

Economic Outlook Webinar

Presented to
Northwest Energy Efficiency Council

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February 22, 2013



WASHINGTON STATE
ECONOMIC AND REVENUE FORECAST COUNCIL



Summary

- As the world economy recovers, energy prices are expected to rise
- Improved energy efficiency has slowed energy demand
- The WA and U.S. economic forecasts have been fairly consistent since early 2012 – slow growth and relatively weak labor markets
- Uncertainty in the baseline remains very high, mostly due to on-going concerns about Europe, China, and gridlock on federal budget issues
- The housing sector appears to have stabilized and is now an upside risk to the forecast



Overview

- Energy
 - Prices
 - Consumption
 - Residential trends
- Washington economy
 - Risks
 - Overview
 - Housing and construction



Energy

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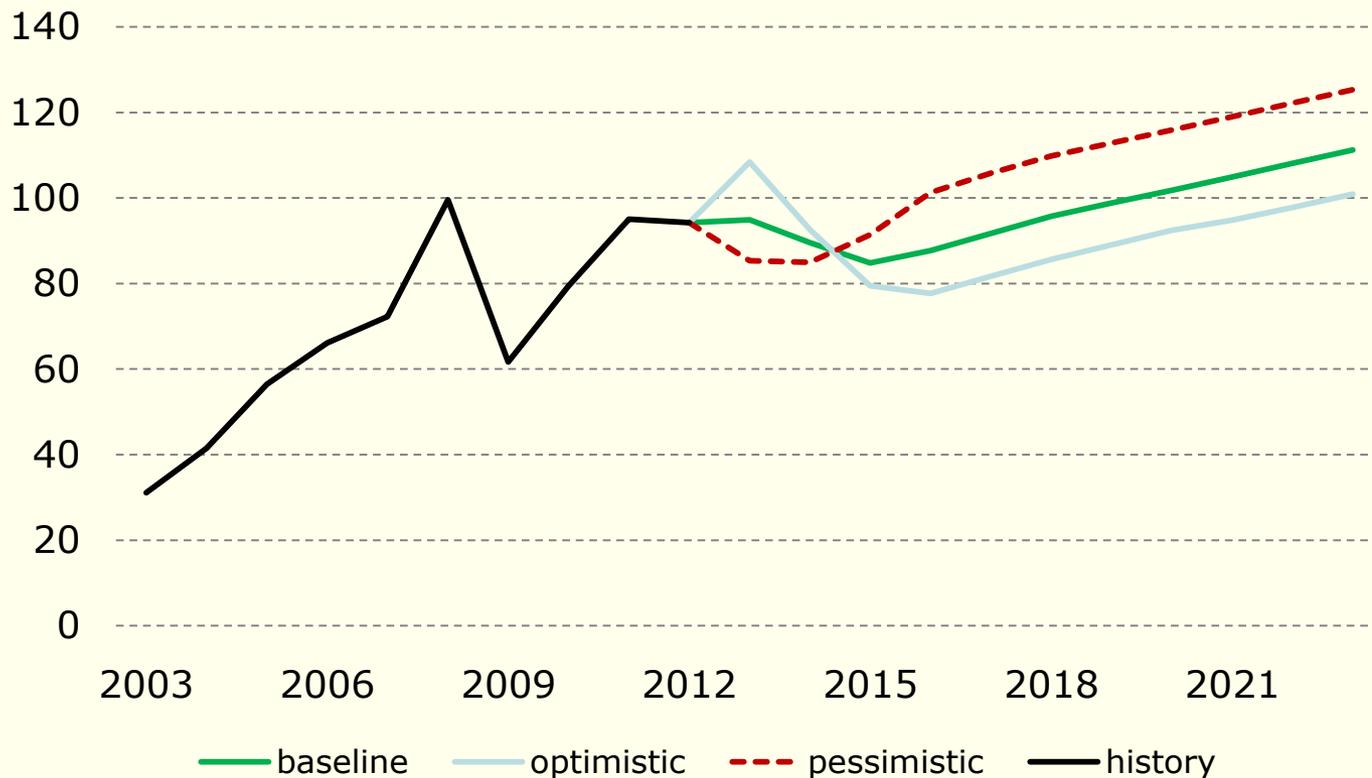
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Oil price – history and forecast scenarios

West Texas Intermediate, \$ per barrel

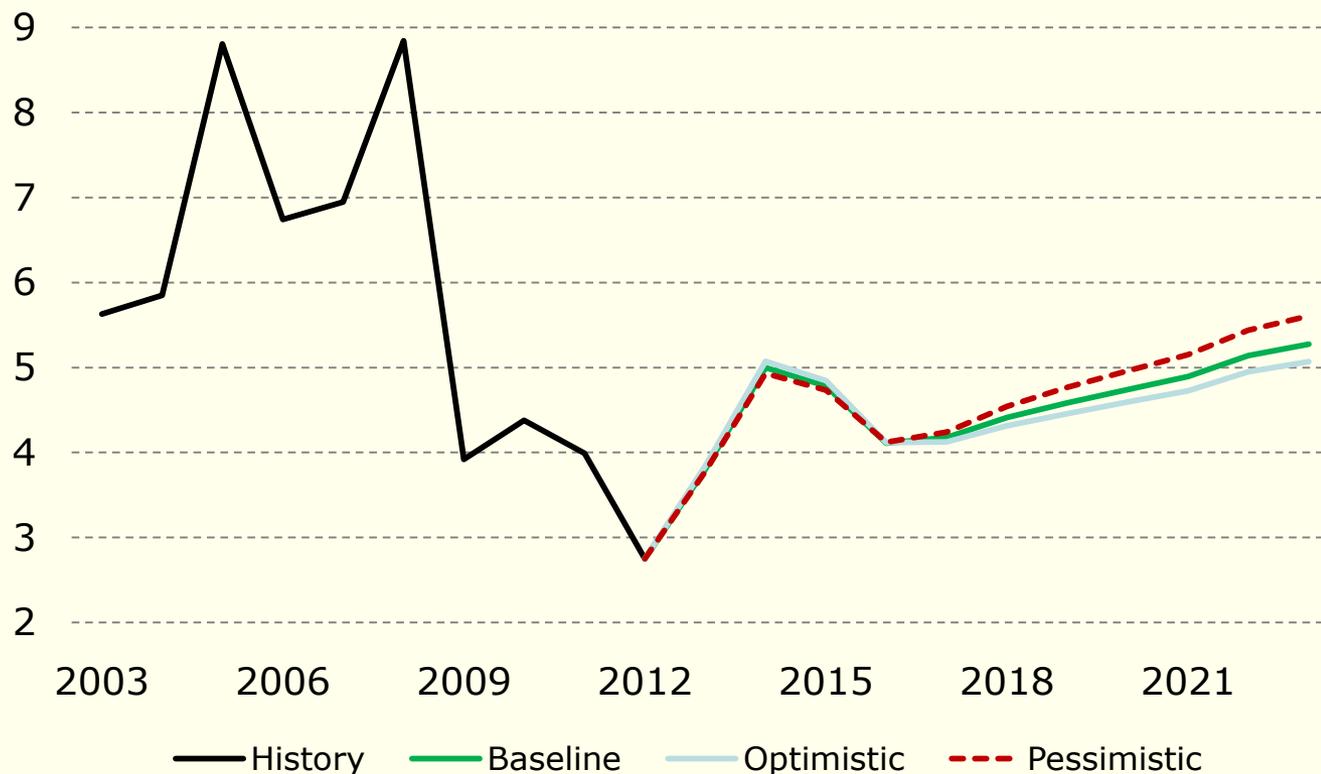


• Source: IHS Global insight



Natural gas price – history and forecast scenarios

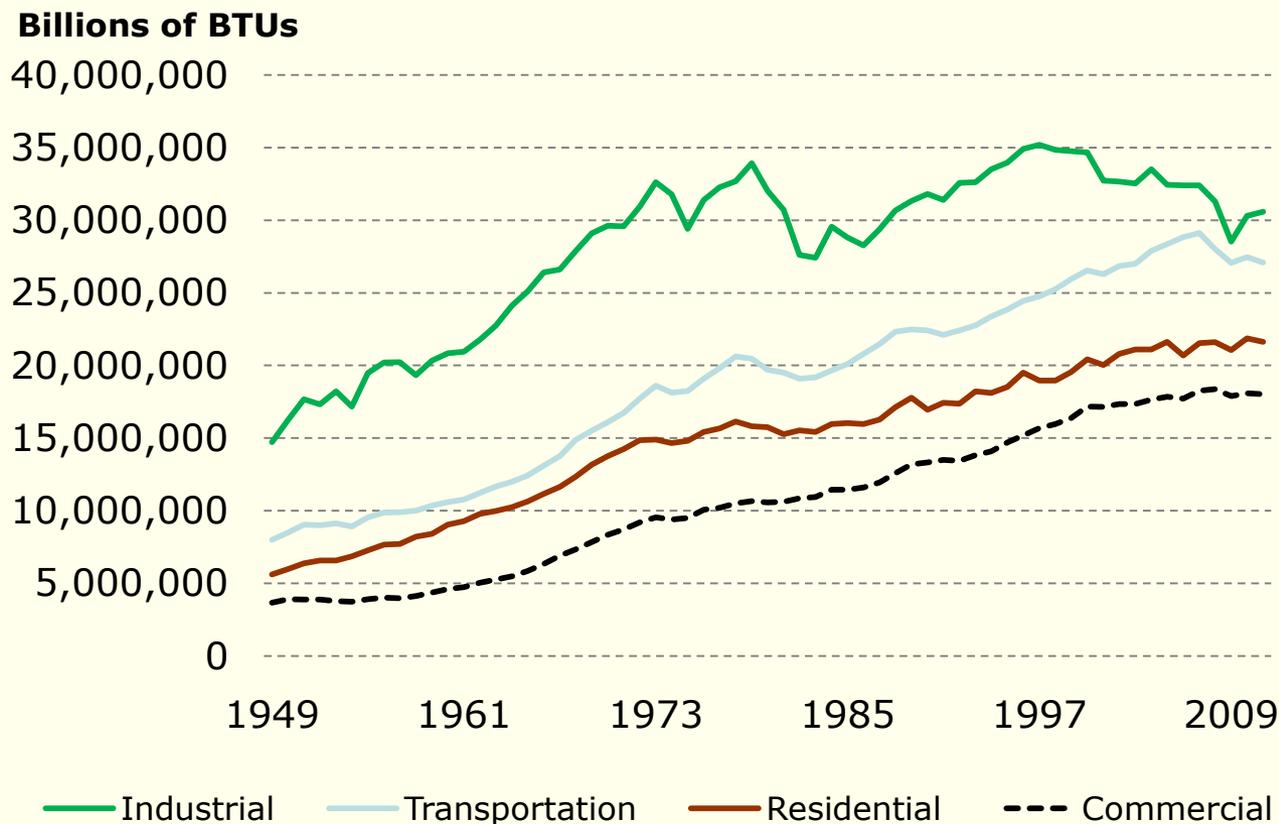
Henry Hub market price, \$ per million BTU



• Source: IHS Global Insight



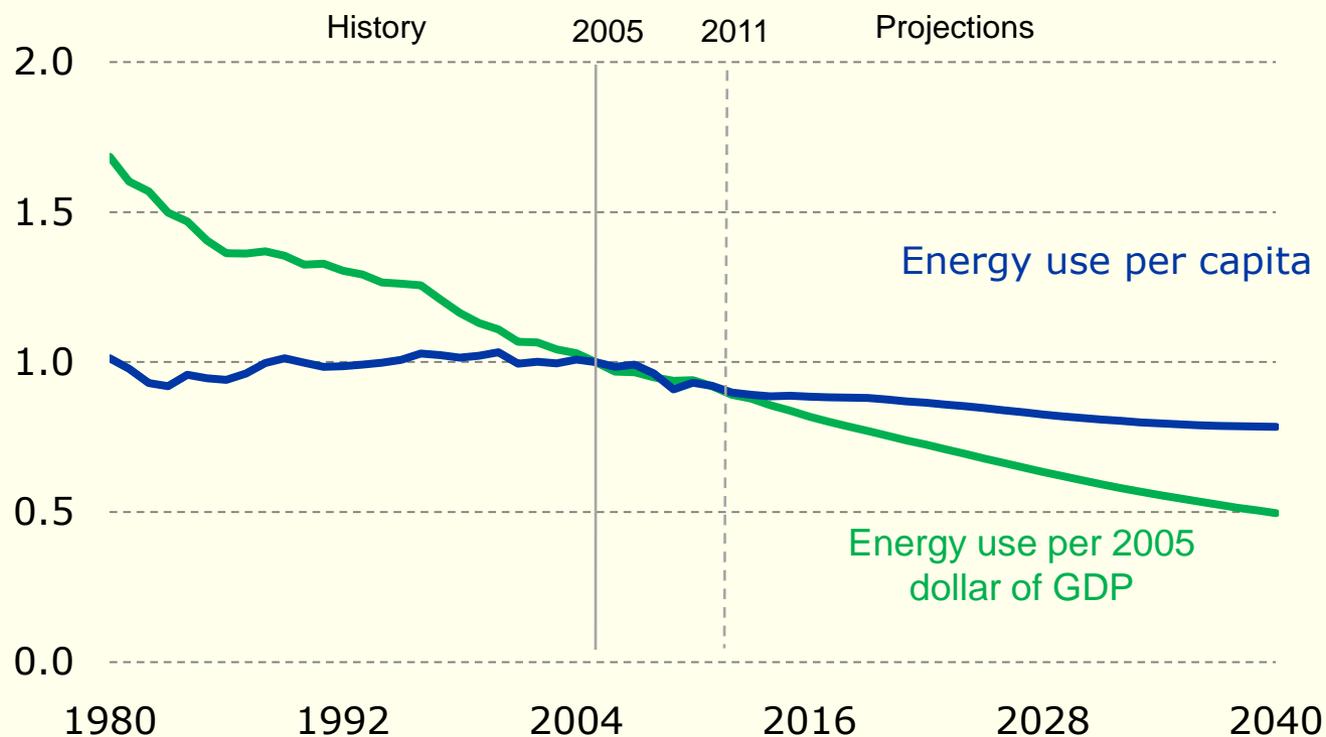
U.S. Energy Consumption by Sector (billions BTUs)





Energy per dollar of GDP and per-capita energy use continue to decline

Energy intensity index, 2005=1

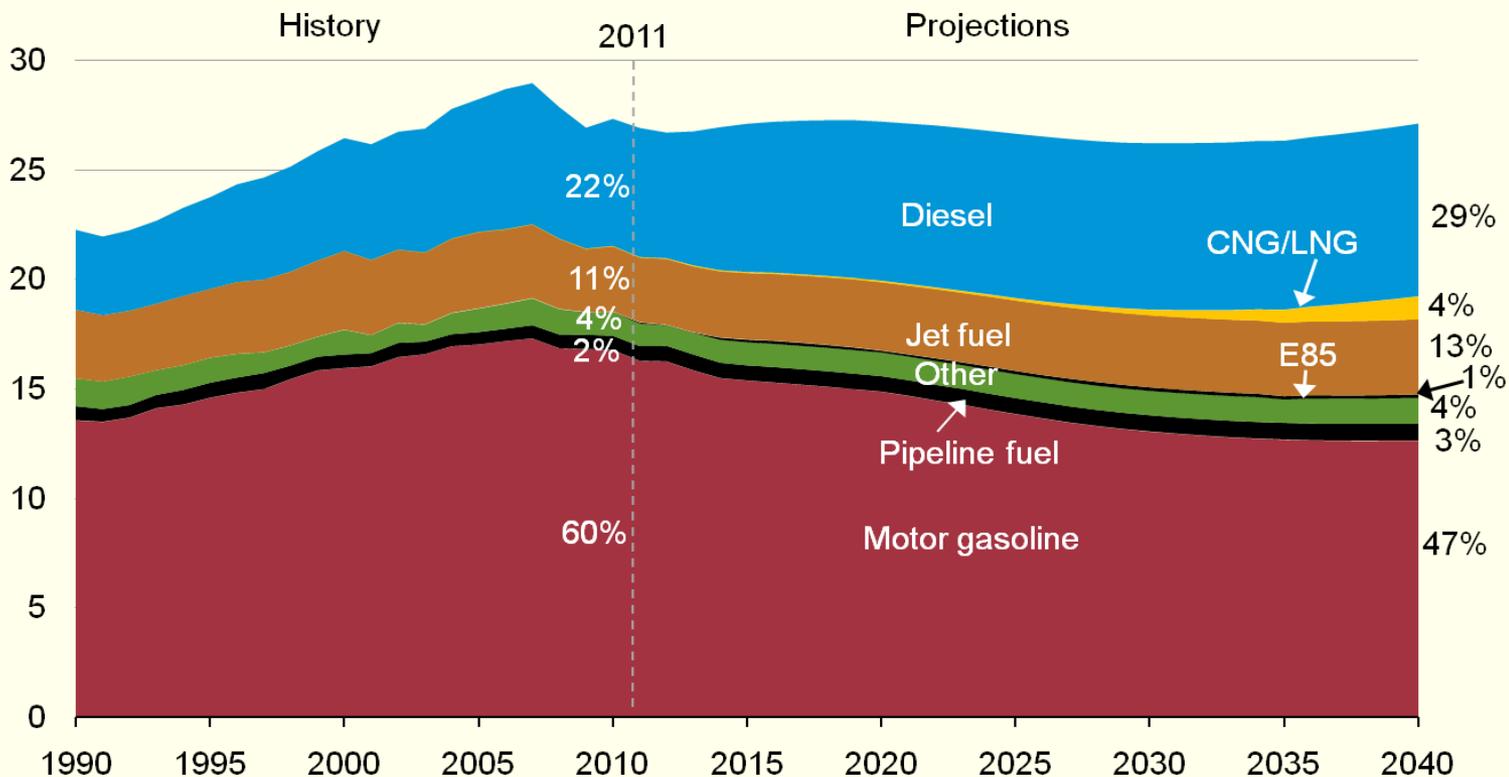


Source: U.S. Dept of Energy, Annual Energy Outlook 2013 Early Release



Transportation sector motor gasoline demand declines

Transportation energy consumption by fuel quadrillion Btu

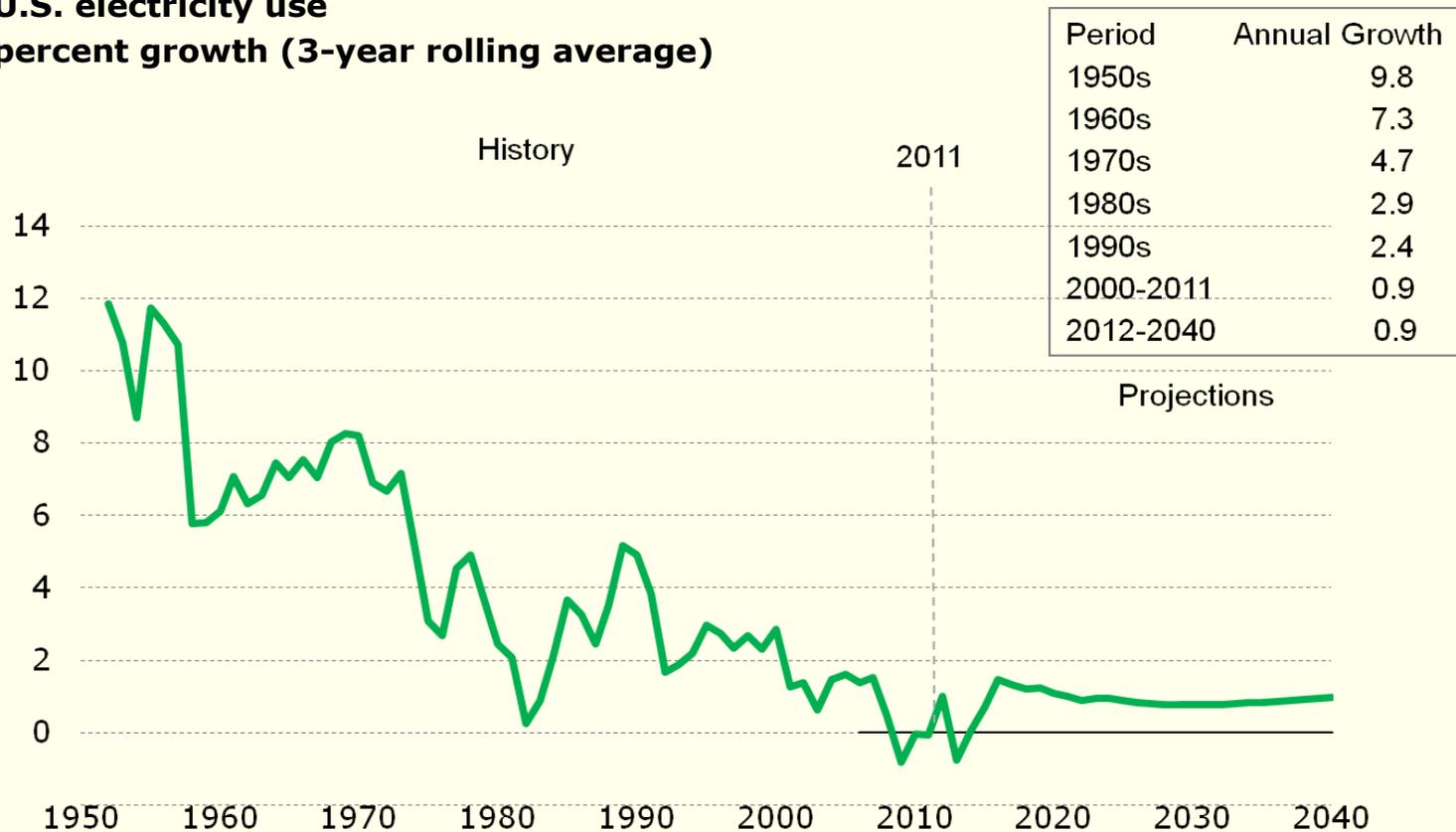


Source: EIA, Annual Energy Outlook 2013 Early Release



Growth in electricity use slows, but still increases by 28% from 2012 to 2040

U.S. electricity use percent growth (3-year rolling average)

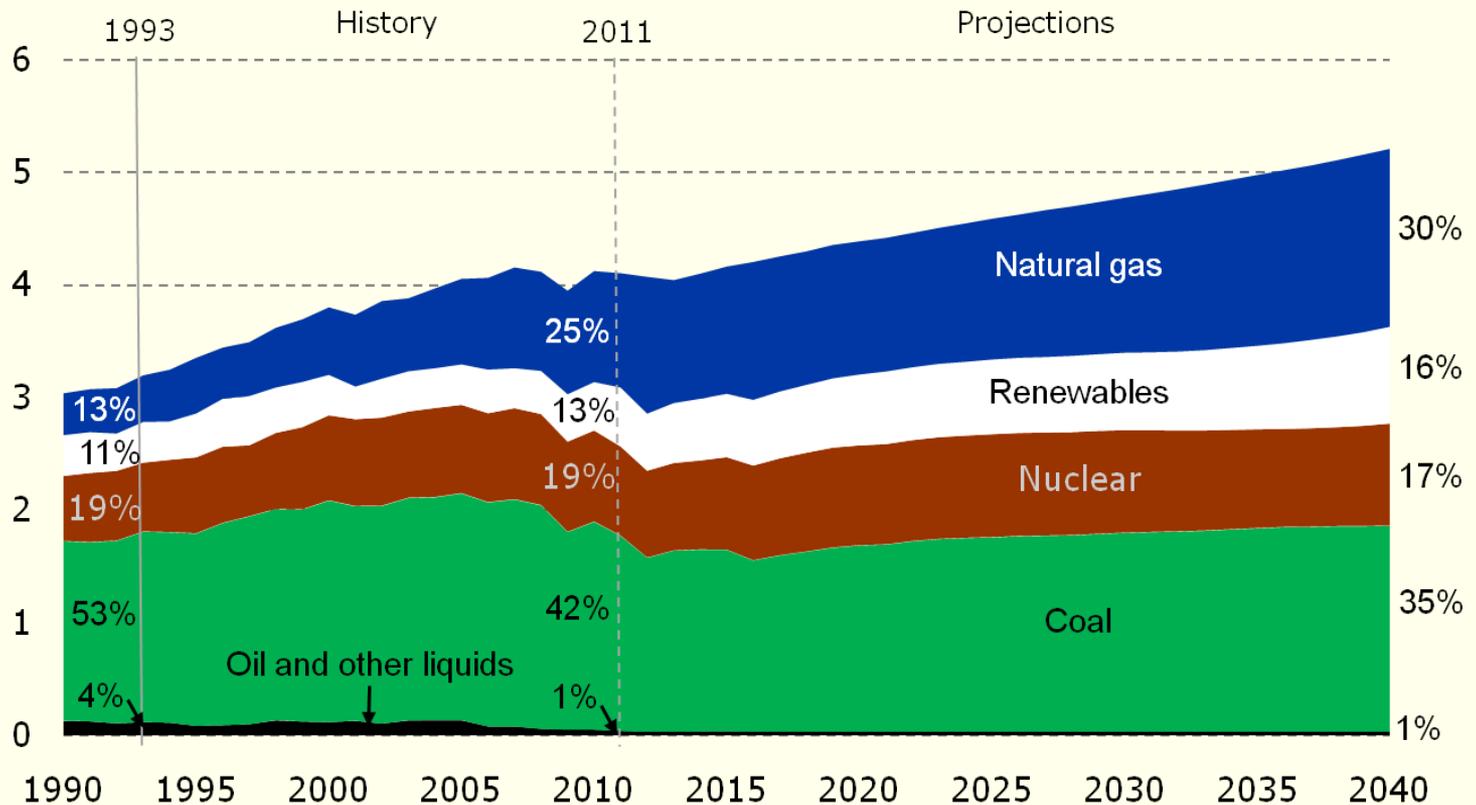


Source: U.S. Dept of Energy, Annual Energy Outlook 2013 Early Release



Over time the electricity mix shifts toward natural gas and renewables, but coal remains the largest fuel source

**U.S. electricity net generation
trillion kilowatt hours**

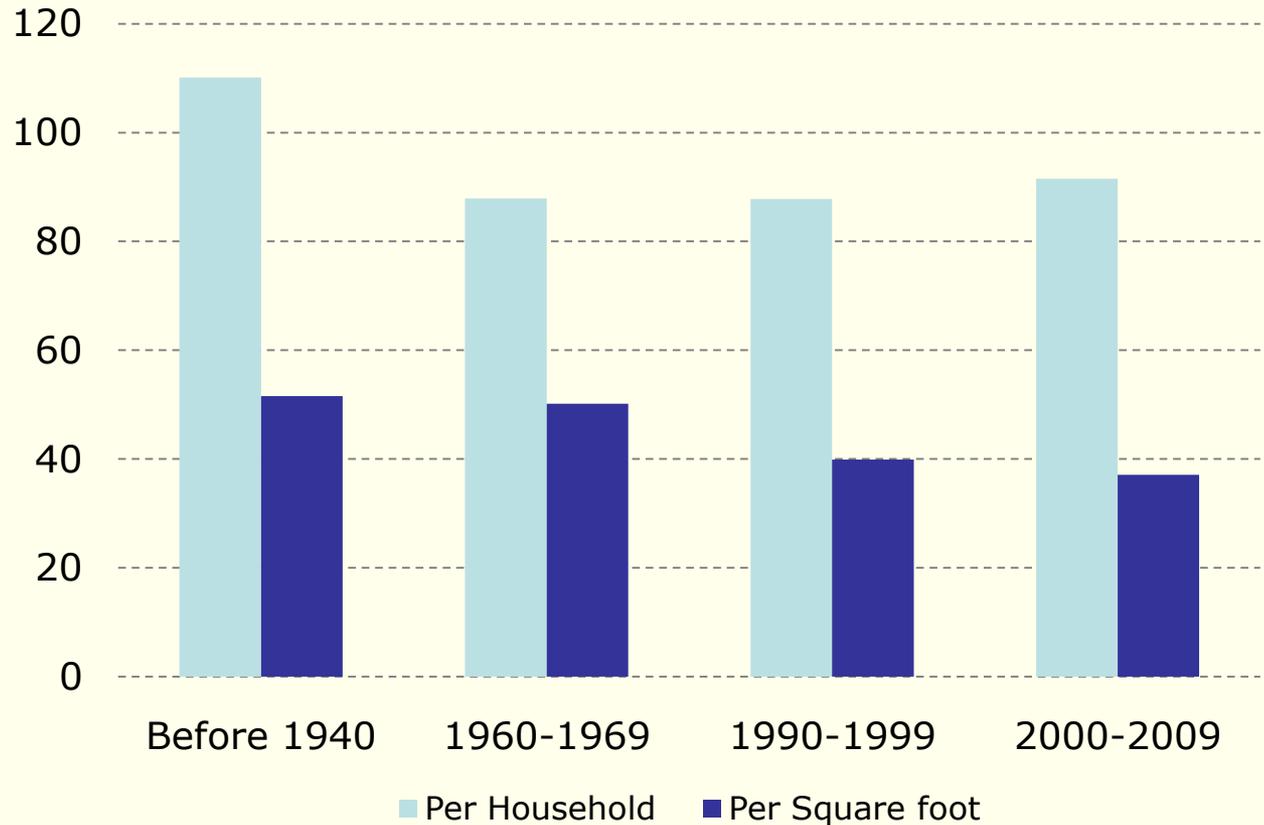


Source: U.S. Dept of Energy, Annual Energy Outlook 2013 Early Release



Residential Energy Use by Year of Construction

Millions Btu per Household
Thousands Btu per square foot



Source: U.S. Dept Of Energy, Residential Energy Consumption Survey

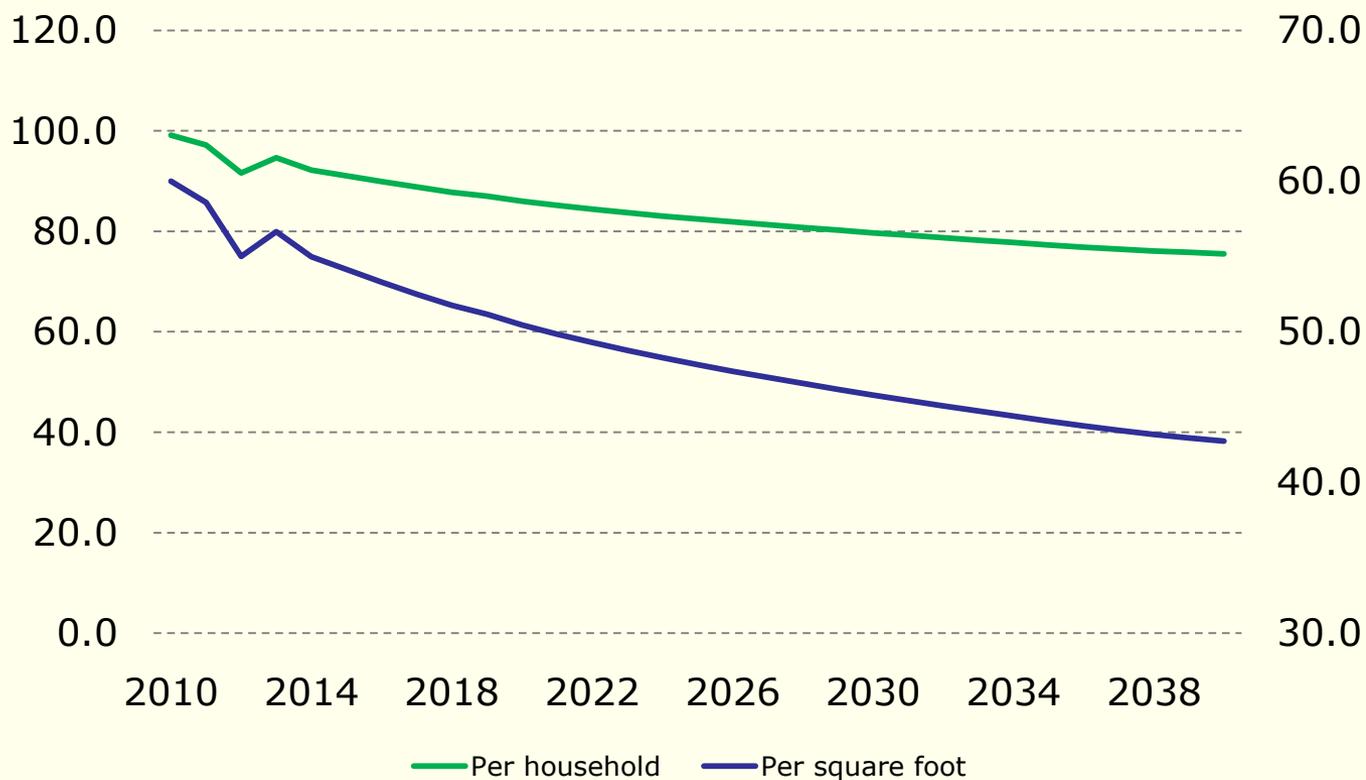
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Residential Energy Intensity is Declining

Millions Btu per household

Thousands Btu per square foot

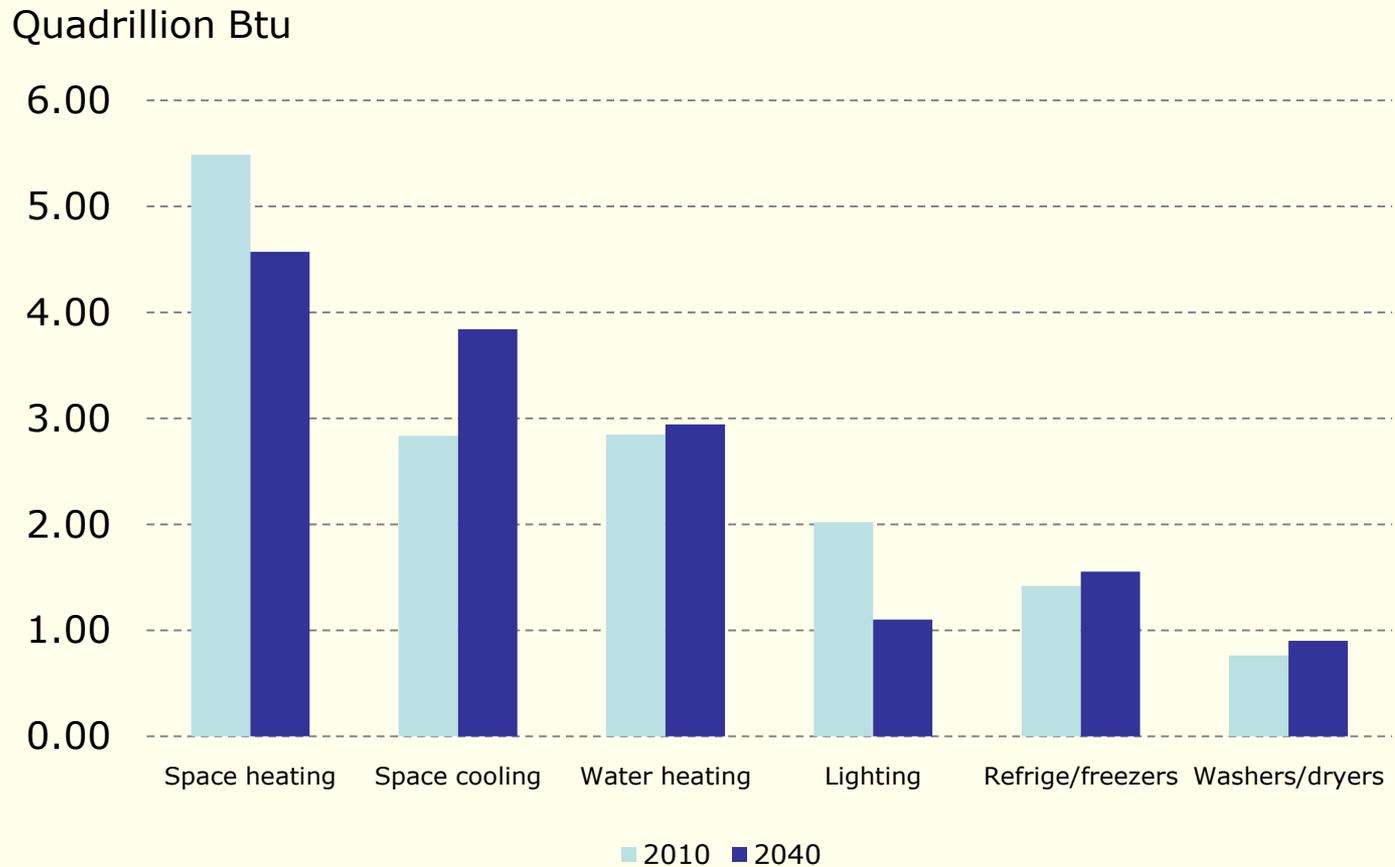


Source: U.S. Dept of Energy, Annual Energy Outlook 2013 Early Release

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Residential Energy Consumption by End Use



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Source: U.S. Dept of Energy, Annual Energy Outlook 2013 Early Release

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Washington Economy

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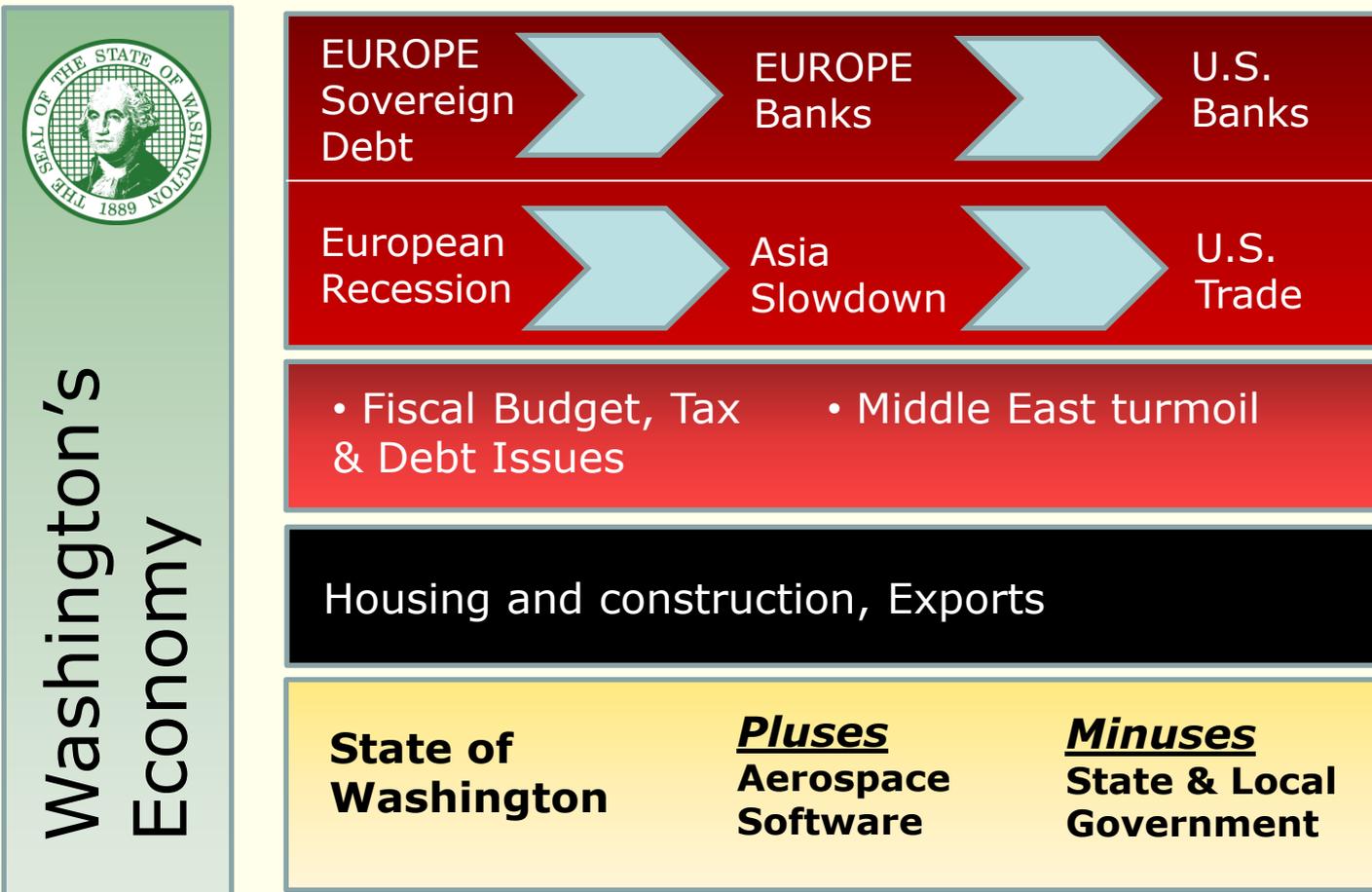
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The state's risk matrix shows most risks from outside state



Source: ERFC

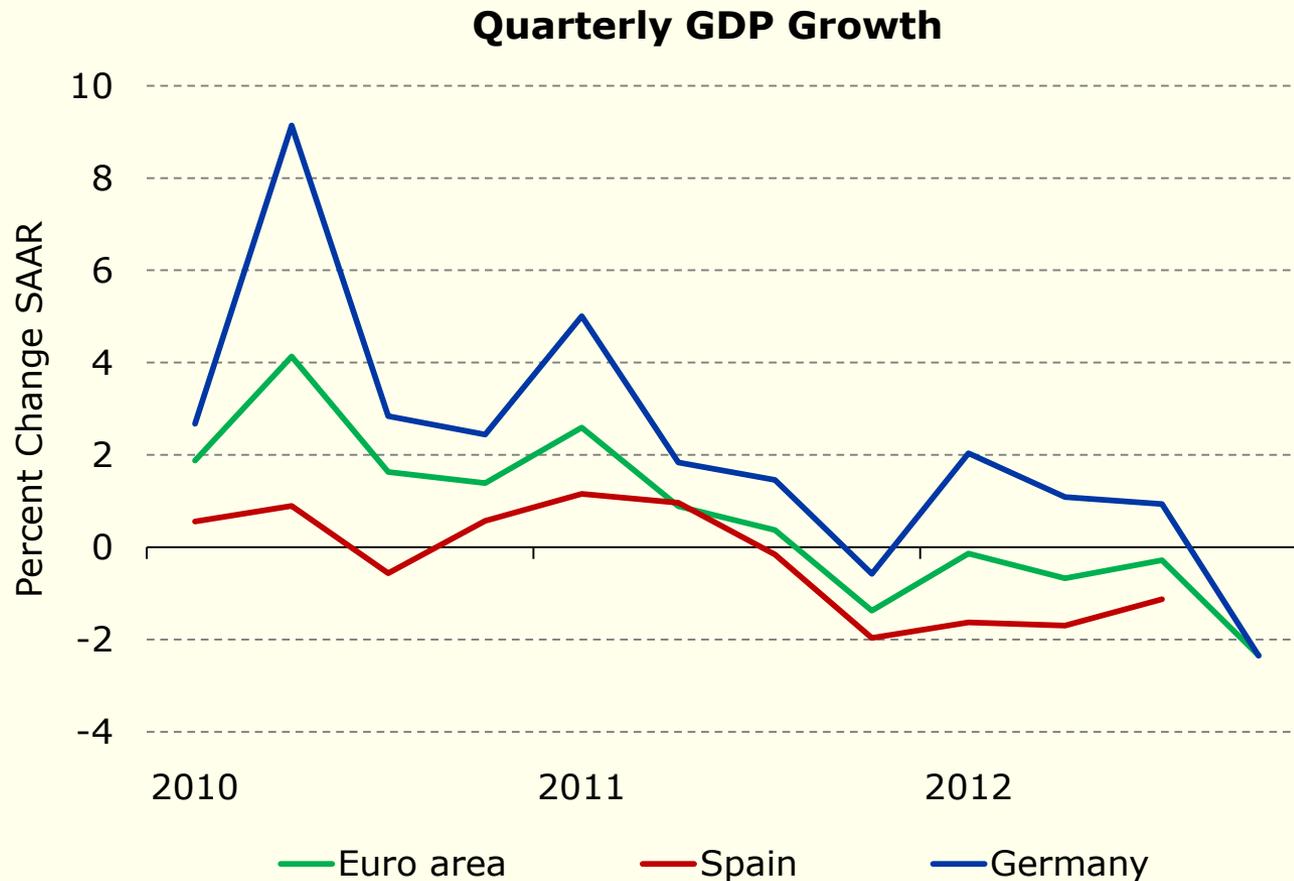


Euro area GDP growth is negative

Eurozone
Forecast:

2013: -0.1%

2014: 0.8%



Source: Eurostat; data through 2012Q4

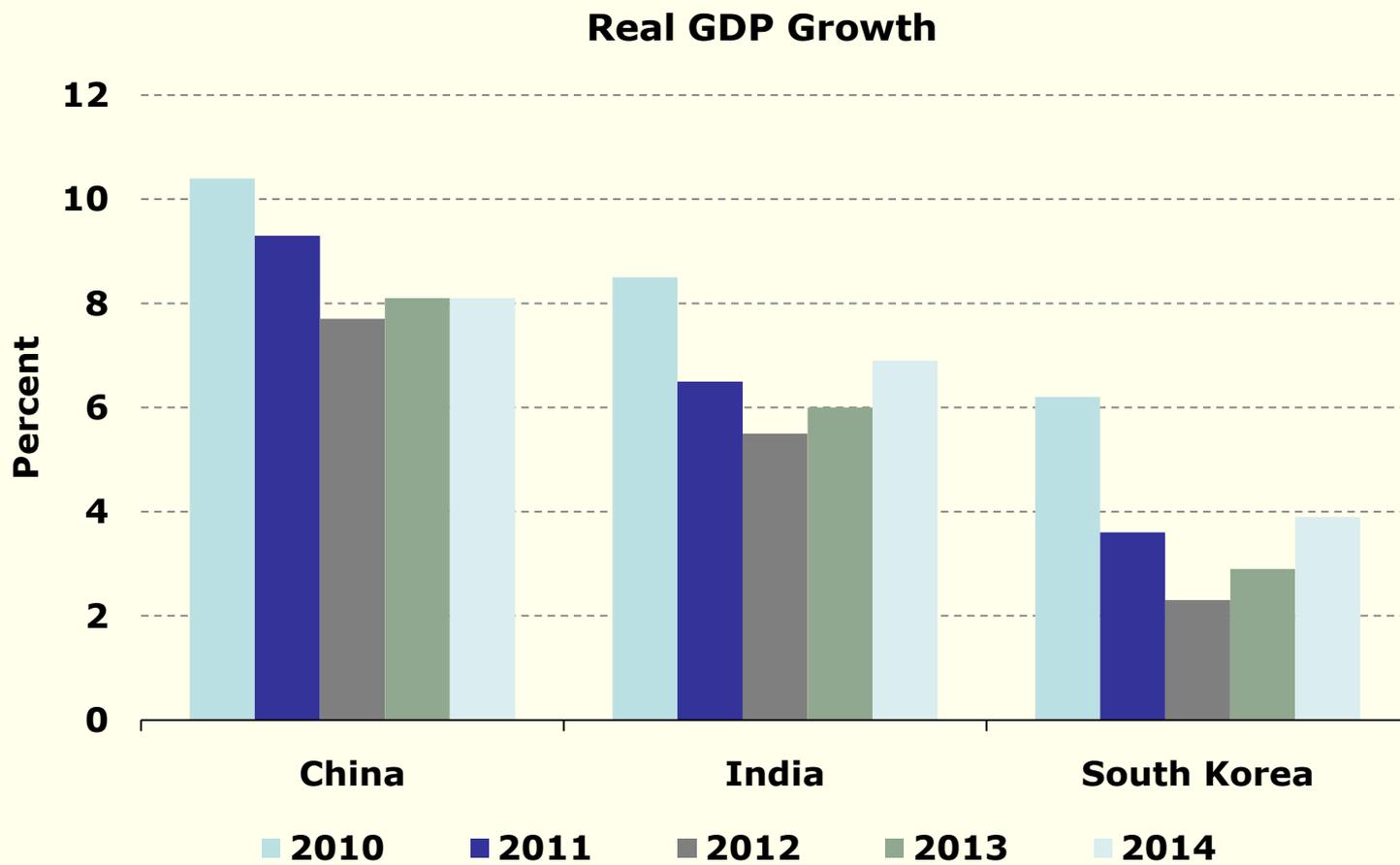
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Asian economic growth has slowed but appears to be improving



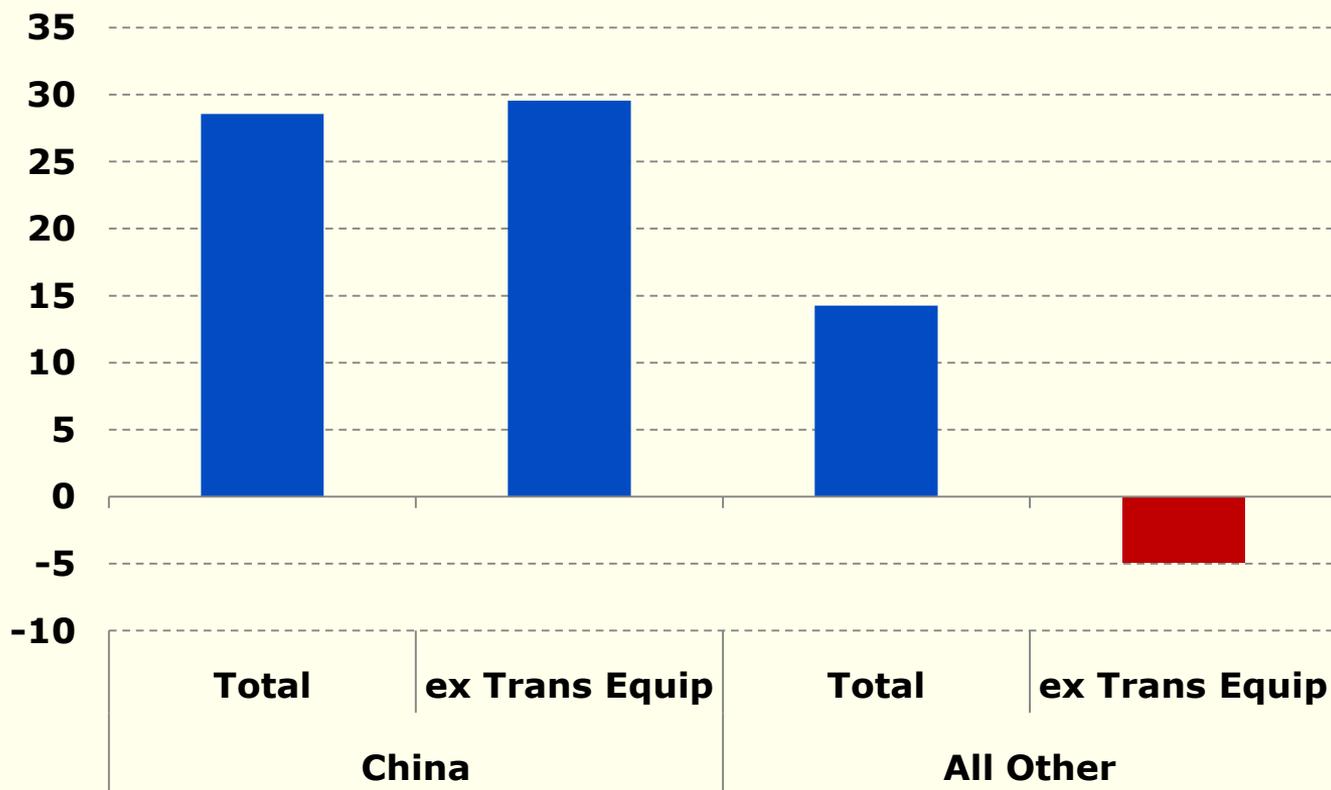
Source: Blue Chip Economic Indicators February 2013, historical data through 2012

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Non Transportation Equipment exports outside of China are declining

Washington Exports YTD % Change



Source: Wiser Trade Data; through November 2012



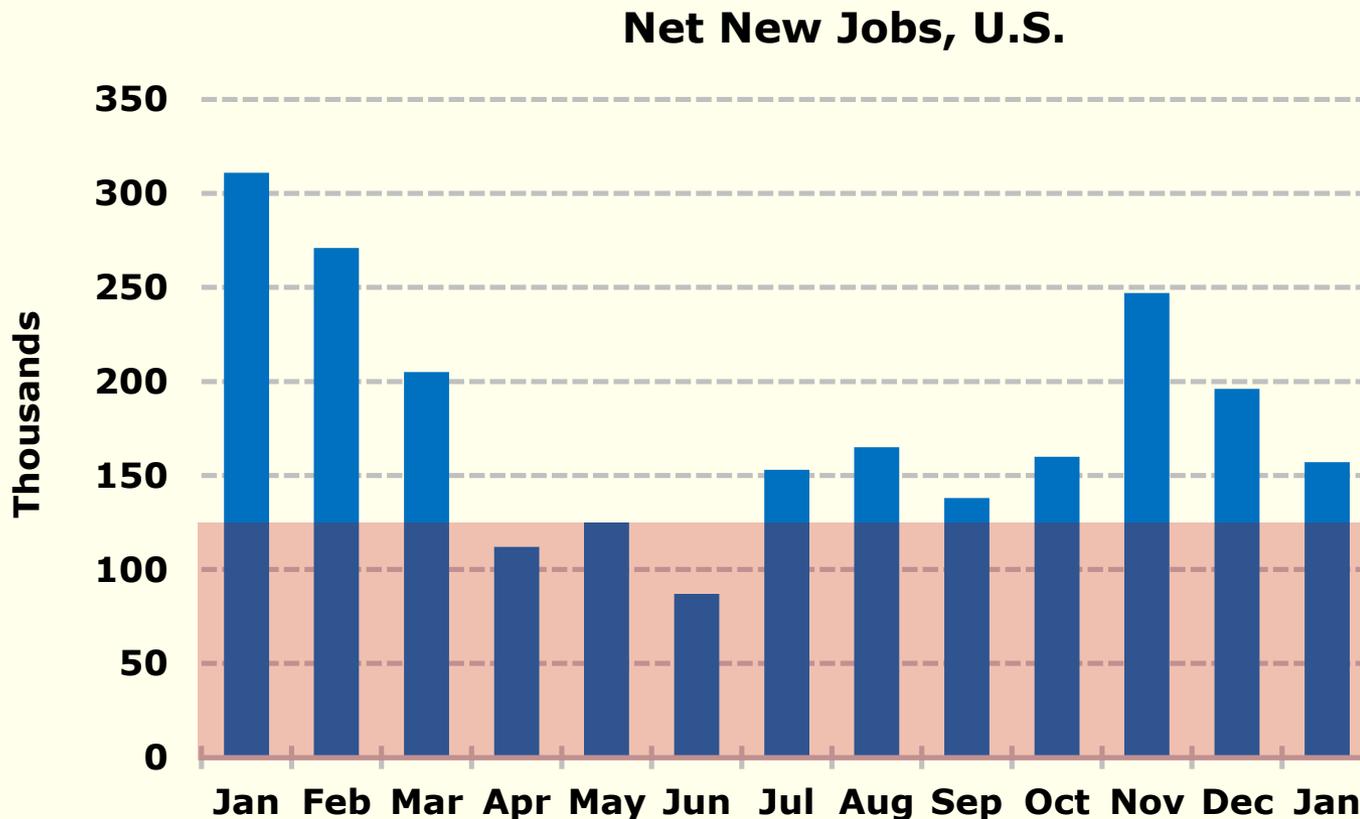
Federal tax and budget issues

- Fiscal cliff deal increased payroll tax, upper income tax rates
 - Likely to reduce household purchases
- Across-the-board budget cuts
 - Take effect March 1st if no Congressional action
 - Impacts on civilian defense and other Federal employees
 - Potential WA impact: up to 41,000 layoffs
- Uncertainty: bad for businesses, households



Job growth remains weak

The economy needs to add roughly 125K jobs each month just to keep up with growth in the labor force

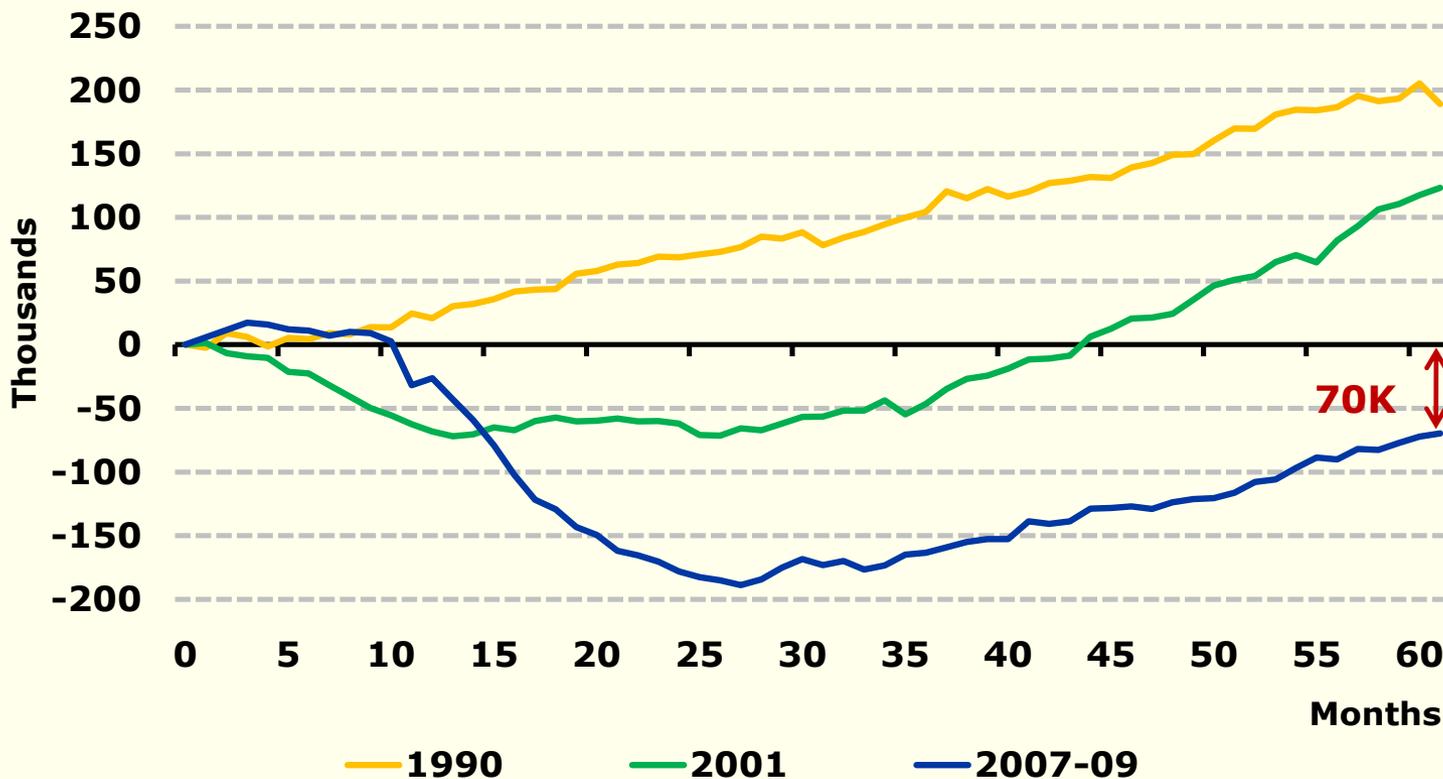


Source: Bureau of Labor Statistics, data through January 2013



The decline in employment has been severe

Washington Employment after Business Cycle Peak



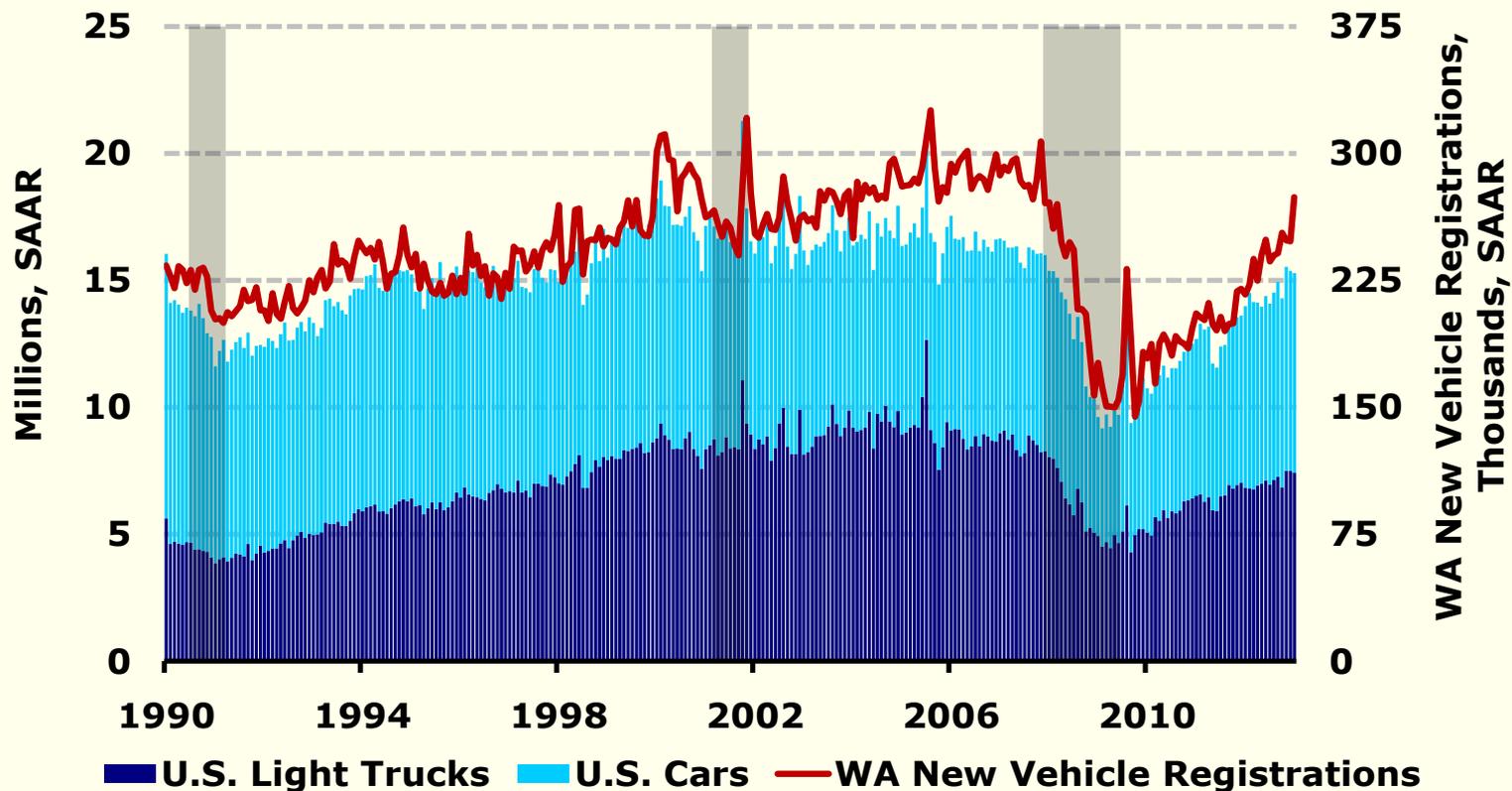
Source: WA ESD, ERFC; data through December 2012

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Vehicle sales continue their upward trend

U.S. LMV sales in December were up 9% year-over-year.



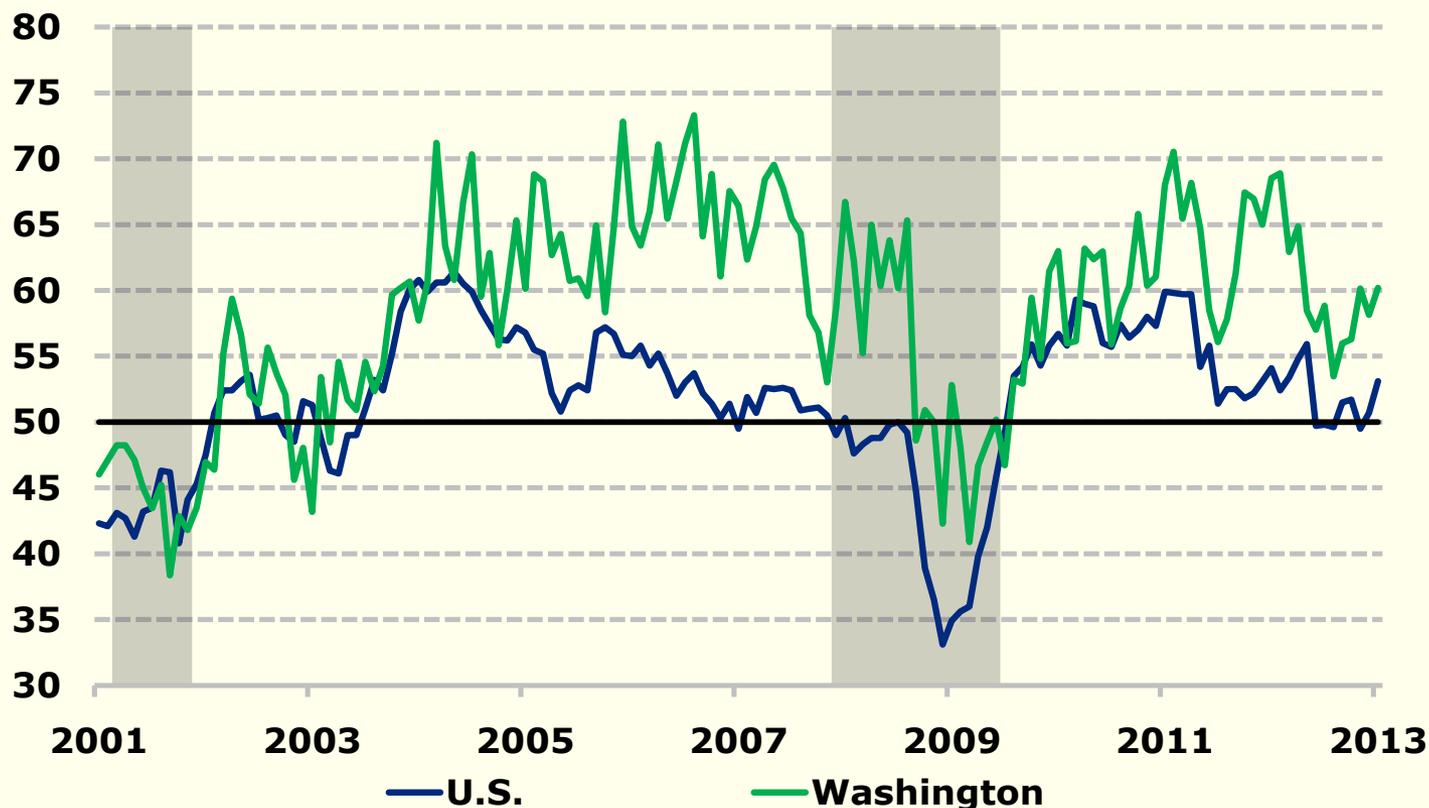
Source: Autodata Corporation, WA DOL; data through January 2013



Manufacturing remains weak nationally

An index greater than 50, implies growth

Institute of Supply Management Index

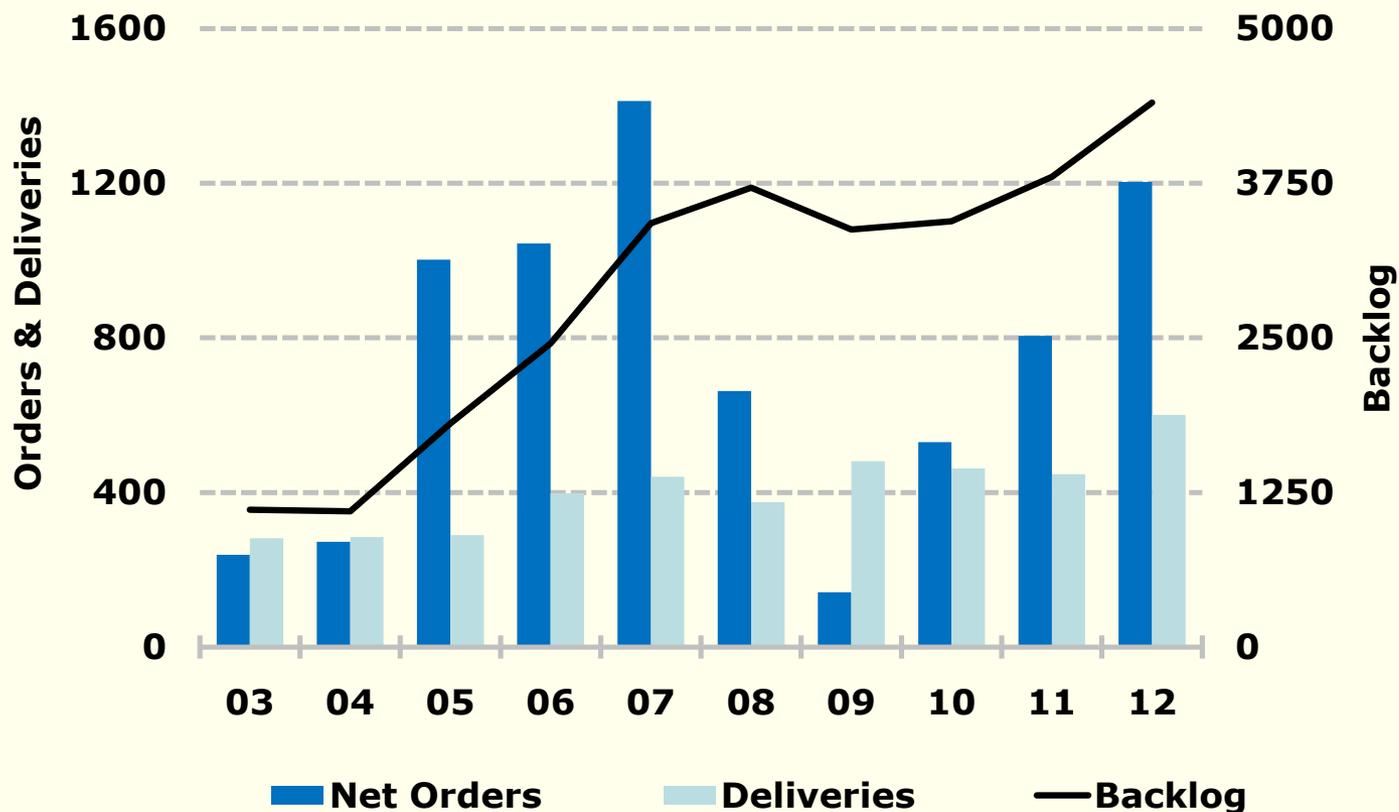


Source: Institute of Supply Management; data through January 2013



Boeing has 7 years of commercial orders on its books

Excludes the military's new refueling tanker

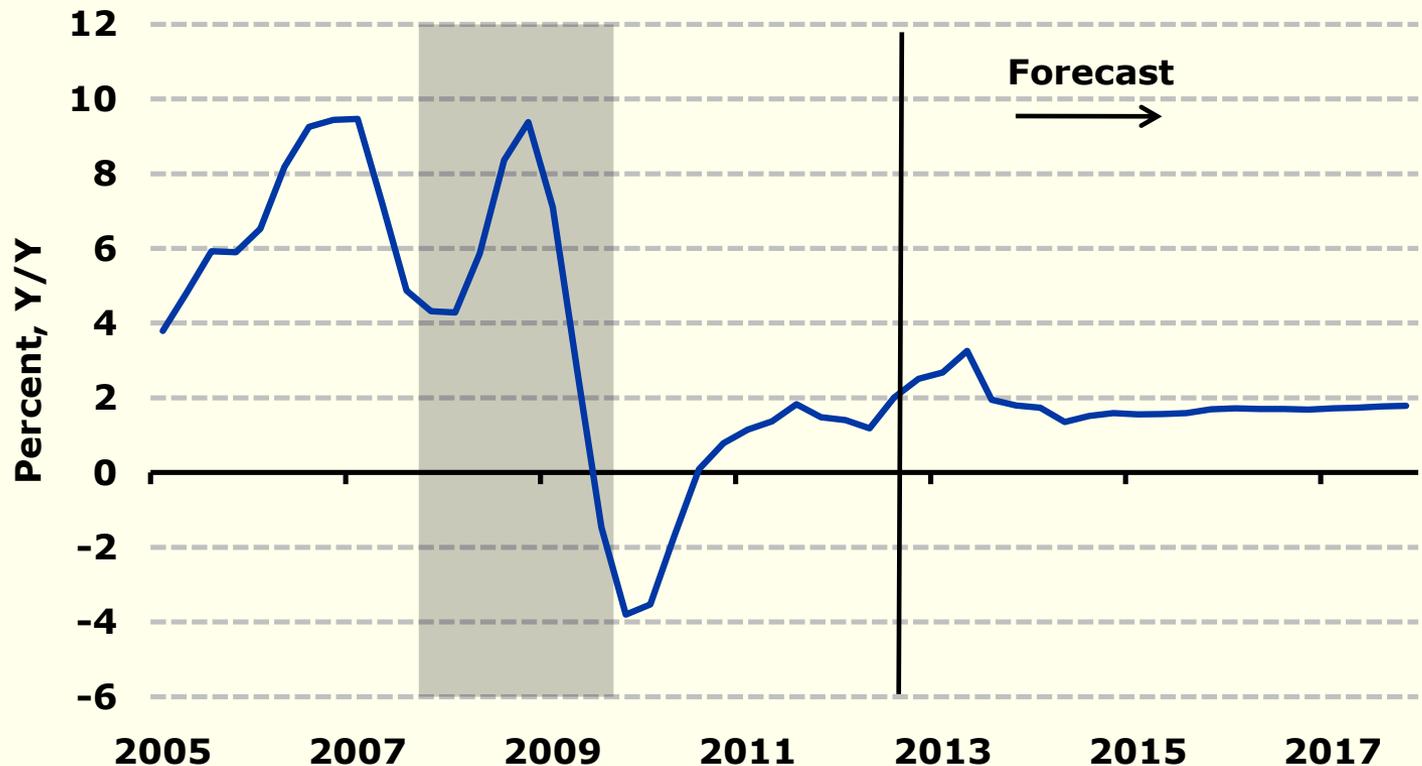


Source: Boeing, data through December 2012



Software publishing employment is expected to slightly outperform overall employment

Washington Software Publishing Employment, SA



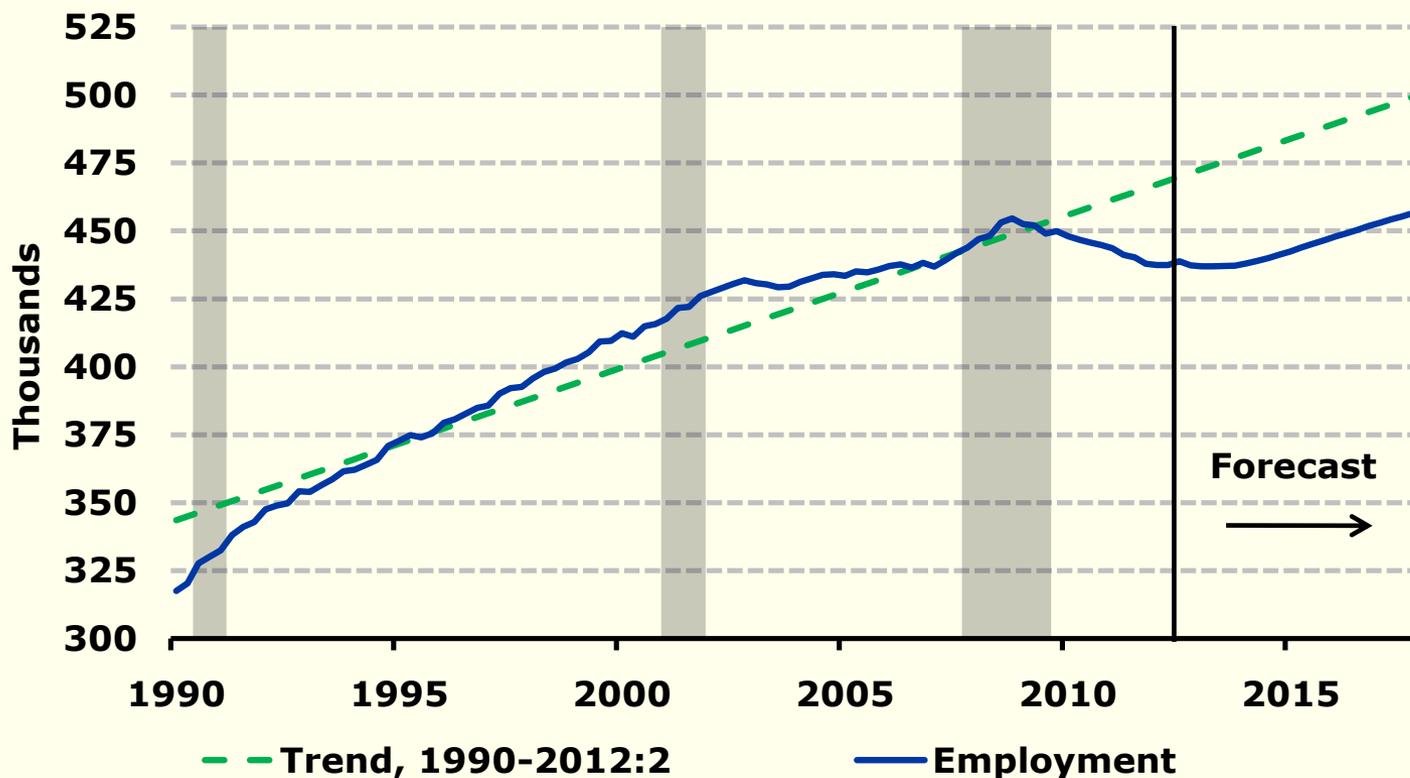
Source: ERFC November 2012 forecast; historical data through 2012Q3

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State and local government employment will remain weak

Washington State and Local Government Employment



Source: ERFC November 2012 forecast; historical data through 2012Q3

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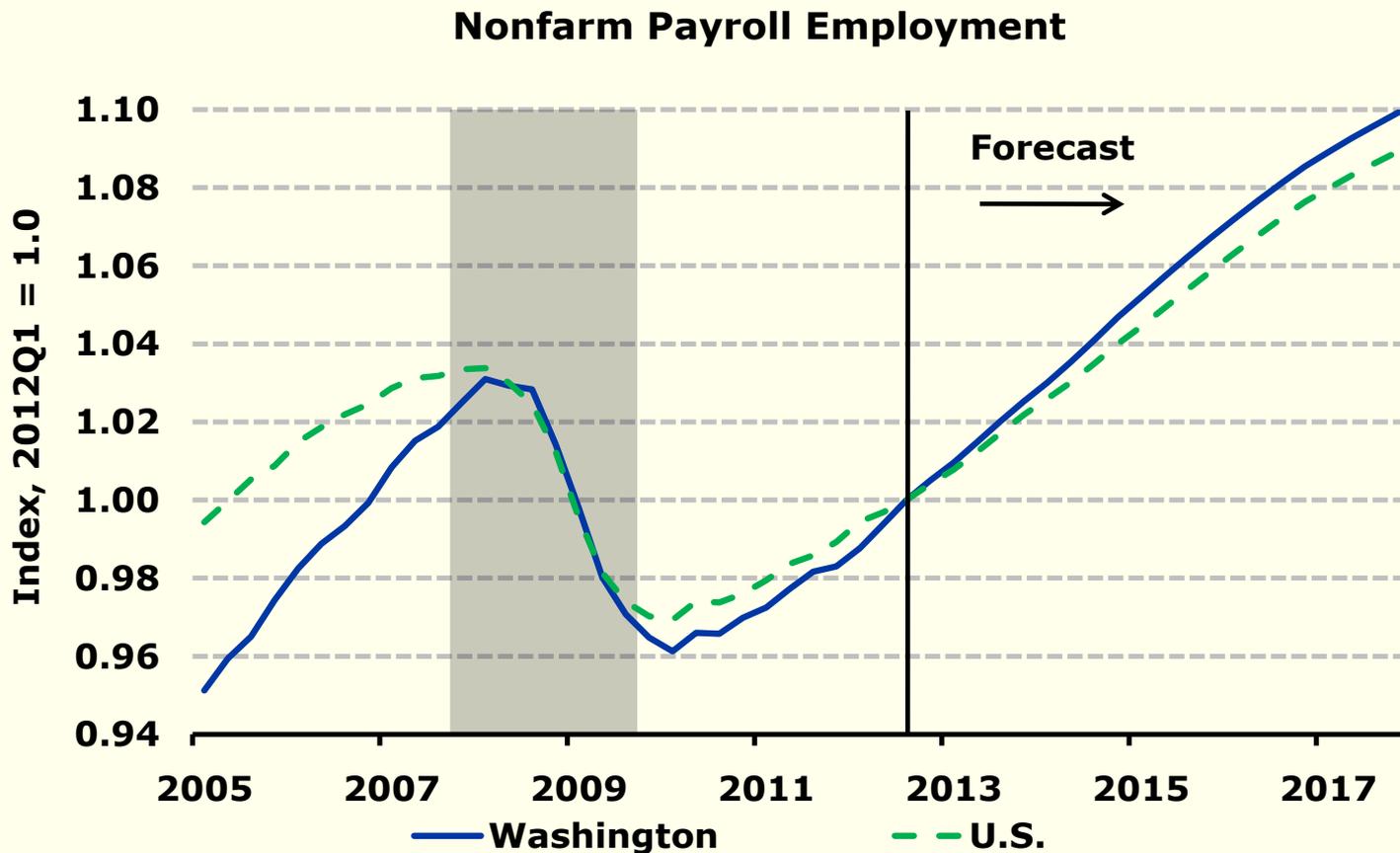


WA employment will recover slightly faster than the U.S.

Date of regaining peak:

WA:
2014Q2

U.S.:
2014Q4



Source: ERFC November 2012 forecast; historical data through 2012Q3

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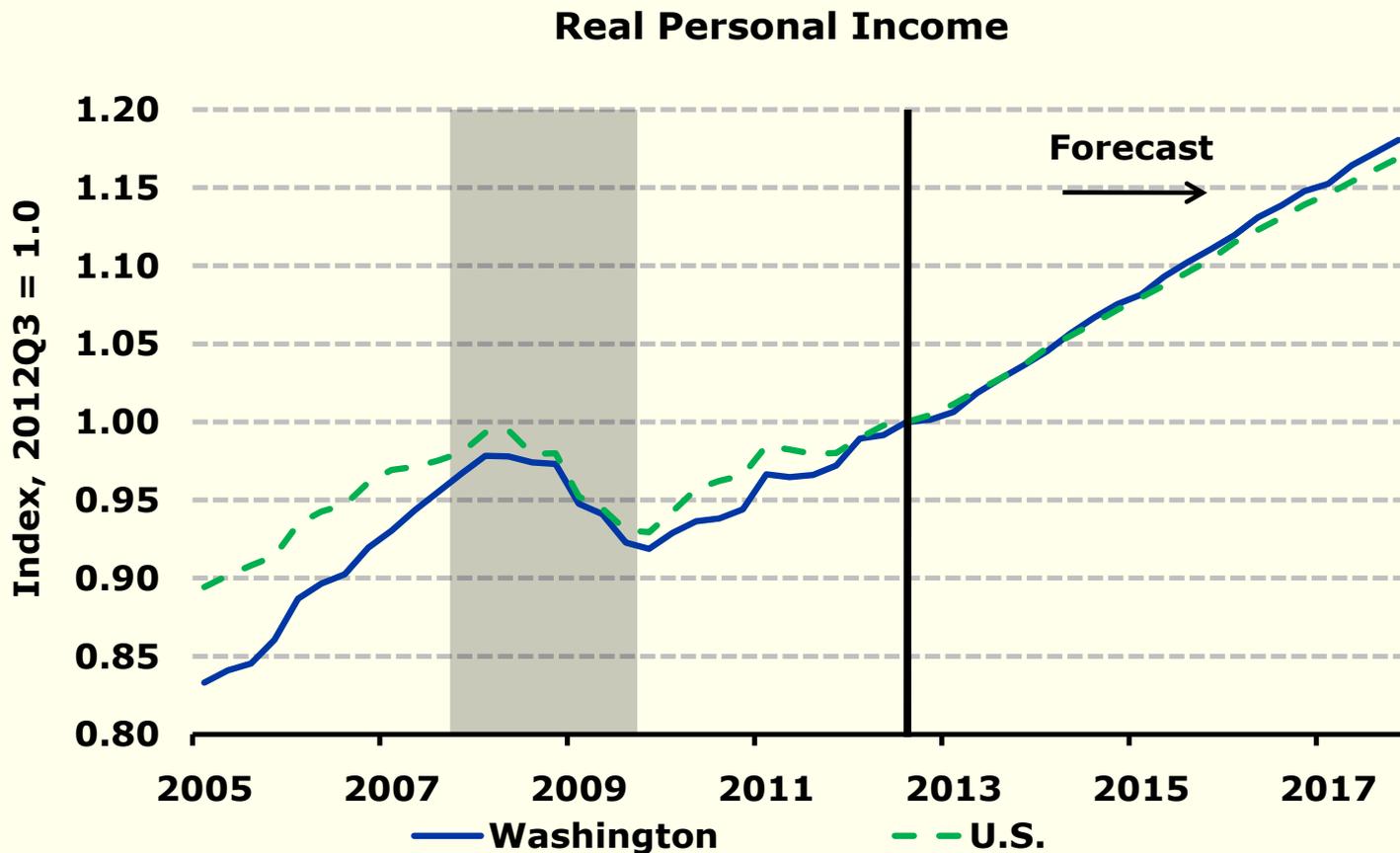


WA personal income will recover slightly faster than the U.S.

Date peak regained:

WA:
2012Q1

U.S.:
2012Q2



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Source: ERFC November 2012 forecast; historical data through 2012Q3

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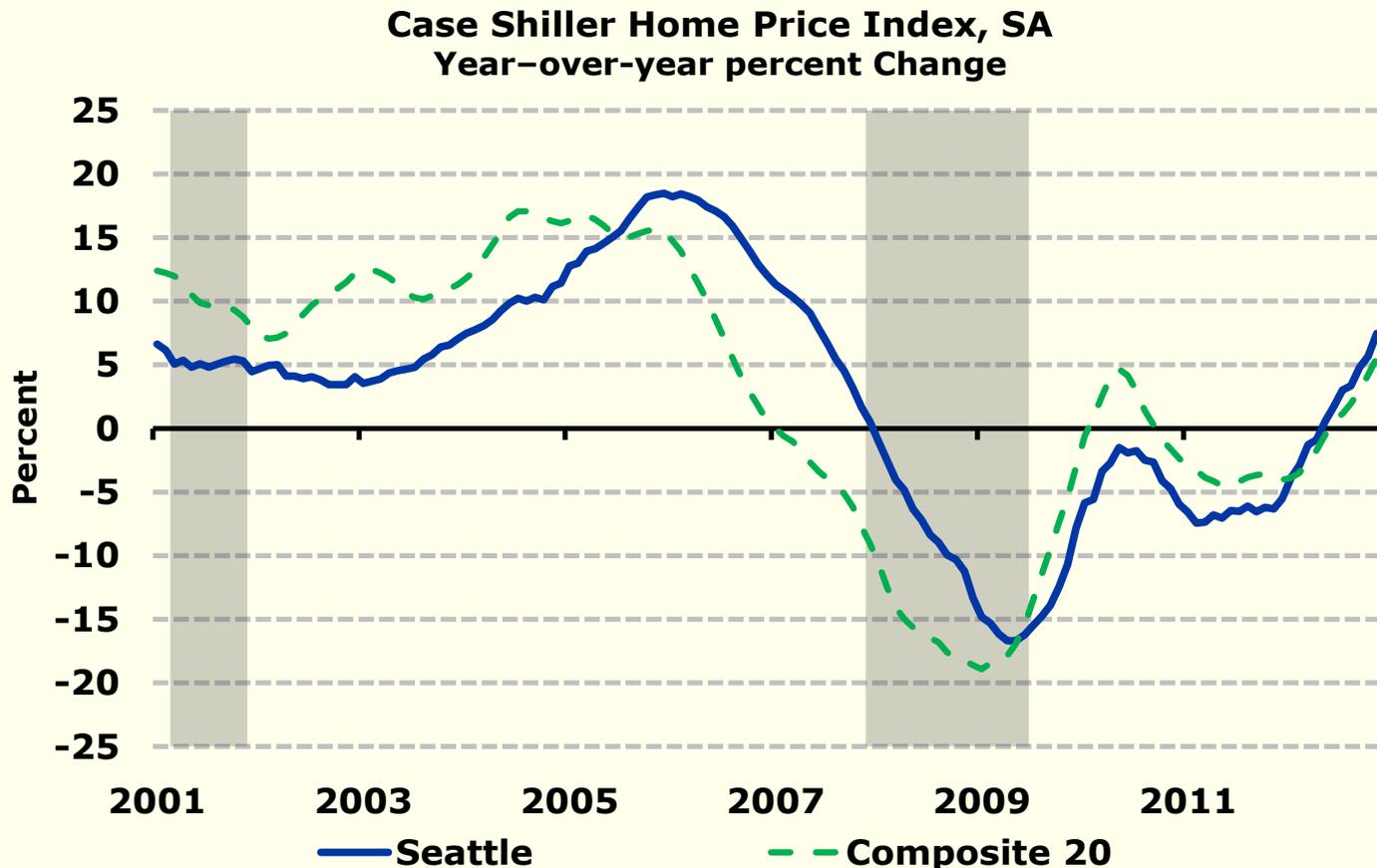


Single-family home prices are beginning to increase

Nov 2012

U.S. is up 5.6%

Seattle is up 7.5%



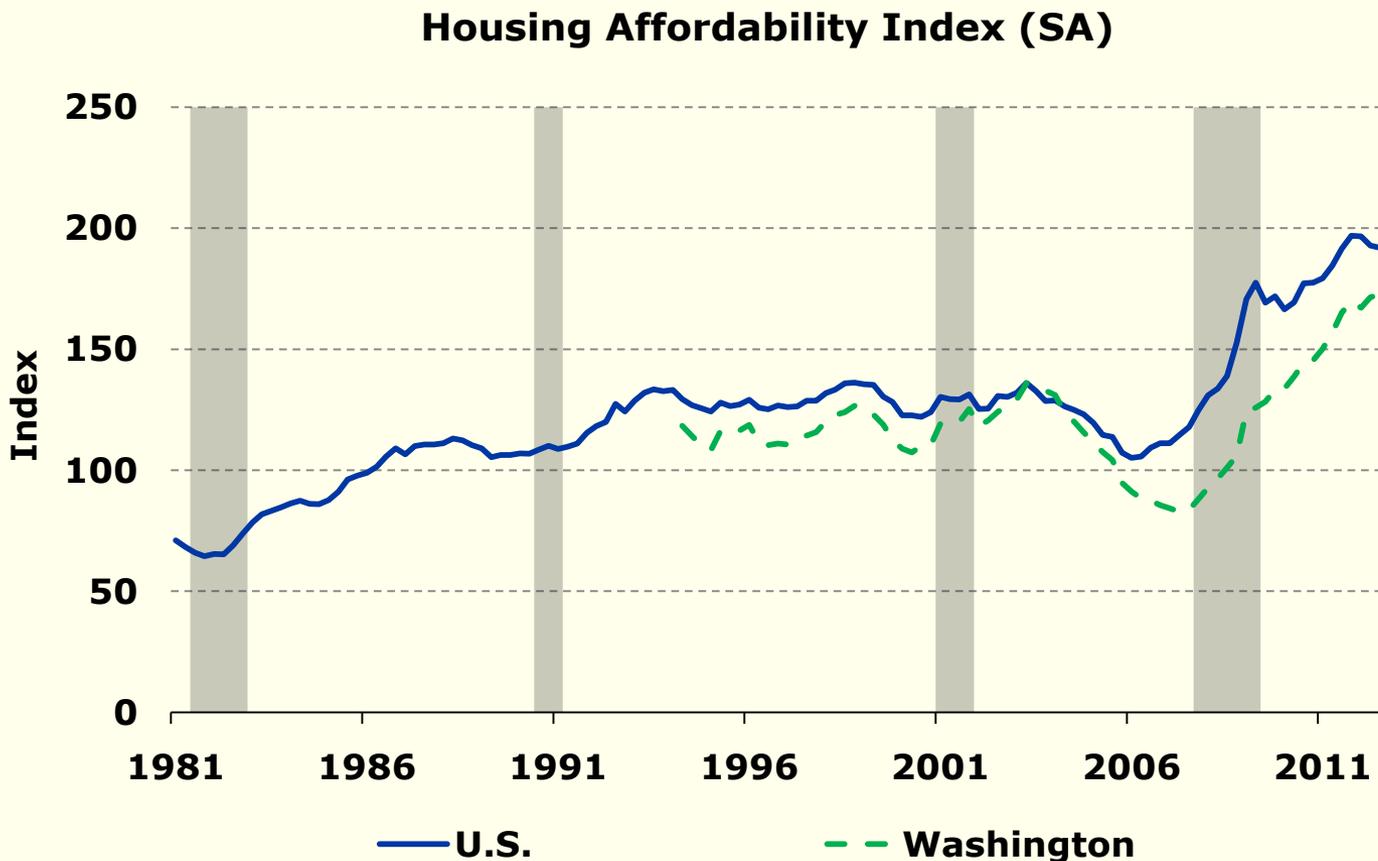
Source: S&P/Case-Shiller; data through November 2012

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Home affordability remains in record territory

Affordability is 100 when the median income can just afford the median priced home. Above 100 means the median income can afford more than the median priced home



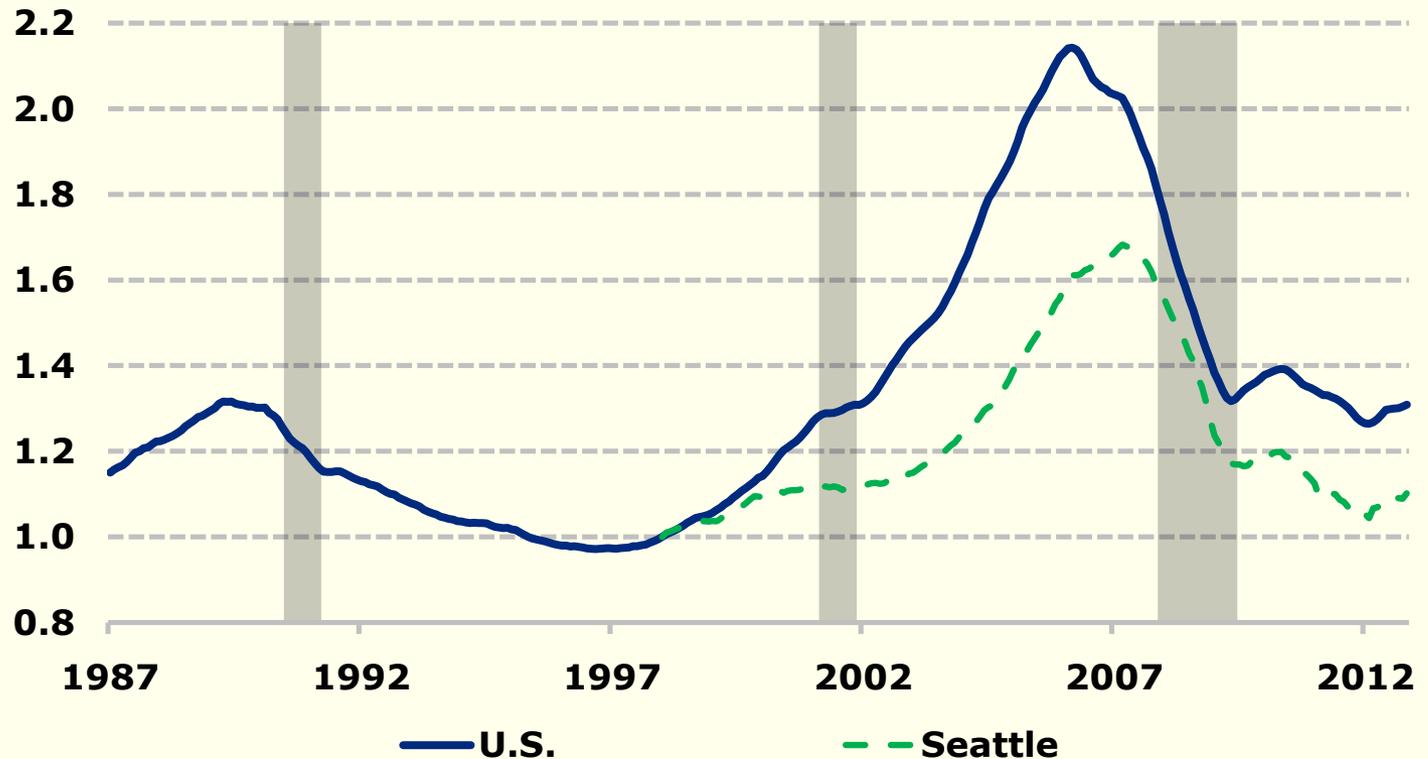
Source: National Association of Realtors, Global Insight, Washington Center for Real Estate Research; data through 2012 Q3

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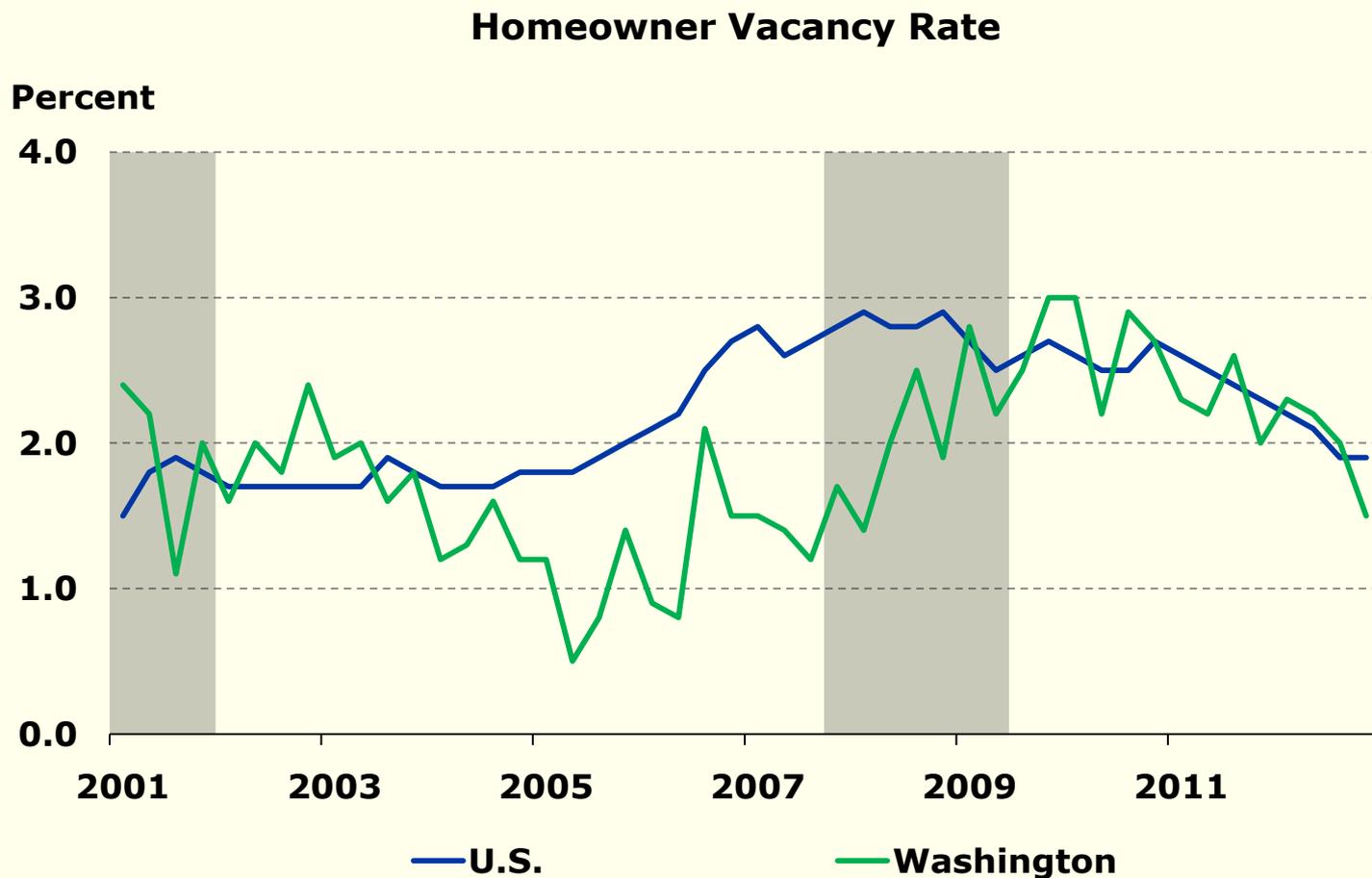
The ratio of home prices to rent has come down since the bubble years

**Home Price to Rent Ratio
Index (Jan 1998 = 1.0)**





Homeowner vacancy rates are declining

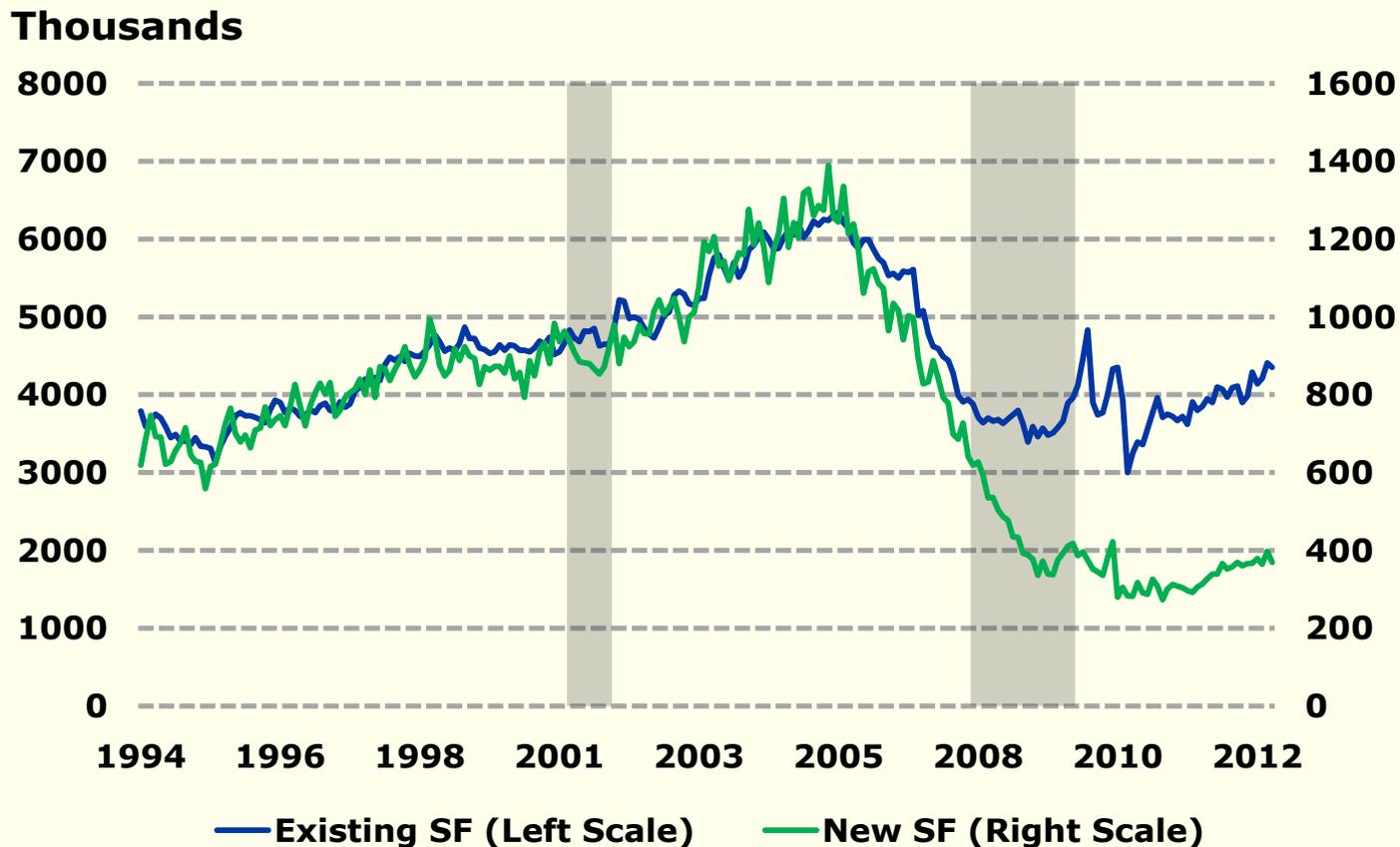


Source: U.S. Census Bureau; data through 2012 Q4

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New home sales remain low

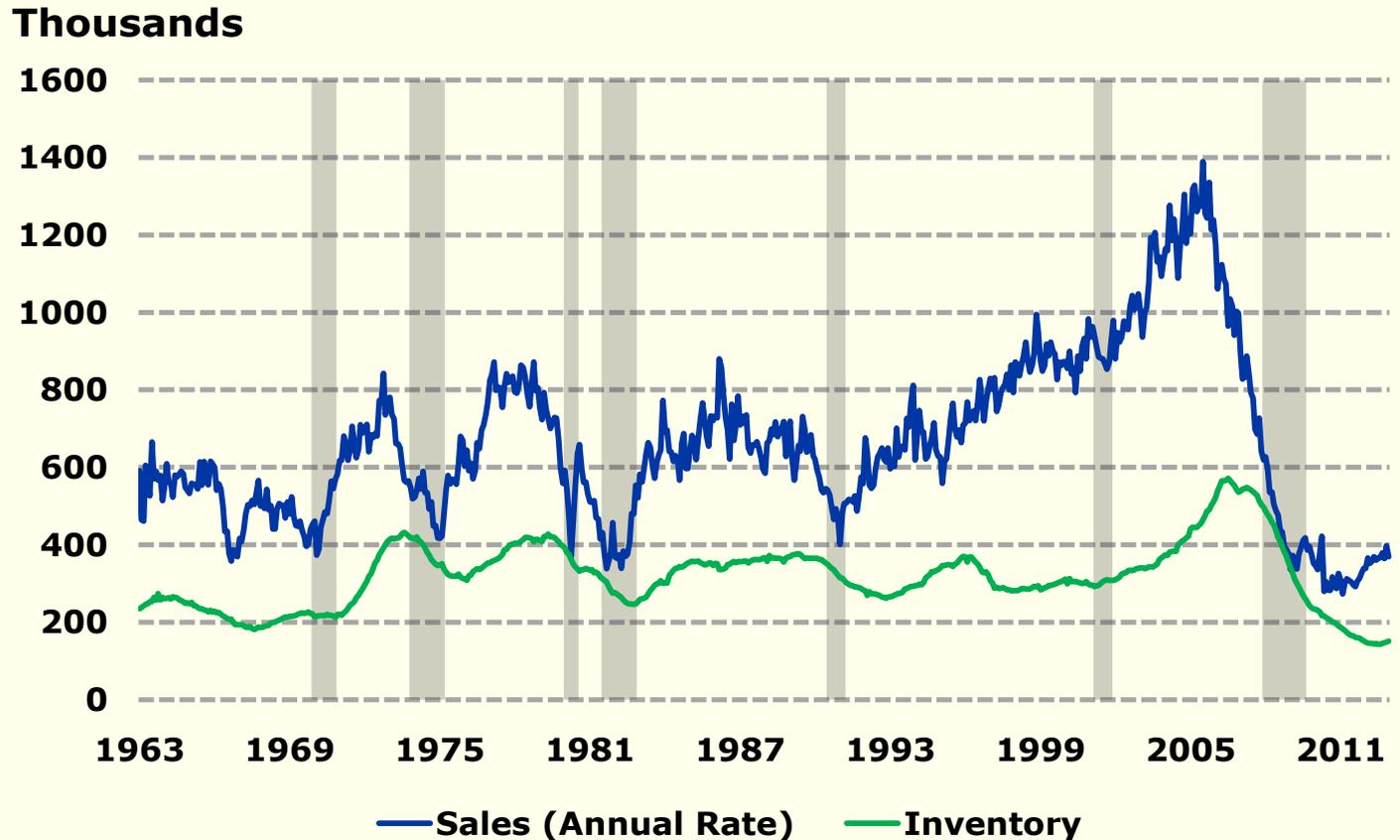


Source: Bureau of the Census, NAR; data through December 2012

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Builders have drastically reduced the inventory of new homes for sale



Source: Bureau of the Census data through December 2012

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Housing permits relative to population will still be below historic levels in 2017

Washington Housing Permits per 1,000 People

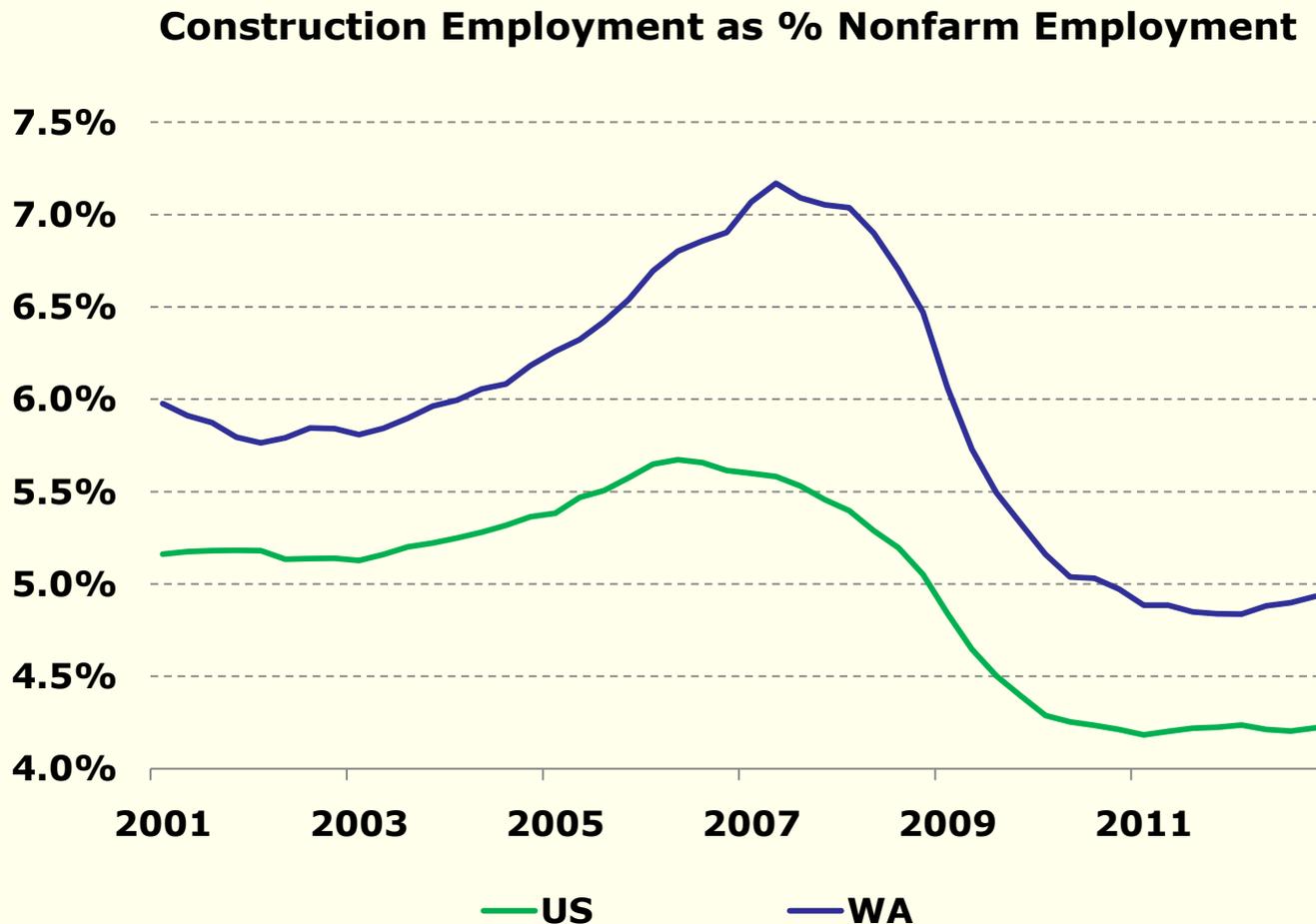


Source: U.S. Census Bureau, ERFC November 2012 Forecast; historical data through 2012 Q3

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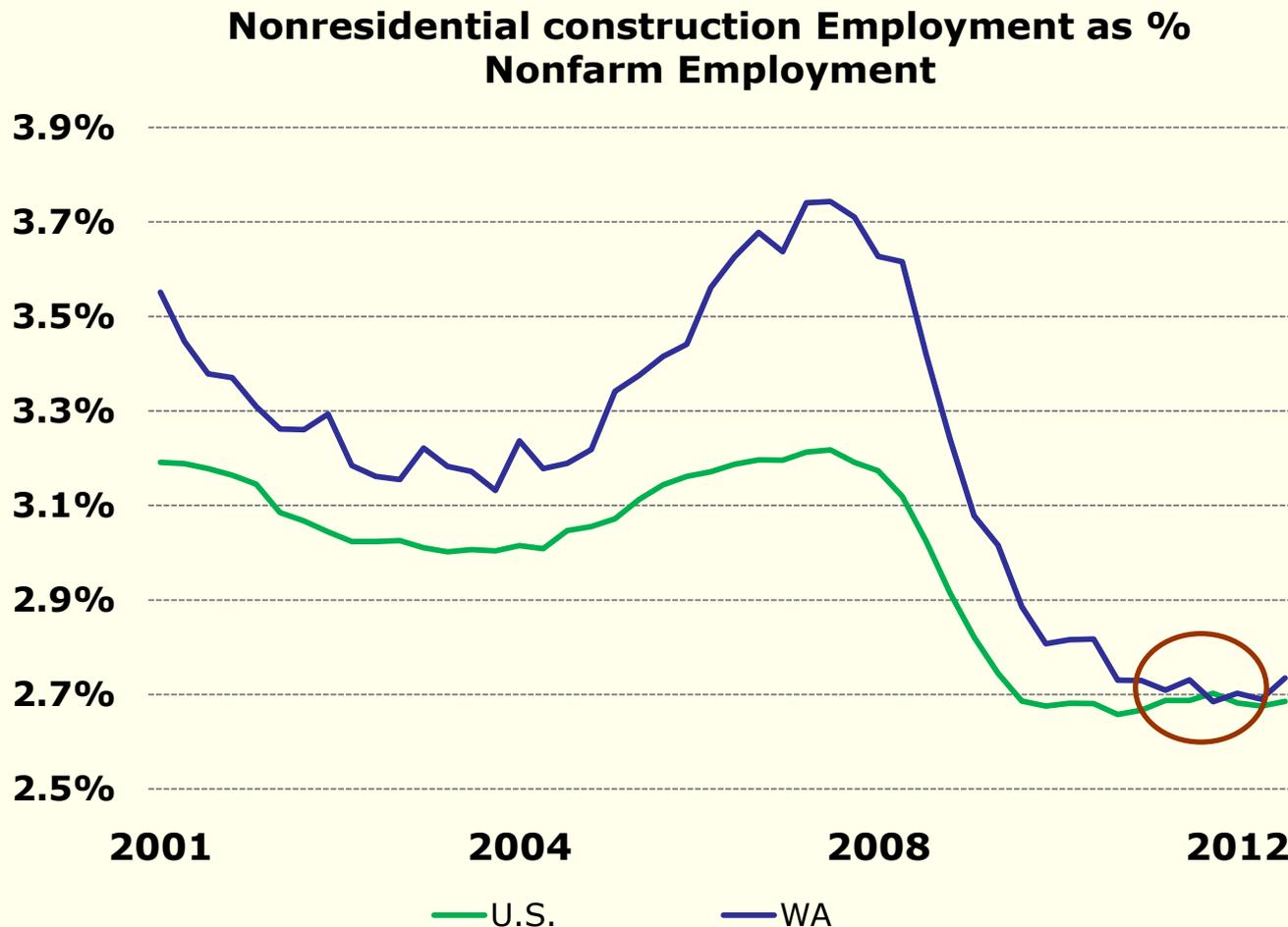


Construction employment share larger in WA than US





Nonresidential employment shares have converged

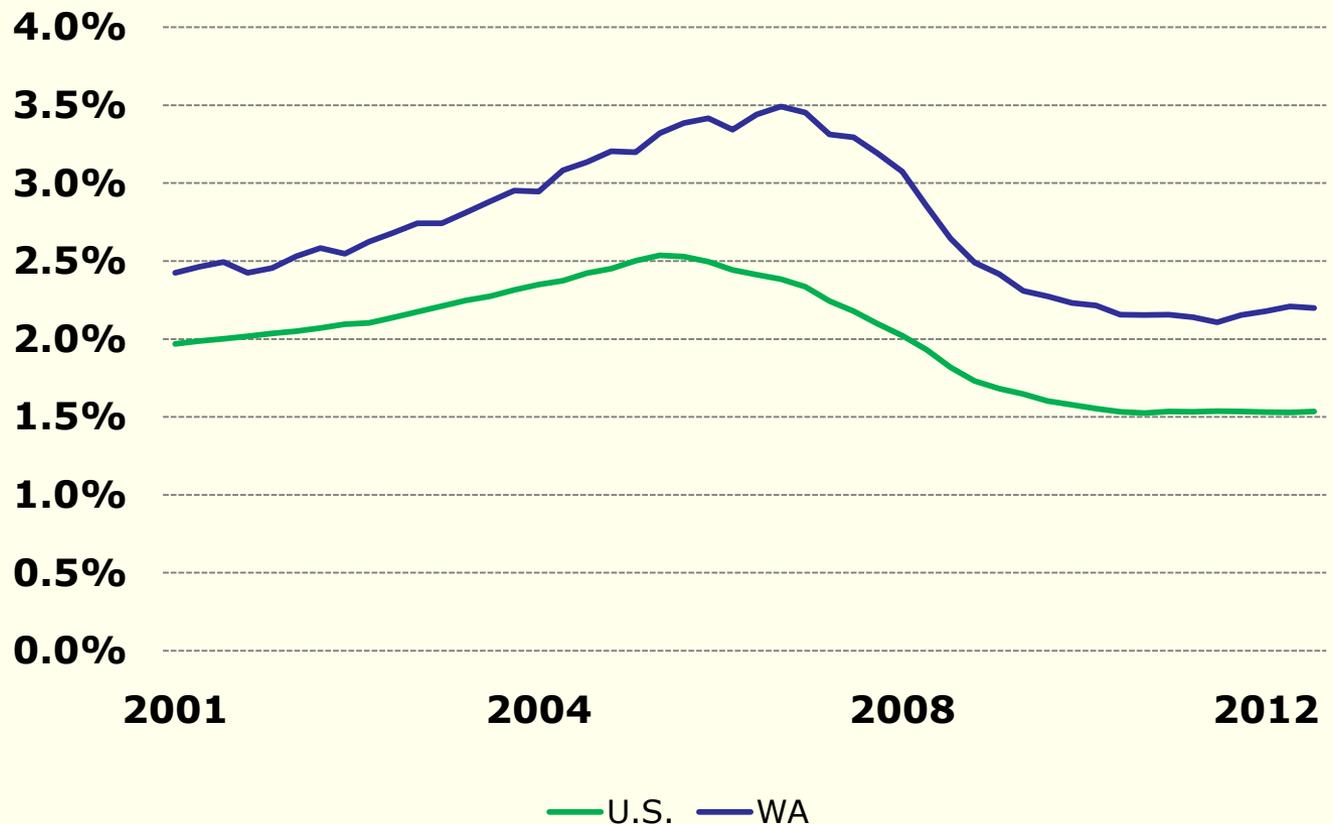


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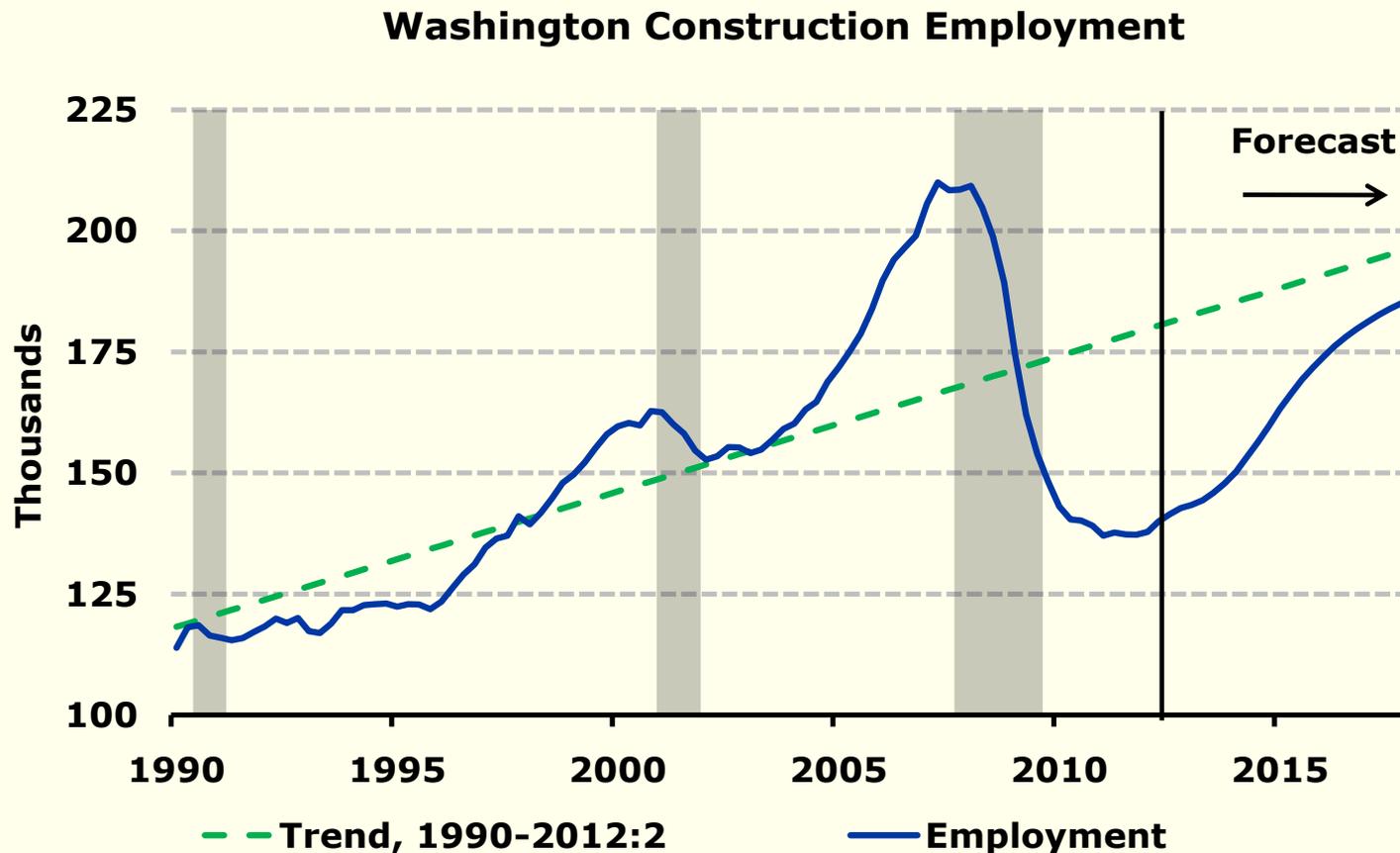
Residential employment shares consistently larger in WA

Residential construction Employment as % Nonfarm Employment





Washington construction employment will remain below trend throughout the forecast

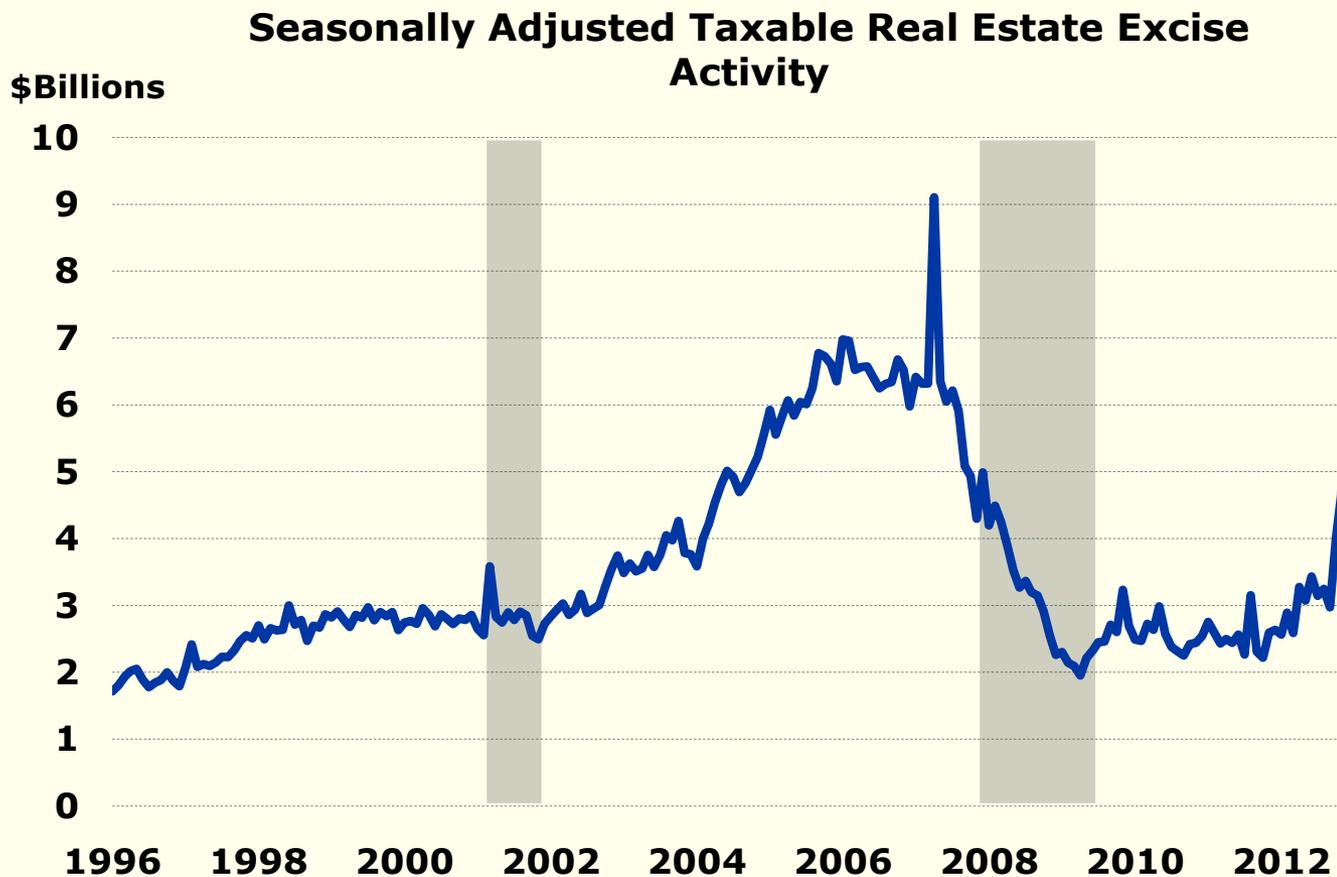


Source: ERFC November 2012 Preliminary forecast; historical data through 2012Q3

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October saw another spike in large commercial real estate sales



Source: ERFC; Monthly data through December 2012 preliminary

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Conclusion

- Impacts of energy efficiency and conservation have been particularly notable in the residential sector
- Recovery from the 2007-09 recession has been unusually slow in Washington and nationally
- Washington should outperform the national economy, but by a small margin
- The level of uncertainty in the baseline remains extremely high, and downside risks outweigh upside risks
- Pent-up demand for housing combined with greatly improved affordability are expected to lead to increased residential activity and construction employment



Questions



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