

Economic Outlook

Robert Fry

Robert Fry Economics LLC


Philadelphia Council for Business Economics

Philadelphia, Pennsylvania

February 1, 2017

RobertFryEconomics.com

RobertFryEconomics@gmail.com



This presentation contains forward-looking statements based on expectations, estimates and projections that are not guarantees of future performance and involve a number of uncertainties and assumptions.

The content is provided “AS IS,” “AS AVAILABLE.” Robert Fry Economics LLC does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained in this communication, and Robert Fry Economics LLC expressly disclaims liability for errors or omissions in these materials. We reserve the right to make changes and corrections at any time, without notice.

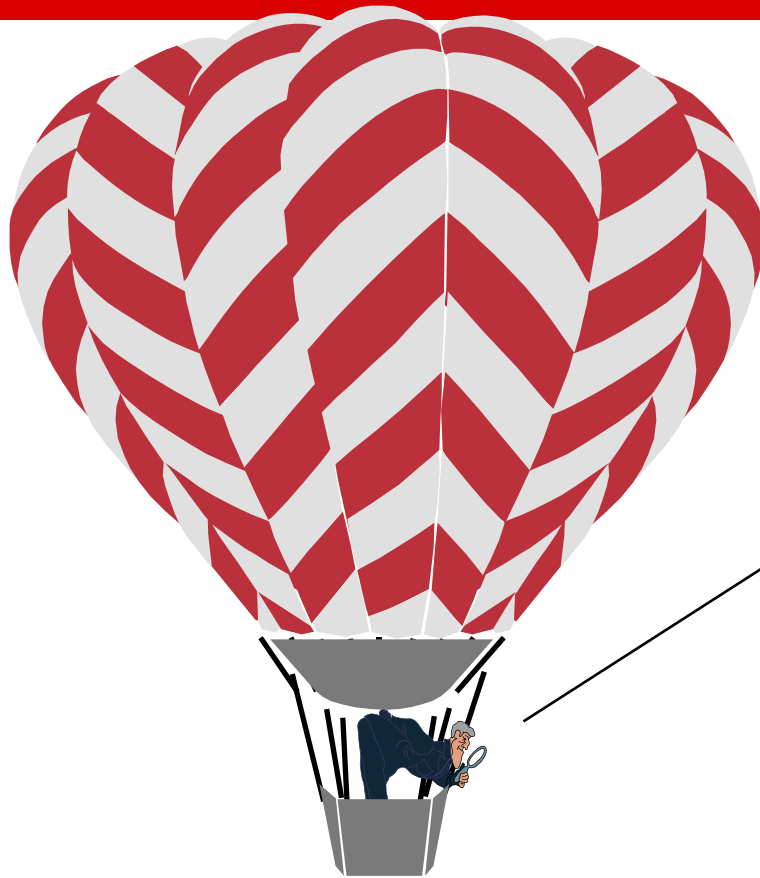
Robert Fry Economics LLC expressly disclaims all liability for the use or interpretation by others of information contained in this communication. Decisions based on information contained in this communication are the sole responsibility of the reader, and in exchange for using this communication the reader agrees to hold Robert Fry Economics LLC harmless against any claims for damages arising from any decisions that the reader makes based on such information. Nothing contained in this Robert Fry Economics LLC communication constitutes investment advice.



**Excuse me.
Can you tell
me where I
am?**

**You're in
a balloon.**





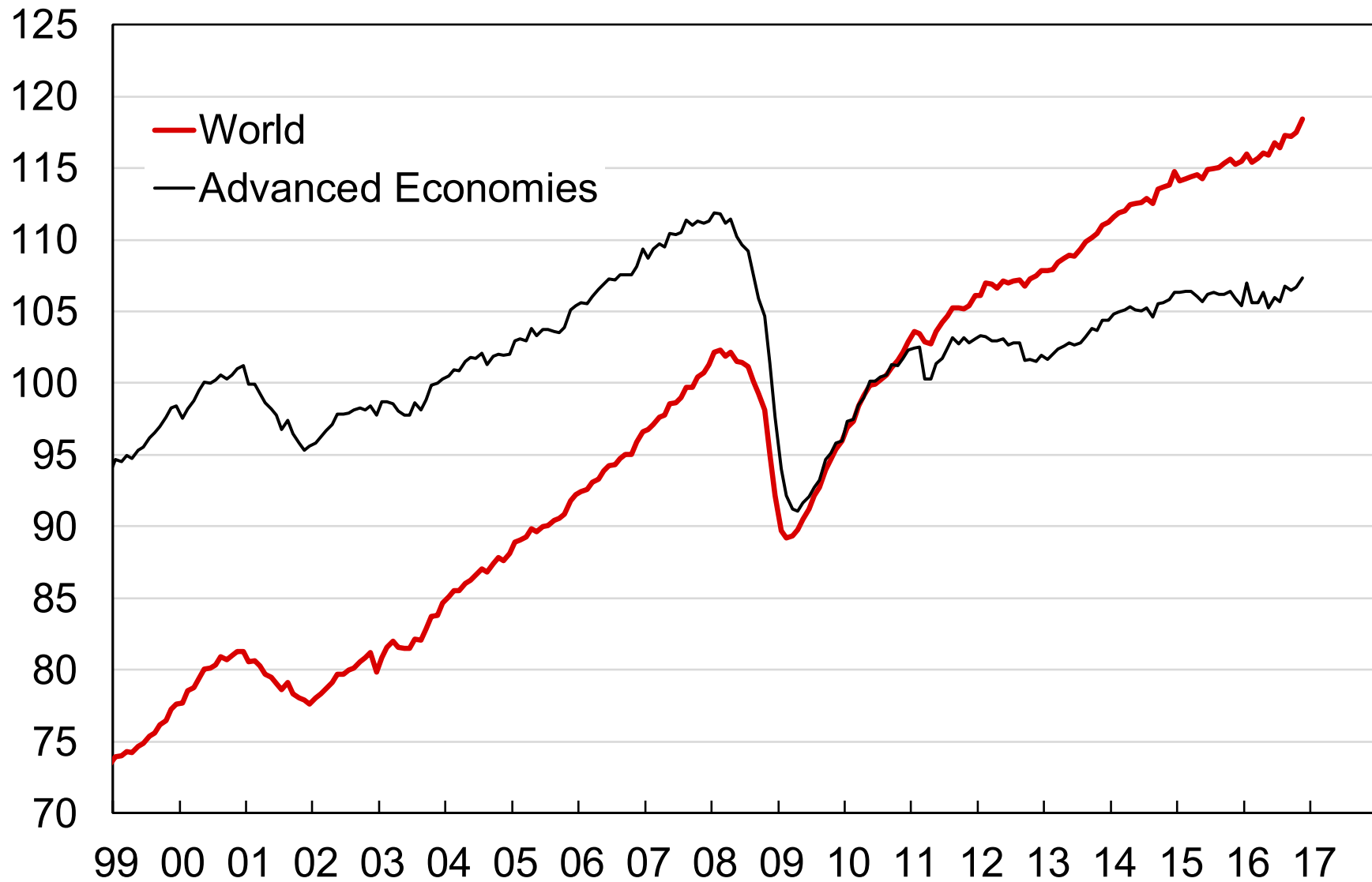
**You must
be a economist.
Your answer is
perfectly correct
and totally
useless.**

**You must be a manager. You
have a great view, but don't
know where you are.**

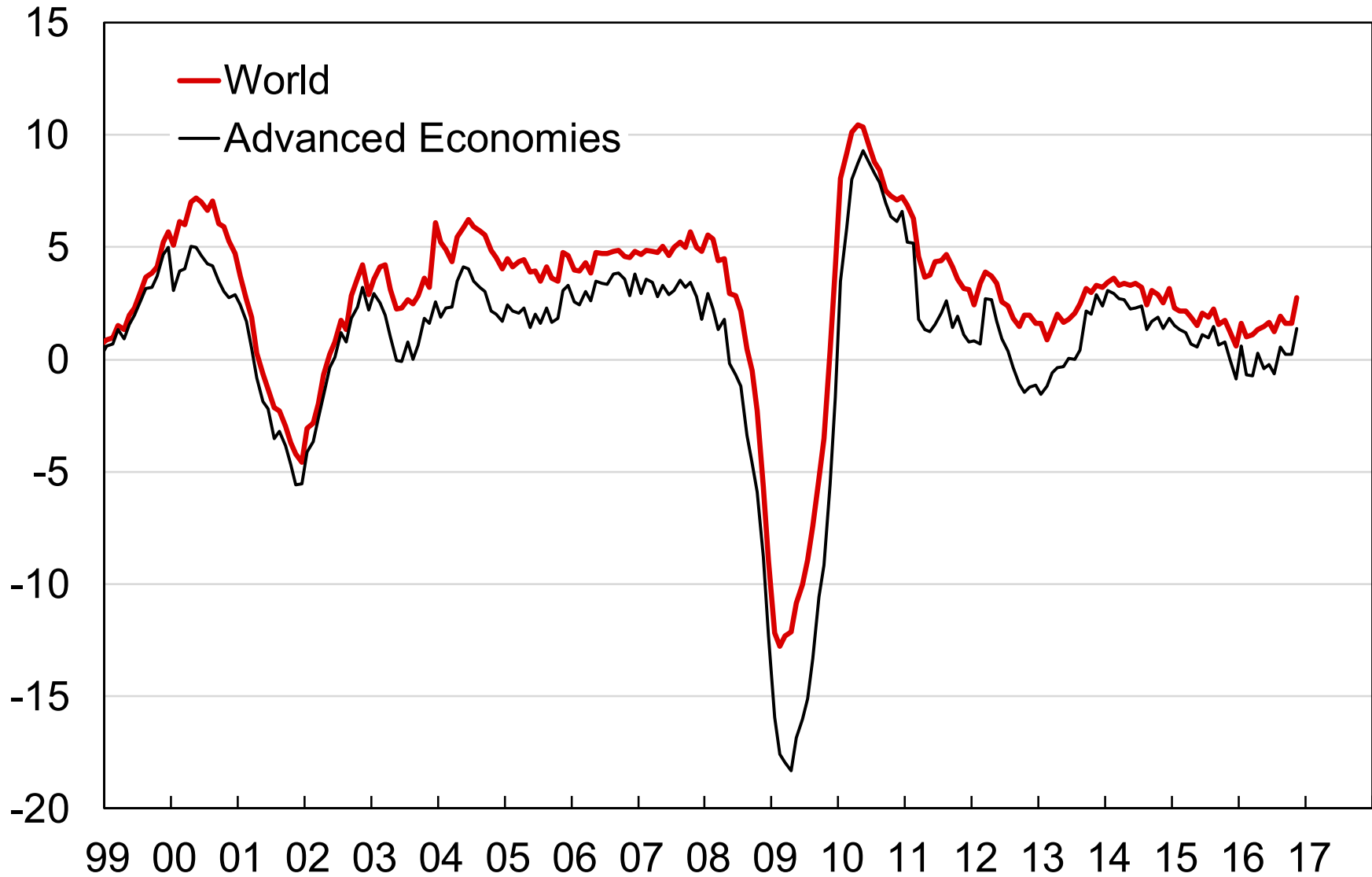


Industrial Production ex Construction

Index, 2010 = 100

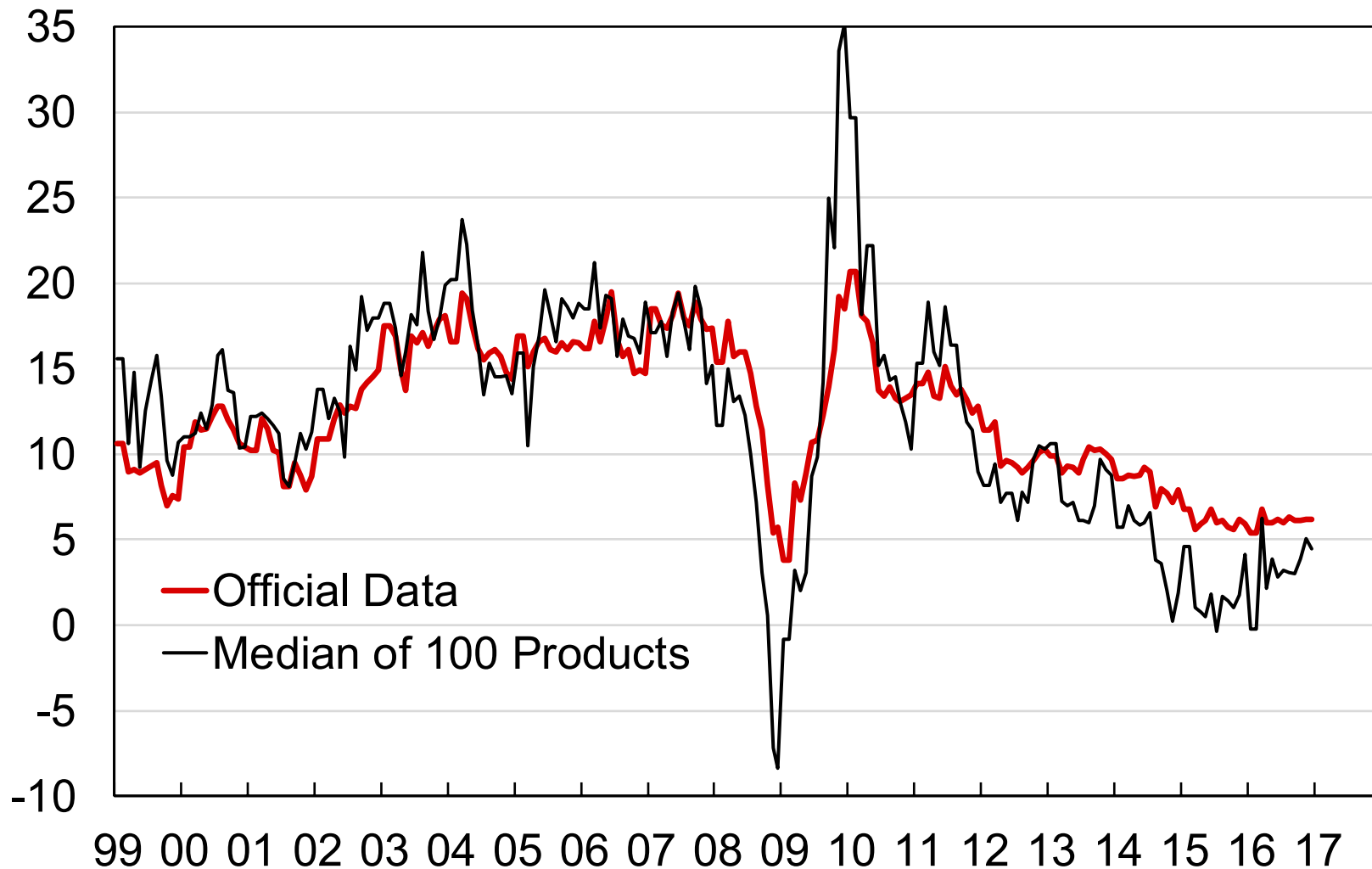


Industrial Production ex Construction *Percent Change from Year Ago*



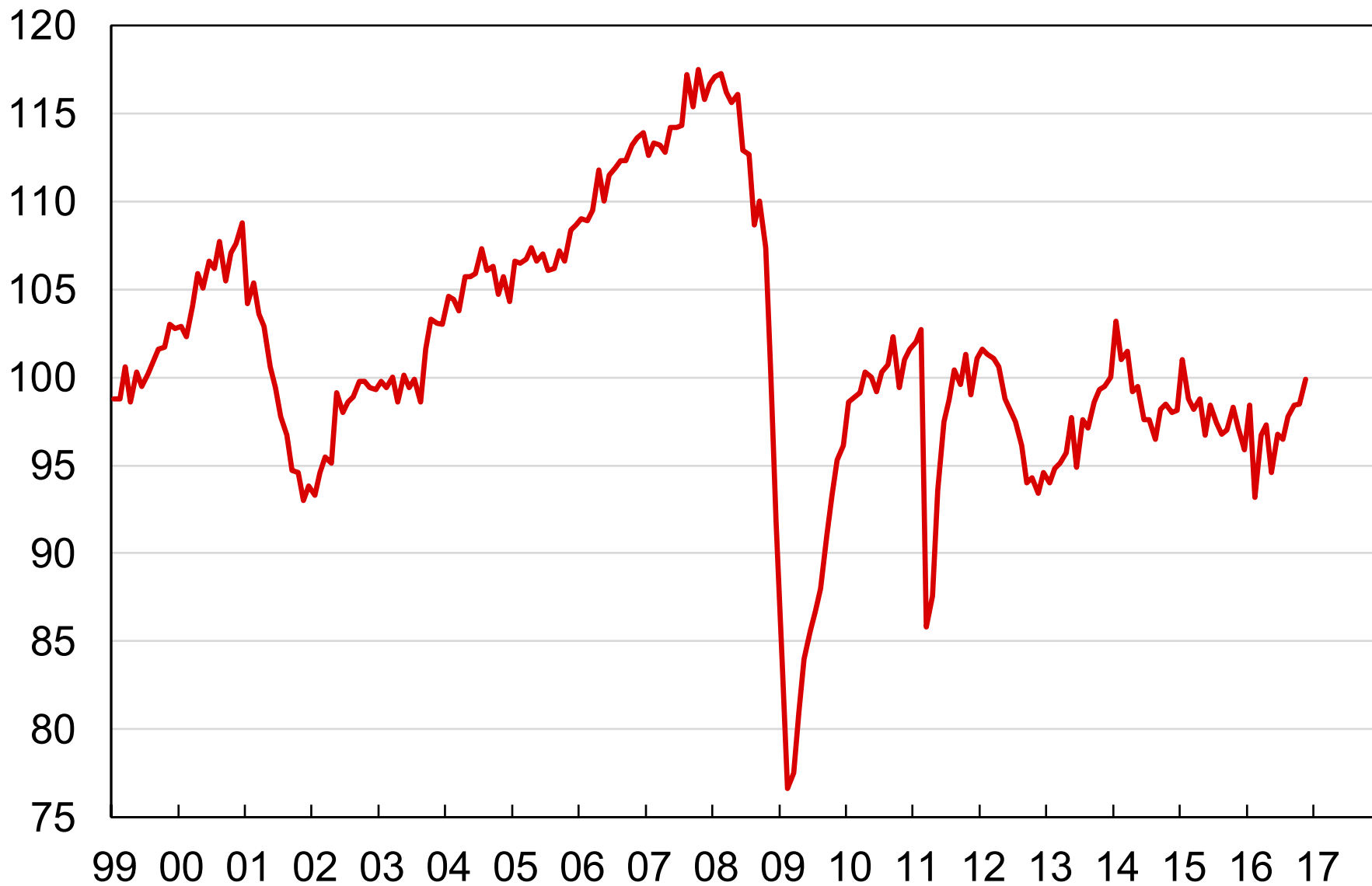
Value Added of Industry (Industrial Production): China

Percent Change from Year Ago



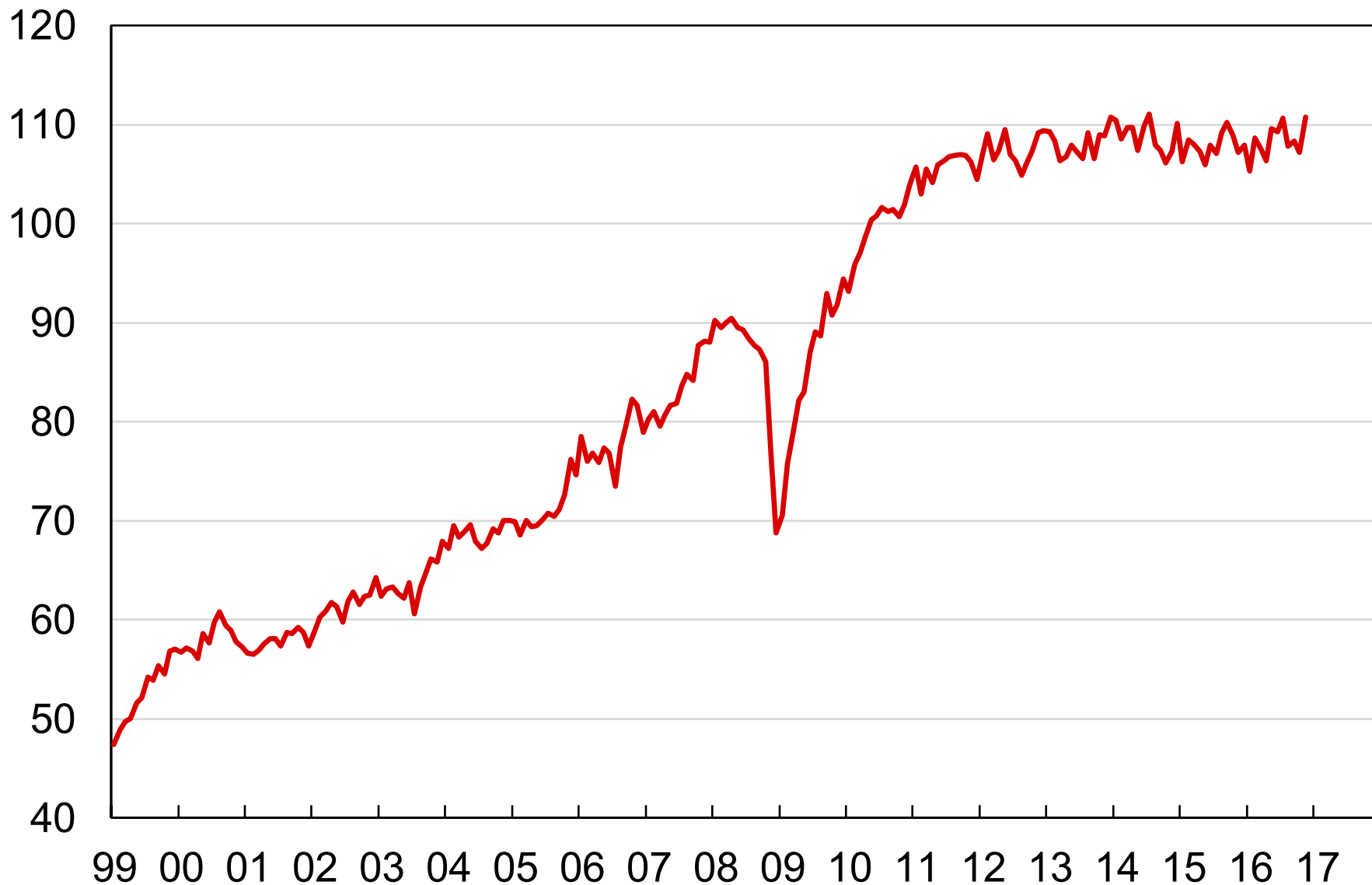
Industrial Production, Manufacturing: Japan

Index, 2010 = 100



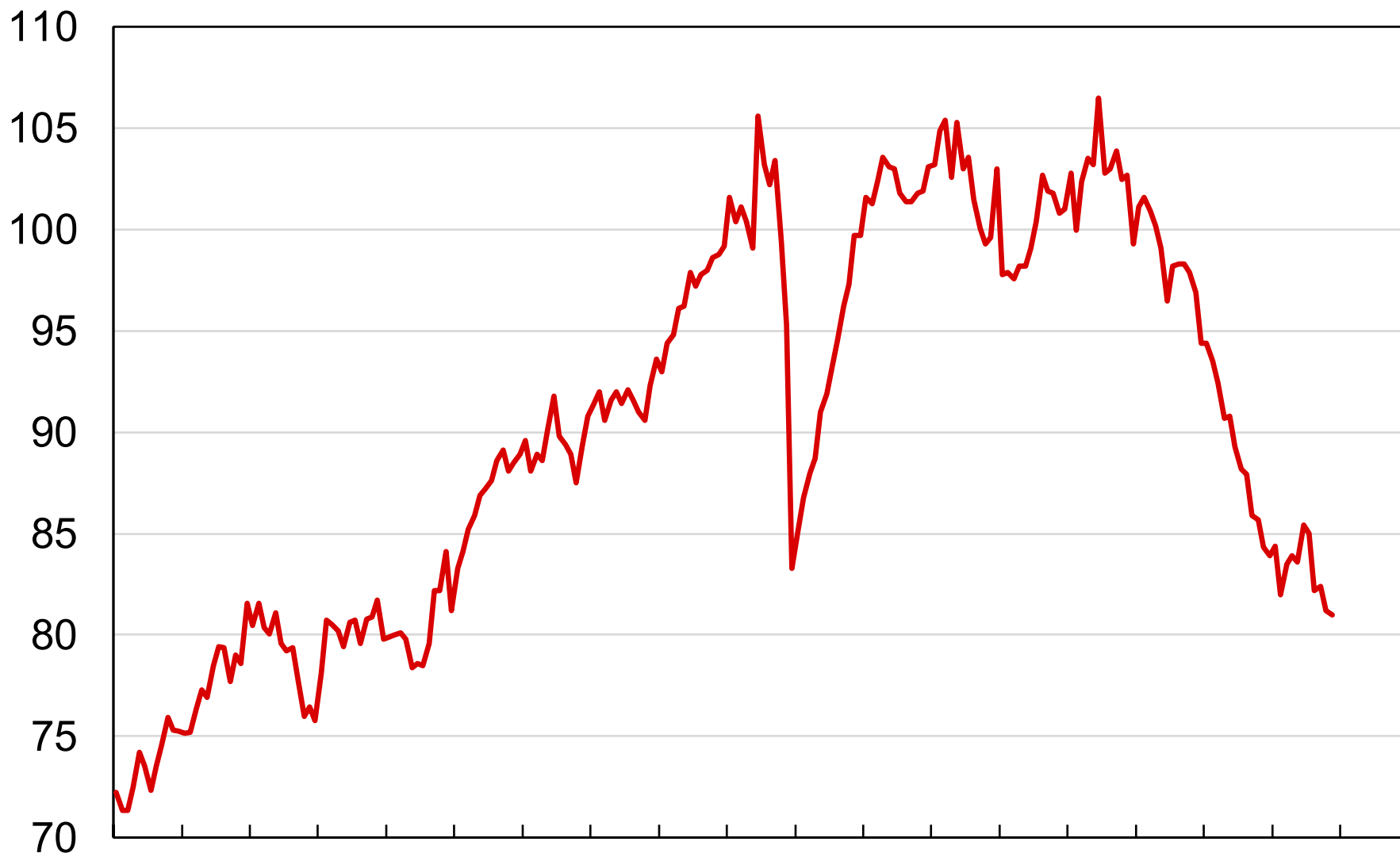
Industrial Production, Manufacturing: South Korea

Index, 2010 = 100



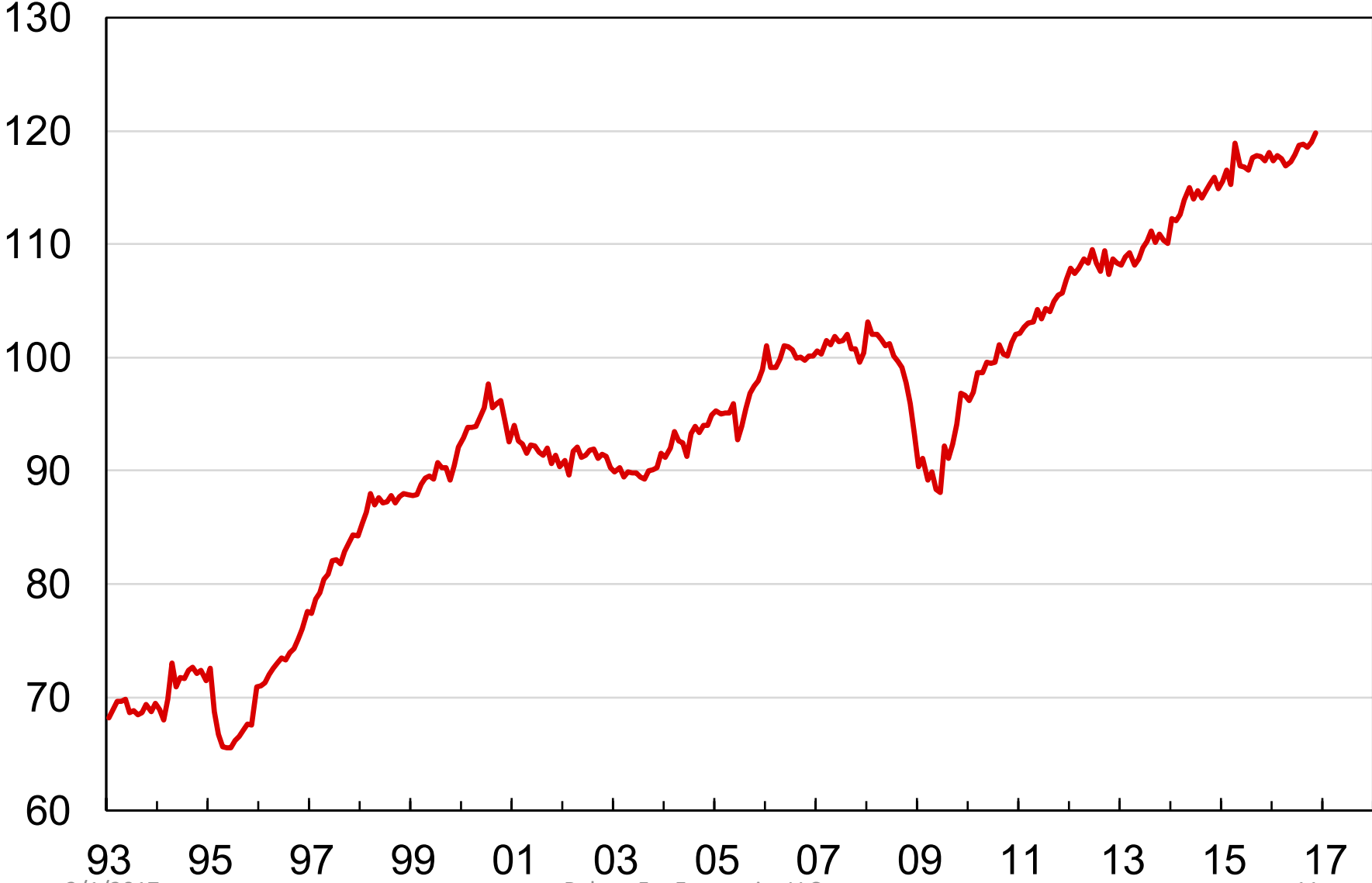
Industrial Production, Manufacturing: Brazil

Index, 2012 = 100



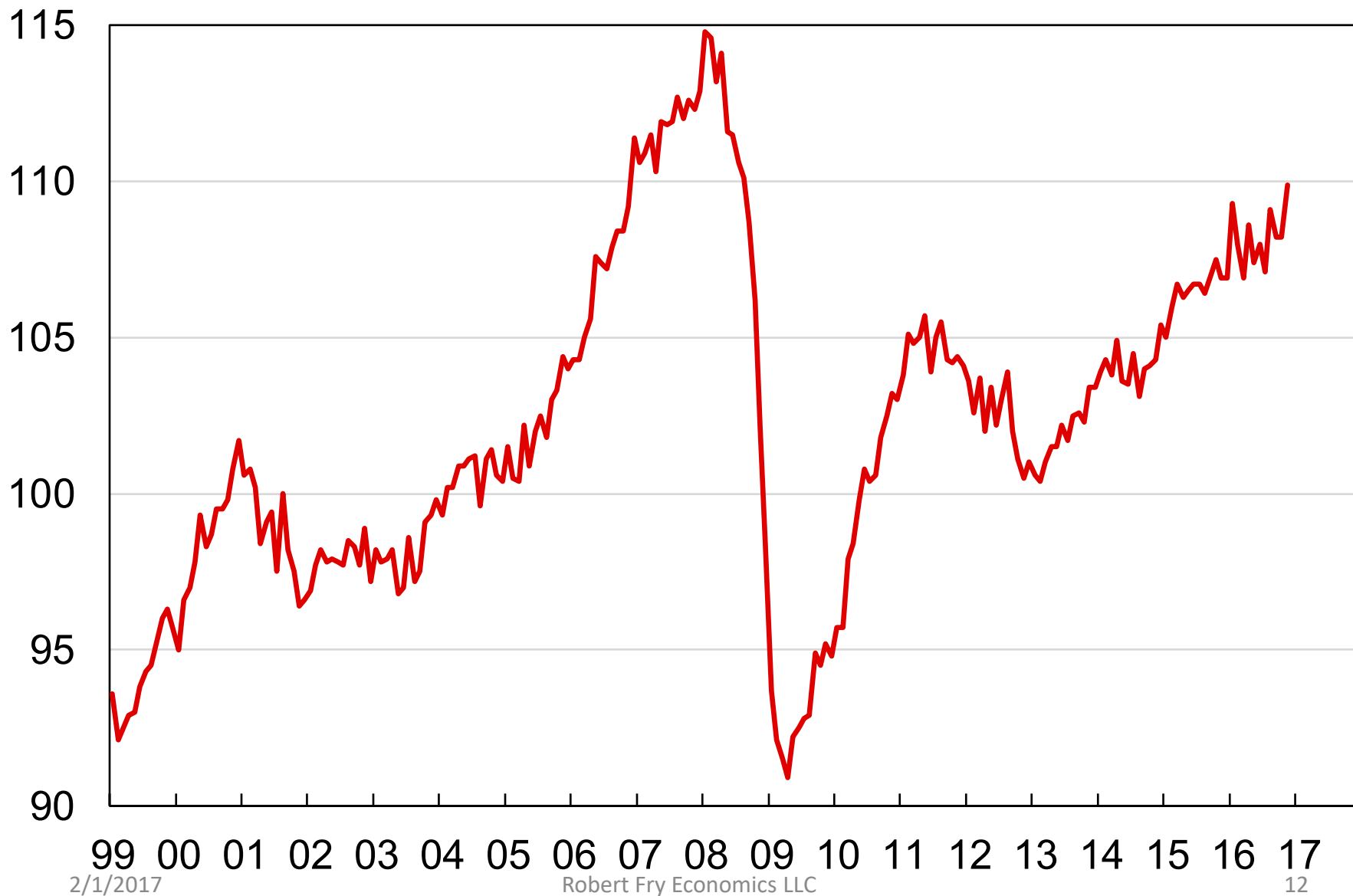
Industrial Production, Manufacturing: Mexico

Index, 2008 = 100



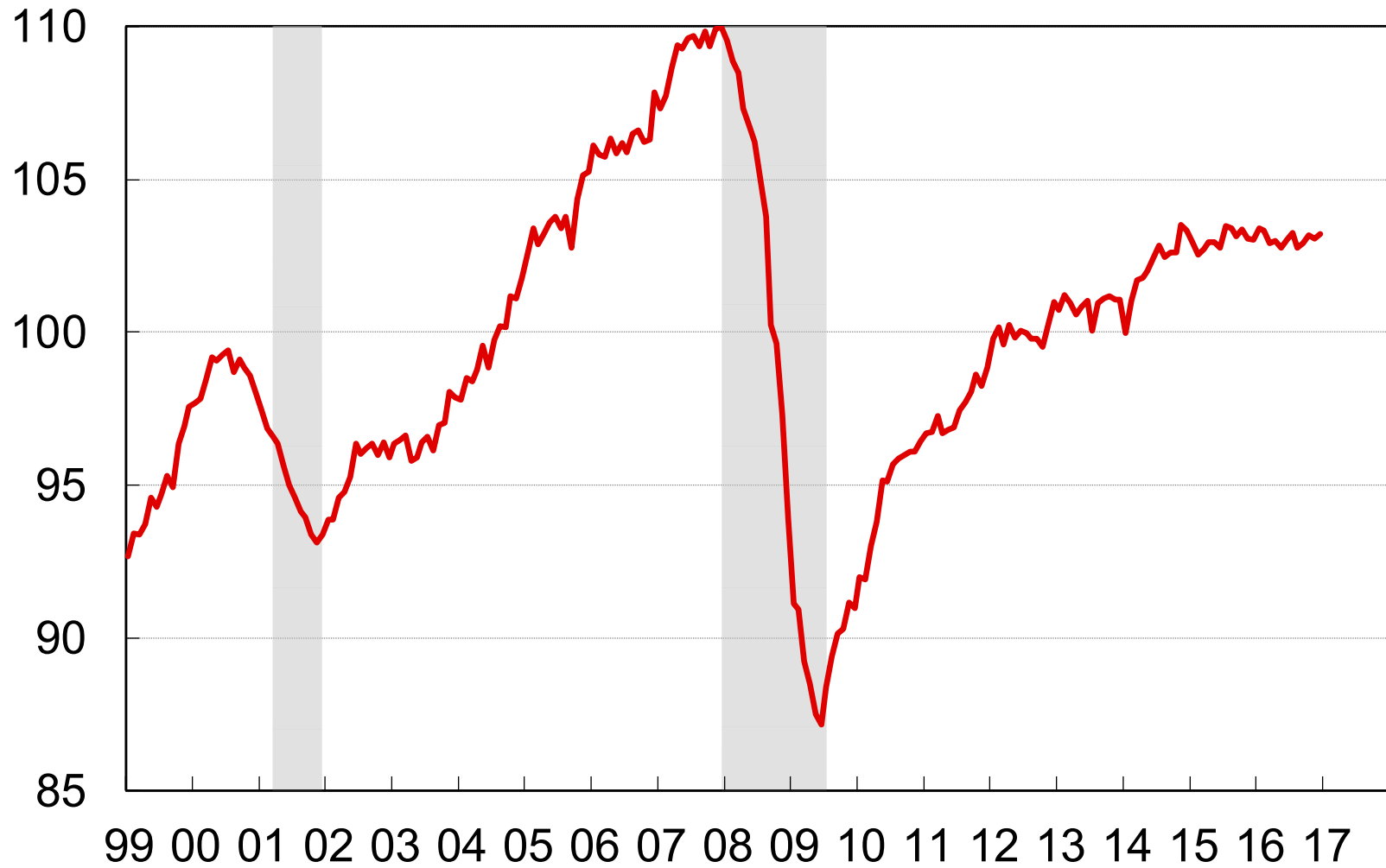
Industrial Production, Manufacturing: European Union

Index, 2010 = 100



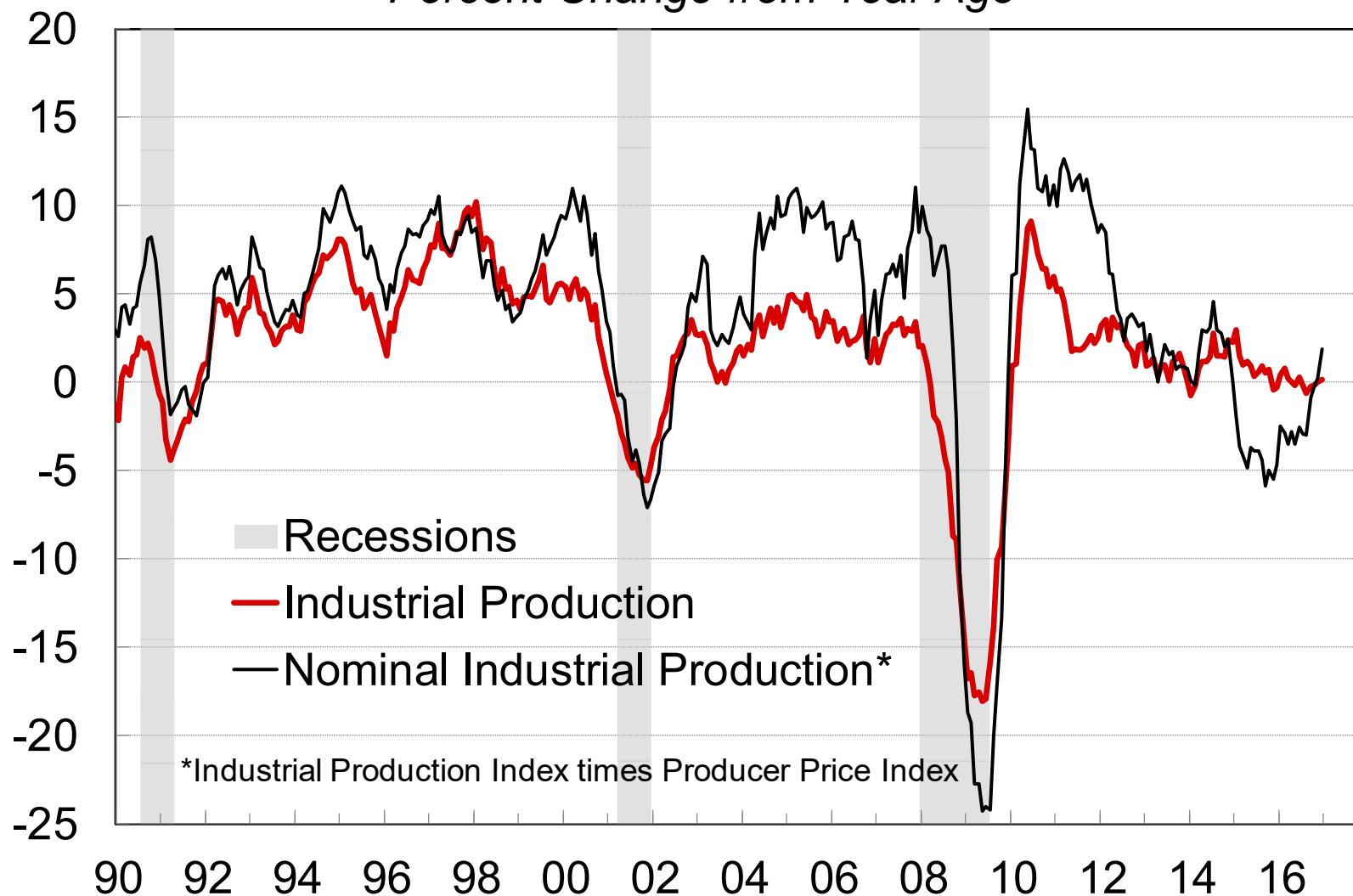
US Industrial Production: Manufacturing

Index, 2012=100



US Industrial Production: Manufacturing

Percent Change from Year Ago



Global manufacturing flat since late 2014, but starting to pick up

Industrial production in US manufacturing has been essentially flat since November 2014; up just 0.2% year-over-year in December.

Industrial production in European Union manufacturing has been stronger than you've been led to believe. Weak currency offsets Brexit risk.

Industrial production in Japanese manufacturing remains in 2011-2016 range, but is rising again.

Manufacturing in Brazil has fallen to new cyclical lows after brief increase.

Only a few countries are routinely setting record highs (e.g., Poland, Mexico).

Official data show Chinese industrial production up 6.2% year-over-year in December. "Reality" hasn't been that good, but improved in 2016.

There was no "manufacturing recession," but price declines (and declines in mining and utilities) made it feel like one.

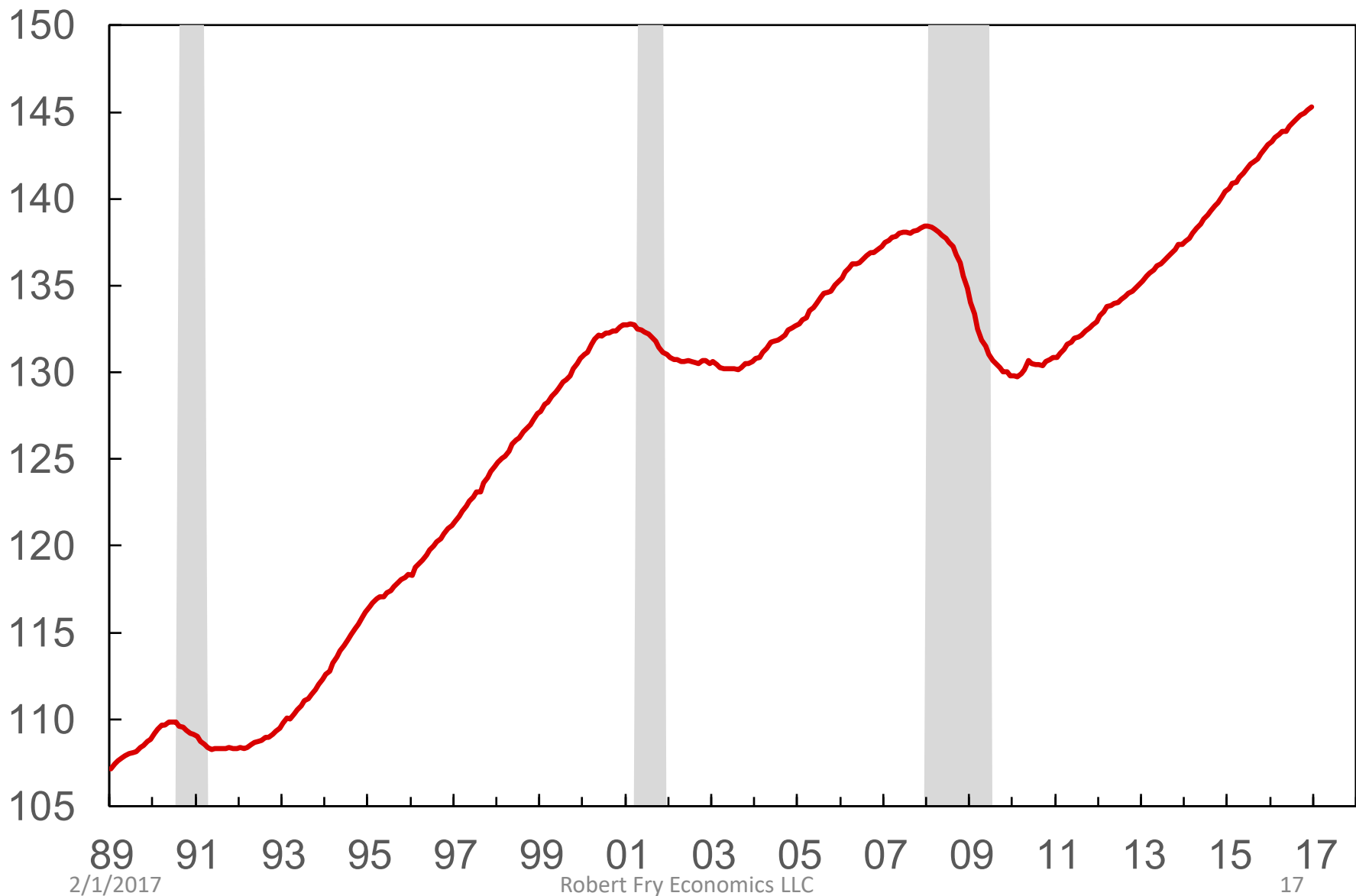


“The accuracy of an economic vision is not always commensurate with the analytical ability of those who hold it. Pessimistic visions about almost anything always strike the public as more erudite than optimistic ones.”

--Joseph Schumpeter, 1883-1950

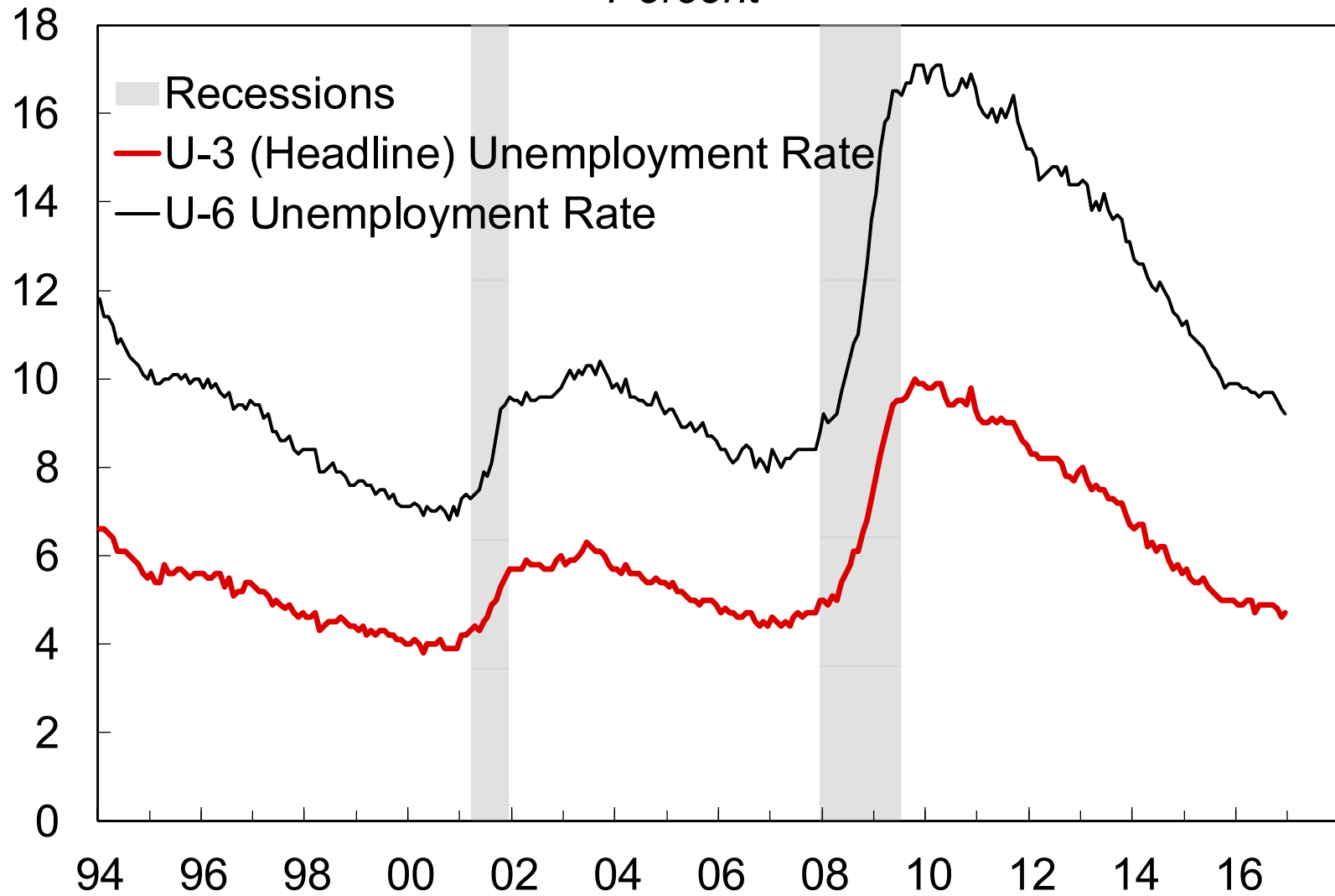
US Payroll Employment

Millions



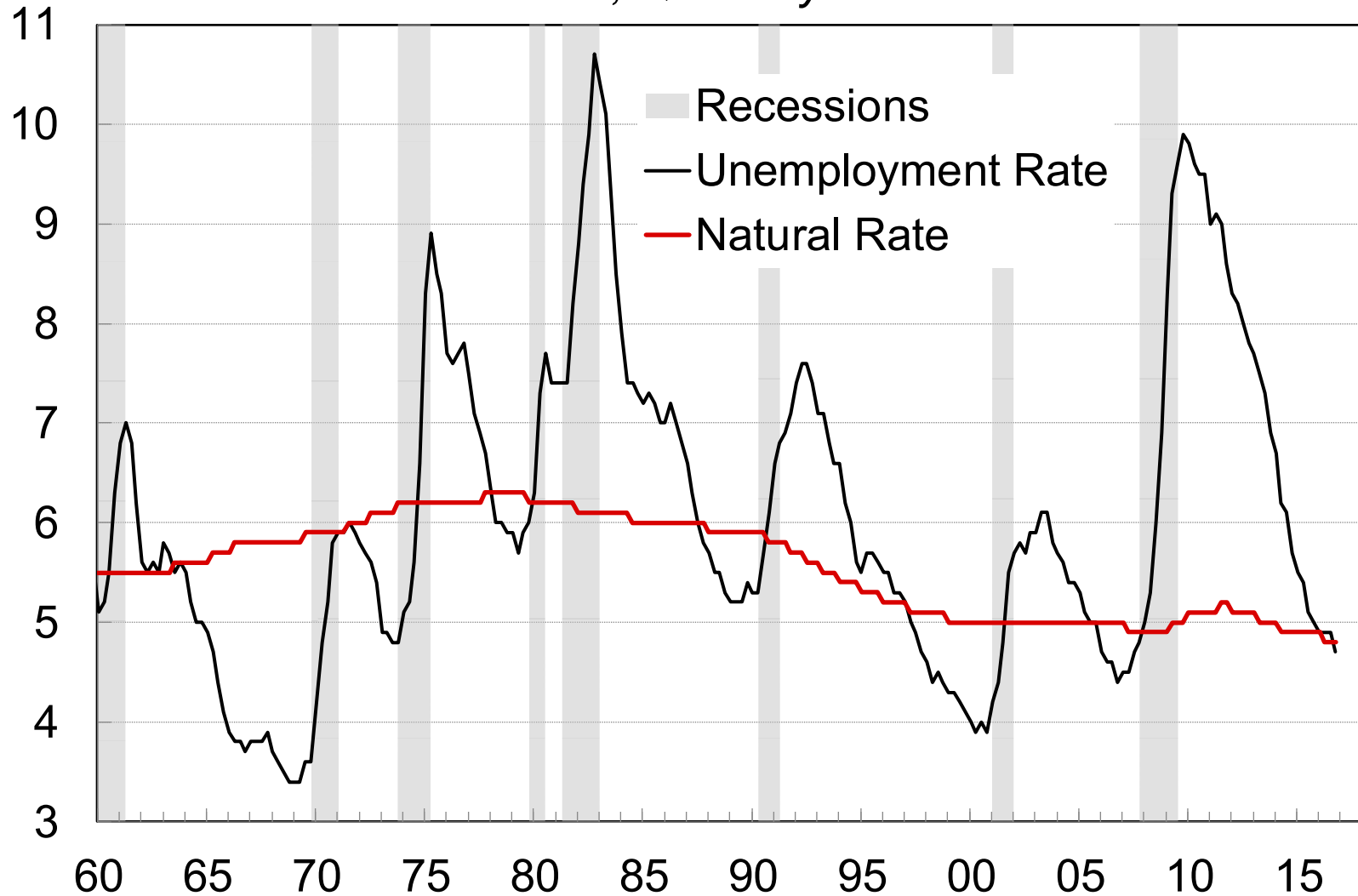
US Civilian Unemployment Rate

Percent



US Civilian Unemployment Rate

Percent, Quarterly Data





How fast can the economy grow at “full employment”?

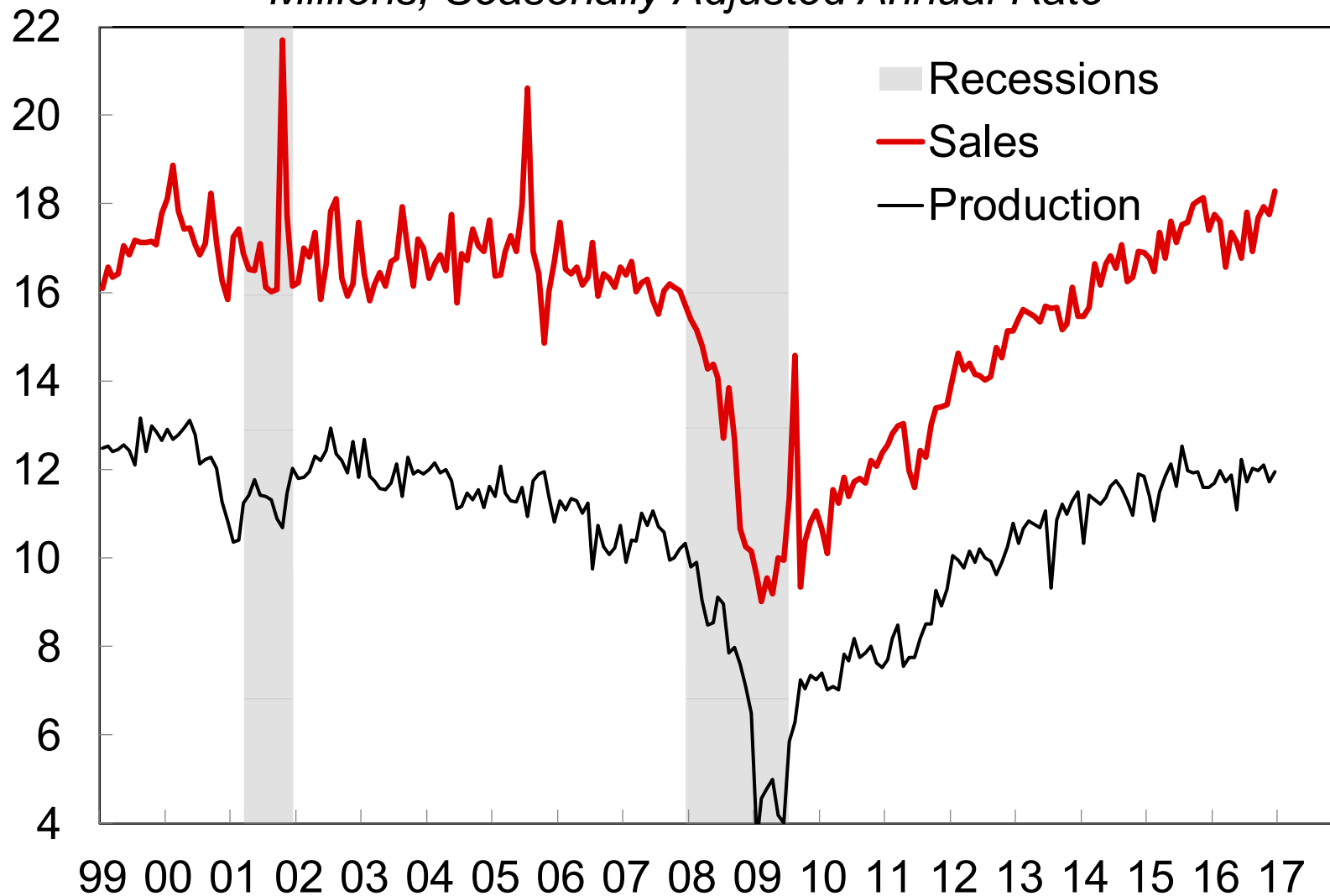
U-3 fell below CBO estimate of natural rate of unemployment in fourth quarter of 1987. Real GDP grew at 3.8% annual rate over next 10 quarters.

U-3 fell below natural rate in fourth quarter of 1997. (Fell to 4.6%, same as in November 2016.) Real GDP grew at 4.8% annual rate over next 10 quarters.

U-6 fell to 9.3% in August 1996 (same as in November 2016). Real GDP grew at 4.6% annual rate over next 15 quarters.

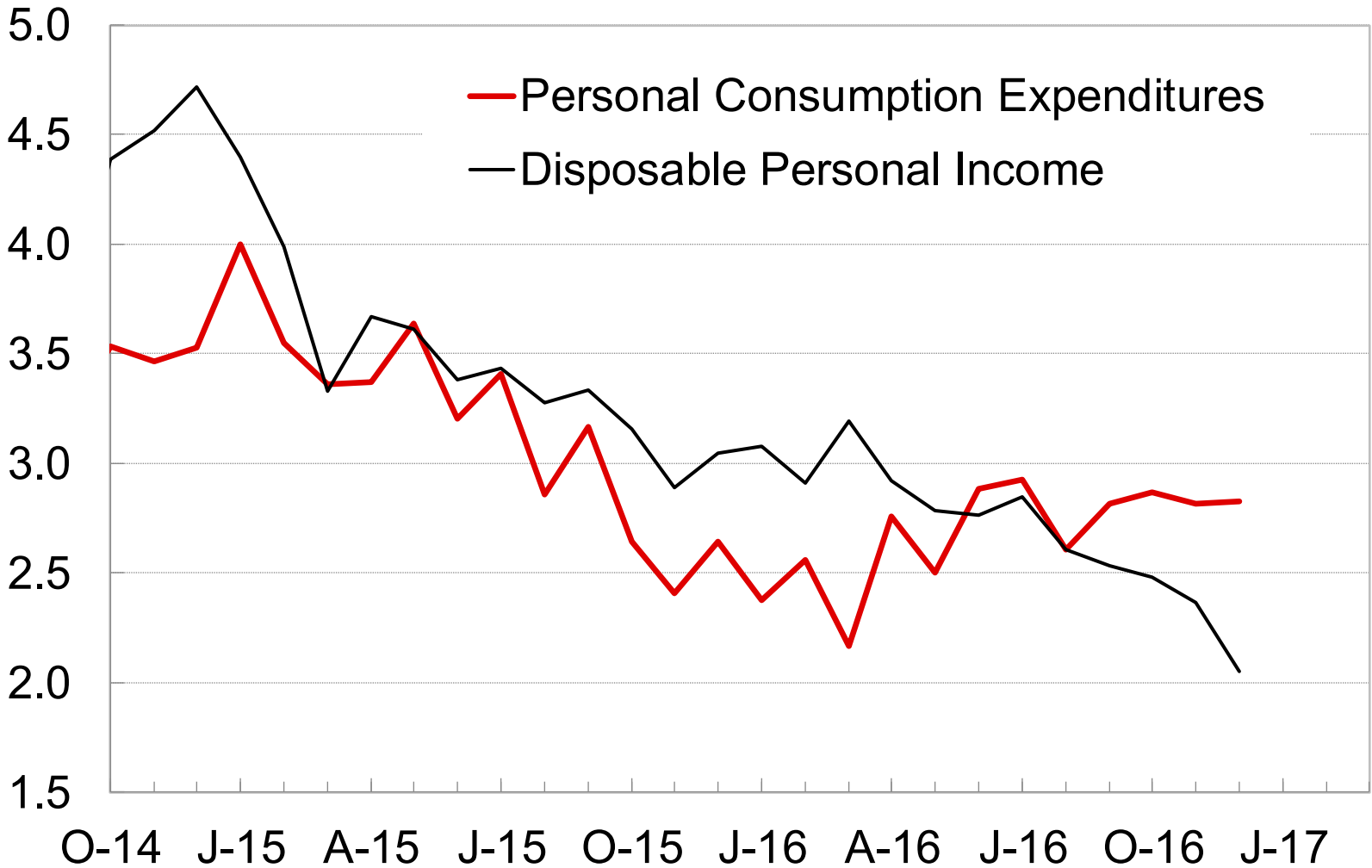
US Light Vehicle Sales & Production

Millions, Seasonally Adjusted Annual Rate



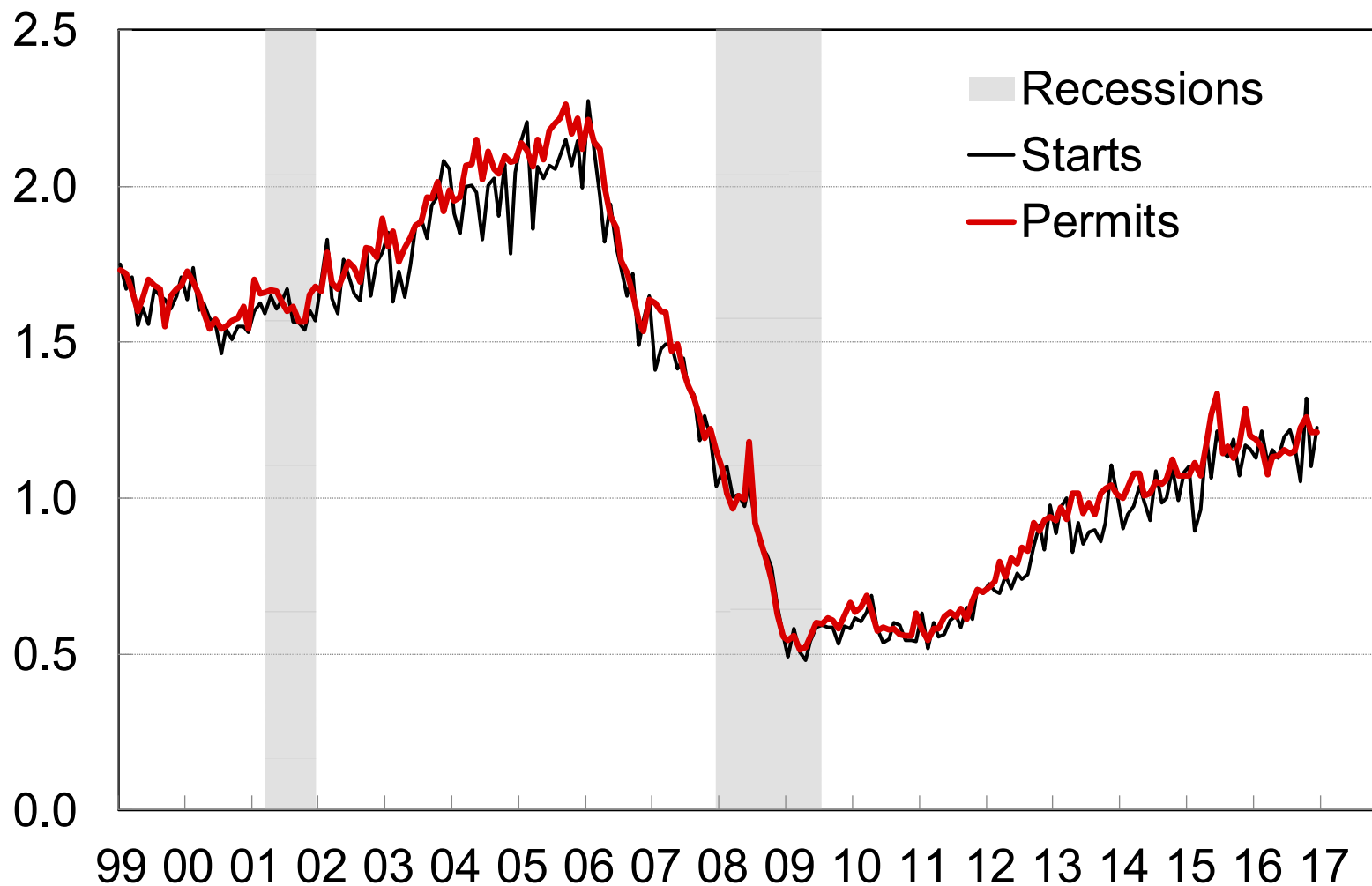
US Real Consumer Spending & Disposable Income

Percent Change from Year Ago, Chained 2009 Dollars



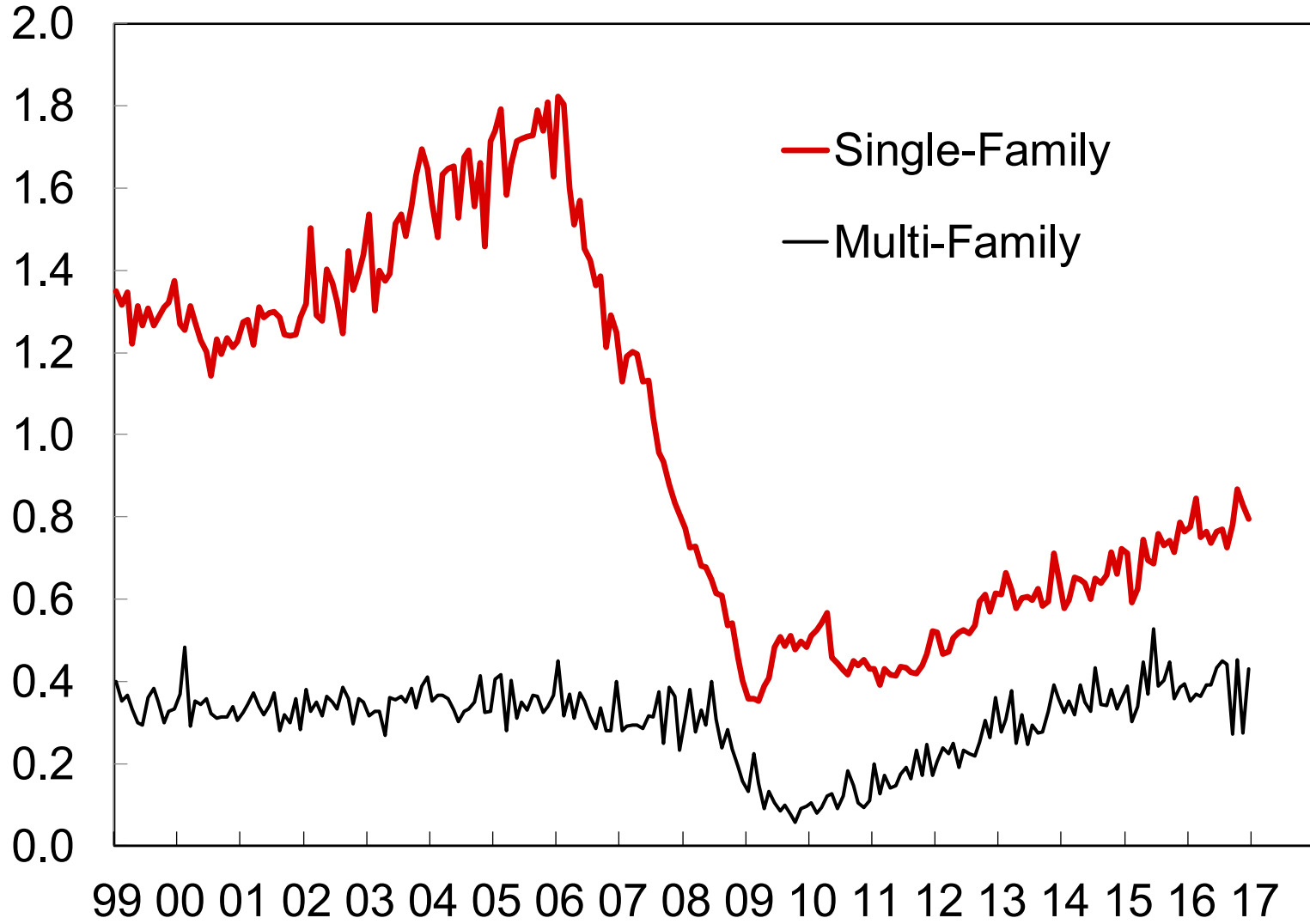
US Housing Starts & Building Permits

Millions, Seasonally Adjusted Annual Rate



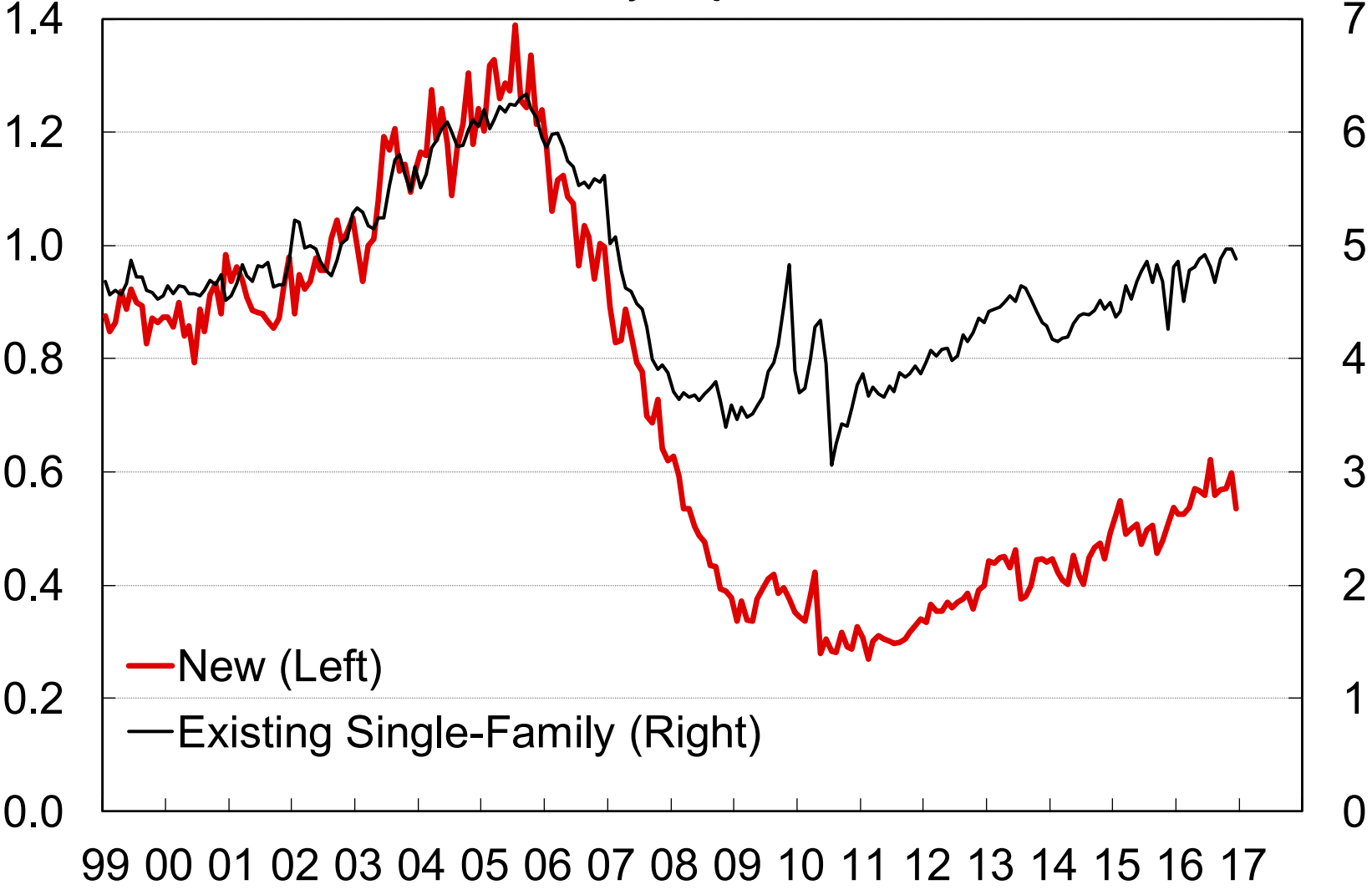
US Housing Starts

Millions



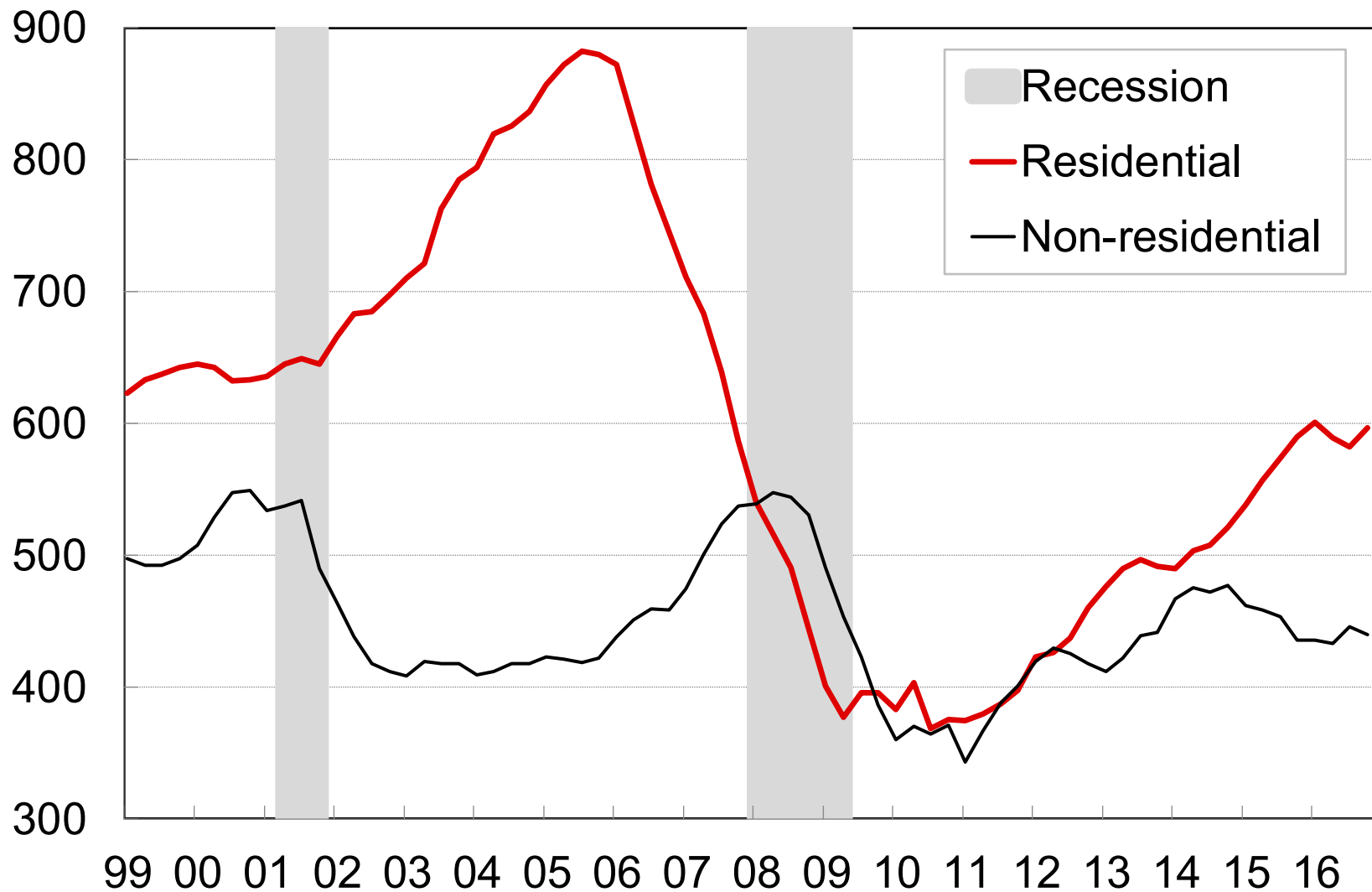
US Home Sales

Millions, Seasonally Adjusted Annual Rate



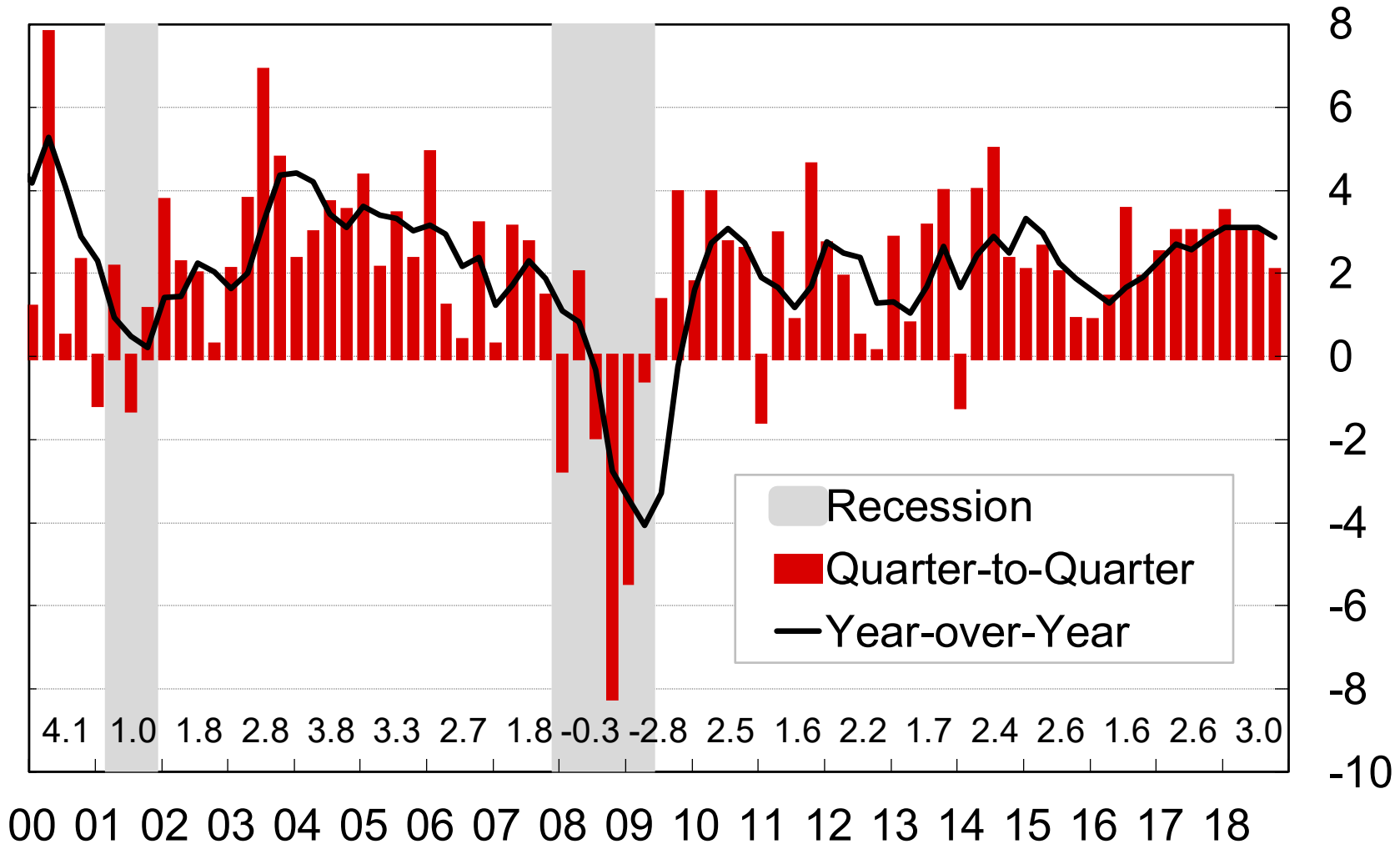
US Investment in Structures

Billion Chained 2009 Dollars



US Real Gross Domestic Product

Annualized Growth Rates



2016Q3 pickup in GDP not sustained into 2016Q4

Real GDP grew at a 1.9% annual rate in 2016Q4 after one quarter of 3.5% growth. Q4 slowdown due to:

- Drop in exports after one-time surge in soybean exports in Q3.
- Surge in imports (to beat border adjustment?)
- Drop in nonresidential construction (waiting for expensing?)

Consumer spending grew at a 2.5% annual rate in Q4, after growing at 3.0% rate in Q3.

Residential construction fell in Q2 and Q3, but resumed long recovery in Q4.

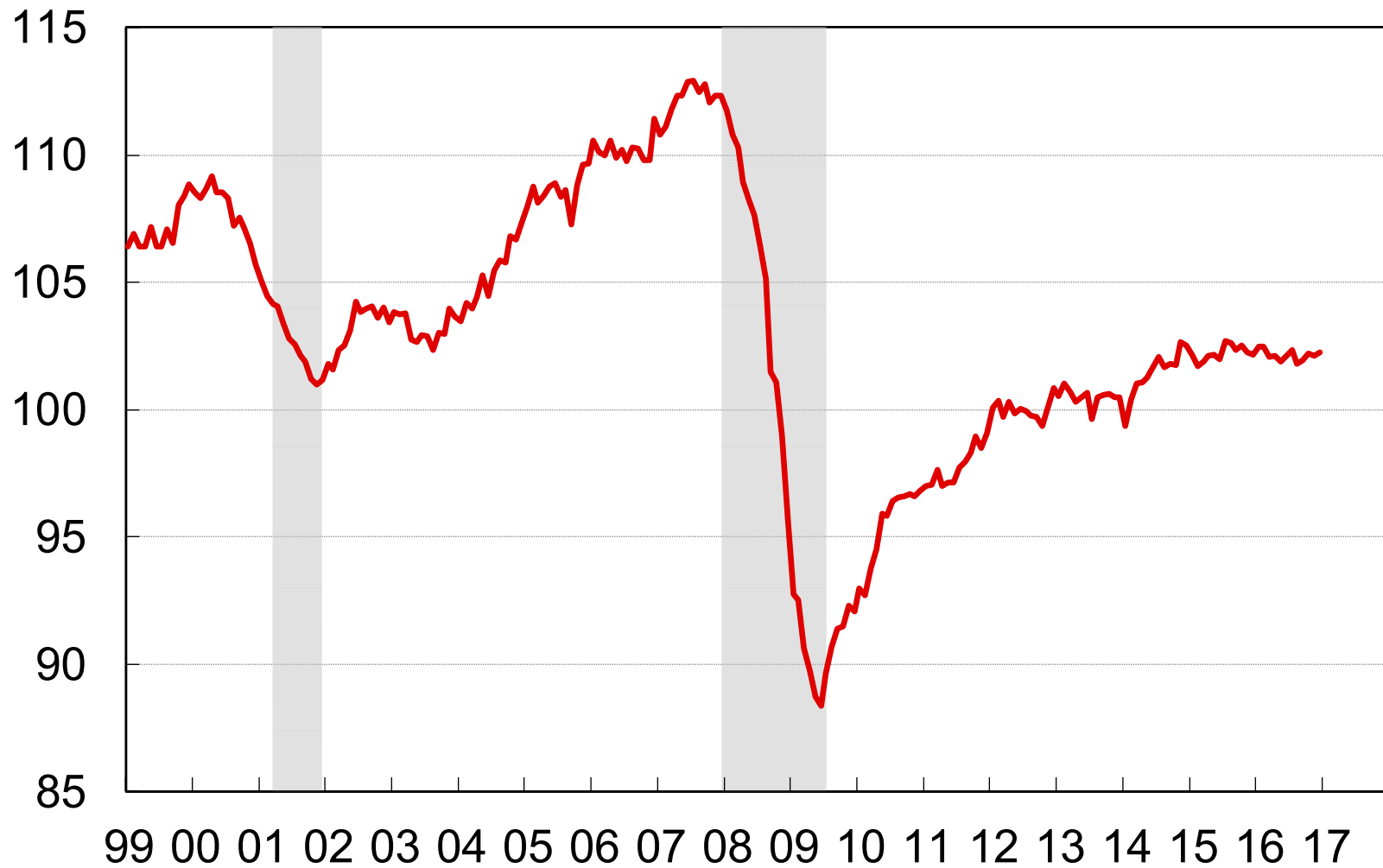
- Demographics argue for big increase in housing starts over next few years.

2015-16 weakness concentrated in nonresidential investment & net exports.

- Business fixed investment rose in Q3 and Q4 after three straight declines.
- Decline in net exports overstated by decline in soybean exports in Q4.

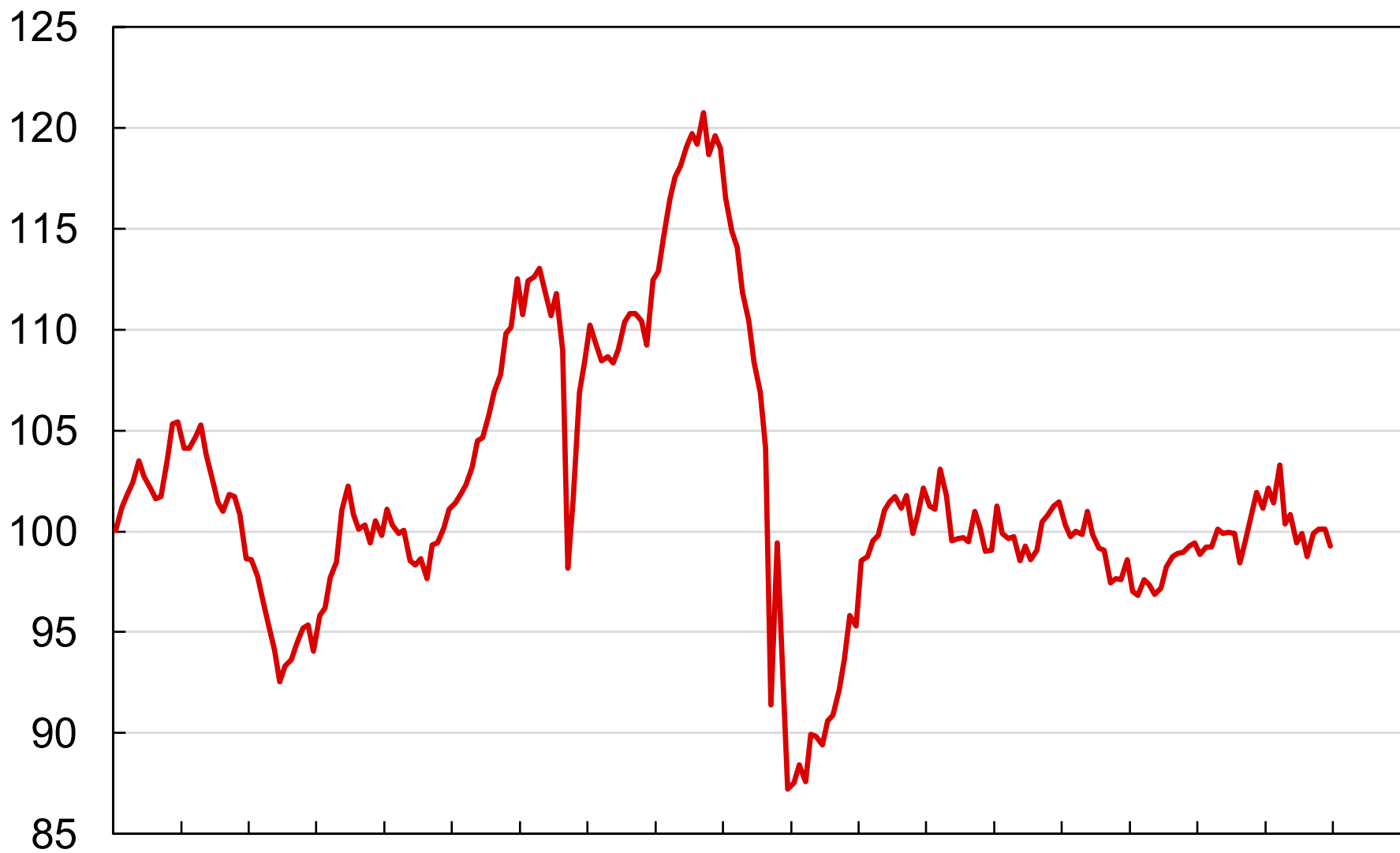
NET impact of lower oil prices is turning positive as drilling turns up.

US Industrial Production: Manufacturing ex high-tech *Index, 2012=100*



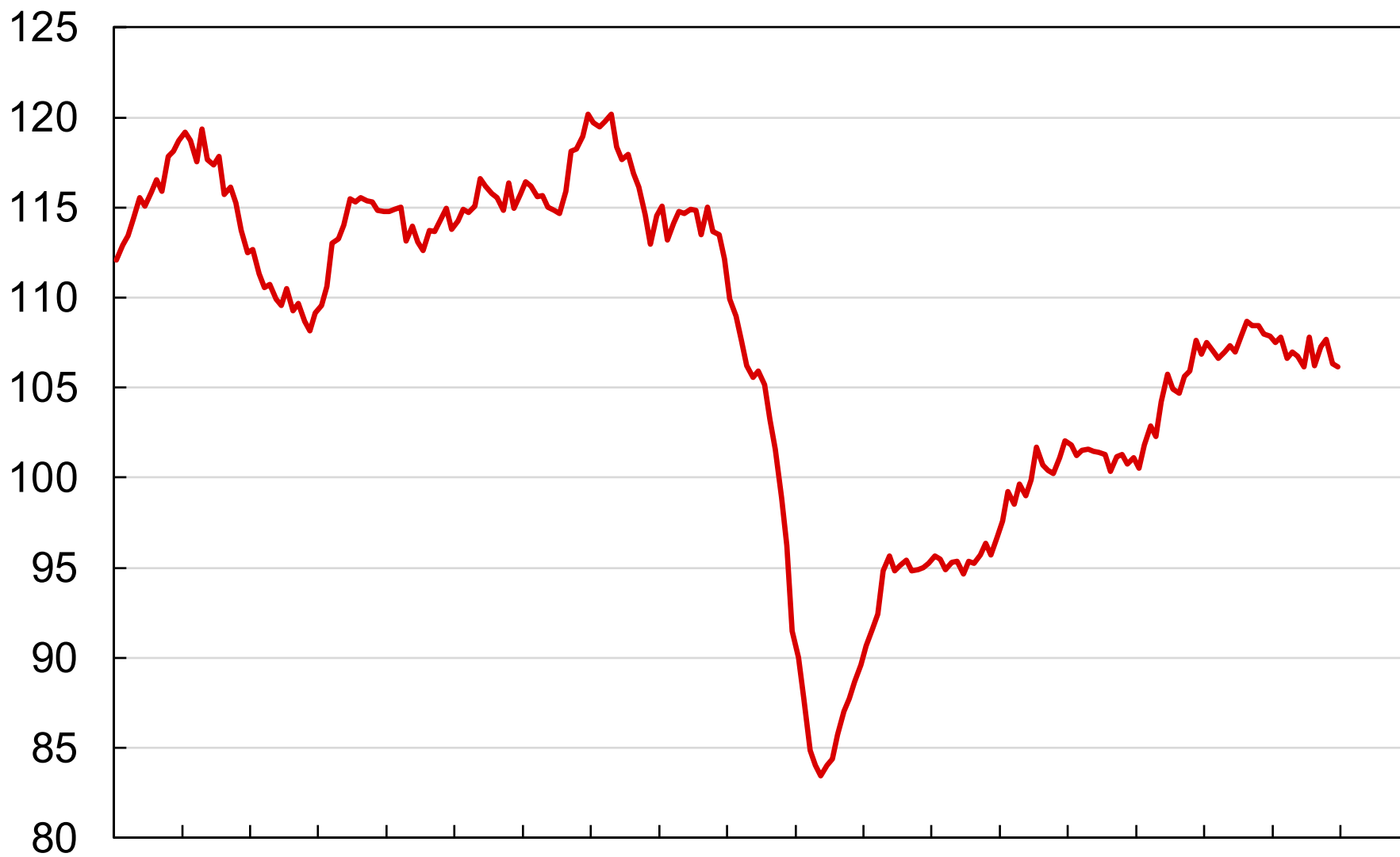
US Industrial Production: Chemicals ex pharmaceuticals

Index, 2012=100



US Industrial Production: Plastic & Rubber Products

Index, 2012=100



US manufacturing flat from July 2014 to August 2016. Rising again?

Production has been held back by:

- Strong dollar, slow growth abroad.
- Impact of low oil prices on machinery and metals.

Only a few industries have been much better or much worse than flat.

- Machinery and metals hit by falling oil prices, strong dollar.
- Apparel, publishing in long-term declines.
- Most growth in computers and motor vehicle due to quality & features, not units.

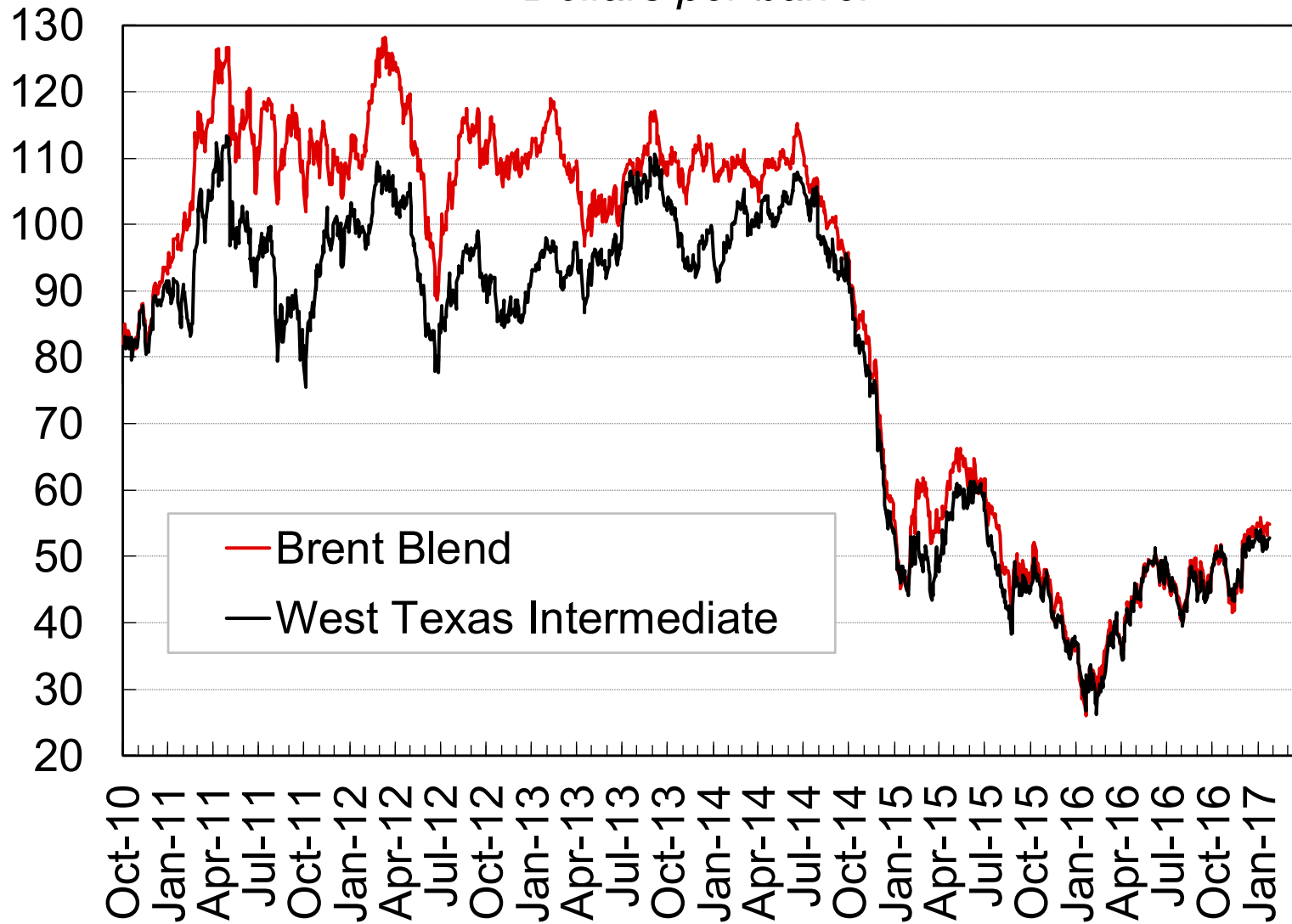
Total industrial production has done much worse than IP in manufacturing.

- Mining fell sharply because of collapse of oil and gas prices; up in recent months.
- Utilities have been held down by mild weather.

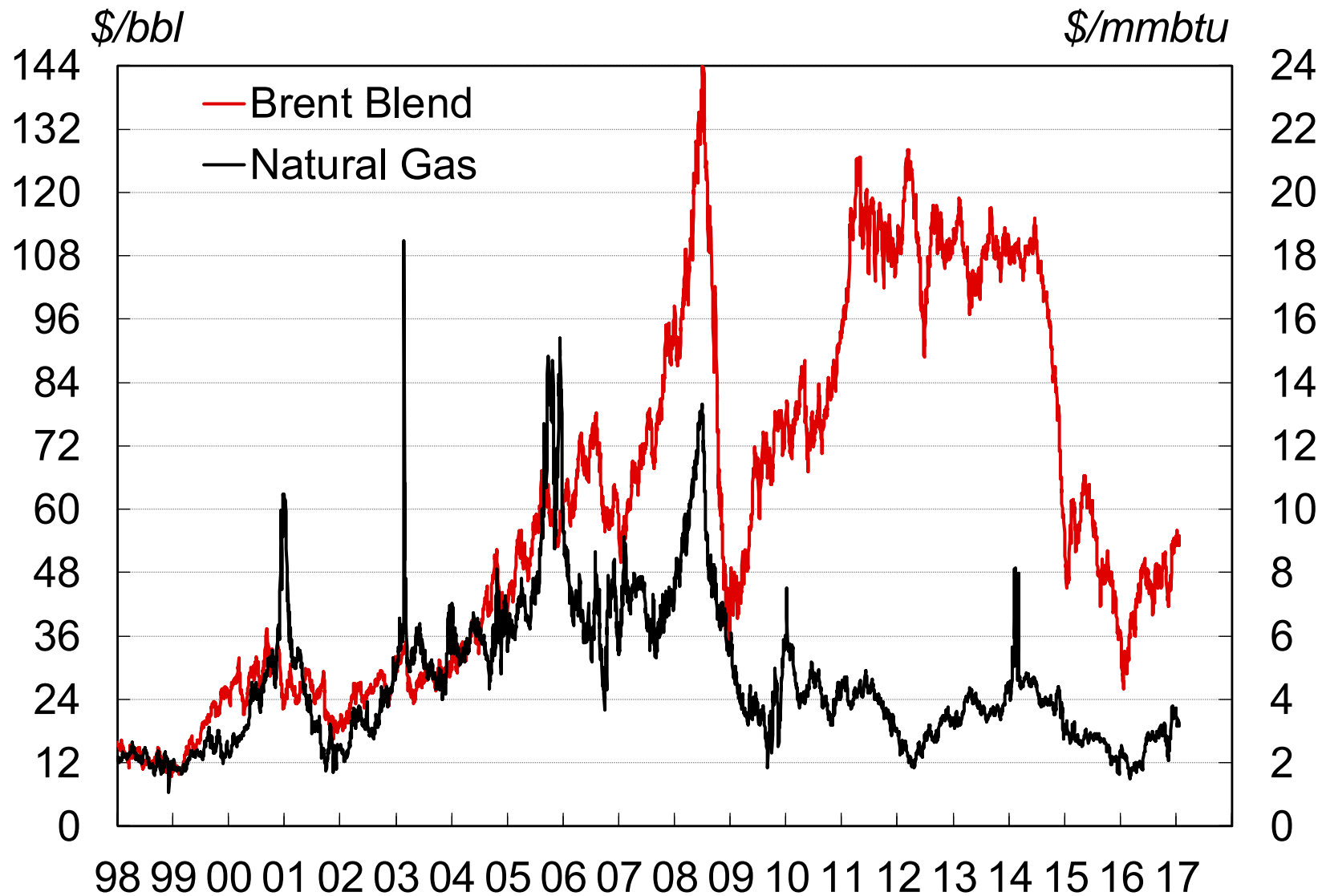
Low oil prices have not helped US industrial production . . . so far.

Crude Oil Prices

Dollars per barrel



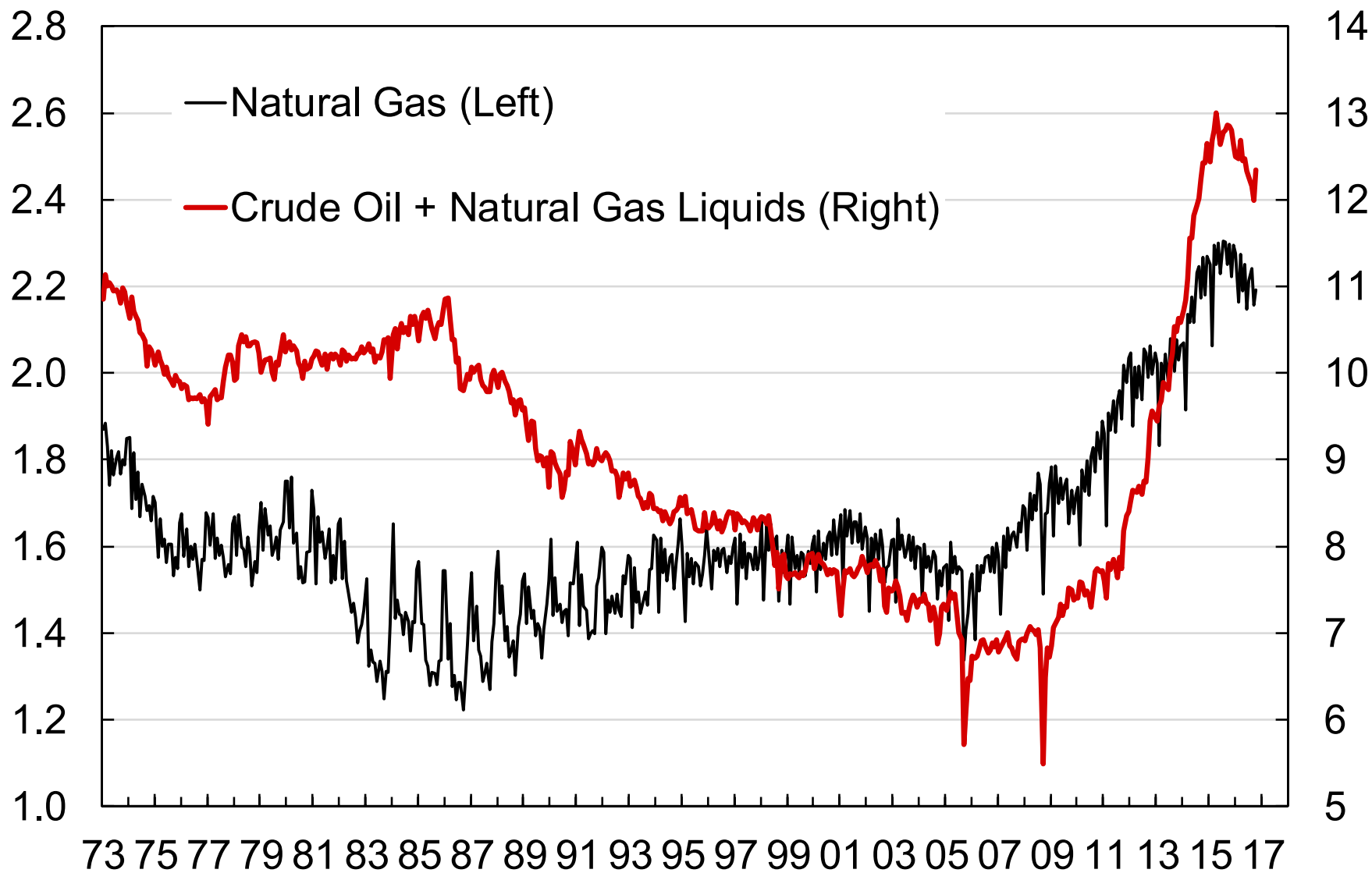
Global Crude Oil and US Natural Gas Prices



US Oil & Gas Production

Trillion Cubic Feet per Month

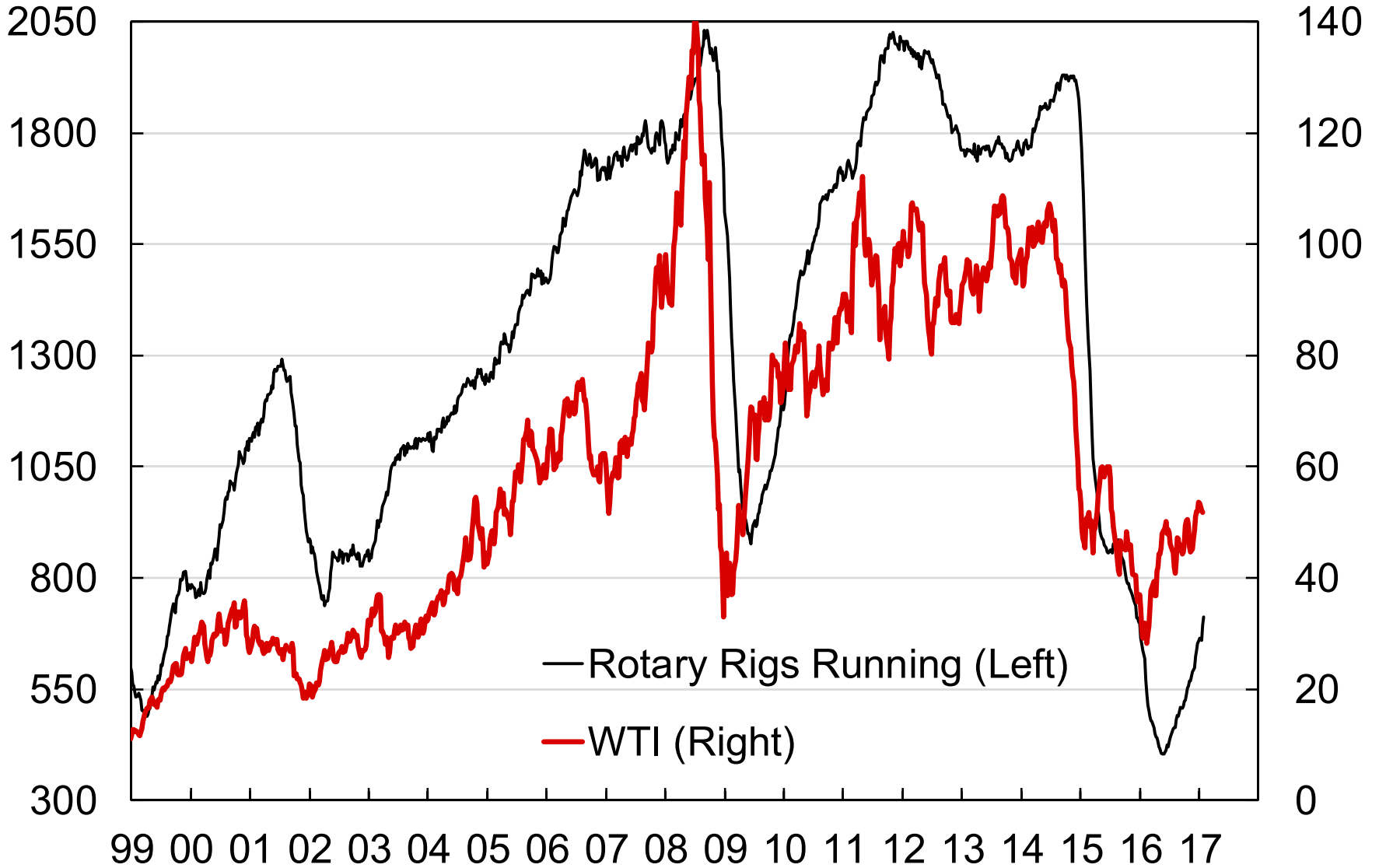
Million Barrels per Day



US Rig Count versus West Texas Intermediate Oil Price

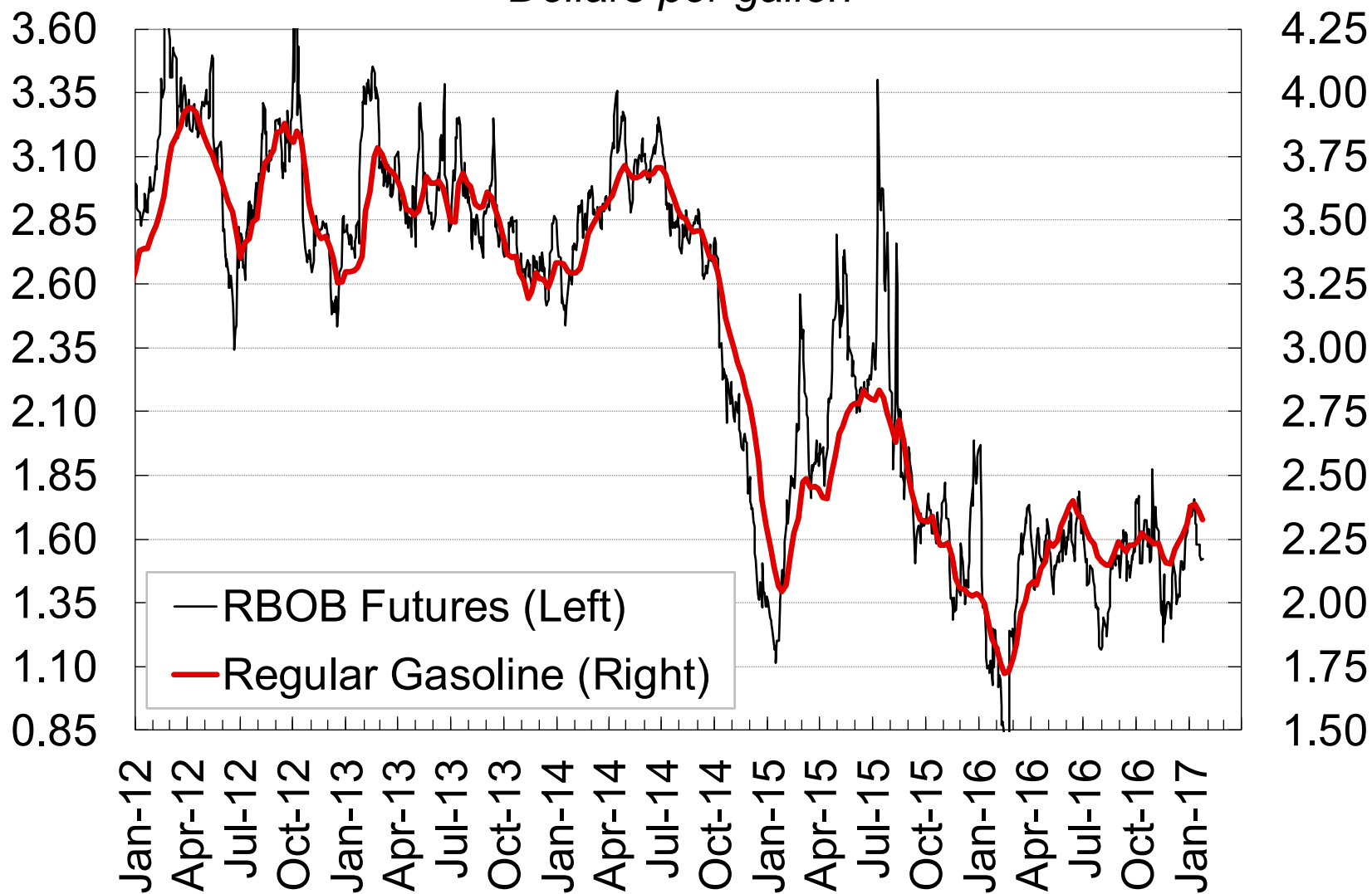
Rig Count

\$/Barrel



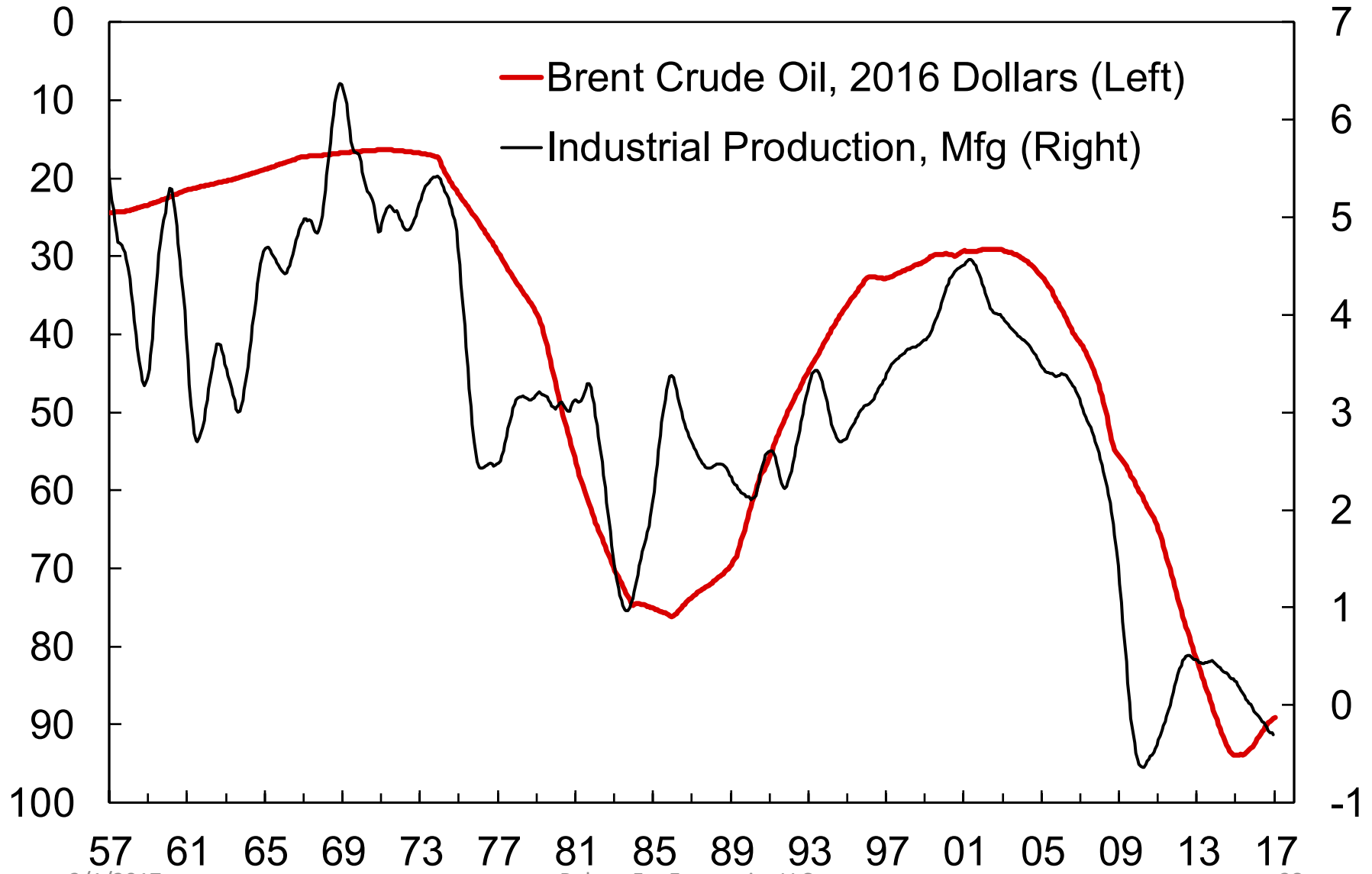
US Gasoline Prices

Dollars per gallon

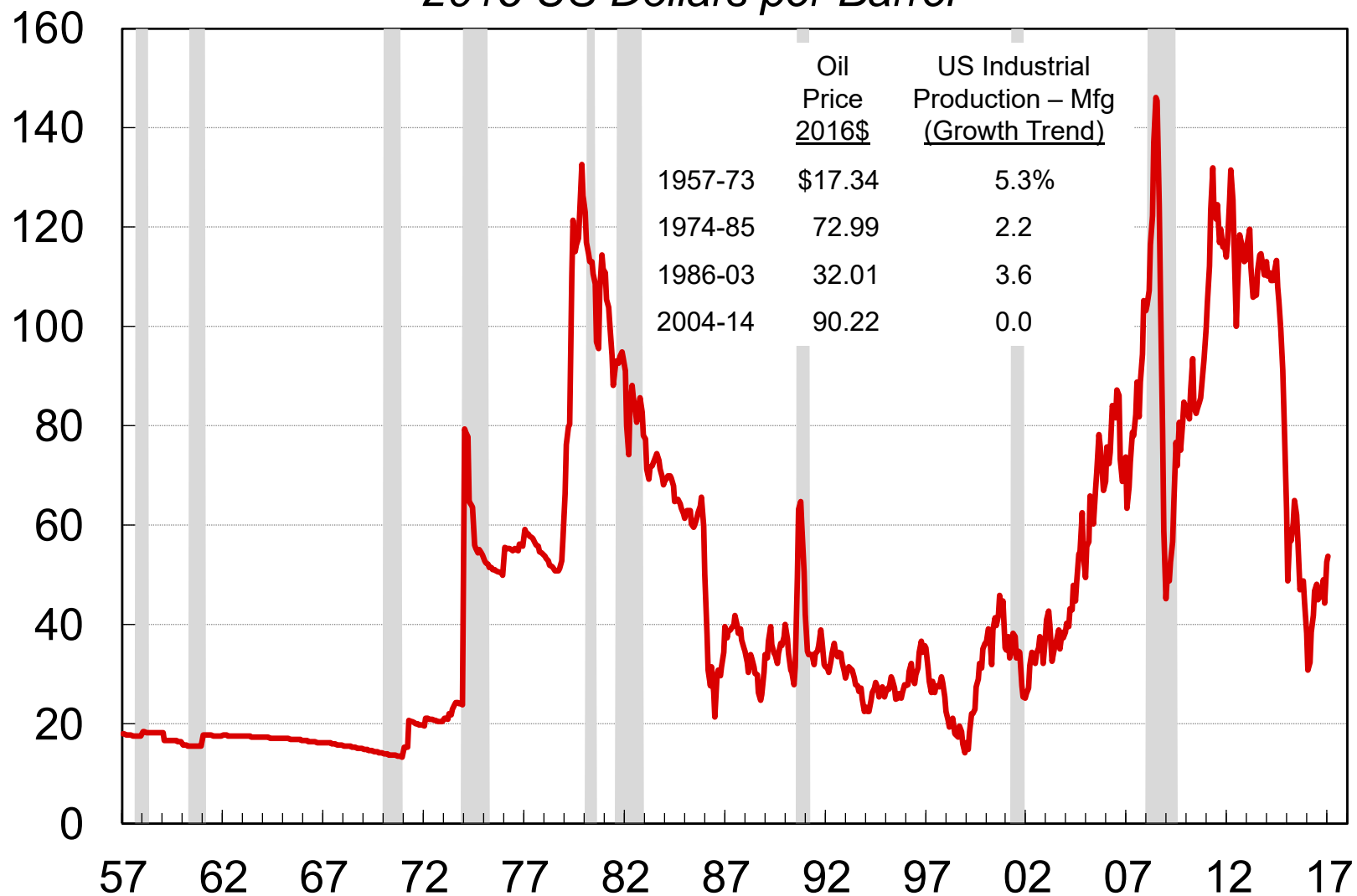


Oil Prices & US Economic Growth

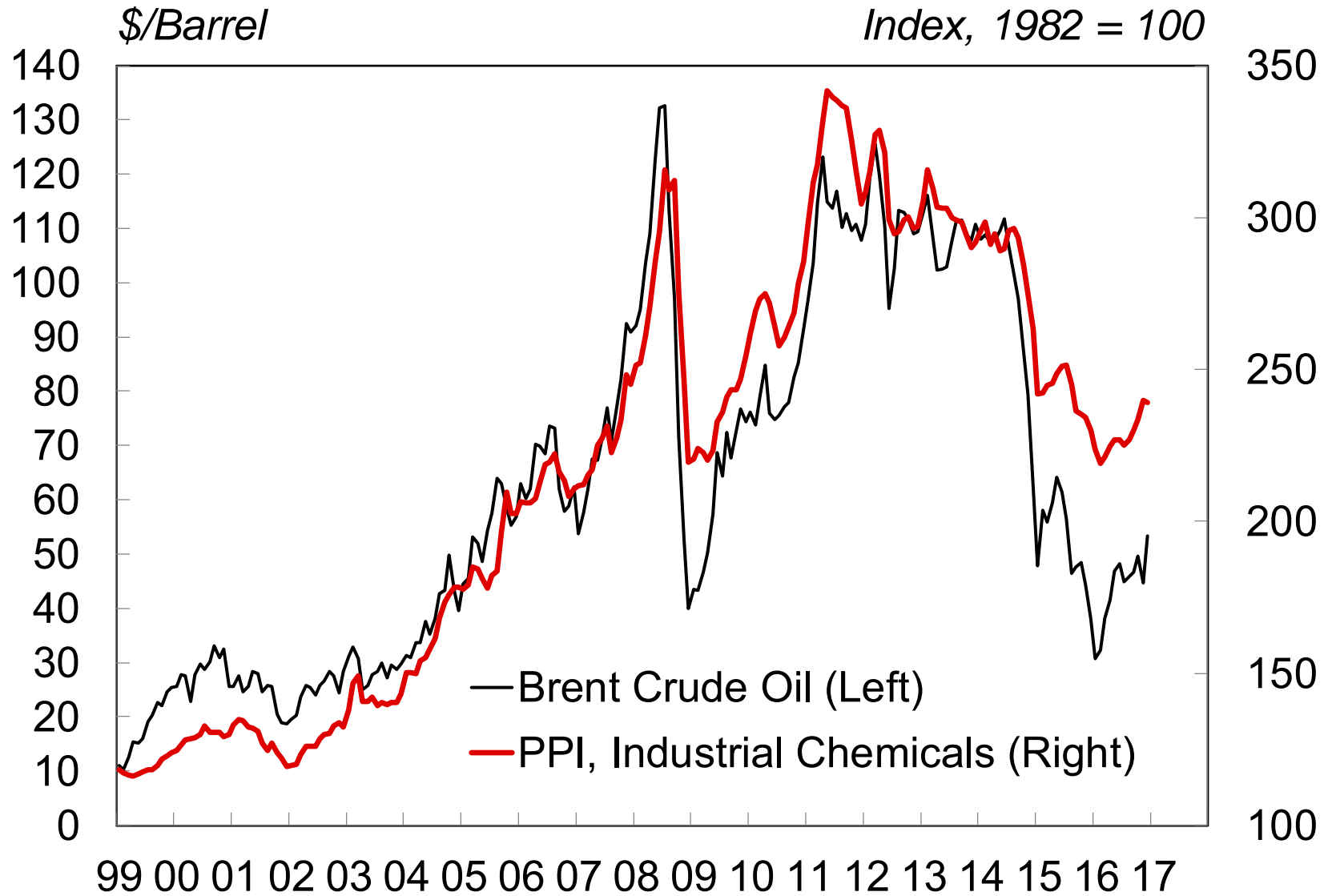
10-Year Moving Average 10-Year Annualized Growth Rate



Brent Blend Oil Price 2016 US Dollars per Barrel



Brent Oil Price vs Industrial Chemical Prices





I still believe cheap oil is a good thing . . . in the long run.

This is a regime shift, not a temporary blip. (Lower for longer.)

In short run, drop in drilling activity offset boost to rest of economy.

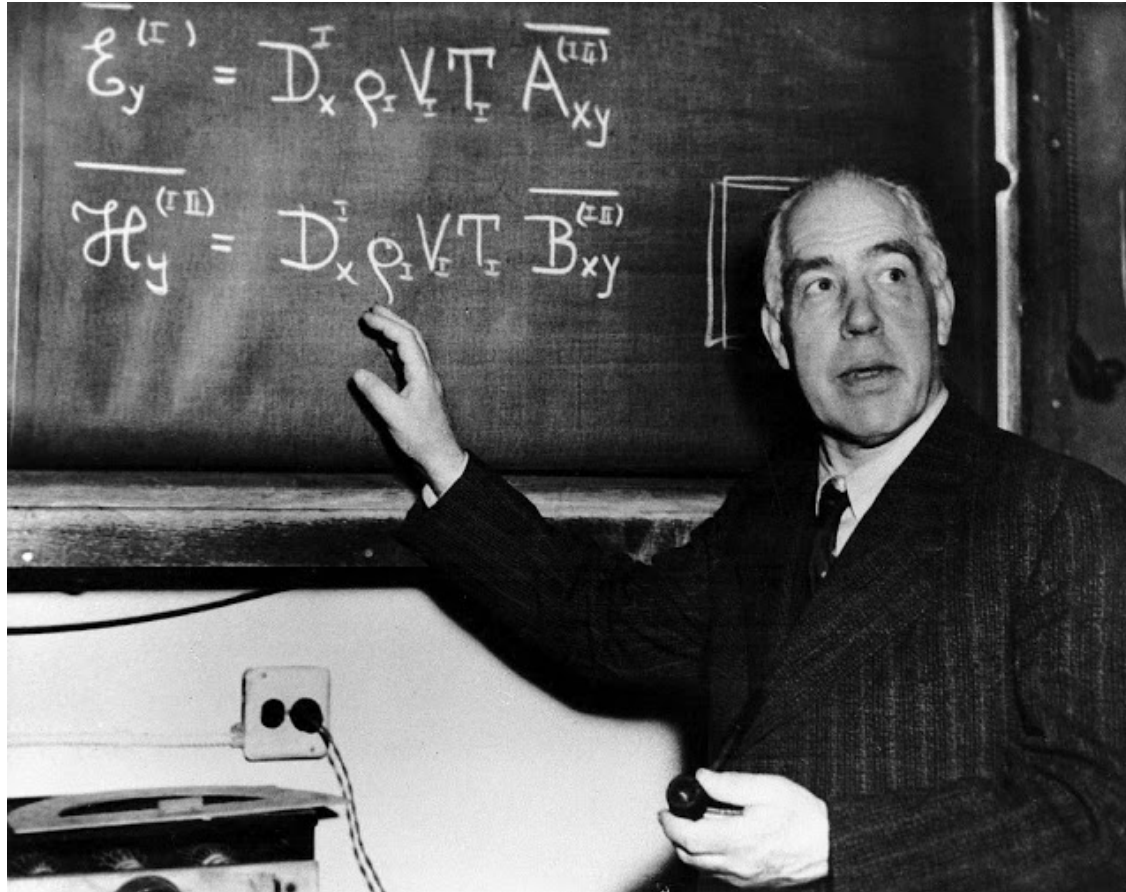
Longer-term, potential growth is boosted significantly.

Vehicle sales, travel and hospitality benefit the most.

Japan, Korea, India among biggest winners; US & China also benefit.

Russia, Iran, and Venezuela are biggest losers.

Losses are concentrated; gains are dispersed.

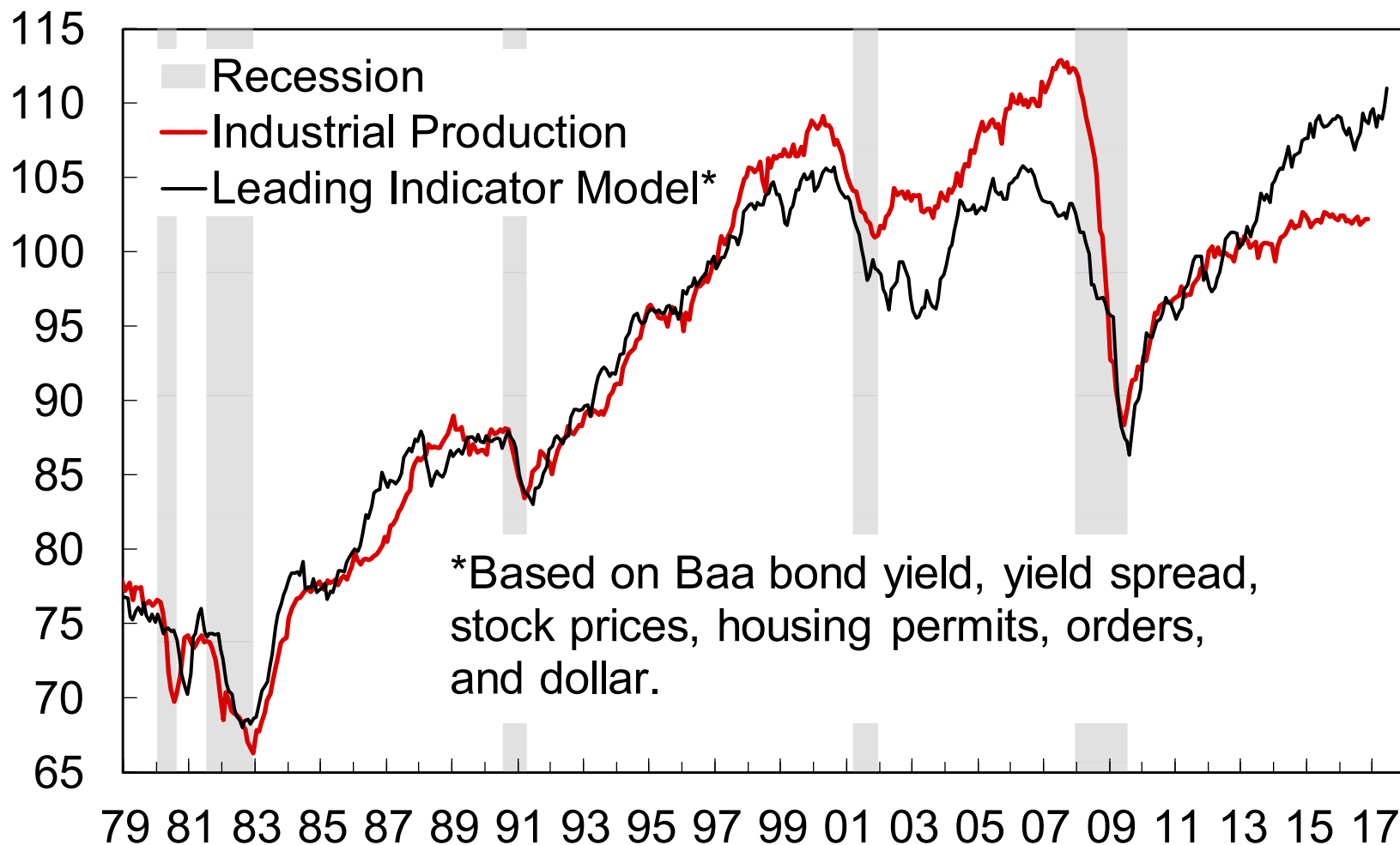


“Prediction is very difficult, especially about the future.”

--Niels Bohr, 1885-1962

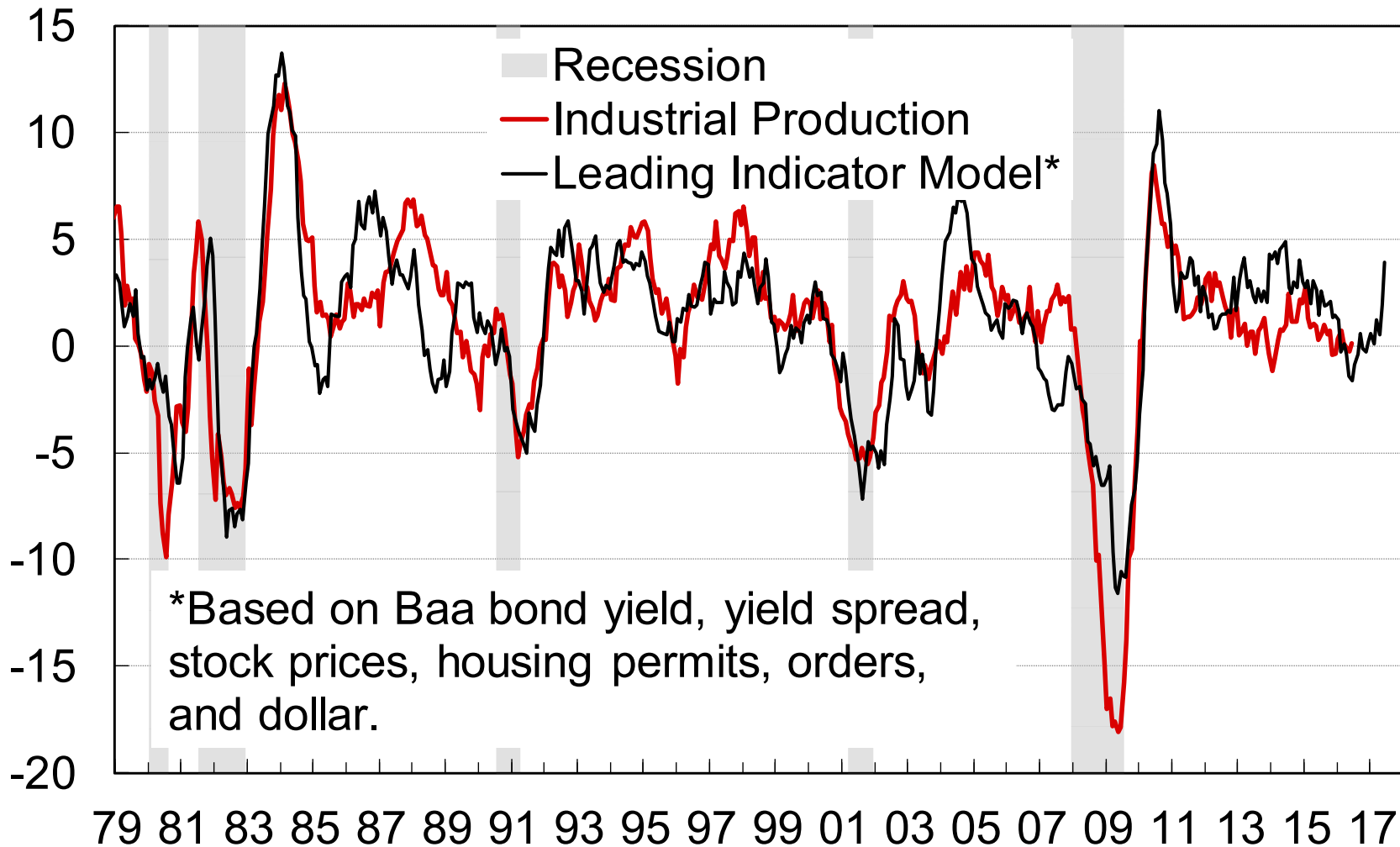
US Industrial Production: Manufacturing ex high-tech

Index 2012 = 100



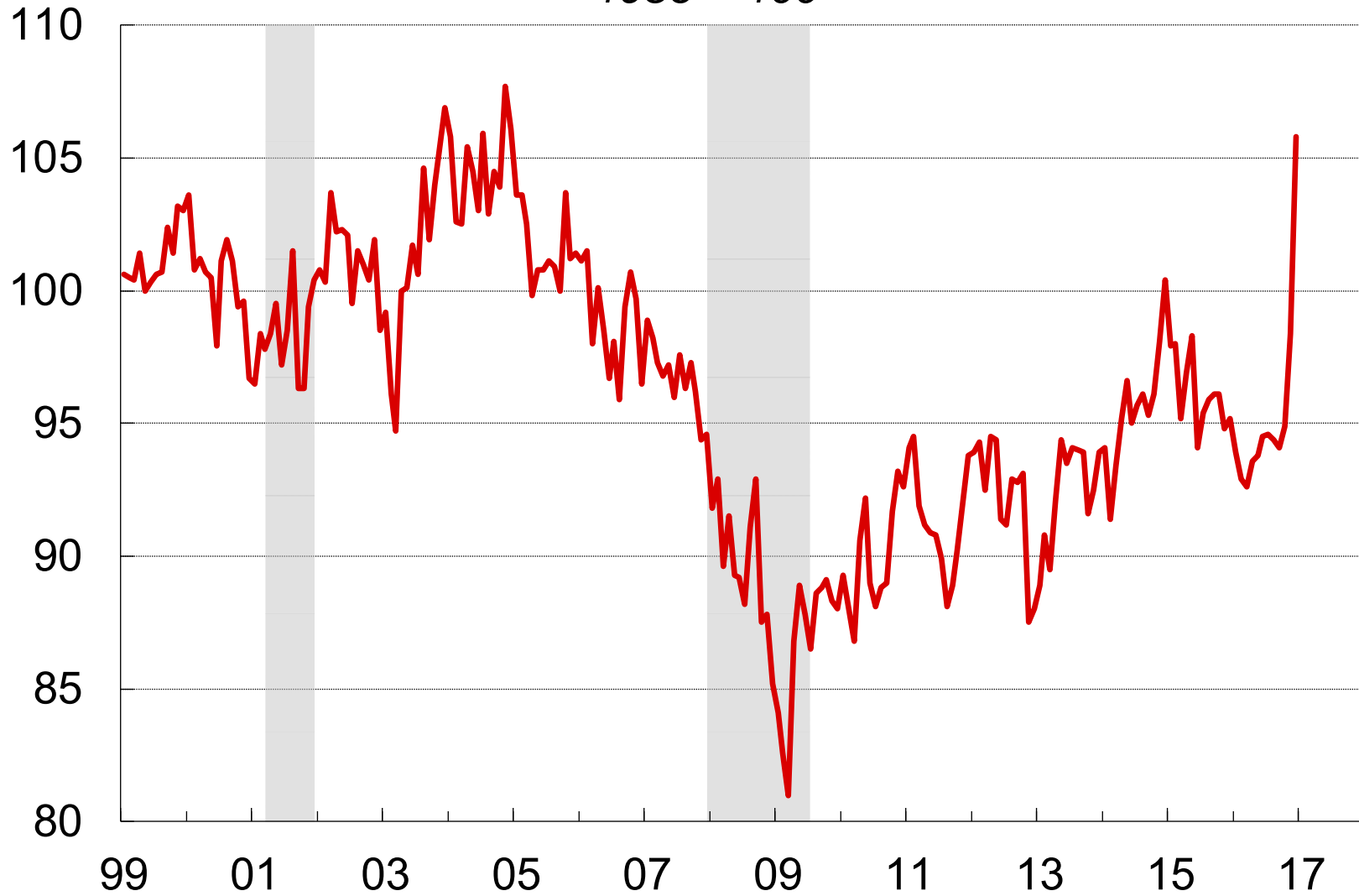
US Industrial Production: Manufacturing ex high-tech

Percent Change from Year Ago



NFIB Small Business Optimism Index

1986 = 100



Real GDP

(Annual % Change)

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
World	2.7	2.6	2.4	2.9	3.0
North America	2.4	2.4	1.6	2.8	2.9
Latin America (x Mex)	0.5	-1.3	-1.6	1.3	2.0
Western Europe	1.6	2.1	1.7	1.5	1.5
C & E Europe	1.9	0.4	1.5	2.3	2.4
Middle East & Africa	3.1	2.4	2.3	2.8	3.3
Asia/Pacific	4.4	4.5	4.5	4.5	4.4
China	7.3	6.9	6.7	6.5	6.0
Japan	0.2	1.2	0.9	1.1	0.9
India	7.2	7.6	7.6	7.6	7.7

Industrial Production

(Annual % Change)

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
World	3.1	1.8	0.9	2.6	2.7
Advanced economies	2.2	0.8	0.1	1.7	1.9
United States	2.9	0.3	-1.0	1.3	2.3
Japan	1.9	-1.3	-1.0	2.5	1.5
Euro Area	0.9	2.0	1.5	1.5	1.5
Other advanced	2.9	1.3	1.0	2.0	2.0
Emerging economies	4.1	2.8	2.2	3.9	3.9
Emerging Asia	6.4	4.7	4.8	5.0	5.0
C & E Europe	0.8	-3.6	0.0	3.0	3.0
Latin America	-0.6	-2.4	-4.0	3.0	3.0
Middle East & Africa	1.3	2.4	2.8	3.0	3.0

Global growth is accelerating

Acceleration in US growth will show up in annual data in 2017.

China reaccelerated in 2016 after big downshift in 2014 and 2015.

- China halted transition to consumer-led growth to end slowdown.
- Fiscal stimulus halted stagnation in manufacturing, decline in construction.
- Reacceleration will help global growth in 2017 and 2018, but . . .
- Debt, devaluation, demographics will curtail growth by 2020.

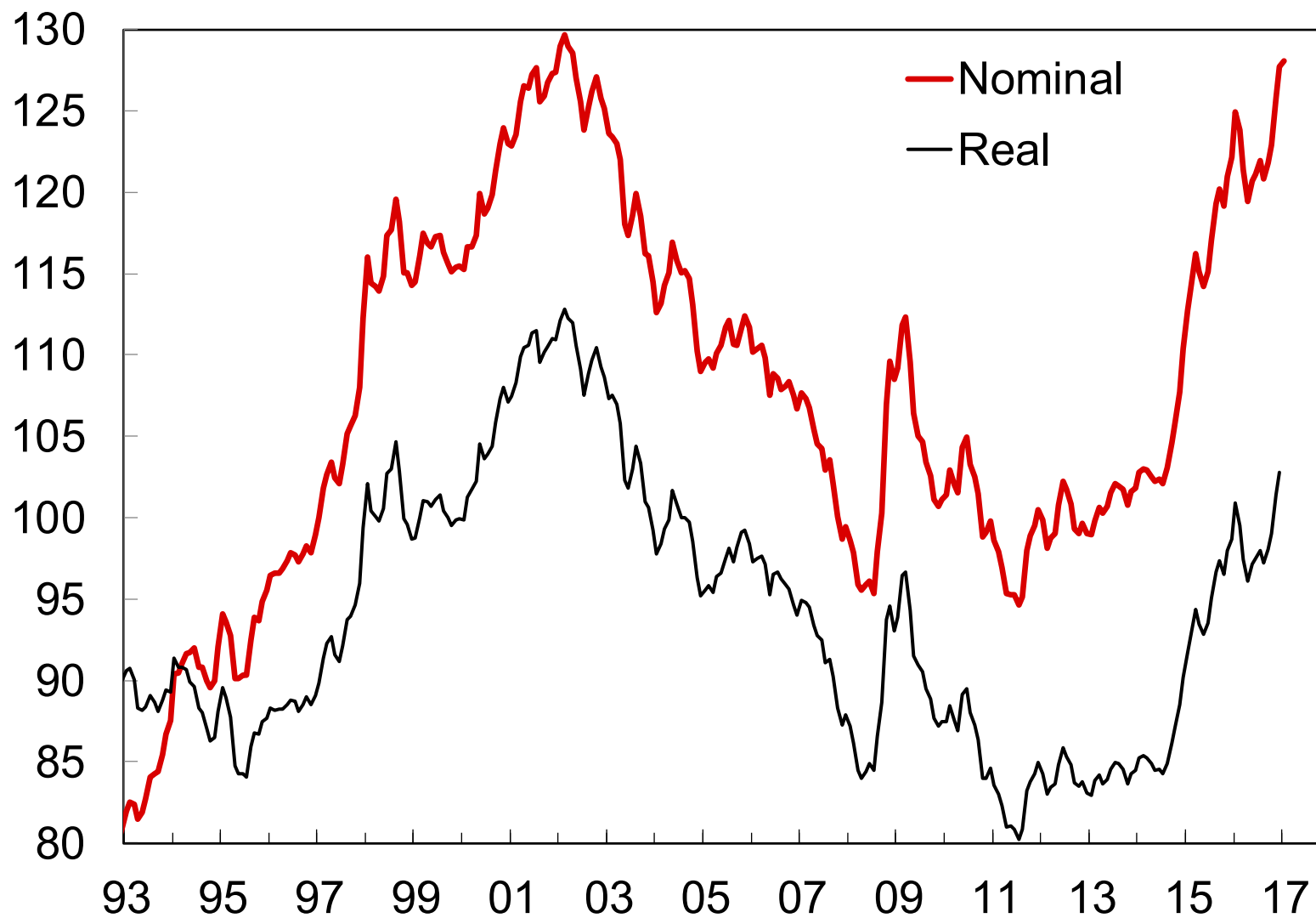
Europe continues to muddle through (despite Brexit).


- Those who constantly knock Europe have unrealistic expectations or . . .
- They're trying to talk down the value of the Euro to aid exporters.

Growth in Japan picking up, aided by weak Yen.

Much of South American hamstrung by poor economic policies.

Federal Reserve Broad Dollar Index



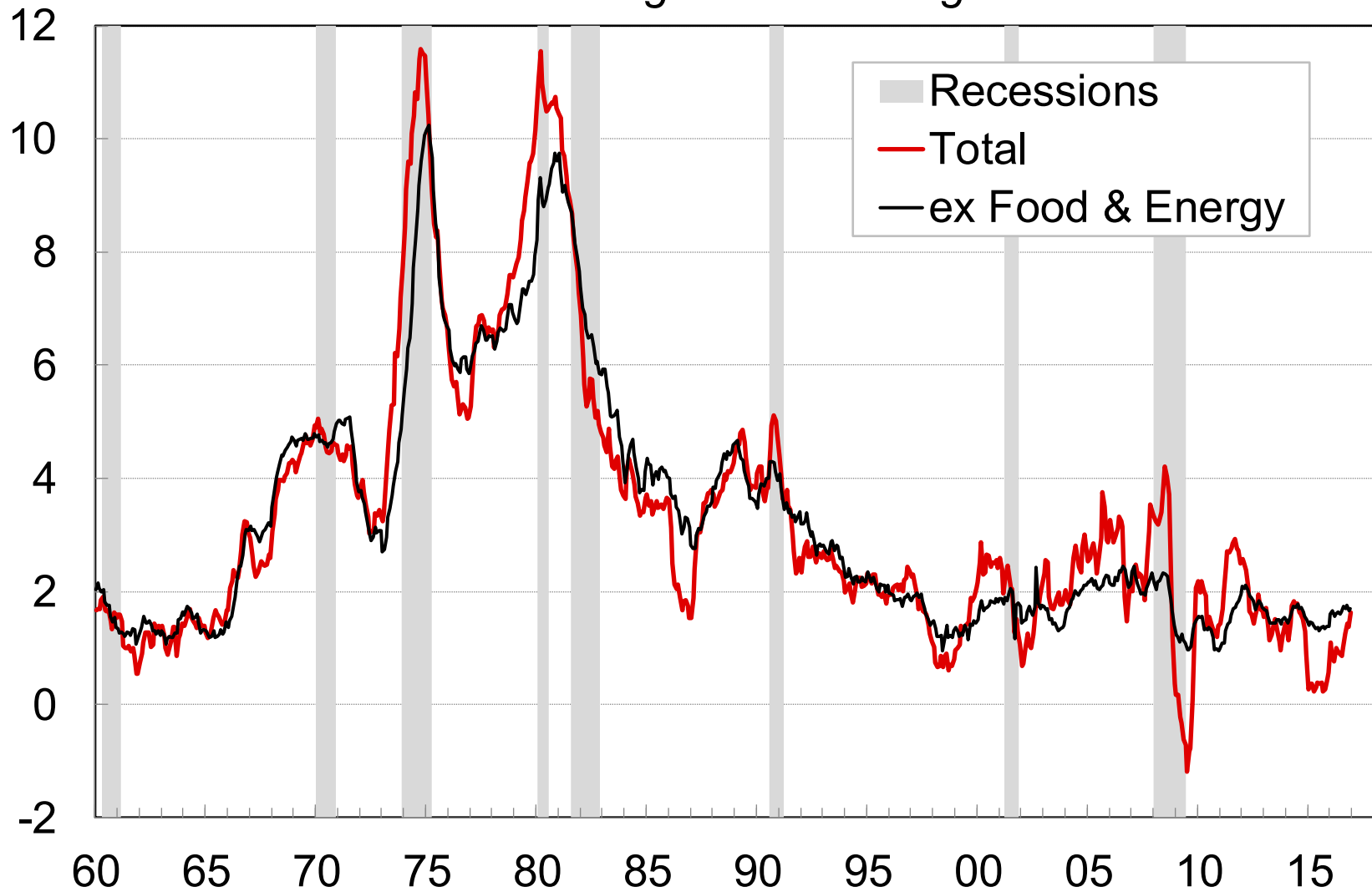


Forecasting exchange rates
has a success rate no better
than that of forecasting the
outcome of a coin toss.

-- Alan Greenspan
November 19, 2004

US Personal Consumption Expenditures Price Index

Percent Change from Year Ago

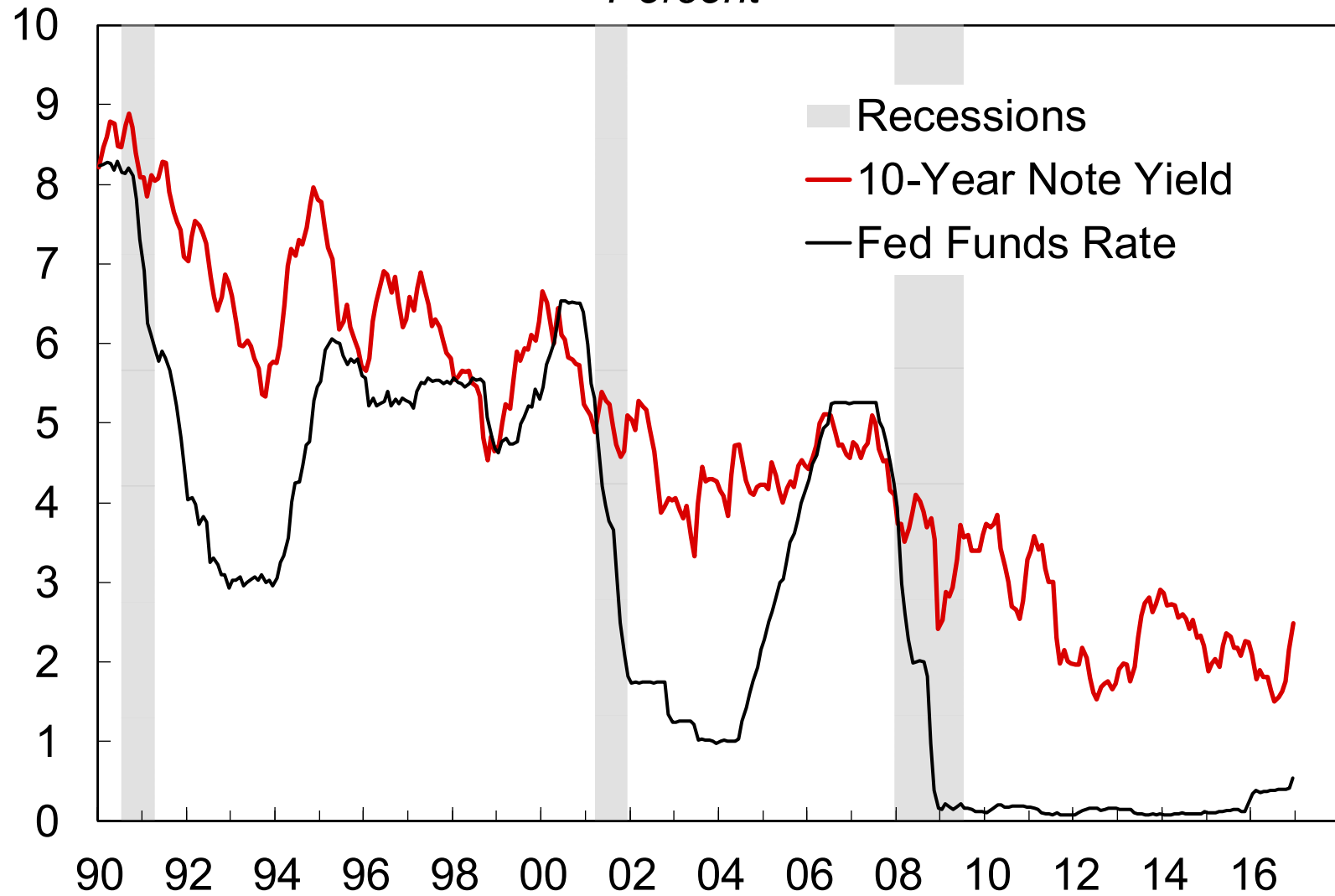




Deflation at the Fed

US Interest Rates

Percent





**You want to know what Janet Yellen is thinking?
Hey. I'm good, but I'm not that good.**

The real issue is slow long-term growth, not recessions

Globally, the story is persistently slow growth.

- High government debt slows long-term growth (Reinhart and Rogoff).
- Demographics also contribute to slower trend.
- Tax and regulatory complexity holding back productivity growth.
- Increased industry concentration may be holding back growth.
- Oil prices were at historically high levels from 2003 to 2014.

Disinflation meant that nominal growth slowed even more than real growth.

- **Growth in corporate earnings is tied to growth in nominal GDP.**
- **For most companies, double-digit earnings growth is a fantasy.**

Potential GDP growth is below 1% in Japan, near 1.5% in Europe, around 2% (?) in US.

Growth in South America held down by bad policies; may be getting less bad.

Growth in China downshifted, not as gradually as official data show. Has firmed.

Corporate tax cuts, deregulation, and cheap oil are good for economic growth.

Impact of Trump policy proposals

Good:


- **Deregulation**
 - Affordable Care Act (Obamacare), Dodd-Frank, Restrictions on energy production
- **Corporate tax reform**
 - Taxation of foreign profits, Expensing, Corporate tax rate

Bad:

- **Tariffs, backing away from trade deals**
- **Mass deportations**

Insignificant:

- **Individual income tax rate cuts**
- **Infrastructure spending**



Free trade, one of the
greatest blessings which a
government can confer on a
people, is in almost every
country unpopular.

Thomas Macaulay
1824



Robert Fry Economics LLC

RobertFryEconomics.com
RobertFryEconomics@gmail.com