

Housing affordability deteriorated in every quarter of 2021

By Kyle Dahms & Alexandra Ducharme

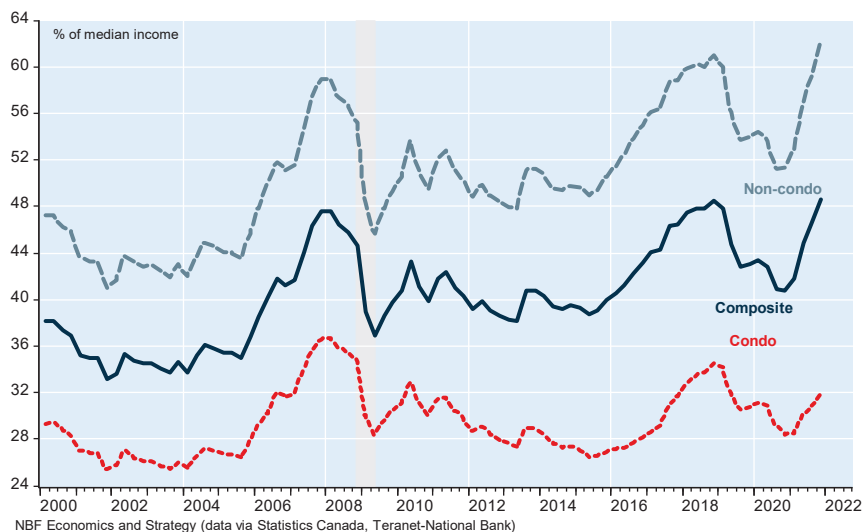
Housing affordability in Canada worsened by 2.1 points in Q4'21, marking a fourth consecutive quarterly deterioration. Over the past year, affordability has worsened at the fastest pace in more than 26 years. As a result, it would take 48.6% of income for a representative household to service the mortgage on a representative home in Canada (see chart on the left). This level is a bit more than the last cyclical high seen in 2018Q4 and marks the worst affordability since the mid-90's with Toronto, Hamilton, Ottawa and Halifax showing levels not seen since the start of this century. While home price growth had its fair share in contributing to declining affordability in Q4, the larger driver was rising mortgage interest rates. Our 5-year benchmark mortgage rate used by our affordability metrics rose 28bps in the last quarter of the year which was the largest one quarter change since 2017Q3 when the central bank raised the overnight rate twice in the same quarter. With investors now anticipating a more rapid increase in policy rates, our benchmark rate has increased by another 30 bps in the current quarter for a cumulative 100 bps since the 2020Q4 rate trough. All else being equal, such an increase would have translated into a 10.7% decline in purchasing power. However, homebuyers opted for variable rate mortgages in a record high proportion (53%) in the second half of 2021. By selecting this option instead of the typical 5-year fixed mortgage, mortgage holders increased their purchasing power by 10% in the fourth quarter. But this escape route is about to vanish in the coming months with the Bank of Canada policy rate on the rise (we expect a 125 basis points increase in 12-months).

HIGHLIGHTS:

- Canadian housing affordability deteriorated for a fourth consecutive quarter in Q4'21. The mortgage payment on a representative home as a percentage of income (MPPI) rose 2.1 points after a 1.7-point increase in Q3'21. Seasonally adjusted home prices increased 1.9% in Q4'21 from Q3'21; the benchmark mortgage rate (5-year term) rose 28bps, while median household income rose 0.8%.
- Affordability deteriorated in all the ten markets covered in Q4. On a sliding scale of markets from worst deterioration to least: Victoria, Toronto, Hamilton, Vancouver, Montreal, Québec, Calgary, Edmonton, Winnipeg, Ottawa-Gatineau (see chart on the right). This was the fourth consecutive quarter with a worsening in all markets. Countrywide, affordability deteriorated 1.1 pp in the condo portion vs. a 2.7 pp deterioration in the non-condo segment. See detailed statistics on page 12.

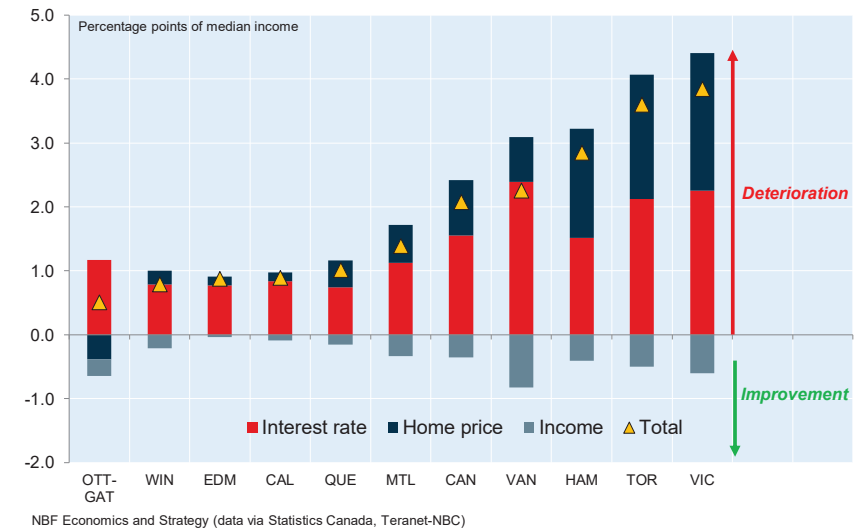
Canada : Perspective on housing affordability

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



Canada: Q4 change in housing affordability in 10 metropolitan areas

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



Housing Affordability Monitor

Economics and Strategy

Toronto

In Toronto, the final quarter of 2021 was marked by a sharp decline in housing affordability. The MPPI* increased 3.6 pp in the quarter to 67.3, its highest level since 1990. This deterioration was observable in both dwelling segments (MPPI* edged up +1.7 pp for condos and +4.0 pp for non-condos). This deterioration was in part attributable to higher home prices, which rose for the tenth consecutive quarter (+3.0%), while income rose 0.8%. Both condo prices and non-condo prices jumped in the quarter (+1.9% and +3.2%, respectively). For all types of dwellings, the price increases exceeded the respective urban composite average. On an annual basis, home prices in Toronto edged up 18.0%, surpassing the index's mean increase of 16.1%. An increase in interest rates also contributed to worsen affordability. Monthly mortgage payments amounted for 67.3% 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 (48.6%).*See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	72.4%	▲ +	4.0%	Q/Q
Condo	40.0%	▲ +	1.7%	Q/Q



Non-Condo

\$1,234,597

Price of the representative home in the metropolitan market

\$212,013

Household annual income needed to afford the representative home

340

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

32.4%

Premium for buying compared to the national urban composite



Condo

\$682,111

Price of the representative condo in the metropolitan market

\$137,145

Household annual income needed to afford the representative condo

59

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

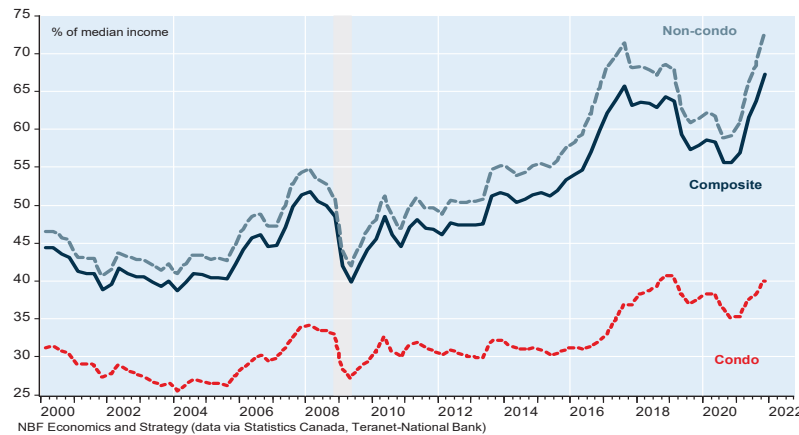
15.4%

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

Toronto : Perspective on housing affordability

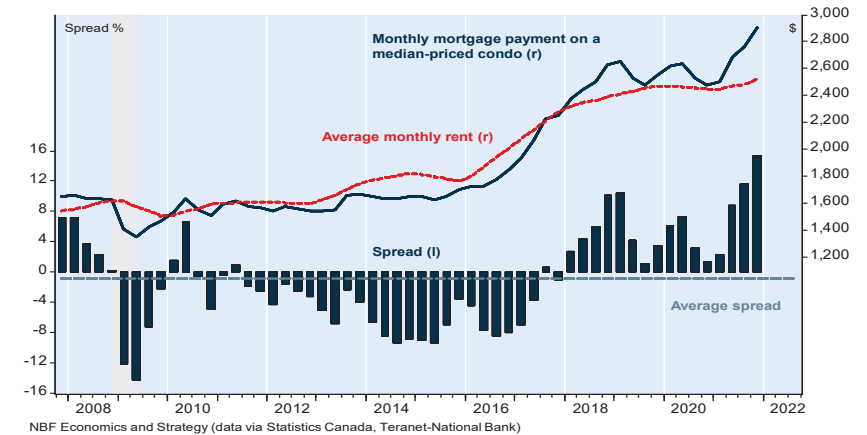
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

TORONTO



Toronto: Buying compared to renting

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



Housing Affordability Monitor

Economics and Strategy

Montreal

In the final quarter of 2021, the affordability of the housing market in Montreal deteriorated for the fifth consecutive quarter to reach its worst level since 2008. The deterioration stemmed from both condos and non-condos (MPPI* edged up 0.7 pp and 1.6 pp respectively), although the increases were all less than the composite average. On an annual basis, home prices in Montreal were up 18.6%, a deceleration from the previous quarter but still very high on a historical basis and above the urban composite (+16.1%). This, combined to higher interest rates, resulted in the fastest annual deterioration in affordability since 1995 (MPPI* up 6.0 pp), although this was still less than the urban composite (MPPI* up 7.8 pp in 12 months). All in all, despite important deteriorations, the Montreal housing market remains more affordable than the Canadian average thanks to lower price levels. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	38.5%	▲ +	1.6%	Q/Q
Condo	26.6%	▲ +	0.7%	Q/Q



Non-Condo

\$535,034

Price of the representative home in the metropolitan market

\$108,731

Household annual income needed to afford the representative home

48

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

-42.6%

Premium for buying compared to the national urban composite



Condo

\$370,392

Price of the representative condo in the metropolitan market

\$75,532

Household annual income needed to afford the representative condo

31

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

21.7%

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

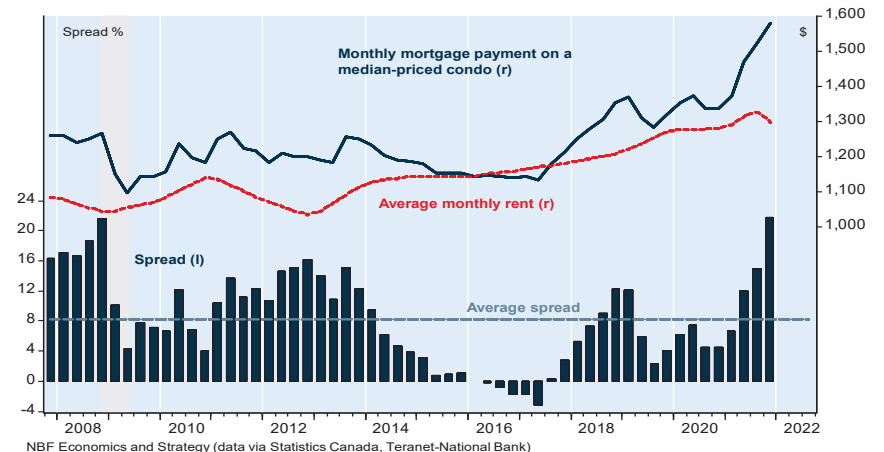
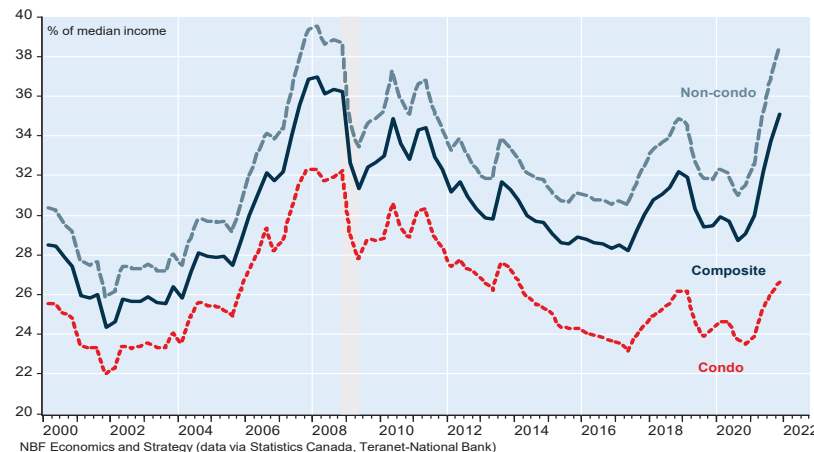
Montreal : Perspective on housing affordability

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

Montreal: Buying compared to renting

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

MONTREAL



Vancouver

Like the first three quarters of the year, the final quarter of 2021 was marked by a deterioration in Vancouver's housing affordability. Home prices increasing 1.0% from already high levels and rising interest rates could not be offset by a 1.2% increase in income. The MPPI* deteriorated +2.3 pp on a quarterly basis, keeping Vancouver as the least affordable city among Canada's urban markets. A mortgage payment now requires 73.9% of the median income, a 10-quarter high. The deterioration in affordability in Vancouver was slightly above the national average both for condos (+1.2 pp) and non-condos (+2.8 pp). On a 12-month basis, home prices in Vancouver were up 15.6%, below the urban composite. Still, elevated price levels and an increase in interest rates contributed to deteriorate the MPPI* 10.6 pp in a year, above the national average and the highest annual deterioration since the second quarter of 2018. *See tables page 12.

Mortgage payment as a % of income (MPPI)

Non-Condo	91.9%	▲ +	2.8%	Q/Q
Condo	39.9%	▲ +	1.2%	Q/Q



Non-Condo

\$1,572,237

Price of the representative home in the metropolitan market

\$269,994

Household annual income needed to afford the representative home

431

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

68.7%

Premium for buying compared to the national urban composite



Condo

\$683,650

Price of the representative condo in the metropolitan market

\$137,442

Household annual income needed to afford the representative condo

59

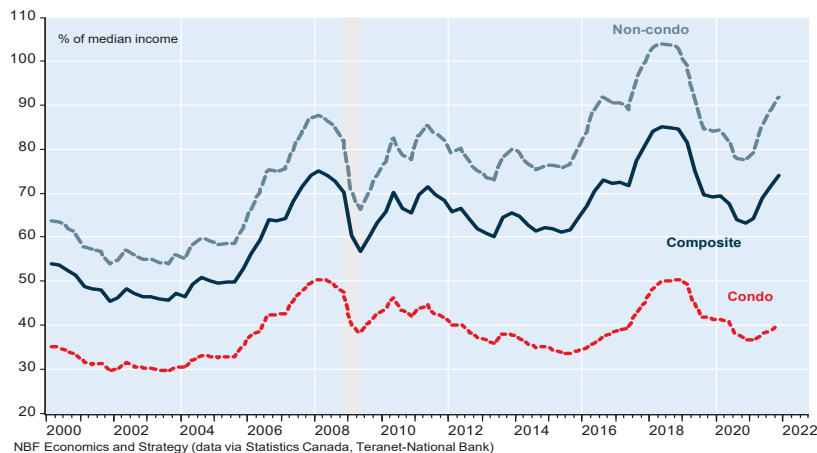
Months of saving required for the down payment (saving rate of 10%)

33.2%

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

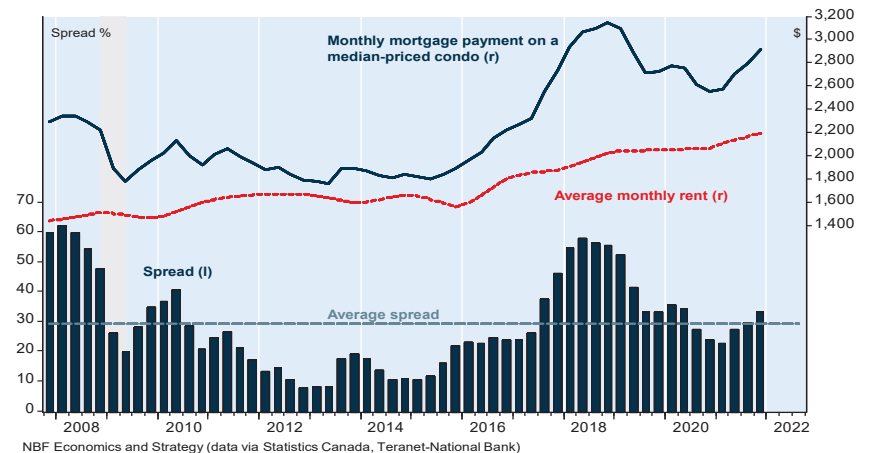
Vancouver : Perspective on housing affordability

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

Housing Affordability Monitor

Economics and Strategy

Calgary

In Calgary, home prices increased 0.6% in the quarter, less than half the urban composite price growth (+1.9%). This, combined with increasing interest rates and a weak increase in median income (+0.4%), resulted in a 0.9 pp increase in the MPPI*. As a result, a mortgage payment now requires 26.0% of the median income in Calgary, a print still well below both the average since 2000 for the city (32.5%) and the urban composite (48.6%). The deterioration stemmed mainly from non-condos (+1.1 pp), but condos were not spared (MPPI* up 0.3 pp). On an annual basis, the affordability of the housing market in Calgary as measured by the MPPI* worsened 2.8 pp, the fastest deterioration since the second quarter of 2010, but 5.0 pp below the urban composite. Both condos (+0.7 pp) and non-condos (+3.5 pp) registered increases in their MPPI* on a 12-month basis. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	29.9%	▲ +	1.1%	Q/Q
Condo	14.1%	▲ +	0.3%	Q/Q



Non-Condo

\$522,003

Price of the representative home in the metropolitan market

\$106,213

Household annual income needed to afford the representative home

37

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

-44.0%

Premium for buying compared to the national urban composite



Condo

\$245,432

Price of the representative condo in the metropolitan market

\$50,050

Household annual income needed to afford the representative condo

16

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

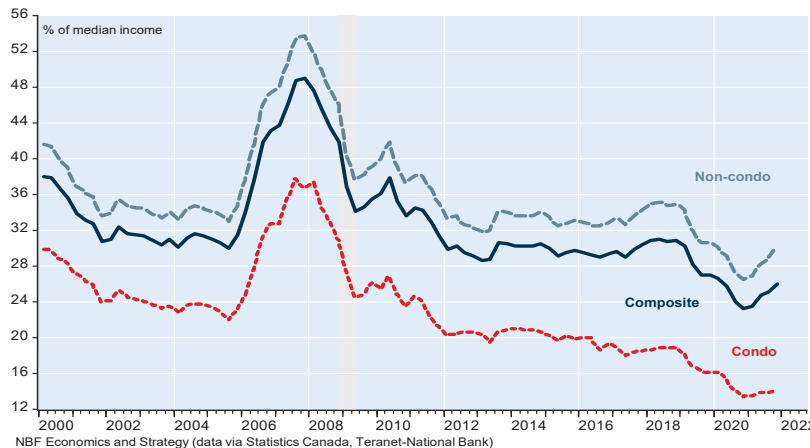
-33.6%

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

Calgary : Perspective on housing affordability

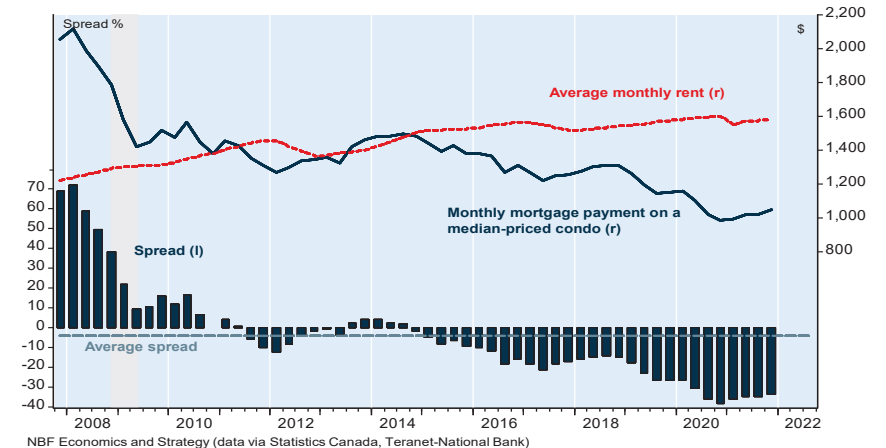
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

CALGARY



Calgary: Buying compared to renting

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



Housing Affordability Monitor

Economics and Strategy

Edmonton

Despite a median income almost unchanged from the previous quarter (+0.2%), Edmonton registered a moderate increase in its MPPI*, attributable to already low home price levels rising only 0.6% in the quarter. The MPPI* still stood well below its average since 2000 (24.0% in the fourth quarter of 2021, compared to 29.4% historically). Most of the deterioration in affordability is attributable to non-condos, for which the MPPI* rose 1.0 pp in the quarter compared to a 0.2 pp increase for condos. 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, and was still the least expensive city in which to buy a condo. *See tables page 12.

Mortgage payment as a % of income (MPPI)

Non-Condo	25.8%	▲ +	1.0%	Q/Q
Condo	13.2%	▲ +	0.2%	Q/Q



Non-Condo

\$438,807

Price of the representative home in the metropolitan market

\$89,484

Household annual income needed to afford the representative home

30

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

-52.9%

Premium for buying compared to the national urban composite



Condo

\$224,521

Price of the representative condo in the metropolitan market

\$45,785

Household annual income needed to afford the representative condo

15

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

-28.5%

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

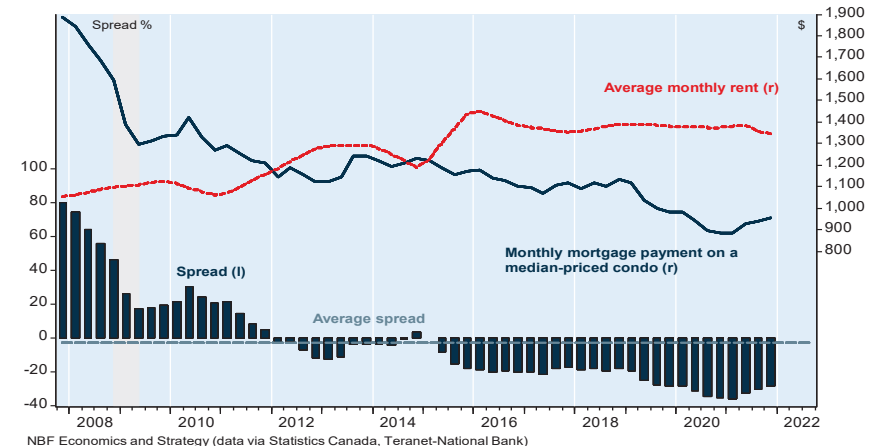
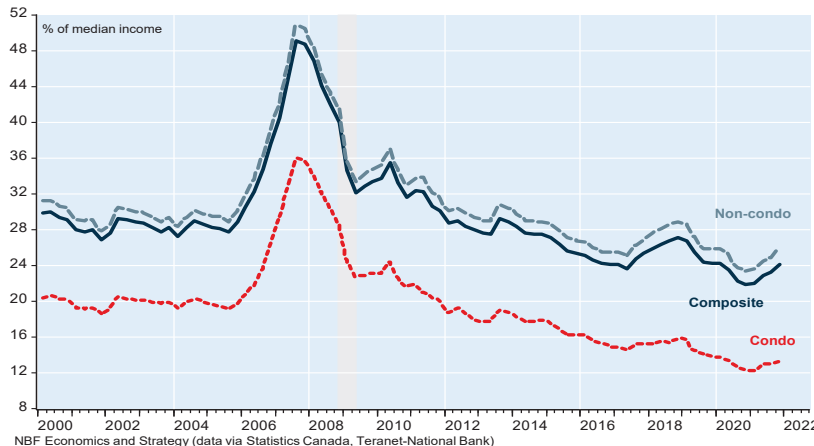
Edmonton : Perspective on housing affordability

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



Housing Affordability Monitor

Economics and Strategy

Ottawa/Gatineau

Ottawa/Gatineau was the only urban region covered that registered a decrease in home prices in the quarter (-1.1%) a first decline since 2016. Despite the price cooldown and a 0.7% increase in the median income, housing affordability deteriorated slightly in the quarter (MPPI* up 0.5 pp, the lowest among markets covered), driven by an increase in interest rates. As a result, the MPPI* reached 35.5%, its highest level since 1995. The MPPI* increased equally for both condos and non-condos, both of which were below the increase of the urban composite. Still, on an annual basis, home prices were up 19.3%, well above the urban composite (+16.1%). The deterioration in affordability was thus more important over this period (MPPI* up +6.6 pp for all dwellings, +3.0 pp for condos and +7.3 for non-condos). These figures all show better affordability than for the composite index. *See tables page 12.

Mortgage payment as a % of income (MPPI)

Non-Condo	38.6%	▲ +	0.5%	Q/Q
Condo	22.4%	▲ +	0.5%	Q/Q



Non-Condo

\$652,322

Price of the representative home in the metropolitan market

\$131,390

Household annual income needed to afford the representative home

56

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

-30.0%

Premium for buying compared to the national urban composite



Condo

\$379,013

Price of the representative condo in the metropolitan market

\$77,290

Household annual income needed to afford the representative condo

26

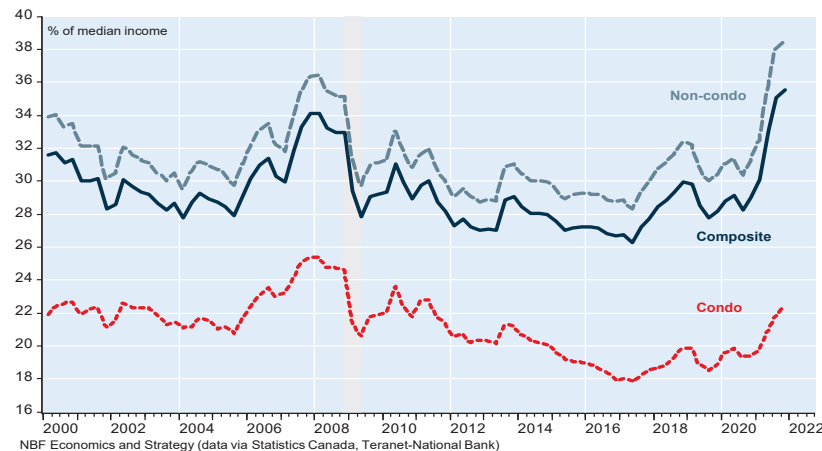
Months of saving required for the down payment (saving rate of 10%)

-8.5%

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

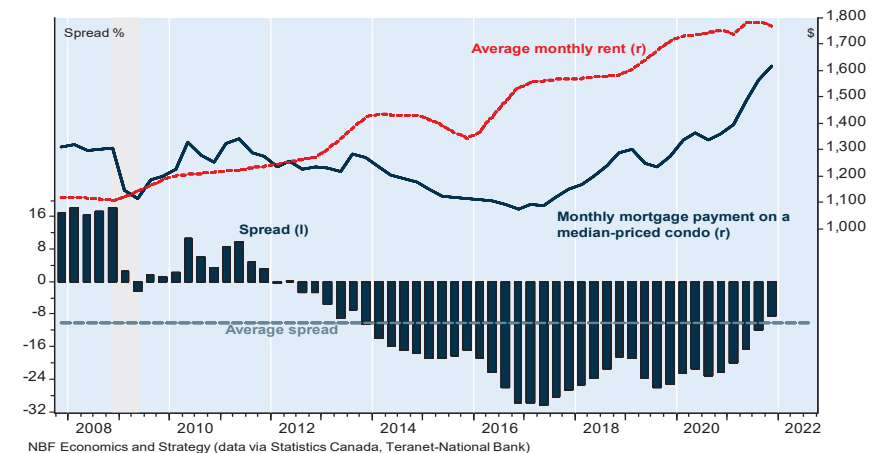
Ottawa/Gatineau : Perspective on housing affordability

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



OTTAWA/GA

Housing Affordability Monitor

Economics and Strategy

Quebec City

Housing affordability continued to deteriorate during the fourth quarter of the year in Québec City, with the MPPI* increasing +1.0 pp, half the urban composite (+2.1 pp). This development caused affordability in Québec City to reach its early 2019 level and exceed by 5 ticks its long-term average. The MPPI* now stands at 23.3% in the city, which remains the most affordable market among the urban areas covered. The deterioration can be explained by home prices rising 1.9% and increasing interest rates, factors that could not be offset by a 0.7% improvement in median income. The deterioration in affordability stemmed from both condos and other dwellings, which registered rises of their MPPI* of +0.5 pp and +1.1 pp, respectively. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	24.2%	▲ +	1.1%	Q/Q
Condo	16.2%	▲ +	0.5%	Q/Q



Non-Condo

\$346,834

Price of the representative home in the metropolitan market

\$70,728

Household annual income needed to afford the representative home

28

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

-62.8%

Premium for buying compared to the national urban composite



Condo

\$232,825

Price of the representative condo in the metropolitan market

\$47,479

Household annual income needed to afford the representative condo

19

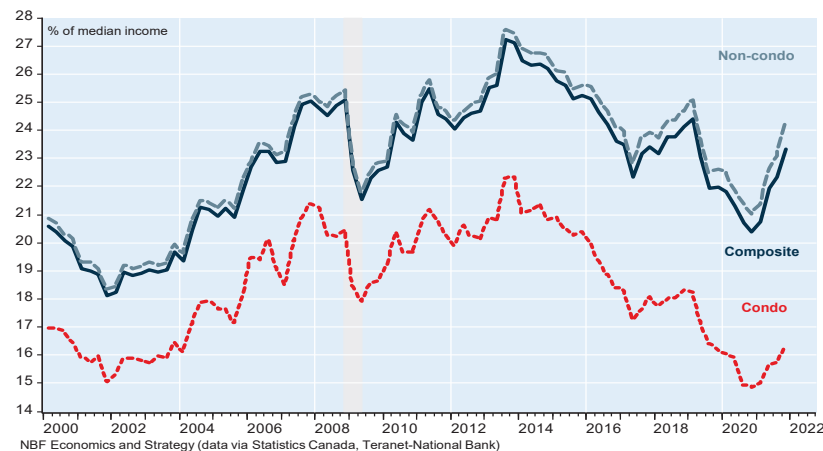
Months of saving required for the down payment (saving rate of 10%)

-14.8%

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

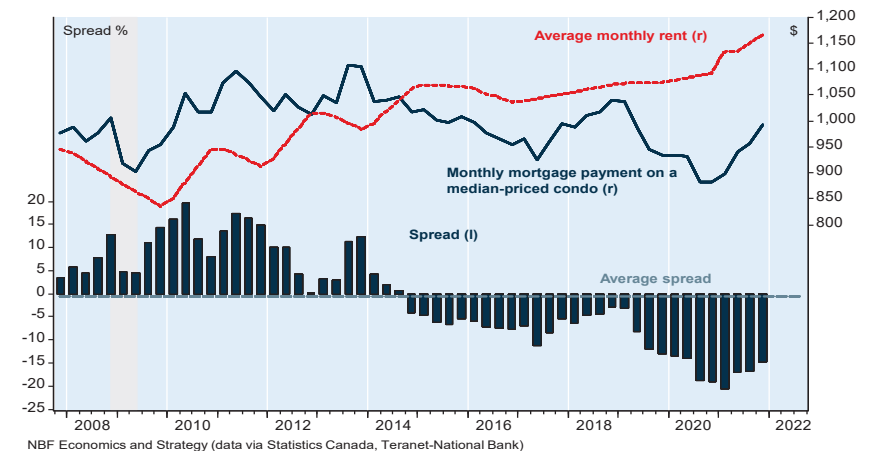
Quebec city: Perspective on housing affordability

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

Housing Affordability Monitor

Economics and Strategy

Winnipeg

In Winnipeg, housing affordability registered the second slowest quarterly deterioration, as the MPPI* increased 0.8 pp to 24.4%. This was the fourth consecutive quarterly deterioration for housing affordability in Winnipeg, but the MPPI* remained 6 ticks below its long-term average. The moderate deterioration came from a modest 0.9% increase in home prices and increase in interest rates only partly offset by a 0.9% growth in median income. Both condos (+0.1 pp) and non-condos (+0.9 pp) saw a deterioration in affordability in the quarter, and from a year before (+0.5 pp and +3.1 pp respectively). *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	24.8%	▲ +	0.9%	Q/Q
Condo	15.1%	▲ +	0.1%	Q/Q



Non-Condo

\$383,220

Price of the representative home in the metropolitan market

\$78,148

Household annual income needed to afford the representative home

29

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

-58.9%

Premium for buying compared to the national urban composite



Condo

\$232,595

Price of the representative condo in the metropolitan market

\$47,432

Household annual income needed to afford the representative condo

18

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

-29.1%

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

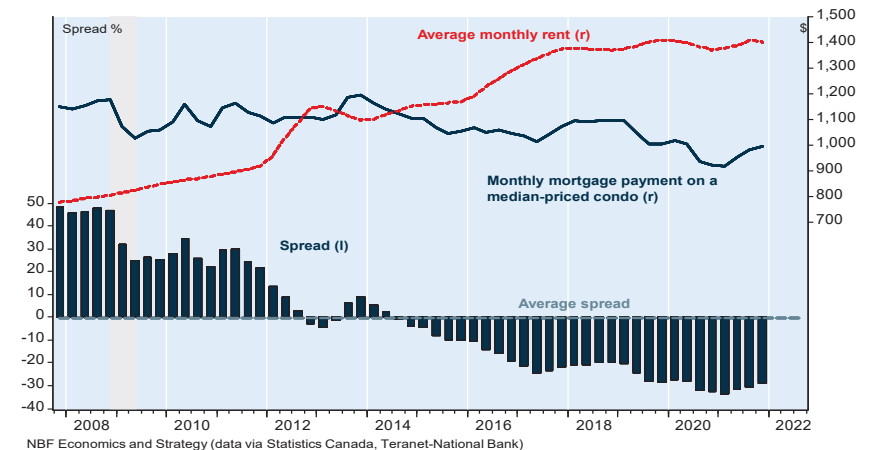
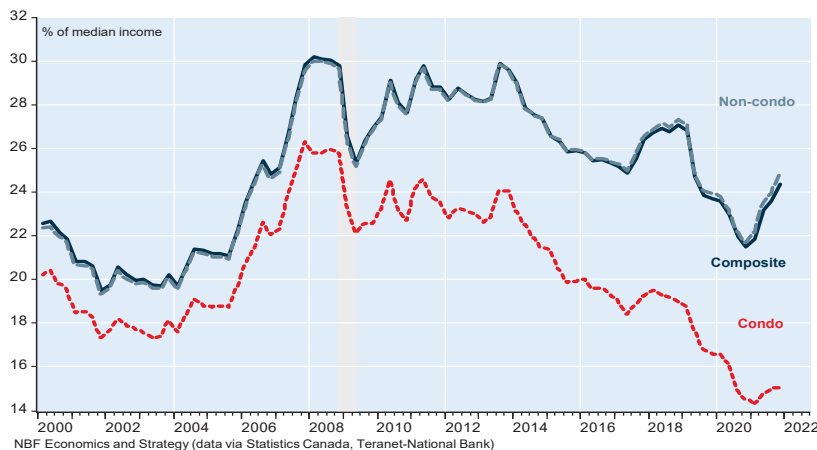
Winnipeg: Perspective on housing affordability

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

Winnipeg: Buying compared to renting

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

WINNIPEG



Housing Affordability Monitor

Economics and Strategy

Hamilton

Hamilton recorded a 2.8 pp deterioration in its MPPI* in the quarter, exceeding the variation of the urban composite. On an annual basis, the deterioration in affordability (+10.8 pp) brought the MPPI* to its highest level ever recorded. Mortgage payments indeed took up 48.3% of the median pre-tax household income, which is the closest to the urban composite (48.6%) the housing market in Hamilton has ever been. The annual deterioration can be explained by home prices rising 26.0% in the year, the fastest growth among markets covered for the third consecutive quarter. On a quarterly basis, prices rose above the pace of the urban composite in all segments (+3.2% for condos, +3.8% for non-condos and +3.8% for the market as a whole), while median income rose 0.9% and interest rates grew. 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	51.6%	▲ +	3.1%	Q/Q
Condo	36.0%	▲ +	1.9%	Q/Q



**Non-
Condo**

\$911,321
Price of the representative home in the metropolitan market

\$181,426
Household annual income needed to afford the representative home

88
Months of saving required for the down payment (saving rate of 10%)

-2.2%
Premium for buying compared to the national urban composite



Condo

\$636,091
Price of the representative condo in the metropolitan market

\$128,254
Household annual income needed to afford the representative condo

51
Months of saving required for the down payment (saving rate of 10%)

34.8%
Premium/discount for buying compared to renting a two-bedroom condo in Hamilton

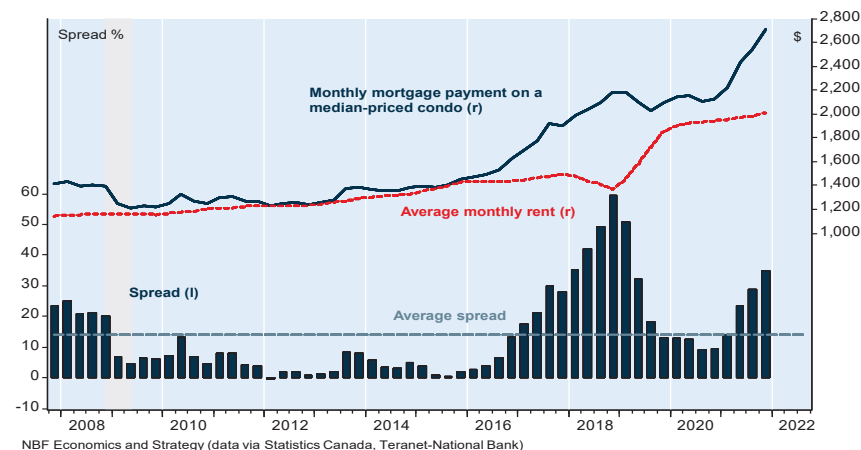
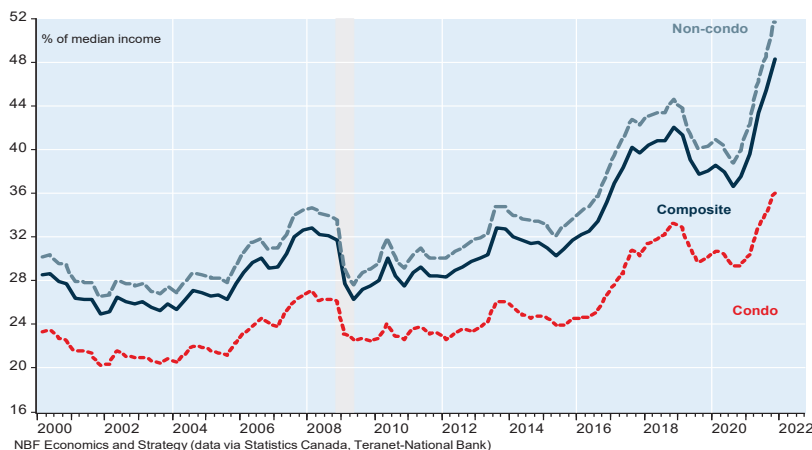
Hamilton: Perspective on housing affordability

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

Hamilton: Buying compared to renting

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

HAMILTON



Victoria

For the second consecutive quarter, Victoria registered the largest annual deterioration in the MPPI* of all the markets covered, (+13.4 pp). As a result, the MPPI* reached 71.3%, the second highest among markets covered after Vancouver and the highest level for this city since the first quarter of 2019. On a quarterly basis, the +3.8 pp increase in the MPPI* also surpassed that of the composite average (+2.1 pp) as home prices grew faster (\$32.0 K vs \$13.4 K), a difference that a slightly higher income growth could not offset. The worsening of affordability was above the urban composite in both segments of the market, with the MPPI* rising +2.5 pp for condos and +4.0 pp for non-condos. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	76.2%	▲ +	4.0%	Q/Q
Condo	40.0%	▲ +	2.5%	Q/Q



Non-Condo

\$1,105,517

Price of the representative home in the metropolitan market

\$189,846

Household annual income needed to afford the representative home

358

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

18.6%

Premium for buying compared to the national urban composite



Condo

\$580,689

Price of the representative condo in the metropolitan market

\$117,551

Household annual income needed to afford the representative condo

53

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

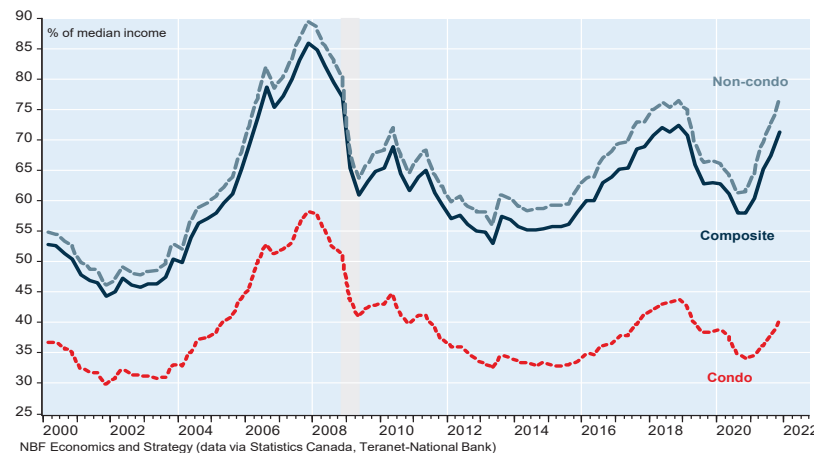
17.9%

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

Victoria: Perspective on housing affordability

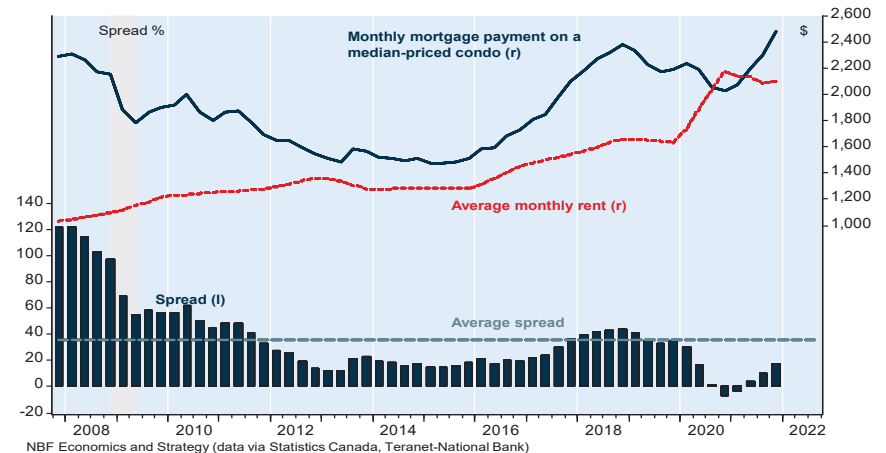
Monthly mortgage payment on median home price (25 year amortization, 5-year term)

VICTORIA



Victoria: Buying compared to renting

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



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	\$ 732,628	1.9	16.1	\$ 48,263	75.2	37.4	\$ 3,121	48.6	2.1	7.8	40.4	\$ 146,904	\$ 77,062	68%
Toronto	\$ 1,147,729	3.0	18.0	\$ 229,546	315.9	60.7	\$ 4,890	67.3	3.6	11.7	49.4	\$ 197,095	\$ 87,209	66%
Montreal	\$ 487,947	1.8	18.6	\$ 24,397	41.2	26.3	\$ 2,079	35.1	1.4	6.0	30.2	\$ 99,505	\$ 71,106	56%
Vancouver	\$ 1,264,779	1.0	15.6	\$ 252,956	346.9	109.3	\$ 5,389	73.9	2.3	10.6	63.0	\$ 217,196	\$ 87,503	64%
Calgary	\$ 453,856	0.6	7.5	\$ 22,693	30.5	27.1	\$ 1,934	26.0	0.9	2.8	32.5	\$ 92,552	\$ 89,256	73%
Edmonton	\$ 408,987	0.6	4.8	\$ 20,449	28.2	24.4	\$ 1,743	24.0	0.9	2.3	29.4	\$ 83,403	\$ 87,047	70%
Ottawa/Gatineau	\$ 601,331	-1.1	19.3	\$ 35,133	48.7	25.7	\$ 2,562	35.5	0.5	6.6	29.3	\$ 121,539	\$ 86,496	67%
Quebec	\$ 334,452	1.9	10.9	\$ 16,723	27.4	20.1	\$ 1,425	23.3	1.0	2.9	22.8	\$ 68,203	\$ 73,306	60%
Winnipeg	\$ 376,342	0.9	11.2	\$ 18,817	28.6	21.9	\$ 1,603	24.4	0.8	2.9	25.0	\$ 76,746	\$ 78,937	67%
Hamilton	\$ 852,438	3.8	26.0	\$ 60,244	80.1	30.2	\$ 3,632	48.3	2.8	10.8	31.5	\$ 170,051	\$ 90,303	70%
Victoria	\$ 1,034,292	3.2	20.4	\$ 206,858	334.7	64.7	\$ 4,407	71.3	3.8	13.4	61.4	\$ 177,615	\$ 74,176	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	\$ 479,720	1.0	9.2	\$ 23,986	37.4	25.5	\$ 2,044	31.8	1.1	3.4	29.4	\$ 97,827	\$ 77,062	9%	\$ 2,028
Toronto	\$ 682,111	1.9	10.8	\$ 43,211	59.5	29.2	\$ 2,906	40.0	1.7	4.8	31.6	\$ 137,145	\$ 87,209	15%	\$ 2,519
Montreal	\$ 370,392	0.4	11.6	\$ 18,520	31.3	22.6	\$ 1,578	26.6	0.7	3.2	26.2	\$ 75,532	\$ 71,106	11%	\$ 1,296
Vancouver	\$ 683,650	0.9	7.9	\$ 43,365	59.5	35.5	\$ 2,913	39.9	1.2	3.3	38.5	\$ 137,442	\$ 87,503	22%	\$ 2,187
Calgary	\$ 245,432	-0.7	0.7	\$ 12,272	16.5	18.6	\$ 1,046	14.1	0.3	0.7	22.9	\$ 50,050	\$ 89,256	14%	\$ 1,575
Edmonton	\$ 224,521	-1.5	2.2	\$ 11,226	15.5	15.8	\$ 957	13.2	0.2	0.9	19.5	\$ 45,785	\$ 87,047	12%	\$ 1,338
Ottawa/Gatineau	\$ 379,013	-0.1	12.3	\$ 18,951	26.3	18.2	\$ 1,615	22.4	0.5	3.0	21.1	\$ 77,290	\$ 86,496	9%	\$ 1,765
Quebec	\$ 232,825	0.3	6.1	\$ 11,641	19.1	16.1	\$ 992	16.2	0.5	1.4	18.4	\$ 47,479	\$ 73,306	9%	\$ 1,165
Winnipeg	\$ 232,595	-1.9	1.5	\$ 11,630	17.7	17.5	\$ 991	15.1	0.1	0.5	20.3	\$ 47,432	\$ 78,937	6%	\$ 1,398
Hamilton	\$ 636,091	3.2	20.4	\$ 38,609	51.3	22.7	\$ 2,710	36.0	1.9	6.7	25.1	\$ 128,254	\$ 90,303	11%	\$ 2,010
Victoria	\$ 580,689	4.0	15.3	\$ 33,069	53.5	33.1	\$ 2,474	40.0	2.5	6.1	38.9	\$ 117,551	\$ 74,176	14%	\$ 2,099

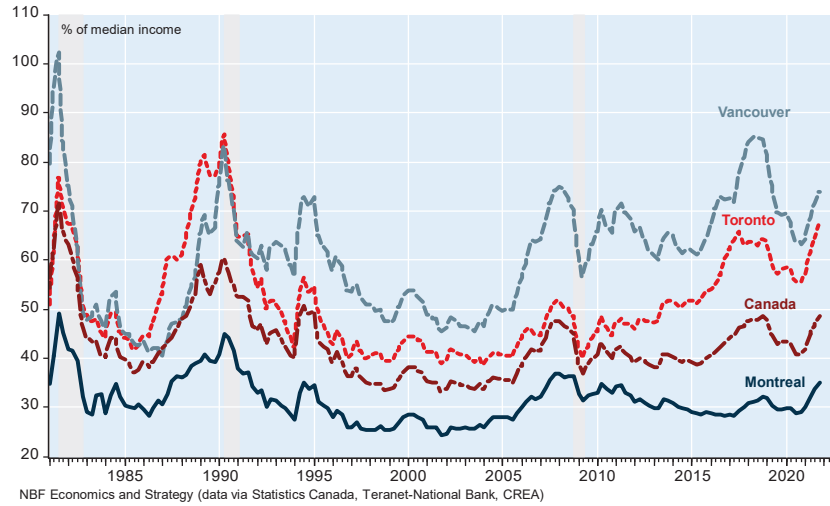
Table 3

	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	\$ 932,216	2.0	17.3	\$ 68,222	106.2	50.0	\$ 3,972	61.8	2.7	10.5	50.5	\$ 185,463	\$ 77,062	59%
Toronto	\$ 1,234,597	3.2	19.1	\$ 246,919	339.8	67.6	\$ 5,260	72.4	4.0	13.2	52.6	\$ 212,013	\$ 87,209	52%
Montreal	\$ 535,034	2.0	19.9	\$ 28,503	48.1	28.2	\$ 2,280	38.5	1.6	6.9	32.3	\$ 108,731	\$ 71,106	45%
Vancouver	\$ 1,572,237	1.0	17.3	\$ 314,447	431.2	150.4	\$ 6,699	91.9	2.8	14.4	75.8	\$ 269,994	\$ 87,503	42%
Calgary	\$ 522,003	0.8	8.6	\$ 27,200	36.6	30.2	\$ 2,224	29.9	1.1	3.5	36.0	\$ 106,213	\$ 89,256	59%
Edmonton	\$ 438,807	0.9	5.1	\$ 21,940	30.2	25.6	\$ 1,870	25.8	1.0	2.5	30.9	\$ 89,484	\$ 87,047	57%
Ottawa/Gatineau	\$ 652,322	-1.2	20.0	\$ 40,232	55.8	27.7	\$ 2,779	38.6	0.5	7.3	31.4	\$ 131,390	\$ 86,496	58%
Quebec	\$ 346,834	2.1	11.6	\$ 17,342	28.4	20.5	\$ 1,478	24.2	1.1	3.2	23.2	\$ 70,728	\$ 73,306	51%
Winnipeg	\$ 383,220	1.1	12.0	\$ 19,161	29.1	21.9	\$ 1,633	24.8	0.9	3.1	25.0	\$ 78,148	\$ 78,937	61%
Hamilton	\$ 911,321	3.8	26.7	\$ 66,132	87.9	32.6	\$ 3,883	51.6	3.1	11.7	33.4	\$ 181,426	\$ 90,303	60%
Victoria	\$ 1,105,517	3.1	21.3	\$ 221,103	357.7	71.4	\$ 4,710	76.2	4.0	14.7	64.5	\$ 189,846	\$ 74,176	49%

Canadian perspective on housing affordability

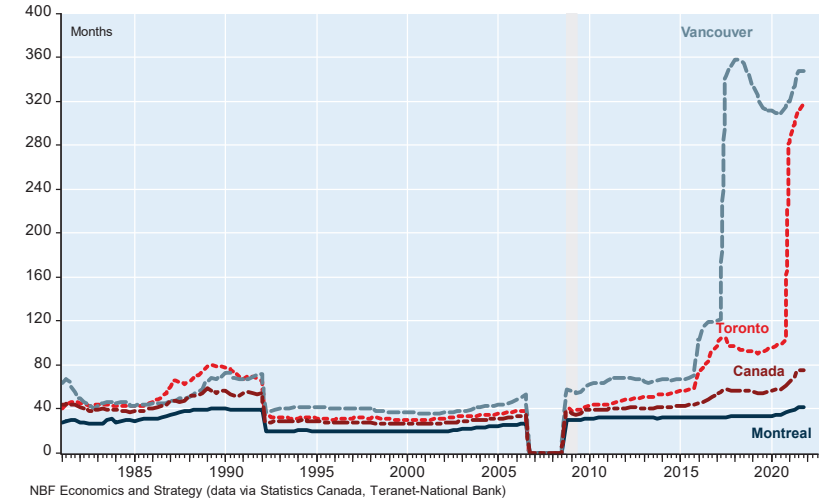
Canada : Perspective on housing affordability

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



Canada: Perspective on housing affordability

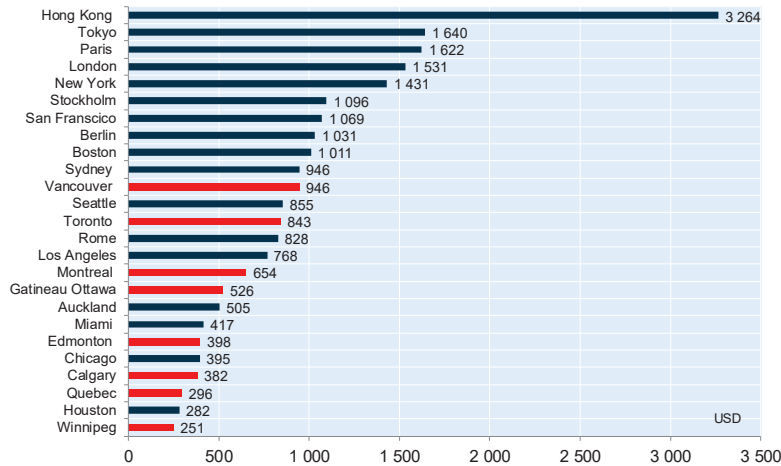
Number of months required to accumulate the minimum down-payment assuming a 10% saving rate



Global perspective on housing affordability

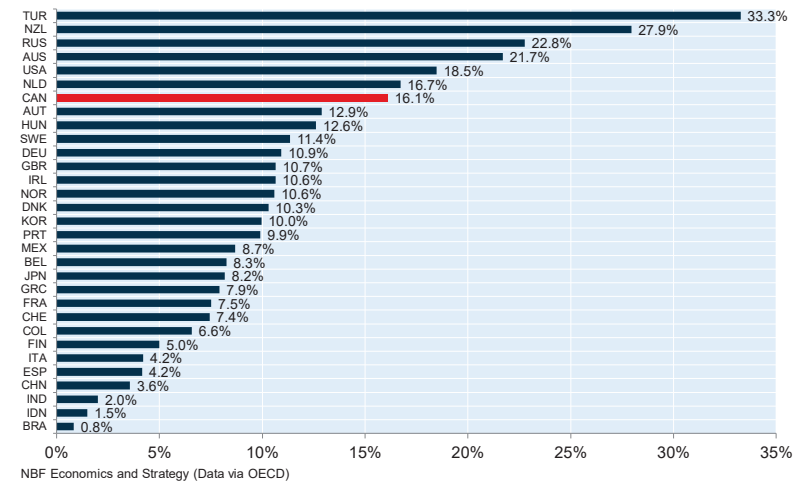
World: Home prices do not seem extreme in Canada

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.

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Housing Affordability Monitor

Economics and Strategy

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