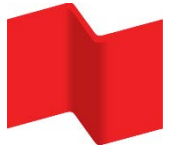


Economic & Financial Outlook

Conference call / Appel conférence

Stéfane Marion / Paul-André Pinsonnault
NBF Economics & Strategy Group

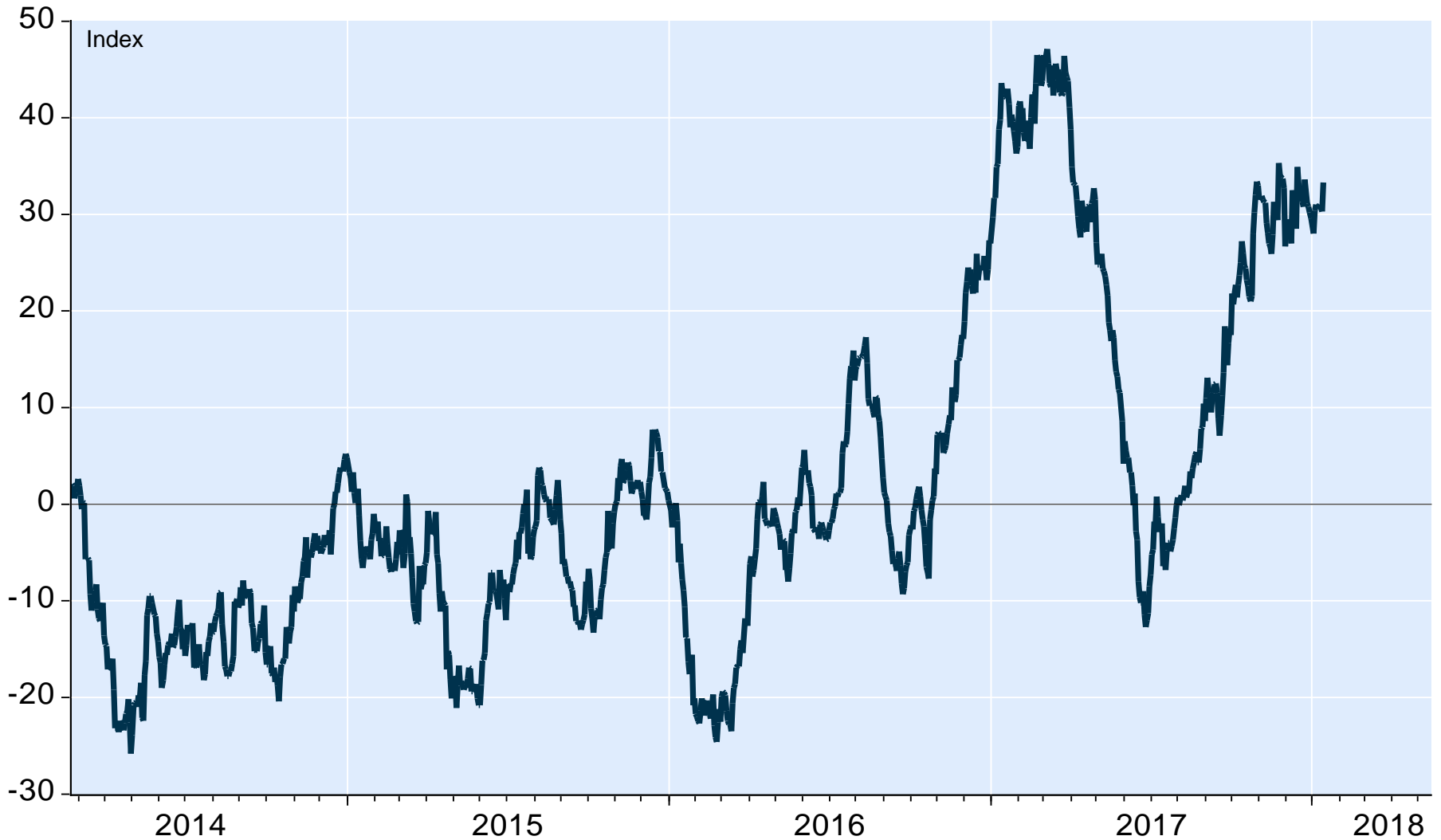
January 15, 2018



World

World: Economy continues to surprise on the upside

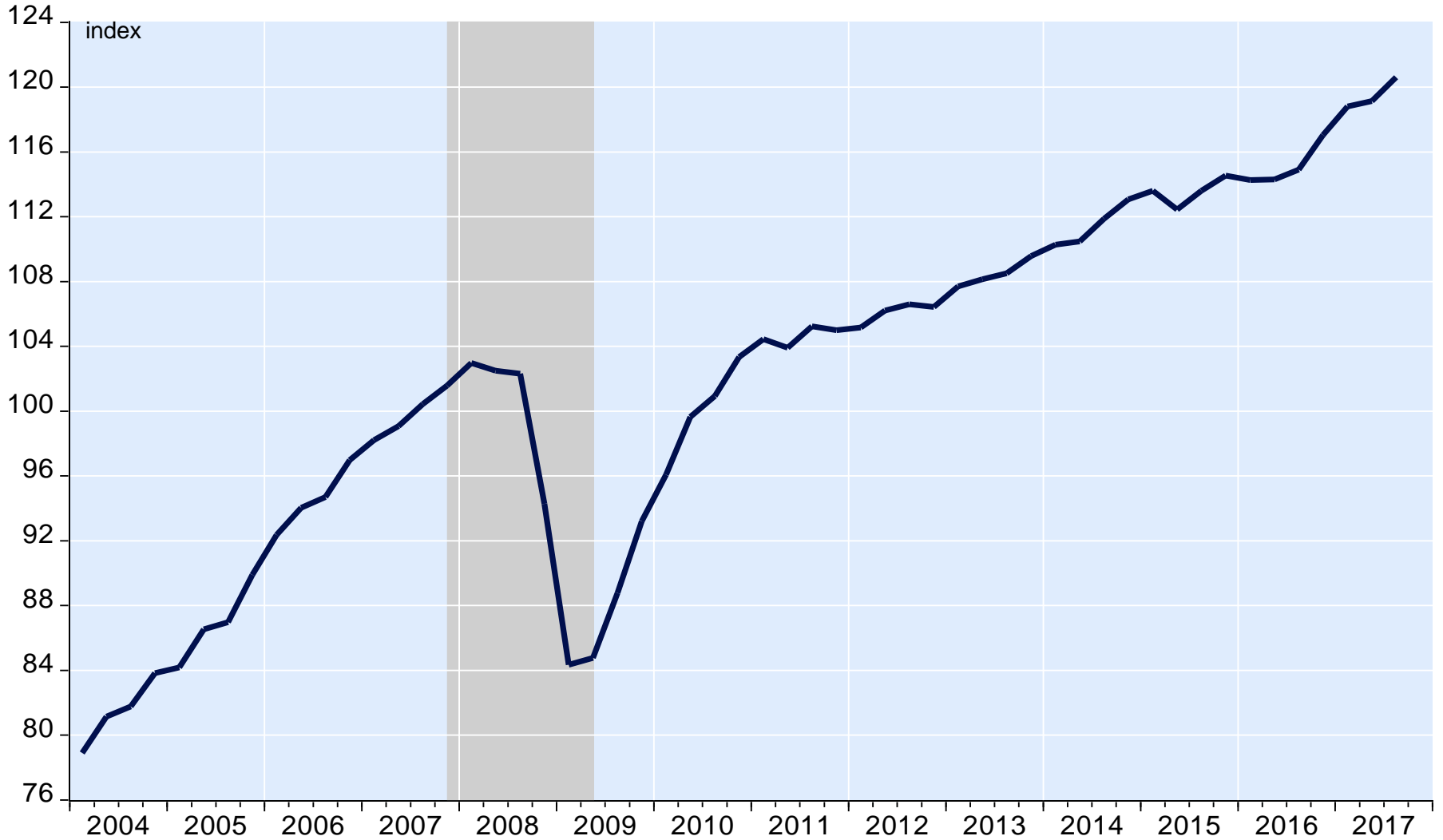
Citi Economic Surprise Index – World composite



NBF Economics and Strategy (data via Bloomberg)

World: Trade volumes at a record

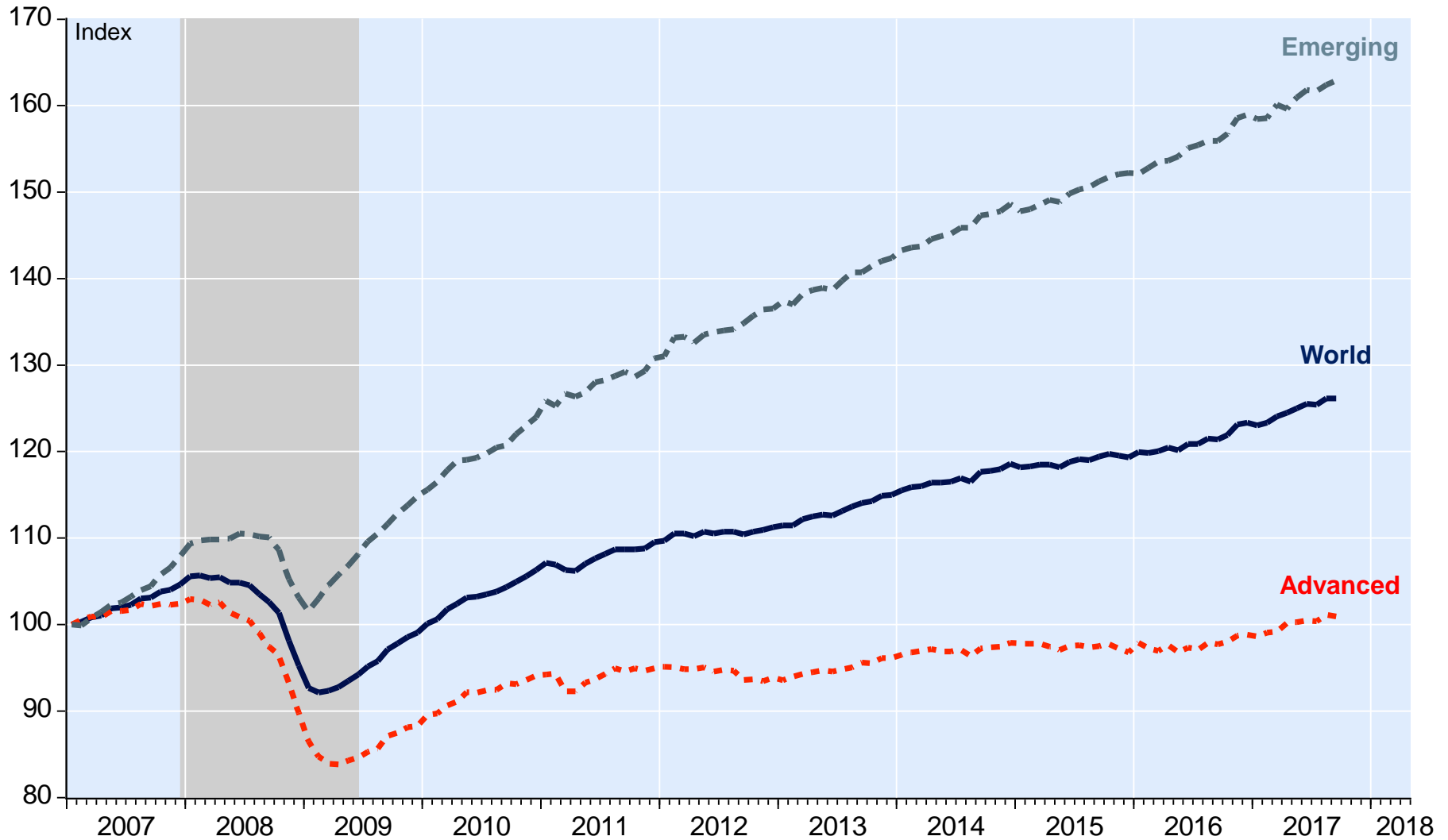
Global trade flows (quarterly volumes)



NBF Economics and Strategy (CPB data via Datastream)

World: Industrial production is at a record high

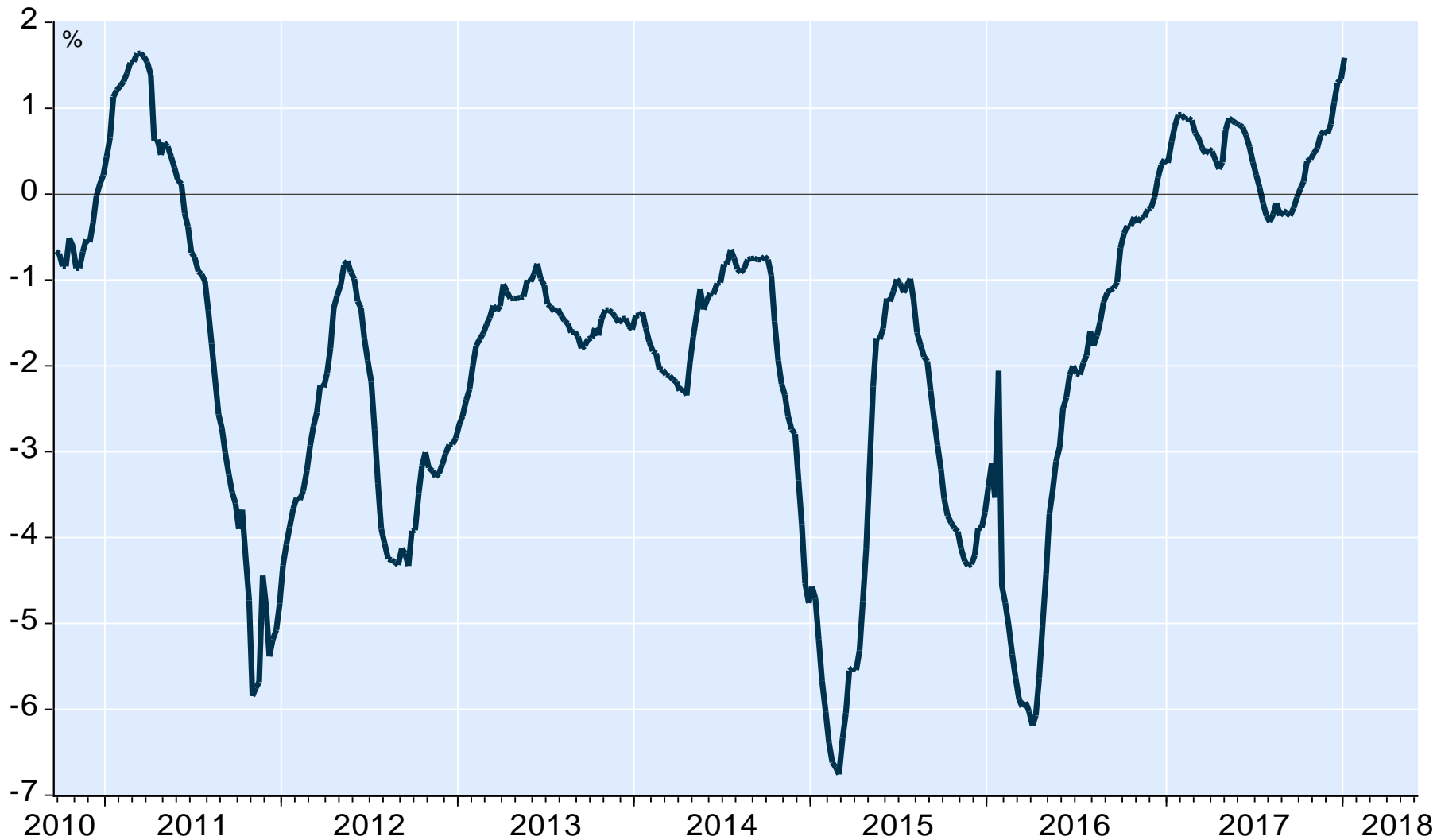
Volume industrial output



NBF Economics and Strategy (data via Bloomberg)

World: Earnings revisions remain positive

3-month change in 12-month forward earnings for the MSCI AC



NBF Economics and Strategy (data via Bloomberg)

MSCI : change in 12-month forward earnings

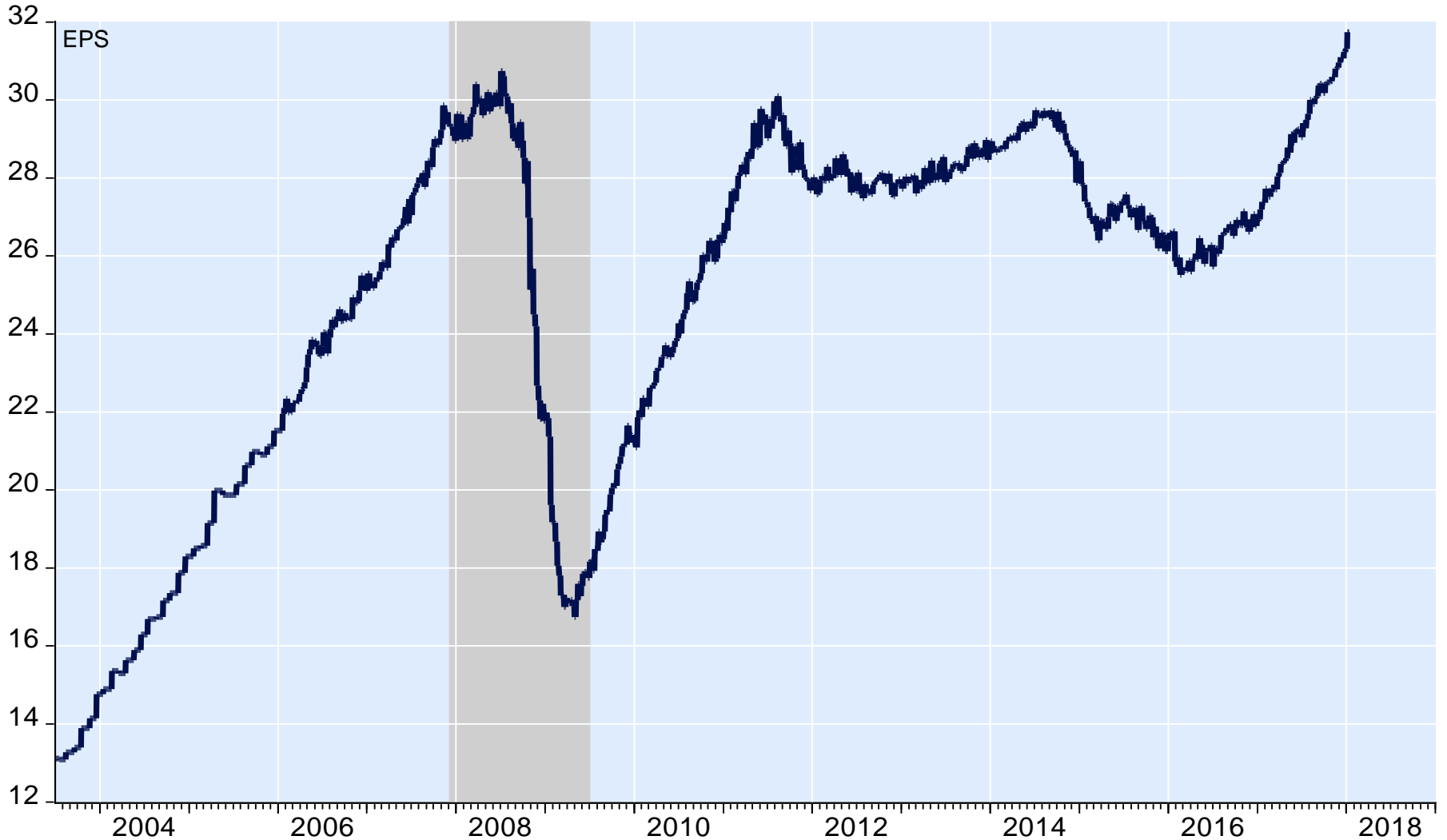
	1-month change	3-month change	10 year historical average	3 month diffusion	10 year historical average
MSCI AC World	0.9	1.6	-0.8	60%	43%
MSCI World	1.0	1.5	-0.8	64%	44%
MSCI USA	1.4	1.8	-0.7	73%	46%
MSCI Canada	0.7	0.4	-0.8	54%	43%
MSCI Europe	0.3	0.2	-1.1	51%	39%
MSCI Pacific ex Jp	0.6	1.0	-0.6	67%	42%
MSCI Japan	0.8	4.5	-0.9	69%	49%
MSCI EM	0.3	1.8	-0.6	49%	41%
MSCI EM EMEA	1.2	1.7	-0.6	58%	42%
MSCI EM Latin America	-0.4	-0.5	-0.9	43%	40%
MSCI EM Asia	0.2	2.2	-0.4	48%	42%

1/12/2018

NBF Economics and Strategy (data via Datastream)

World: Earnings expectations are not unreasonable

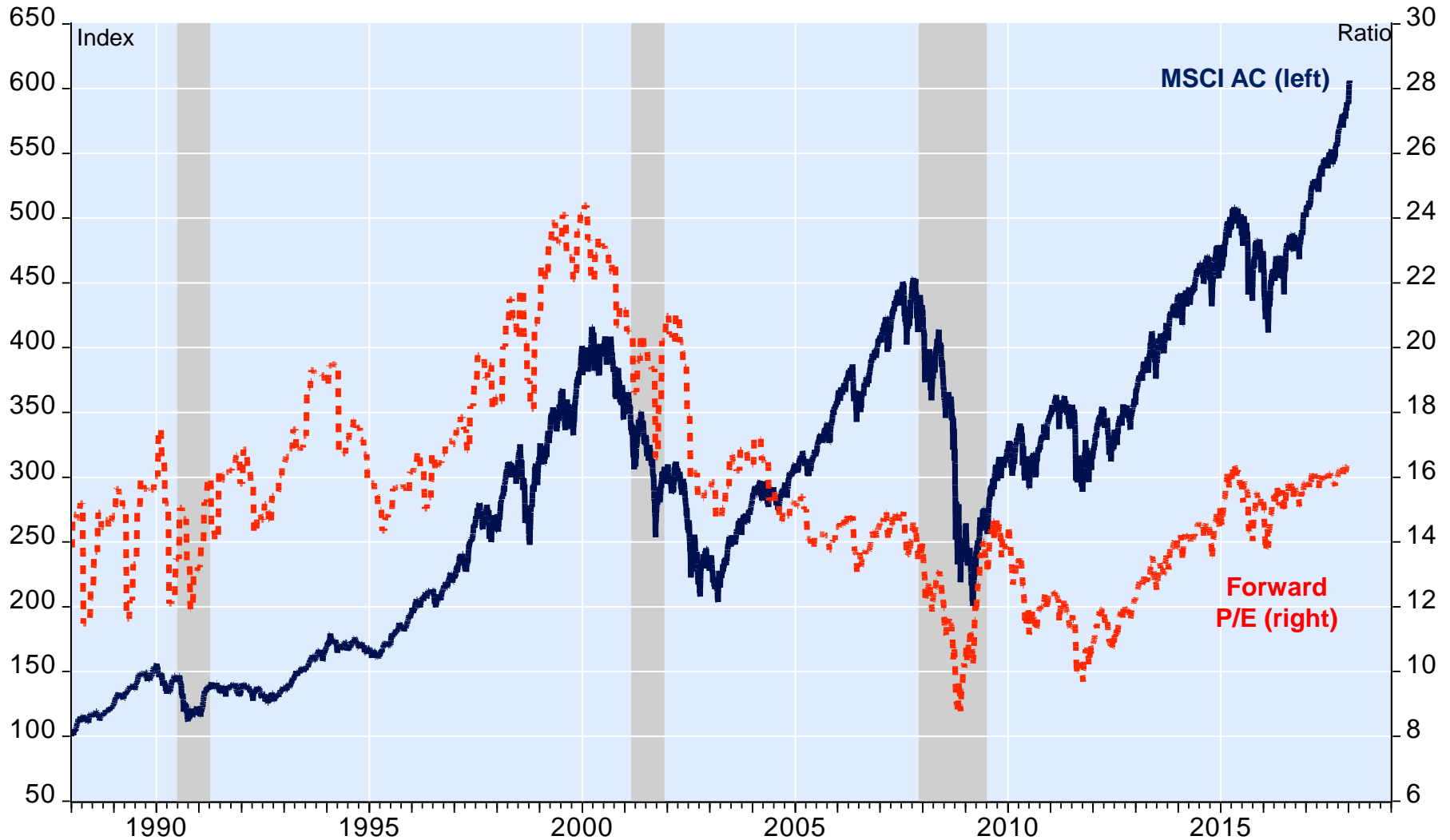
12-month forward earnings for the MSCI AC



NBF Economics and Strategy (data via Datastream)

Global equities: Record high with stable P/E

MSCI AC and its 12-month-forward P/E



NBF Economics and Strategy (data via Datastream)

MSCI composite index: EPS Performance

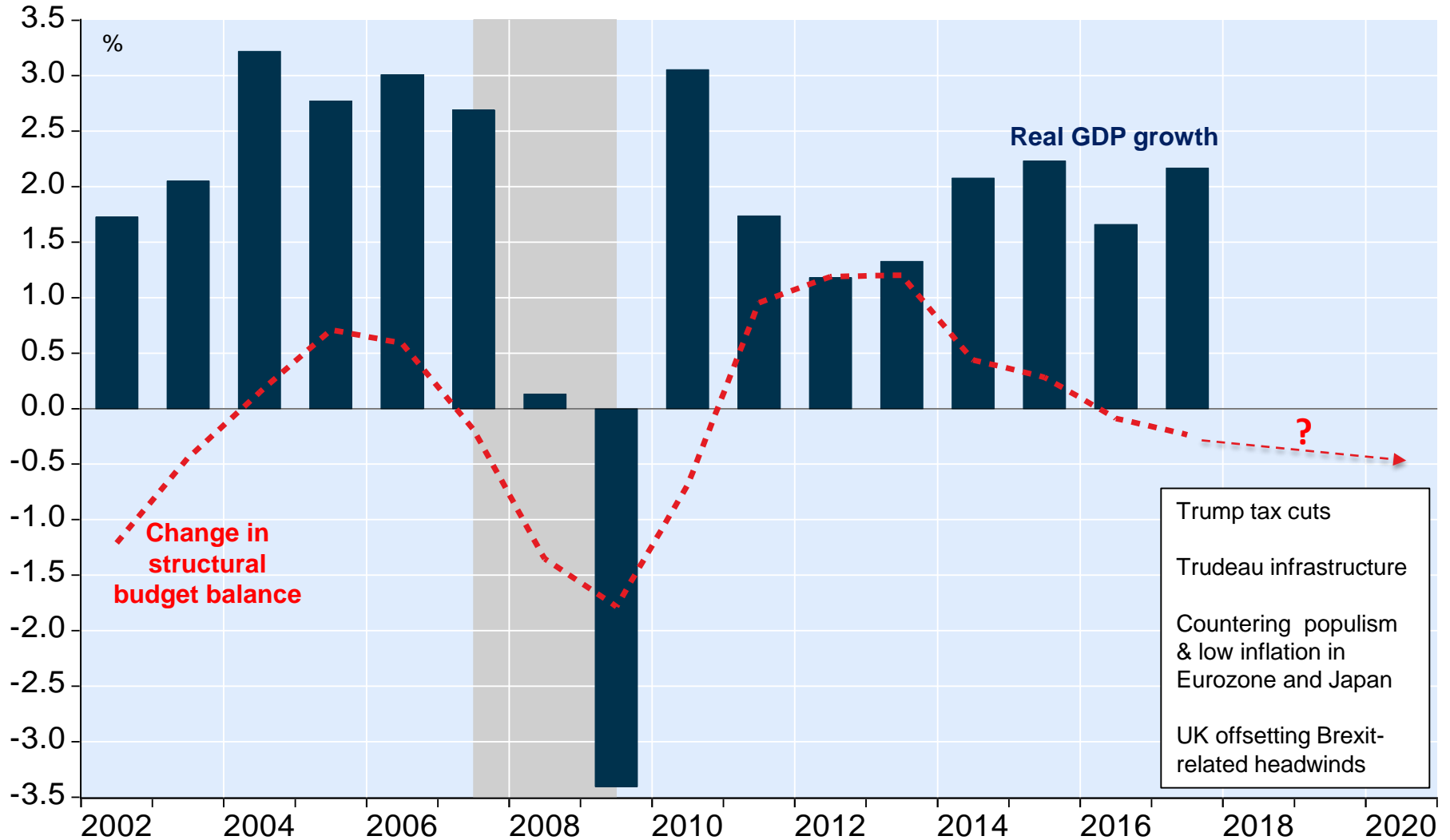
	2016	2017	2018	2019	12 months forward
MSCI AC World	2.9	15.2	10.8	9.8	10.8
MSCI World	2.2	13.9	10.3	9.6	10.4
MSCI USA	2.3	10.6	13.5	10.6	12.8
MSCI Canada	-4.1	26.2	8.1	10.7	8.9
MSCI Europe	1.1	12.5	9.1	8.7	8.9
MSCI Pacific ex Jp	-7.8	15.9	6.4	5.5	6.1
MSCI Japan	NA	13.8	30.5	1.1	4.9
MSCI EM	7.9	22.9	13.3	11.0	13.1
MSCI EM EMEA	6.8	14.2	12.6	9.1	11.7
MSCI EM Latin America	59.6	16.5	10.7	16.5	11.0
MSCI EM Asia	2.9	26.1	13.8	10.7	13.7

1/12/2018

NBF Economics and Strategy (data via Datastream)

OECD: Pro-cyclical fiscal stimulus?

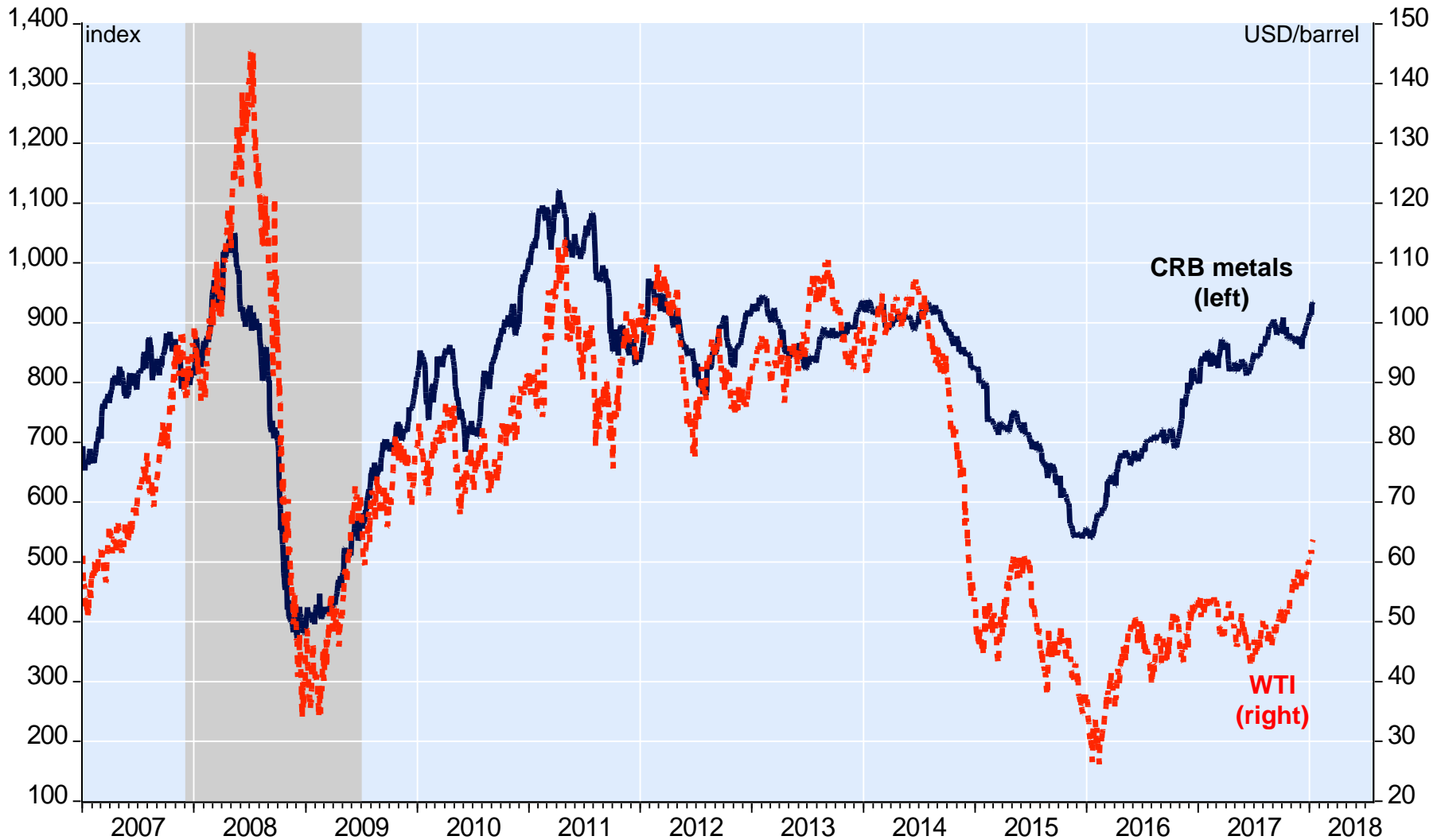
Advanced economies real GDP growth and change in structural budget balance



NBF Economics and Strategy (data via IMF)

World: Perspective on commodity prices

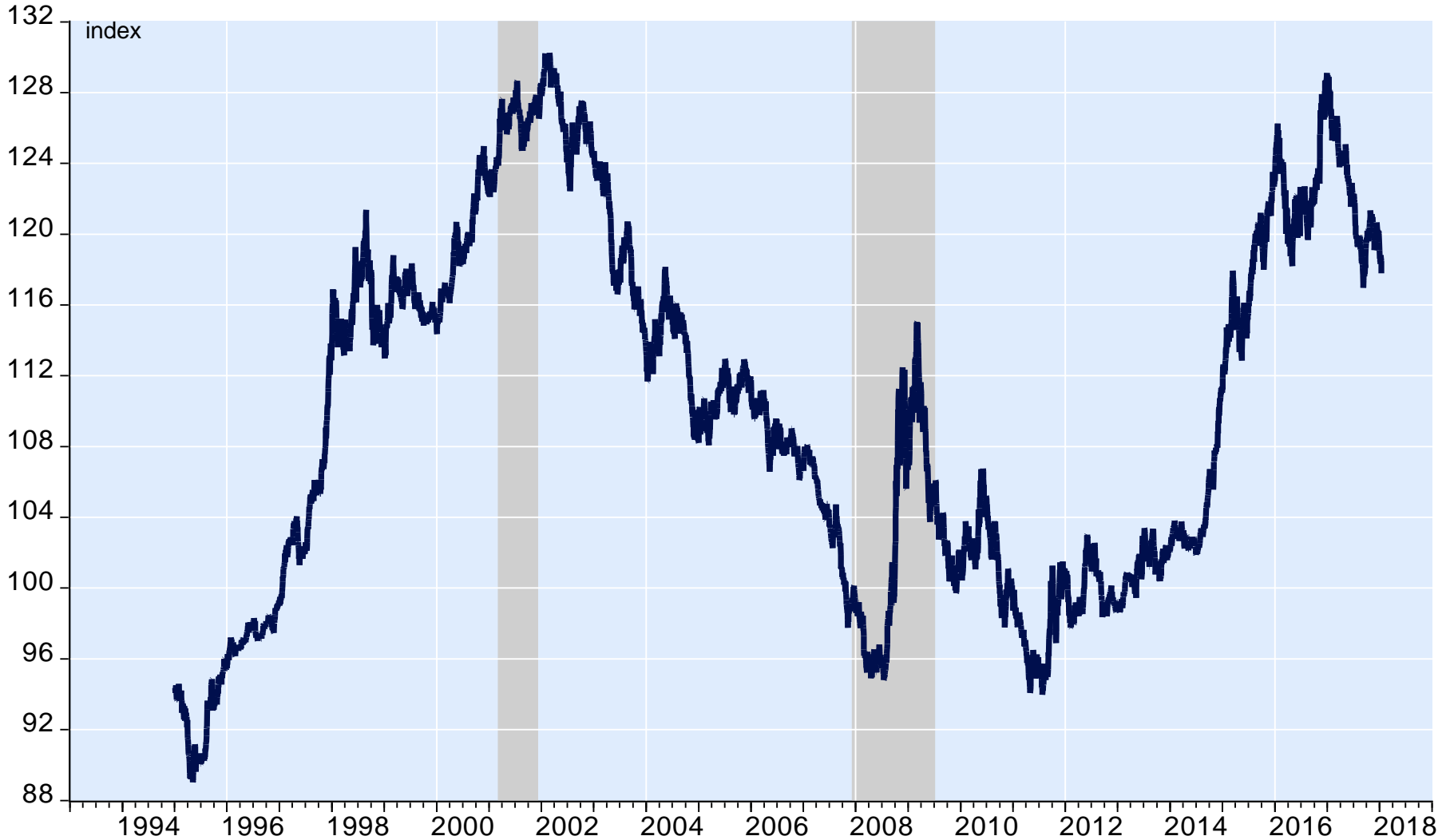
CRB metals vs. WTI



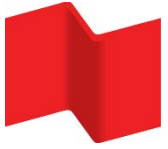
NBF Economics and Strategy (data via Datastream)

World: USD is not a threat at the moment

USD broad index (vs. 26 currencies)



NBF Economics and Strategy (Federal Reserve data via Datastream)



U.S.

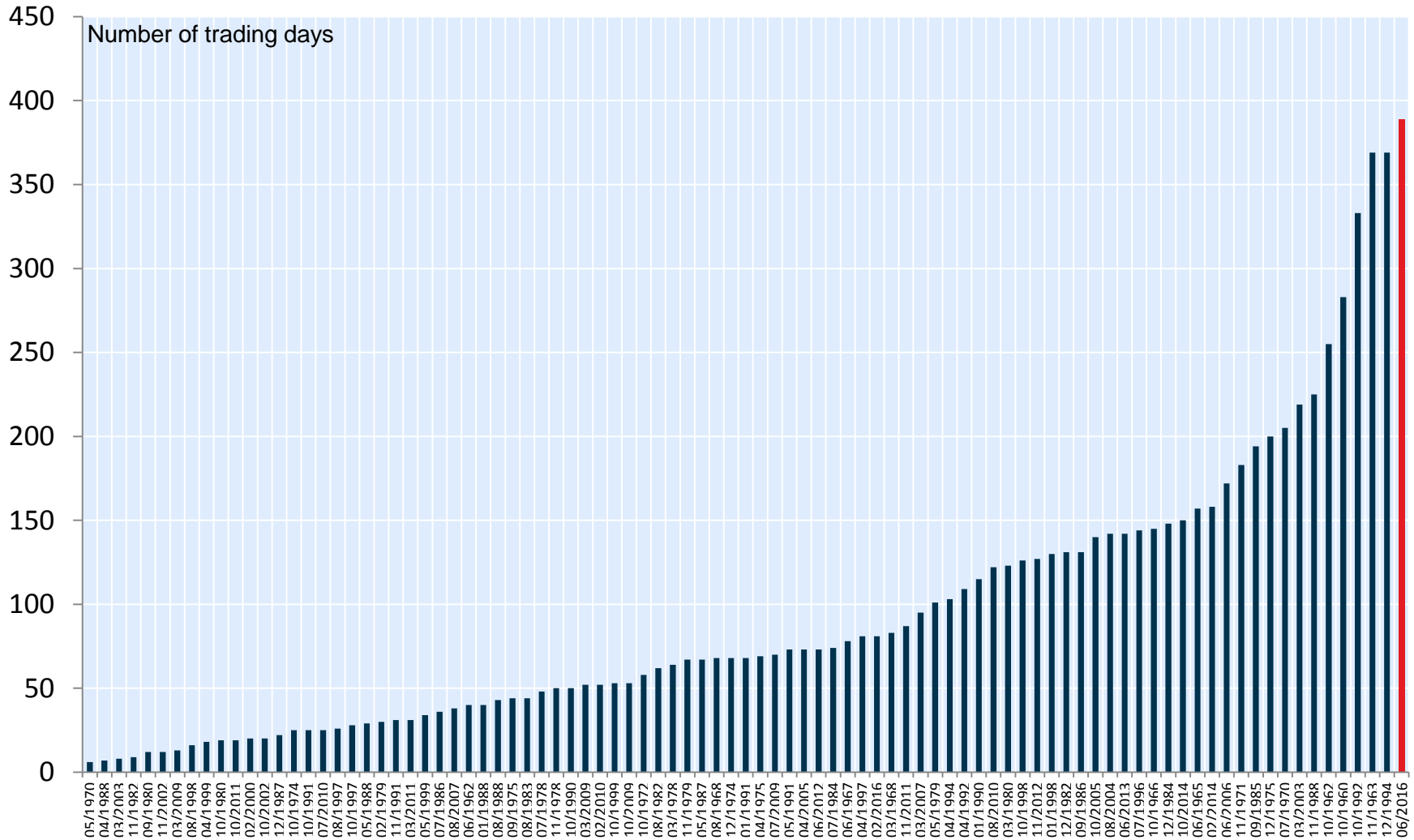


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FINANCIAL MARKETS

S&P 500: The longest rally since 1960

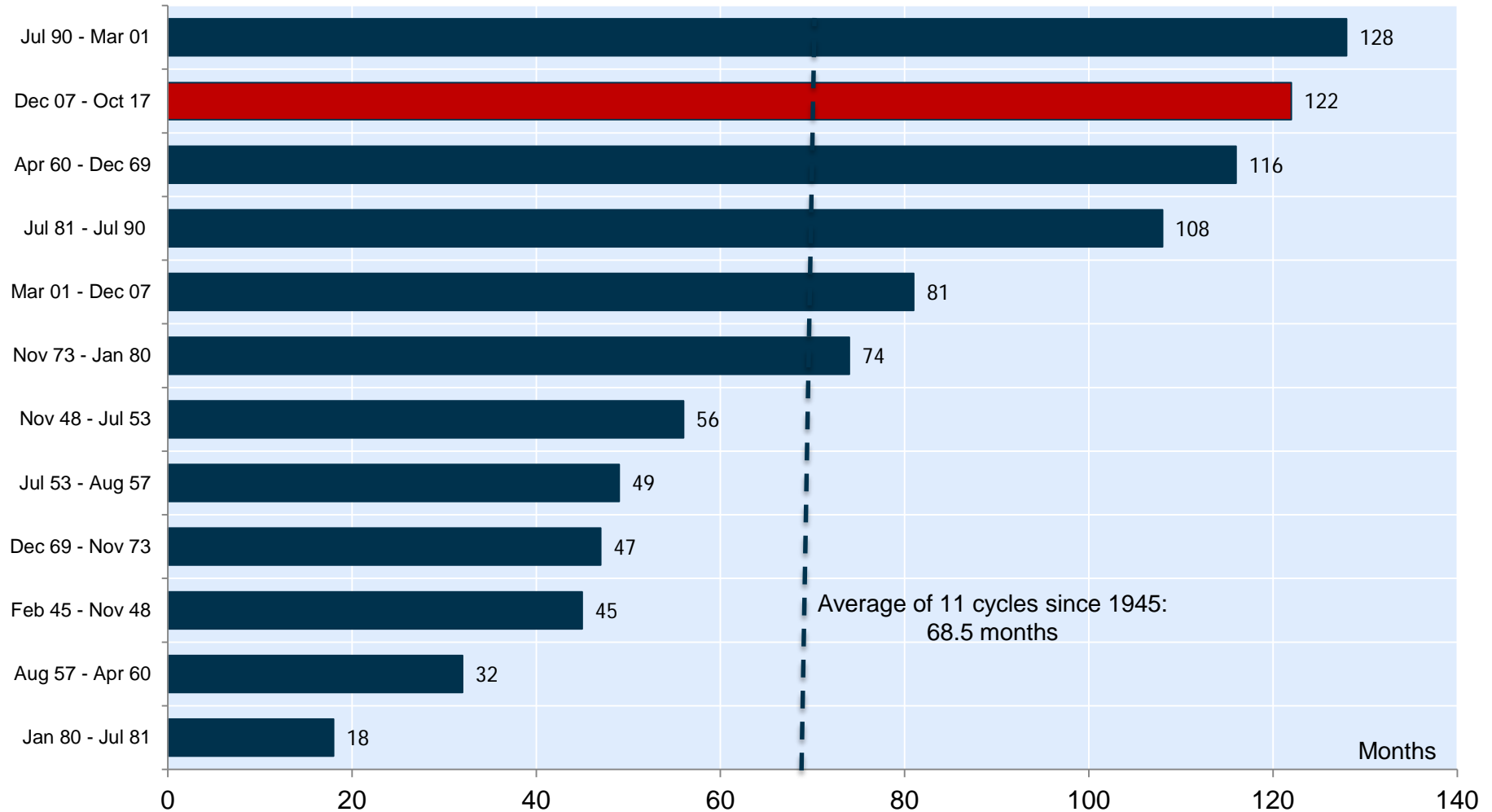
Rallies since 1960 without a 5%+ correction



NBF Economics and Strategy (data via Bloomberg as of Dec 13th, 2017)

U.S.: The second longest business cycle on record

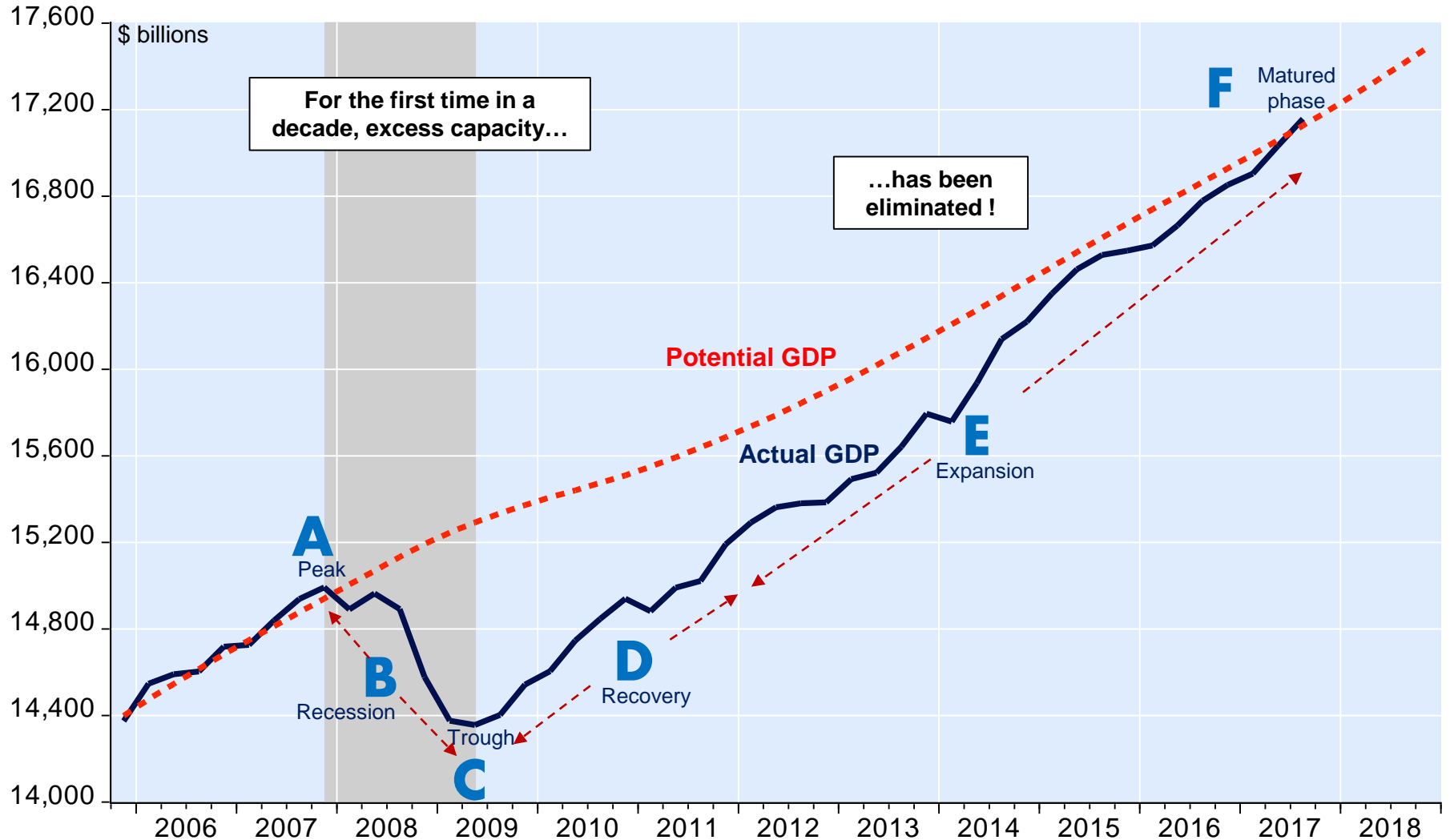
Duration of economic cycles since 1945 (peak to peak)



NBF Economics and Strategy (<http://www.nber.org/cycles.html>)

U.S.: GDP exceeds potential for the first time in a decade

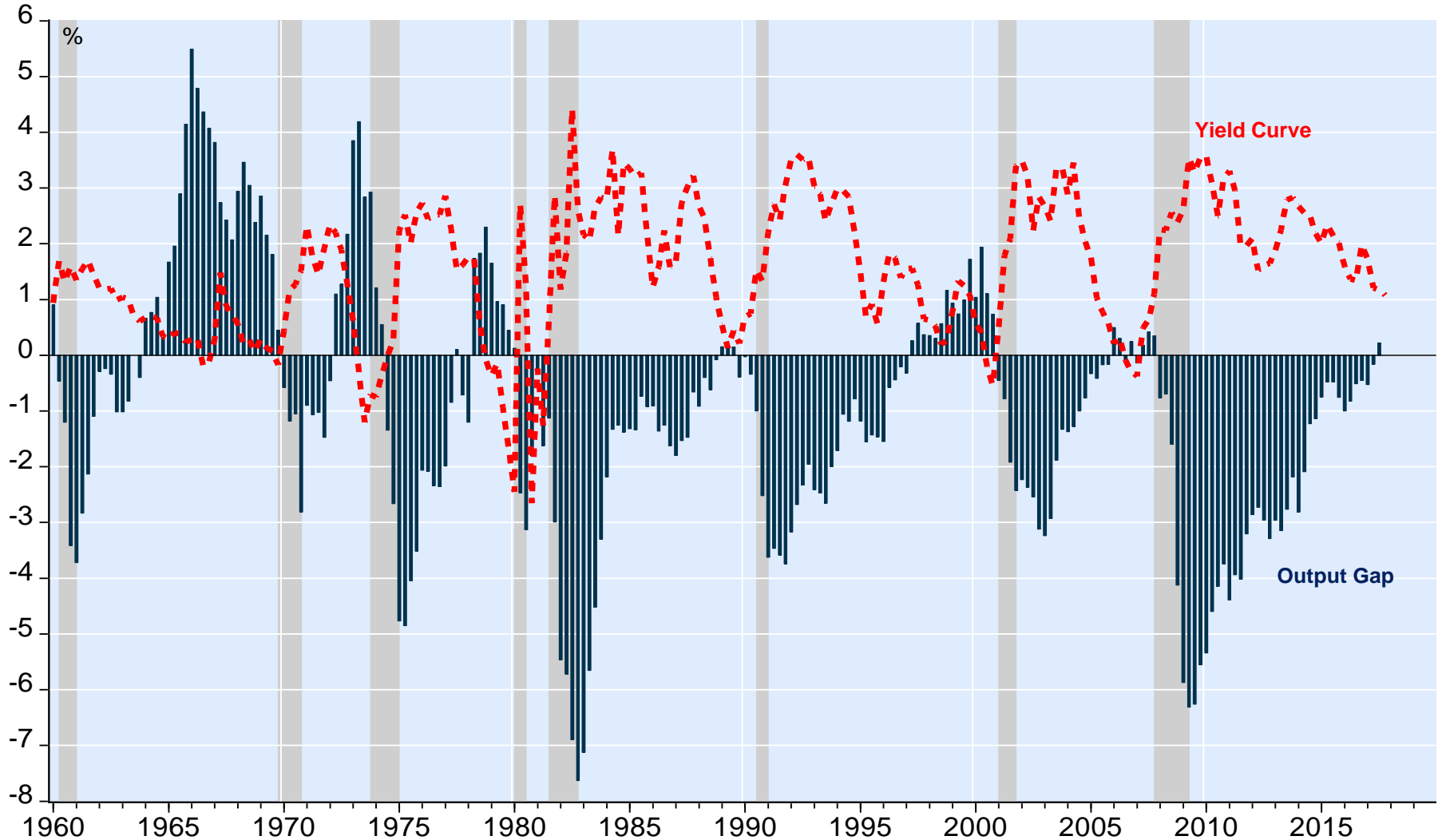
Actual vs. potential* real GDP



* As calculated by the Congressional Budget Office (CBO) - NBF Economics and Strategy (data via Datastream)

U.S.: Yield curve not that flat at this point in the cycle

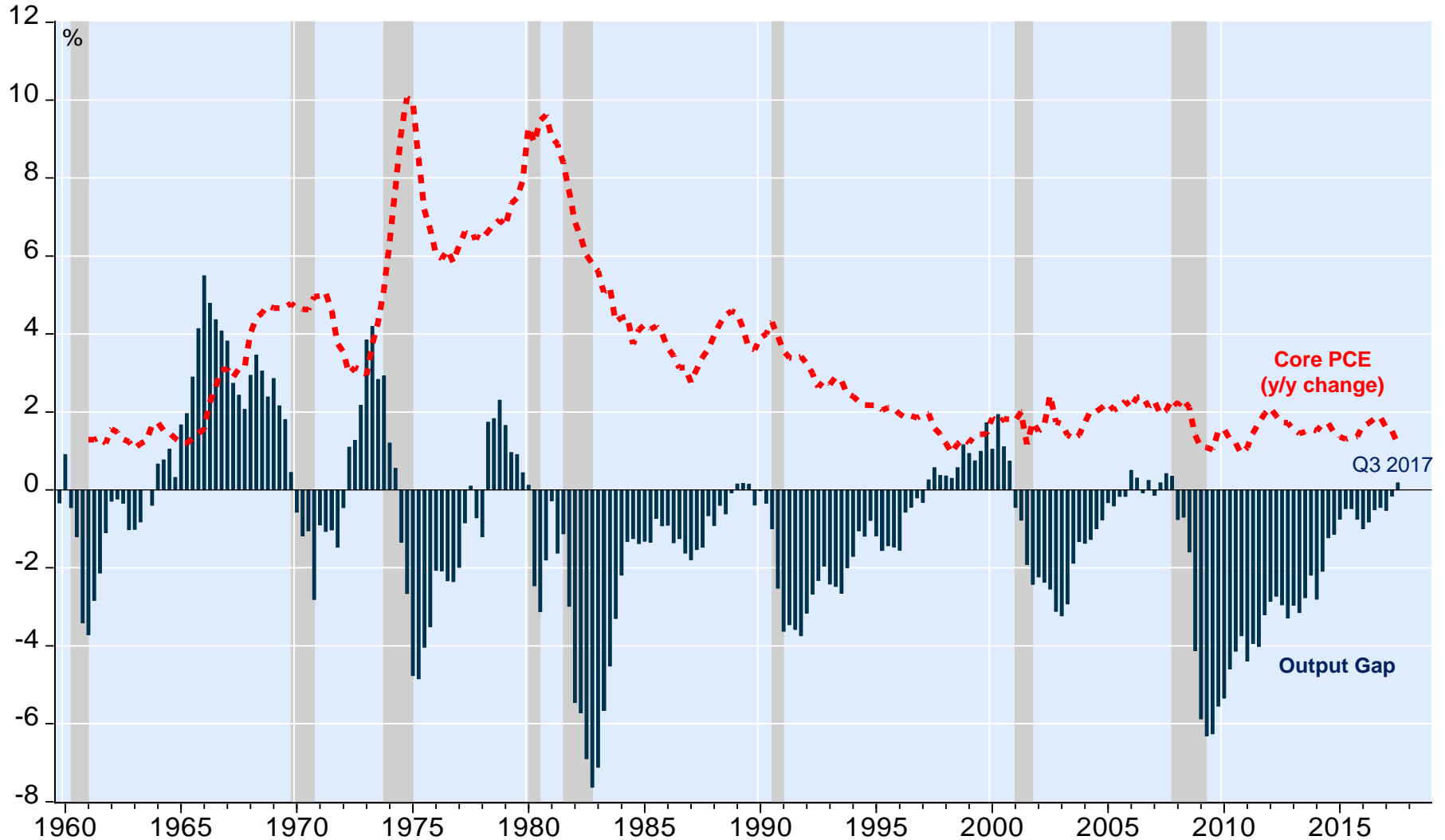
Output gap* vs. yield curve (10-year Treasury yield less 3-month T Bill)



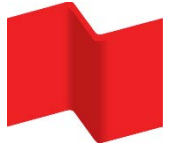
* Using potential GDP calculated by the Congressional Budget Office (CBO) - NBF Economics and Strategy (data via Datastream)

U.S.: Core inflation tends to move higher at this point in the cycle

Core PCE deflator vs. output gap*



* Using potential GDP calculated by the Congressional Budget Office (CBO) - NBF Economics and Strategy (data via Datastream)



Canada

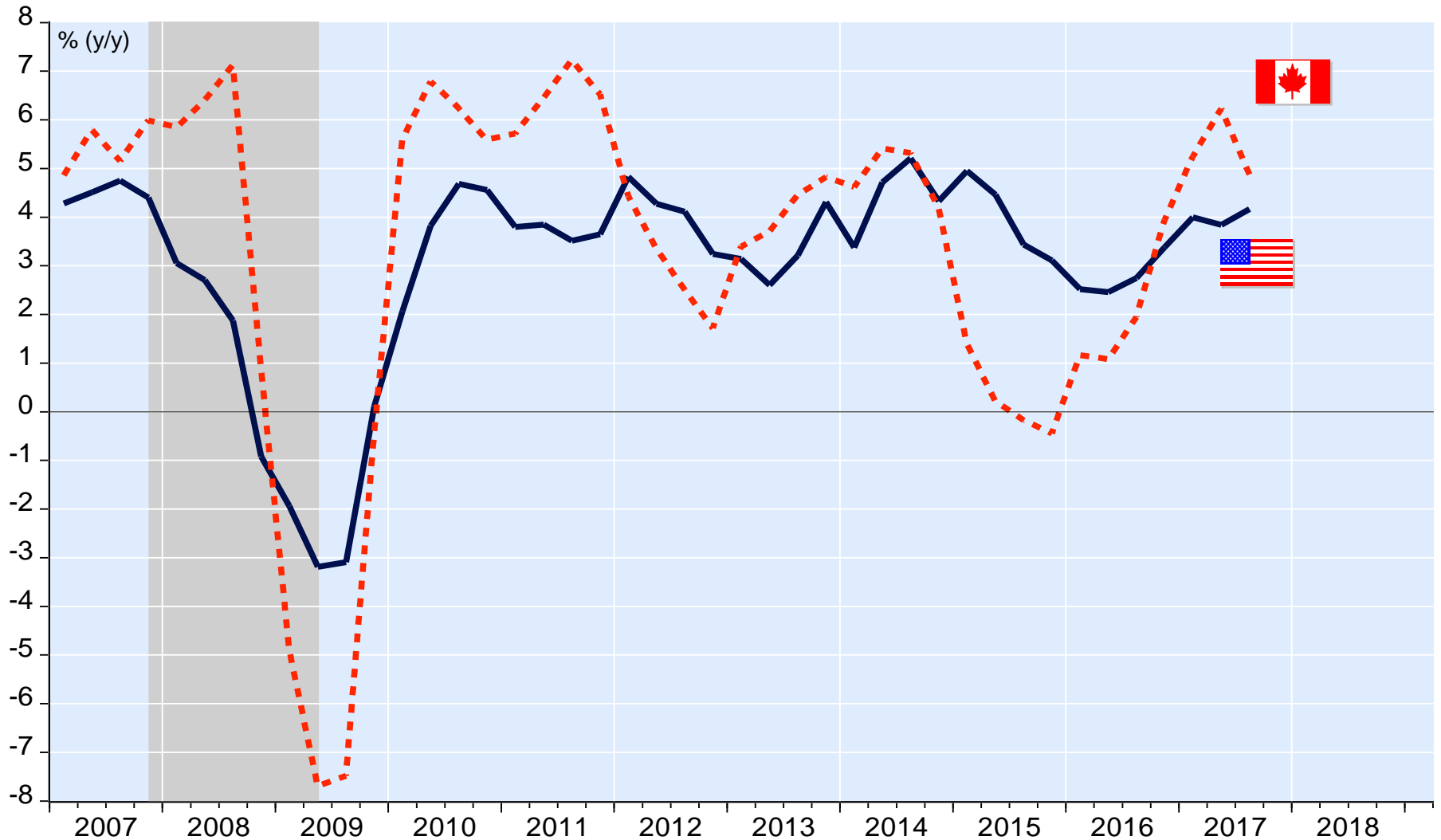


**NATIONAL
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FINANCIAL MARKETS

Canada: Economy has done very well in recent quarters

Nominal GDP growth



NBF Economics and Strategy (data via Statcan and Datastream)

Poloz on the run: Where is he going?



Business · Economy

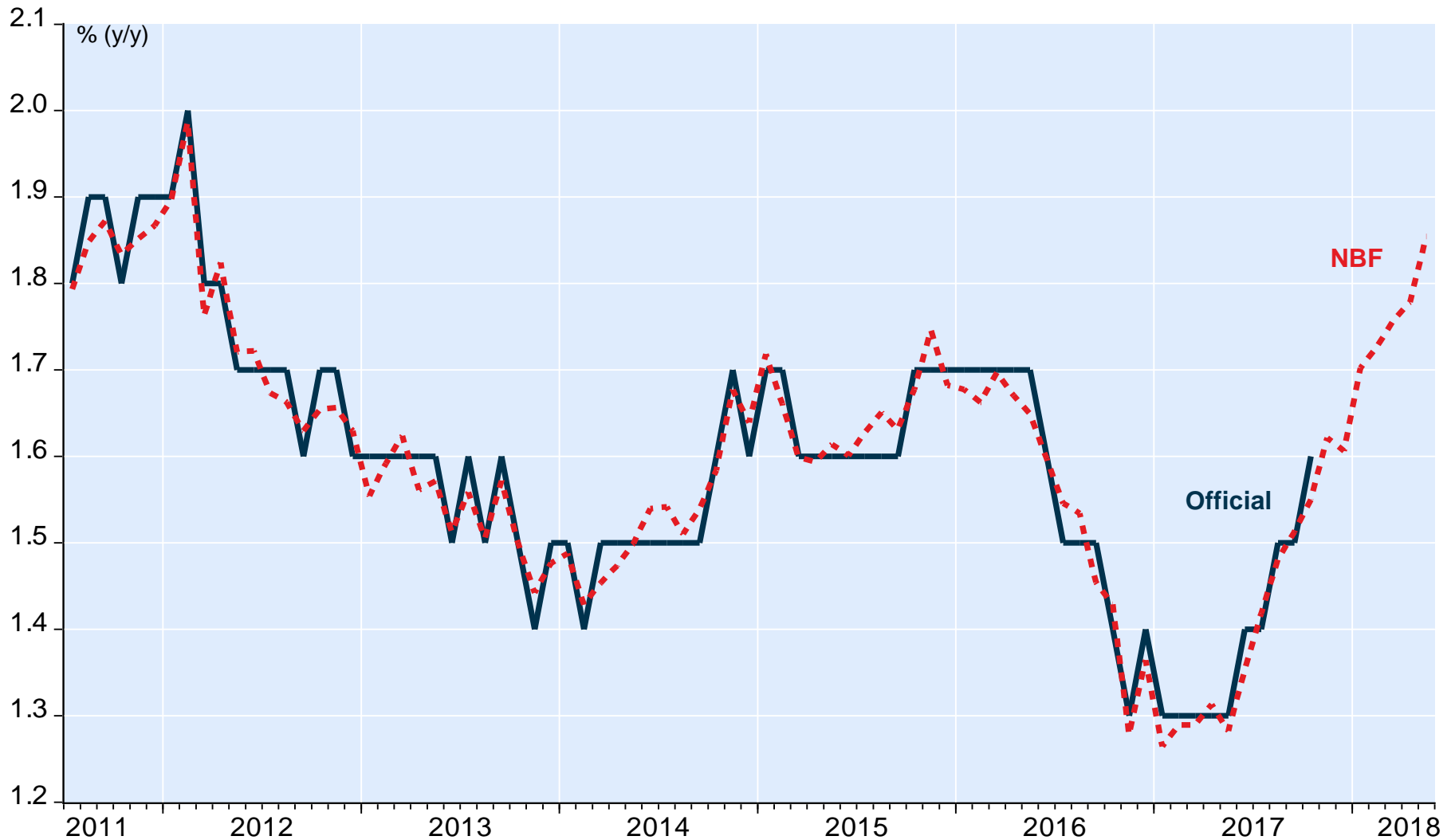
No set path for interest rates, says Bank of Canada governor Stephen Poloz

Poloz is seeking to bring interest rates back to more normal levels while not harming the fledgling economic recovery.



Canada: Perspective on CPI-common

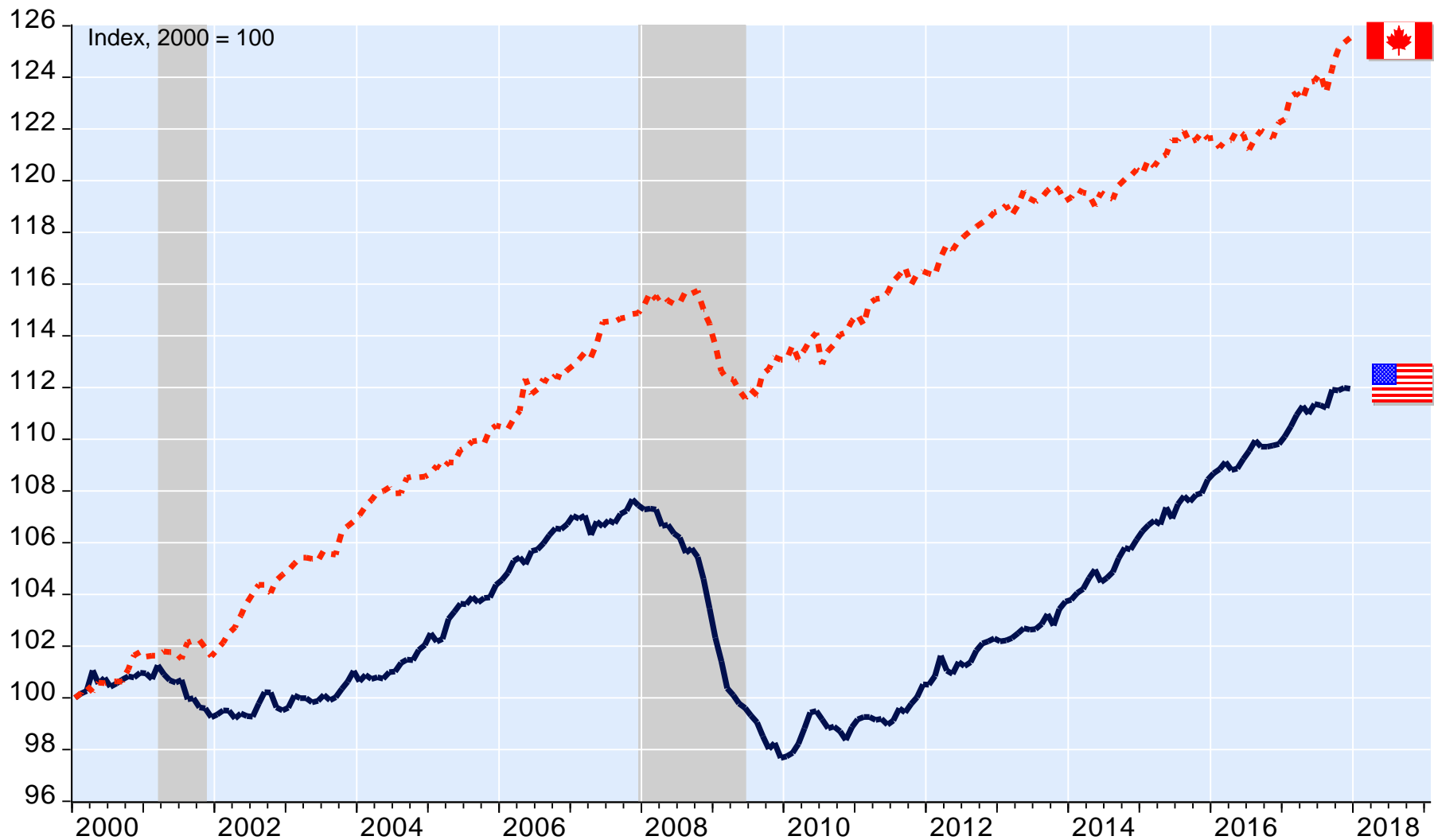
Core inflation based on common component measure



NBF Economics and Strategy (data via Statistics Canada)

Perspective on key driver of labour income

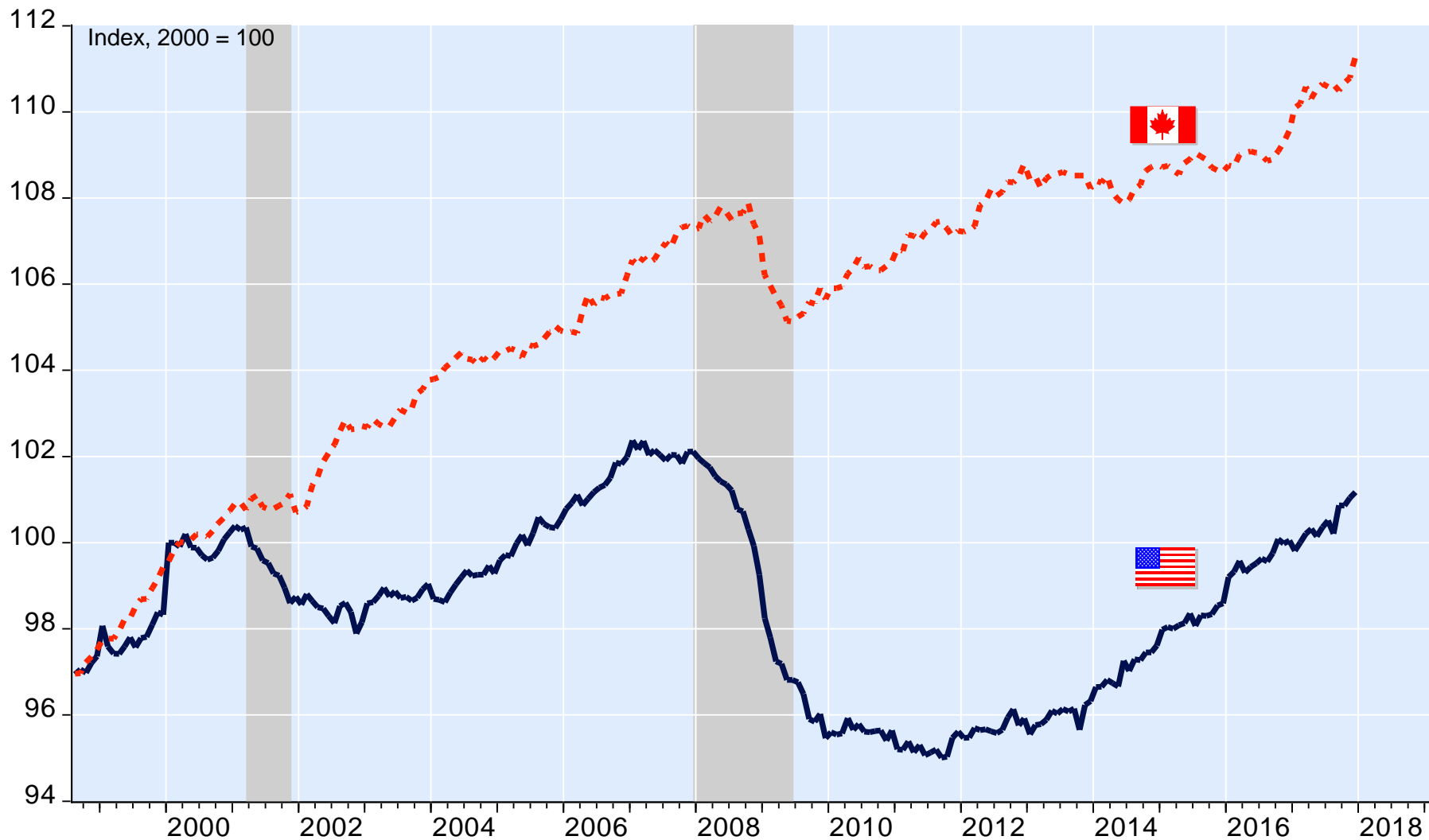
Full-time employment: Canada vs. the U.S.



NBF Economics and Strategy (data via Datastream)

Perspective on the prime-aged workforce

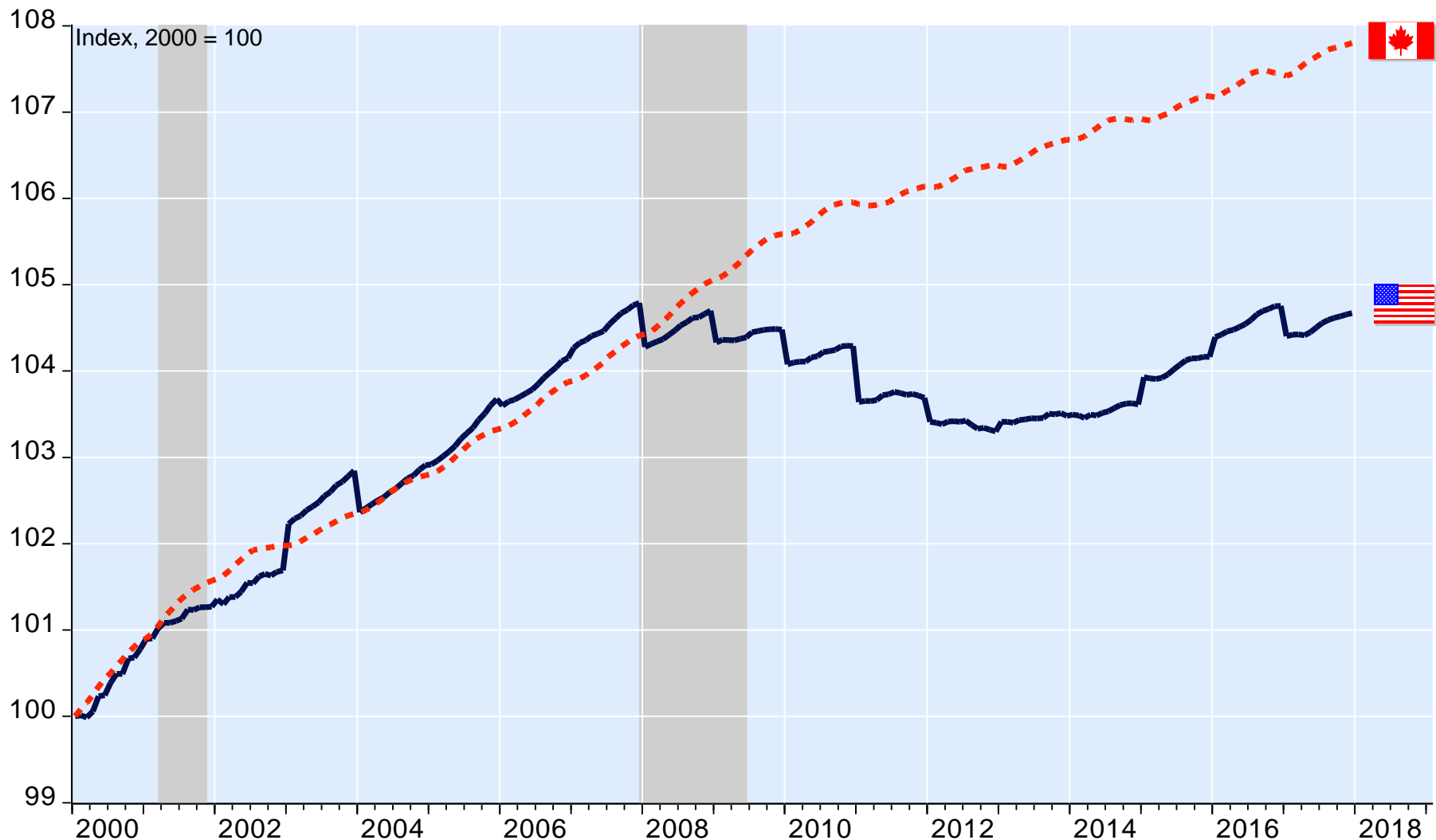
Employment for people aged 25-54: Canada vs. the U.S.



NBF Economics and Strategy (data via Statistics Canada and BLS via Datastream)

Prime-age population growing in Canada, stalling in the U.S.

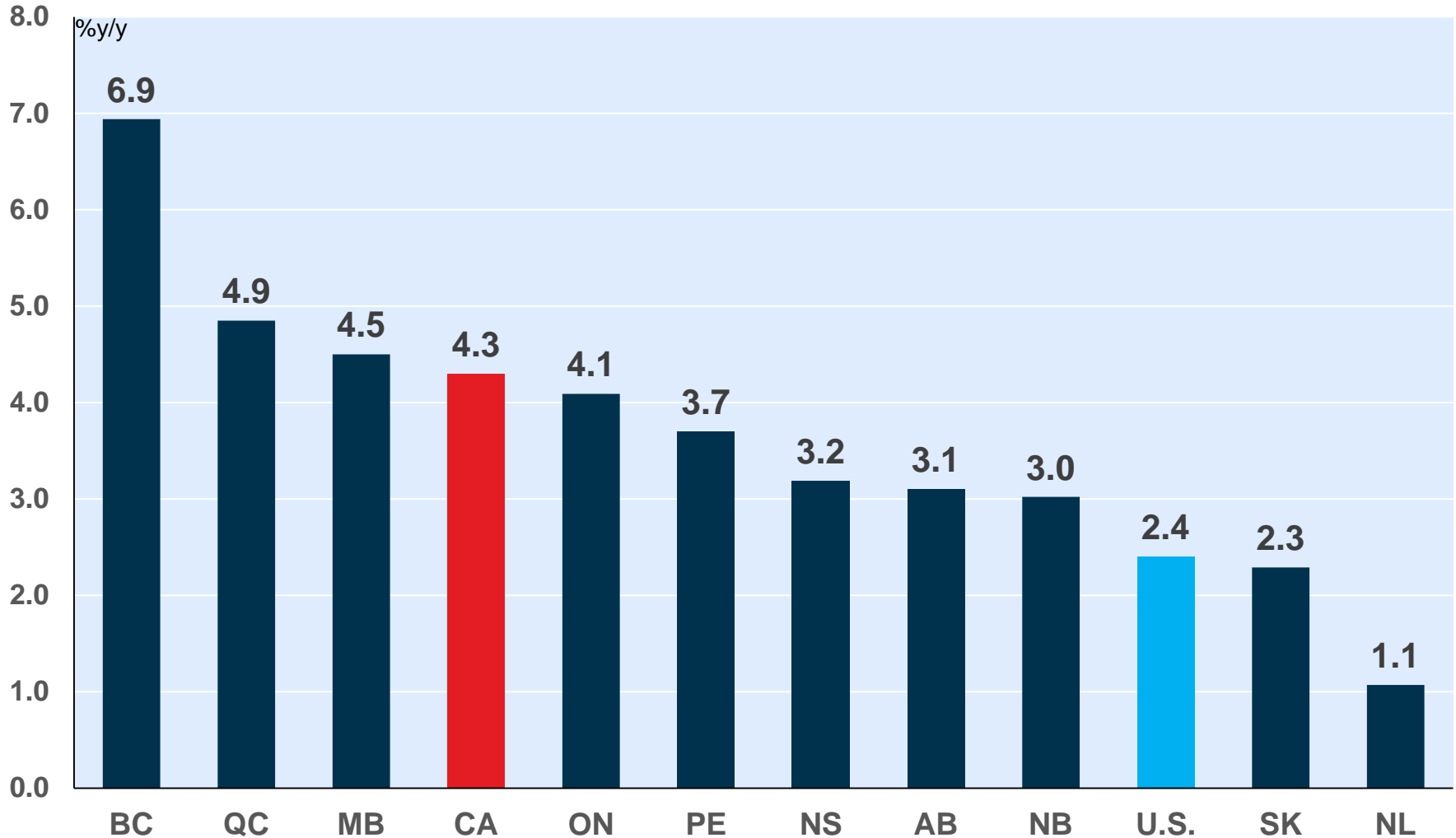
Population aged 25-54: Canada vs. the U.S.



NBF Economics and Strategy (data via Statistics Canada and BLS via Datastream)

Wages and salaries growth

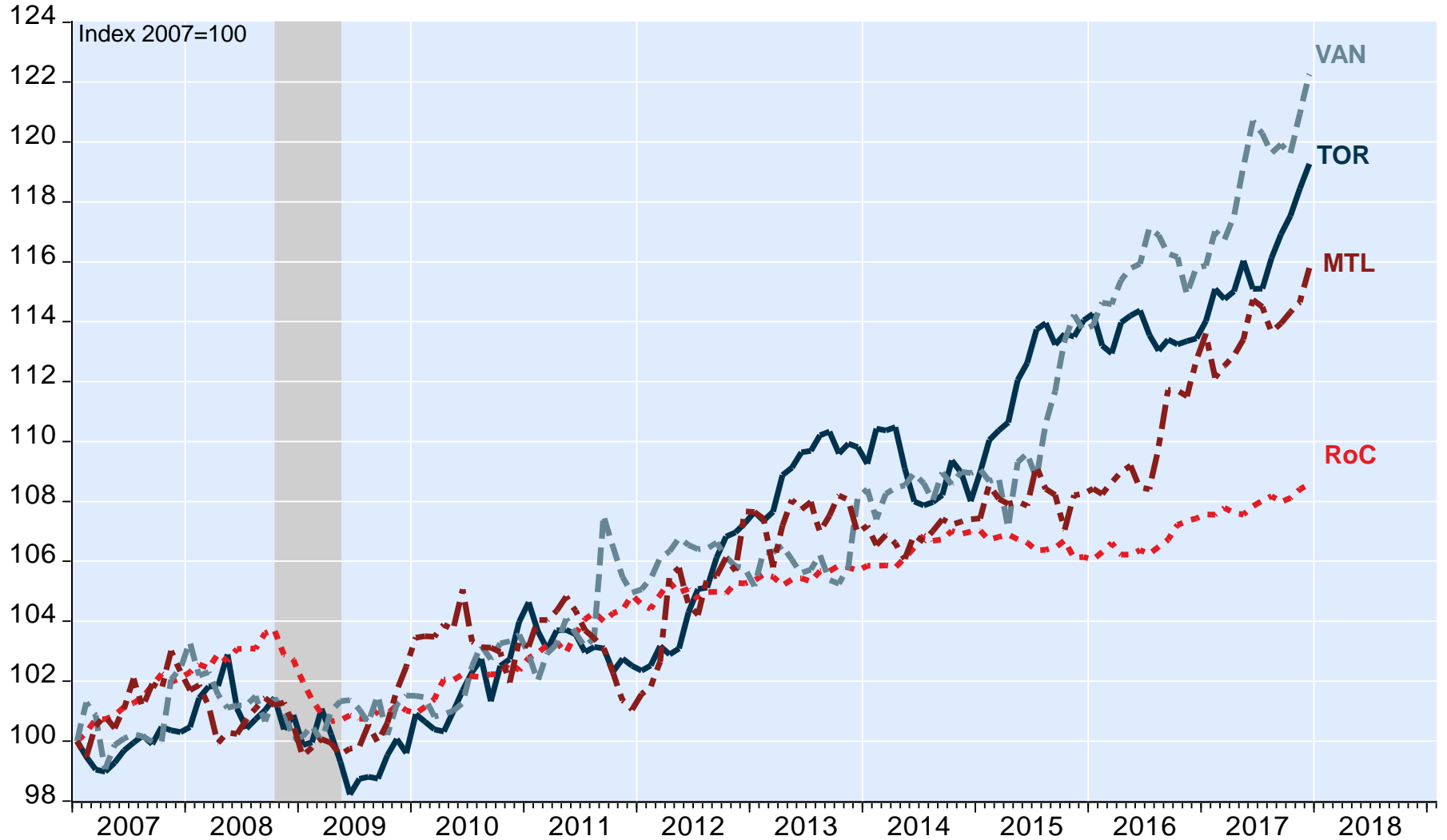
Q3 2017 vs. Q3 2016



NBF Economics and Strategy (data via Statistics Canada)

Canada: Job creation in the main cities

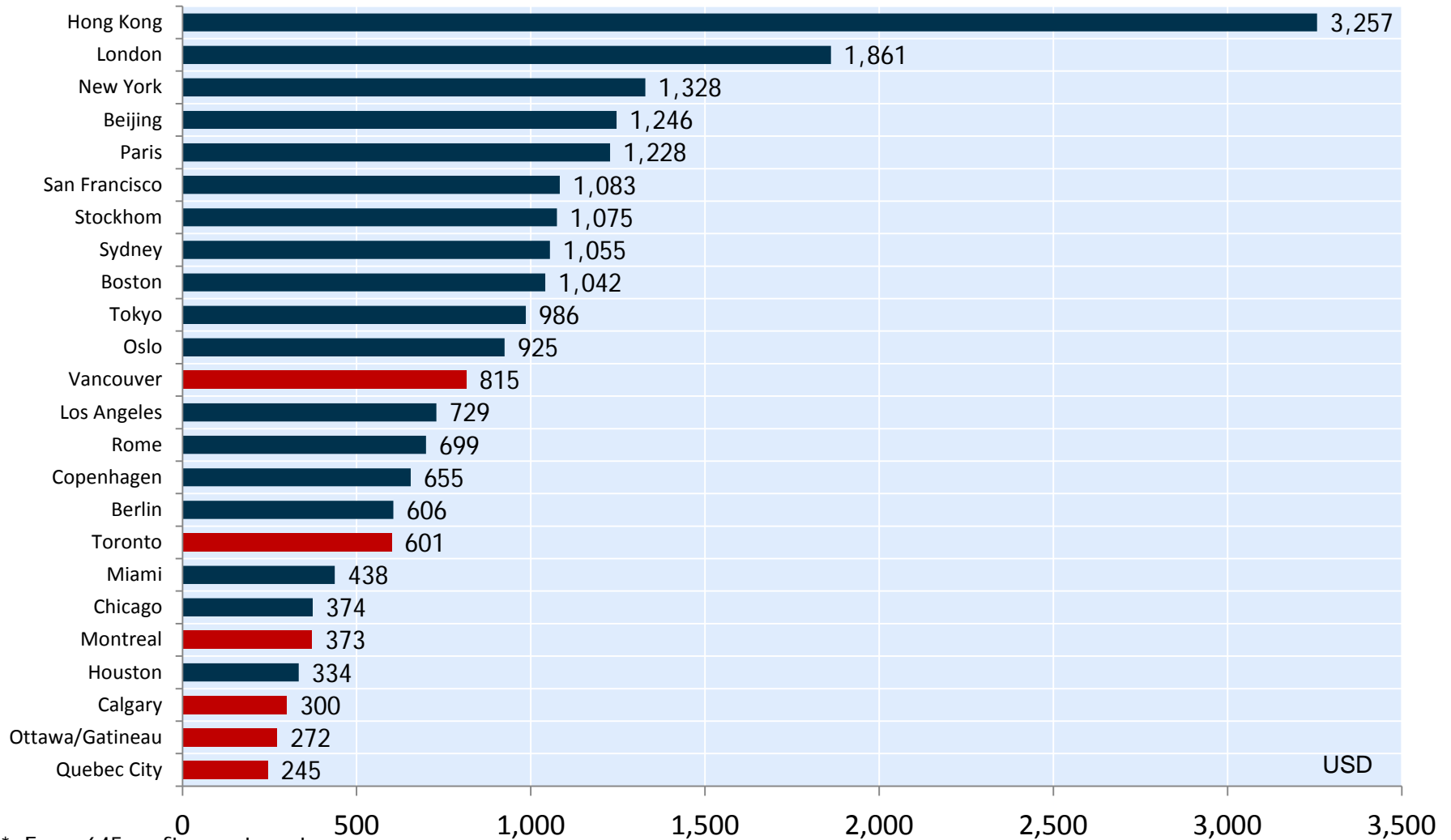
Job creation in greater Vancouver, greater Toronto, greater Montreal and rest of Canada (RoC)



NBF Economics and Strategy (data via Statistics Canada)

World: Home prices do not seem extreme in Canada

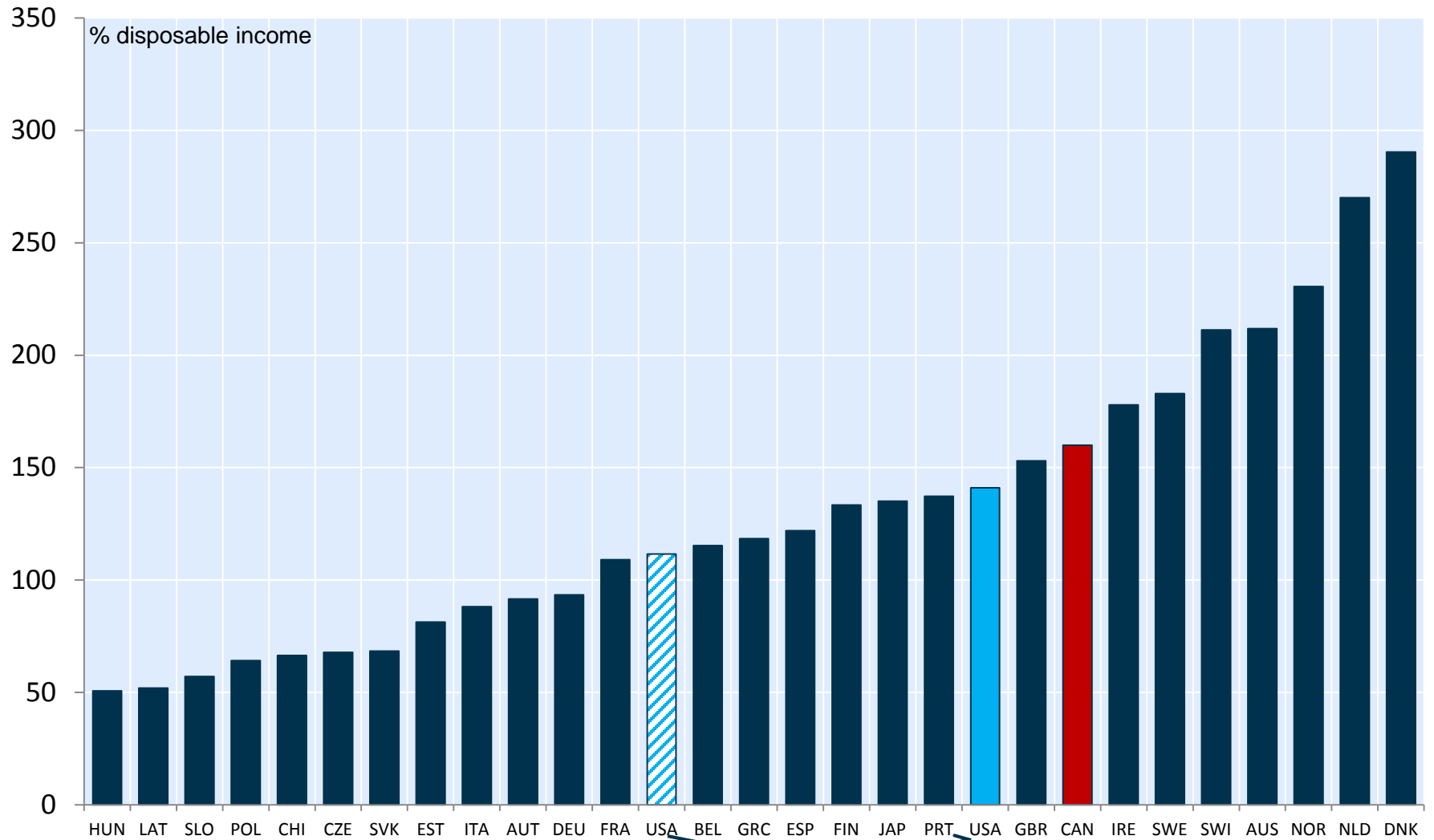
Price per square feet in USD for downtown living* (summer 2017)



* For a 645 sq.ft. apartment
NBF Economics and Strategy

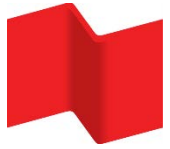
World: Perspective on household leverage

Household debt as a percentage of net disposable income (major OECD countries)



NBF Economics and Strategy (data via OECD)

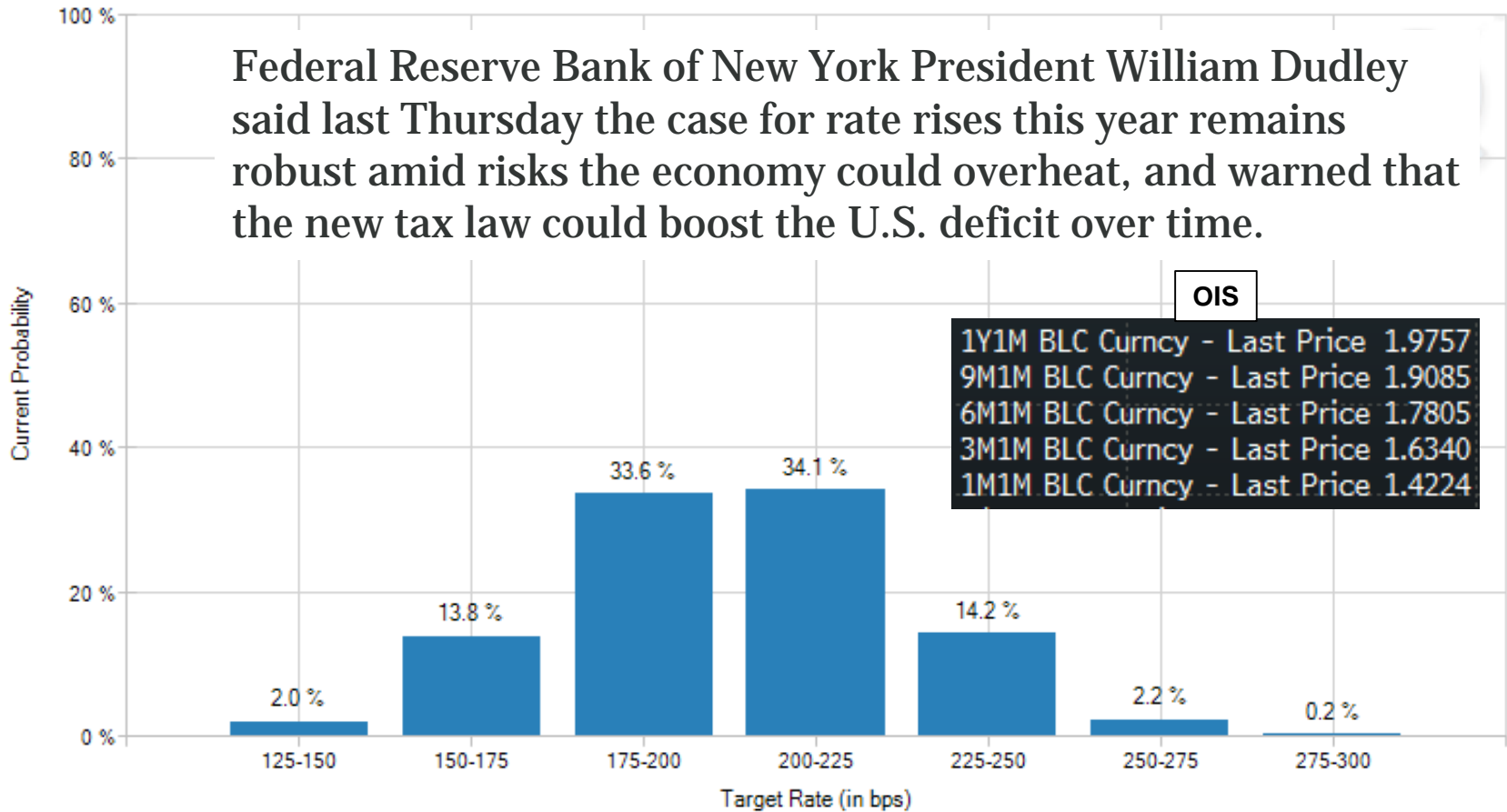
U.S. adjusted to Canadian definition



Interest rates

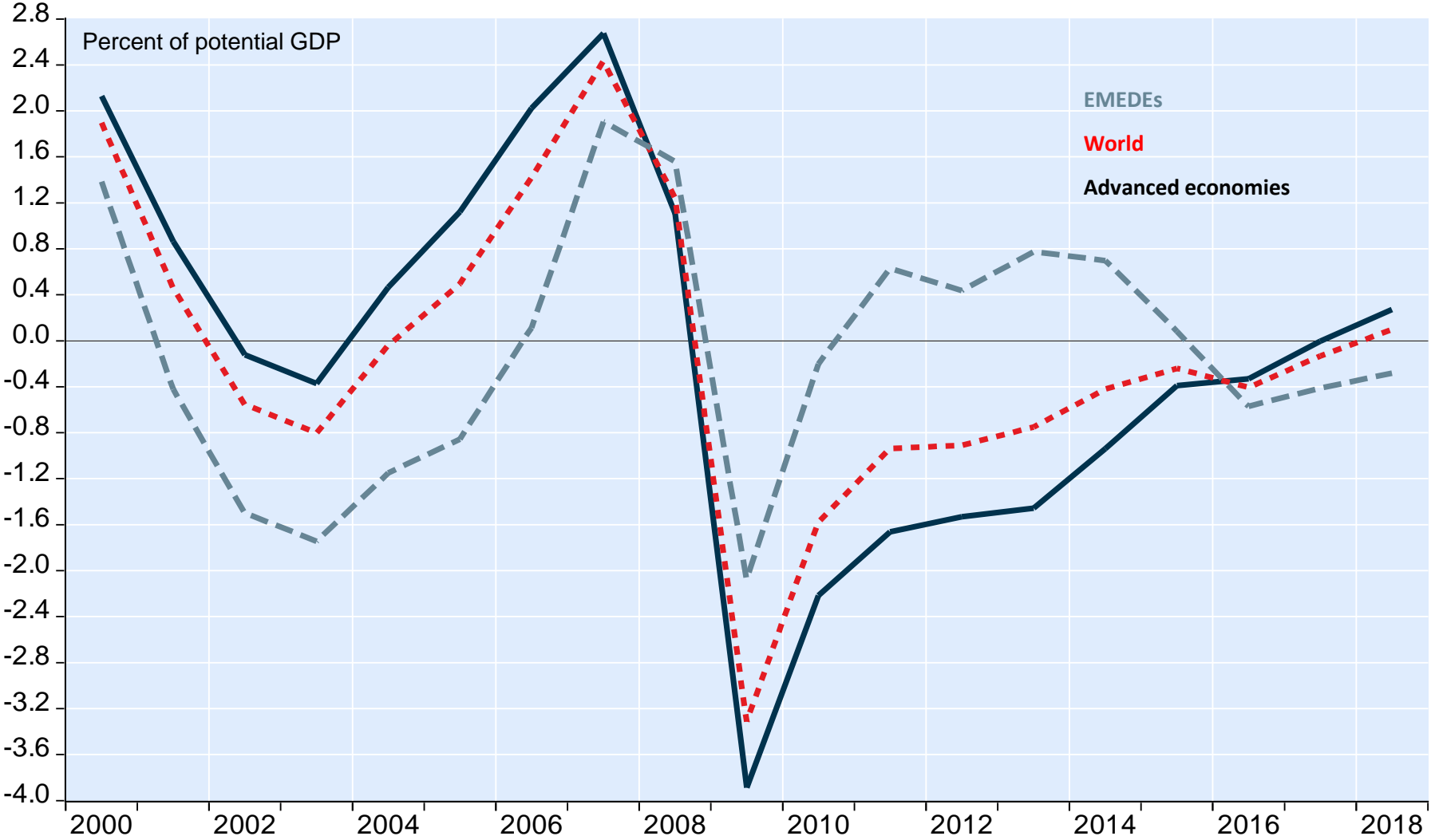
CME: Probabilities of FOMC rate moves based on fed funds futures

Current Target Rate Probabilities for 19 Dec 2018 Fed Meeting



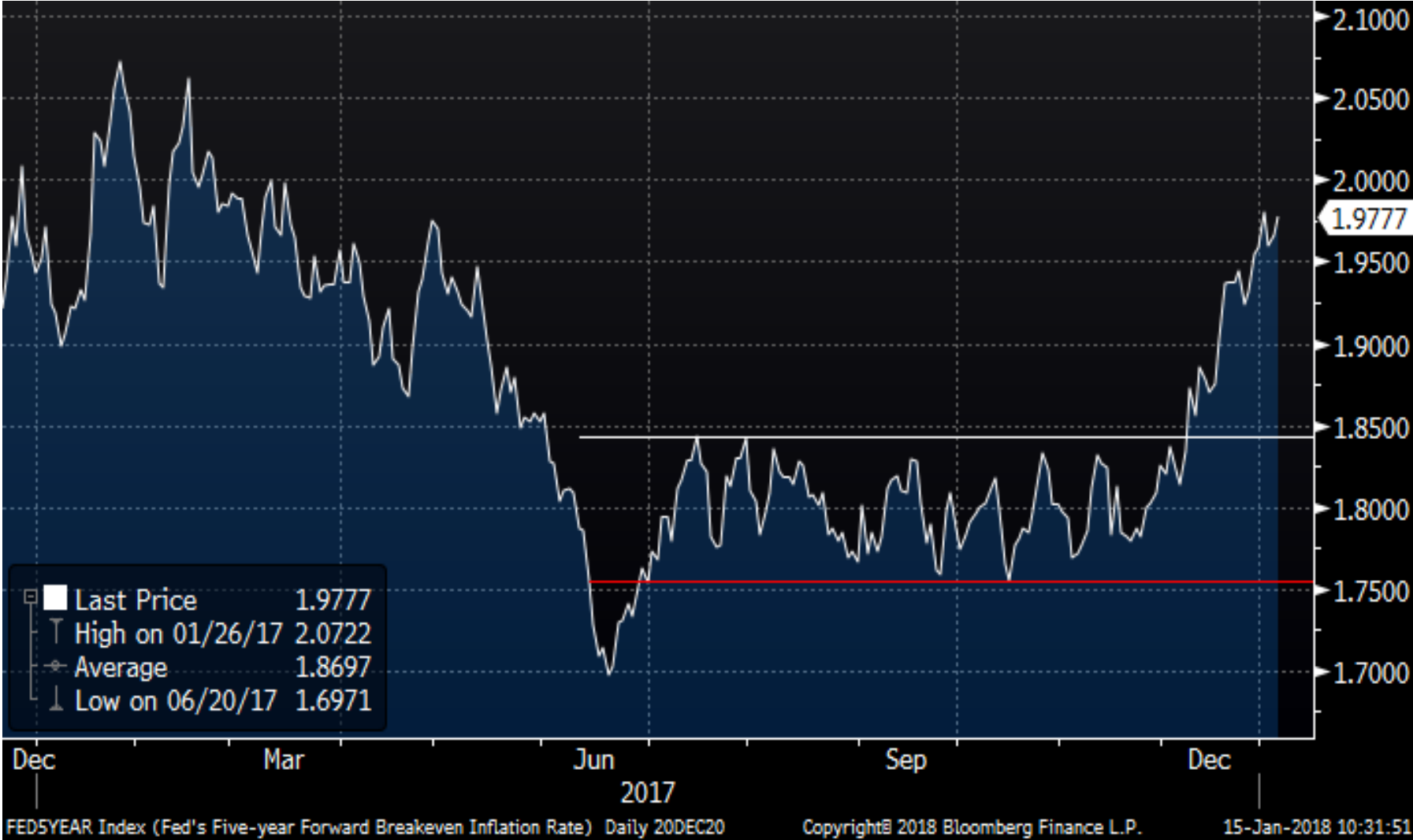
NBF Economics and Strategy (data via CME Group) 2018-01-15

World Bank: Output gaps in advanced economies and EMDEs



NBF Economics and Strategy (data via World Bank) 2018-01-15

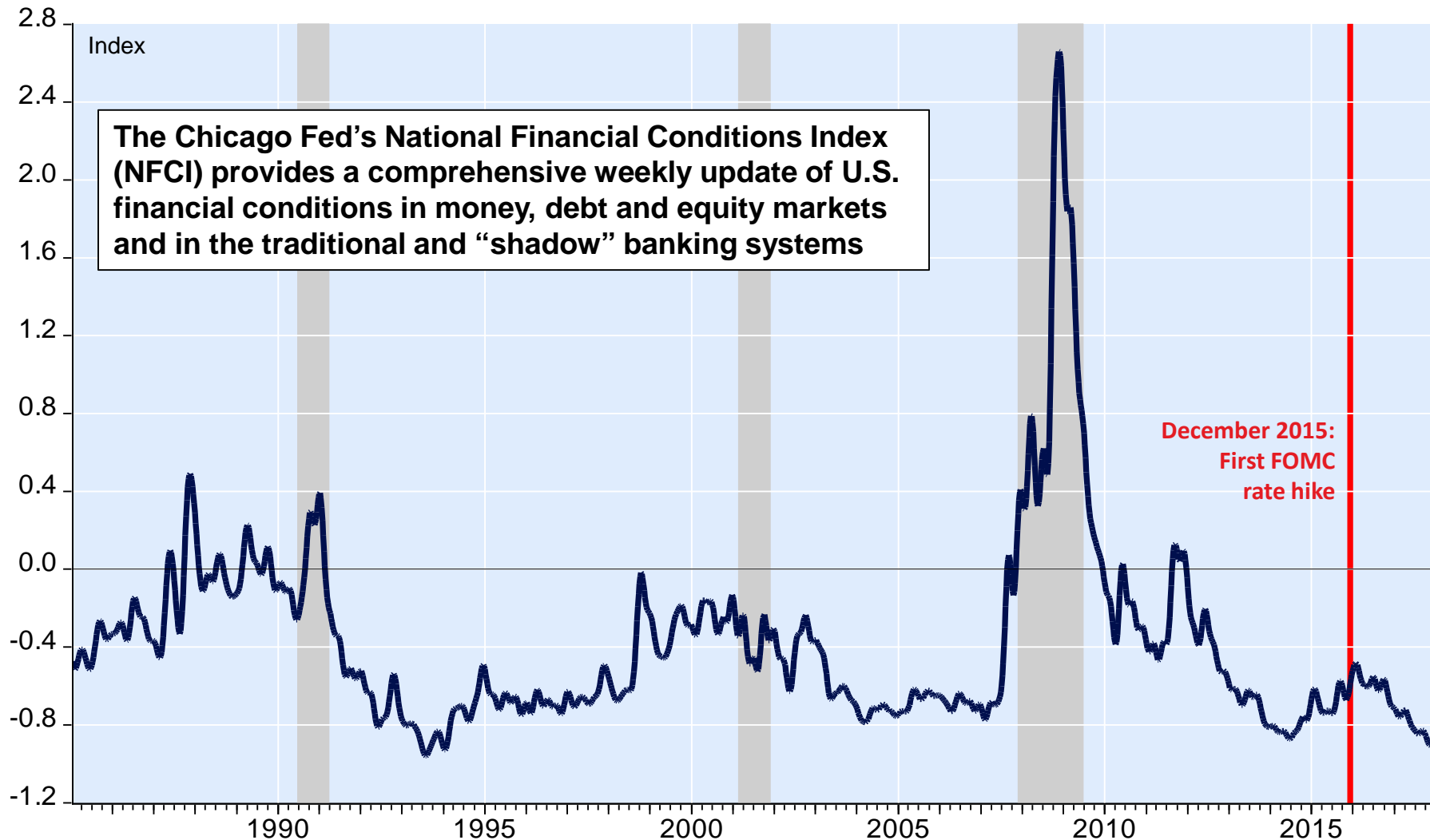
Fed's five-year forward breakeven inflation rate



NBF Economics and Strategy (data via Bloomberg)

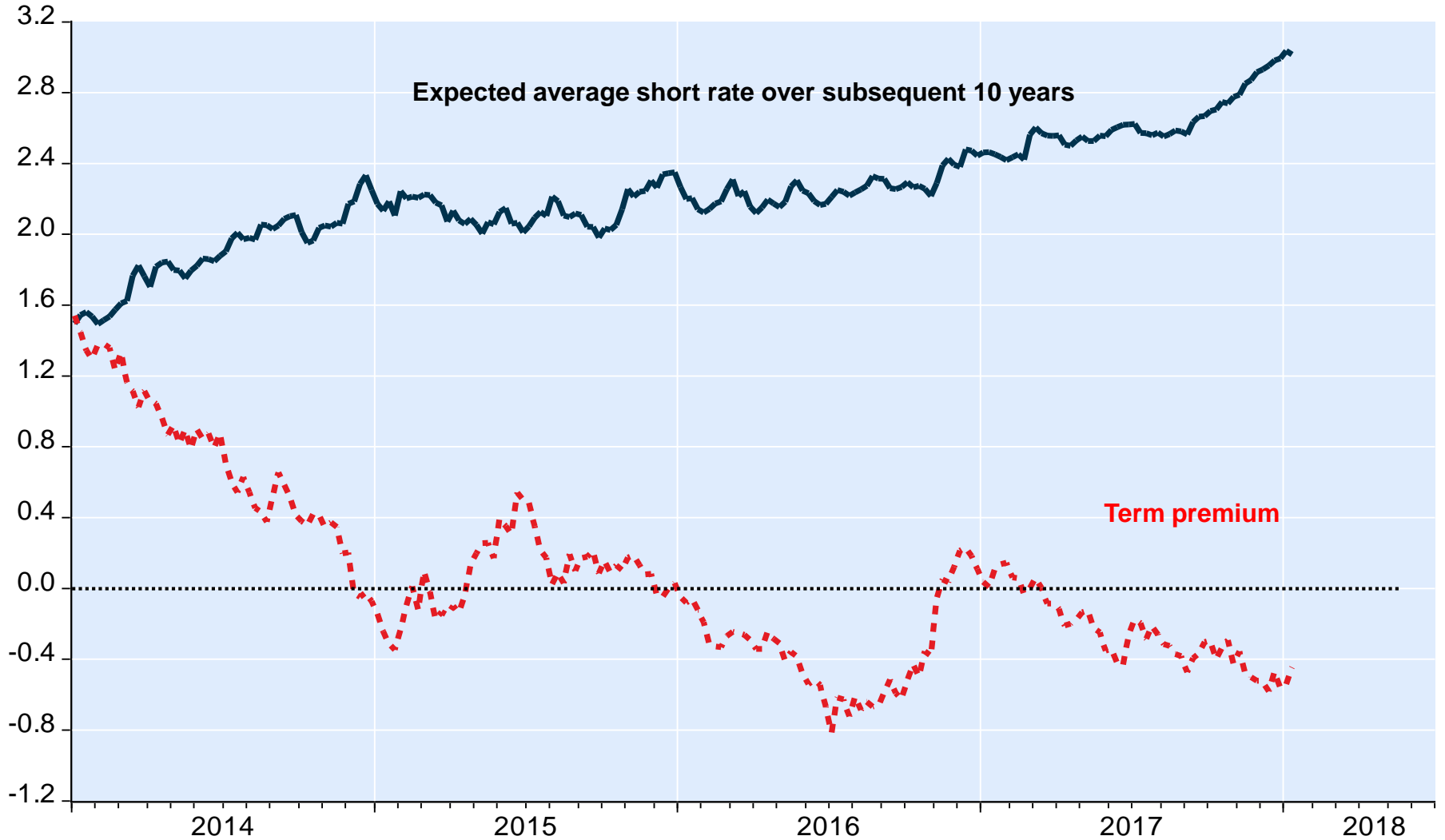
Financial conditions have eased despite the FOMC's rate hikes

NFCI shows financial conditions at year end 2017 easier than in the period from 2003 to 2005



NBF Economics and Strategy (data via Bloomberg)

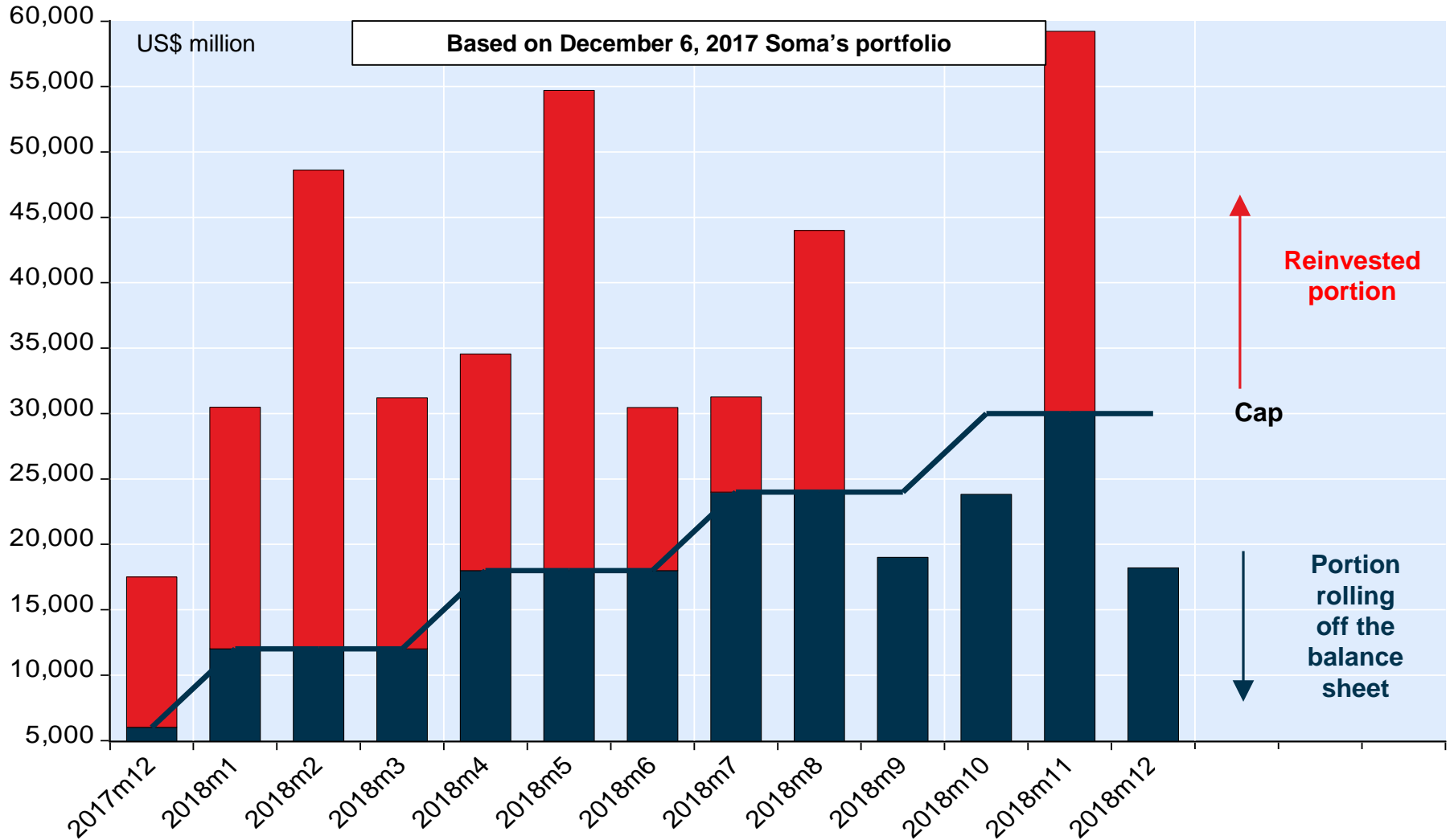
10-year yield: Sum of expected average short rate and term premium



NBF Economics and Strategy (data via Bloomberg)

SOMA: 2018 Treasury maturities and run-off caps

Maturity schedule of notes, bonds, floating-rate notes and TIPS



NBF Economic and Strategy (data via Federal Reserve Bank of New York) 2017/12/06

ECB: Officials “widely” agreed that the bank would need to change its guidance to investors

The eurozone economy is in its best shape in more than a decade. Consumer sentiment is at its highest level since the turn of the century, unemployment is close to a nine-year low, and industrial production is booming, rising 1% on the month in November



	Start Date	Days	Ticker	Last	Rate
	01/17/2018	63	Front	100.3402	-0.3402
10)	03/21/2018	91	ERH8	100.3200	-0.3200
11)	06/20/2018	91	ERM8	100.3050	-0.3050
12)	09/19/2018	91	ERU8	100.2800	-0.2800
13)	12/19/2018	91	ERZ8	100.2300	-0.2300
14)	03/20/2019	91	ERH9	100.1450	-0.1450
15)	06/19/2019	91	ERM9	100.0500	-0.0500
16)	09/18/2019	91	ERU9	99.9500	0.0500
17)	12/18/2019	91	ERZ9	99.8500	0.1500
18)	03/18/2020	91	ERH0	99.7550	0.2450
19)	06/17/2020	91	ERM0	99.6550	0.3450
20)	09/16/2020	91	ERU0	99.5600	0.4400
21)	12/16/2020	91	ERZ0	99.4650	0.5350
22)	03/17/2021	91	ERH1	99.3850	0.6150

NBF Economics and Strategy (data via Bloomberg)

FOMC: More policy normalization in 2018

Balancing of risks to financial stability, the economy and inflation calls for gradual policy normalization



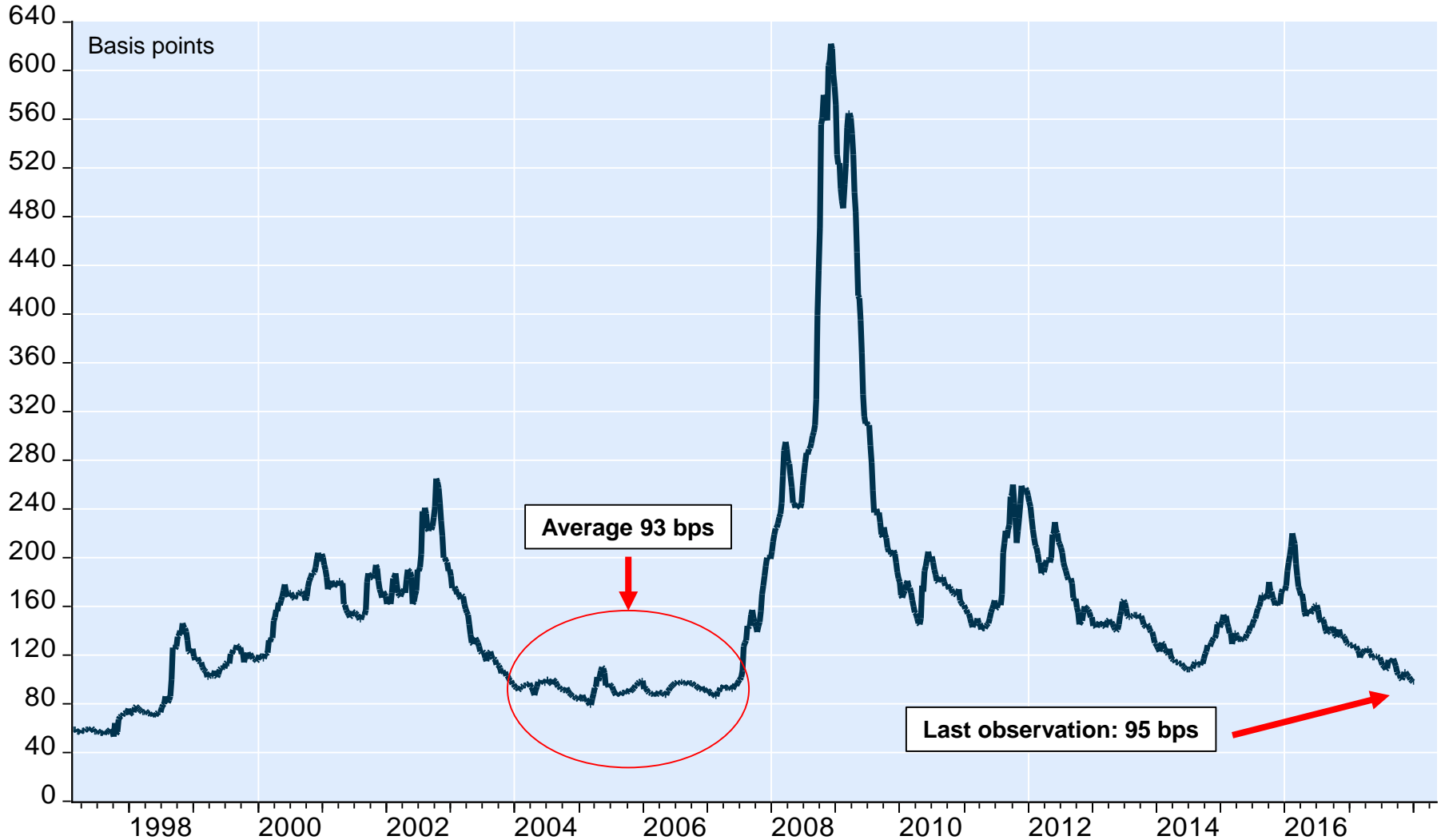
U.S. economic forecast

	Q4 2017 forecast	Q1 2018 forecast	Q2 2018 forecast	Q3 2018 forecast	Q4 2018 forecast	2018 forecast
Real GDP growth (q/q % chg. saar)	2.5	1.5	3.2	2.3	2.2	2.5
CPI (y/y % chg.)	2.1	1.9	2.5	2.5	2.1	2.2
CPI ex. food and energy (y/y % chg.)	1.7	1.7	2.1	2.2	2.3	2.1
Unemployment rate (%)	4.1	4.1	4.0	4.0	3.9	4.0
Fed Fund Target Rate		1.75	1.75	2.00	2.25	
10-Year Treasuries		2.54	2.73	2.84	2.95	

NBF Economics and Strategy (data via Bloomberg)

US corporate bonds: Investment grade option adjusted spread

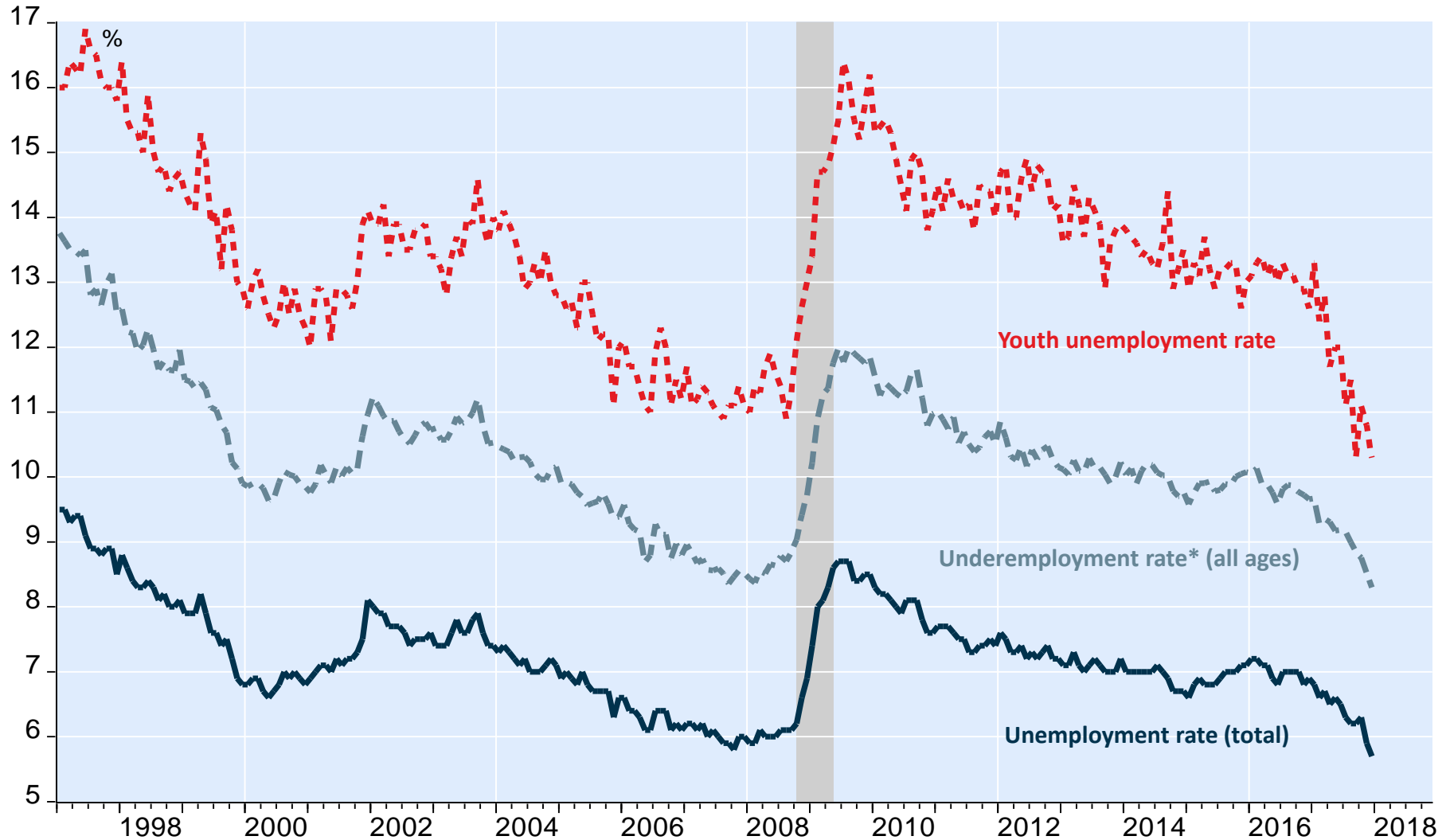
OAS back to levels seen in 2004 to 2006



NBF Economics and Strategy (data via Bloomberg, ICE BofAML)

Canada: Perspective on labour-market slack

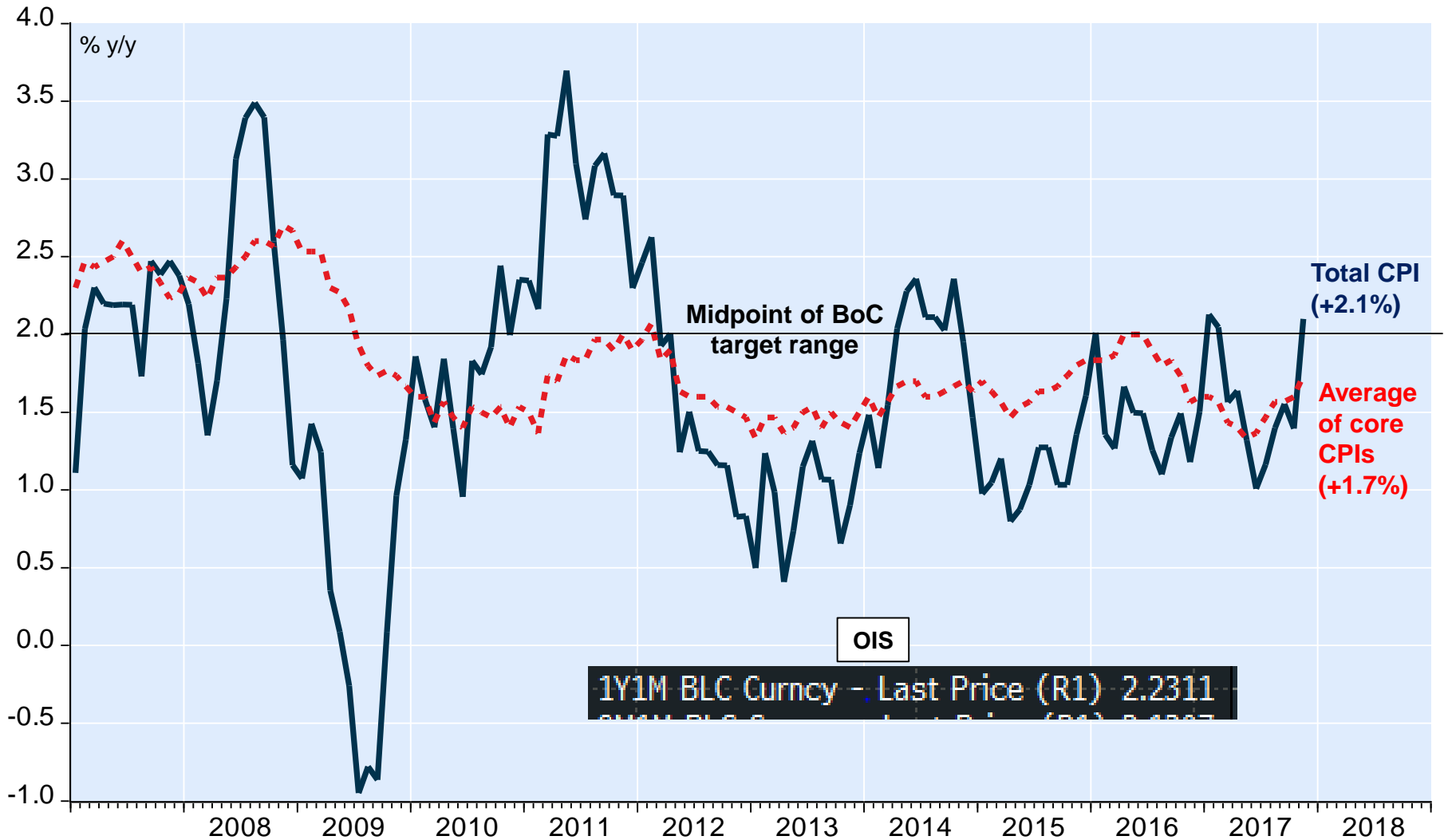
Unemployment rate, youth unemployment rate and underemployment rate



• Includes discouraged workers, waiting groups and involuntary part-time

Canada: Consumer Price Index inflation since 2007

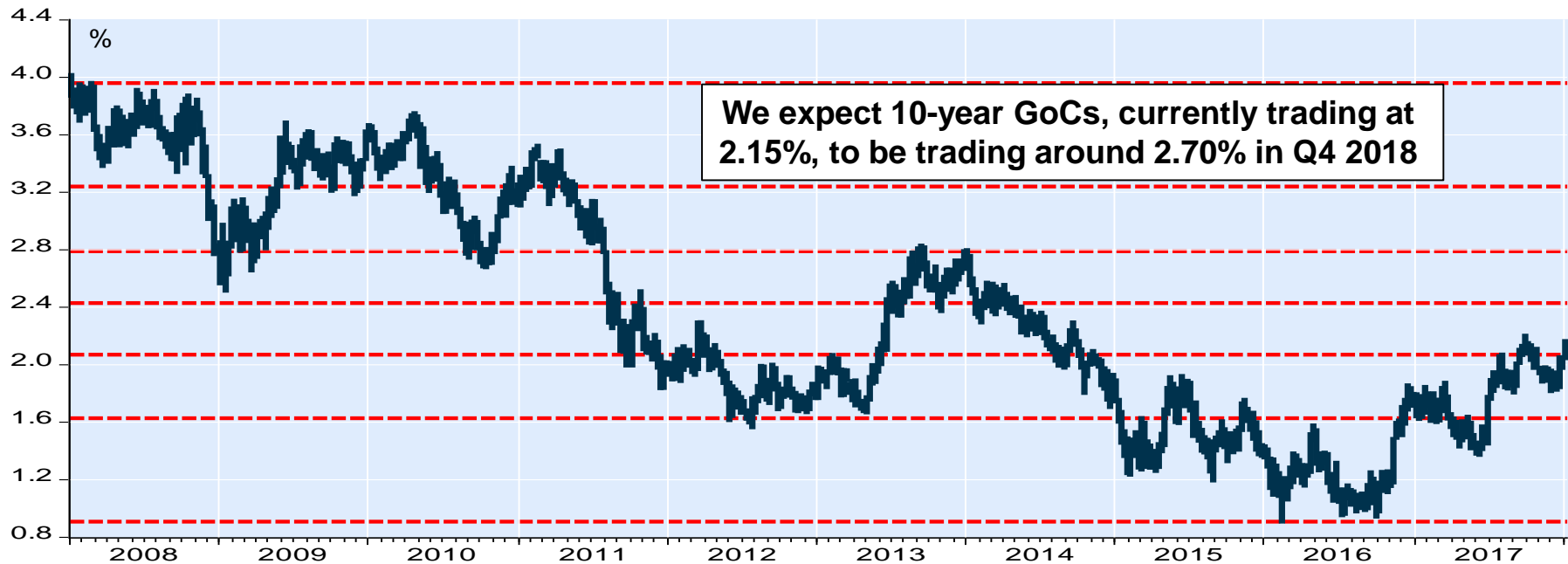
Change in total CPI and change in average of the three core measures preferred by the Bank of Canada



NBF Economics and Strategy (data via Statistics Canada)

Canada: More policy normalization in 2018

Balancing of risks to financial stability, economy and inflation calls for gradual policy normalization



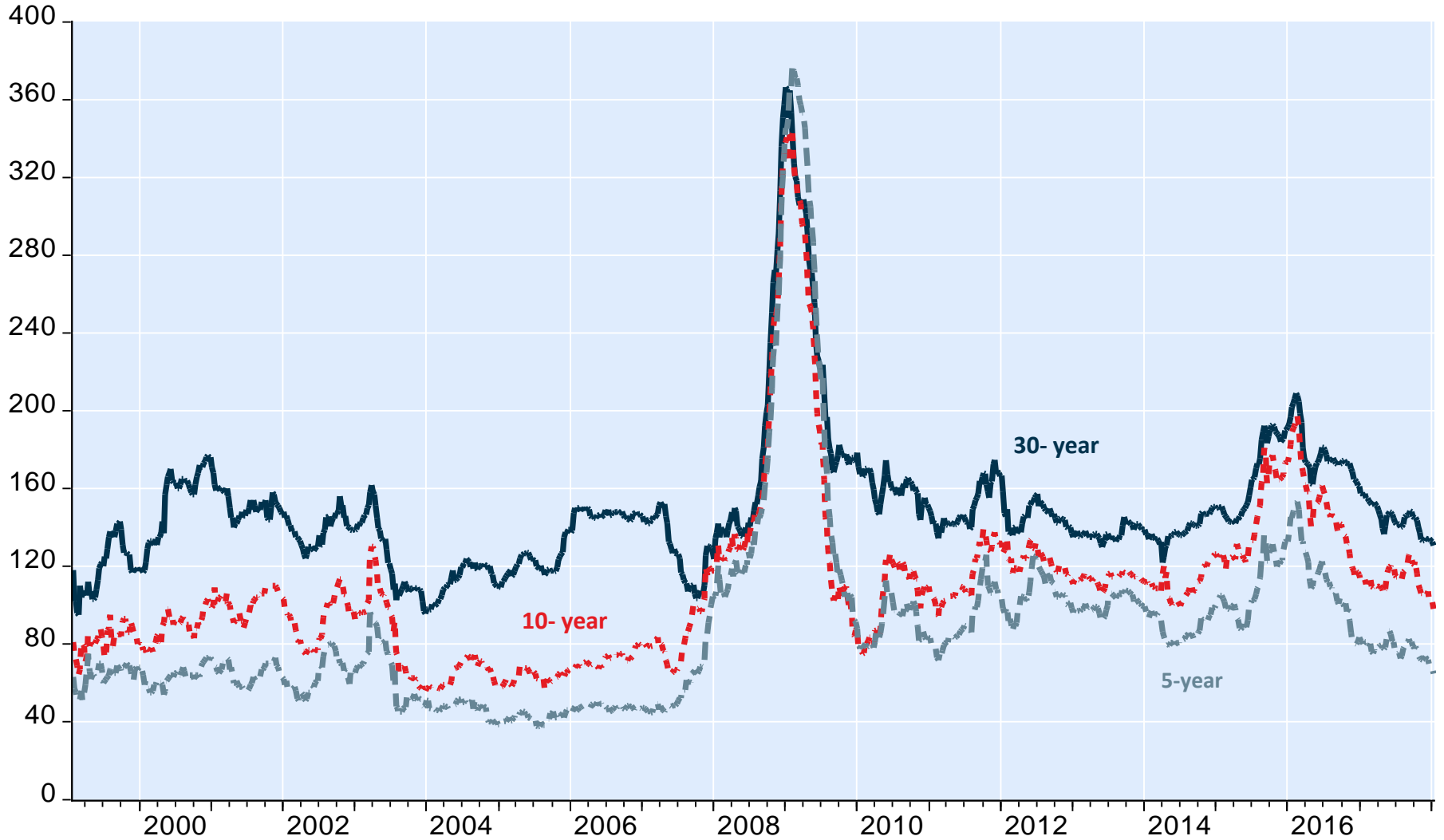
Canada economic forecast

	Q4 2017 forecast	Q1 2018 forecast	Q2 2018 forecast	Q3 2018 forecast	Q4 2018 forecast	2018 forecast
Real GDP growth (q/q % chg. saar)	2.2	2.3	2.5	2.7	2.1	2.5
CPI (y/y % chg.)	1.8	1.7	2.3	2.6	2.3	2.3
CPI ex. food and energy (y/y % chg.)	1.6	1.5	1.9	2.1	2.3	2.0
Unemployment rate (%)	6.0	5.9	5.9	5.7	5.6	5.8
Boc's overnight rate		1.25	1.50	1.75	2.00	
10-Year Gov. of Canada		2.21	2.51	2.65	2.70	

NBF Economics and Strategy (data via Bloomberg)

Corps A's yield spreads to Canadas

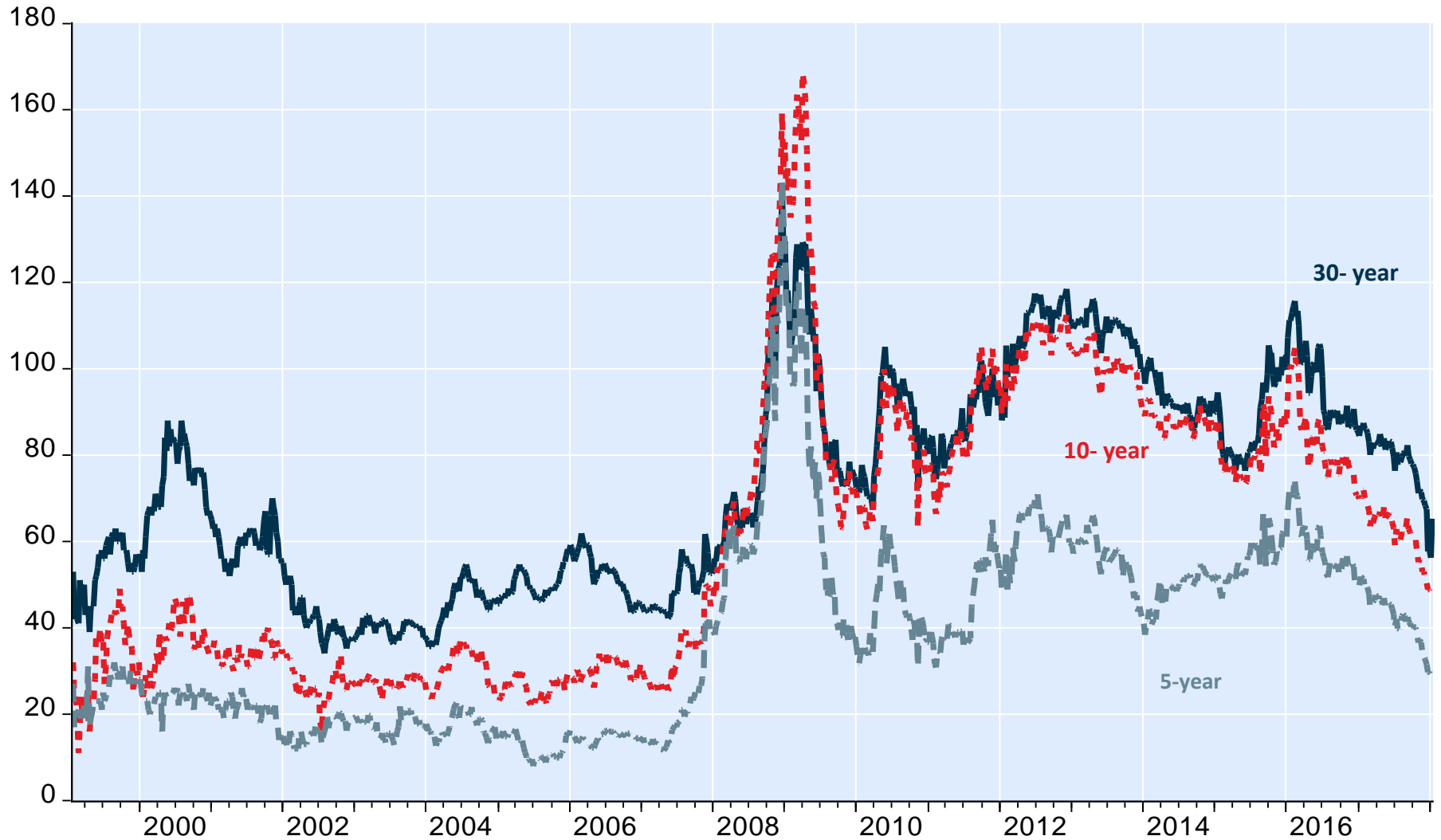
BFV corporate A



NBF Economics and Strategy (data via Bloomberg)

Ontario's yield spreads to Canadas

Still well above levels seen in 2004 to 2006



NBF Economics and Strategy (data via Bloomberg)

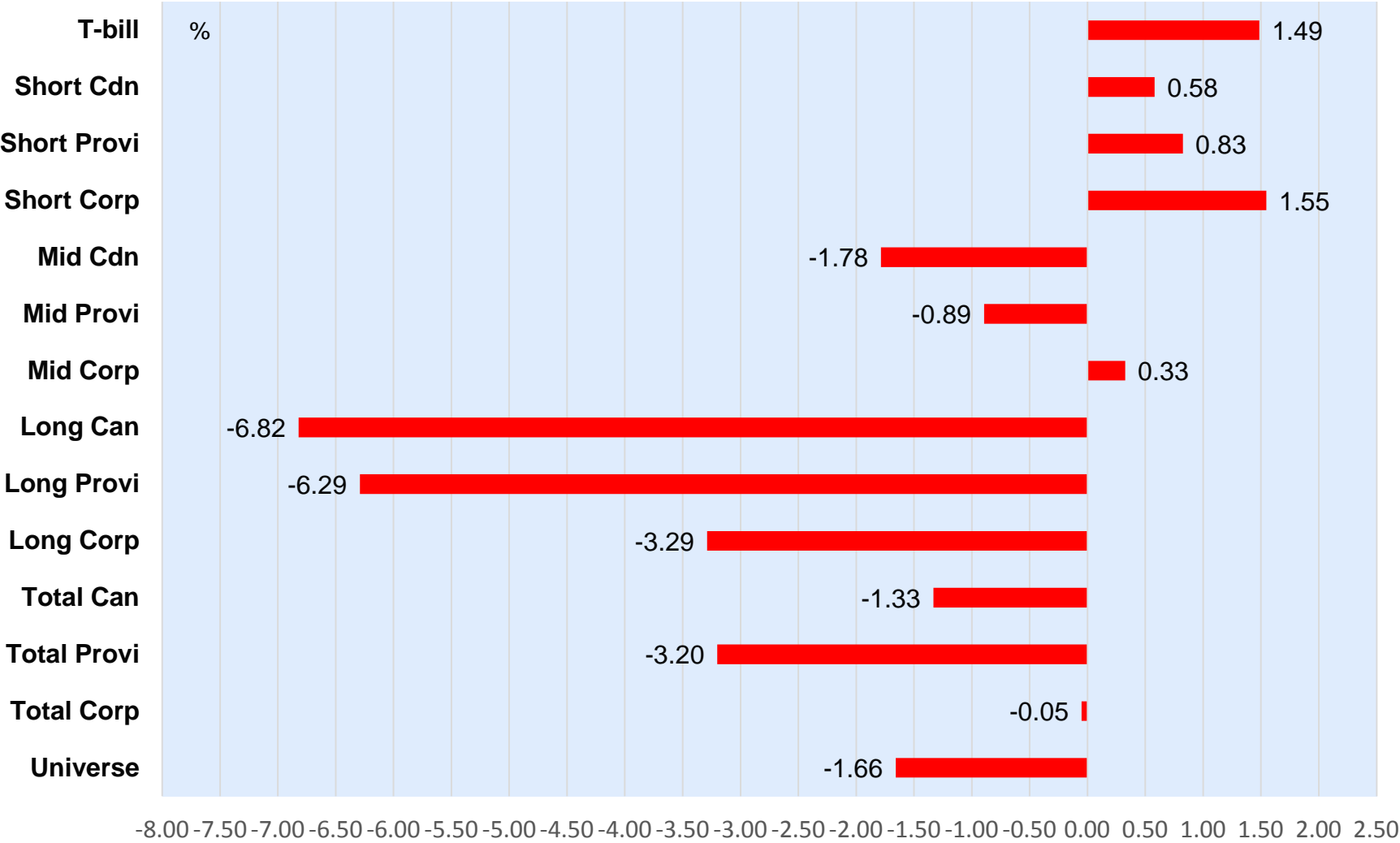
Canada: Underlying assumptions for total returns calculations

Canada economic forecast	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
	forecast	forecast	forecast	forecast	forecast	forecast
Real GDP growth (q/q % chg. saar)	2.2	2.3	2.5	2.7	2.1	2.5
CPI (y/y % chg.)	1.8	1.7	2.3	2.6	2.3	2.3
CPI ex. food and energy (y/y % chg.)	1.6	1.5	1.9	2.1	2.3	2.0
Unemployment rate (%)	6.0	5.9	5.9	5.7	5.6	5.8
Boc's overnight rate		1.25	1.50	1.75	2.00	
10-Year Gov. of Canada		2.21	2.51	2.65	2.70	

Province	Avg.	Avg.	Avg.
GDP	2017	2018	2019
N & L	-2.0%	3.0%	4.7%
P.E.I.	2.0%	1.5%	1.5%
N.S.	1.2%	1.1%	1.0%
N.B.	1.2%	1.0%	1.2%
Quebec	2.6%	2.3%	1.3%
Ontario	3.0%	2.6%	1.5%
Manitoba	2.6%	2.1%	1.2%
Sask.	2.2%	2.0%	1.9%
Alberta	4.5%	2.3%	1.6%
B.C.	3.1%	3.0%	1.7%

Canada: Spreads		
	12/29/17	Forecast
Corporate		
Long All	157	149
Mid All	124	115
Short All	76	65
Provincial		
Long	72	72
Mid	53	49
Short	31	29

Canada: Projected total returns, 2017-12-29 to 2018-12-31



Conclusion:

- **World, U.S.: Another year of above-potential growth**

- Global growth near 3.7% in 2018
- China continues to grow at around 6.5% (good enough)
- Eurozone, still great at 1.9%
- Geopolitical risks to remain a major source of concern: U.S. Trade Policy?

Interest rates, currency:

- The Fed probably hikes three times in 2018 ; 10-year Treasury yield near 3.0%.
- Expect the BoC to hike again this weekE, more to come after that (heading towards 2%)
- Canadian dollar in the 1.20-1.30 range (stronger in short-term); Oil in the \$55-\$62 range
- Large correction in housing unlikely unless labour markets deteriorate markedly or mortgage rates surge.

Equity over bonds for now with an eye on the yield-curve: Inflation comeback in 2018?