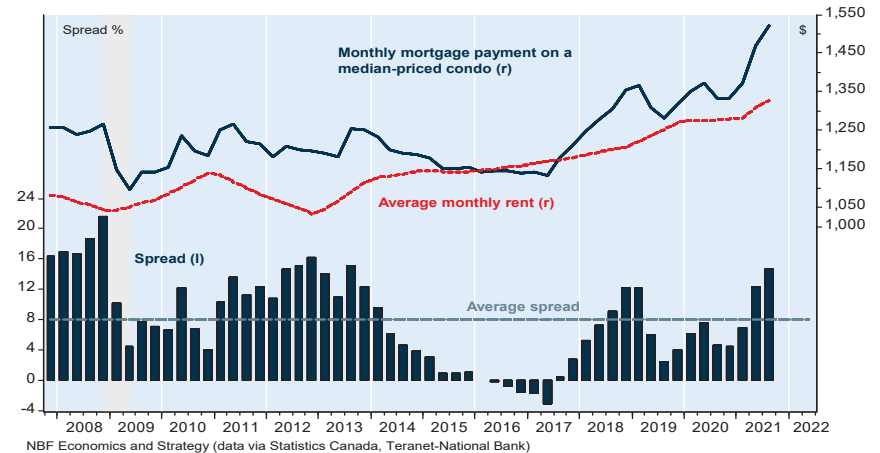
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

MONTREAL



Montreal: Buying compared to renting

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



Vancouver

Despite the median income in Vancouver accelerating at the fastest quarterly pace among the markets covered (1.2%), housing affordability deteriorated the most in this city, dragged by already elevated and rising home prices (+5.6%). The MPPI* now surpasses its pre-pandemic level in Canada's least affordable city and indicates that a mortgage payment takes up 71.6% of the median income, a deterioration of 3.0 pp compared to the previous quarter. The deterioration in affordability in Vancouver was above the national average both for condos (+0.9 pp) and non-condos (+4.1 pp). On a twelve-month basis, Vancouver saw the accessibility of its housing market deteriorate above the composite average as well (+7.6 pp). Home prices in Vancouver, which are the highest across all categories, were up 5.6% on an increase of 6.1% for non-condos and 3.5% for condos. Mortgage interest rates were essentially unchanged and had no impact on the MPPI*. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	89.0%	▲ +	4.1%	Q/Q
Condo	38.8%	▲ +	0.9%	Q/Q



Non-Condo

\$1,558,535
Price of the representative home in the metropolitan market

\$267,641
Household annual income needed to afford the representative home

432
Months of saving required for the down payment (saving rate of 10%)

70.5%
Premium for buying compared to the national urban composite



Condo

\$678,614
Price of the representative condo in the metropolitan market

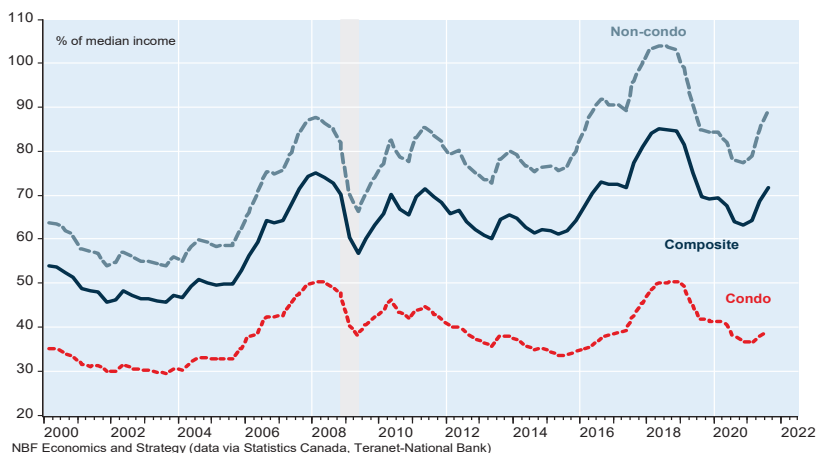
\$136,469
Household annual income needed to afford the representative condo

59
Months of saving required for the down payment (saving rate of 10%)

30.0%
Premium/discount for buying compared to renting a two-bedroom condo in Vancouver

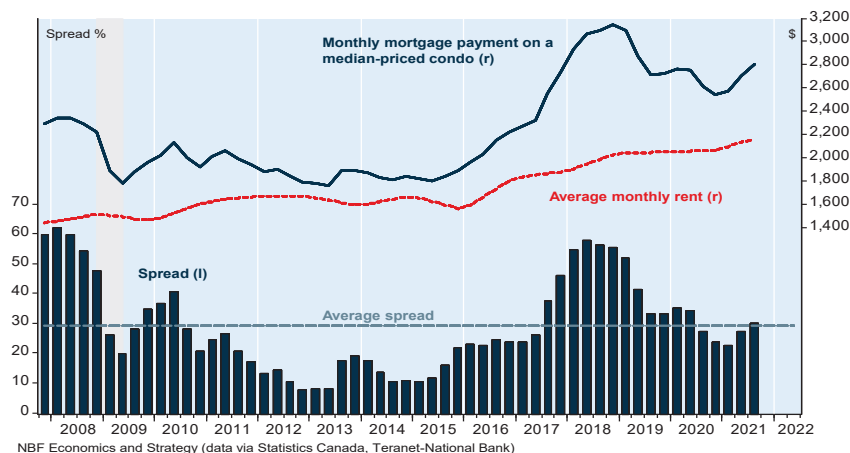
Vancouver : Perspective on housing affordability

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



VANCOUVER

Calgary

In Calgary, home prices increased 2.3% in the quarter, the second lowest increase after Edmonton. This modest growth in home prices, which was half of that of the urban composite, combined with Calgary registering a weak increase in median income (+0.4%) kept the rise of the MPPI* to 0.5 pp. As a result, a mortgage payment now requires 25.1% of the median income in Calgary, a print still well below both the average since 2000 for the city (32.6%) and the urban composite (46.5%). Condo prices in Calgary rose only 0.3% in the quarter, the slowest growth among the markets covered, while non-condo prices grew 2.6%. Consequently, the deterioration of affordability only stemmed from non-condos, for which the MPPI* rose 0.6 pp, while condos remained unchanged in the quarter. On a twelve-month basis, condos in Calgary became more affordable, the only improvement observed across all markets. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	28.8%	▲ +	0.6%	Q/Q
Condo	13.8%	▶	0.0%	Q/Q



Non-Condo

\$518,286

Price of the representative home in the metropolitan market

\$105,495

Household annual income needed to afford the representative home

36

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

-43.3%

Premium for buying compared to the national urban composite



Condo

\$247,705

Price of the representative condo in the metropolitan market

\$50,513

Household annual income needed to afford the representative condo

17

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

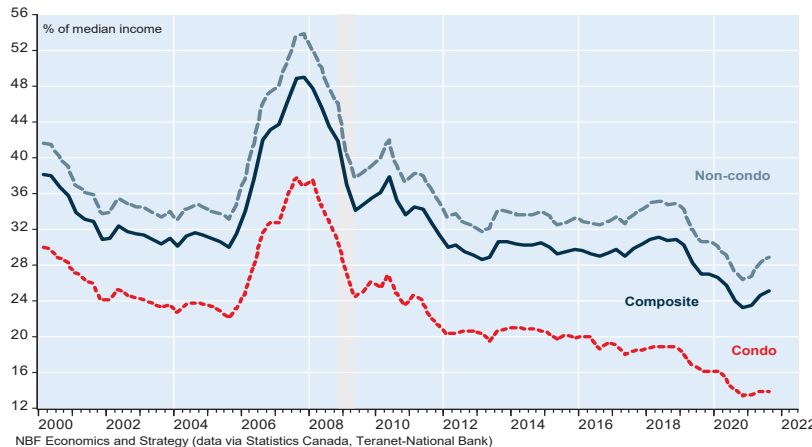
-35.2%

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

Calgary : Perspective on housing affordability

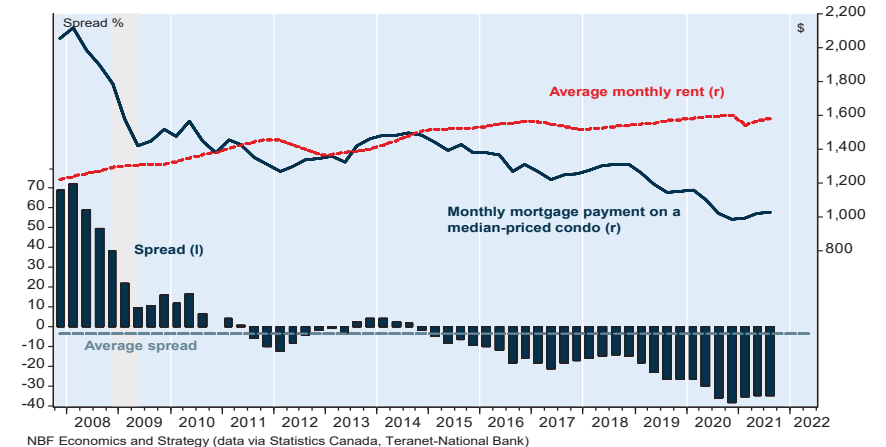
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

CALGARY



Calgary: Buying compared to renting

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



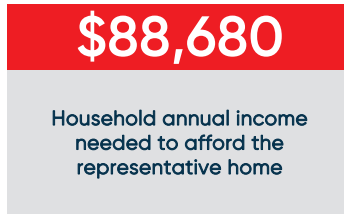
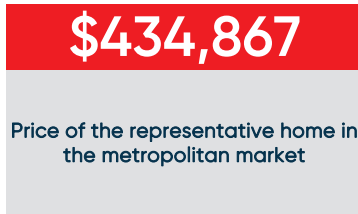
Edmonton

Despite a median income almost unchanged from the previous quarter (+0.1%), Edmonton registered the weakest MPPI* increase (+0.3 pp) among markets covered for the third consecutive quarter. Home prices rose only 1.5% in the quarter and 6.0% in the year, both of which are the slowest paces among the markets covered and a third of the increase in the urban composite. The MPPI* also still stood well below its average since 2000 (23.2% in the third quarter of 2021, compared to 29.5% historically). Both condos and non-condos recorded a similar decrease in affordability in the quarter (+0.2 pp and +0.3 pp, respectively) and were less affordable compared to a year ago (+0.6 pp and +1.1 pp). These figures all show better affordability than for the composite index. Edmonton remained the second least expensive Canadian city to buy a house, only surpassed by Québec City, but it was the least expensive city in which to buy a condo. *See tables page 12.

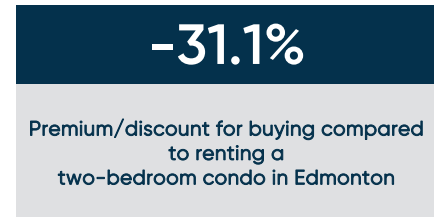
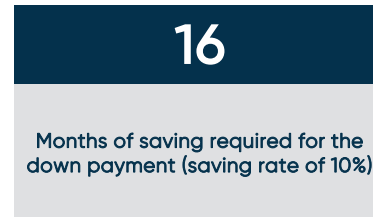
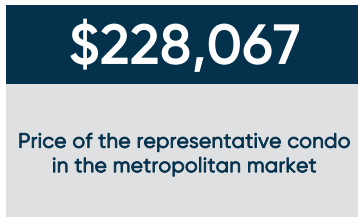
Mortgage payment as a % of income (MPPI)				
Non-Condo	24.8%	▲	+ 0.3%	Q/Q
Condo	13.0%	▲	+ 0.2%	Q/Q



Non-Condo



Condo



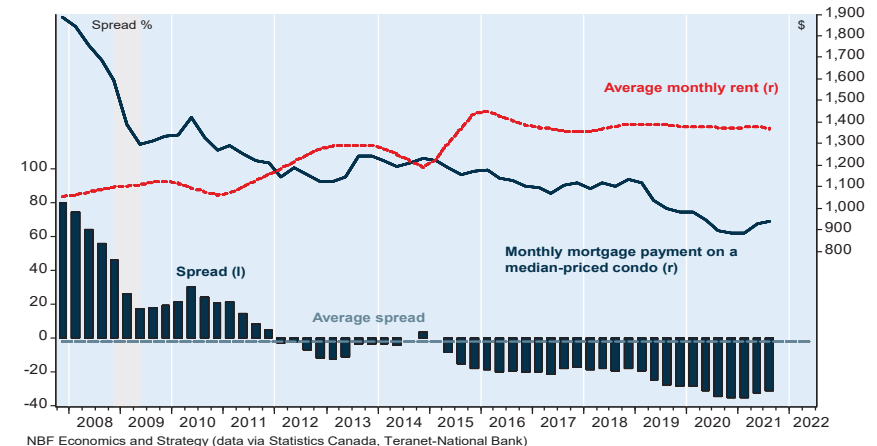
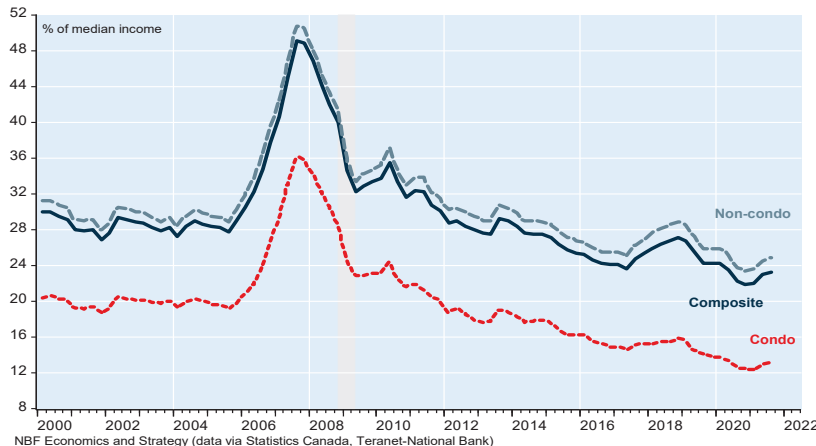
Edmonton : Perspective on housing affordability

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, home prices rose 6.7% in the quarter and 29.1% in the past year, progressions that stand well above the increases registered by the composite index (4.6% and 18.6%, respectively). On an annual basis, prices have never increased faster in this area, while median income grew only 3.2%, the slowest growth since 2017. Both condos (17.9%) and non-condos (30.3%) contributed to the annual price surge. As a result, the MPPI* increased +6.8 pp over the last 12 months, a result substantially above the +5.7 pp growth of the urban composite. On a quarterly basis, the deterioration was more modest (+1.9 pp), but still two ticks above the composite average. A mortgage payment in Ottawa/Gatineau now takes up 35.0% of the median income, the highest print since 1995. On a quarterly basis, affordability deteriorated +0.9 pp for condos and +2.2 pp for non-condos during the quarter, both essentially in line with the composite average (+0.7 pp and +2.3 pp, respectively). Median household income increased +0.8% in the quarter, a result consistent with the previous quarter and in line with the national average. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	38.0%	▲ +	2.2%	Q/Q
Condo	21.8%	▲ +	0.9%	Q/Q



Non-Condo

\$661,025

Price of the representative home in the metropolitan market

\$133,071

Household annual income needed to afford the representative home

57

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

-27.7%

Premium for buying compared to the national urban composite



Condo

\$379,509

Price of the representative condo in the metropolitan market

\$77,391

Household annual income needed to afford the representative condo

26

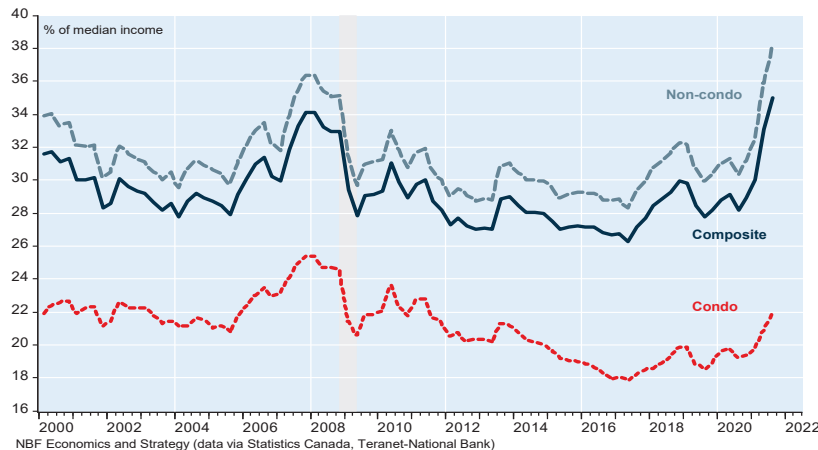
Months of saving required for the down payment (saving rate of 10%)

-12.4%

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

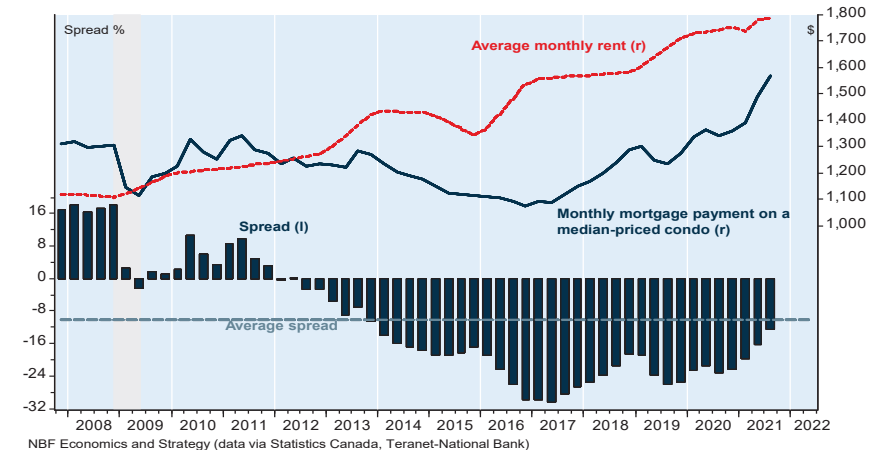
Ottawa/Gatineau : Perspective on housing affordability

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

Housing affordability continued to deteriorate during the third quarter of the year in Québec City, with the MPPI* increasing +0.4 pp, a moderate progress compared to the urban composite (+1.7 pp) and the least pronounced (matching Calgary) after Edmonton. Nonetheless, this development still caused affordability in Québec City to worsen towards its higher long-term average, which is now just 4 ticks away. The deterioration can be explained by home prices rising 2.5%, a growth that could not be offset by a 0.6% improvement in median income. The deterioration in affordability stemmed from both condos and other dwellings, which registered rises of their MPPI* of +0.2 pp and +0.4 pp, respectively. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	23.1%	▲ +	0.4%	Q/Q
Condo	15.9%	▲ +	0.2%	Q/Q



Non-Condo

\$339,134

Price of the representative home in the metropolitan market

\$69,158

Household annual income needed to afford the representative home

28

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

-62.9%

Premium for buying compared to the national urban composite



Condo

\$232,290

Price of the representative condo in the metropolitan market

\$47,370

Household annual income needed to afford the representative condo

19

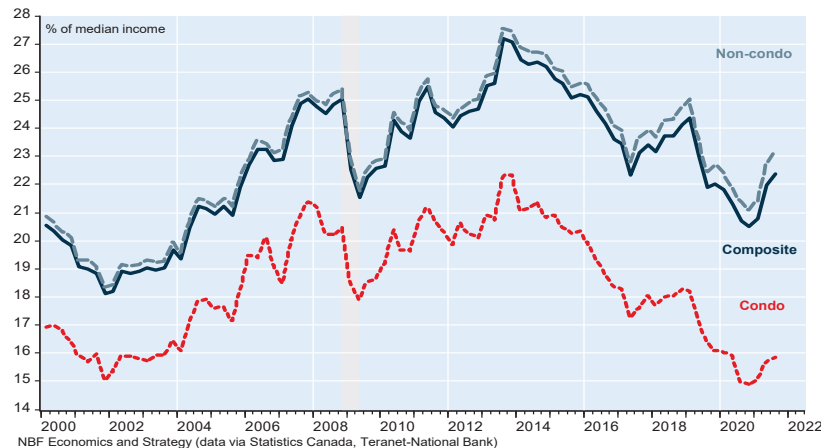
Months of saving required for the down payment (saving rate of 10%)

-17.2%

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

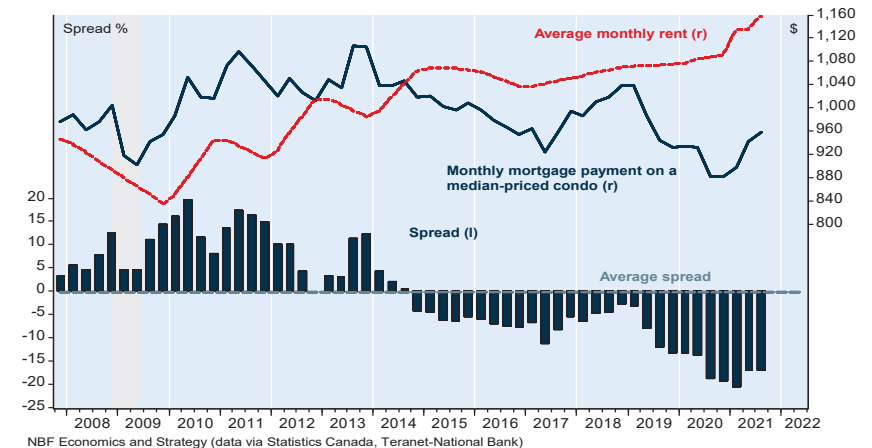
Quebec city: Perspective on housing affordability

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



Winnipeg

Housing affordability worsened in Winnipeg, with a 2.7% increase in home prices surpassing the 1.0% increase in median income. The MPPI* rose +0.4 pp, a moderate deterioration that took the mortgage payment to 23.5% of median income. This is still more affordable than both the pre-pandemic level (23.9%) and the long-term average (25.0%). Both condos (+0.3 pp) and non-condos (+0.4 pp) saw a deterioration in affordability in the quarter, although condos were as affordable as 12 months ago. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	23.9%	▲ +	0.4%	Q/Q
Condo	15.0%	▲ +	0.3%	Q/Q



Non-Condo

\$378,985

Price of the representative home in the metropolitan market

\$77,284

Household annual income needed to afford the representative home

29

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

-58.5%

Premium for buying compared to the national urban composite



Condo

\$237,594

Price of the representative condo in the metropolitan market

\$48,451

Household annual income needed to afford the representative condo

18

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

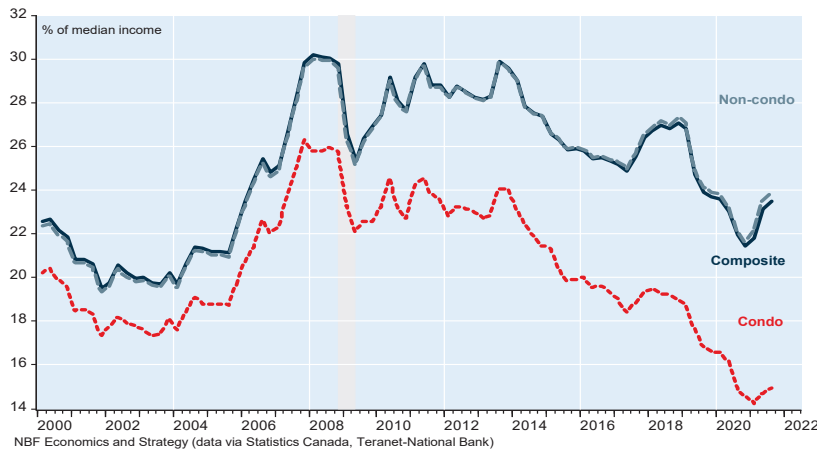
-30.0%

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

Winnipeg: Perspective on housing affordability

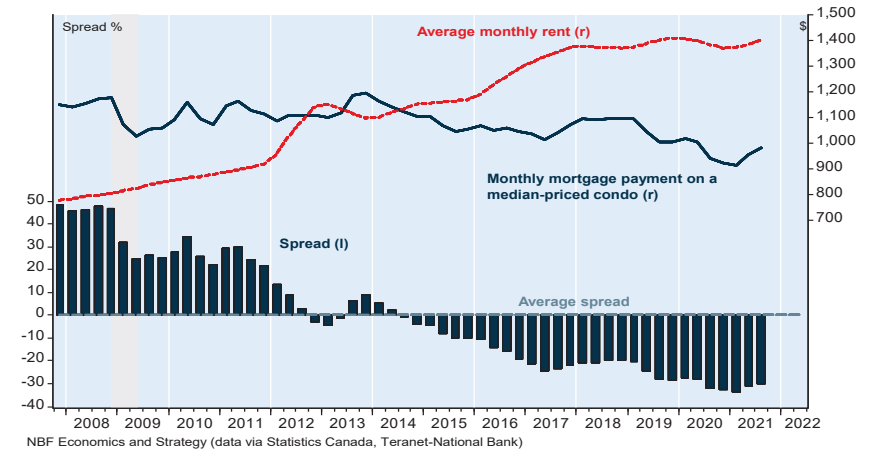
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

WINNIPEG



Winnipeg: Buying compared to renting

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



Hamilton

Hamilton recorded a 1.9 pp deterioration in its MPPI* in the quarter, exceeding by 2 ticks the variation of the urban composite. On an annual basis, the deterioration in affordability (+8.7 pp) was the second-worse of all markets covered and brought the MPPI* to its highest level ever recorded. Mortgage payments indeed took up 45.2% of the median pre-tax household income, which remains below the urban composite (46.5%). The annual deterioration can be explained by home prices rising 30.1% in the year, the fastest growth among markets covered. On a quarterly basis, prices rose above the pace of the urban composite in all segments (+4.4% for condos, +5.6% for non-condos and +5.5% for the market as a whole), while median income rose only 1.0%. As a result, the MPPI* rose to record levels for both non-condos and condos. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	48.3%	▲ +	2.1%	Q/Q
Condo	33.9%	▲ +	1.1%	Q/Q



Non-Condo

\$877,264

Price of the representative home in the metropolitan market

\$174,847

Household annual income needed to afford the representative home

84

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

-4.0%

Premium for buying compared to the national urban composite



Condo

\$616,524

Price of the representative condo in the metropolitan market

\$124,474

Household annual income needed to afford the representative condo

49

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

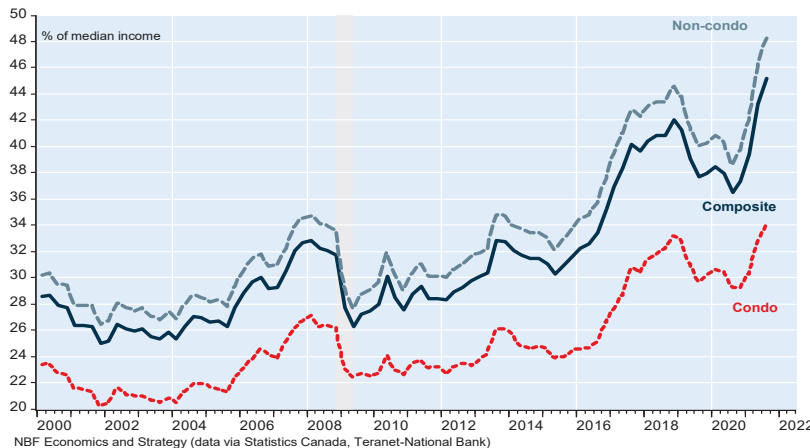
29.2%

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

Hamilton: Perspective on housing affordability

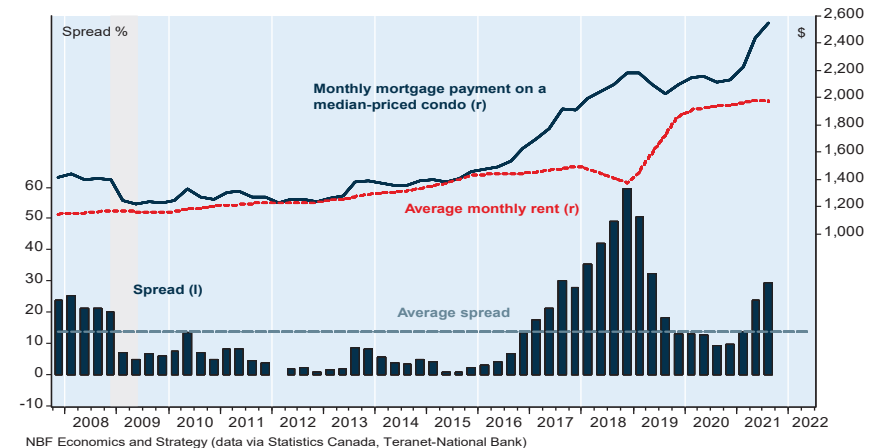
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

HAMILTON



Hamilton: Buying compared to renting

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



Victoria

Victoria registered the largest annual deterioration in the MPPI* of all the markets covered, and the worst deterioration for this city since the last quarter of 2007. On a quarterly basis, the +2.3 pp increase in the MPPI* also surpassed that of the composite average (+1.7 pp) as home prices grew faster (\$43.8 K vs \$31.5 K), a difference that a slightly higher income growth could not offset. The worsening of affordability was observable in both segments of the market, with the MPPI* rising +1.4 pp for condos and +2.5 pp for non-condos, both of which are above the urban composite. Mortgage payments absorbed 67.5% of the median pre-tax household income in the third quarter of 2021, making Victoria the second least affordable city after Vancouver. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	72.2%	▲ +	2.5%	Q/Q
Condo	37.6%	▲ +	1.4%	Q/Q



Non-Condo

\$1,072,800

Price of the representative home in the metropolitan market

\$184,228

Household annual income needed to afford the representative home

350

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

17.4%

Premium for buying compared to the national urban composite



Condo

\$558,722

Price of the representative condo in the metropolitan market

\$113,307

Household annual income needed to afford the representative condo

50

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

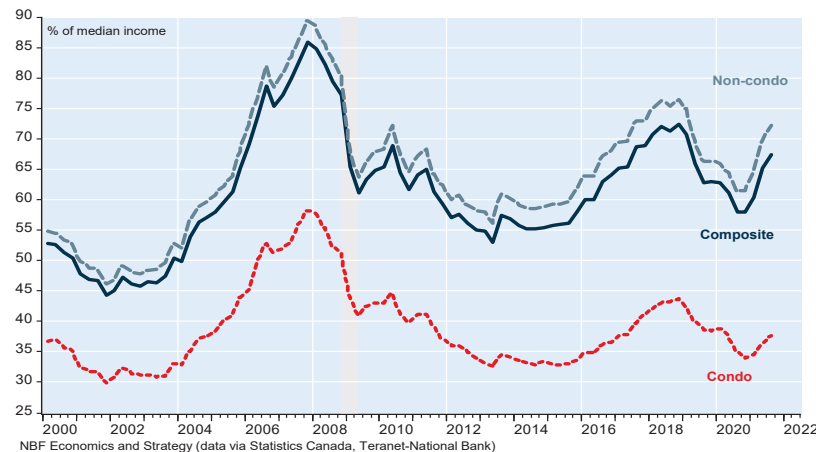
11.0%

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

Victoria: Perspective on housing affordability

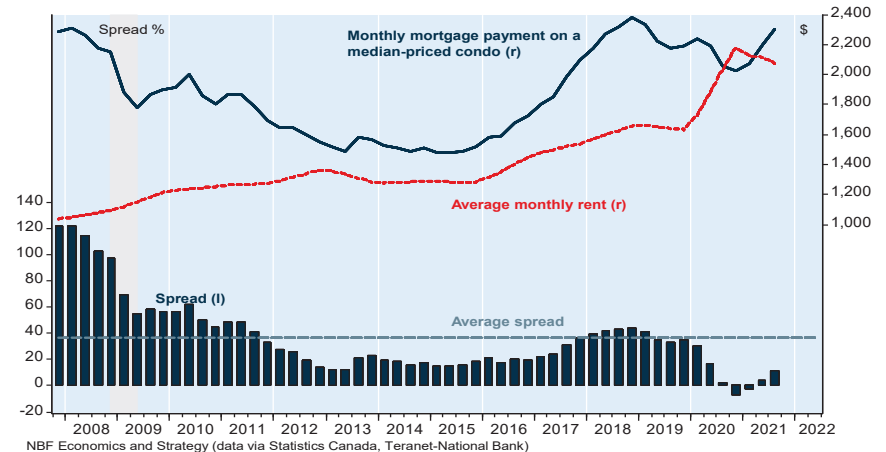
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

VICTORIA



Victoria: Buying compared to renting

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



Housing affordability statistics

Table 1

	A	B	C	D	E	F	G	H	I	J	K	L	M	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	\$ 719 440	4.6	18.6	\$ 46 944	73.6	37.0	\$ 2 966	46.5	1.7	5.7	40.3	\$ 144 356	\$ 76 518	68%
Toronto	\$ 1 113 576	4.3	19.5	\$ 222 715	307.6	57.8	\$ 4 591	63.4	2.0	8.0	49.2	\$ 191 230	\$ 86 875	66%
Montreal	\$ 479 571	5.9	23.5	\$ 23 979	40.9	26.1	\$ 1 977	33.7	1.5	5.0	30.1	\$ 97 796	\$ 70 383	56%
Vancouver	\$ 1 254 055	5.6	18.5	\$ 250 811	347.5	106.6	\$ 5 171	71.6	3.0	7.6	62.9	\$ 215 354	\$ 86 614	64%
Calgary	\$ 451 583	2.3	7.3	\$ 22 579	30.4	27.1	\$ 1 862	25.1	0.5	1.1	32.6	\$ 92 089	\$ 89 071	73%
Edmonton	\$ 406 476	1.5	6.0	\$ 20 324	28.1	24.3	\$ 1 676	23.2	0.3	1.0	29.5	\$ 82 891	\$ 86 718	70%
Ottawa/Gatineau	\$ 608 652	6.7	29.1	\$ 35 865	50.0	25.4	\$ 2 510	35.0	1.9	6.8	29.2	\$ 122 953	\$ 86 060	67%
Quebec	\$ 327 885	2.5	11.6	\$ 16 394	27.1	20.0	\$ 1 352	22.4	0.4	1.7	22.8	\$ 66 864	\$ 72 484	60%
Winnipeg	\$ 373 048	2.7	12.7	\$ 18 652	28.5	21.9	\$ 1 538	23.5	0.4	1.6	25.0	\$ 76 074	\$ 78 530	67%
Hamilton	\$ 821 202	5.5	30.1	\$ 57 120	76.2	29.6	\$ 3 386	45.2	1.9	8.7	31.3	\$ 164 016	\$ 89 957	70%
Victoria	\$ 1 002 520	4.6	21.9	\$ 200 504	327.3	61.6	\$ 4 134	67.5	2.3	9.6	61.3	\$ 172 159	\$ 73 517	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	\$ 475 304	3.0	10.0	\$ 23 765	37.3	25.4	\$ 1 960	30.7	0.7	1.6	29.4	\$ 96 926	\$ 76 518	9%	\$ 2 005
Toronto	\$ 669 593	2.8	10.1	\$ 41 959	58.0	28.8	\$ 2 761	38.1	0.7	2.0	31.5	\$ 134 726	\$ 86 875	15%	\$ 2 466
Montreal	\$ 369 004	3.5	15.0	\$ 18 450	31.5	22.5	\$ 1 521	25.9	0.6	2.2	26.2	\$ 75 249	\$ 70 383	11%	\$ 1 326
Vancouver	\$ 678 614	3.5	8.1	\$ 42 861	59.4	35.3	\$ 2 798	38.8	0.9	0.8	38.5	\$ 136 469	\$ 86 614	22%	\$ 2 152
Calgary	\$ 247 705	0.3	1.3	\$ 12 385	16.7	18.6	\$ 1 021	13.8	0.0	-0.2	23.0	\$ 50 513	\$ 89 071	14%	\$ 1 577
Edmonton	\$ 228 067	1.7	5.9	\$ 11 403	15.8	15.8	\$ 940	13.0	0.2	0.6	19.6	\$ 46 509	\$ 86 718	12%	\$ 1 365
Ottawa/Gatineau	\$ 379 509	5.4	17.9	\$ 18 975	26.5	18.1	\$ 1 565	21.8	0.9	2.6	21.1	\$ 77 391	\$ 86 060	9%	\$ 1 786
Quebec	\$ 232 290	1.8	9.5	\$ 11 615	19.2	16.0	\$ 958	15.9	0.2	0.9	18.4	\$ 47 370	\$ 72 484	9%	\$ 1 156
Winnipeg	\$ 237 594	3.1	5.4	\$ 11 880	18.2	17.5	\$ 980	15.0	0.3	0.0	20.4	\$ 48 451	\$ 78 530	6%	\$ 1 400
Hamilton	\$ 616 524	4.4	21.6	\$ 36 652	48.9	22.4	\$ 2 542	33.9	1.1	4.6	25.0	\$ 124 474	\$ 89 957	11%	\$ 1 968
Victoria	\$ 558 722	4.8	12.8	\$ 30 872	50.4	32.8	\$ 2 304	37.6	1.4	2.7	38.9	\$ 113 307	\$ 73 517	14%	\$ 2 076

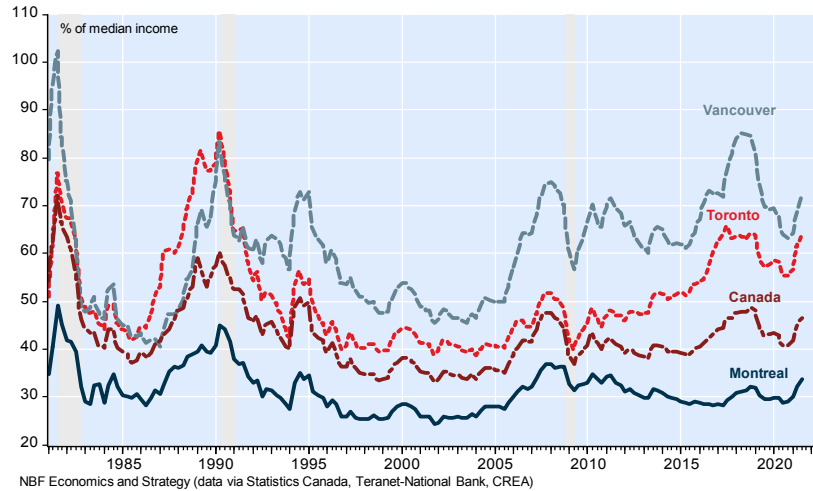
Table 3

	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	\$ 914 100	4.8	20.1	\$ 66 410	104.1	49.3	\$ 3 769	59.1	2.3	7.9	50.4	\$ 181 963	\$ 76 518	59%
Toronto	\$ 1 195 754	4.5	21.0	\$ 239 151	330.3	64.4	\$ 4 930	68.1	2.3	9.3	52.3	\$ 205 342	\$ 86 875	52%
Montreal	\$ 524 515	6.3	25.1	\$ 27 452	46.8	28.0	\$ 2 163	36.9	1.8	5.9	32.2	\$ 106 699	\$ 70 383	45%
Vancouver	\$ 1 558 535	6.1	20.9	\$ 311 707	431.9	147.2	\$ 6 426	89.0	4.1	11.1	75.7	\$ 267 641	\$ 86 614	42%
Calgary	\$ 518 286	2.6	8.2	\$ 26 829	36.1	30.1	\$ 2 137	28.8	0.6	1.5	36.1	\$ 105 495	\$ 89 071	59%
Edmonton	\$ 434 867	1.5	6.0	\$ 21 743	30.1	25.6	\$ 1 793	24.8	0.3	1.1	30.9	\$ 88 680	\$ 86 718	57%
Ottawa/Gatineau	\$ 661 025	6.9	30.3	\$ 41 102	57.3	27.4	\$ 2 726	38.0	2.2	7.7	31.3	\$ 133 071	\$ 86 060	58%
Quebec	\$ 339 134	2.6	11.9	\$ 16 957	28.1	20.4	\$ 1 398	23.1	0.4	1.8	23.1	\$ 69 158	\$ 72 484	51%
Winnipeg	\$ 378 985	2.6	13.3	\$ 18 949	29.0	21.8	\$ 1 563	23.9	0.4	1.7	25.0	\$ 77 284	\$ 78 530	61%
Hamilton	\$ 877 264	5.6	31.1	\$ 62 726	83.7	32.0	\$ 3 617	48.3	2.1	9.6	33.2	\$ 174 847	\$ 89 957	60%
Victoria	\$ 1 072 800	4.5	23.4	\$ 214 560	350.2	68.2	\$ 4 423	72.2	2.5	11.0	64.4	\$ 184 228	\$ 73 517	49%

Canadian perspective on housing affordability

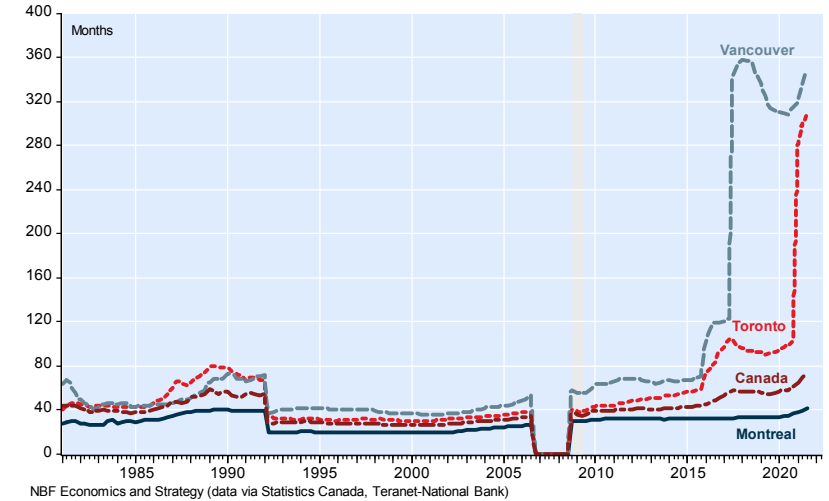
Canada : Perspective on housing affordability

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



Canada: Perspective on housing affordability

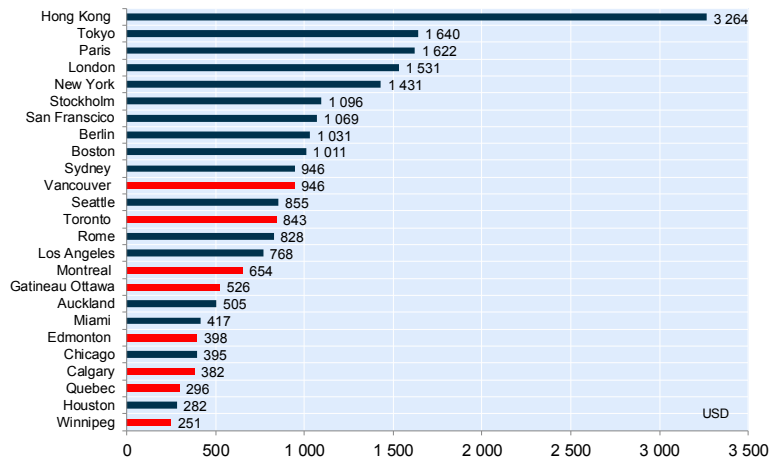
Number of months required to accumulate the minimum down-payment assuming a 10% saving rate



Global perspective on housing affordability

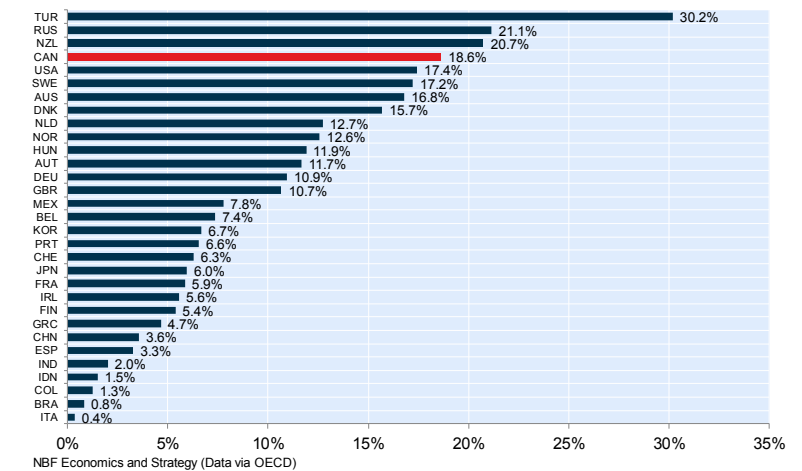
World: Home prices do not seem extreme in Canada

Price per square feet in USD for downtown living* (May 2021)



World: Perspective on home price growth

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



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 and apply a Hodrick–Prescott filter to smooth short-term fluctuations.

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.

Economics and Strategy

Montreal Office

514-879-2529

Stéfane Marion

Chief Economist and Strategist

stefane.marion@nbc.ca

Kyle Dahms

Economist

kyle.dahms@nbc.ca

Alexandra Ducharme

Economist

alexandra.ducharme@nbc.ca

Matthieu Arseneau

Deputy Chief Economist

matthieu.arseneau@nbc.ca

Daren King

Economist

daren.king@nbc.ca

Angelo Katsoras

Geopolitical Analyst

angelo.katsoras@nbc.ca

Paul-André Pinonnault

Senior Economist

paulandre.pinonnault@nbc.ca

Jocelyn Paquet

Economist

jocelyn.paquet@nbc.ca

Toronto Office

416-869-8598

Warren Lovely

Chief Rates and Public Sector Strategist

warren.lovely@nbc.ca

Taylor Schleich

Rates Strategist

taylor.schleich@nbc.ca

Alpa Atha

Fixed Income Economist

alpa.atha@nbc.ca

General

This Report was prepared by National Bank Financial, Inc. (NBF), (a Canadian investment dealer, member of IIROC), an indirect wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on the Toronto Stock Exchange.

The particulars contained herein were obtained from sources which we believe to be reliable but are not guaranteed by us and may be incomplete and may be subject to change without notice. The information is current as of the date of this document. Neither the author nor NBF assumes any obligation to update the information or advise on further developments relating to the topics or securities discussed. The opinions expressed are based upon the author(s) analysis and interpretation of these particulars and are not to be construed as a solicitation or offer to buy or sell the securities mentioned herein, and nothing in this Report constitutes a representation that any investment strategy or recommendation contained herein is suitable or appropriate to a recipient's individual circumstances. In all cases, investors should conduct their own investigation and analysis of such information before taking or omitting to take any action in relation to securities or markets that are analyzed in this Report. The Report alone is not intended to form the basis for an investment decision, or to replace any due diligence or analytical work required by you in making an investment decision.

This Report is for distribution only under such circumstances as may be permitted by applicable law. This Report is not directed at you if NBF or any affiliate distributing this Report is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that NBF is permitted to provide this Report to you under relevant legislation and regulations.

National Bank of Canada Financial Markets is a trade name used by National Bank Financial and National Bank of Canada Financial Inc.

Canadian Residents

NBF or its affiliates may engage in any trading strategies described herein for their own account or on a discretionary basis on behalf of certain clients and as market conditions change, may amend or change investment strategy including full and complete divestment. The trading interests of NBF and its affiliates may also be contrary to any opinions expressed in this Report.

NBF or its affiliates often act as financial advisor, agent or underwriter for certain issuers mentioned herein and may receive remuneration for its services. As well NBF and its affiliates and/or their officers, directors, representatives, associates, may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise. NBF and its affiliates may make a market in securities mentioned in this Report. This Report may not be independent of the proprietary interests of NBF and its affiliates.

This Report is not considered a research product under Canadian law and regulation, and consequently is not governed by Canadian rules applicable to the publication and distribution of research Reports, including relevant restrictions or disclosures required to be included in research Reports.

Housing Affordability Monitor

Economics and Strategy

UK Residents

This Report is a marketing document. This Report has not been prepared in accordance with EU legal requirements designed to promote the independence of investment research and it is not subject to any prohibition on dealing ahead of the dissemination of investment research. In respect of the distribution of this Report to UK residents, NBF has approved the contents (including, where necessary, for the purposes of Section 21(1) of the Financial Services and Markets Act 2000). This Report is for information purposes only and does not constitute a personal recommendation, or investment, legal or tax advice. NBF and/or its parent and/or any companies within or affiliates of the National Bank of Canada group and/or any of their directors, officers and employees may have or may have had interests or long or short positions in, and may at any time make purchases and/or sales as principal or agent, or may act or have acted as market maker in the relevant investments or related investments discussed in this Report, or may act or have acted as investment and/or commercial banker with respect hereto. The value of investments, and the income derived from them, can go down as well as up and you may not get back the amount invested. Past performance is not a guide to future performance. If an investment is denominated in a foreign currency, rates of exchange may have an adverse effect on the value of the investment. Investments which are illiquid may be difficult to sell or realise; it may also be difficult to obtain reliable information about their value or the extent of the risks to which they are exposed. Certain transactions, including those involving futures, swaps, and other derivatives, give rise to substantial risk and are not suitable for all investors. The investments contained in this Report are not available to retail customers and this Report is not for distribution to retail clients (within the meaning of the rules of the Financial Conduct Authority). Persons who are retail clients should not act or rely upon the information in this Report. This Report does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for the securities described herein nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This information is only for distribution to Eligible Counterparties and Professional Clients in the United Kingdom within the meaning of the rules of the Financial Conduct Authority. NBF is authorised and regulated by the Financial Conduct Authority and has its registered office at 70 St. Mary Axe, London, EC3A 8BE. NBF is not authorised by the Prudential Regulation Authority and the Financial Conduct Authority to accept deposits in the United Kingdom.

U.S. Residents

With respect to the distribution of this report in the United States of America, National Bank of Canada Financial Inc. ("NBCFI") which is regulated by the Financial Industry Regulatory Authority (FINRA) and a member of the Securities Investor Protection Corporation (SIPC), an affiliate of NBF, accepts responsibility for its contents, subject to any terms set out above.

To make further inquiry related to this report, or to effect any transaction, United States residents should contact their NBCFI registered representative.

This report is not a research report and is intended for Major U.S. Institutional Investors only.

This report is not subject to U.S. independence and disclosure standards applicable to research reports.

HK Residents

With respect to the distribution of this report in Hong Kong by NBC Financial Markets Asia Limited ("NBCFMA") which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 (dealing in securities) and Type 3 (leveraged foreign exchange trading) regulated activities, the contents of this report are solely for informational purposes. It has not been approved by, reviewed by, verified by or filed with any regulator in Hong Kong. Nothing herein is a recommendation, advice, offer or solicitation to buy or sell a product or service, nor an official confirmation of any transaction. None of the products issuers, NBCFMA or its affiliates or other persons or entities named herein are obliged to notify you of changes to any information and none of the foregoing assume any loss suffered by you in reliance of such information.

The content of this report may contain information about investment products which are not authorized by SFC for offering to the public in Hong Kong and such information will only be available to, those persons who are Professional Investors (as defined in the Securities and Futures Ordinance of Hong Kong ("SFO")). If you are in any doubt as to your status you should consult a financial adviser or contact us. This material is not meant to be marketing materials and is not intended for public distribution. Please note that neither this material nor the product referred to is authorized for sale by SFC. Please refer to product prospectus for full details.

There may be conflicts of interest relating to NBCFMA or its affiliates' businesses. These activities and interests include potential multiple advisory, transactional and financial and other interests in securities and instruments that may be purchased or sold by NBCFMA or its affiliates, or in other investment vehicles which are managed by NBCFMA or its affiliates that may purchase or sell such securities and instruments.

No other entity within the National Bank of Canada group, including National Bank of Canada and National Bank Financial Inc, is licensed or registered with the SFC. Accordingly, such entities and their employees are not permitted and do not intend to: (i) carry on a business in any regulated activity in Hong Kong; (ii) hold themselves out as carrying on a business in any regulated activity in Hong Kong; or (iii) actively market their services to the Hong Kong public.

Copyright

This Report may not be reproduced in whole or in part, or further distributed or published or referred to in any manner whatsoever, nor may the information, opinions or conclusions contained in it be referred to without in each case the prior express written consent of NBF.

Disclaimer: Teranet - National Bank House Price Index

The index data and related information and materials ("Index Data") are protected by copyright law, both individually and as a collective work or compilation, and by trade-mark law, and other applicable laws. National Bank of Canada ("NBC") and Teranet Enterprises Inc. ("Teranet") grant to you a limited non-exclusive, non-transferable license to view, copy and print this report, provided that all copies that you make must be solely for your non-commercial, personal use, and must retain all copyright and other notices that are required. Except as provided in the previous sentence, you may not (for either commercial or non-commercial use) use, distribute, sell, modify, transmit, revise, reverse engineer, republish, post or create derivative works (where applicable) of any content of this report without the prior written permission of Teranet and National Bank (who are referred to collectively herein as the "Index Data Providers"). Without limiting the generality of the foregoing, the Index Data and other Index Data Provider intellectual property contained in this report may not be used as a basis for any financial instruments or products (including, without limitation, passively managed funds and index-linked derivative securities), or used to verify or correct data in any other compilation of data or index, or used to create any other data or index (custom or otherwise), without the Index Data Providers' prior written permission. You acknowledge and agree that you will not acquire any rights or licenses in the content of this report. The Index Data is for informational purposes only, and the user of the information contained in the Index Data assumes the entire risk of any use made of the Index Data. You understand and agree that the Index Data is provided "as is" and neither NBC nor Teranet warrants the accuracy, completeness, non-infringement, originality, timeliness or any other characteristic of the Index Data. The Index Data is not an offer or recommendation to buy or sell or a solicitation of an offer to buy or sell any security or instrument or to participate in any particular trading strategy. Further, none of the Index Data is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Reproduction, redistribution or any other form of copying or transmission of the Index Data without the Index Data Providers' prior written consent is strictly prohibited. Without limiting the generality of the foregoing, the Index Data and other Index Data Provider intellectual property may not be used as a basis for any financial instruments or products (including, without limitation, passively managed funds and index-linked derivative securities), or used to verify or correct data in any other compilation of data or index, or used to create any other data or index (custom or otherwise), without the Index Data Providers' prior written permission. In no event shall any of NBC, Teranet, their respective affiliates, any of their or their direct or indirect information providers nor any other third party involved in, or related to, compiling, computing or creating any of the Index Data (collectively, the "Index Data Provider Parties") have any liability to any person or entity for any damages, whether direct, indirect, special, incidental, punitive, consequential (including, without limitation, loss of use, lost profits or revenues or any other economic loss) arising in any manner out of your use or inability to use any of the Index Data contained in this report, even if such party might have anticipated, or was advised or notified of, the possibility of such damages.