

The Outlook for the U.S. Economy



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The views expressed are those of the author, and are not those of the Federal Reserve Bank of Dallas or of the Federal Reserve System.

Modest Economic Growth since Great Recession

Real GDP Growth in 2016 - 0.8% Q1, 1.4% Q2 and 2.9% Q3

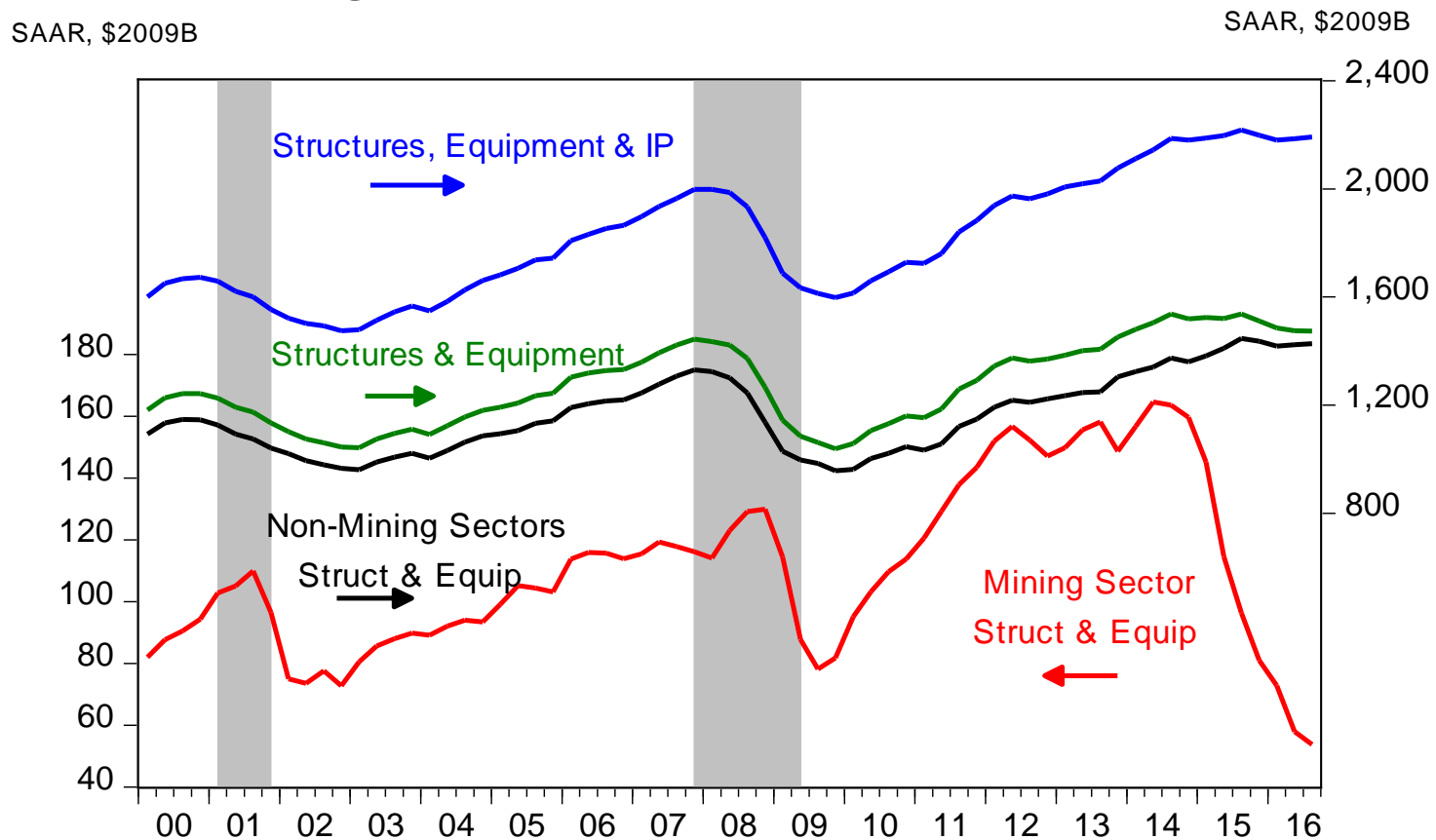
	2011	2012	2013	2014	2015	2016 YTD
GDP Growth, % SAAR	1.6	2.2	1.7	2.4	2.6	1.7
Contributions to Growth, PPAR						
- Personal Consumer Expenditure	1.6	1.0	1.0	2.0	2.2	1.8
- Non-Residential Fixed Investment	0.9	1.0	0.4	0.8	0.3	-0.1
- Residential Fixed Investment	0.0	0.3	0.3	0.1	0.4	-0.1
- Inventories	-0.1	0.1	0.2	0.1	0.2	-0.3
- Net Exports	0.0	0.1	0.3	-0.2	-0.7	0.3
- Government	-0.6	-0.4	-0.6	-0.1	-0.3	0.0

Note: PPAR = percentage points at annual rates, SAAR = seasonally adjusted at annual rates.

Source: BEA.

Many External and Internal Shocks Including Low Oil Prices

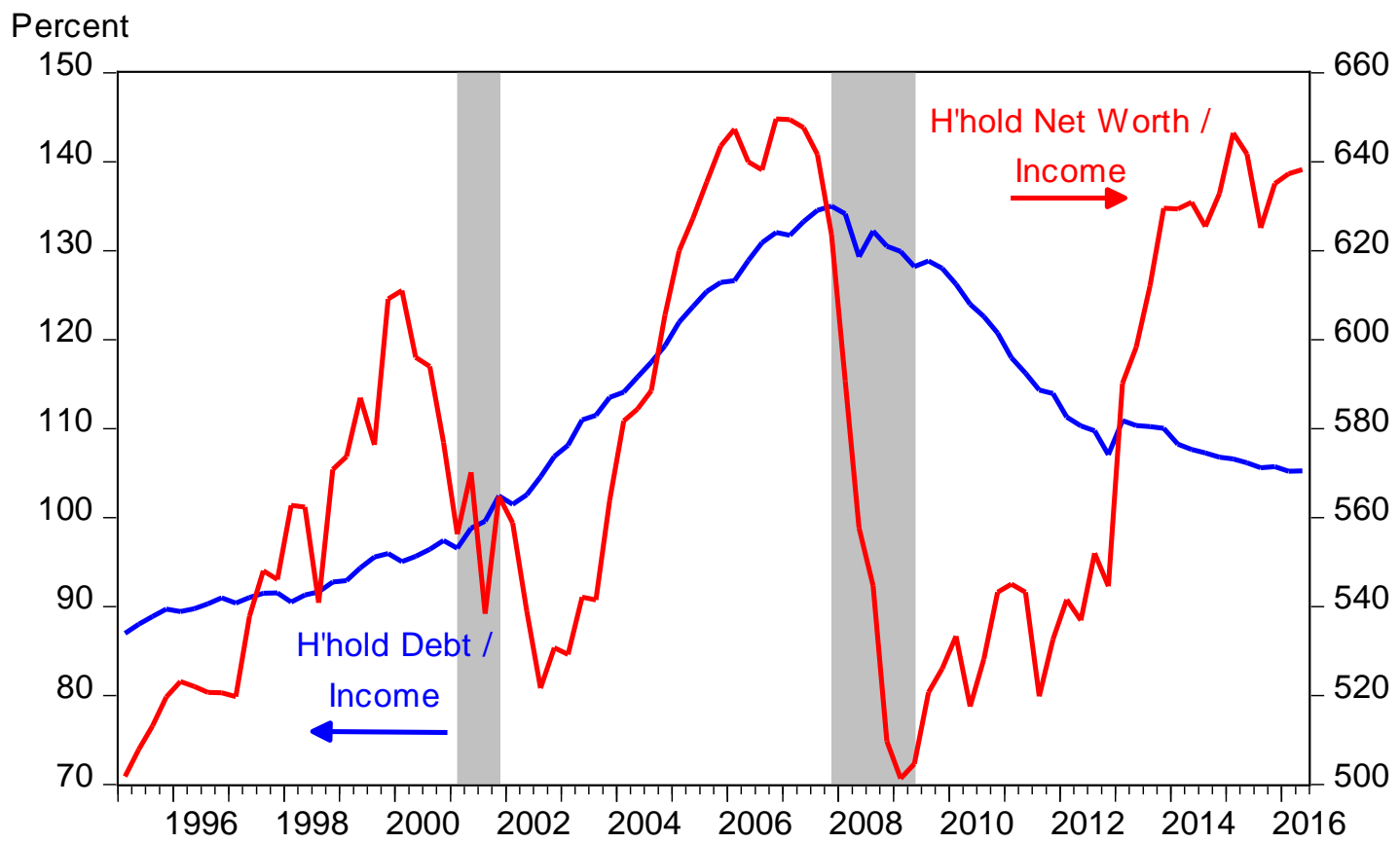
Mining v. Other Non-Residential Investment



Sources: BEA and author's calculations. Note: NBER dated recessions are shaded grey.

Deleveraging Important Reason Why Recovery from Great Recession So Slow

Household Deleveraging Probably Complete

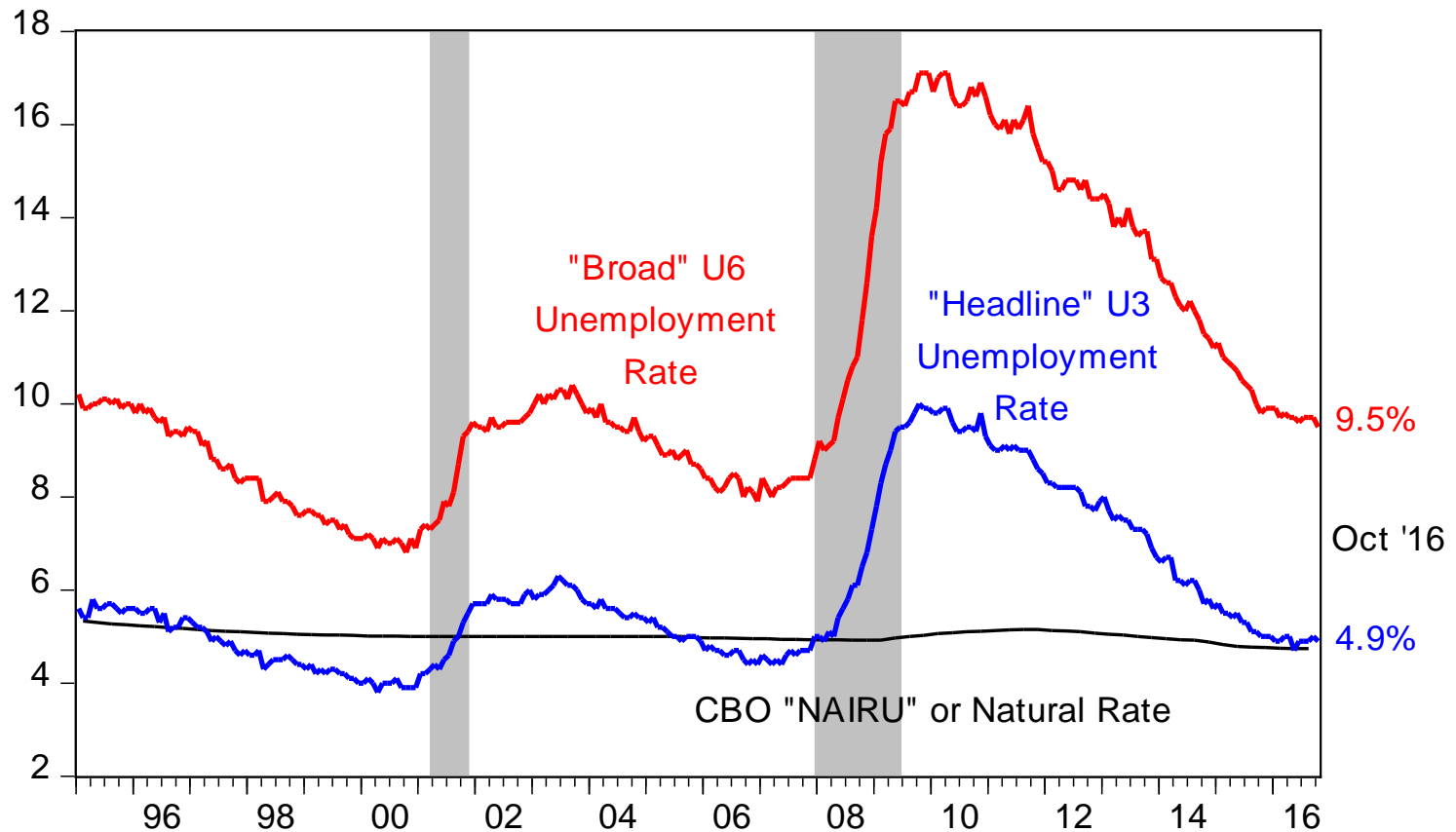


Sources: BEA and Federal Reserve,

Unemployment Rate Close to NAIRU or Natural Rate

U6 Includes "Part Time for Economic Reasons" & Discouraged Workers

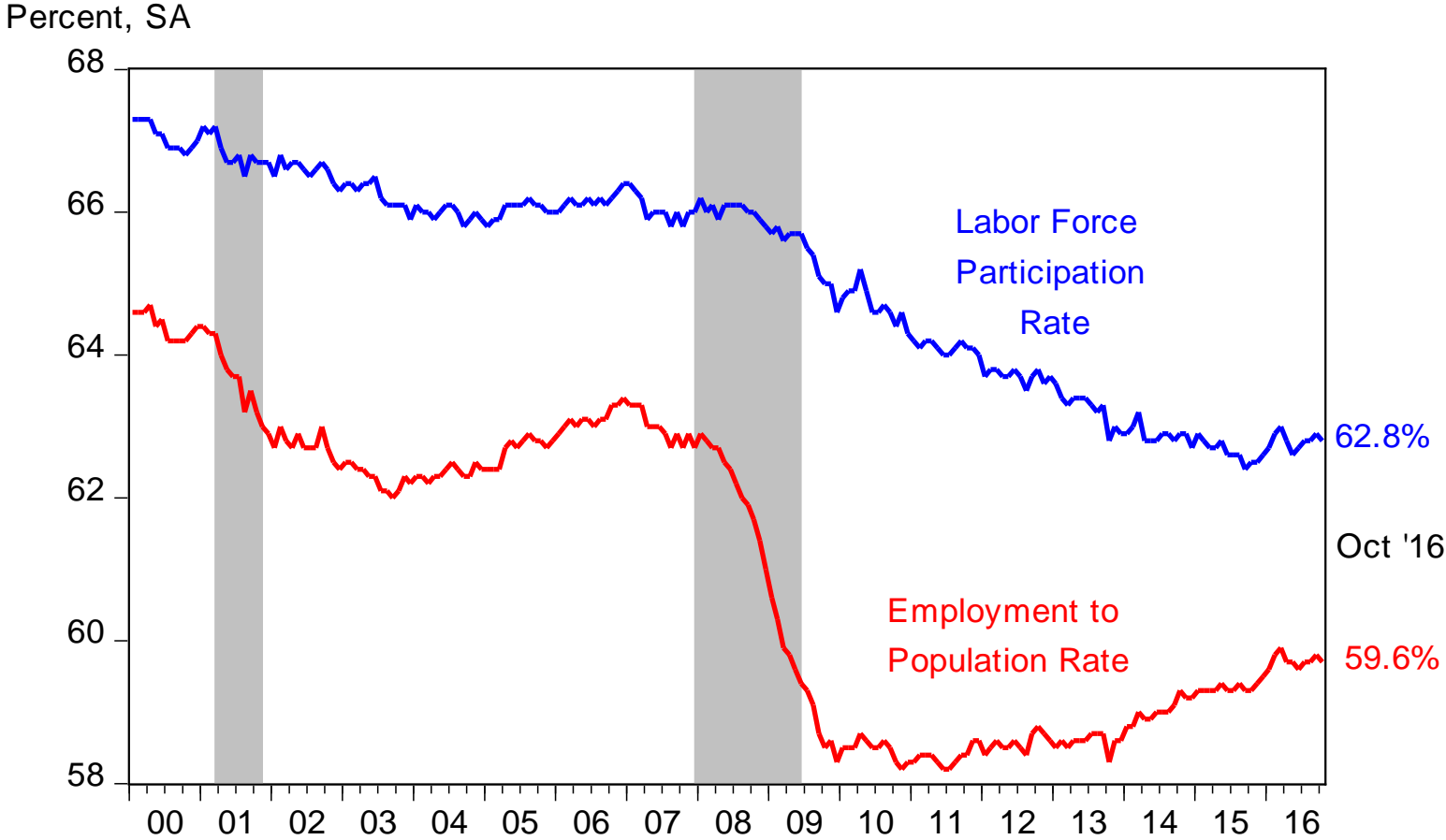
Percent, SA



Source: BLS and CBO.

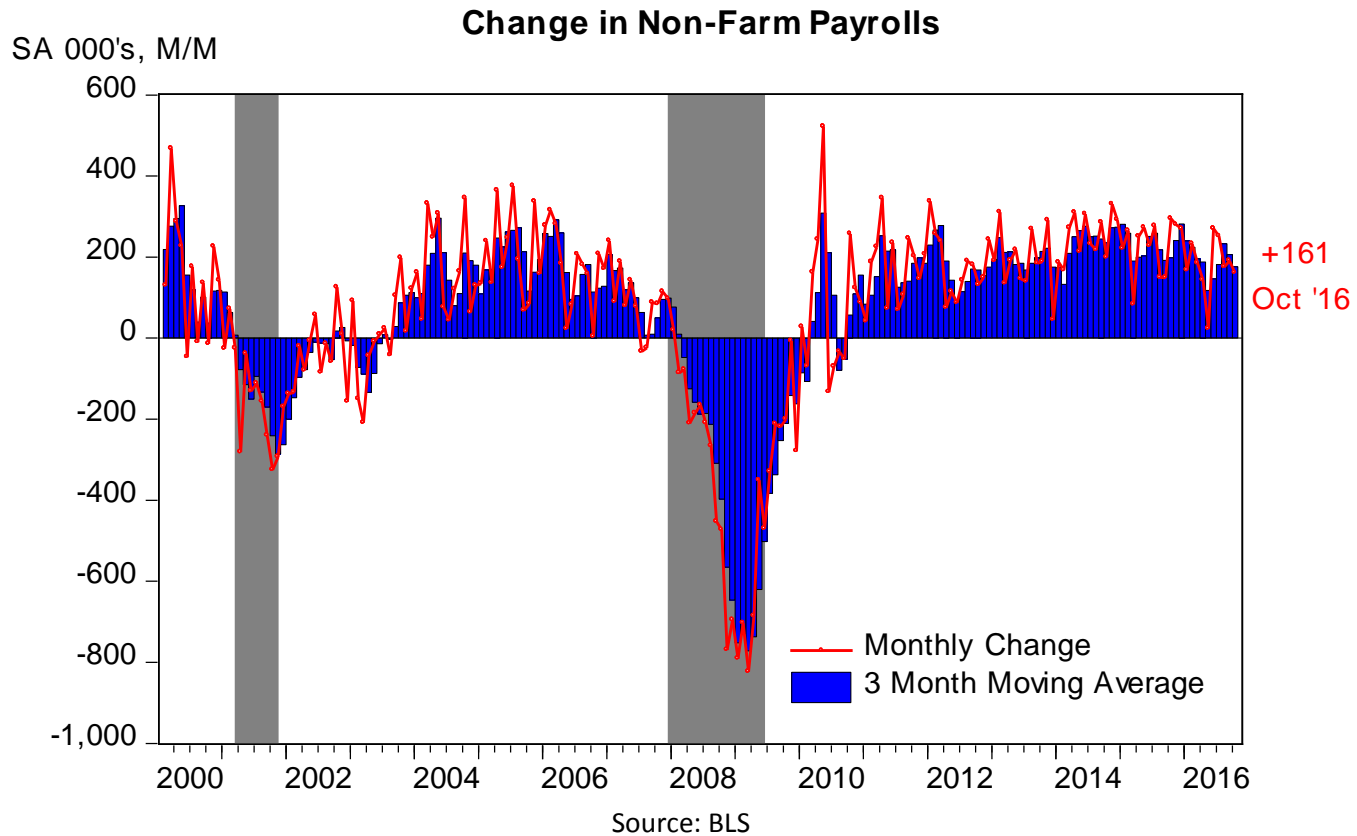
Labor Force Participation Rate Has Ticked Up

Especially Prime Aged (25–54 Years Old)



Source: BLS.

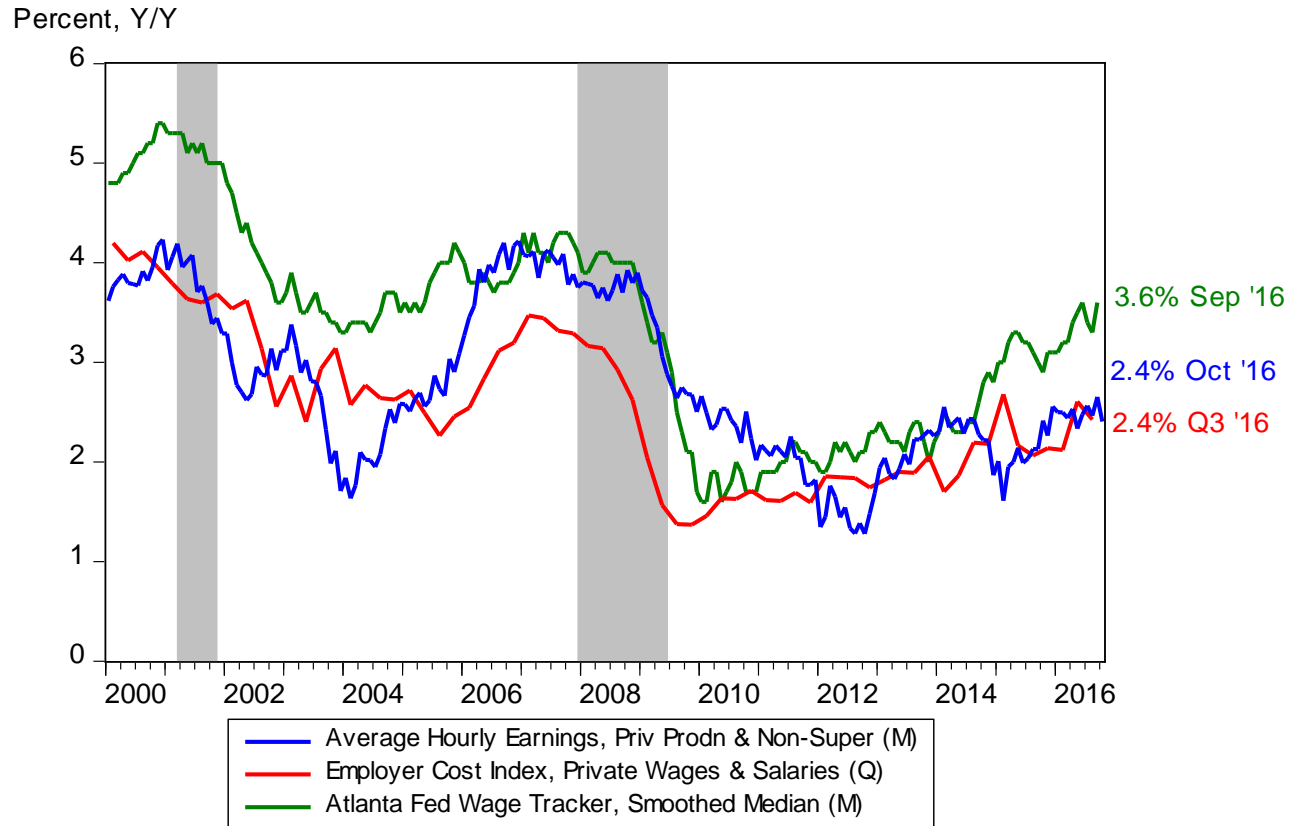
Robust Employment Growth, Resilient to Shocks



Year	2011	2012	2013	2014	2015	2016 YTD
Monthly Ave (000's)	174	179	193	251	229	181

Wage Inflation Slowly Picking Up

Need to Look at a Range of Wage Measures



Note: Average hourly earnings for all workers: +2.8% Oct 2016. Source: BLS and Atlanta Fed.

Forecasts of Output and Unemployment

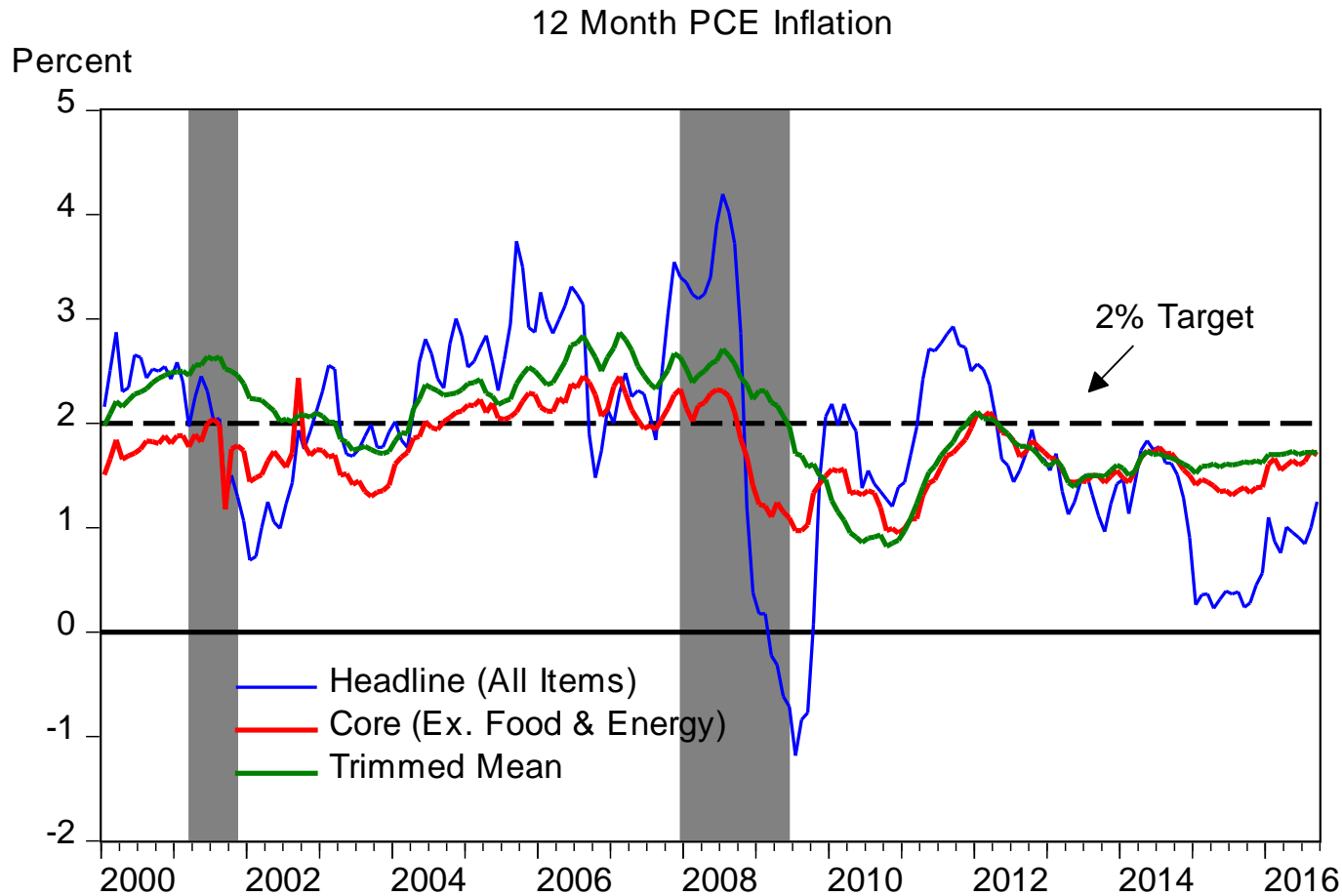
Moderate Output Growth and Unemployment below NAIRU

	2016 Q4	2016 Q4/Q4	2017 Q4/Q4	2018 Q4/Q4	2019 Q4/Q4
Real GDP Growth					
Blue Chip (10 Oct)	2.4	1.5	2.2	-	-
FOMC (21 Sep)	-	1.8	2.0	2.0	1.8
SPF (12 Aug)	2.2	1.5	2.2 ^e	2.2 ^e	2.2 ^e
	2016 Q4	2017 Q4	2018 Q4	2019 Q4	
Unemployment Rate					
Blue Chip		4.7	4.6	-	-
FOMC		4.8	4.6	4.5	4.6
SPF		4.7	4.6 ^e	4.6 ^e	4.7 ^e

Sources: Blue Chip Economic Indicators (10 Oct 2016), Survey of Professional Forecasters (SPF, 12 Aug 2016), and Federal Open Markets Committee (FOMC, 21 Sep 2016, Summary of Economic Projections median).

Underlying Inflation Edging Towards 2% Target

Inflation Expectations Reasonably Well Anchored



Sources: BEA and Dallas Fed.

Forecasts of Inflation

Reverting to 2% Target

	2016 Q4	2016 Q4/Q4	2017 Q4/Q4	2018 Q4/Q4	2019 Q4/Q4
CPI Inflation					
Blue Chip (10 Oct)	2.4	1.2	2.3	-	-
SPF (12 Aug)	2.2	1.6	2.3	2.3	-
PCE Inflation					
FOMC (21 Sep)	-	1.3	1.9	2.0	2.0
SPF	1.9	1.4	1.9	2.0	-
Core PCE Inflation					
FOMC	-	1.7	1.8	2.0	2.0
SPF	1.6	1.8	1.9	2.0	-

Sources: Blue Chip Economic Indicators (10 Oct 2016), Survey of Professional Forecasters (SPF, 12 Aug 2016), and Federal Open markets Committee Summary of Economic Projections (FOMC, 21 Sep 2016, median).

Monetary Policy

- Fed has dual mandate – maximum employment and price stability
- Wednesday's FOMC statement:
 - The labor market has continued to strengthen and growth of economic activity has picked up from the modest pace seen in the first half of this year
 - [FOMC] expects that ... economic activity will expand at a moderate pace and labor market conditions will strengthen somewhat further
 - Inflation is expected to rise to 2 percent over the medium term
 - Near term risks to the economic outlook appear roughly balanced
- Interest rates:
 - “The Committee judges that the case for an increase in the federal funds rate has continued to strengthen but decided, for the time being, to wait for some further evidence of continued progress towards its objectives”
(Changes in statement wording underlined)

Longer Term Economic Challenge: Low Growth

Estimates of Long-Run Growth Revised Down

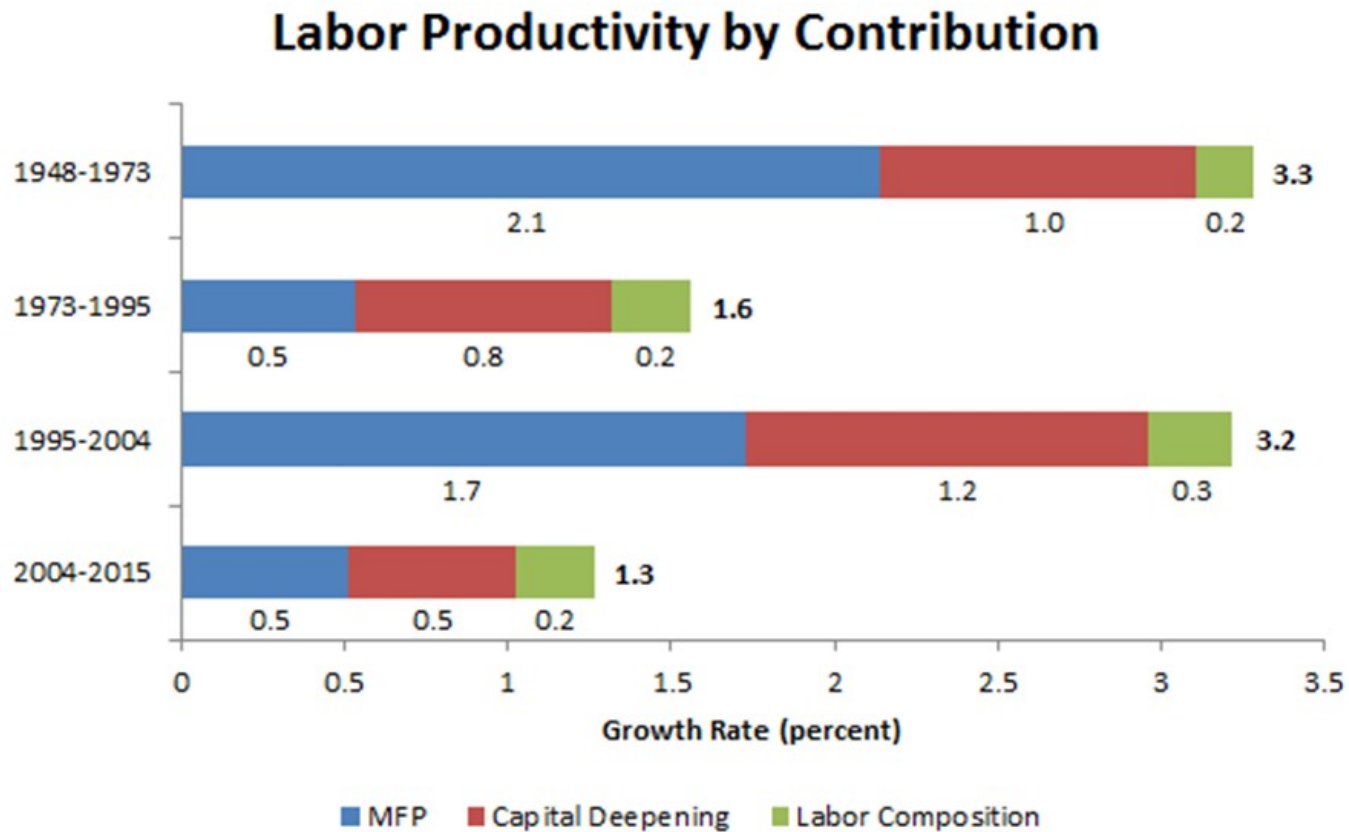
Year	Blue Chip	SPF	CBO	FOMC
2000	3.1%	3.0%	2.9%	-
2005	3.2%	3.3%	2.6%	-
2010	2.6%	2.6%	2.2%	2.7%
2012	2.5%	2.5%	2.3%	2.5%
2014	2.4%	2.6%	2.1%	2.3%
2016	2.1%	2.3%	1.9%	1.8%

Sources: Blue Chip Economic Indicators, Survey of Professional Forecasters (SPF), Congressional Budget Office (CBO) and Federal Open Markets Committee (FOMC) Summary of Economic Projections (median).

Low Productivity Growth

- Low growth due to an aging population and lower labor productivity
- Labor productivity growth is the most important determinant of the long run growth in wages and living standards
- Key component of labor productivity growth is total factor productivity (TFP) growth – the growth in the efficiency with inputs such as capital and labor are combined to produce output, e.g.
 - Improvements in technology, producing higher value products and services, better organization of production
- Limited role for monetary policy or short-term fiscal policy (demand side policies) in tackling low productivity growth
- Supply side policies needed

US Labor Productivity Growth Slowed in Early 1970's with Temporary Surge from 1995 to 2004

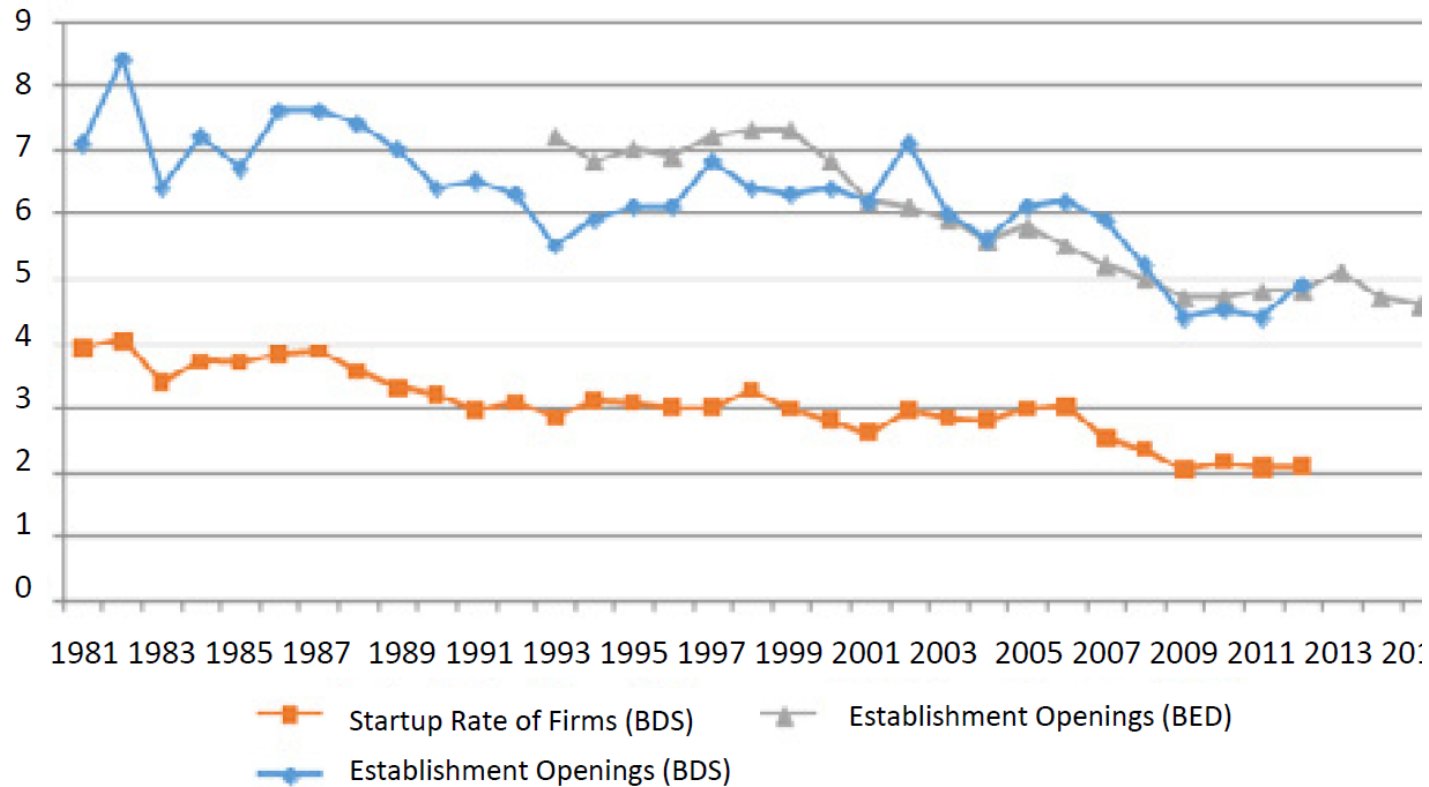


Source: BLS and Baily and Montalbano (2016).

Tackling Low Productivity Growth

- At the micro level, low TFP reflected in:
 - Widening gaps between frontier and other firms
 - Fewer start-ups and less “creative destruction” reallocation of production among firms
- Research suggests that **declining business dynamism** is the main factor
- **Boost diffusion of new technologies** and best practices by:
 - **Increasing competitive intensity**
 - Simplifying and rationalizing economic regulation
 - Limit patents – too little competition, too much rent seeking
 - Reduce licensing restrictions – barrier to entry
 - More competition in health care
 - **Improving managerial and worker skills**
- Other policies – infrastructure investment , tax and immigration reform, more Federal support for R&D – would also help

Decline in U.S. Firm Startup Rates



Source: Decker et al (2016)

Summary

- Economic outlook is for:
 - Moderate (2% to 2¼%) growth for the next few years
 - A stronger labor market
 - Low (2% or lower) inflation
 - Gradual rise in interest rates
- Outlook better than in most advanced economies
- The near term risks to the outlook are fairly balanced
 - The downside risks are predominantly external
 - Sluggish global growth, recession in China, hard Brexit, failure of Deutsche Bank etc.
- In the longer term, supply side policies are needed to tackle low productivity growth