



Worst decline for housing affordability in a generation

By Matthieu Arseneau, Kyle Dahms & Alexandra Ducharme

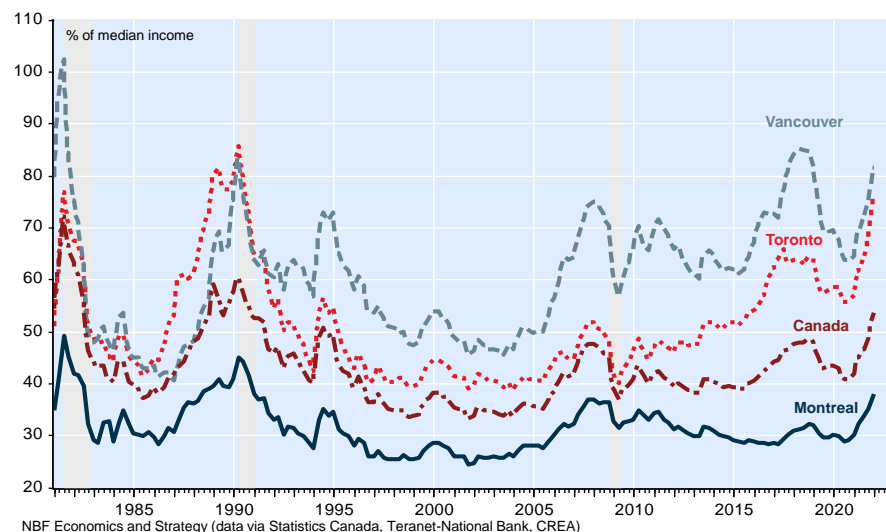
Housing affordability in Canada worsened by 4.9 points in Q1'22, marking a fifth consecutive quarterly deterioration. The first quarter of 2022 was also the worst quarterly deterioration in over 27 years. Over the last 12 months, the worsening in affordability was the nastiest in 40 years. For the first time since 1994, it would take more than 50% of income for a representative household to service the mortgage on a representative home in Canada's main urban centers. The blame can be retraced in equal fashion to surging home prices and an increase in the mortgage interest rate in Q1. For the latter, our 5-year benchmark mortgage rate used by our affordability metrics rose 46 bps in the last quarter of the year which was the largest one quarter change since 2013Q3. The annual increase in interest rates was the steepest in over two decades. Most homebuyers have avoided these steep increases in recent months by opting for variable rate mortgages, but the financing conditions for those are now less attractive. Subsequently, we have started to notice their impact on weakening resale market data ([report](#)). Already in May, 60% of consumers answered that now is a bad time to make a major outlay (such as a home, Conference Board data), the highest level on record outside of a recession. Headwinds will continue to blow against Canada's real estate market in the months ahead with the Bank of Canada pursuing its monetary policy normalization process through higher policy rates and quantitative tightening.

HIGHLIGHTS:

- Canadian housing affordability deteriorated for a fifth consecutive quarter in Q1'22. The mortgage payment on a representative home as a percentage of income (MPPI) rose 4.9 points after a 2.2-point increase in Q4'21. Seasonally adjusted home prices increased 5.1% in Q1'22 from Q4'21; the benchmark mortgage rate (5-year term) rose 46bps, while median household income rose 0.8%.
- Affordability deteriorated in all the ten markets covered in Q1. On a sliding scale of markets from worst deterioration to least: Victoria, Toronto, Vancouver, Hamilton, Ottawa-Gatineau, Montreal, Winnipeg, Calgary, Québec, Edmonton (see chart on the right). This was the fifth consecutive quarter with a worsening in all markets. Countrywide, affordability deteriorated 2.7 pp in the condo portion vs. a 6.3 pp deterioration in the non-condo segment. See detailed statistics on page 12.

Canada : Perspective on housing affordability

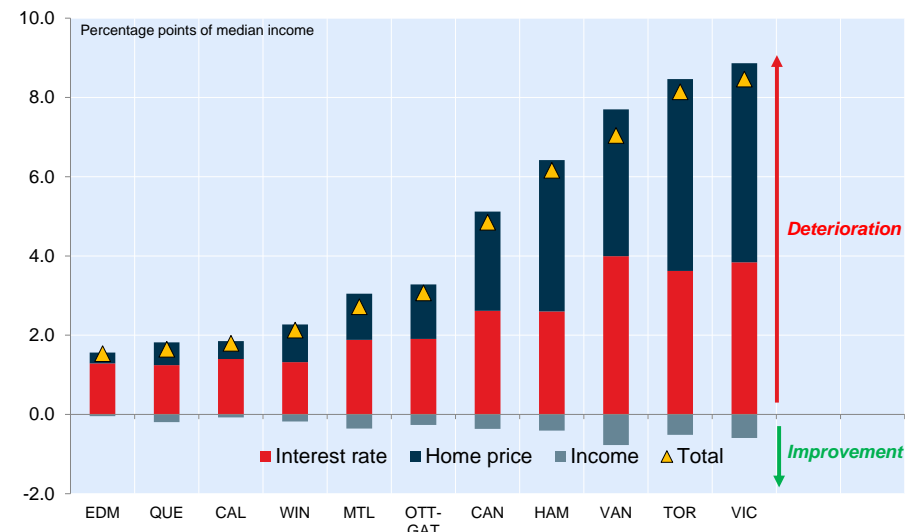
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



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

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)



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

Housing Affordability Monitor

Economics and Strategy

Toronto

In Toronto, the first quarter of 2022 was marked by the highest quarterly deterioration in affordability since 1994, the MPPI* gaining 8.1pp to reach its highest level since 1990 (75.6pp). The level of the MPPI* thus remained way above the city's 20-year average (49.7pp) and the urban composite (53.5pp). The deterioration was in part attributable to the increase in home prices, which grew 22.7% annually and 7.2% during the quarter. Both the condo and non-condo segments registered steep declines in housing affordability as prices respectively grew 5.6% and 7.4% during the quarter and interest rates climbed, pressures that an income up 0.8% could not offset. For both types of dwelling, the quarterly and annual deteriorations in affordability surpassed those of the composite average. *See tables page 12.

Mortgage payment as a % of income (MPPI)					
Non-Condo	81.5%	▲ +	8.9%	Q/Q	
Condo	44.2%	▲ +	4.2%	Q/Q	



Non-Condo

\$1,328,277

Price of the representative home in the metropolitan market

\$228,100

Household annual income needed to afford the representative home

363

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

35.0%

Premium for buying compared to the national urban composite



Condo

\$720,929

Price of the representative condo in the metropolitan market

\$144,644

Household annual income needed to afford the representative condo

64

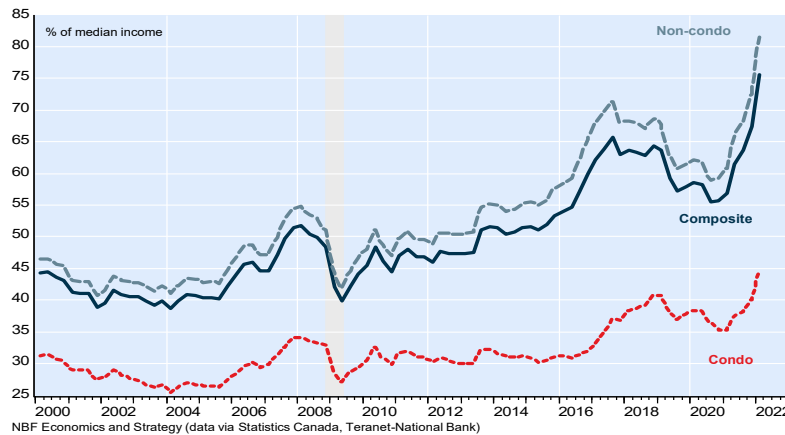
Months of saving required for the down payment (saving rate of 10%)

35.1%

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

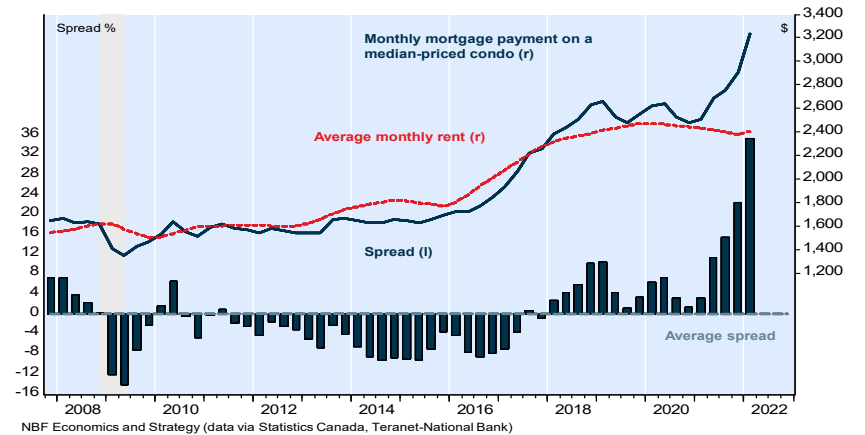
Toronto : Perspective on housing affordability

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



Housing Affordability Monitor

Economics and Strategy

Montreal

In the first quarter of 2022, the affordability of the housing market in Montreal deteriorated for the sixth consecutive quarter to reach its worst level since the first quarter of 1991. The deterioration stemmed from both condos and non-condos (MPPI* edged up 2.1 pp and 3.0 pp respectively), although the increases were all less than the composite average. On an annual basis, home prices in Montreal were up 17.5%, a second consecutive deceleration and less than the urban composite (+18.3%), but nonetheless high compared to the 20-year average of this indicator (6.9%). This, combined to higher interest rates, resulted in the fastest annual deterioration in affordability since 1981 (MPPI* up 7.8 pp), although this was still less than the urban composite (MPPI* up 11.7 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	41.4%	▲	+ 3.0%	Q/Q
Condo	28.7%	▲	+ 2.1%	Q/Q



Non-Condo

\$553,095

Price of the representative home in the metropolitan market

\$112,220

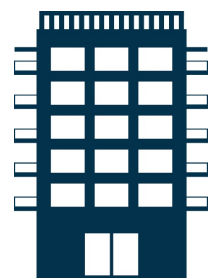
Household annual income needed to afford the representative home

51

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

-43.8%

Premium for buying compared to the national urban composite



Condo

\$383,384

Price of the representative condo in the metropolitan market

\$78,182

Household annual income needed to afford the representative condo

32

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

18.4%

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

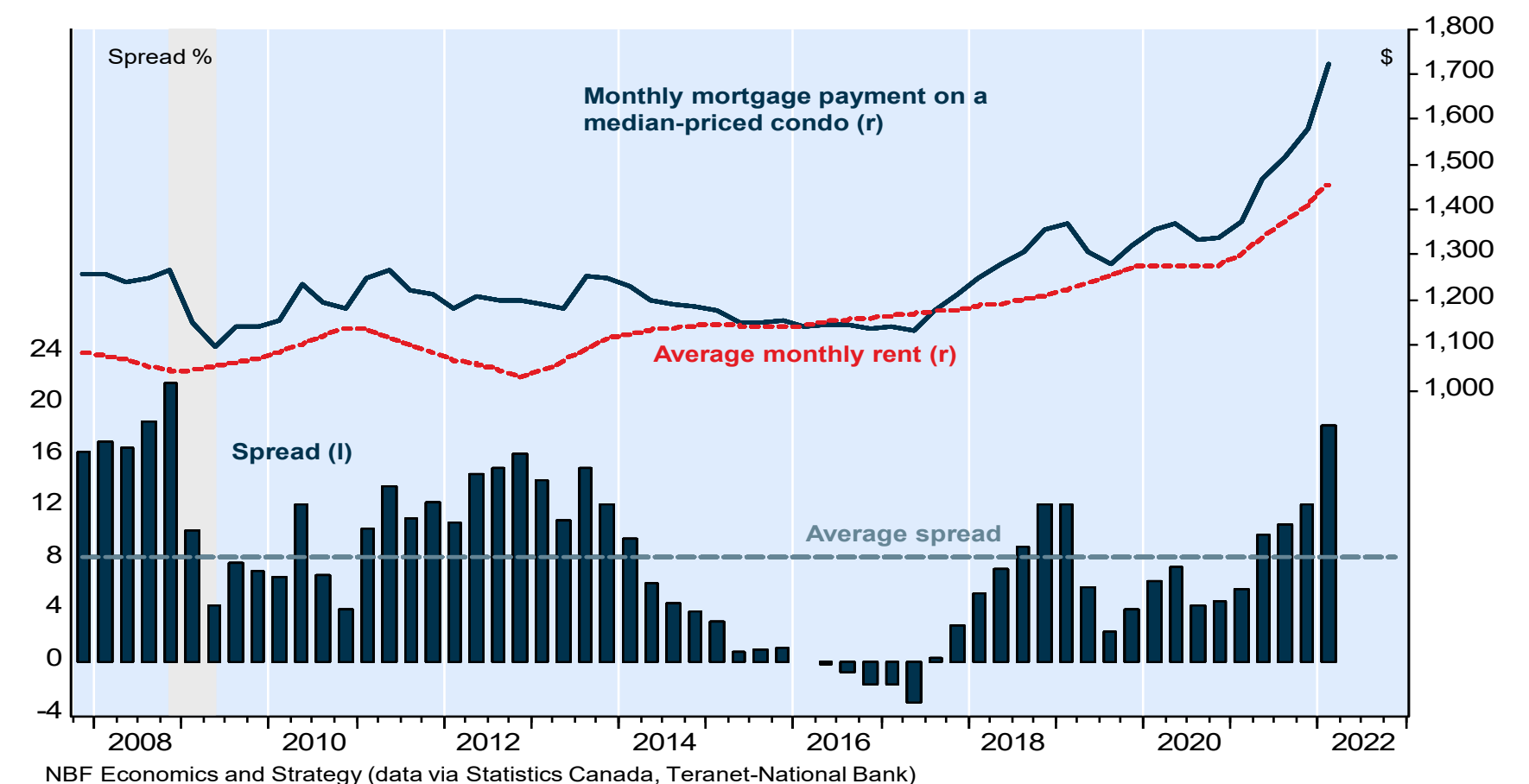
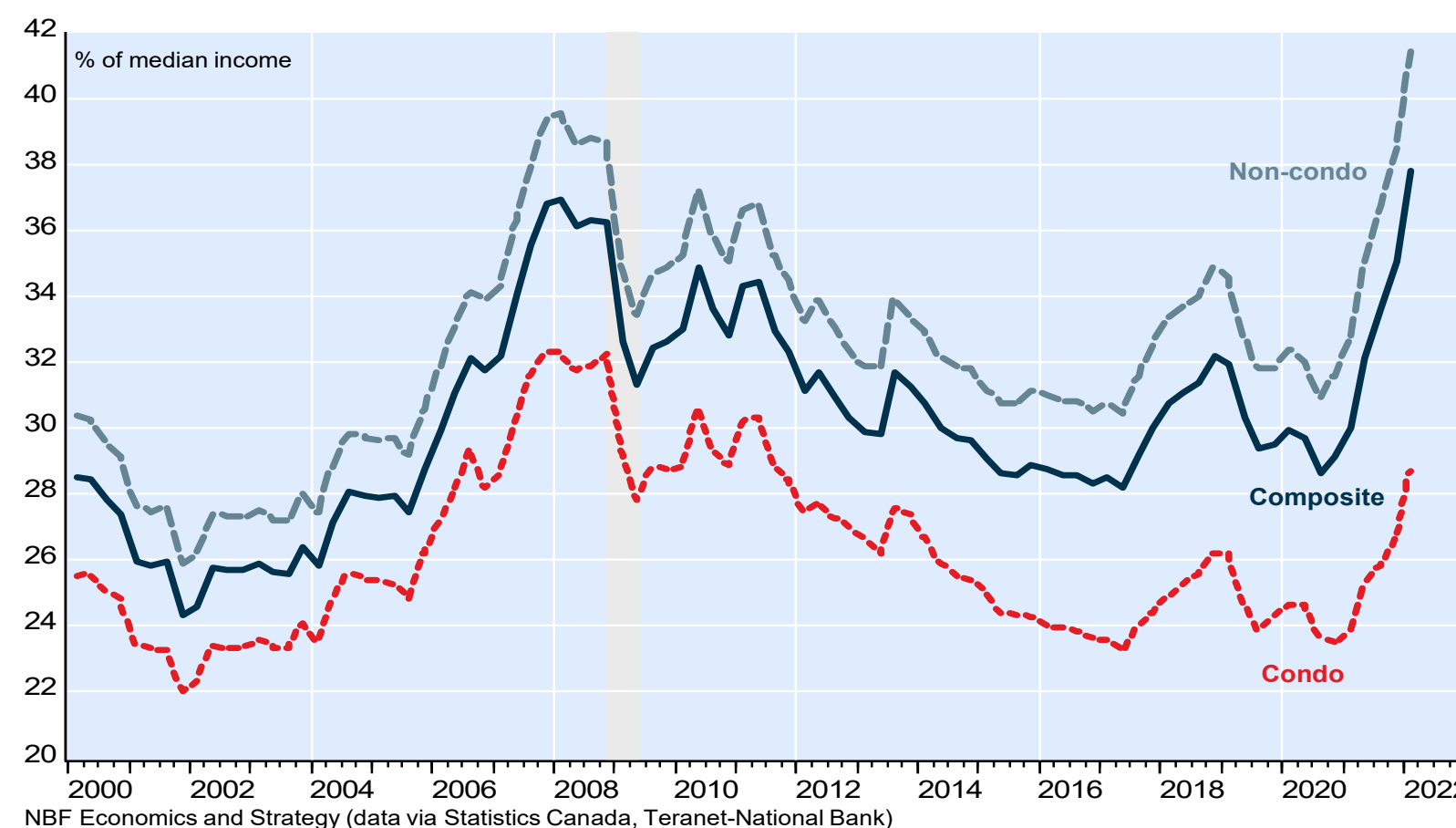
Montreal : Perspective on housing affordability

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



Housing Affordability Monitor

Economics and Strategy

Vancouver

Affordability in Vancouver kicked off 2022 the same way it ended 2021, registering steep deteriorations in all types of dwelling. Home prices grew 5.0% from their already elevated levels during the quarter and interest rates continued to grow, trends that a one percent quarterly increase in income simply could not offset. The MPPI* consequently grew 7.0 pp during the quarter, an acceleration unseen since 1994. As a result, Vancouver remained the least affordable city in Canada in which to buy a dwelling, the representative mortgage payment now notching 81.4% of the median income. On a 12-month basis, home prices in Vancouver were up 18.0%, in line with the urban composite. Still, elevated price levels and an increase in interest rates contributed to deteriorate the MPPI* 16.9 pp in a year, above the national average and the highest annual deterioration since 1989. The deterioration in affordability in Vancouver was above the national average both for condos (+3.2 pp) and non-condos (+9.0 pp). *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	101.5%	▲	+ 9.0%	Q/Q
Condo	43.4%	▲	+ 3.2%	Q/Q



Non-Condo

\$1,660,074

Price of the representative home in the metropolitan market

\$285,078

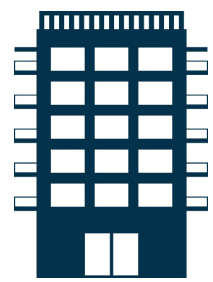
Household annual income needed to afford the representative home

452

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

68.8%

Premium for buying compared to the national urban composite



Condo

\$709,092

Price of the representative condo in the metropolitan market

\$142,357

Household annual income needed to afford the representative condo

63

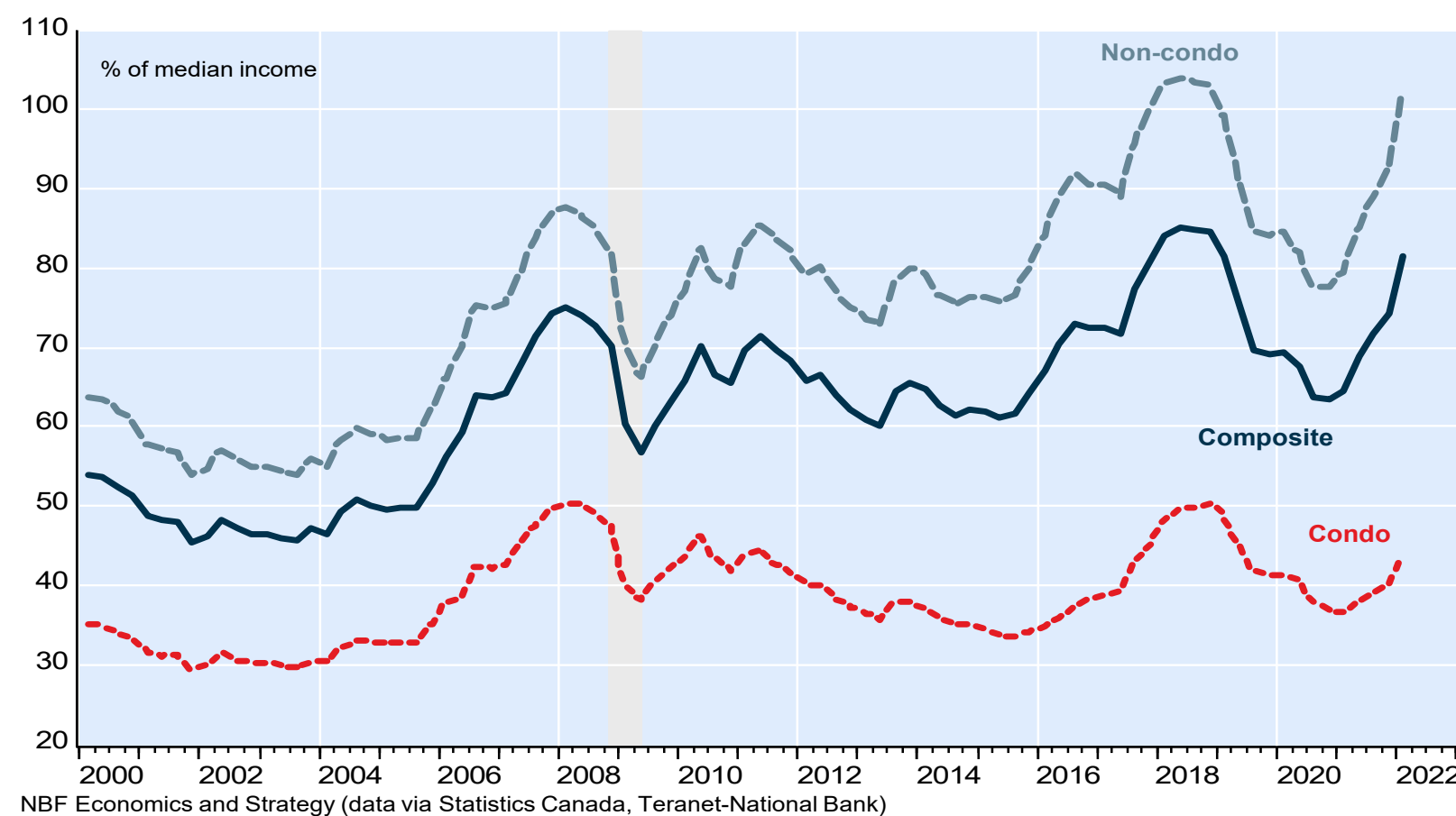
Months of saving required for the down payment (saving rate of 10%)

25.4%

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

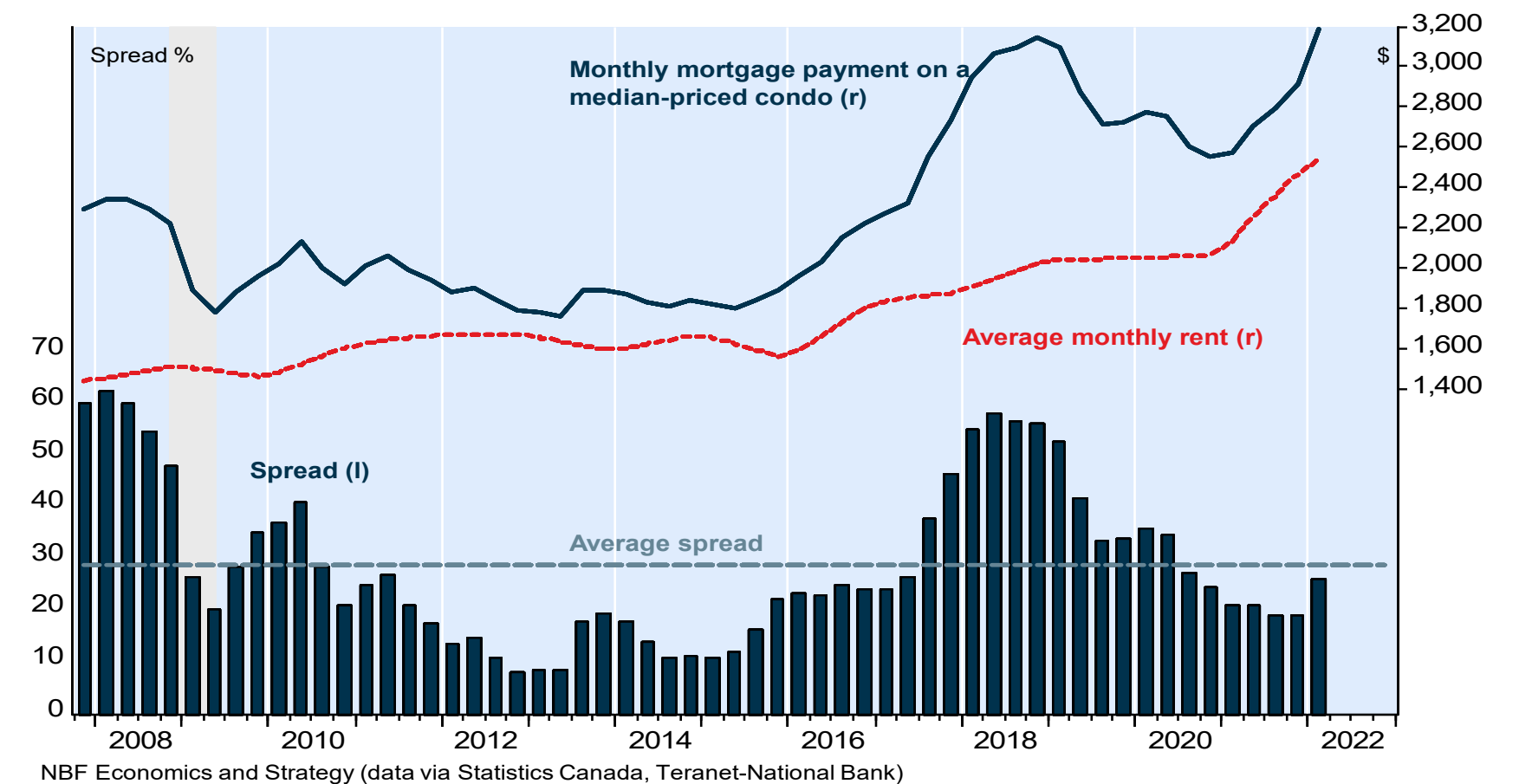
Vancouver : Perspective on housing affordability

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 1.7% in the quarter, the second least important home price growth behind Edmonton. This resulted in a moderate deterioration of housing affordability (MPPI* up 1.8 pp), which brought the MPPI* in Calgary at its highest level since the second quarter of 2019 but still below its long-term average (27.9%) and the urban average (53.5%). The deterioration stemmed principally from non-condos (MPPI* up 2.2 pp) although condos also recorded a worsening (MPPI* up 0.7 pp). On an annual basis, the affordability of the housing market in Calgary as measured by the MPPI* worsened 4.4 pp, the fastest deterioration since the last quarter of 2007, but 7.3 pp below the urban composite. Both condos (+1.4 pp) and non-condos (+5.4 pp) registered increases in their MPPI* on a 12-month basis. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	32.1%	▲ +	2.2%	Q/Q
Condo	14.8%	▲ +	0.7%	Q/Q



Non-Condo

\$533,082

Price of the representative home in the metropolitan market

\$108,353

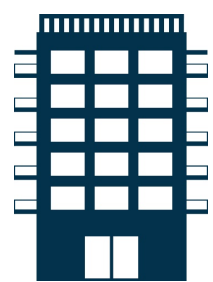
Household annual income needed to afford the representative home

38

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

-45.8%

Premium for buying compared to the national urban composite



Condo

\$245,179

Price of the representative condo in the metropolitan market

\$49,998

Household annual income needed to afford the representative condo

16

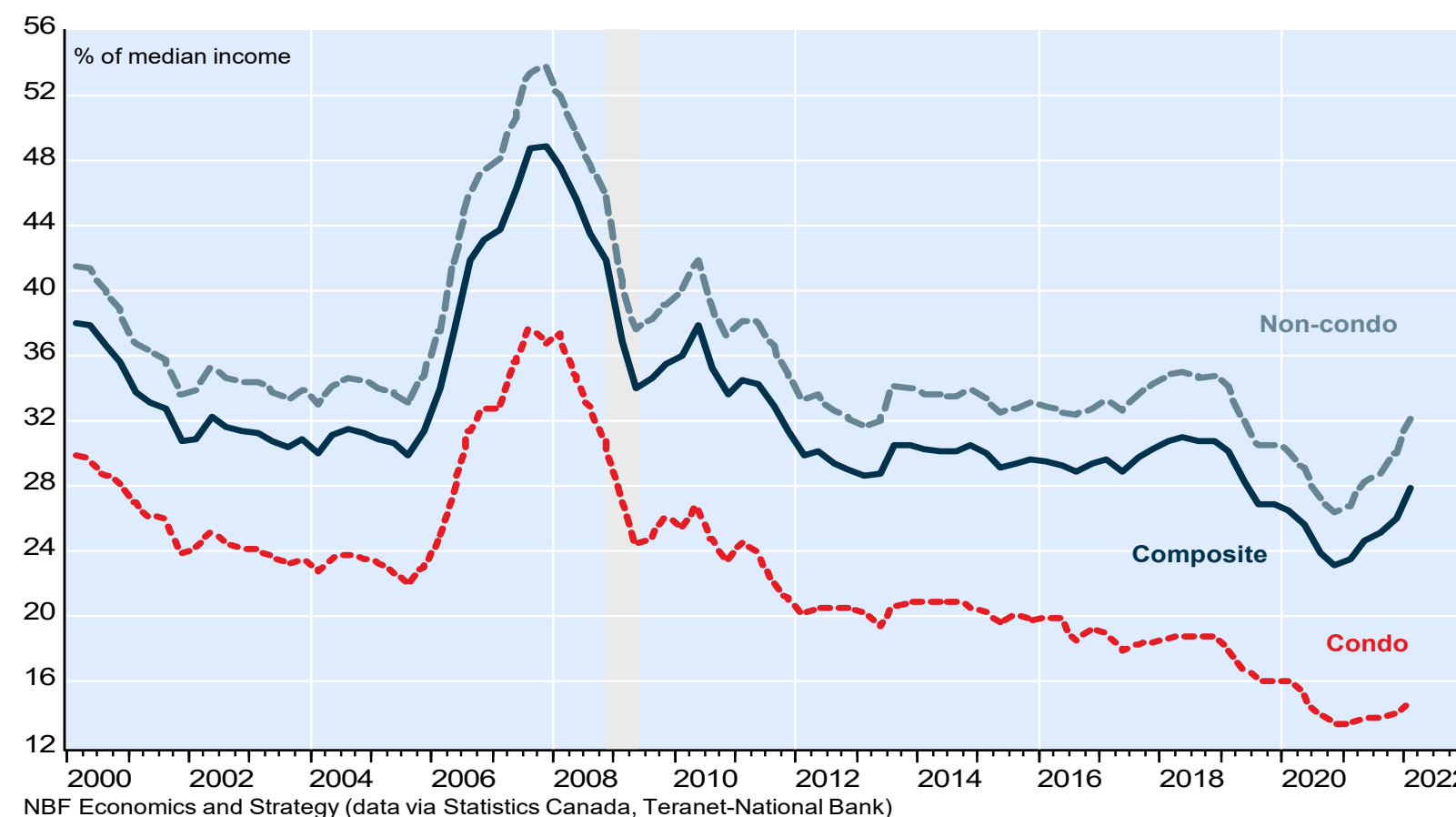
Months of saving required for the down payment (saving rate of 10%)

-29.2%

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

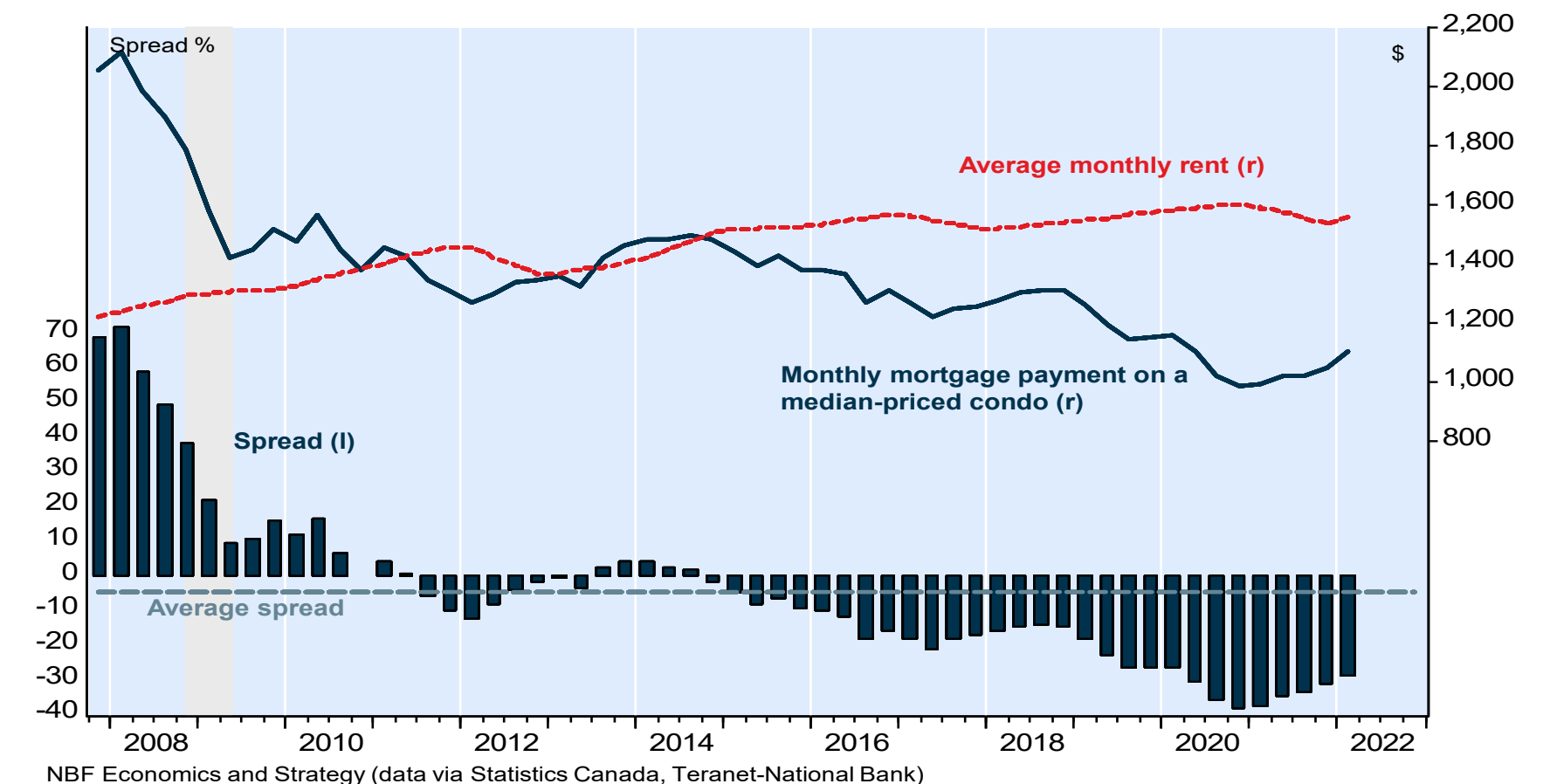
Calgary : Perspective on housing affordability

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



Calgary: Buying compared to renting

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



CALGARY

NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

Housing Affordability Monitor

Economics and Strategy

Edmonton

Home prices in Edmonton rose 1.1% during the quarter, the slowest growth in the markets covered. This, combined to only a moderate growth in wages and rising interest rates, contributed to increase the MPPPI* by 1.5 pp in the quarter, the slowest increase amid markets covered but the fastest in this city since 2010. The MPPPI* still stood well below its average since 2000 (25.5% in the first quarter of 2022, compared to 29.4% historically). Most of the deterioration in affordability is attributable to non-condos, for which the MPPPI* rose 1.7 pp in the quarter compared to a 0.5 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 (MPPPI)				
Non-Condo	27.5%	▲ +	1.7%	Q/Q
Condo	13.7%	▲ +	0.5%	Q/Q



Non-Condo

\$445,295

Price of the representative home in the metropolitan market

\$90,807

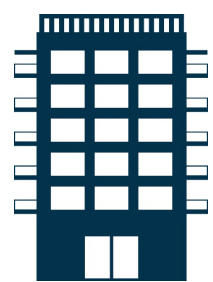
Household annual income needed to afford the representative home

31

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

-54.7%

Premium for buying compared to the national urban composite



Condo

\$221,735

Price of the representative condo in the metropolitan market

\$45,217

Household annual income needed to afford the representative condo

15

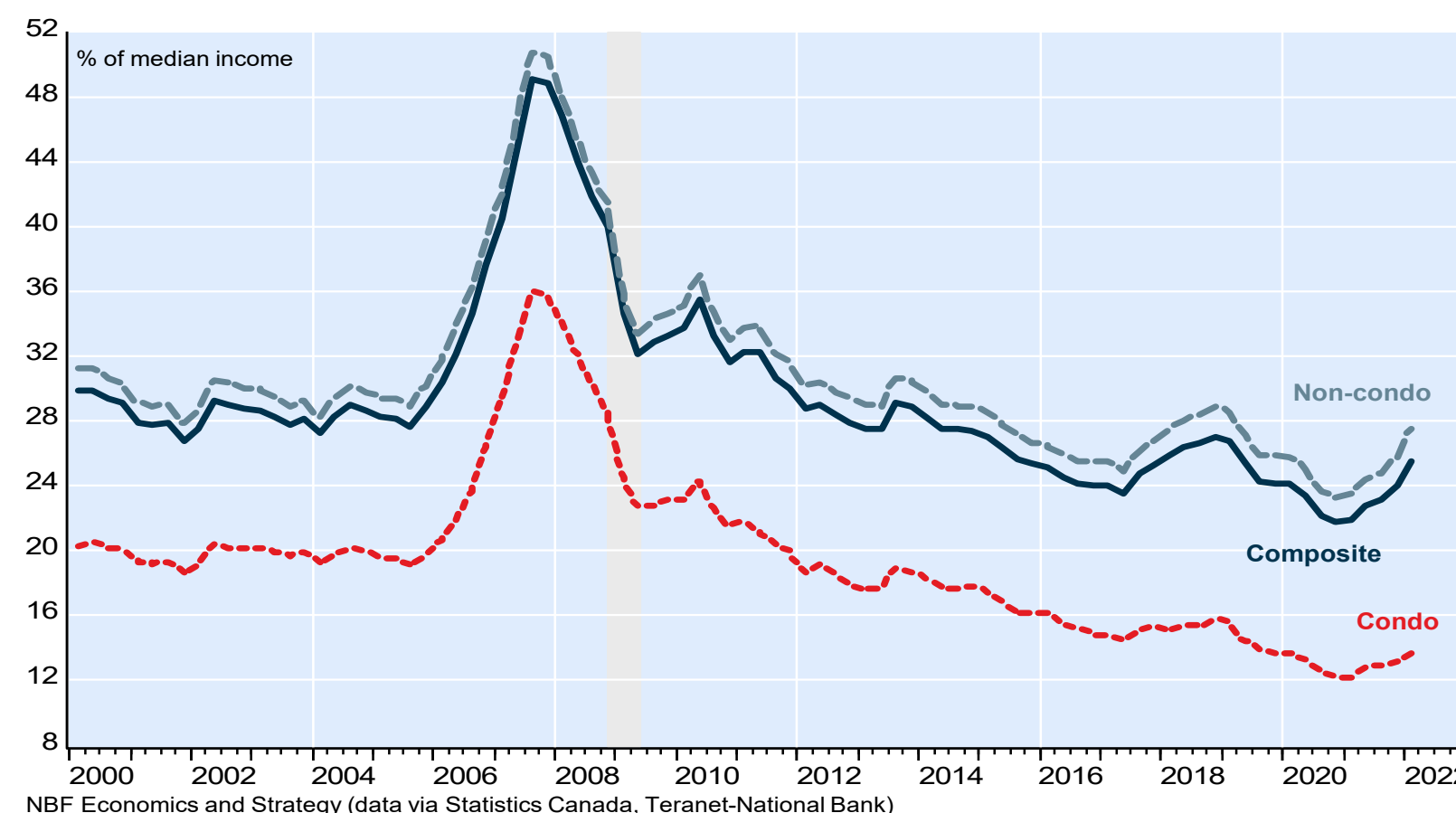
Months of saving required for the down payment (saving rate of 10%)

-31.3%

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

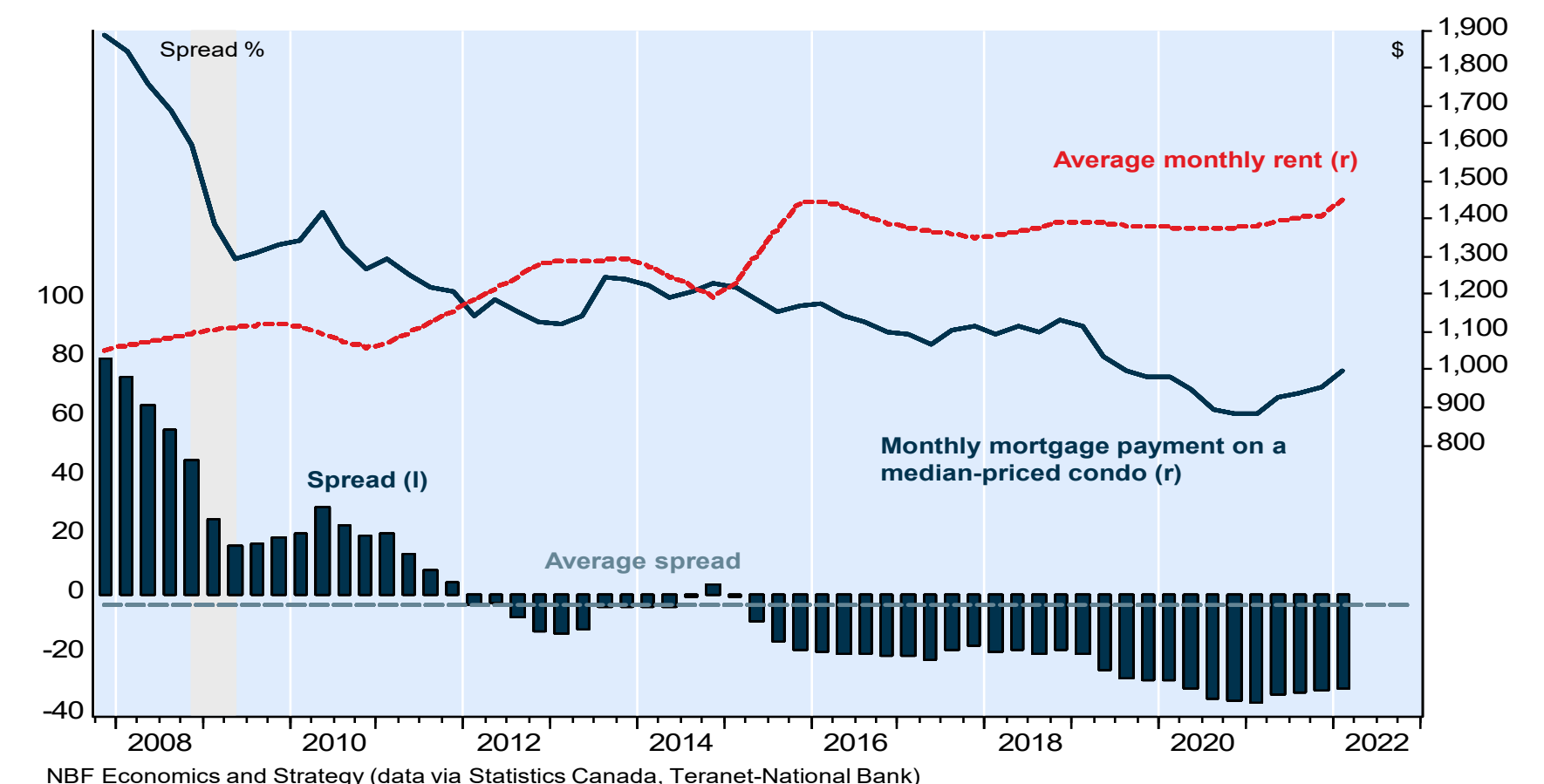
Edmonton : Perspective on housing affordability

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

In Ottawa/Gatineau, home prices grew 3.9% during the quarter while the median income increased 0.8% and interest rates climbed. As a result, the MPPI* grew 3.1 pp, a slower progression than the urban composite but still the fastest increase for this city since 1994. The average mortgage payment in Ottawa/Gatineau now represents 38.6% of the median income, above the long-term average for this indicator (29.4%) but below the composite average (53.5%). The deterioration stemmed from both non-condos and condos (MPPI* up +3.4 pp and 1.5 pp, respectively), both of which were below that of the urban composite. On an annual basis, home prices were up 17.8%, also below the urban composite (+18.3%). The deterioration in affordability over this period for all segments were thus lower than the composite index (MPPI* up +8.4 pp for all dwellings, + 4.1 pp for condos and +9.3 for non-condos). *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	42.0%	▲ +	3.4%	Q/Q
Condo	23.8%	▲ +	1.5%	Q/Q



Non-Condo

\$679,188

Price of the representative home in the metropolitan market

\$136,580

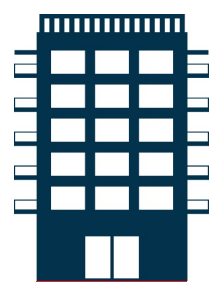
Household annual income needed to afford the representative home

59

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

-31.0%

Premium for buying compared to the national urban composite



Condo

\$385,923

Price of the representative condo in the metropolitan market

\$78,699

Household annual income needed to afford the representative condo

27

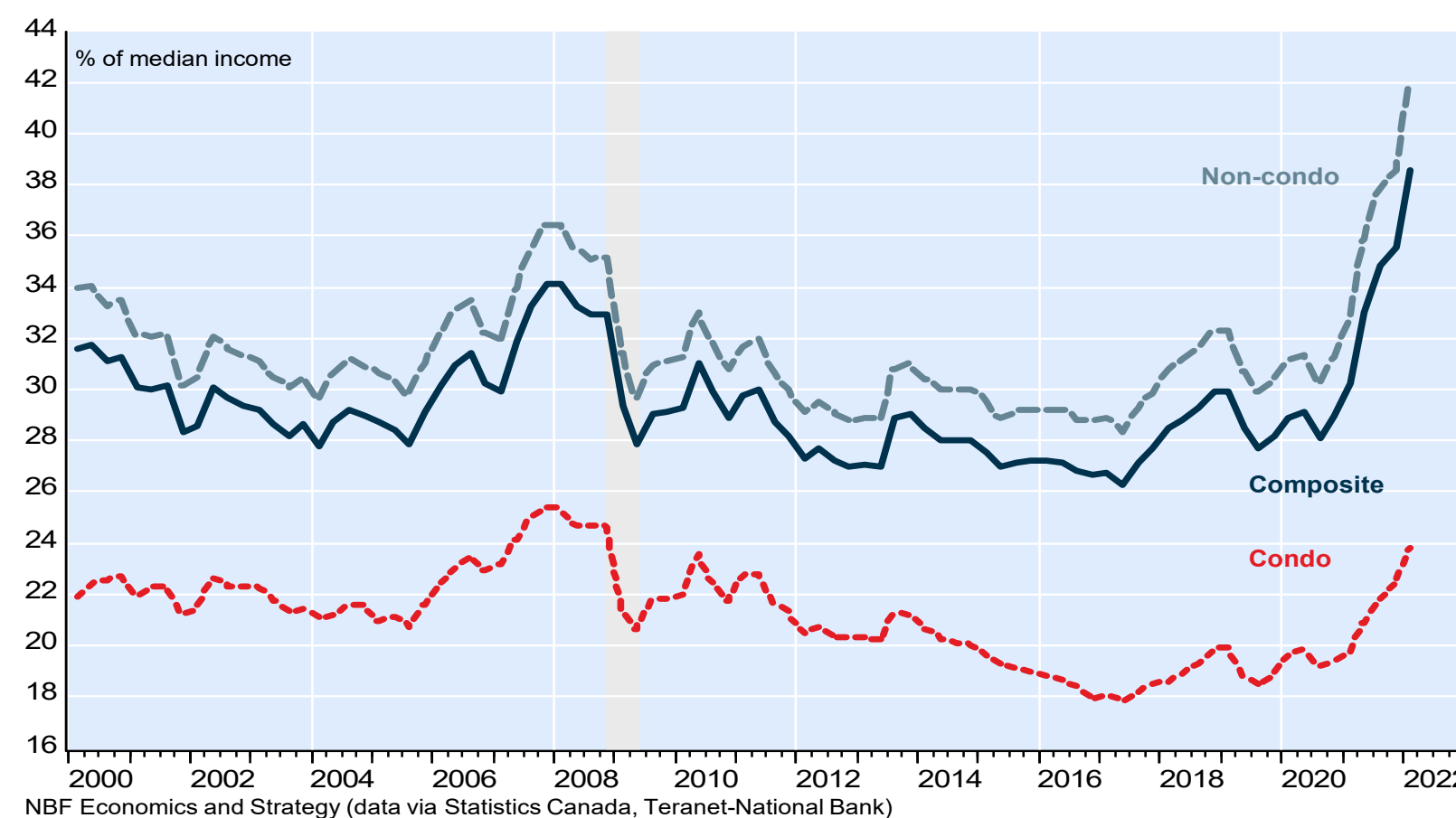
Months of saving required for the down payment (saving rate of 10%)

-7.4%

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

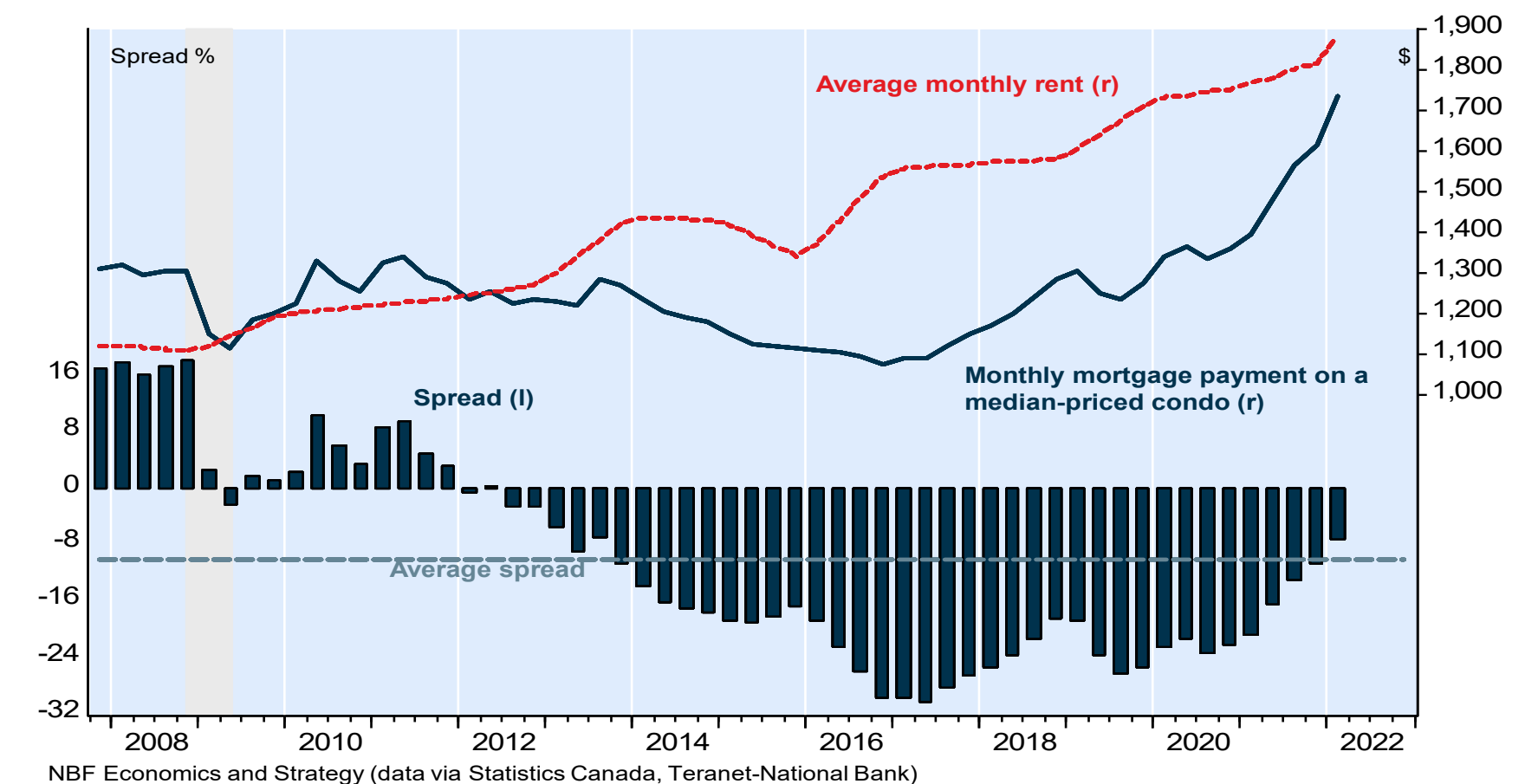
Ottawa/Gatineau : Perspective on housing affordability

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



OTTAWA/GA

Housing Affordability Monitor

Economics and Strategy

Quebec City

Housing affordability continued to deteriorate during the first quarter of the year in Québec City, with the MPPI* increasing +1.6 pp, less than half the urban composite (+4.9 pp). This development caused affordability in Québec City to reach its early 2016 level and exceed by 2 percentage points its long-term average (22.8%). The MPPI* now stands at 24.8% in the city, which remains the most affordable market among the urban areas covered. The deterioration can be explained by home prices rising 2.5% and increasing interest rates, factors that could not be offset by a 0.8% improvement in median income. The deterioration in affordability stemmed from both condos and other dwellings, which registered rises of their MPPI* of +0.9 pp and +1.8 pp, respectively. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	25.8%	▲	+	1.8% Q/Q
Condo	17.0%	▲	+	0.9% Q/Q



Non-Condo

\$356,311

Price of the representative home in the metropolitan market

\$72,661

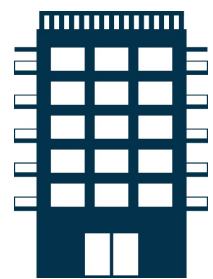
Household annual income needed to afford the representative home

29

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

-63.8%

Premium for buying compared to the national urban composite



Condo

\$234,770

Price of the representative condo in the metropolitan market

\$47,875

Household annual income needed to afford the representative condo

19

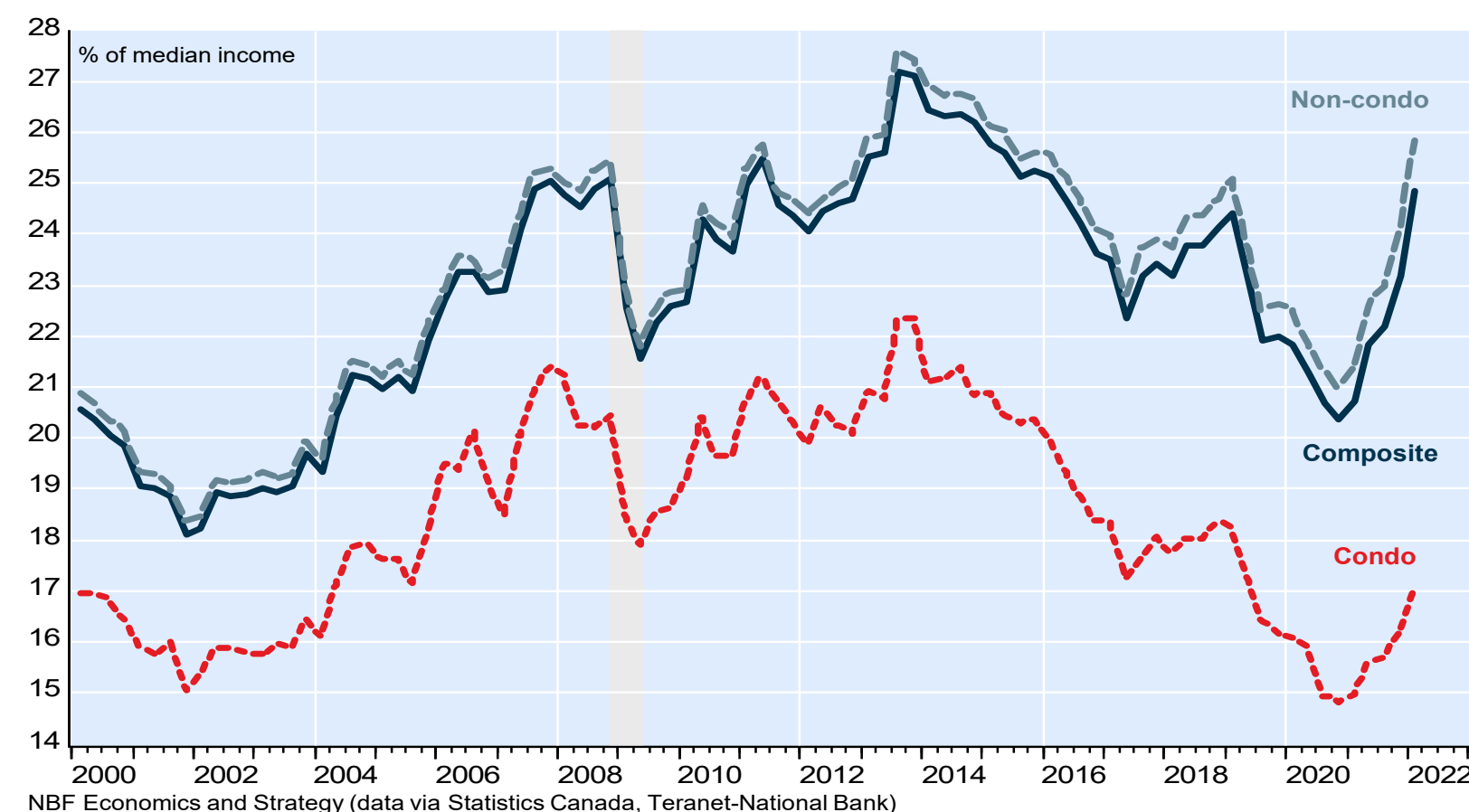
Months of saving required for the down payment (saving rate of 10%)

-6.1%

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

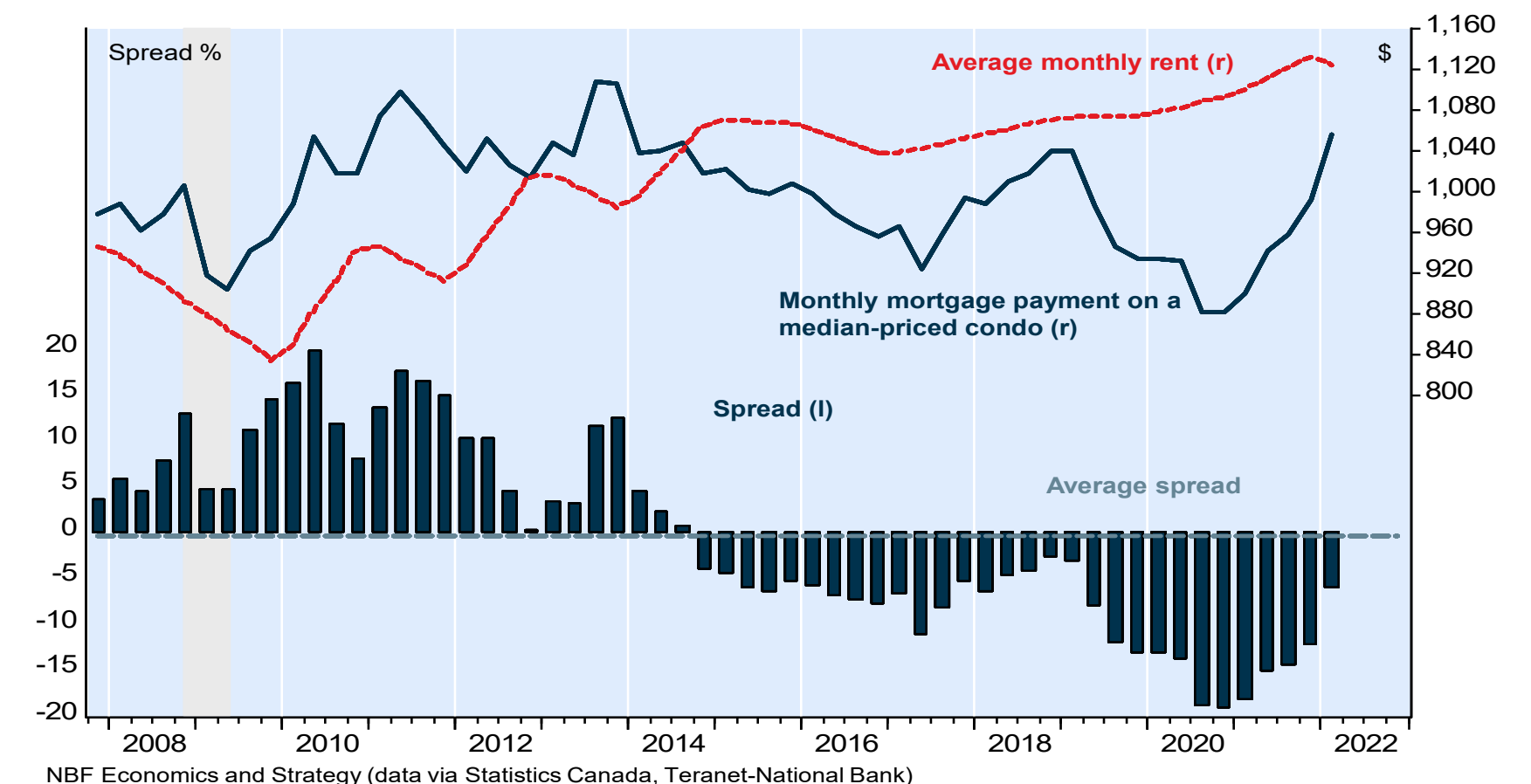
Quebec city: Perspective on housing affordability

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

NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

NBF Economics and Strategy (data via Statistics Canada, Teranet-National Bank)

Housing Affordability Monitor

Economics and Strategy

Winnipeg

In Winnipeg, housing affordability worsened above its long-term average as the MPPI* grew 2.1 pp to 26.7%, compared to 25.1% historically. Despite this deterioration, the MPPI* remained about half that of the urban composite, which stood at 53.5%. This deterioration was attributable to a 3.9% growth in home prices and to rising interest rates, factors that a 0.7% increase in income was not sufficient to offset. This was the fifth consecutive quarterly deterioration for housing affordability in Winnipeg. Both condos (+1.4 pp) and non-condos (+2.2 pp) saw a deterioration in affordability in the quarter, and from a year before (+2.3 pp and +4.9 pp respectively). *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	27.2%	▲	+ 2.2%	Q/Q
Condo	16.6%	▲	+ 1.4%	Q/Q



Non-Condo

\$398,295

Price of the representative home in the metropolitan market

\$81,222

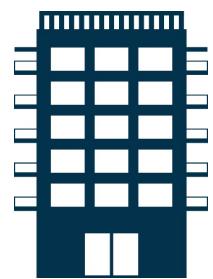
Household annual income needed to afford the representative home

30

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

-59.5%

Premium for buying compared to the national urban composite



Condo

\$243,379

Price of the representative condo in the metropolitan market

\$49,631

Household annual income needed to afford the representative condo

19

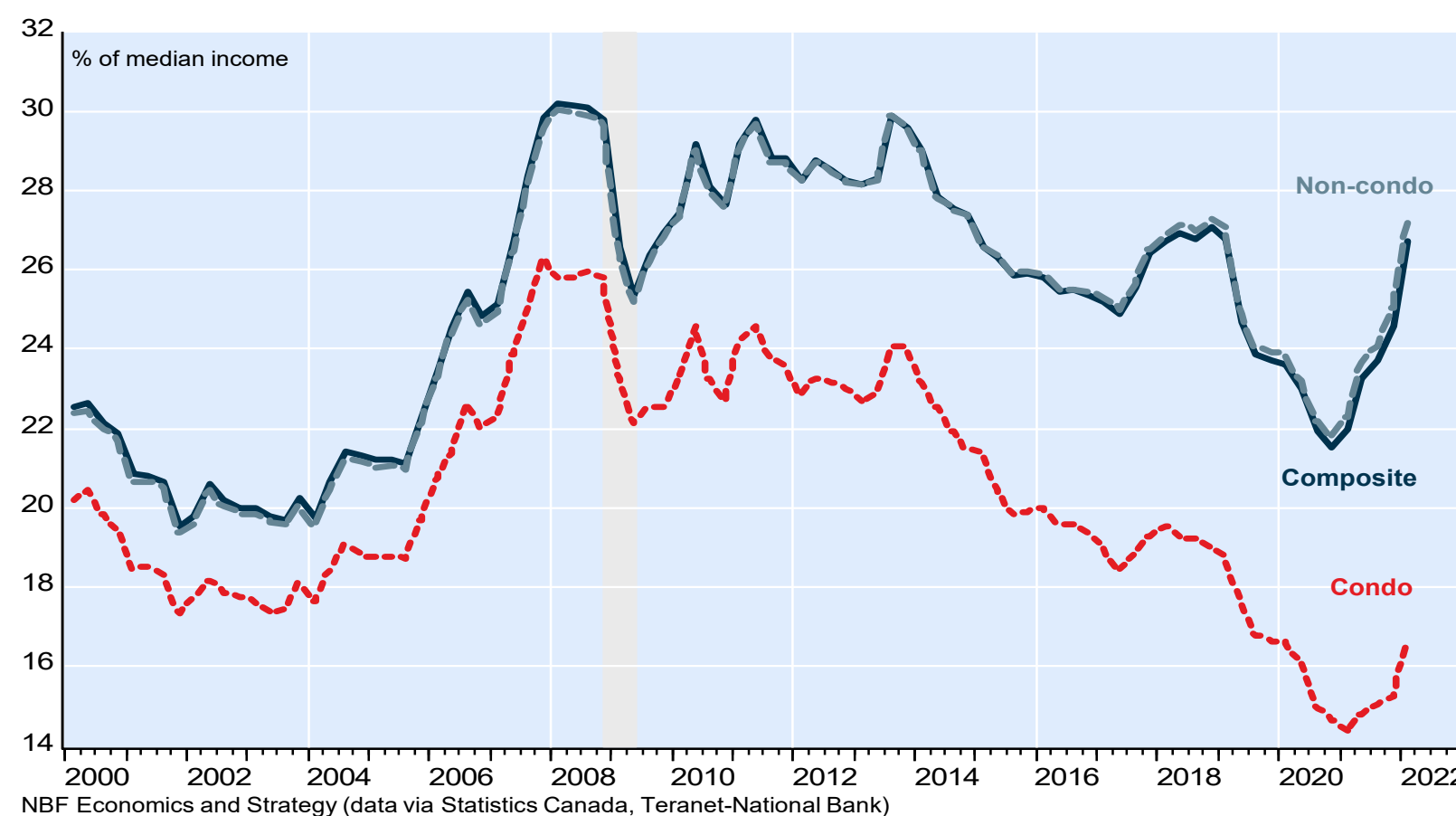
Months of saving required for the down payment (saving rate of 10%)

-22.3%

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

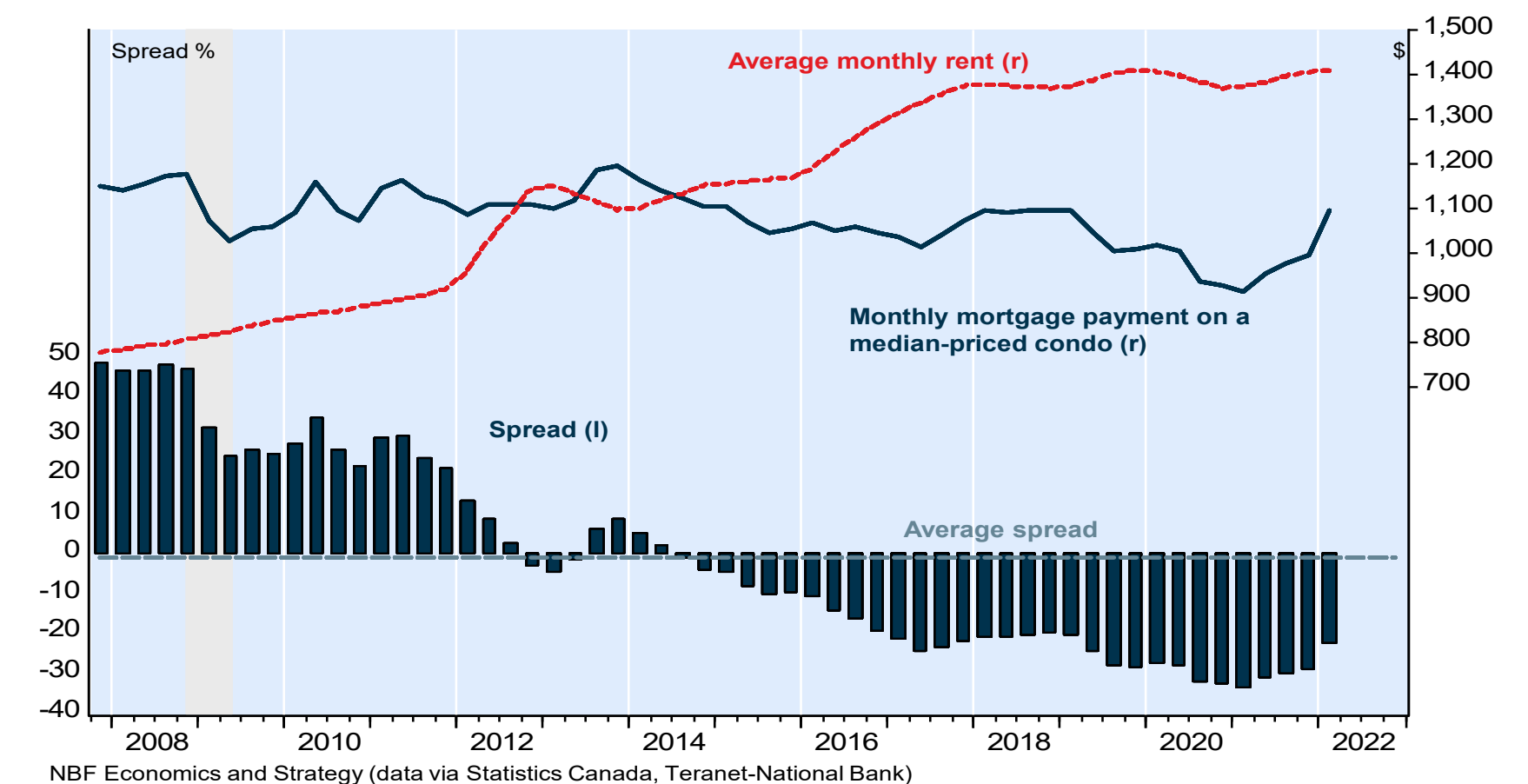
Winnipeg: Perspective on housing affordability

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

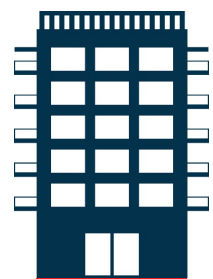
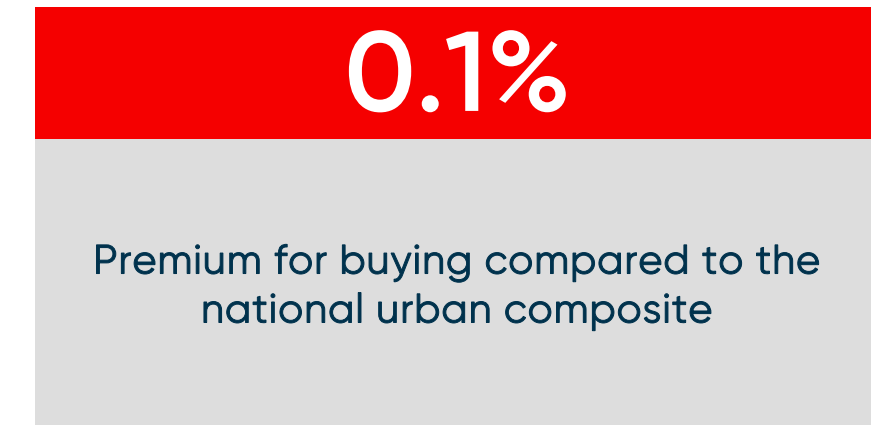
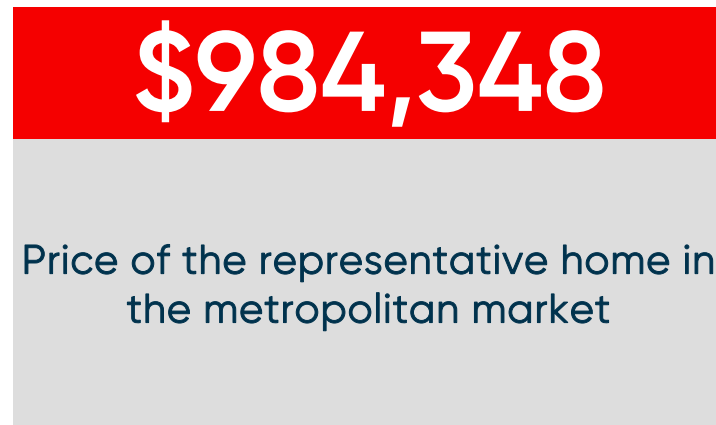
Hamilton

Hamilton recorded a 6.2 pp deterioration in its MPPI* in the quarter, exceeding the variation of the urban composite. On an annual basis, the deterioration in affordability (+15.0 pp) brought the MPPI* to its highest level ever recorded. Mortgage payments indeed took up 54.6% of the median pre-tax household income, which is above the urban composite (53.5%), a first occurrence in Hamilton. The annual deterioration can be explained by home prices rising 27.7% 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 (+8.1% for condos, +7.9% for non-condos and +7.9% 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.

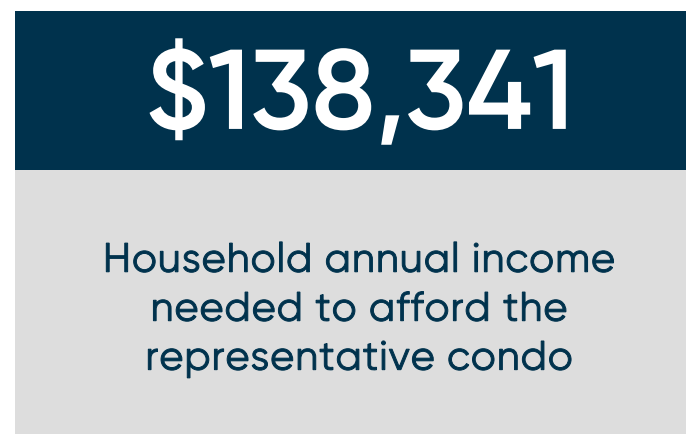
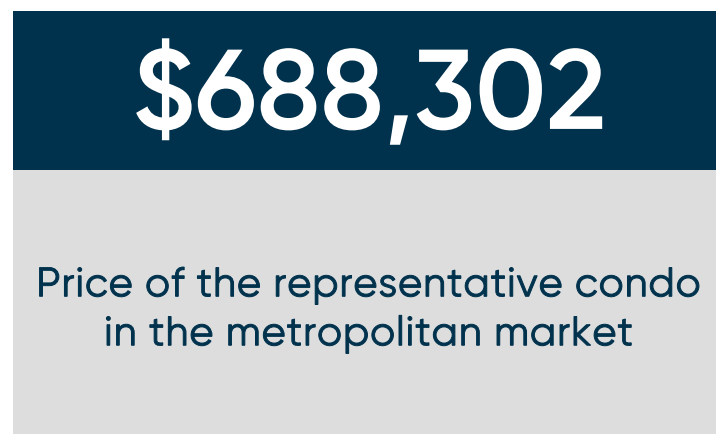
Mortgage payment as a % of income (MPPI)				
Non-Condo	58.3%	▲	+	6.6% Q/Q
Condo	40.8%	▲	+	4.7% Q/Q



Non-Condo



Condo



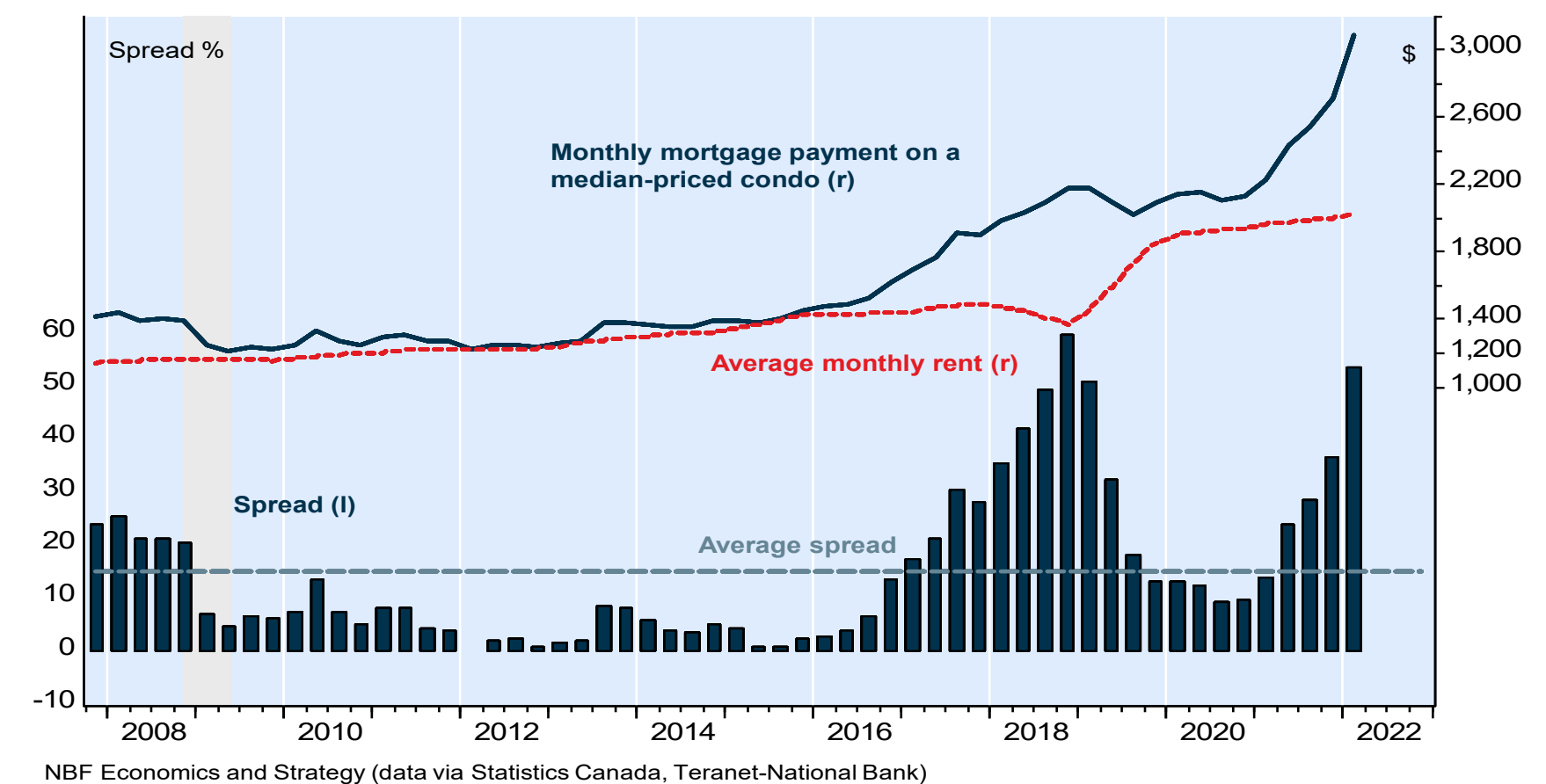
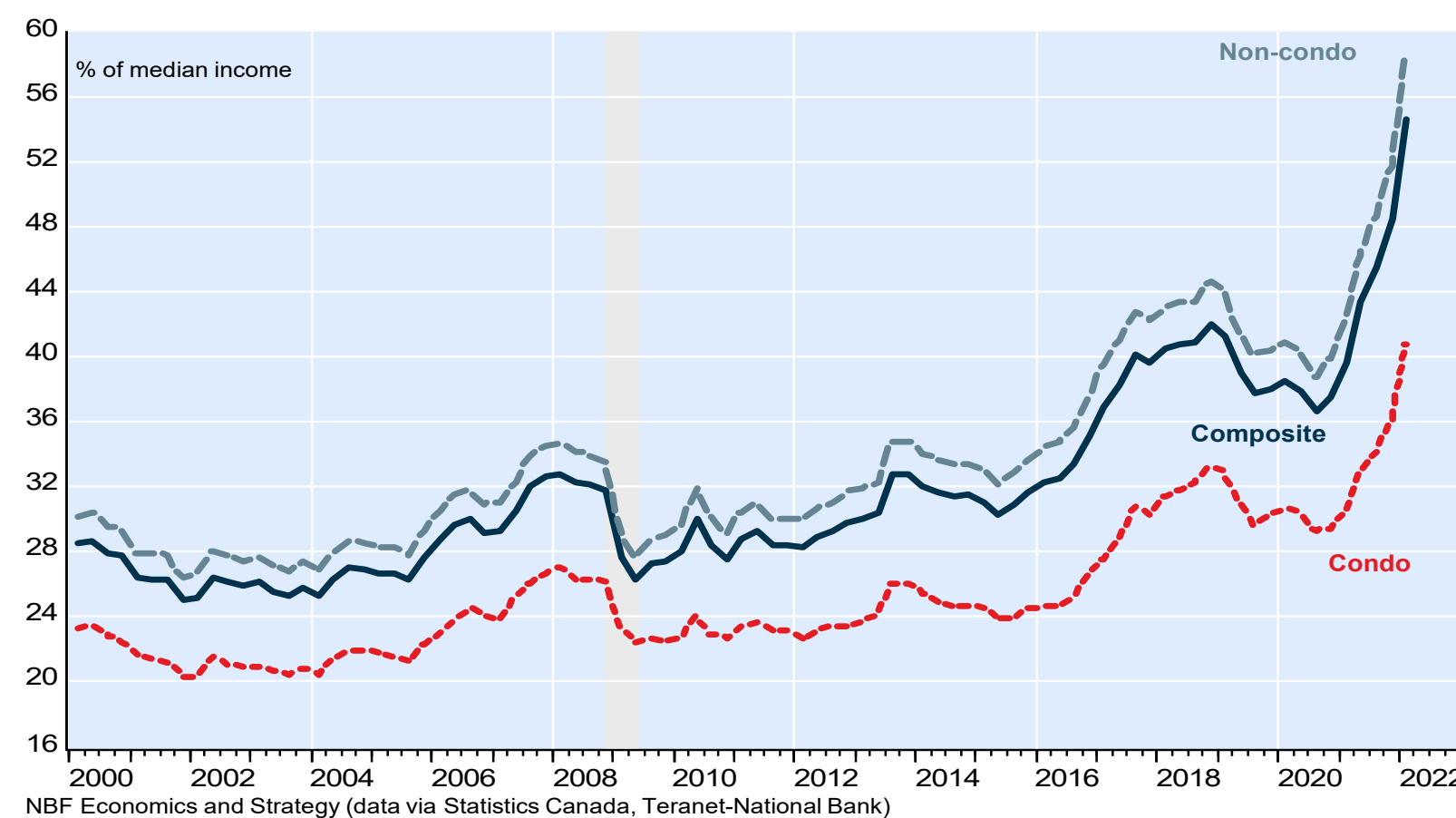
Hamilton: Perspective on housing affordability

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



Housing Affordability Monitor

Economics and Strategy

Victoria

For the third consecutive quarter, Victoria registered the largest annual deterioration in the MPPI* of all the markets covered (+19.6 pp). As a result, the MPPI* reached 80.0%, the second highest among markets covered after Vancouver and the highest level for this city since the second quarter of 2008. On a quarterly basis, the +8.5 pp increase in the MPPI* was also the highest of all markets as home prices grew faster than the urban composite (\$72.8 K vs \$37.8 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 +4.1 pp in the quarter for condos and +9.3 pp for non-condos. *See tables page 12.

Mortgage payment as a % of income (MPPI)				
Non-Condo	85.7%	▲ +	9.3%	Q/Q
Condo	44.2%	▲ +	4.1%	Q/Q



Non-Condo

\$1,188,394

Price of the representative home in the metropolitan market

\$204,078

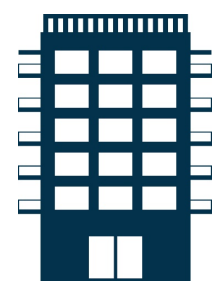
Household annual income needed to afford the representative home

382

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

20.8%

Premium for buying compared to the national urban composite



Condo

\$612,759

Price of the representative condo in the metropolitan market

\$123,747

Household annual income needed to afford the representative condo

58

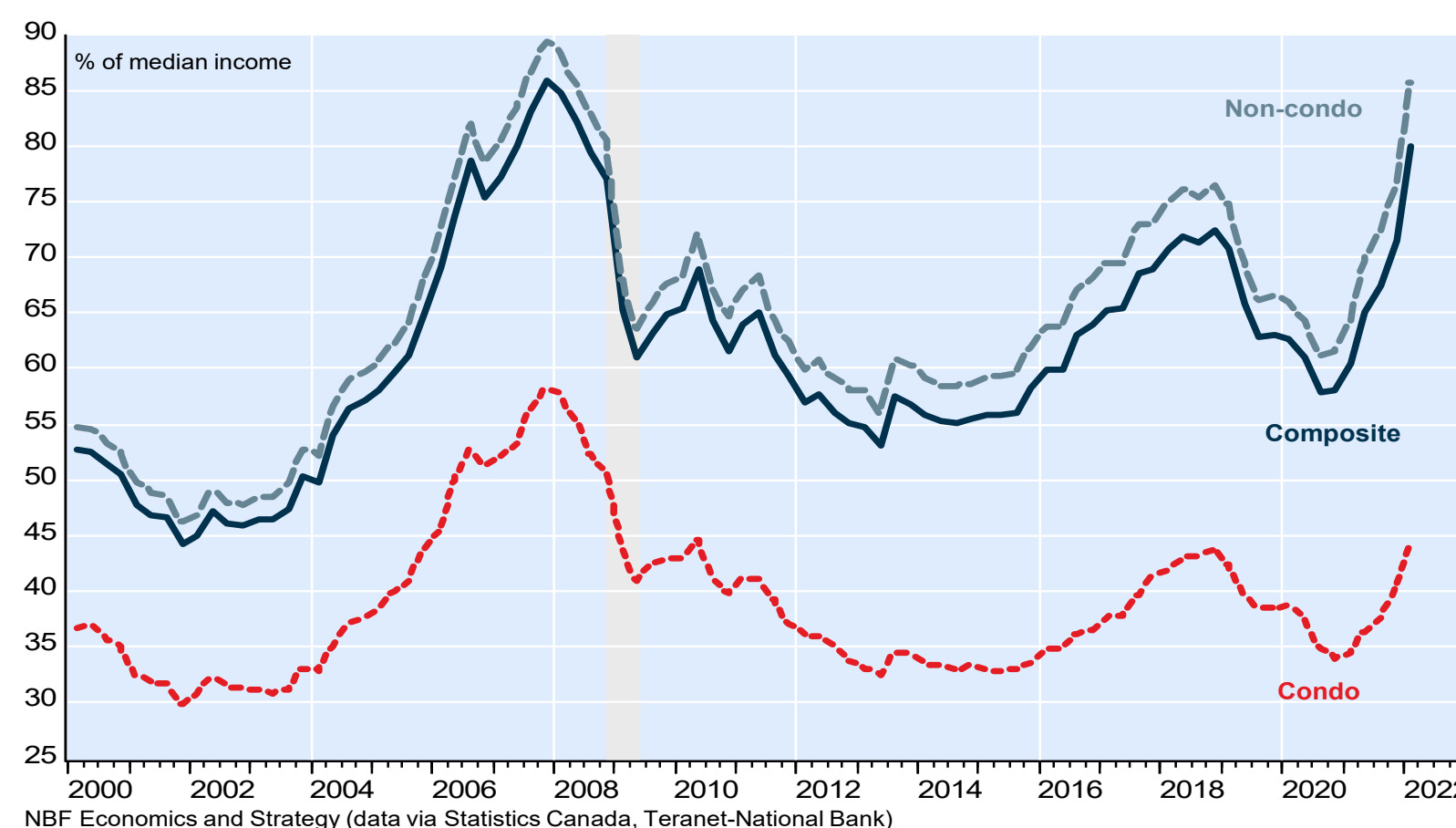
Months of saving required for the down payment (saving rate of 10%)

25.7%

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

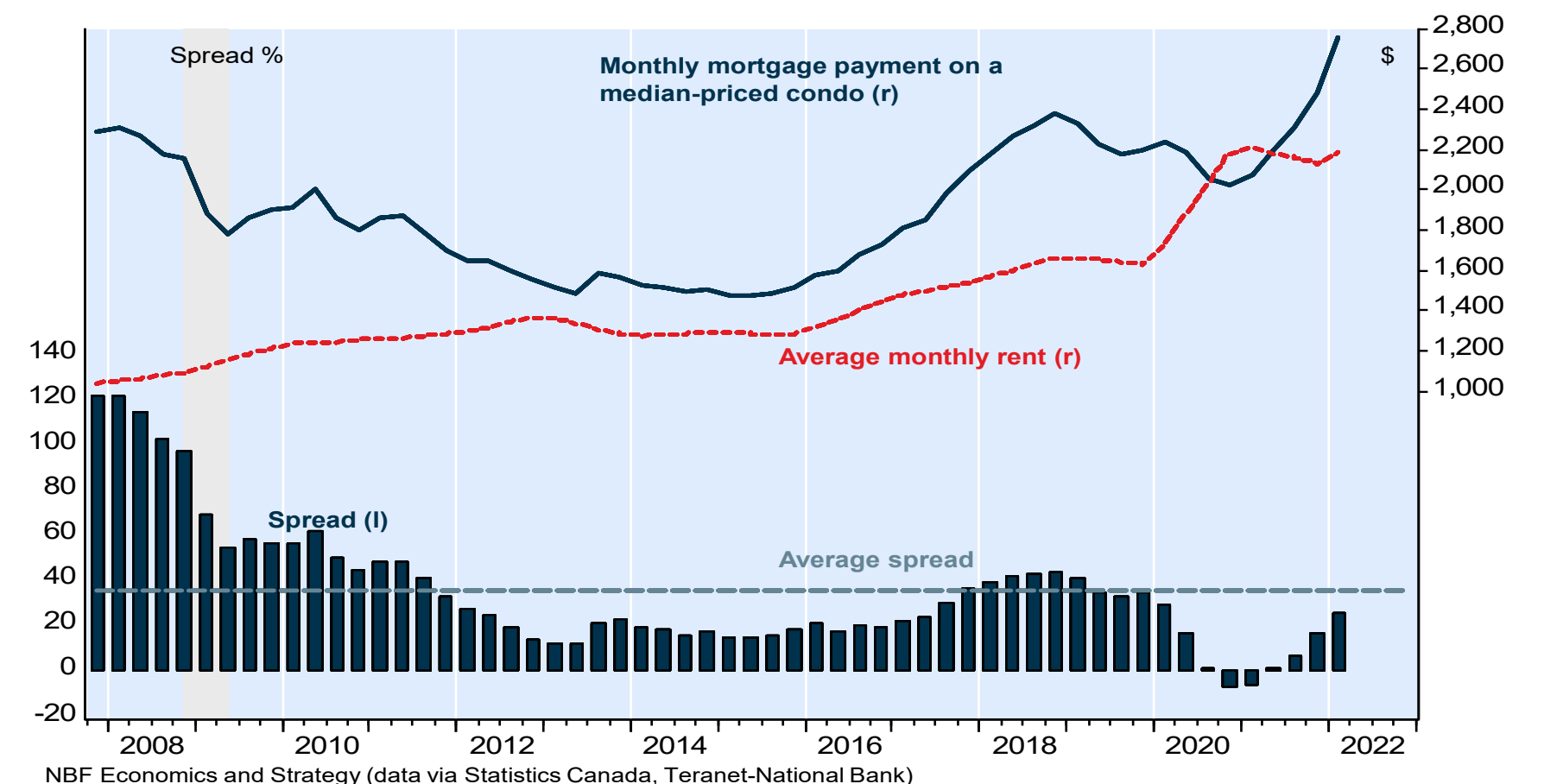
Victoria: Perspective on housing affordability

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



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	\$ 771 407	5.1	18.3	\$ 52 141	80.6	37.9	\$ 3 463	53.5	4.9	11.7	40.5	\$ 154 396	\$ 77 622	68%
Toronto	\$ 1 231 944	7.2	22.7	\$ 246 389	336.6	63.8	\$ 5 531	75.6	8.1	18.7	49.7	\$ 211 557	\$ 87 847	66%
Montreal	\$ 504 523	3.3	17.5	\$ 25 452	42.5	26.4	\$ 2 265	37.8	2.7	7.8	30.2	\$ 102 836	\$ 71 921	56%
Vancouver	\$ 1 331 177	5.0	18.0	\$ 266 235	362.6	112.2	\$ 5 976	81.4	7.0	16.9	63.2	\$ 228 598	\$ 88 115	64%
Calgary	\$ 462 154	1.7	7.6	\$ 23 108	31.0	27.1	\$ 2 075	27.9	1.8	4.4	32.4	\$ 94 245	\$ 89 342	73%
Edmonton	\$ 413 729	1.1	4.9	\$ 20 686	28.4	24.4	\$ 1 857	25.5	1.5	3.6	29.4	\$ 84 370	\$ 87 362	70%
Ottawa/Gatineau	\$ 624 754	3.9	17.8	\$ 37 475	51.6	26.0	\$ 2 805	38.6	3.1	8.4	29.4	\$ 126 064	\$ 87 222	67%
Quebec	\$ 342 762	2.5	10.9	\$ 17 138	27.7	20.2	\$ 1 539	24.8	1.6	4.1	22.8	\$ 69 898	\$ 74 328	60%
Winnipeg	\$ 391 337	3.9	12.4	\$ 19 567	29.8	22.0	\$ 1 757	26.7	2.1	4.8	25.1	\$ 79 803	\$ 78 903	67%
Hamilton	\$ 920 929	7.9	27.7	\$ 67 093	88.6	30.9	\$ 4 135	54.6	6.2	15.0	31.8	\$ 183 282	\$ 90 915	70%
Victoria	\$ 1 109 009	7.0	22.8	\$ 221 802	356.3	68.0	\$ 4 979	80.0	8.5	19.6	61.6	\$ 190 446	\$ 74 693	63%

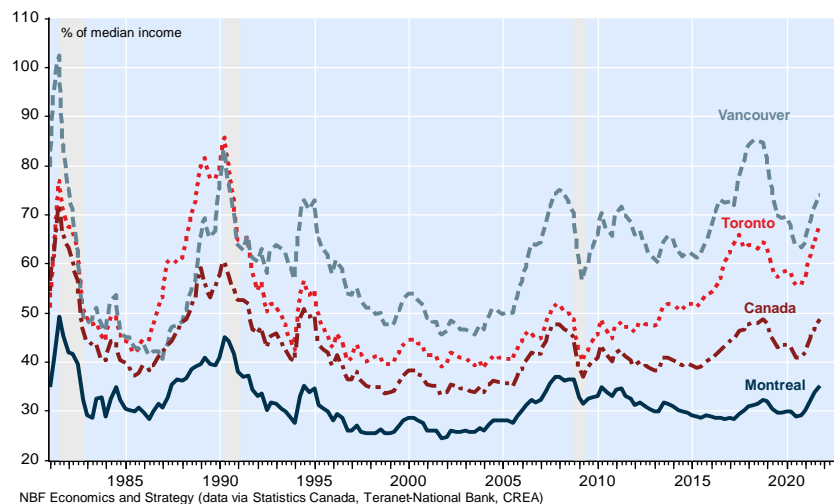
Table 2	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Condo	Median home price	Q/Q % change	Y/Y % change	Downpayment \$	Downpayment: Months of saving	Avg. Since 2000	Monthly mortgage payment	Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly average rent
Urban Composite	\$ 498 586	3.8	11.9	\$ 24 929	38.5	25.7	\$ 2 238	34.6	2.7	6.1	29.5	\$ 101 674	\$ 77 622	9%	\$ 2 127
Toronto	\$ 720 929	5.6	15.7	\$ 47 093	64.3	29.6	\$ 3 237	44.2	4.2	8.9	31.7	\$ 144 644	\$ 87 847	15%	\$ 2 396
Montreal	\$ 383 384	3.4	12.2	\$ 19 169	32.0	22.7	\$ 1 721	28.7	2.1	4.8	26.2	\$ 78 182	\$ 71 921	11%	\$ 1 454
Vancouver	\$ 709 092	3.6	11.0	\$ 45 909	62.5	35.9	\$ 3 183	43.4	3.2	6.8	38.6	\$ 142 357	\$ 88 115	22%	\$ 2 538
Calgary	\$ 245 179	-0.2	-0.1	\$ 12 259	16.5	18.6	\$ 1 101	14.8	0.7	1.4	22.8	\$ 49 998	\$ 89 342	14%	\$ 1 555
Edmonton	\$ 221 735	-1.2	1.0	\$ 11 087	15.2	15.8	\$ 995	13.7	0.5	1.5	19.5	\$ 45 217	\$ 87 362	12%	\$ 1 449
Ottawa/Gatineau	\$ 385 923	1.8	11.4	\$ 19 296	26.5	18.3	\$ 1 733	23.8	1.5	4.1	21.2	\$ 78 699	\$ 87 222	9%	\$ 1 870
Quebec	\$ 234 770	0.9	5.1	\$ 11 738	19.0	16.1	\$ 1 054	17.0	0.9	2.0	18.4	\$ 47 875	\$ 74 328	9%	\$ 1 123
Winnipeg	\$ 243 379	4.3	7.2	\$ 12 169	18.5	17.5	\$ 1 093	16.6	1.4	2.3	20.3	\$ 49 631	\$ 78 903	6%	\$ 1 406
Hamilton	\$ 688 302	8.1	24.4	\$ 43 830	57.9	23.1	\$ 3 090	40.8	4.7	10.4	25.3	\$ 138 341	\$ 90 915	11%	\$ 2 018
Victoria	\$ 612 759	5.4	19.0	\$ 36 276	58.3	33.4	\$ 2 751	44.2	4.1	9.8	39.0	\$ 123 747	\$ 74 693	14%	\$ 2 189

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	\$ 983 645	5.4	19.4	\$ 73 365	113.4	50.7	\$ 4 416	68.3	6.3	15.5	50.7	\$ 195 399	\$ 77 622	59%
Toronto	\$ 1 328 277	7.4	23.8	\$ 265 655	362.9	70.9	\$ 5 963	81.5	8.9	20.7	52.9	\$ 228 100	\$ 87 847	52%
Montreal	\$ 553 095	3.3	18.6	\$ 30 309	50.6	28.5	\$ 2 483	41.4	3.0	8.8	32.4	\$ 112 220	\$ 71 921	45%
Vancouver	\$ 1 660 074	5.3	19.6	\$ 332 015	452.2	153.9	\$ 7 453	101.5	9.0	22.2	76.1	\$ 285 078	\$ 88 115	42%
Calgary	\$ 533 082	2.0	8.8	\$ 28 308	38.0	30.3	\$ 2 393	32.1	2.2	5.4	36.0	\$ 108 353	\$ 89 342	59%
Edmonton	\$ 445 295	1.5	5.5	\$ 22 265	30.6	25.7	\$ 1 999	27.5	1.7	4.0	30.8	\$ 90 807	\$ 87 362	57%
Ottawa/Gatineau	\$ 679 188	4.1	18.5	\$ 42 919	59.0	28.1	\$ 3 049	42.0	3.4	9.3	31.5	\$ 136 580	\$ 87 222	58%
Quebec	\$ 356 311	2.7	11.8	\$ 17 816	28.8	20.5	\$ 1 600	25.8	1.8	4.5	23.2	\$ 72 661	\$ 74 328	51%
Winnipeg	\$ 398 295	3.8	12.8	\$ 19 915	30.3	22.0	\$ 1 788	27.2	2.2	4.9	25.0	\$ 81 222	\$ 78 903	61%
Hamilton	\$ 984 348	7.9	28.2	\$ 73 435	96.9	33.4	\$ 4 419	58.3	6.6	16.1	33.7	\$ 195 534	\$ 90 915	60%
Victoria	\$ 1 188 394	7.3	23.4	\$ 237 679	381.9	75.0	\$ 5 335	85.7	9.3	21.3	64.8	\$ 204 078	\$ 74 693	49%

Canadian perspective on housing affordability

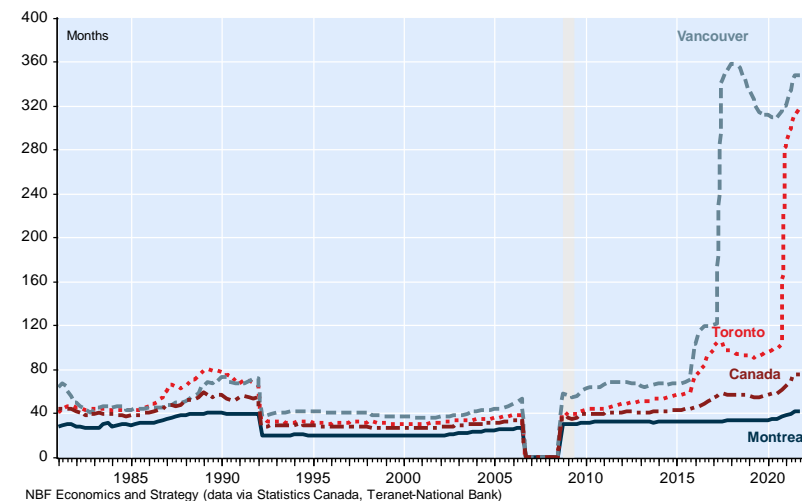
Canada : Perspective on housing affordability

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



Canada: Perspective on housing affordability

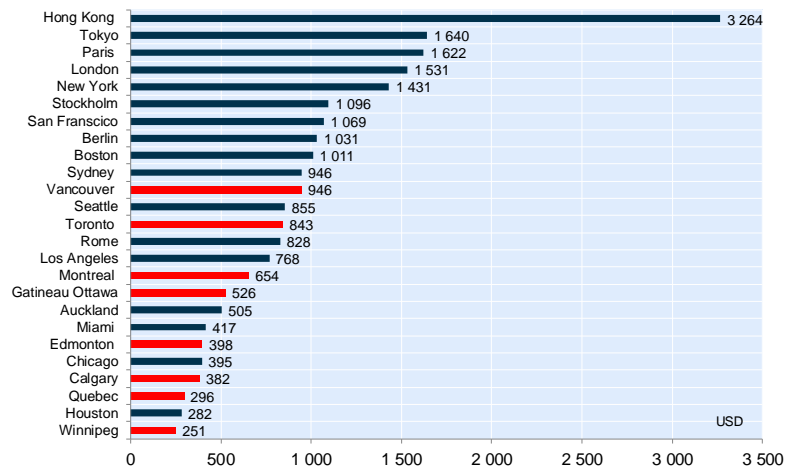
Number of months required to accumulate the minimum down-payment assuming a 10% saving rate



Global perspective on housing affordability

World: Home prices do not seem extreme in Canada

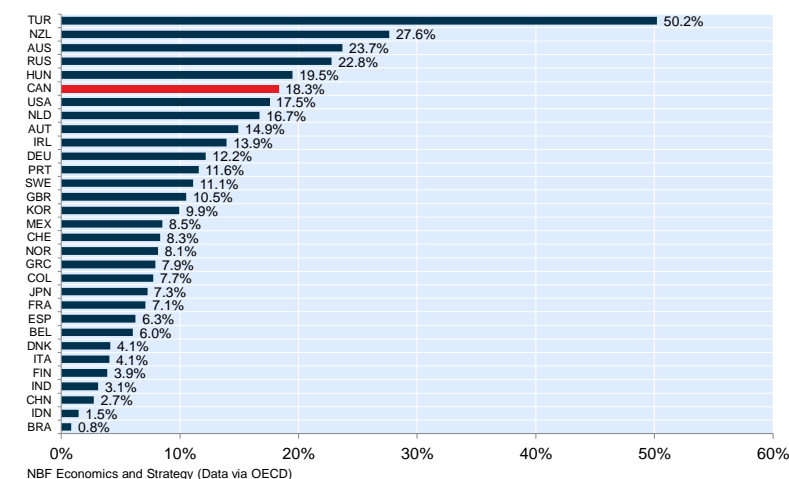
Price per square feet in USD for downtown living* (May 2021)



* For a 700 sq.ft. apartment
NBF Economics and Strategy (as of 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

Matthieu Arseneau

Deputy Chief Economist
matthieu.arseneau@nbc.ca

Kyle Dahms

Economist
kyle.dahms@nbc.ca

Daren King

Economist
daren.king@nbc.ca

Jocelyn Paquet

Economist
jocelyn.paquet@nbc.ca

Alexandra Ducharme

Economist
alexandra.ducharme@nbc.ca

Angelo Katsoras

Geopolitical Analyst
angelo.katsoras@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

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(l) 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 may 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.