

Affordability erodes again in Q2

By Matthieu Arseneau & Kyle Dahms

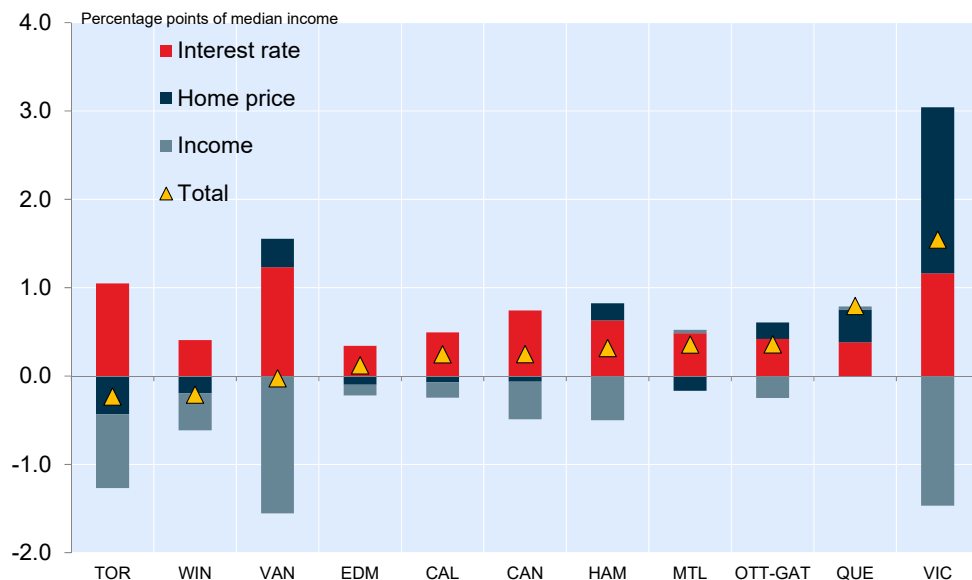
Mortgage interest rates were on the rise for a fourth consecutive quarter in Q2. As a result, affordability worsened in no less than 7 out of ten urban markets which explains the 12th consecutive deterioration of our urban composite index. Unsurprisingly, the rise in interest rates hit harder for the priciest markets in the country (left chart). Thankfully, income gains in British Columbia mitigated the impact on affordability for its two major cities. Nevertheless, Victoria experienced a sharp deterioration in both condo and non-condo segments as prices continue to swell despite more restrictive lending standards imposed by OSFI since January. The slowdown in the resale market has begun to impact prices in Vancouver and Toronto during the quarter. Indeed, home prices experienced their weakest gain in almost four years in Vancouver while Toronto posted a decline. That being said, both cities remain a painful environment for new homebuyers (right chart) and this is unlikely to change in the short term as central banks remain in a tightening mode.

HIGHLIGHTS:

- Canadian housing affordability deteriorated for a twelfth consecutive quarter in Q2. The mortgage payment on a representative home as a percentage of income (MPPI) rose 0.2 points after a 1.2-point rise in Q1. Seasonally adjusted home prices edged down 0.1% in Q2 from Q1; the benchmark mortgage rate (5-year term) rose 0.14 points; and median household income rose 0.9% (3.6% annualized).
- The worst deteriorations were in Victoria (+1.5 points) and Quebec City (+0.8 points). There were slight improvements in Toronto (-0.2 points) and Winnipeg (-0.2 points). The situation worsened in Montreal (+0.4)/Calgary (+0.2) and remained unchanged in Vancouver.
- Countrywide, affordability worsened in the condo (+0.7 points) and for non-condo (+0.2 points) segments.
- The time required to save for the down payment on a representative home at a savings rate of 10%, was down to 57.1 months, versus 57.7 months a quarter earlier.

Canada: Q2 change in housing affordability in 10 metropolitan areas

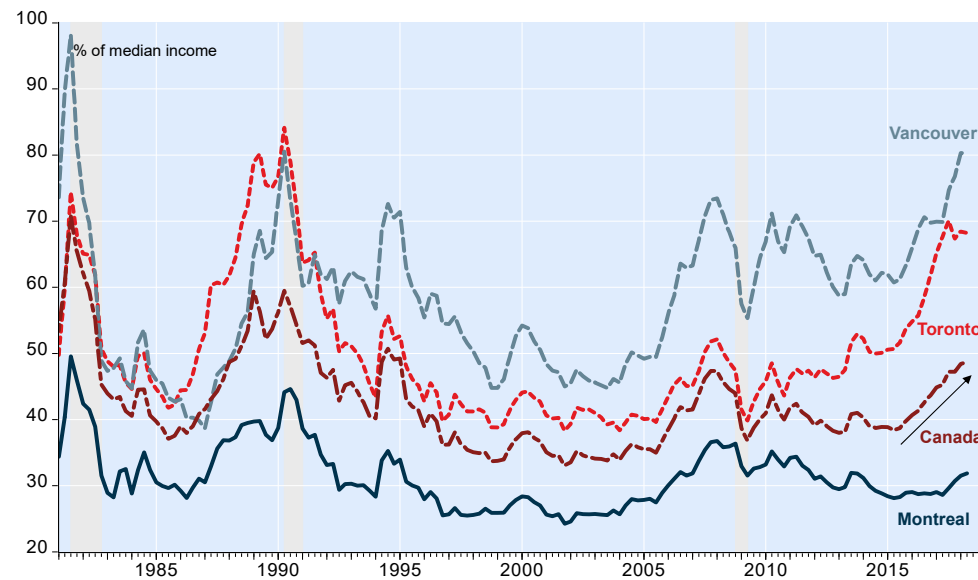
Q/Q change in mortgage payment on median-price home (25-year amortization, 5-year term)



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

Canada: Housing affordability since 1981

Mortgage payment on a median-price home as % of median income (25-year amortization, 5-year term)



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

Housing Affordability Monitor

Economics and Strategy

Toronto

Toronto's housing affordability improved for the non-condo segment in the second quarter. That said, condos became less affordable in the same period. With non-condo ownership being unattainable for most households, a spillover could be headed towards the relatively more affordable condo segment. Prices for condos were up on a q/q (+1.2%) and y/y (+8.7%) basis. All in all, including home price declines for the non-condo segment and rising incomes, the aggregate for all dwellings showed an improvement in the MPPI* for the quarter (-0.2pp). *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	73.0%	▼	- 0.4%	Q/Q
Condo	41.7%	▲	+ 0.6%	Q/Q



Non-Condo

\$897,747

Price of the representative home in the metropolitan market

\$160,577

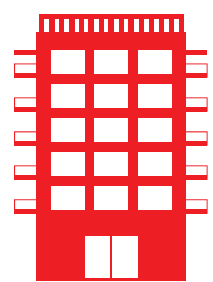
Household annual income needed to afford the representative home

111

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

25.8%

Premium for buying compared to the national urban composite



Condo

\$512,223

Price of the representative condo in the metropolitan market

\$91,620

Household annual income needed to afford the representative condo

45

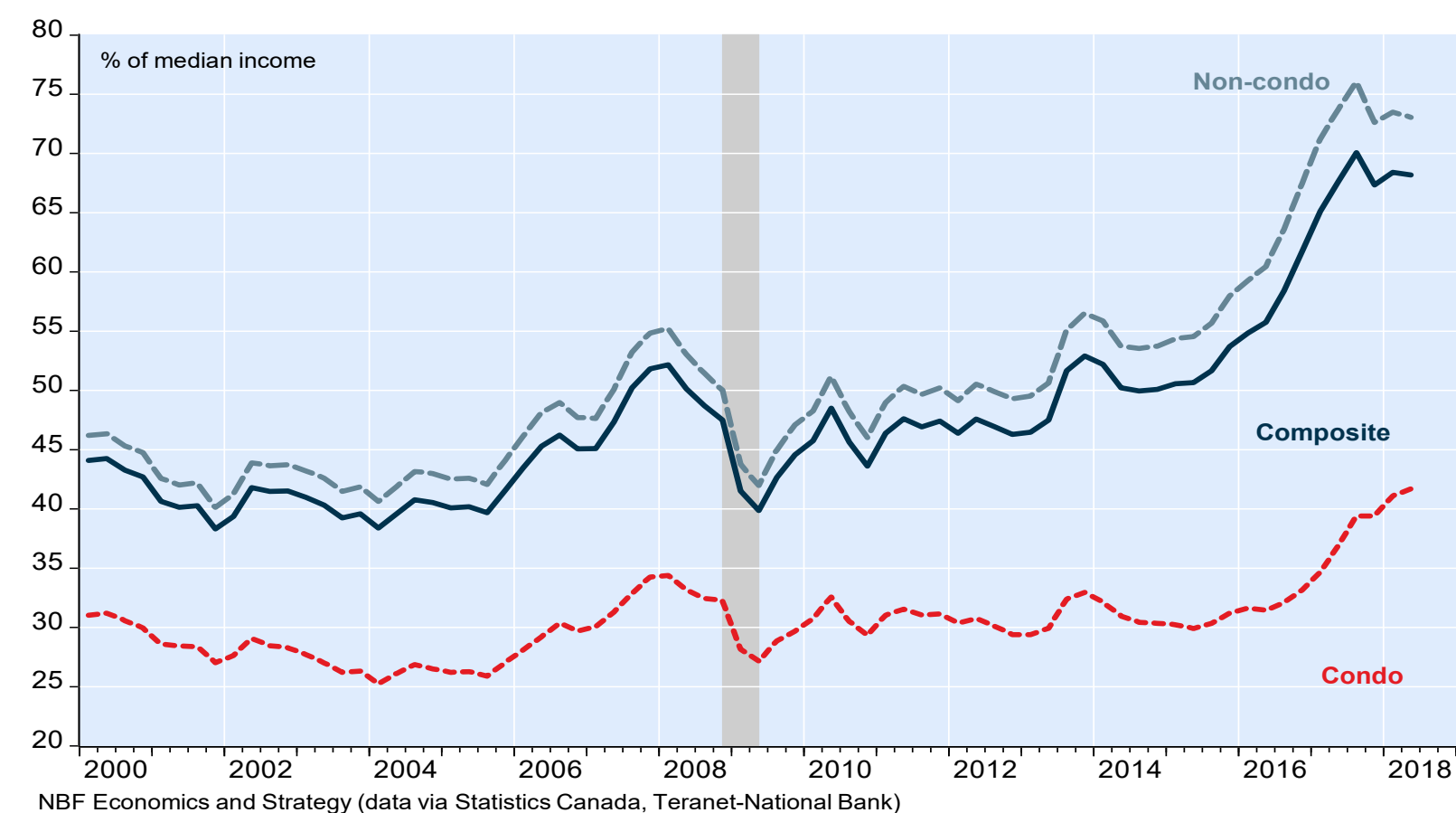
Months of saving required for the down payment (saving rate of 10%)

5.2%

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

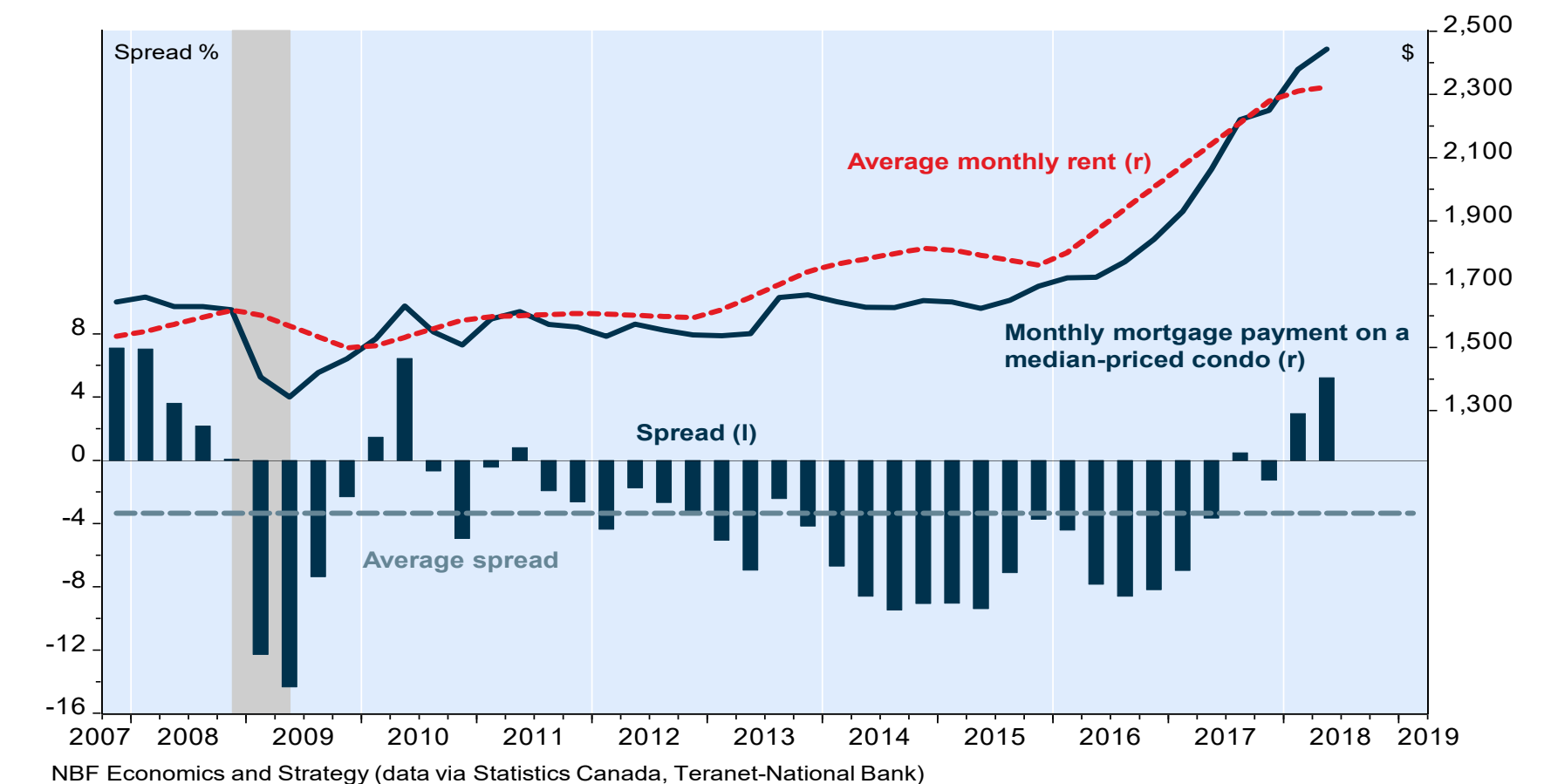
Toronto : Perspective on housing affordability

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



TORONTO

Housing Affordability Monitor

Economics and Strategy

Montreal

In Montreal, affordability as measured by the MPPI declined for both the condo (+0.5pp) and non-condo (+0.3pp) segments. The housing market is heating up in this comparatively affordable city. Accordingly, for the aggregate of all dwellings, the MPPI* reached 31.9 %, its highest level since Q3 2013. On a yearly basis, home prices have risen by 4.7 %, outpacing income growth which progressed 2.4 % in the same period. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	34.5%	▲	+ 0.3%	Q/Q
Condo	26.0%	▲	+ 0.5%	Q/Q



Non-Condo

\$353,577

Price of the representative home in the metropolitan market

\$63,243

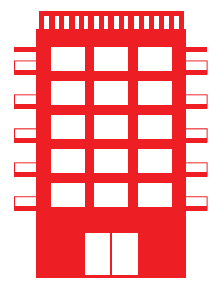
Household annual income needed to afford the representative home

36

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

-50.5%

Premium for buying compared to the national urban composite



Condo

\$266,504

Price of the representative condo in the metropolitan market

\$47,669

Household annual income needed to afford the representative condo

27

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

7.3%

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

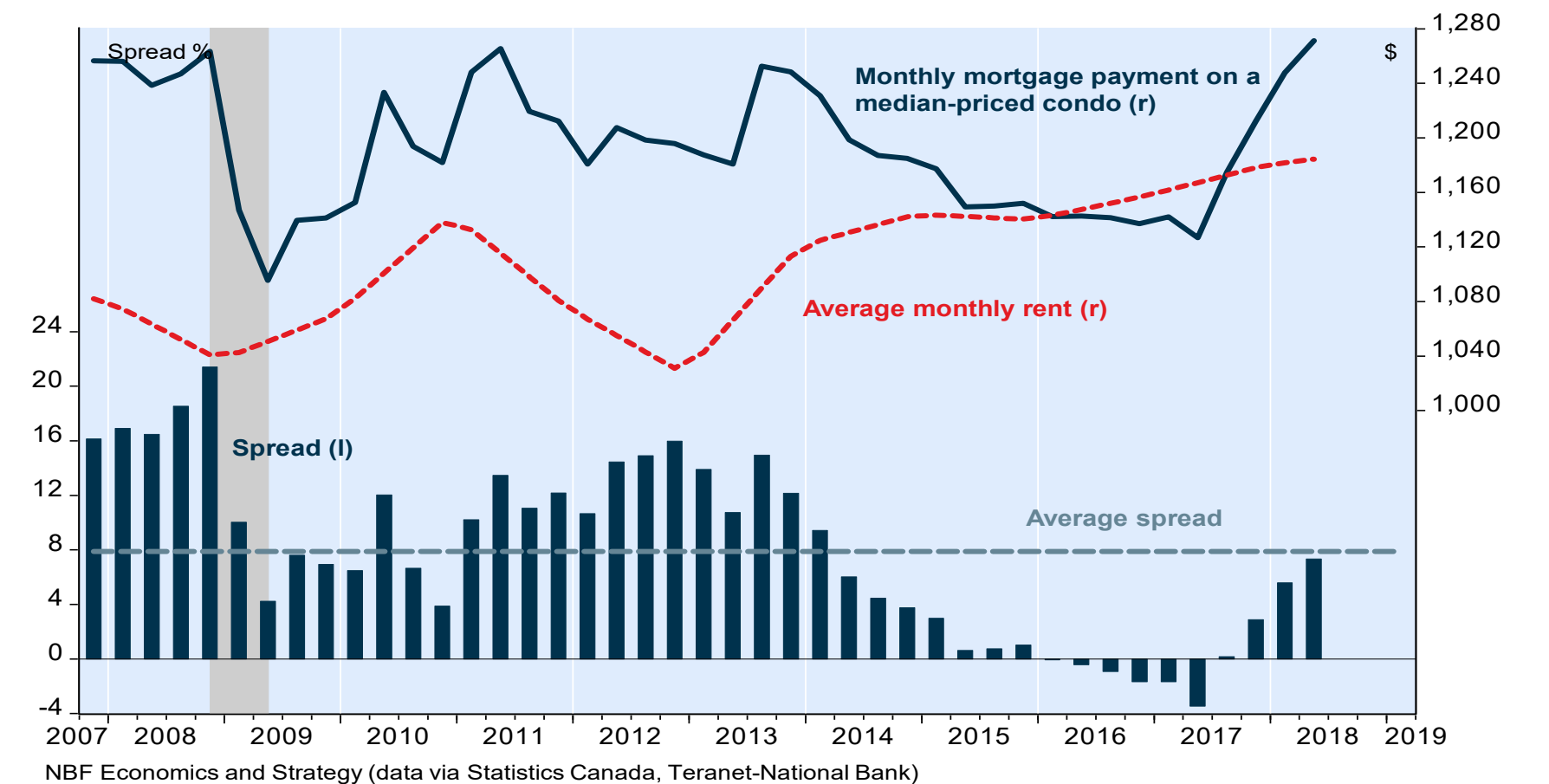
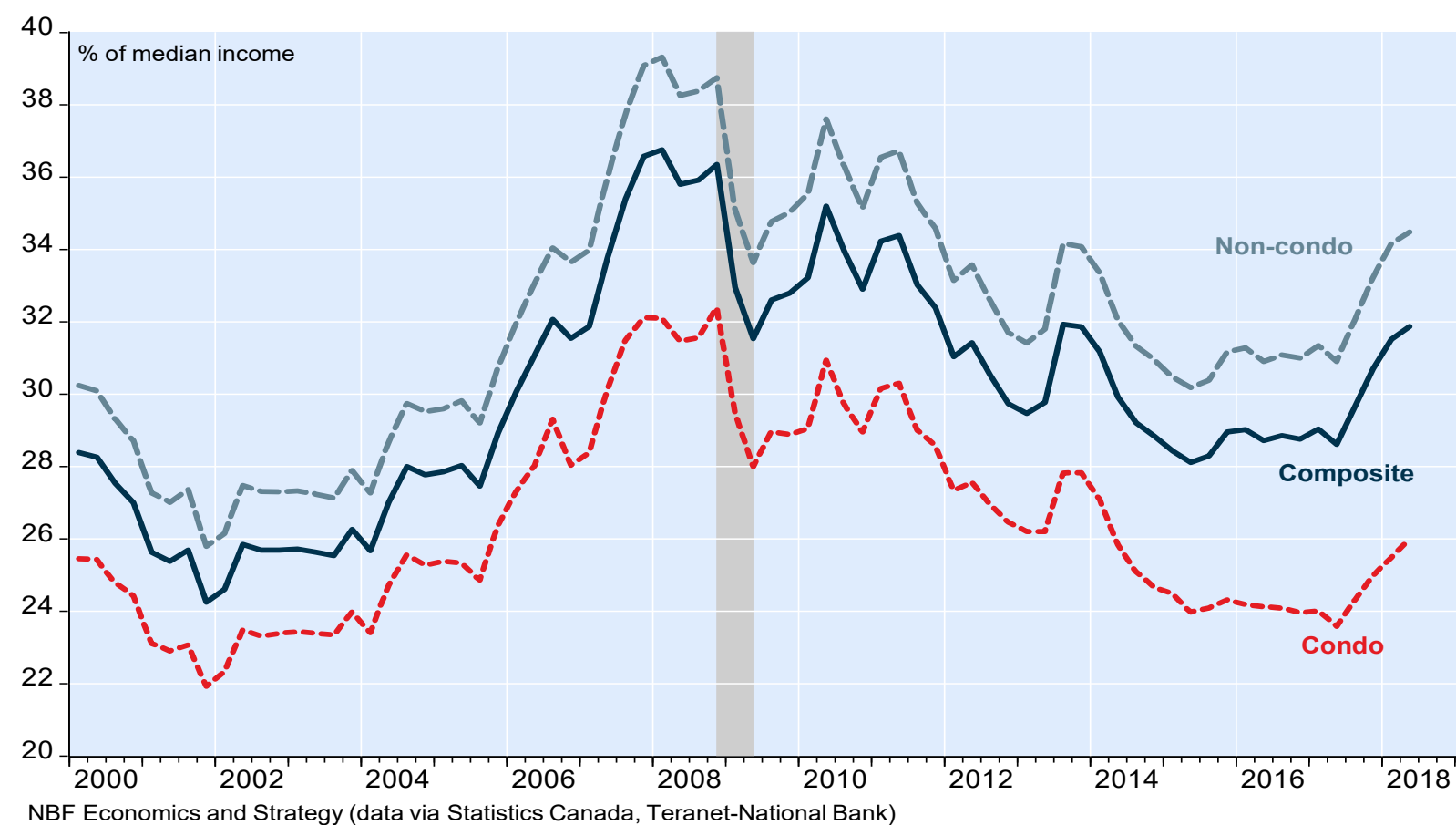
Montreal : Perspective on housing affordability

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



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

Vancouver

Vancouver's housing affordability somewhat mirrored conditions seen in the Toronto market. Indeed, affordability as quantified by the MPPI* was declining for the condo sector (+1.2%, a 12th consecutive deterioration) in the second quarter. A mortgage payment for the non-condo segment would require almost the totality of the total median household income (97.9%) to service. This percentage declined in quarter (-0.6pp) on the back of rising incomes and declining home prices. Overall, aggregate home prices rose a towering 12.8% in the past year, slightly down from the prior quarter.*See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	97.9%	▼	- 0.6%	Q/Q
Condo	47.4%	▲	+ 1.2%	Q/Q



Non-Condo

\$1,334,406

Price of the representative home in the metropolitan market

\$238,681

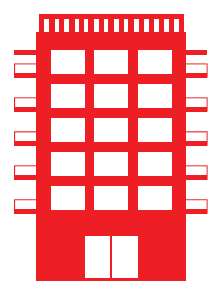
Household annual income needed to afford the representative home

410

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

86.9%

Premium for buying compared to the national urban composite



Condo

\$646,043

Price of the representative condo in the metropolitan market

\$115,556

Household annual income needed to afford the representative condo

61

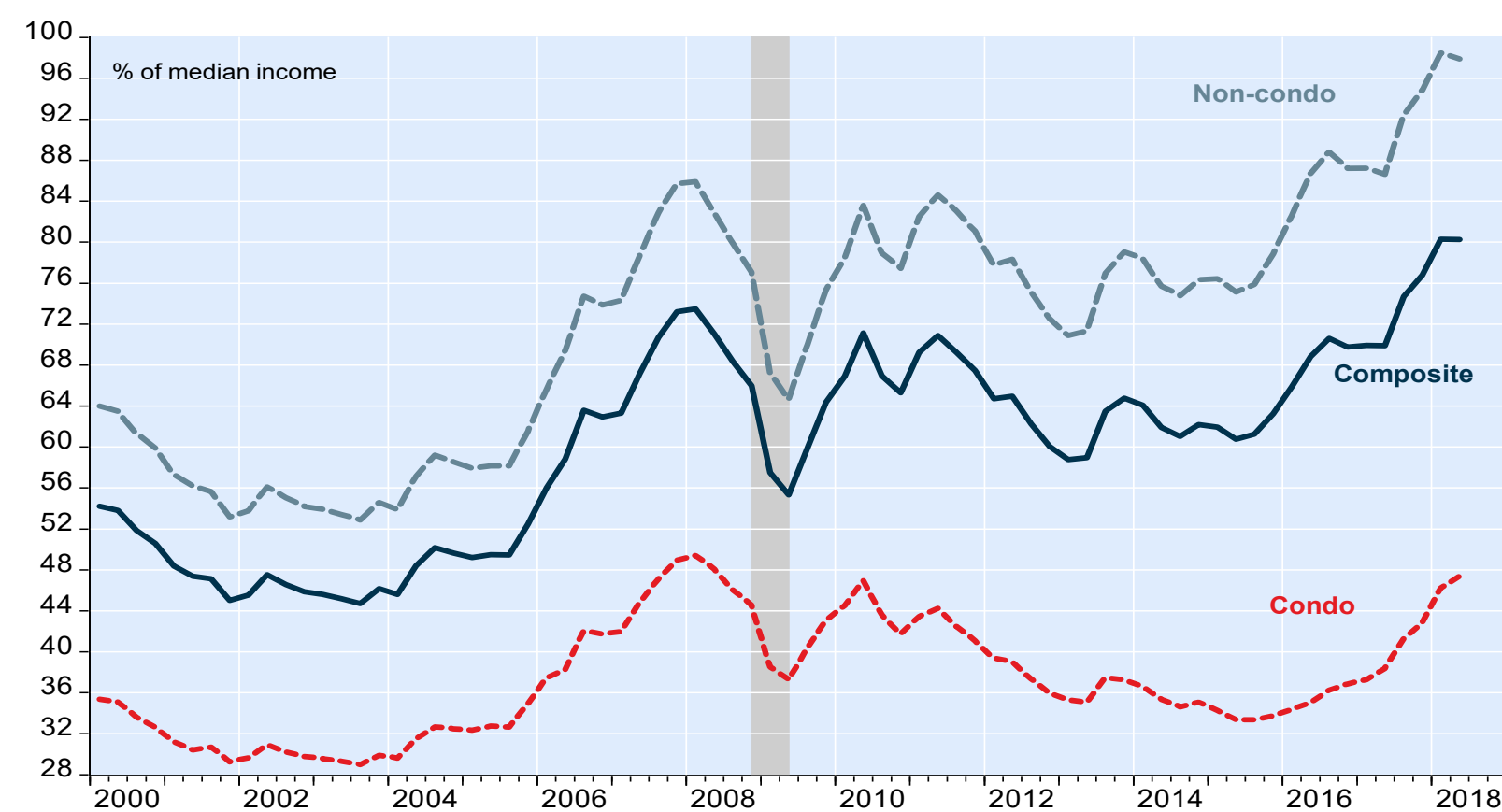
Months of saving required for the down payment (saving rate of 10%)

62.7%

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

Vancouver : Perspective on housing affordability

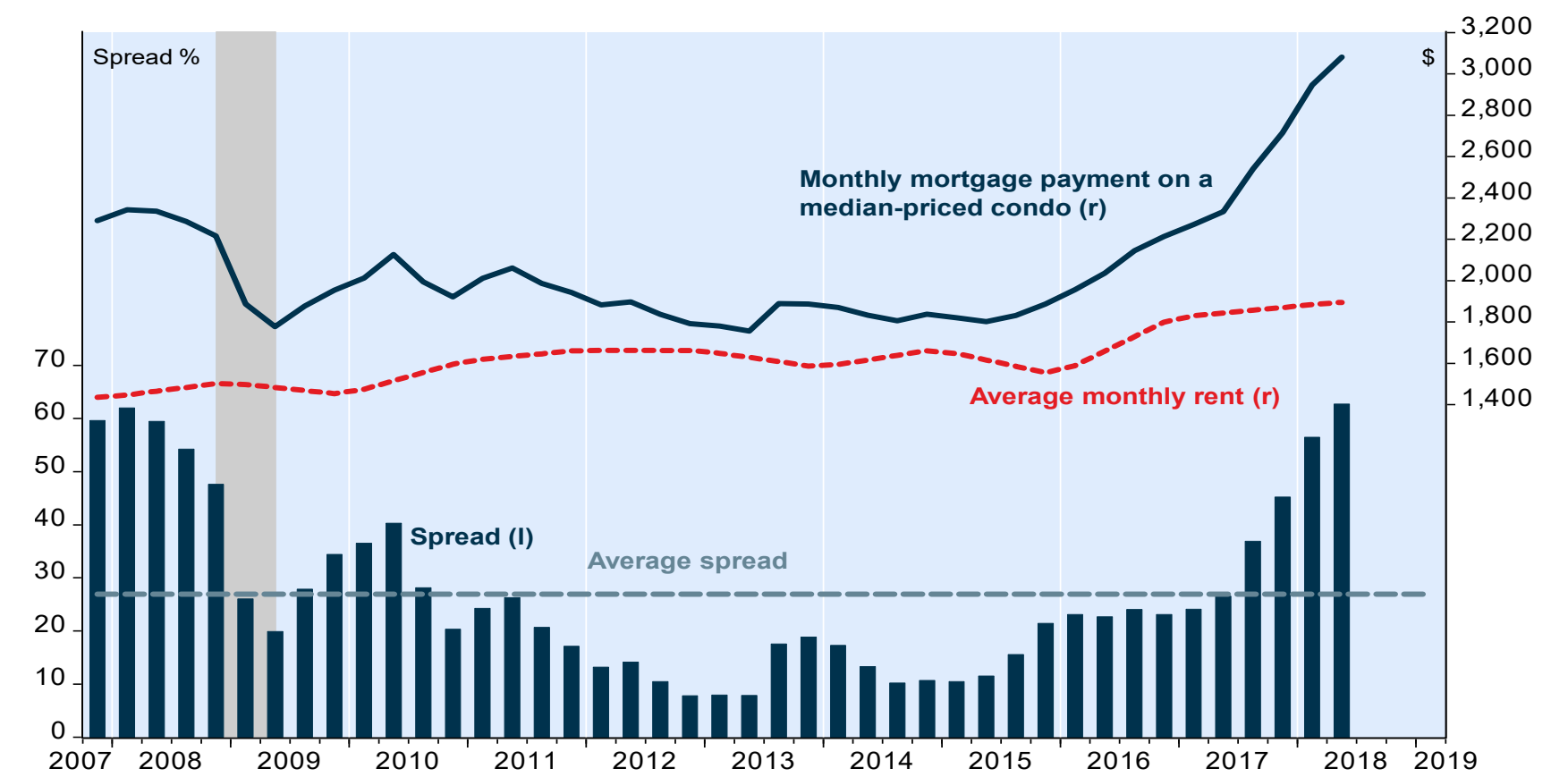
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



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

Vancouver: Buying compared to renting

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



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

VANCOUVER

Housing Affordability Monitor

Economics and Strategy

Calgary

In Calgary, the MPPI* for both the non-condo and condo segments showed a deterioration in affordability of +0.3pp and +0.2pp respectively. That said, on an annual basis, the city composite experienced a marginal increase of 0.1% in housing prices and a 3.8% improvement in income. The 77-bps hike for mortgage rates overwhelmed the potential improvement in housing affordability. All in all, the Calgary market as a whole remains on the cusp of affordability as resale market conditions remain favourable to buyers. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	36.7%	▲ +	0.3%	Q/Q
Condo	19.8%	▲ +	0.2%	Q/Q



**Non-
Condo**

\$505,361

Price of the representative home in the metropolitan market

\$90,392

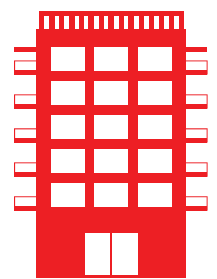
Household annual income needed to afford the representative home

39

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

-29.2%

Premium for buying compared to the national urban composite



Condo

\$272,063

Price of the representative condo in the metropolitan market

\$48,663

Household annual income needed to afford the representative condo

21

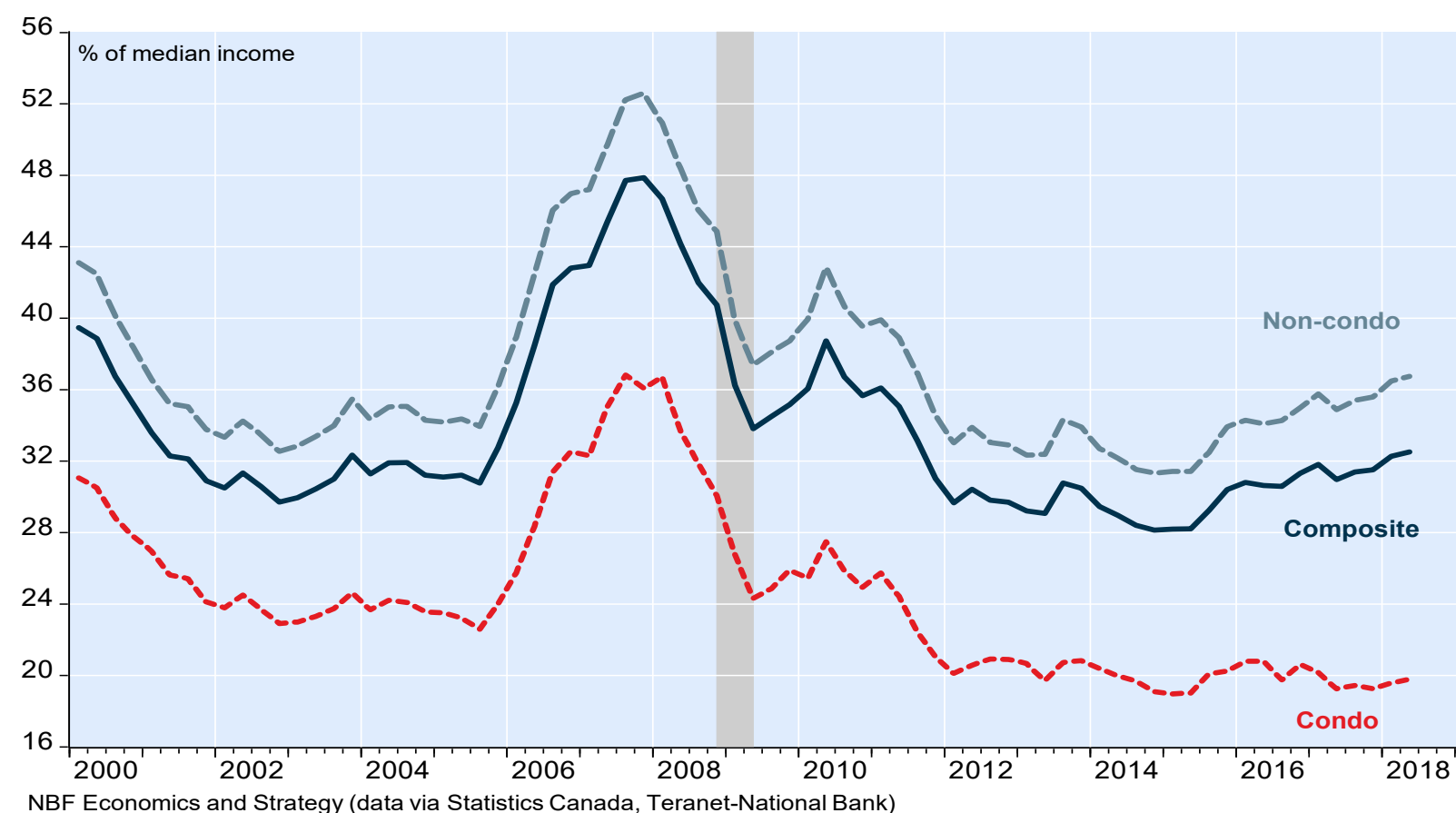
Months of saving required for the down payment (saving rate of 10%)

-14.5%

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

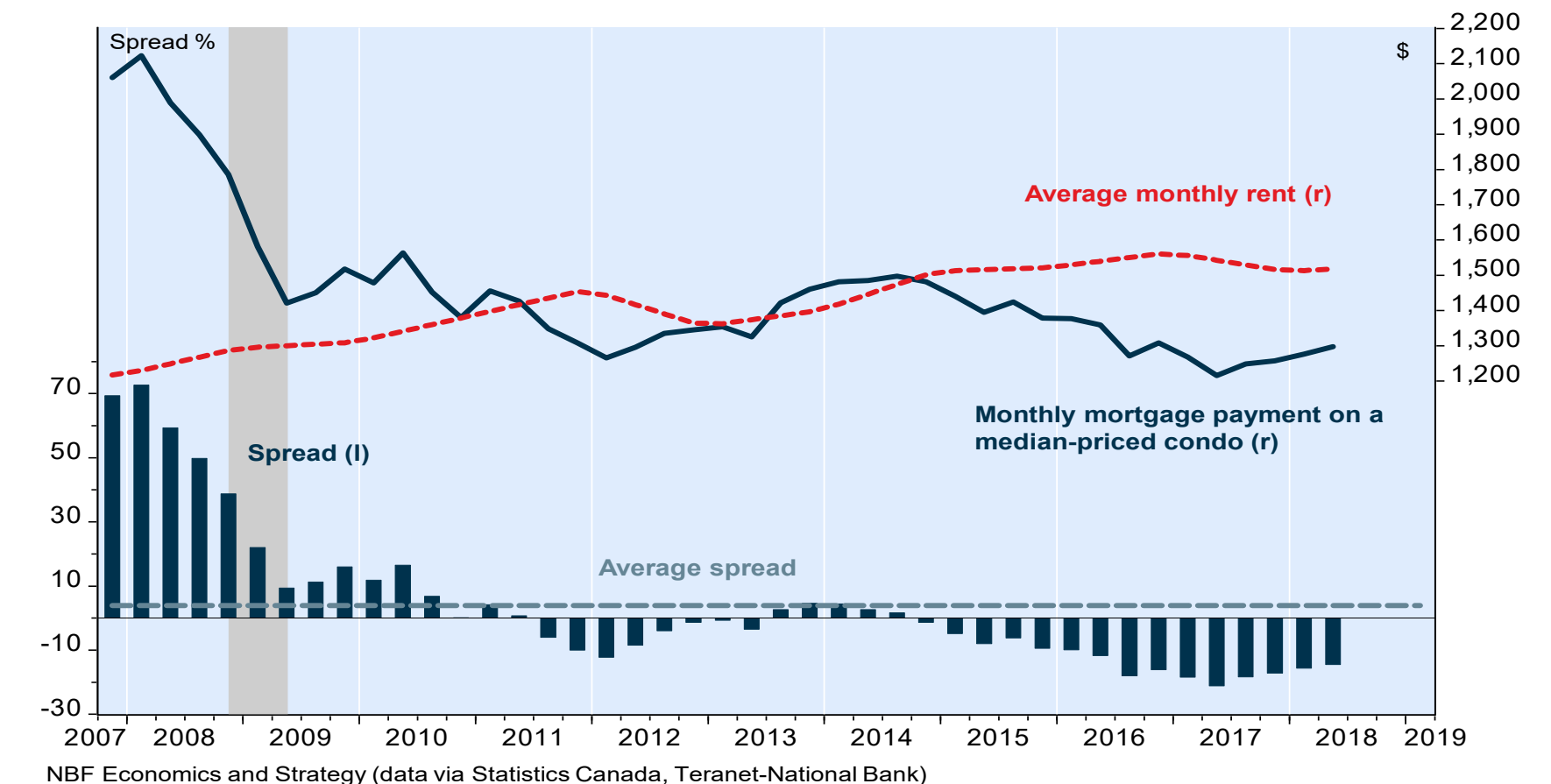
Calgary : Perspective on housing affordability

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

Housing Affordability Monitor

Economics and Strategy

Edmonton

Edmonton saw a deterioration in affordability for the non-condo (+0.1pp) and condo (+0.2pp) segments. These increases in the MPPI* are essentially due to a rise in interest rates in the quarter. That said, the 25 (non-condo) and 14 (condo) months of savings required for the down payment are the lowest amongst its peers. On an annual basis, the MPPI* for the composite progressed by 1.1-points. Despite this relatively small rise, Edmonton remains one of the most affordable housing markets in Canada. Indeed, it was only the third time in the last 14 quarters that there was a deterioration of the MPPI. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	23.8%	▲ +	0.1%	Q/Q
Condo	13.2%	▲ +	0.2%	Q/Q



**Non-
Condo**

\$423,124

Price of the representative home in the metropolitan market

\$75,683

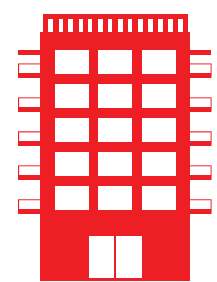
Household annual income needed to afford the representative home

25

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

-40.7%

Premium for buying compared to the national urban composite



Condo

\$234,233

Price of the representative condo in the metropolitan market

\$41,897

Household annual income needed to afford the representative condo

14

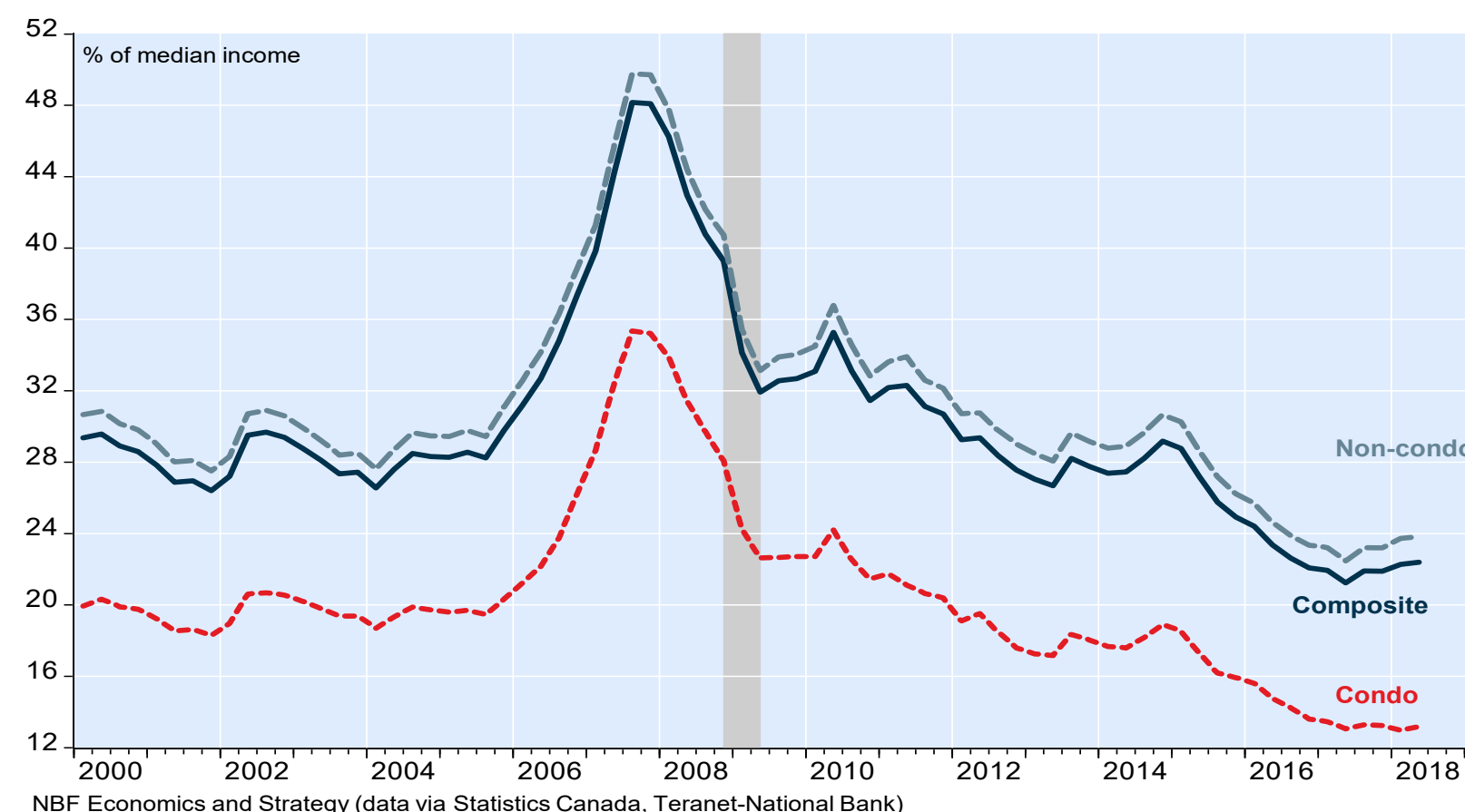
Months of saving required for the down payment (saving rate of 10%)

-17.3%

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

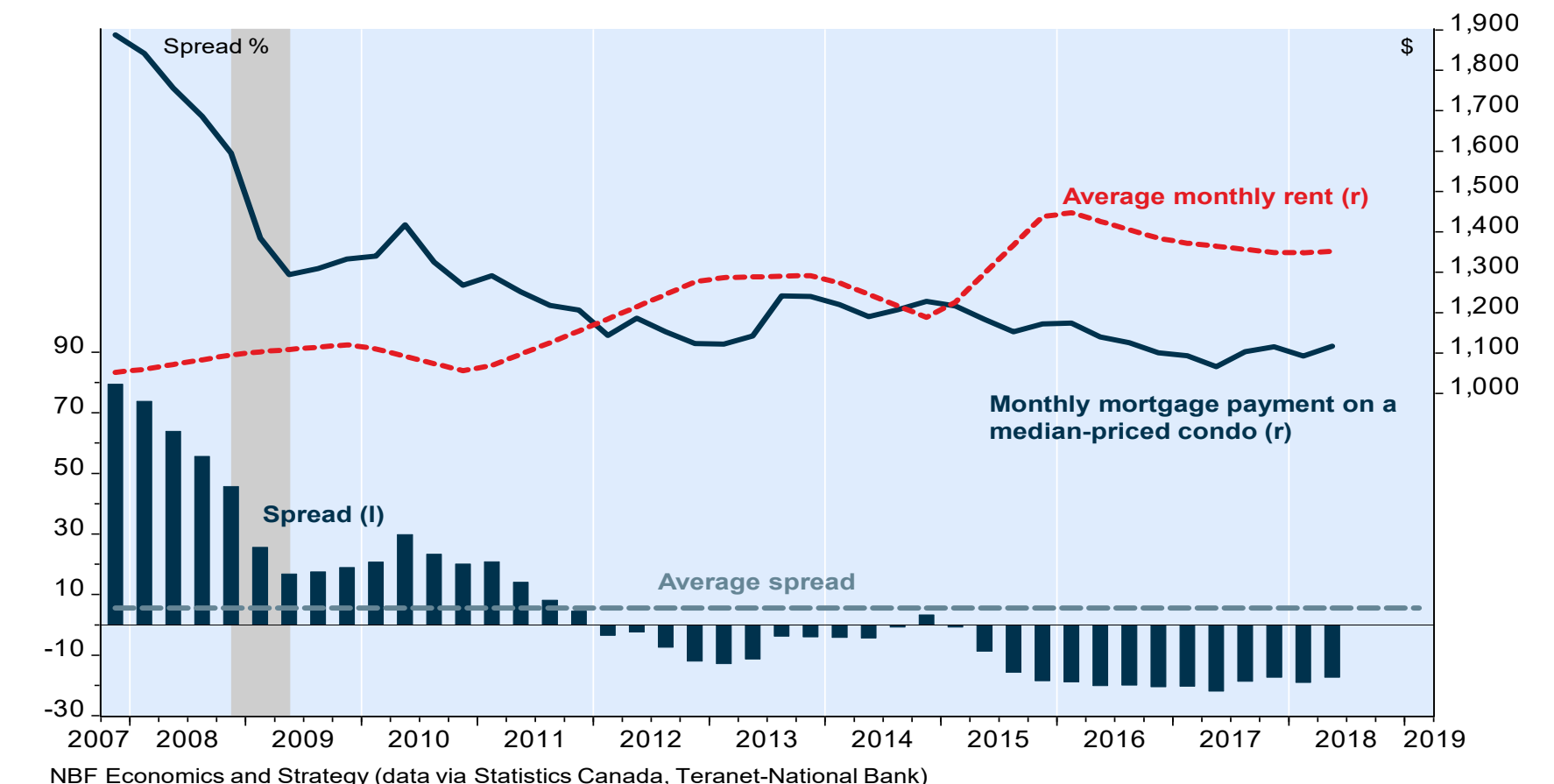
Edmonton : Perspective on housing affordability

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

Ottawa/Gatineau

In Ottawa-Gatineau, the MPPI* for both the non-condo and condo segments showed a deterioration in affordability of +0.4pp and +0.2pp, respectively. A rise in home prices for both segments of the market were behind this quarterly decline. For the aggregate of all dwellings, this was the fourth consecutive quarter of worsening for affordability, with a MPPI which rose 2.4pp from a year ago. Income grew at a respectable 4.2 % on a yearly basis but was not enough to offset the increase in home prices and interest rates. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	30.0%	▲ +	0.4%	Q/Q
Condo	18.0%	▲ +	0.2%	Q/Q



**Non-
Condo**

\$413,192

Price of the representative home in the metropolitan market

\$73,906

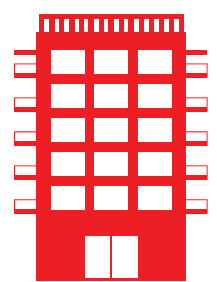
Household annual income needed to afford the representative home

31

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

-42.1%

Premium for buying compared to the national urban composite



Condo

\$247,604

Price of the representative condo in the metropolitan market

\$44,288

Household annual income needed to afford the representative condo

19

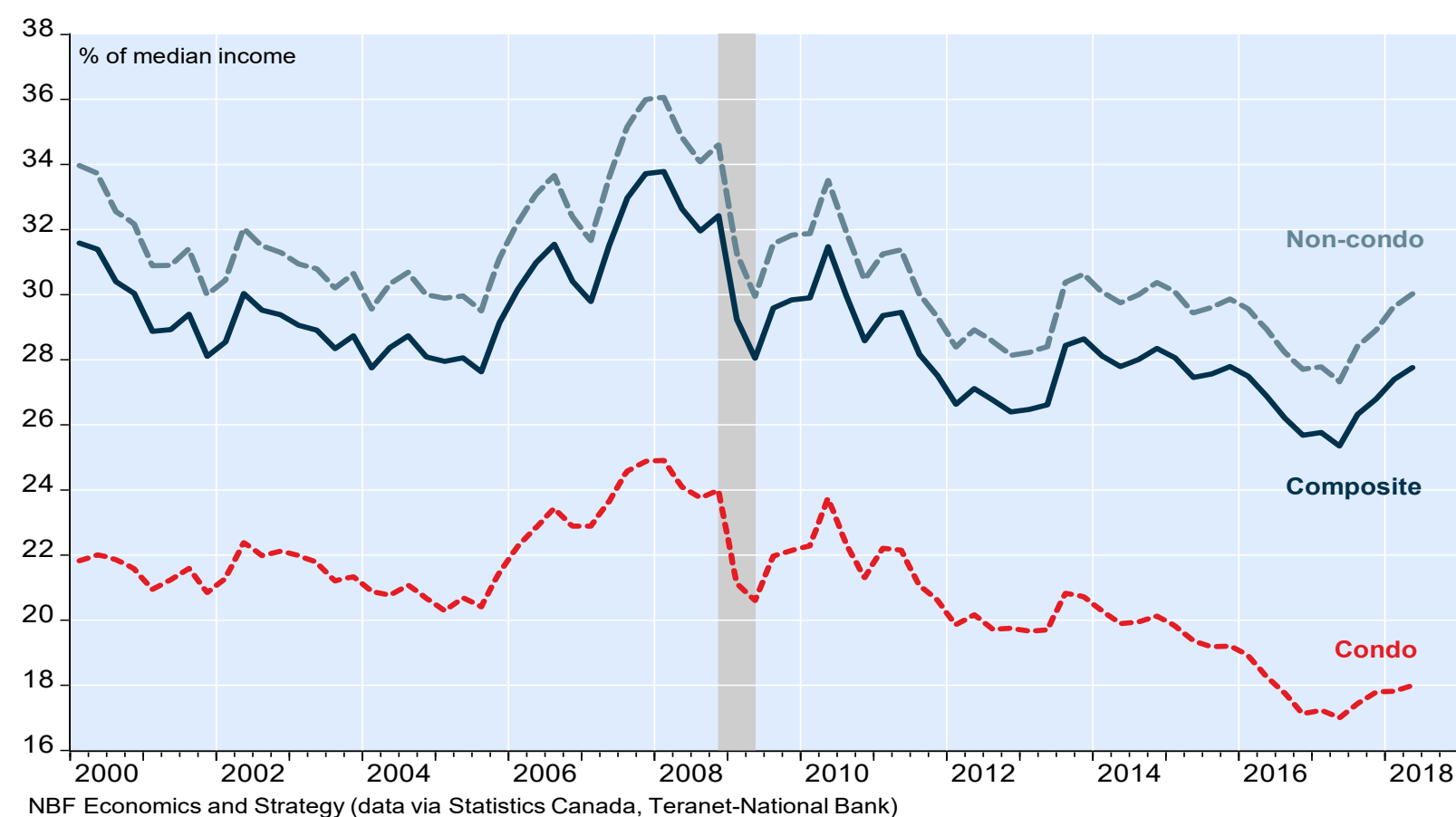
Months of saving required for the down payment (saving rate of 10%)

-24.9%

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

Ottawa/Gatineau : Perspective on housing affordability

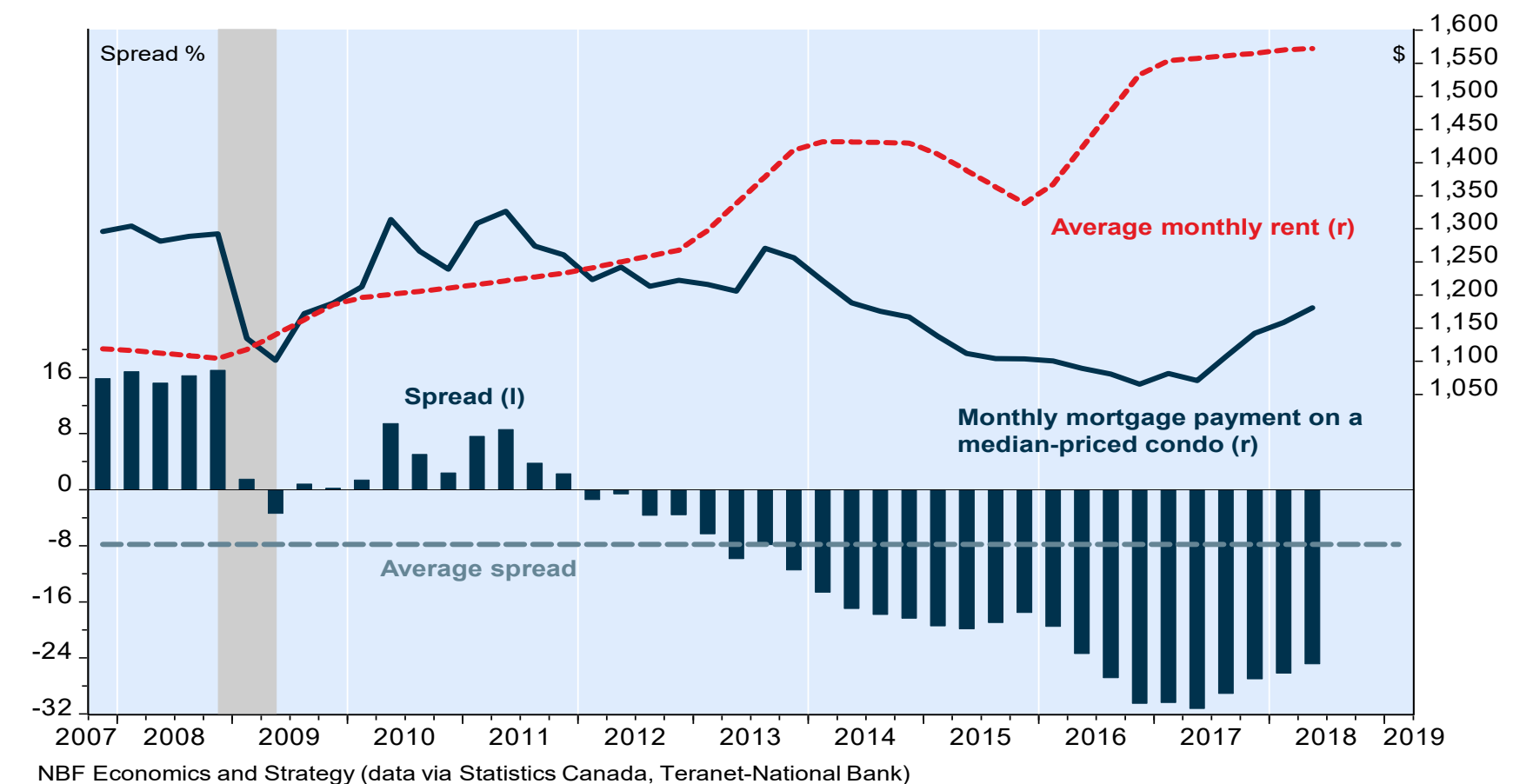
Monthly mortgage payment on median home price (25 year amortization, 5-year term)



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

Ottawa/Gatineau: Buying compared to renting

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



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

OTTAWA/GA

Quebec City

Canada's second most affordable market became slightly less accessible in the quarter. Quebec's MPPI* saw a deterioration in affordability for the non-condo (+0.8pp) and condo (+0.5pp) segments. On a yearly basis for the composite of all dwellings, the MPPI gained 2.0-points, the highest annual increase since Q1 of 2013. This decline in housing affordability can be partly attributed to a 77 bps increase of the mortgage rate as income and prices have risen 2.4 % and 2.0 % respectively . *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	26.4%	▲	+ 0.8%	Q/Q
Condo	19.7%	▲	+ 0.5%	Q/Q



**Non-
Condo**

\$284,283

Price of the representative home in the metropolitan market

\$50,849

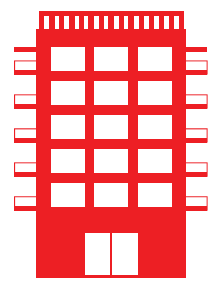
Household annual income needed to afford the representative home

28

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

-60.2%

Premium for buying compared to the national urban composite



Condo

\$212,250

Price of the representative condo in the metropolitan market

\$37,965

Household annual income needed to afford the representative condo

21

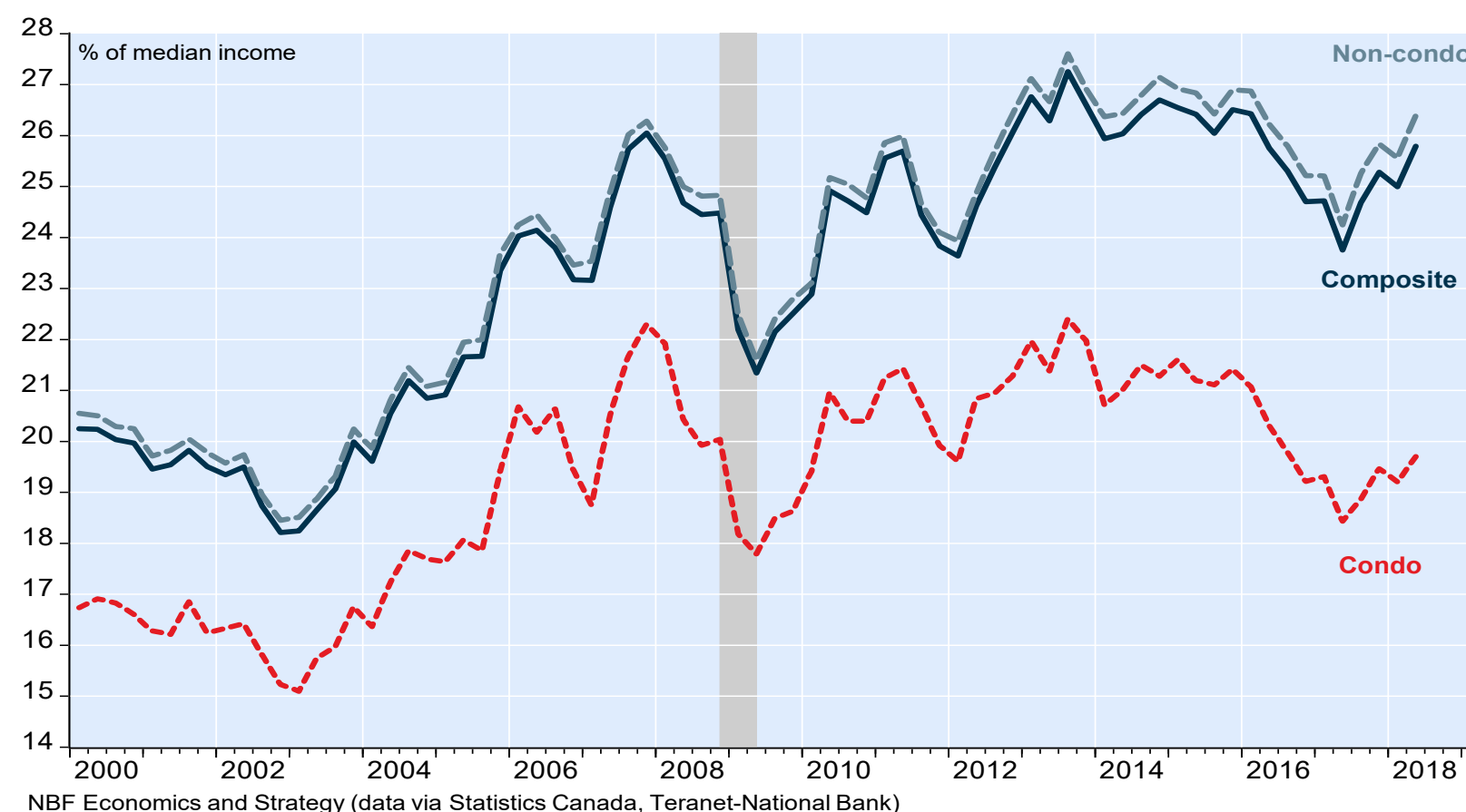
Months of saving required for the down payment (saving rate of 10%)

-4.0%

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

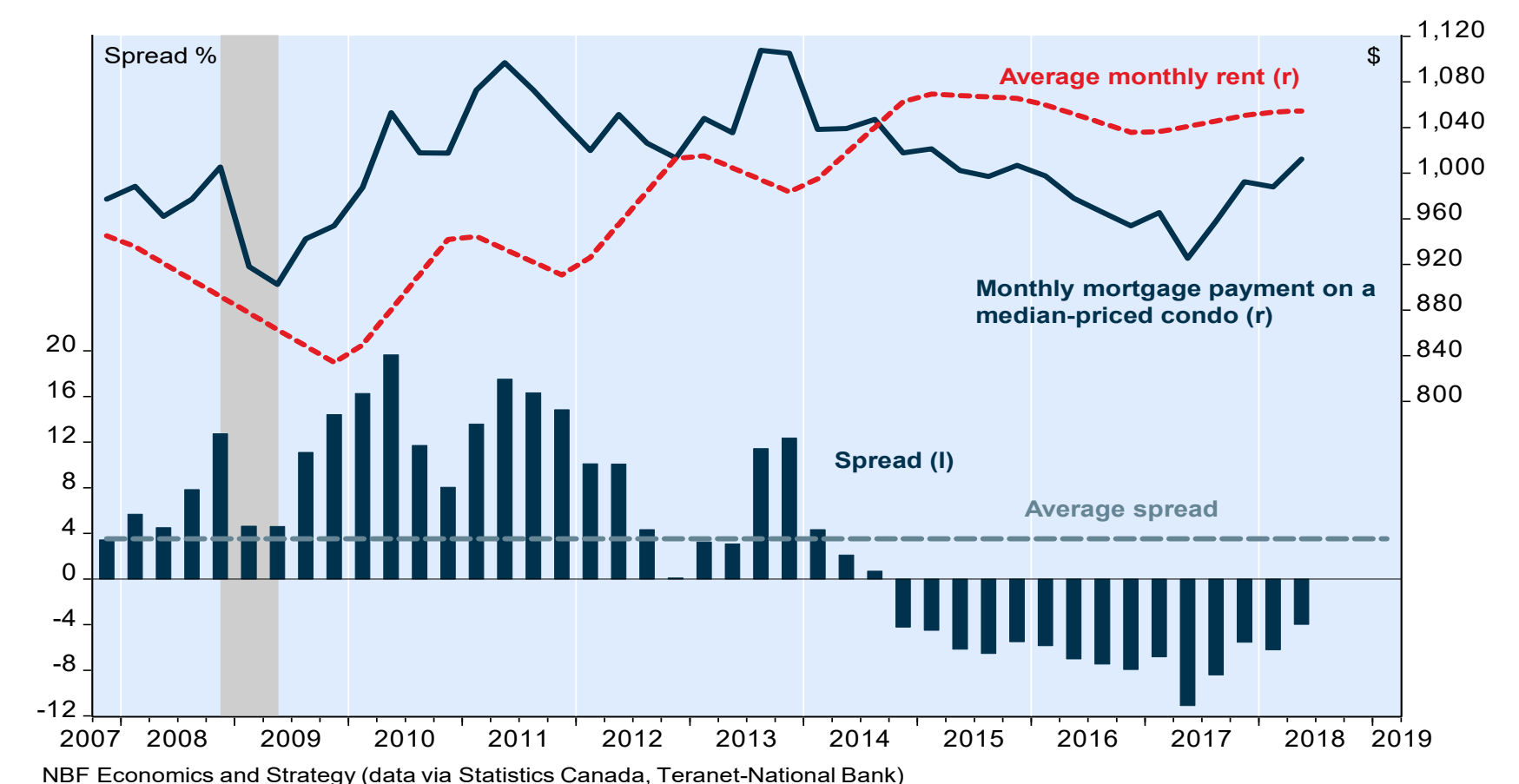
Quebec city: Perspective on housing affordability

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

Winnipeg was one of two markets to have shown an improvement in housing affordability in Q2 (the other being Toronto). Indeed, the MPPI* showed an amelioration in affordability for the non-condo (-0.2pp) and condo (-0.2pp) segments. For the aggregate of all dwellings, the MPPI fell 0.2-points after a 0.8-point rise in Q1. That said, the MPPI was up 2.4-points in the year as a 1.2% increment in income was more than offset by an increase of the mortgage rate and a progression of home prices. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	26.6%	▼	- 0.2%	Q/Q
Condo	19.1%	▼	- 0.2%	Q/Q



Non-Condo

\$318,610

Price of the representative home in the metropolitan market

\$56,989

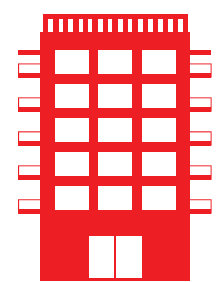
Household annual income needed to afford the representative home

28

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

-55.4%

Premium for buying compared to the national urban composite



Condo

\$229,426

Price of the representative condo in the metropolitan market

\$41,037

Household annual income needed to afford the representative condo

20

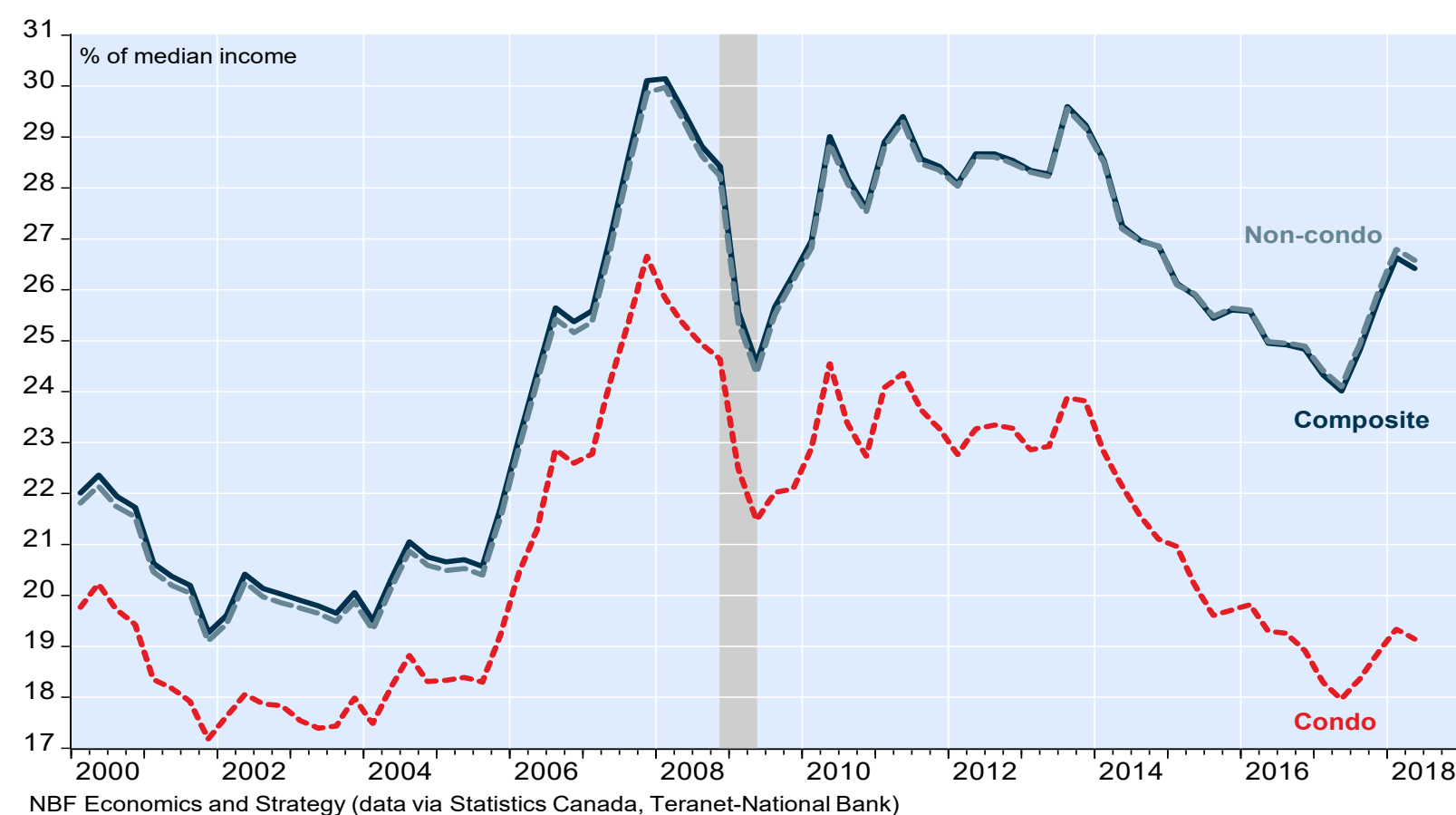
Months of saving required for the down payment (saving rate of 10%)

-21.3%

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

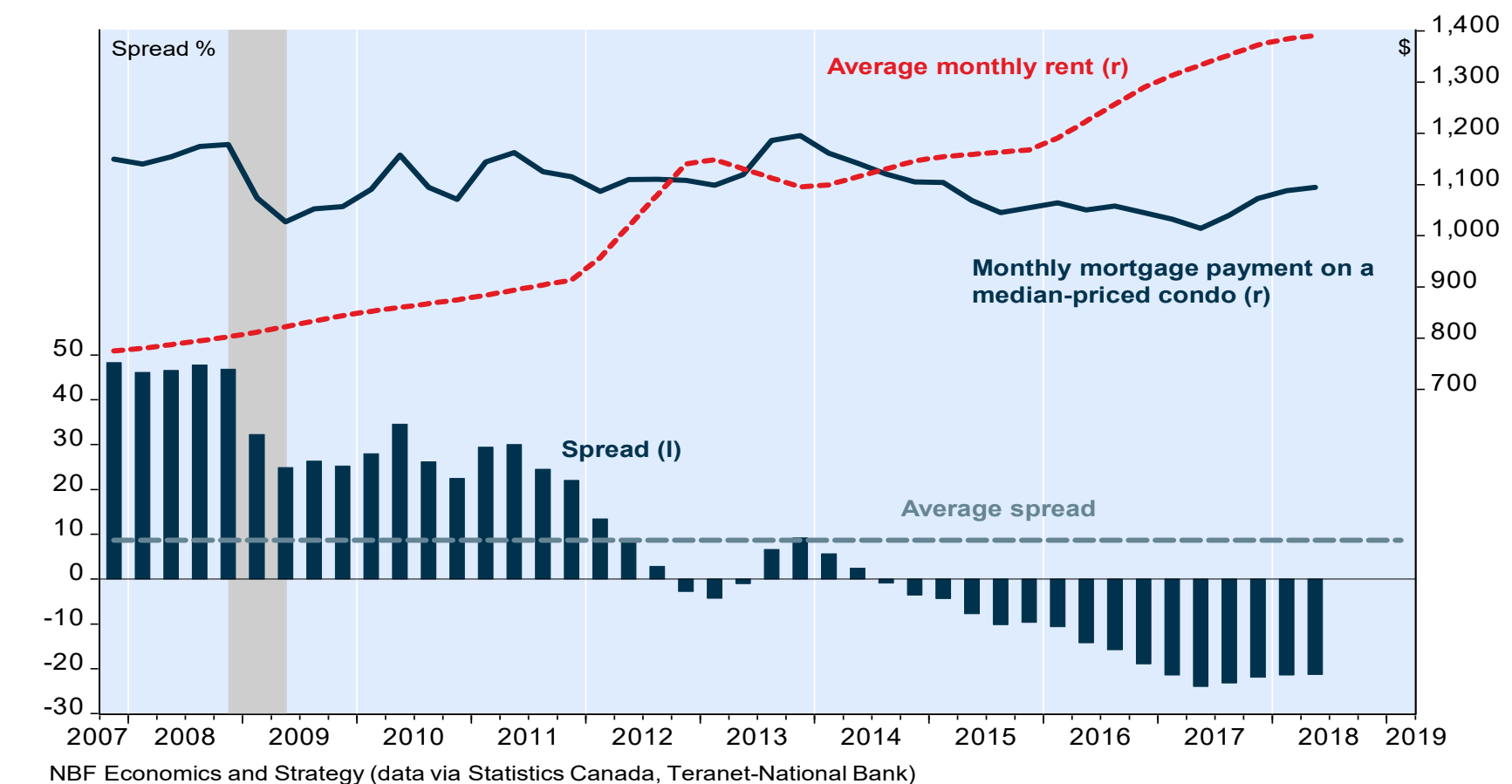
Winnipeg: Perspective on housing affordability

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

In Hamilton, the MPPI* for both the non-condo and condo segments showed a deterioration in affordability of +0.3pp and +0.5pp respectively. For the aggregate of all dwellings, the MPPI rose by 0.8-point in Q2, reaching its highest since at least 2000 (41.4 %). That being said, the housing situation appears to be normalizing with an MPPI that was up 2.6-points from a year earlier. This contrasts heavily with Q2 of 2017 when the yearly MPPI had surged by a spectacular 7.7-points. The current stabilization can be credited to prices increasing modestly by 1.4% y/y combined with income rising by 4.71% over that same period. *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non-Condo	44.0%	▲	+ 0.3%	Q/Q
Condo	32.4%	▲	+ 0.5%	Q/Q



Non-Condo

\$583,788

Price of the representative home in the metropolitan market

\$104,420

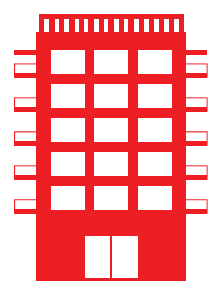
Household annual income needed to afford the representative home

53

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

-18.2%

Premium for buying compared to the national urban composite



Condo

\$429,409

Price of the representative condo in the metropolitan market

\$76,807

Household annual income needed to afford the representative condo

34

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

35.9%

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

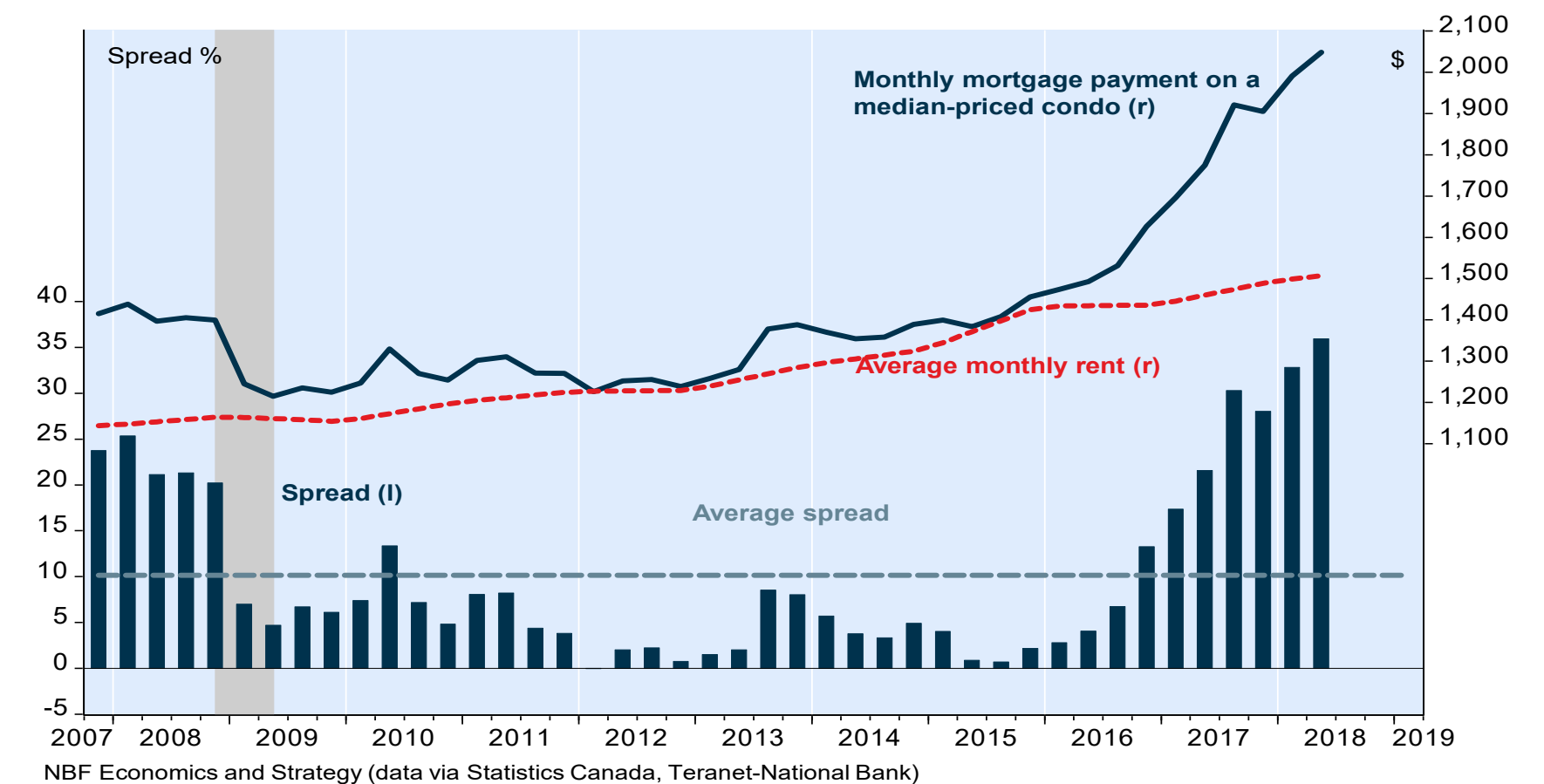
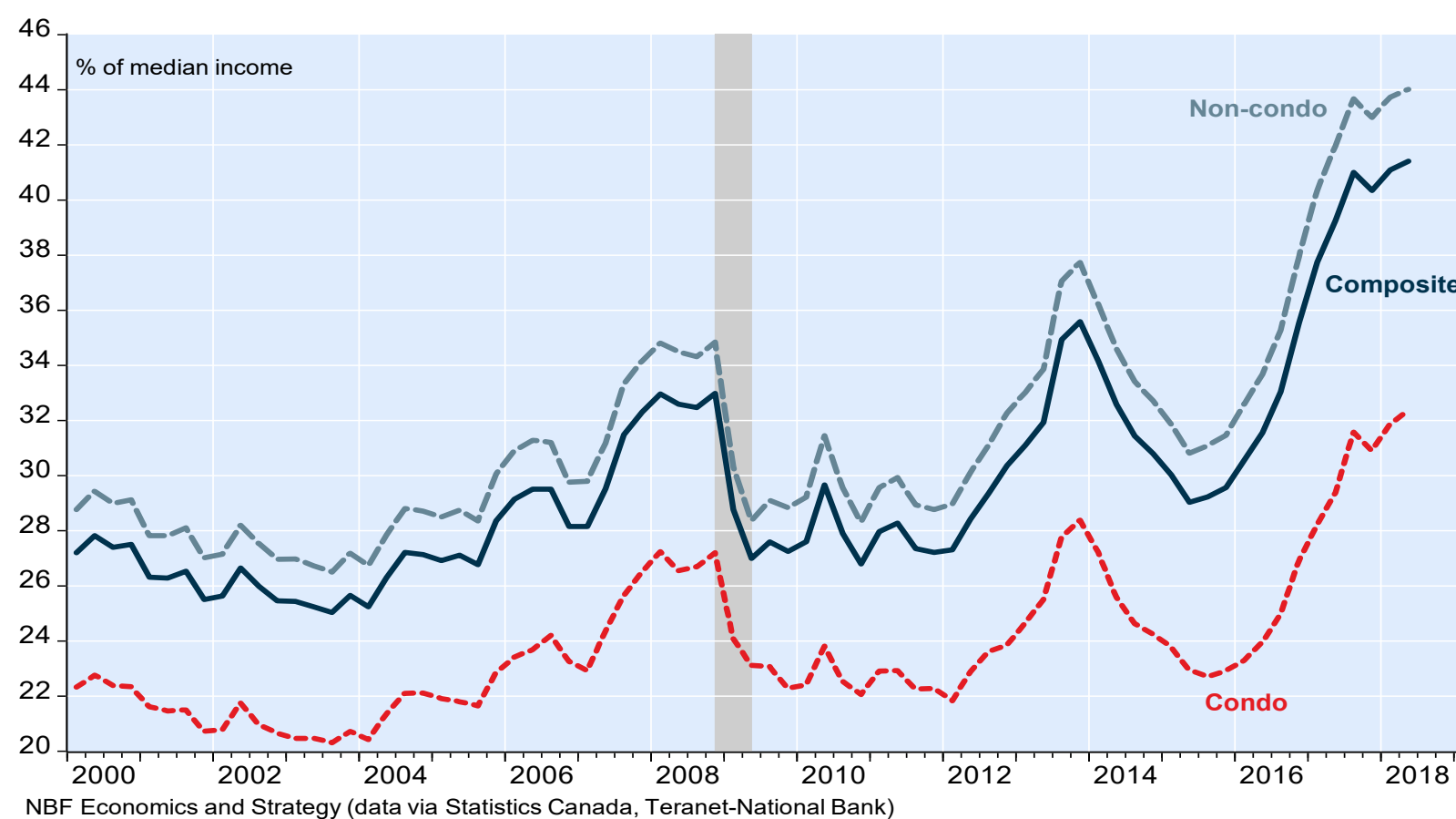
Hamilton: Perspective on housing affordability

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



Housing Affordability Monitor

Economics and Strategy

Victoria

Victoria experienced a significant deterioration in affordability with the MPPI* showing a worsening for the non-condo (+1.6pp) and condo (+1.1pp) segments. For the composite of all dwellings, the MPPI jumped by 1.5-points in Q2 up to 77.3%. This quarterly move was the worst amongst major Canadian metropolitan markets. In addition, this quarters level for the MPPI is at its worst since Q2 of 2008. It was up 7.7-points from a year earlier as a result of higher rates and a substantial increase in home prices (+9.0%) which more than offset the immense growth in income (+7.0%). *See tables on page 12 for more information.

Mortgage payment as a % of income (MPPI)				
Non- Condo	81.9%	▲ +	1.6%	Q/Q
Condo	46.0%	▲ +	1.1%	Q/Q



**Non-
Condo**

\$847,619

Price of the representative home in the metropolitan market

\$151,611

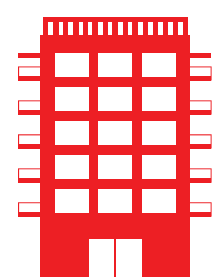
Household annual income needed to afford the representative home

121

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

18.7%

Premium for buying compared to the national urban composite



Condo

\$475,899

Price of the representative condo in the metropolitan market

\$85,123

Household annual income needed to afford the representative condo

48

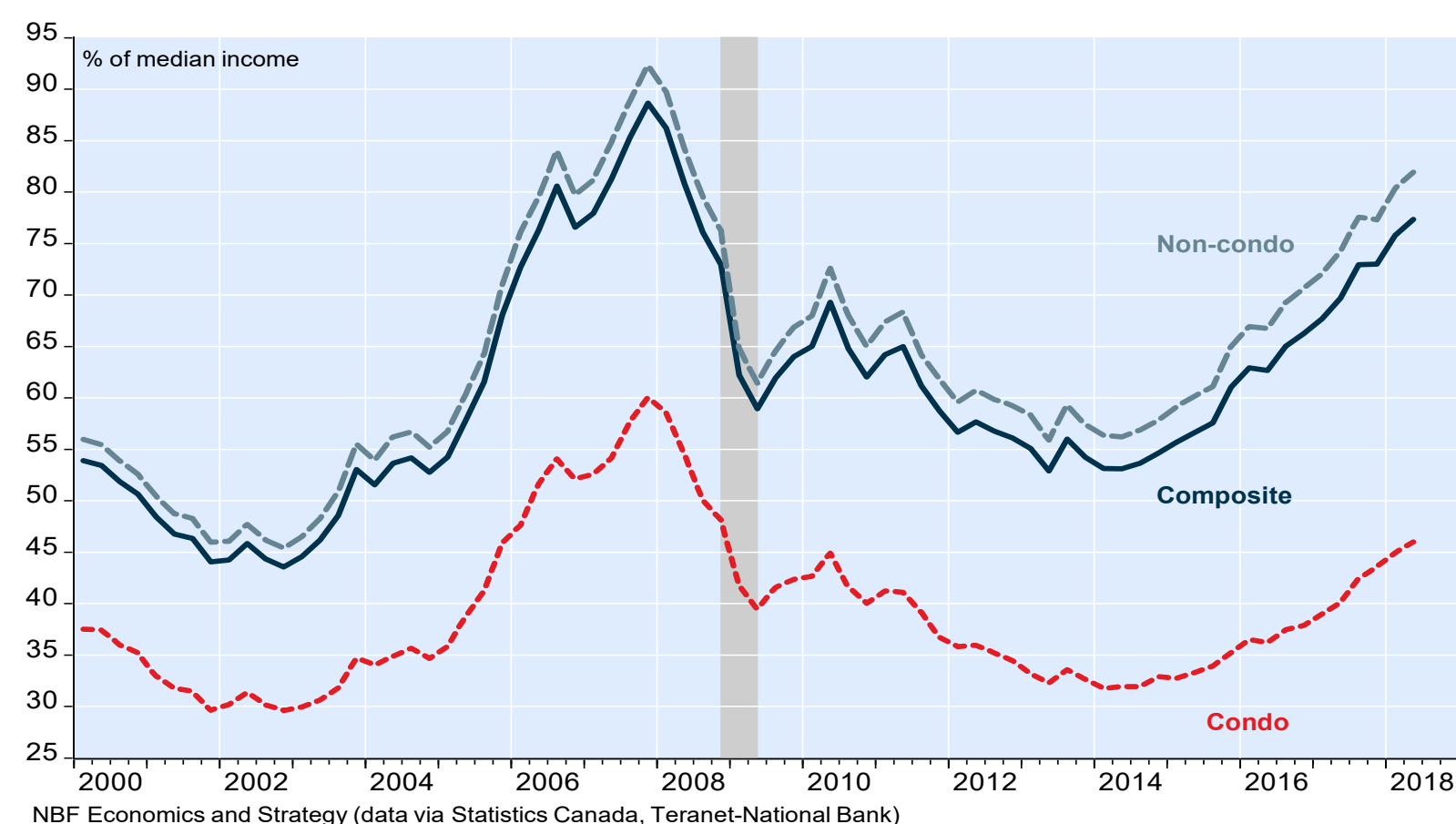
Months of saving required for the down payment (saving rate of 10%)

45.6%

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

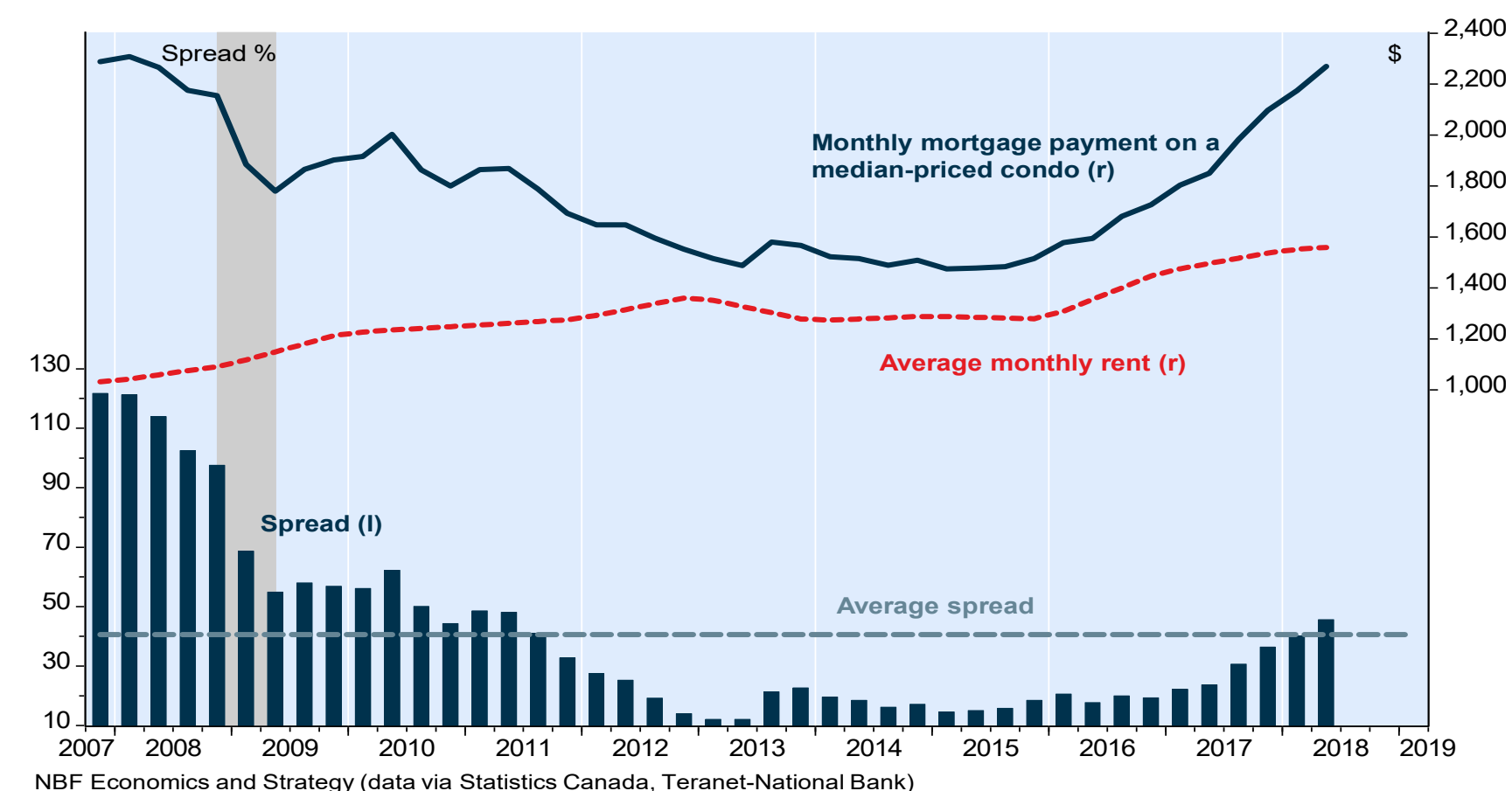
Victoria: Perspective on housing affordability

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 statistics

Table 1

	A	B	C	D	E	F	G	H	I	J	K	L	M
All dwellings	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying annual Income	Median annual Income	Home-ownership rate (2016)	Monthly mortgage payment
Urban Composite	\$ 567,359	-0.1	2.7	57.1	33.2	48.7	0.2	3.4	39.6	\$ 101,482	\$ 66,723	68%	\$ 2,706
Toronto	\$ 838,011	-0.6	-3.1	100.3	43.7	68.2	-0.2	0.5	47.6	\$ 149,893	\$ 70,342	66%	\$ 3,997
Montreal	\$ 326,793	-0.5	4.7	33.4	24.6	31.9	0.4	3.3	30.0	\$ 58,452	\$ 58,688	56%	\$ 1,559
Vancouver	\$ 1,094,227	0.4	12.8	336.6	66.5	80.3	0.0	10.4	60.3	\$ 195,721	\$ 78,028	64%	\$ 5,219
Calgary	\$ 447,140	-0.2	0.1	34.1	26.8	32.5	0.2	1.6	33.8	\$ 79,979	\$ 78,721	73%	\$ 2,133
Edmonton	\$ 397,866	-0.4	0.5	23.5	23.4	22.4	0.1	1.1	30.0	\$ 71,165	\$101,716	70%	\$ 1,898
Ottawa/Gatineau	\$ 381,974	0.7	4.7	29.1	23.5	27.8	0.4	2.4	28.9	\$ 68,323	\$ 78,770	67%	\$ 1,822
Quebec	\$ 277,875	1.5	2.0	27.0	19.5	25.8	0.8	2.0	23.3	\$ 49,703	\$ 61,674	60%	\$ 1,325
Winnipeg	\$ 316,690	-0.7	2.3	27.7	20.6	26.4	-0.2	2.4	24.9	\$ 56,645	\$ 68,608	67%	\$ 1,511
Hamilton	\$ 549,184	0.5	1.4	47.3	25.2	41.4	0.3	2.2	29.8	\$ 98,231	\$ 75,915	70%	\$ 2,619
Victoria	\$ 800,124	2.5	9.0	111.5	52.1	77.3	1.5	7.7	61.0	\$ 143,116	\$ 59,219	63%	\$ 3,816

Table 2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Condo	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly mortgage payment	Monthly average rent
Urban Composite	\$ 398,142	1.5	9.4	35.8	23.7	34.2	0.7	4.3	29.1	\$ 71,215	\$ 66,723	9%	\$ 1,899	\$ 1,821
Toronto	\$ 512,223	1.2	8.7	44.7	25.4	41.7	0.6	4.8	30.5	\$ 91,620	\$ 70,342	15%	\$ 2,443	\$ 2,322
Montreal	\$ 266,504	0.3	3.6	27.2	21.5	26.0	0.5	2.4	26.4	\$ 47,669	\$ 58,688	11%	\$ 1,271	\$ 1,184
Vancouver	\$ 646,043	3.0	21.2	60.9	30.9	47.4	1.2	9.0	37.3	\$ 115,556	\$ 78,028	22%	\$ 3,081	\$ 1,894
Calgary	\$ 272,063	0.1	-2.0	20.7	19.0	19.8	0.2	0.5	24.5	\$ 48,663	\$ 78,721	14%	\$ 1,298	\$ 1,518
Edmonton	\$ 234,233	0.7	-3.8	13.8	15.6	13.2	0.2	0.1	20.4	\$ 41,897	\$101,716	12%	\$ 1,117	\$ 1,351
Ottawa/Gatineau	\$ 247,604	0.4	1.2	18.9	17.0	18.0	0.2	1.0	21.0	\$ 44,288	\$ 78,770	9%	\$ 1,181	\$ 1,572
Quebec	\$ 212,250	0.9	0.4	20.6	16.0	19.7	0.5	1.3	19.2	\$ 37,965	\$ 61,674	9%	\$ 1,012	\$ 1,054
Winnipeg	\$ 229,426	-0.9	-1.0	20.1	17.1	19.1	-0.2	1.2	20.9	\$ 41,037	\$ 68,608	6%	\$ 1,094	\$ 1,390
Hamilton	\$ 429,409	1.3	5.9	33.9	19.9	32.4	0.5	3.0	23.9	\$ 76,807	\$ 75,915	11%	\$ 2,048	\$ 1,507
Victoria	\$ 475,899	2.8	12.6	48.2	31.0	46.0	1.1	5.9	39.1	\$ 85,123	\$ 59,219	14%	\$ 2,270	\$ 1,558

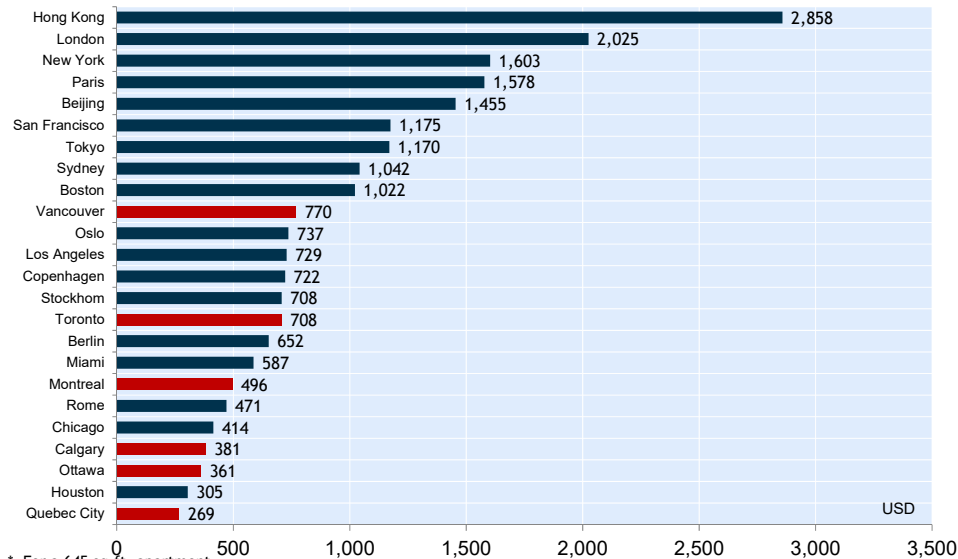
Table 3

	A	B	C	D	E	F	G	H	I	J	K	L	M
Non-condo	Median home price	Q/Q % change	Y/Y % change	Downpayment: Months of saving	Avg. Since 2000	*Mortgage payment as % of income	Q/Q diff. PP	Y/Y diff. PP	Avg. Since 2000	Qualifying Income	Median Income	Home-ownership rate (2016)	Monthly mortgage payment
Urban Composite	\$ 713,823	-0.4	1.7	83.4	43.1	61.2	0.2	3.7	49.4	\$ 127,679	\$ 66,723	59%	\$ 3,405
Toronto	\$ 897,747	-0.9	-4.8	110.5	47.1	73.0	-0.4	-0.7	50.7	\$ 160,577	\$ 70,342	52%	\$ 4,282
Montreal	\$ 353,577	-0.7	4.9	36.1	26.3	34.5	0.3	3.6	32.0	\$ 63,243	\$ 58,688	45%	\$ 1,686
Vancouver	\$ 1,334,406	-0.2	11.0	410.4	100.6	97.9	-0.6	11.3	72.2	\$ 238,681	\$ 78,028	42%	\$ 6,365
Calgary	\$ 505,361	-0.3	0.4	38.9	29.7	36.7	0.3	1.9	37.3	\$ 90,392	\$ 78,721	59%	\$ 2,410
Edmonton	\$ 423,124	-0.6	1.0	25.0	24.5	23.8	0.1	1.3	31.3	\$ 75,683	\$101,716	57%	\$ 2,018
Ottawa/Gatineau	\$ 413,192	0.7	5.1	31.5	25.2	30.0	0.4	2.7	30.9	\$ 73,906	\$ 78,770	58%	\$ 1,971
Quebec	\$ 284,283	1.6	2.3	27.7	19.8	26.4	0.8	2.1	23.7	\$ 50,849	\$ 61,674	51%	\$ 1,356
Winnipeg	\$ 318,610	-0.7	2.5	27.9	20.6	26.6	-0.2	2.5	24.8	\$ 56,989	\$ 68,608	61%	\$ 1,520
Hamilton	\$ 583,788	0.4	0.8	52.8	27.0	44.0	0.3	2.1	31.6	\$ 104,420	\$ 75,915	60%	\$ 2,785
Victoria	\$ 847,619	2.4	8.4	121.1	55.3	81.9	1.6	7.7	64.1	\$ 151,611	\$ 59,219	49%	\$ 4,043

Global perspective on housing affordability

World: Home prices do not seem extreme in Canada

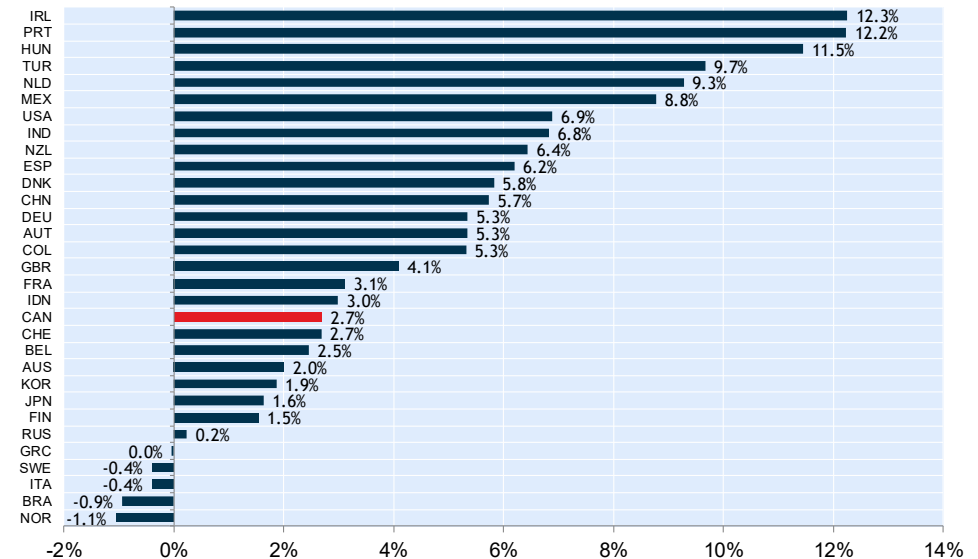
Price per square foot in USD for downtown living* (summer 2018)



* For a 645 sq.ft. apartment
NBF Economics and Strategy (as of May 14, 2018)

World: Perspective on home price growth

Home price percentage change year over year



NBF Economics and Strategy (Data via OECD)

Methodology

The National Bank Housing Affordability Report measures housing affordability in 10 major census metropolitan areas (CMAs) and summarizes the results in a weighted-average composite of the 10 CMAs. We track the **condo market**, **other dwellings** (single detached, semi-detached) and the **market as a whole**.

We measure two hurdles for the purchase of a home. First, a household must save the **down-payment** amount. We measure this requirement as the number of months a median-income household will require to save for the minimum cash down payment (CMHC insured mortgage) of the representative home at a savings rate of 10% of its pre-tax income. We evaluate the representative home using the Teranet–National Bank House Price Index for the market in question to calculate the home price for months before and after the median home price measured by the 2016 Census. For **median household income** in each CMA, we take the Statistics Canada annual data up to 2013. For subsequent months, we extend the series using average weekly earnings growth as a proxy.

The second hurdle for the purchase of a home is the monthly mortgage payment. We measure this as the monthly payment on a median-priced home assuming a 25-year amortization period and a 5-year term. The resulting amount is presented as a percentage of income calculated as described above (sometimes referred as **MPPi**). Note that we do not take the down payment into account in this calculation because there is an opportunity cost in a household's use of these funds for that purpose. Also, we do not wish policy changes in this regard to affect our indicator over time. We also calculate the income needed to purchase the median property assuming that household devote 32% of its pre-tax income for mortgage payment (defined as **qualifying income**). For the condo market, we also compare the monthly mortgage payment to the average rent for a two-bedroom 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.

Housing Affordability Monitor

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