FEDERAL RESERVE BANK of CLEVELAND

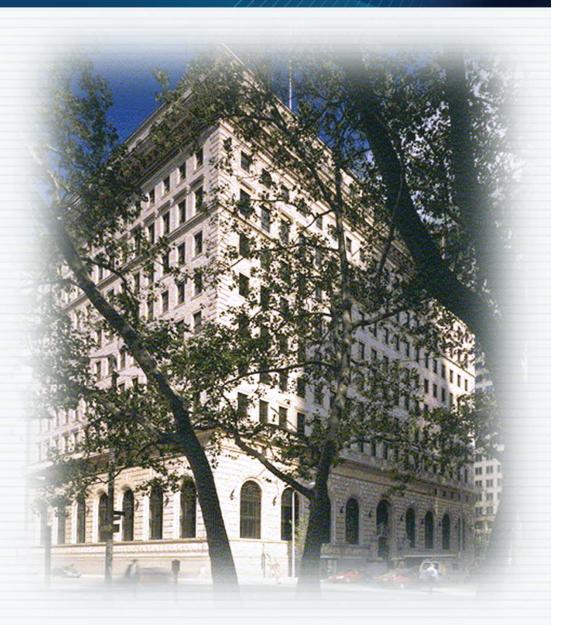
Outlook of Economic Conditions

Buckeye Actuarial Continuing Education, BACE April 8, 2015

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Research Analyst

These are my opinions and do not necessarily reflect those of others within the Federal Reserve Bank of Cleveland or Federal Reserve System.



Federal Reserve System

- Board of Governors in Washington
 - Currently 5 members, but up to 7 including the Chairman
 - Appointed by the President, confirmed by Congress
- 12 Regional Reserve Banks
 - 12 presidents
 - Regional and District Board of Directors / Stakeholders
- Federal Open Market Committee (FOMC)

- 12 voting members (7 from the Board plus 5 Regional presidents that are rotated annually)



The Federal Open Market Committee, FOMC



Yellen



Fischer



|Board of Governors|

Tarullo

|Regional Presidents|





Brainard

Boston

Philadelphia New York

Cleveland

Mester

Kansas City

Powell

Richmond

Lacker

Dallas



Atlanta

Lockhart

San Francisco



FEDERAL RESERVE BANK of CLEVELAND



Rosengren



Evans



Dudley





Minnesota

Plosser

George

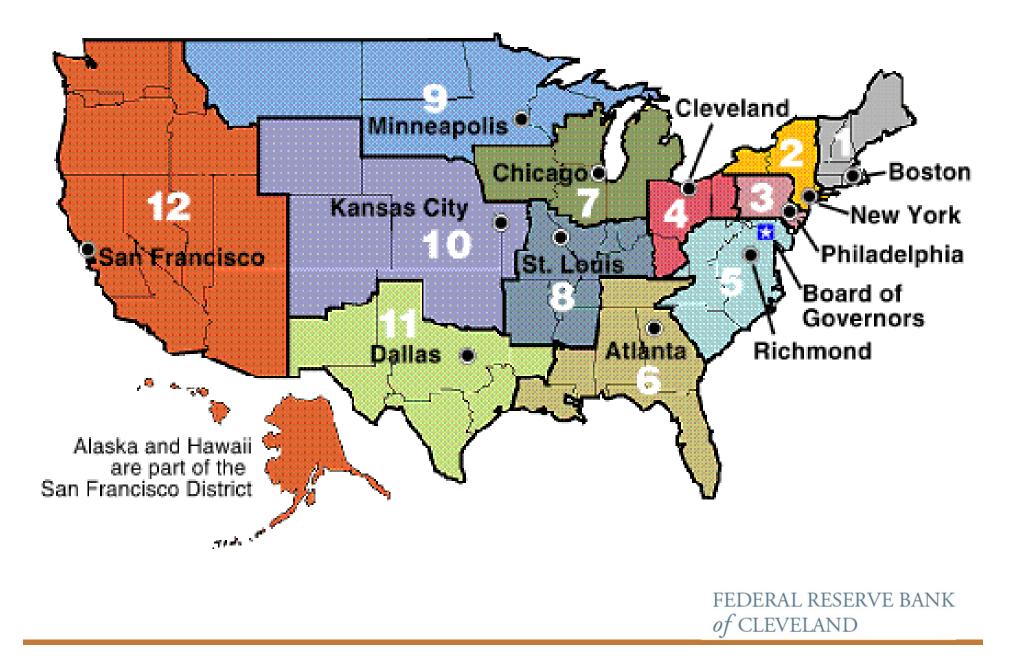


Fisher*

Williams

3 Fisher is currently retired and a new President has not yet been named

12 Federal Reserve Districts



Purpose and Functions

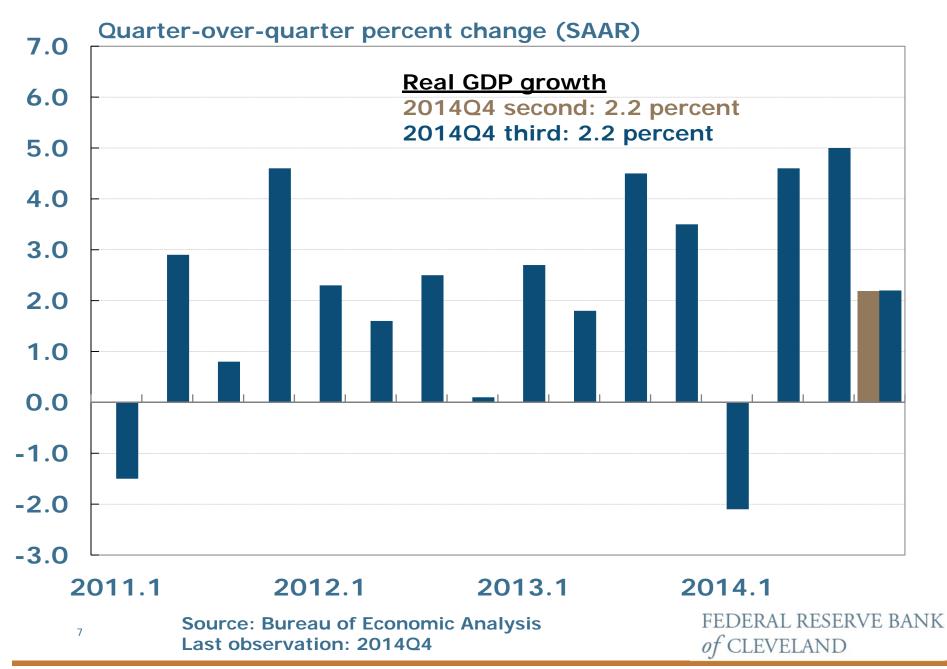
- The Federal Reserve operates under the Congressional dual-mandate to ensure maximum employment and stable prices. In performing its duties, the Fed continually monitors the financial stability and systemic risk within the economy:
- Maximum Employment:
 - Determined by the long term unemployment rate trends
- Stable Prices:
 - Inflation as measured by the annual change in the Personal Consumption Expenditures, PCE, index
- Essential Operations
 - Supervision and Regulation
 - Banking and financial system
 - Consumer protection
 - Provide Financial Services
 - Depository institutions
 - Federal government
 - Check processing
 - Cash distribution

Gross Domestic Product

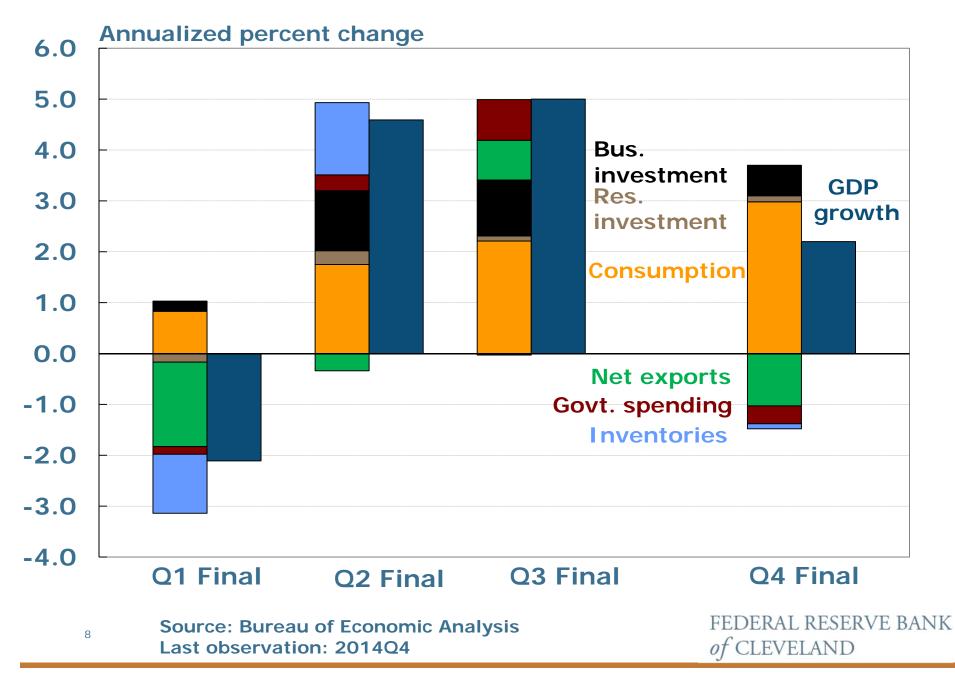
- Q4:2014 real GDP the value of the production of goods and services, adjusted for price changes, increased at an annual rate of 2.2. In the third quarter, real GDP increased 5.0 percent.
- Advanced 2013 metropolitan estimates report that real GDP rose 1.7 percent annually after increasing 2.6 percent in 2012. 292 of the nation's 381 metropolitan areas showed economic growth led by financial and professional services as well as mining and nondurable manufacturing.



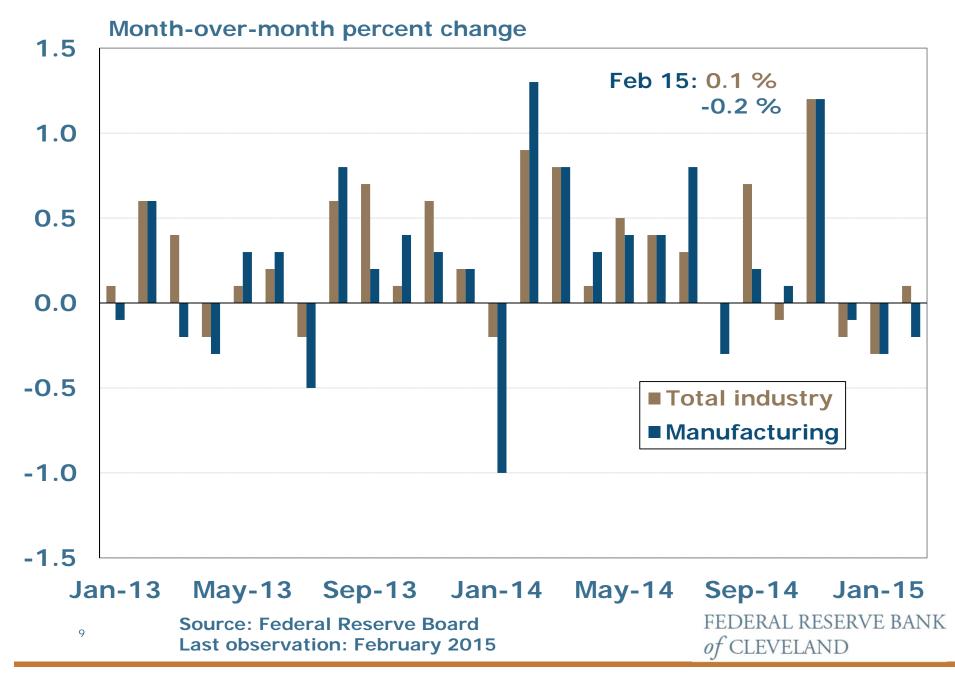
Real GDP Growth



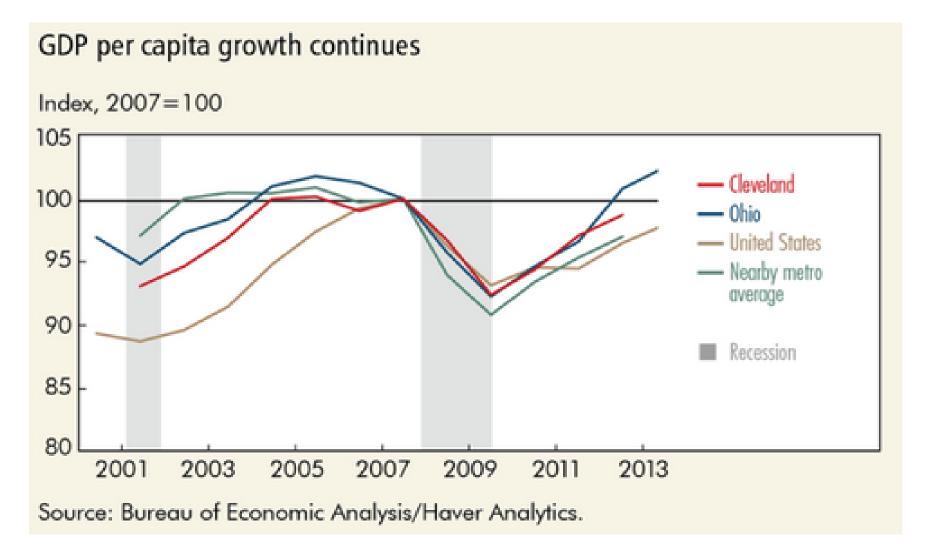
Contributions to GDP Growth



Industrial Production



Regional Per-Capita Output Growth



Source: Bureau of Economic Analysis

Regional Productivity Growth

0	•			
		Nation	NEO MSAs	Difference
	2010 to 2012	1.7	2.1	0.4
	2007 to 2012	7.0	2.9	-4.2
	2001 to 2012	20.2	0.0	10 5
	2001 to 2012	20.3	9.8	-10.5
				Percent

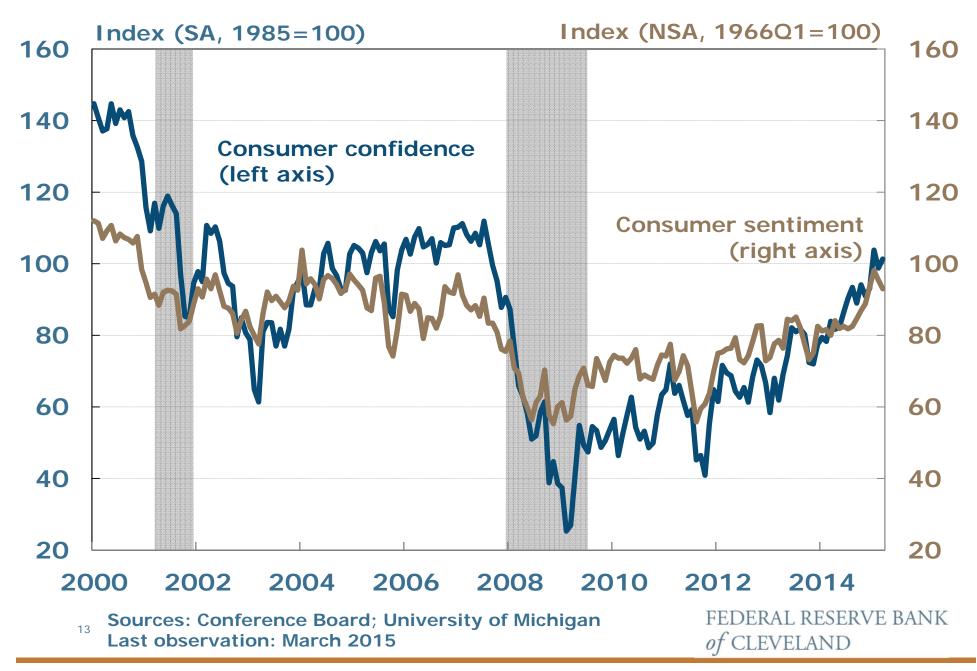
Source: Bureau of Economic Analysis; Bureau of Labor Statistics

Income & Consumption

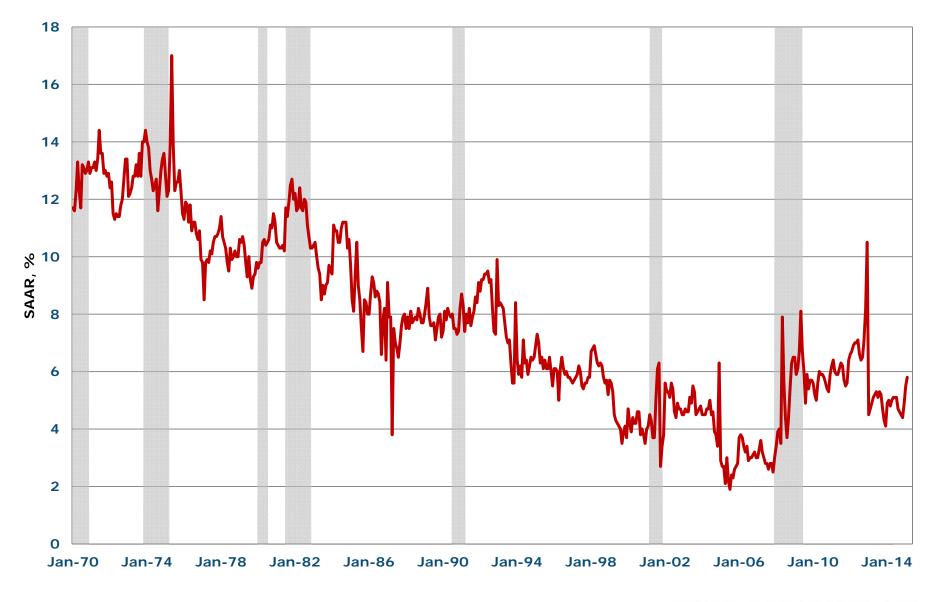
- Cleveland's per capita income exceeds that of the nation, state and nearby metro averages.
- The rate of decline in consumer debt in the Cleveland metro is in line with that of Ohio.
- Credit card delinquent rates remain below pre-recession levels in the Cleveland Metro area.
- Average weekly earnings in Cleveland metro are \$818
- Education matters.



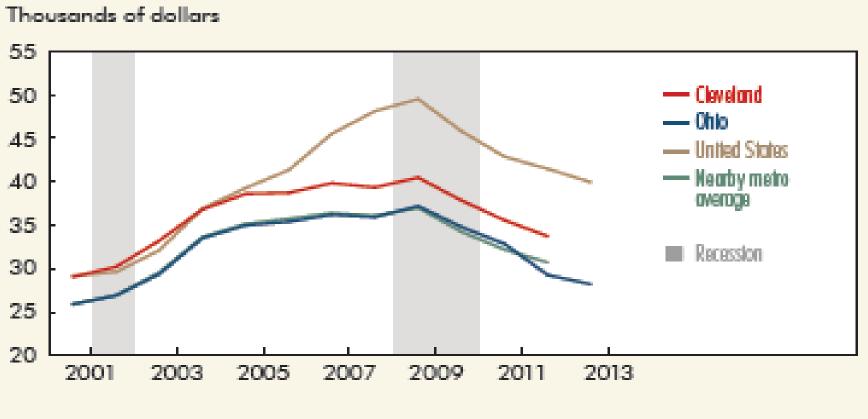
Consumer Confidence



Savings Share of Disposable Income

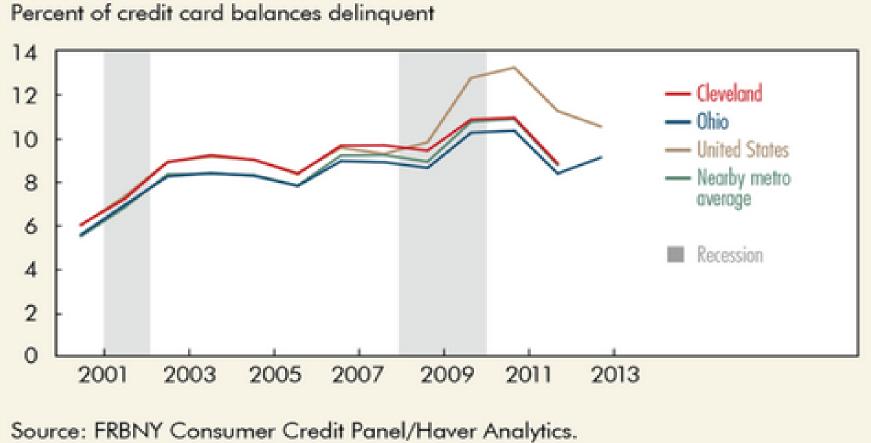


Regional Consumer Debt

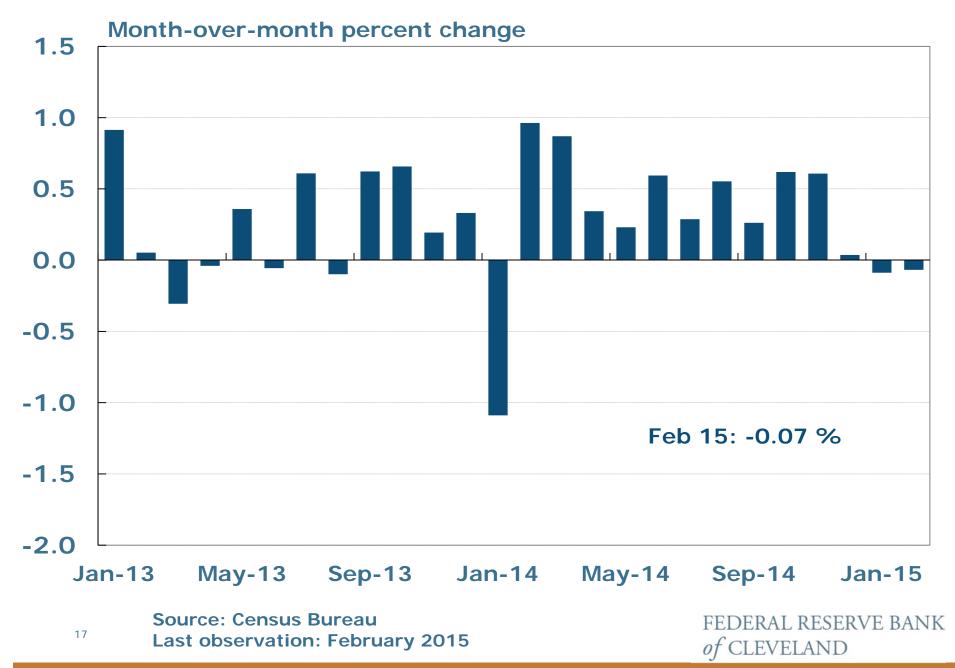


Source: FRBNY Consumer Credit Panel.

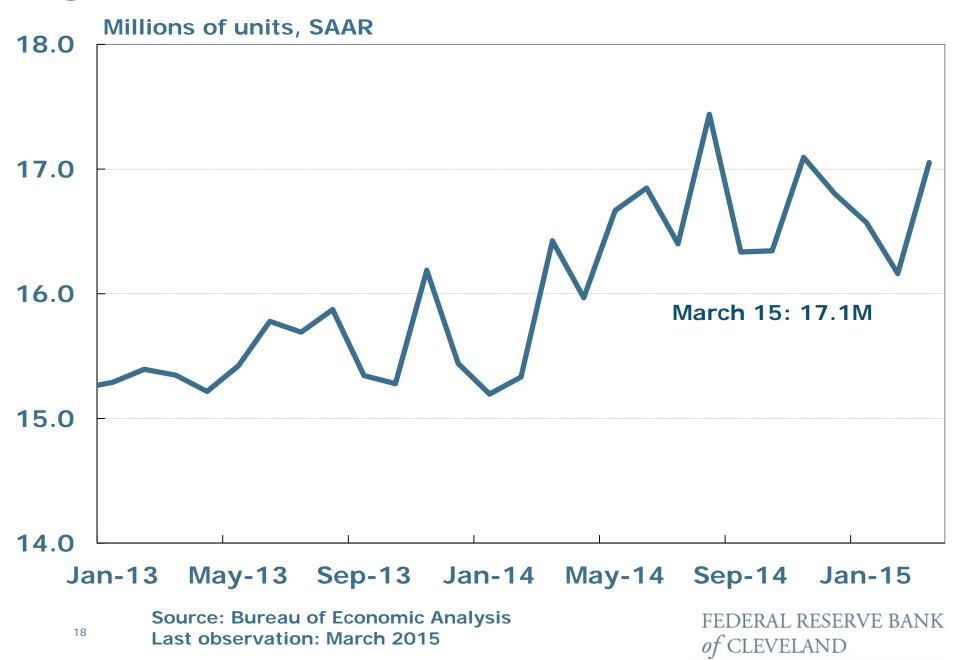
Regional Credit Card Delinquency



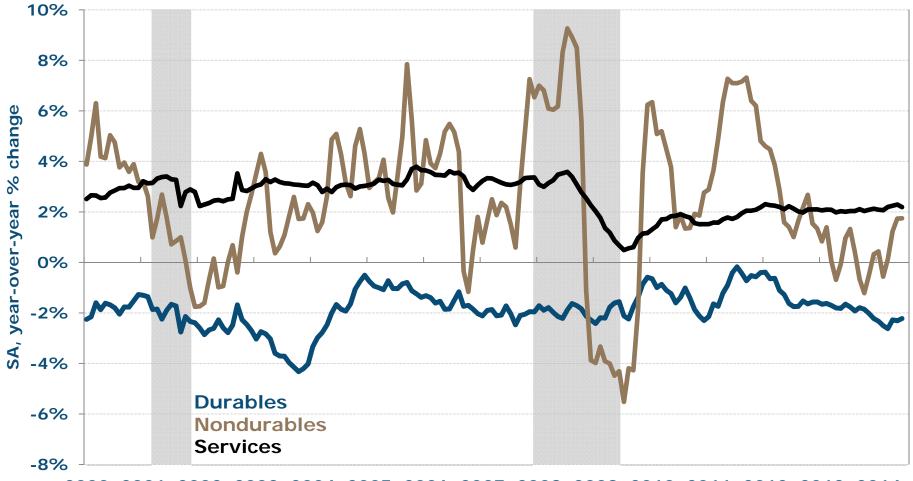
Core Retail Sales – Ex Gas and Autos



Light Vehicle Sales



PCE Inflation: Services, Durables and Non-Durables



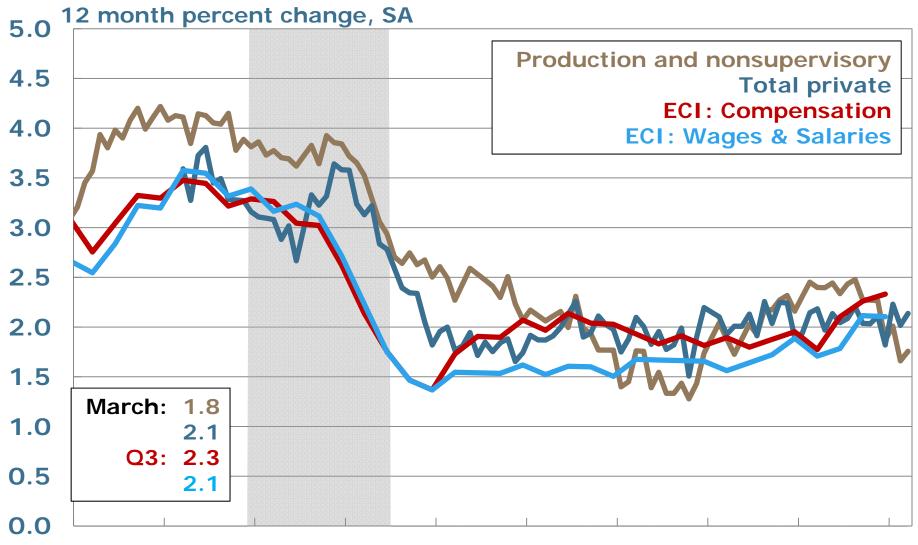
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Regional Per Capita Income



Source: Bureau of Economic Analysis/Haver Analytics.

Average Hourly Earnings and ECI

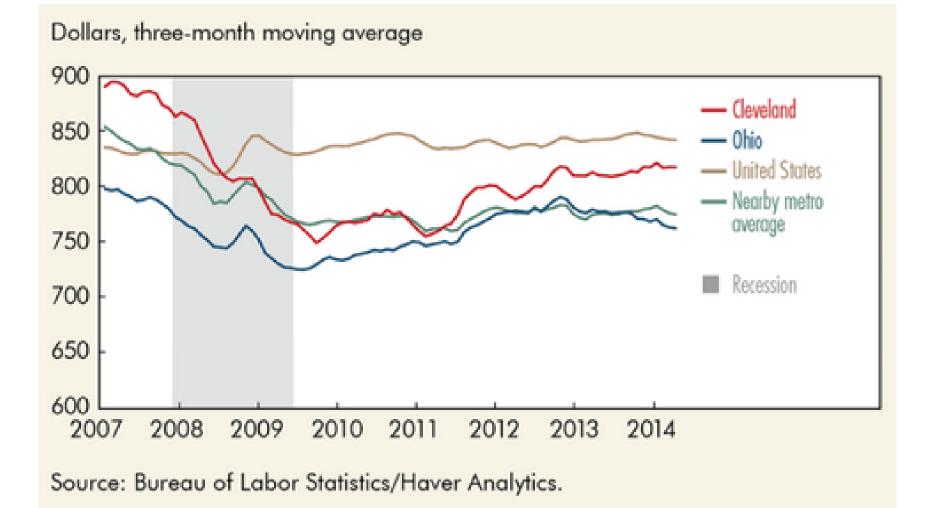


2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Source: Bureau of Labor Statistics Last observation: March 2015 & 2014Q3

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Regional Weekly Earnings

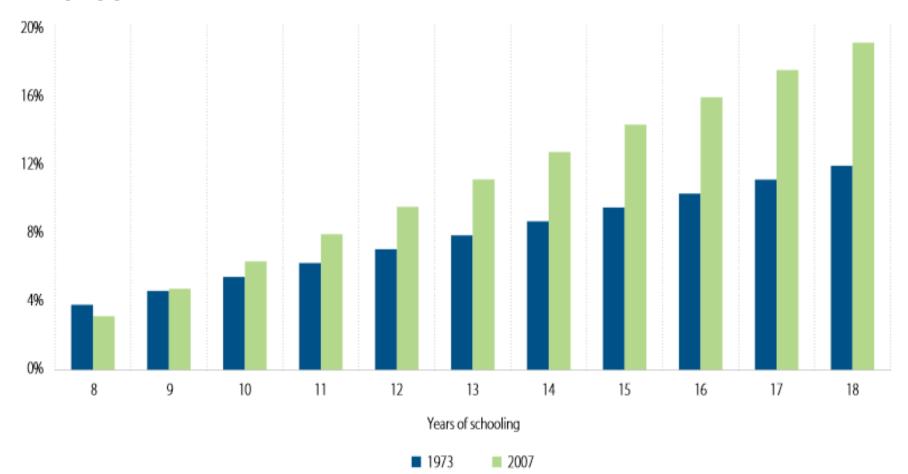


Demographics & Education

	Cleveland metro area		United States	
	2012	Change from 2009	2012	Change from 2009
Population	2,063,535	-0.8%	313,914,000	+2.3%
Adults with less than a high school diploma	11.5%	-0.8%	14.1%	-0.7%
Adults with an undergraduate degree or higher	28.5%	+1.6%	28.5%	+0.6%
Median age (years)	41.2	+1.0 years	37.4	+0.6 years
Median household income	\$48,733	-3.4%	\$53,329	-4.4%

Median Hourly Wage Gain by Years of Schooling: 1973-2007

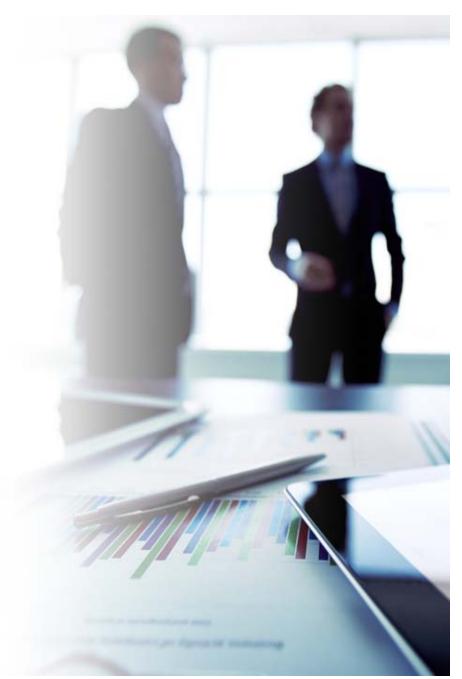
Percentage wage gain



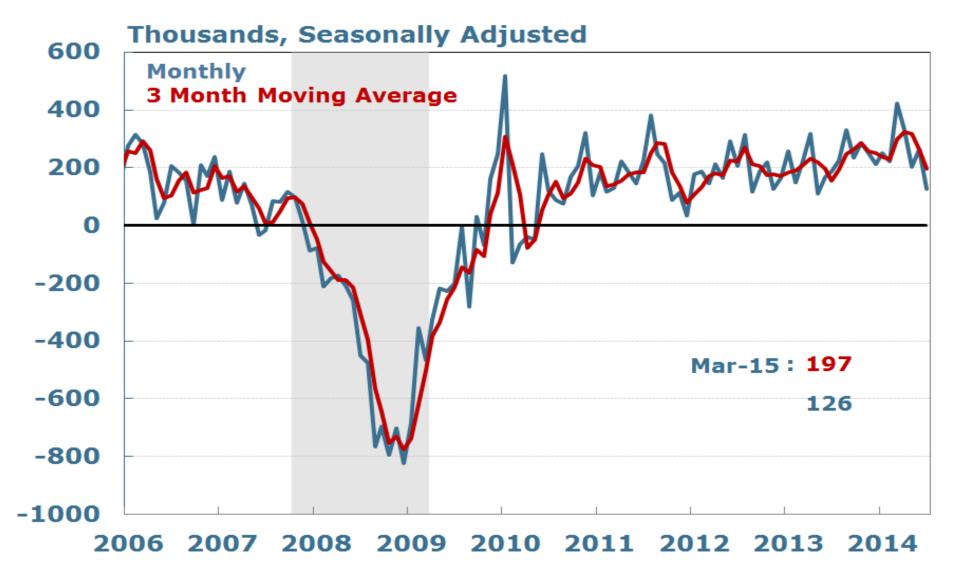
Source: David Autor (2010), The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings

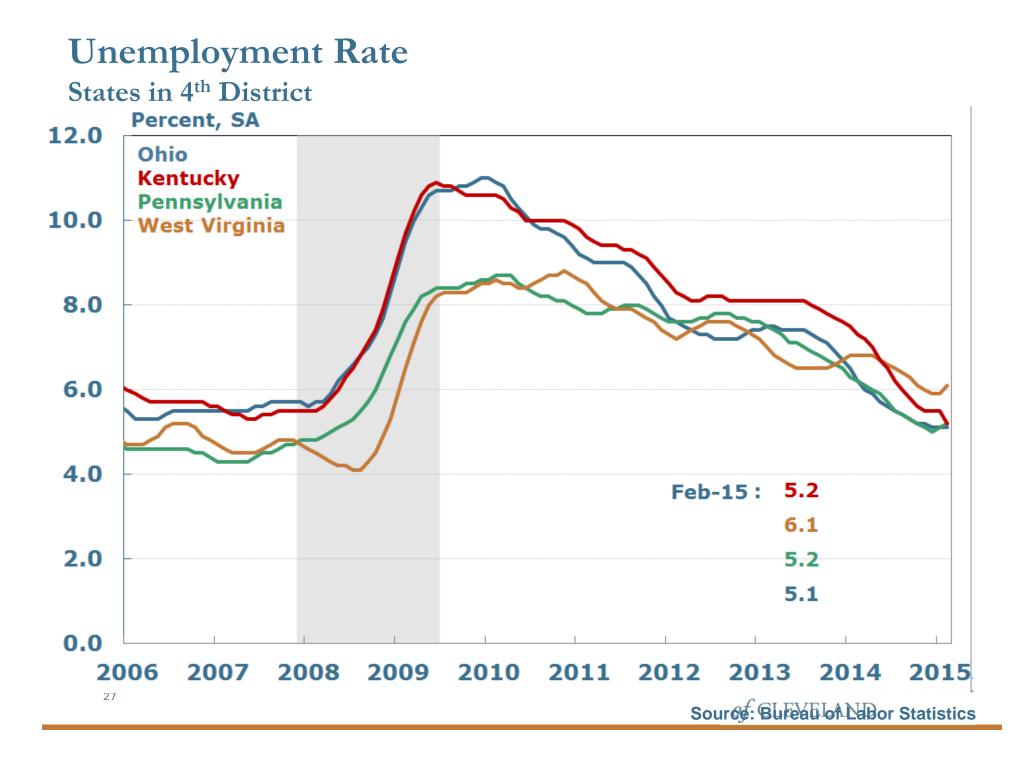
Labor Market

- Unemployment rates vary greatly across the Fourth District, with a majority at or below their 20-year average unemployment rate by county.
- Cleveland's unemployment rate has dropped to 5.6 percent in February from a peak of 8.9 percent in December 2009.
- Cleveland's recovery from the Great Recession has been stronger than during the 2001 recession.

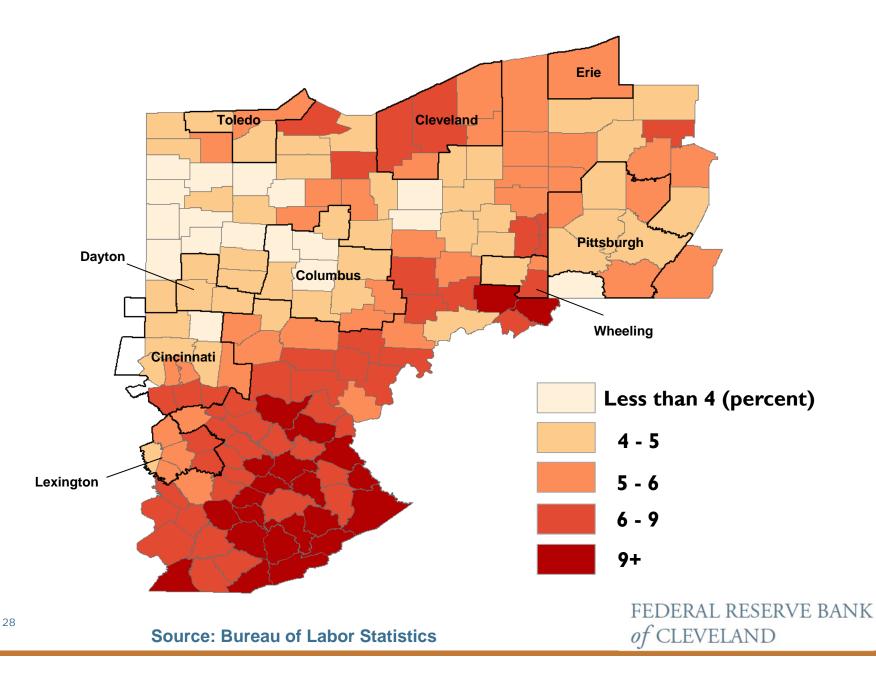


Total Payroll Employment Change





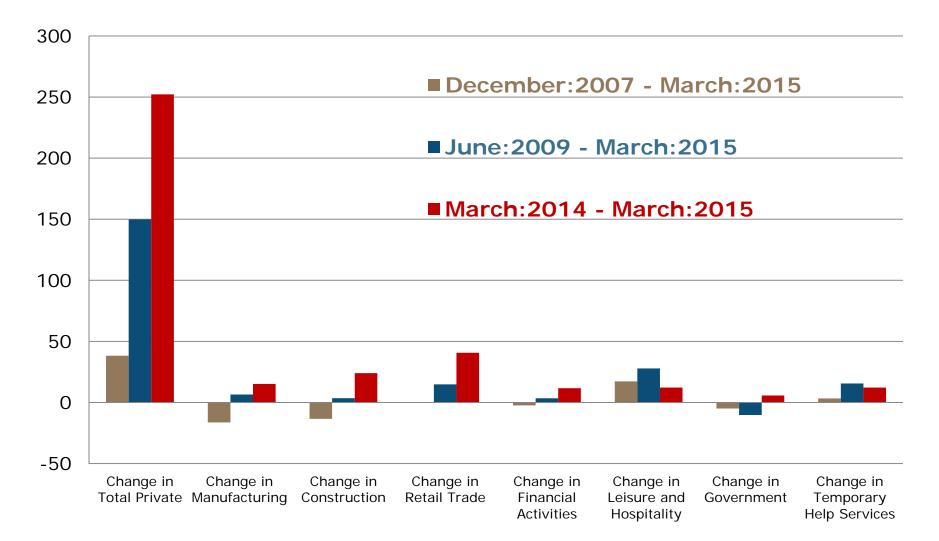
Fourth District County Unemployment Rates



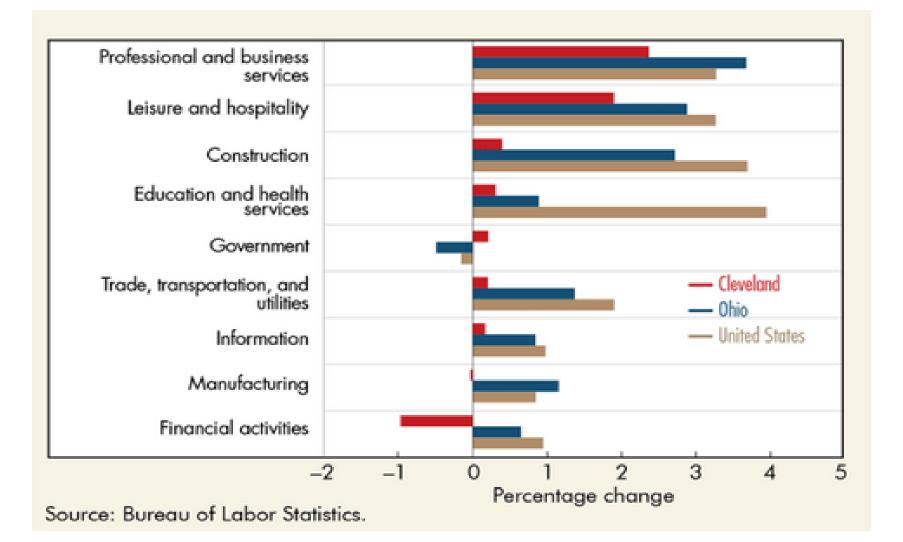
Regional Employment Growth



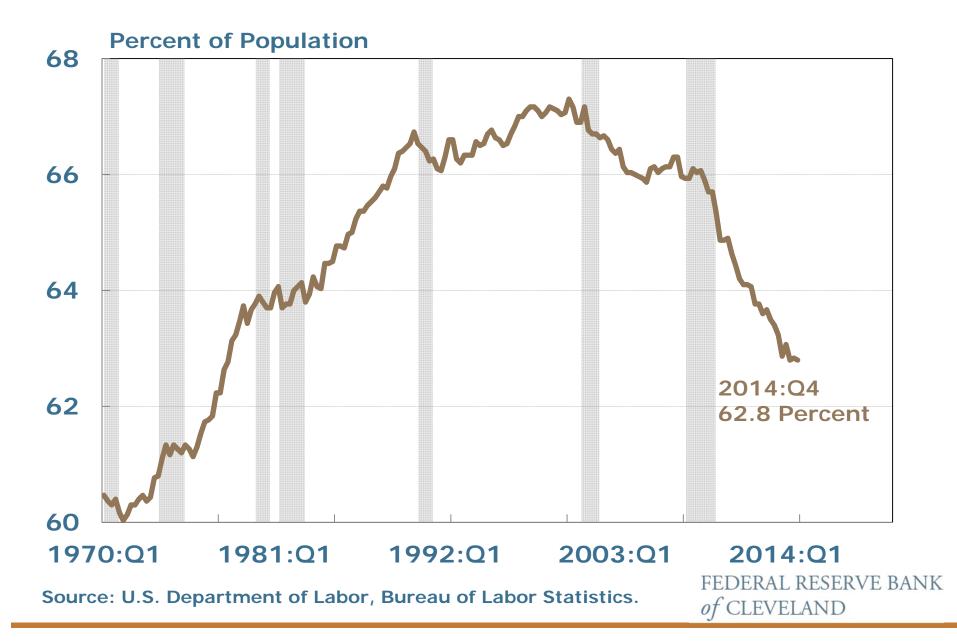
Average Employment Growth



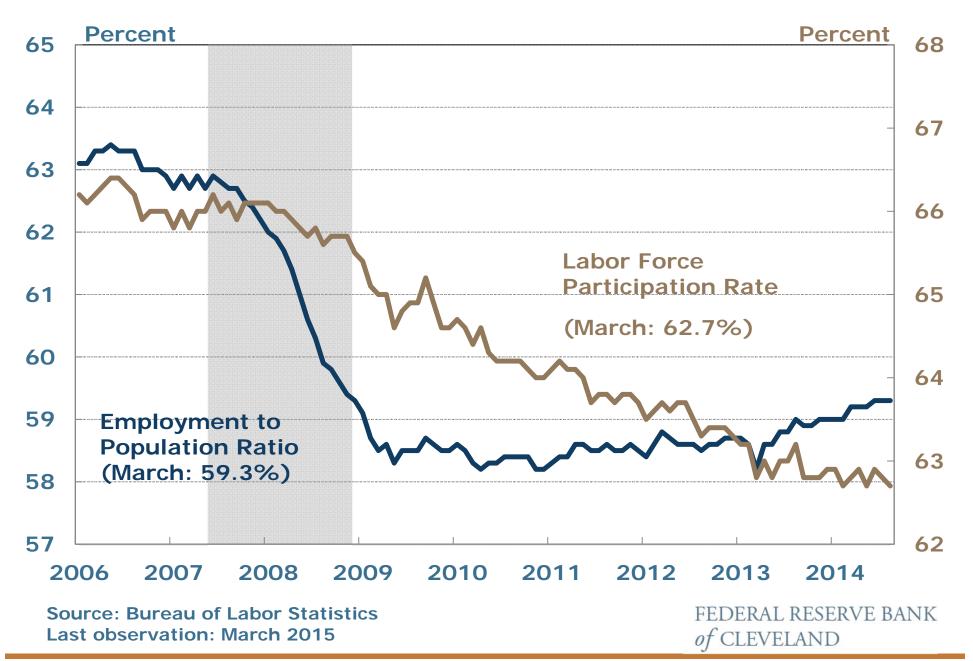
Regional Employment by Industrial Sector



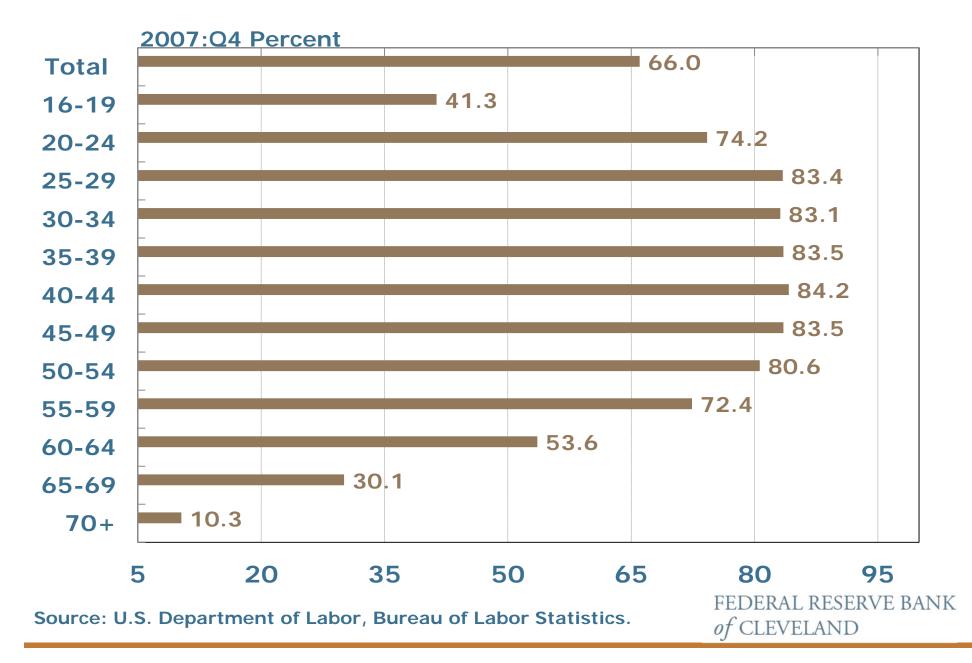
Aggregate Labor Force Participation Rate



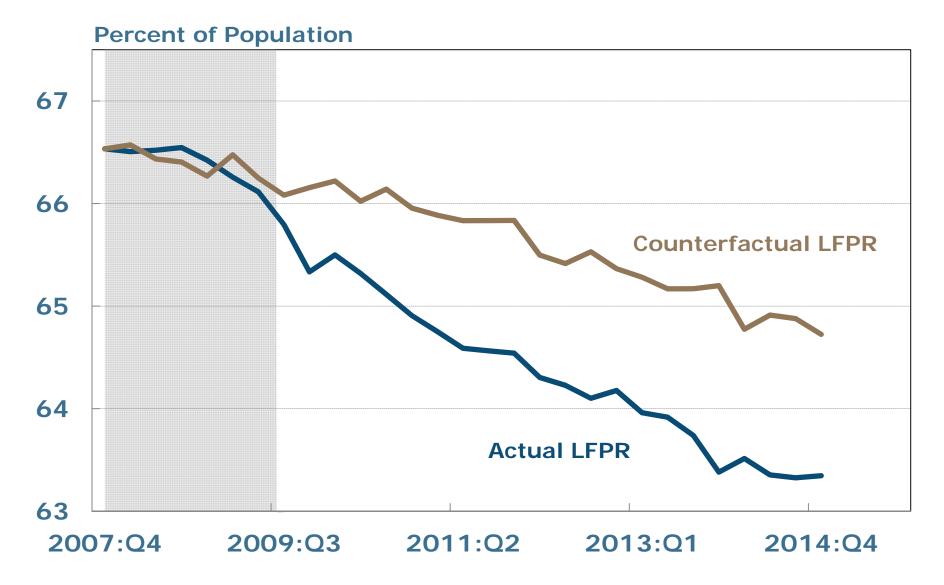
Participation and Employment



Labor Force Participation Rate by Age Group



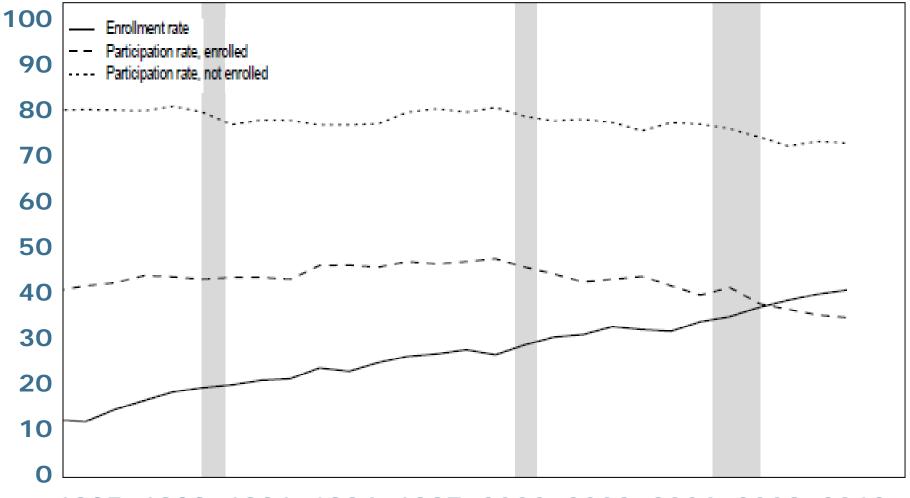
Contribution of Aging to LFPR



Source: U.S. Department of Labor, Bureau of Labor Statistics and staff calculations.

LFPR of Young Persons by Enrollment Status

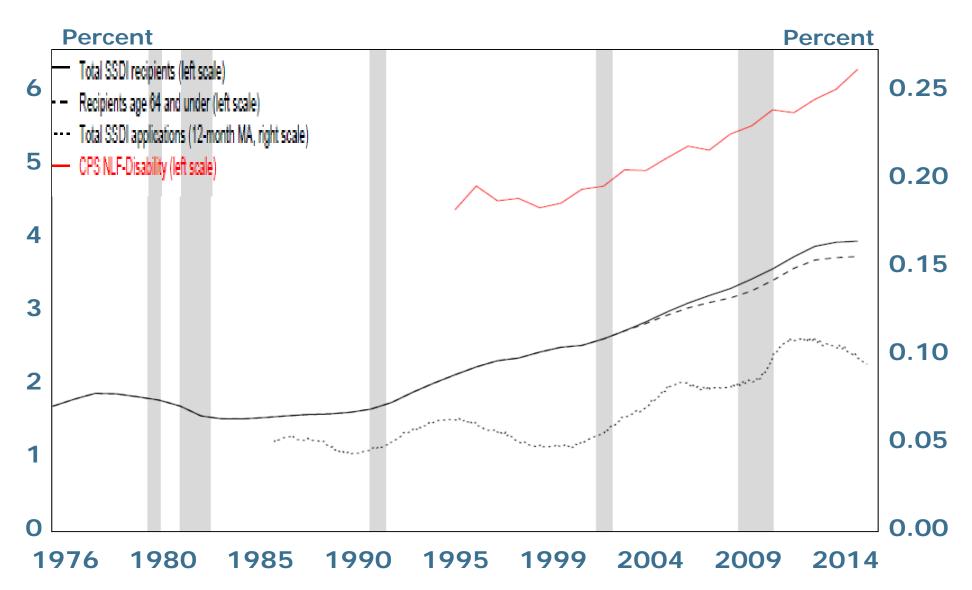
Percent of Population Age 19-24



1985 1988 1991 1994 1997 2000 2003 2006 2009 2012

Source: Brookings Paper.

Disability Recipients & Applications



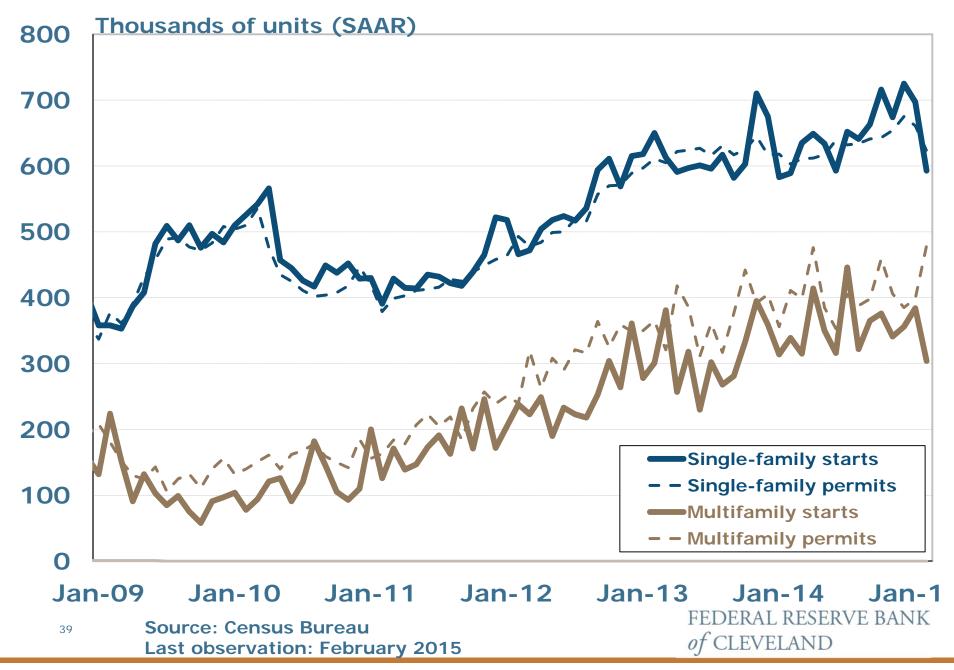
Source: Brookings Paper.

Residential and Commercial Real-Estate

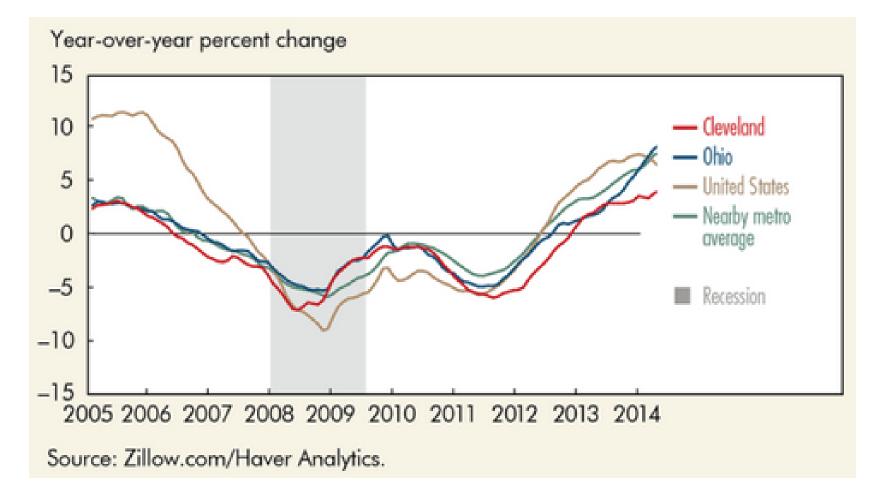
- Year-to-date housing metrics showed mixed results across geographic regions of the District.
- Regionally, home sales in southwest Pennsylvania rose by almost 4 percent yearover-year, while in eastern Kentucky, growth was slightly positive. However, year-over-year sales in Ohio declined by almost 3 percent.
- The improvement in nonresidential construction that began a year ago continues. Builders report moderate to robust pipelines and they are happy with their backlogs going into 2015.



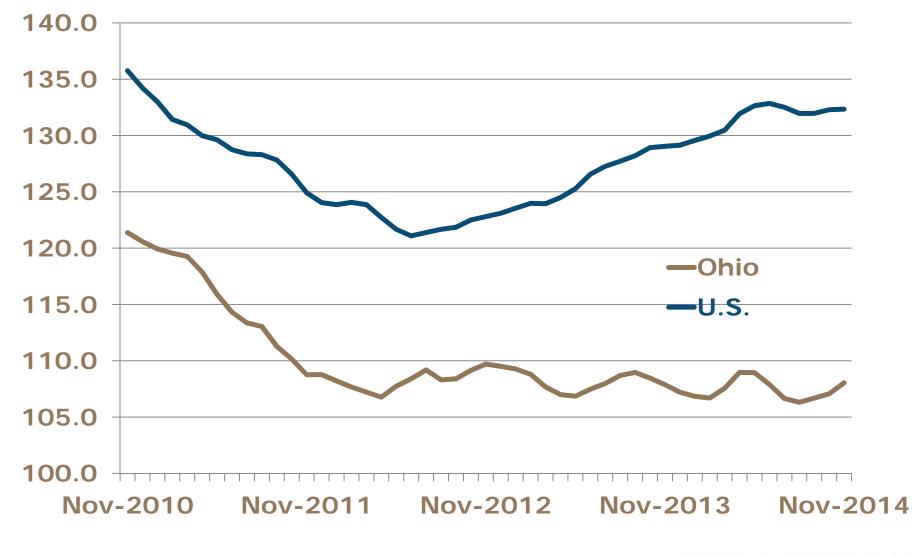
Housing Starts



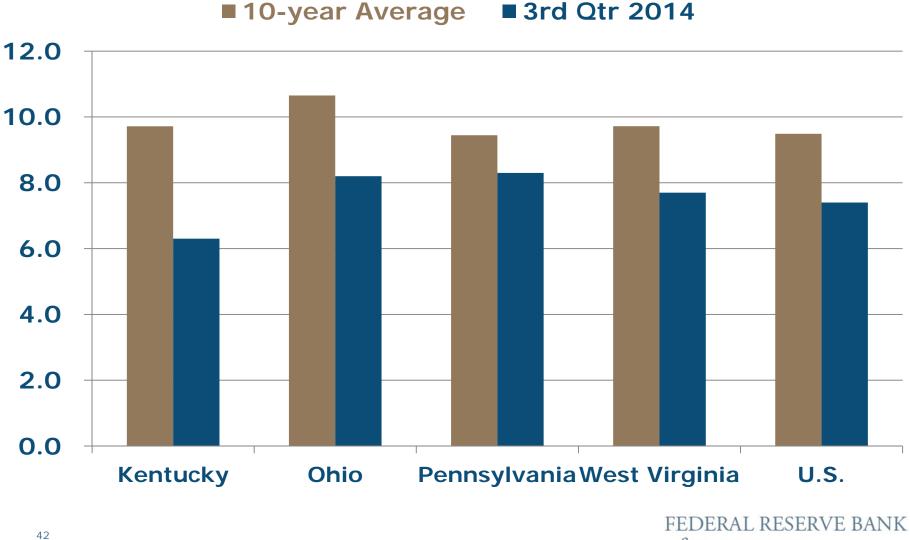
Regional Home Prices



Home Price to Rent Ratio



Rental Vacancy Rates are below 10-year average nationally and at District level.



Source: U.S. Census Bureau

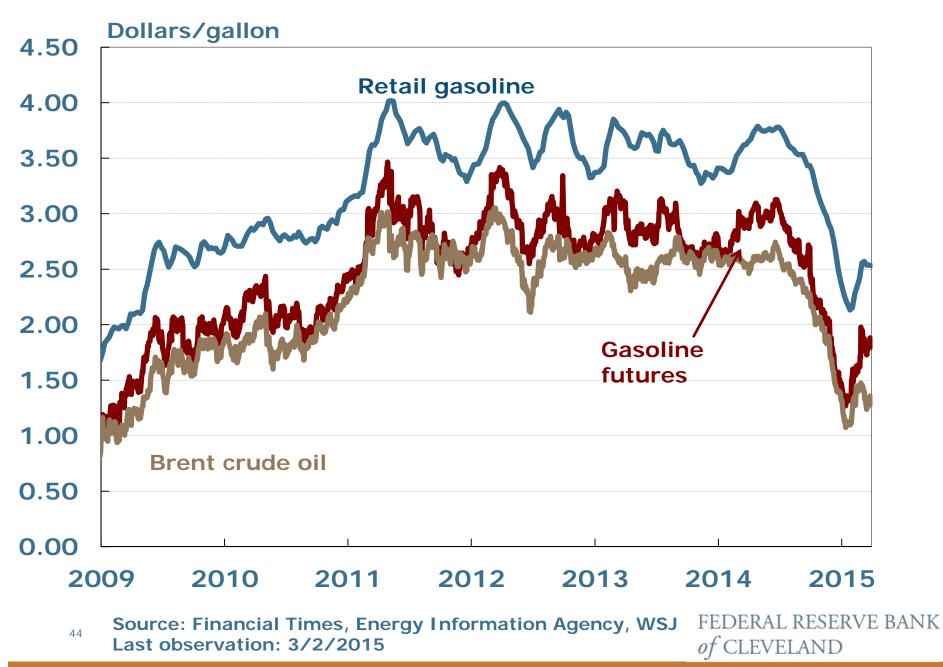
of CLEVELAND

Fourth District Oil & Gas Activity

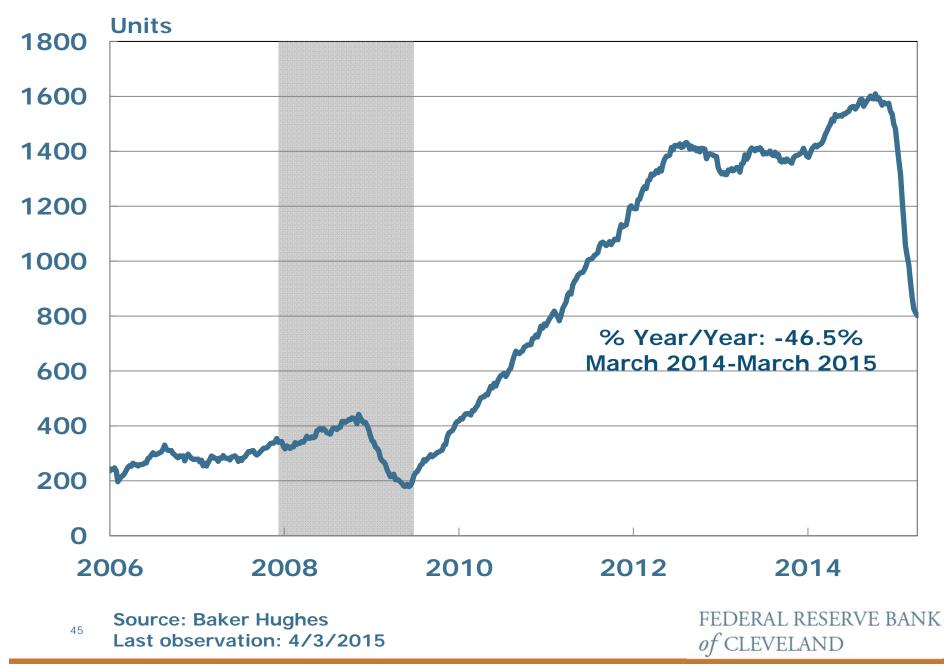
- District Active Oil Drilling Rigs have yet to decline appreciably in response to market oversupply and declining oil prices
- Employment in the District's Mining and Logging sector have yet to suffer appreciable losses in response to oil & gas price declines



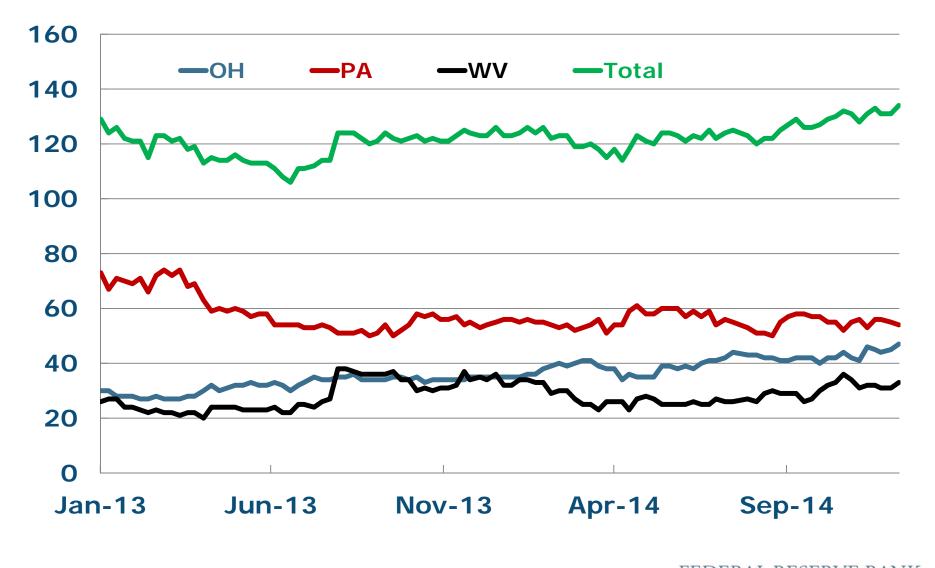
Oil and Gasoline Prices



Active Oil Rig Count

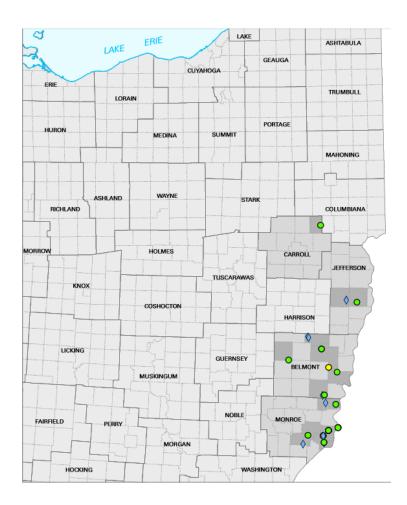


Active Drilling Rigs Within District



Source: Baker & Hughes

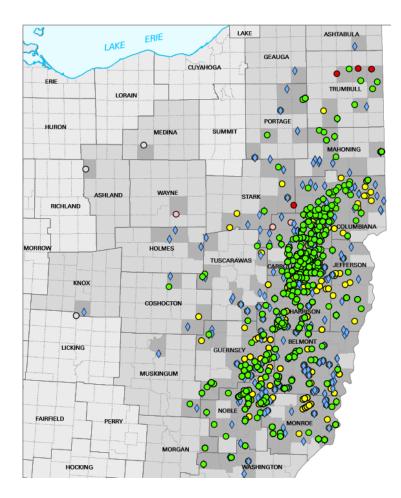
Horizontal Marcellus Well Activity



Horizontal well status as of 4/4/2015

- PERMITTED-(Permitted; Not Drilled; Canceled) (15)
- DRILLED-(Drilling; Well Drilled) (15)
- PRODUCING-(Producing; Plugged Back) (13)
- INACTIVE-(Drilled Inactive; Shut in) (1)
- Lost Hole or Final Restoration (0)
- O Dry and Abandoned (0)
- O Plugged and Abandoned (0)

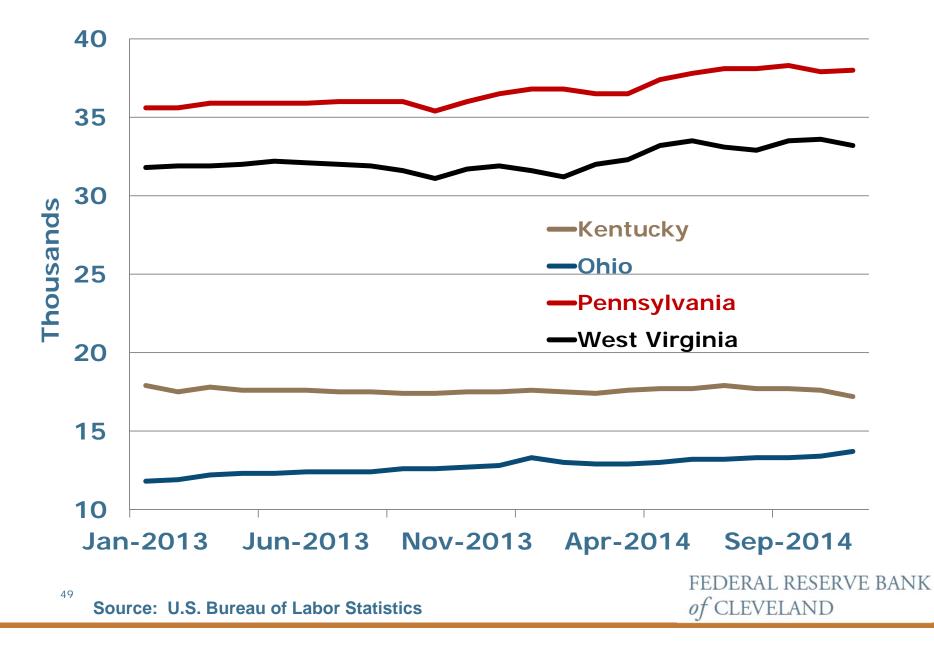
Horizontal Utica – Pt Pleasant Well Activity



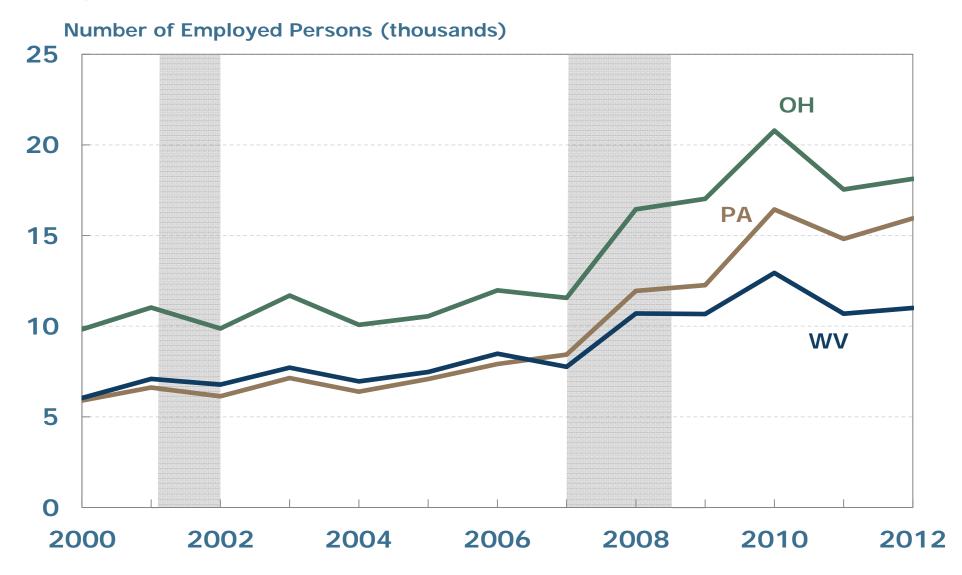
Horizontal well status as of 4/4/2015

- PERMITTED-(Permitted; Not Drilled; Canceled) (448)
- DRILLED-(Drilling; Well Drilled) (544)
- PRODUCING-(Producing; Plugged Back) (839)
- INACTIVE-(Drilled Inactive; Shut in) (10)
- Lost Hole or Final Restoration (24)
- O Dry and Abandoned (3)
- O Plugged and Abandoned (0)

Mining and Logging Employment Levels

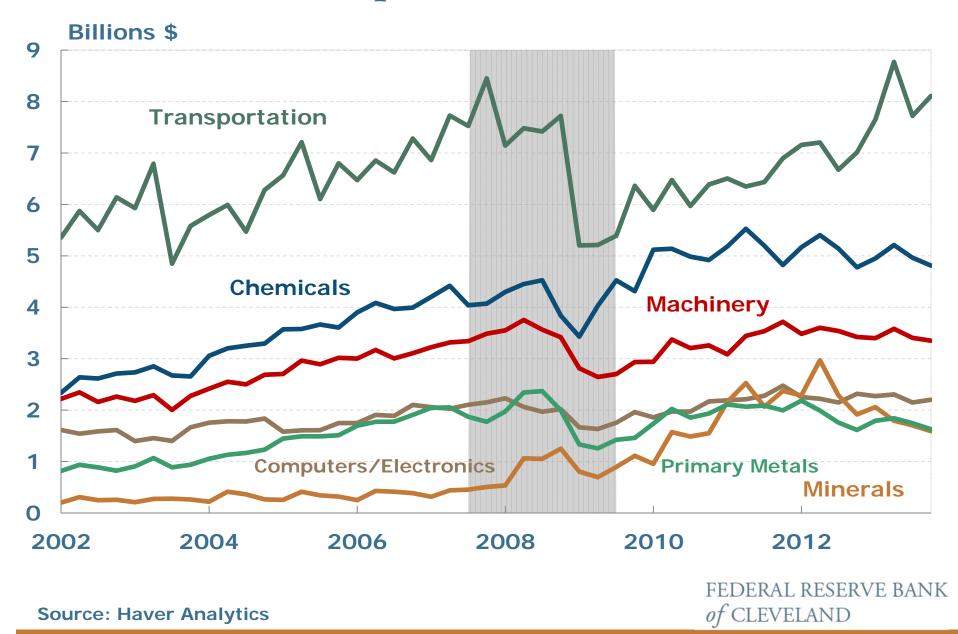


Regional Employment in Oil and Gas

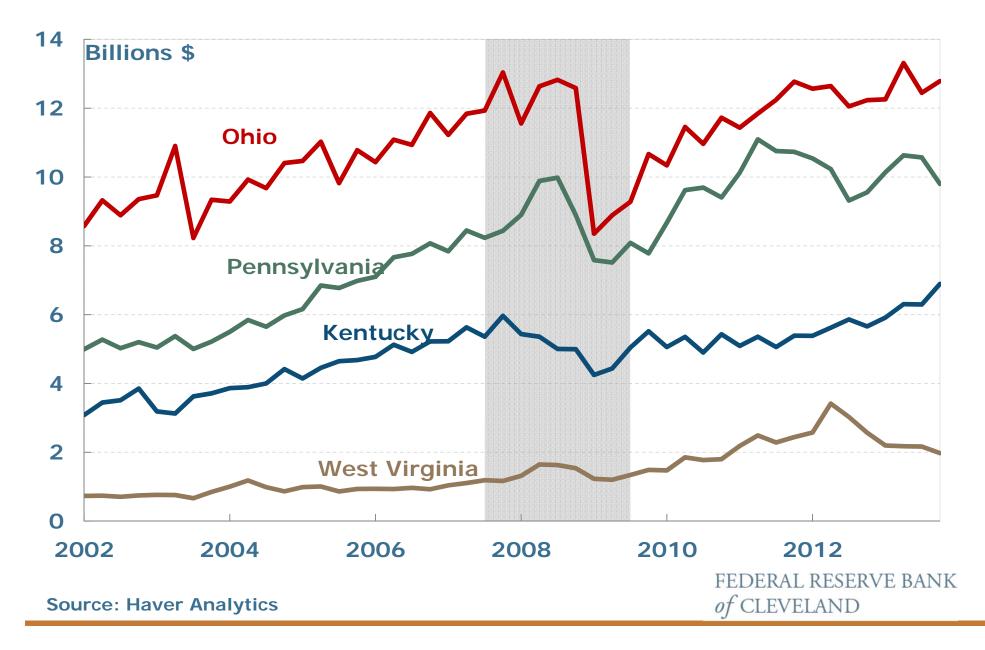


Source: Bureau of Economic Analysis Note: Oil & Gas Employment includes O&G Extraction and Support Activities

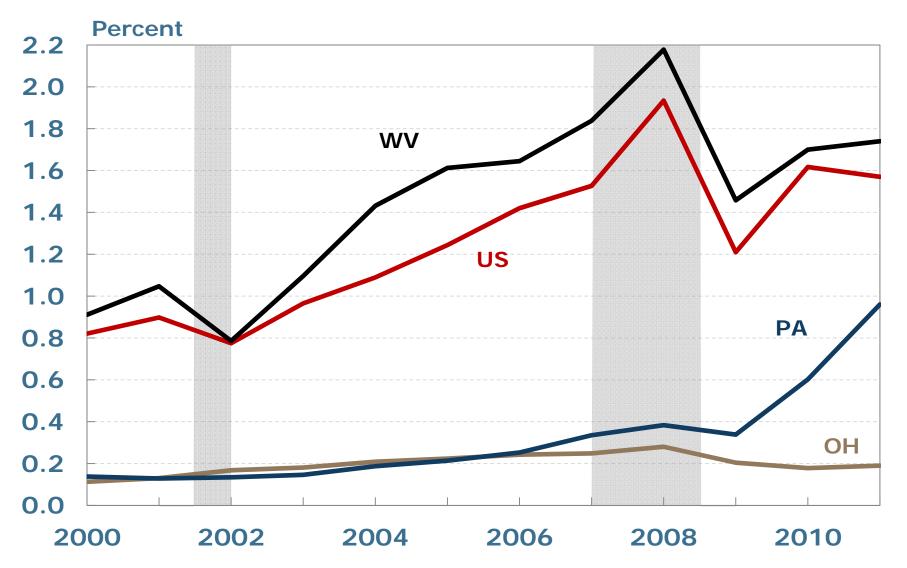
Fourth District Exports



Value of Total State Exports



Oil and Gas Share of Gross State Product



Source: Bureau of Economic Analysis Note: Oil & Gas Share includes O&G Extraction and Support Activities

Thank You.

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