

NEW ENGLAND ECONOMIC OUTLOOK

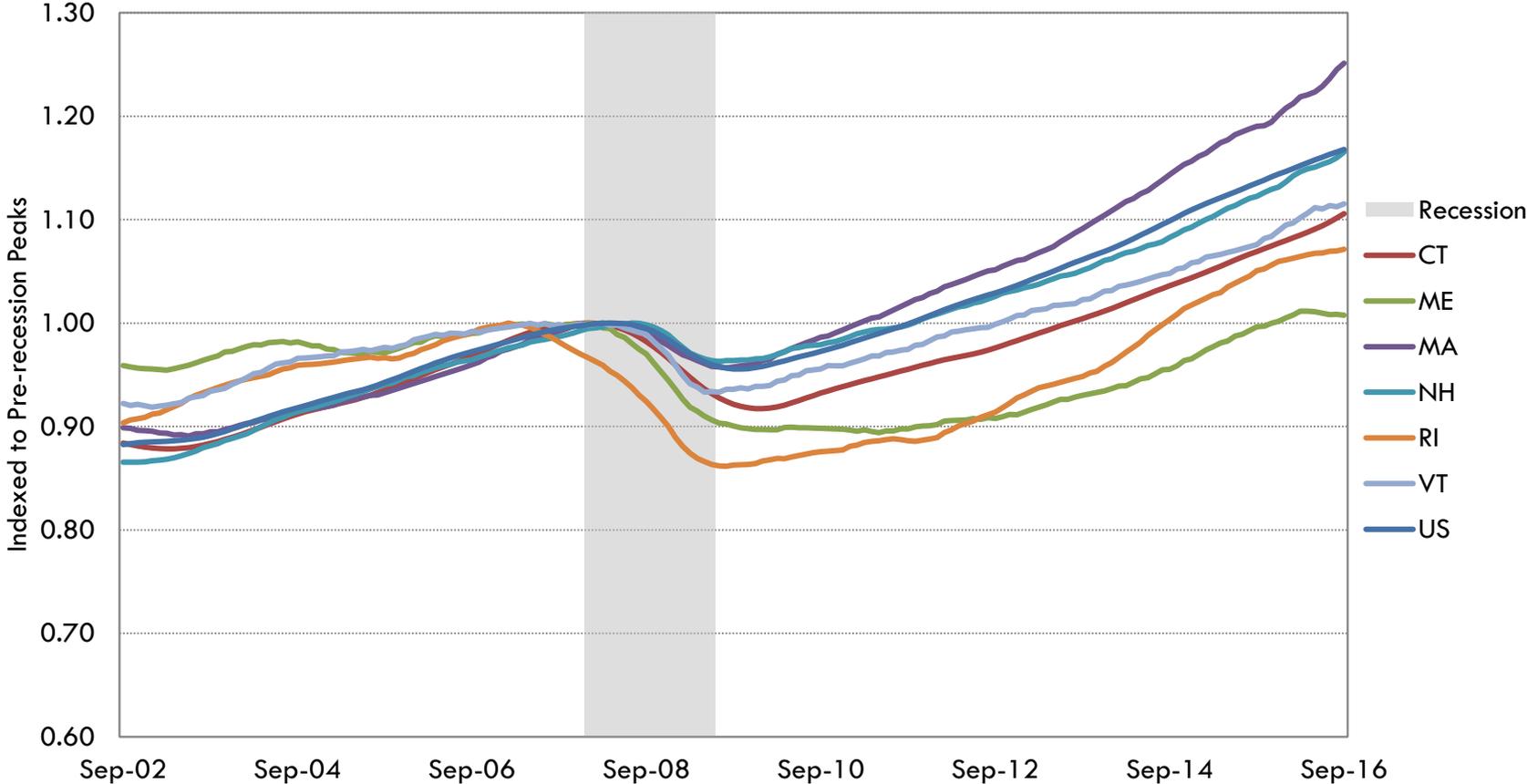
15th Annual Regional & Community Bankers Conference
Federal Reserve Bank of Boston
November 17, 2016

Mary A. Burke
Senior Economist
Federal Reserve Bank of Boston



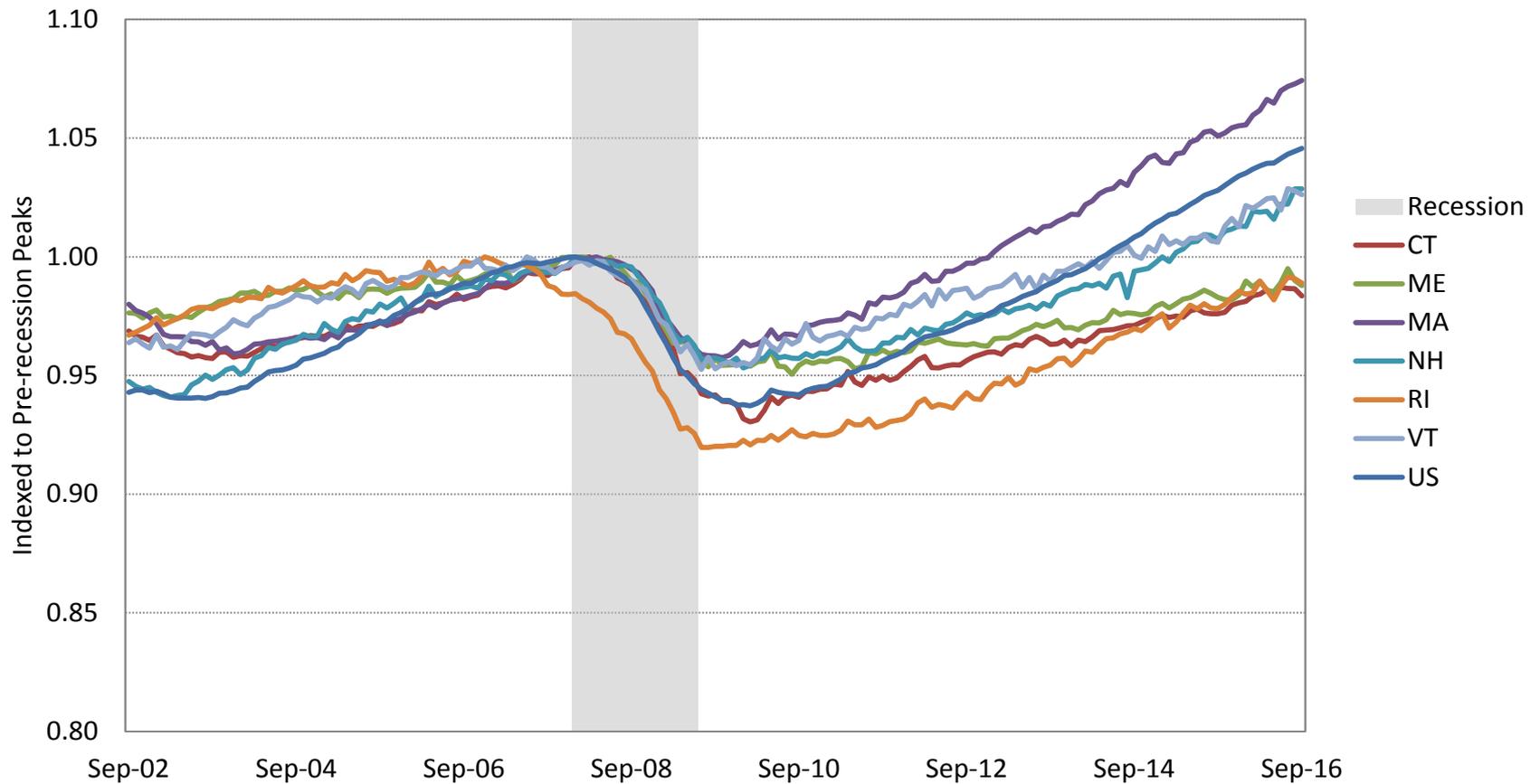
Disclaimer: The views expressed here are those of the speaker and do not necessarily represent the views of the Federal Reserve Bank of Boston or the Federal Reserve System.

Economic Activity Above Pre-Recession Levels in All New England States



Source: Federal Reserve Bank of Philadelphia, NBER, Haver Analytics

Payroll Employment Below Pre-Recession Peak in 3 New England States



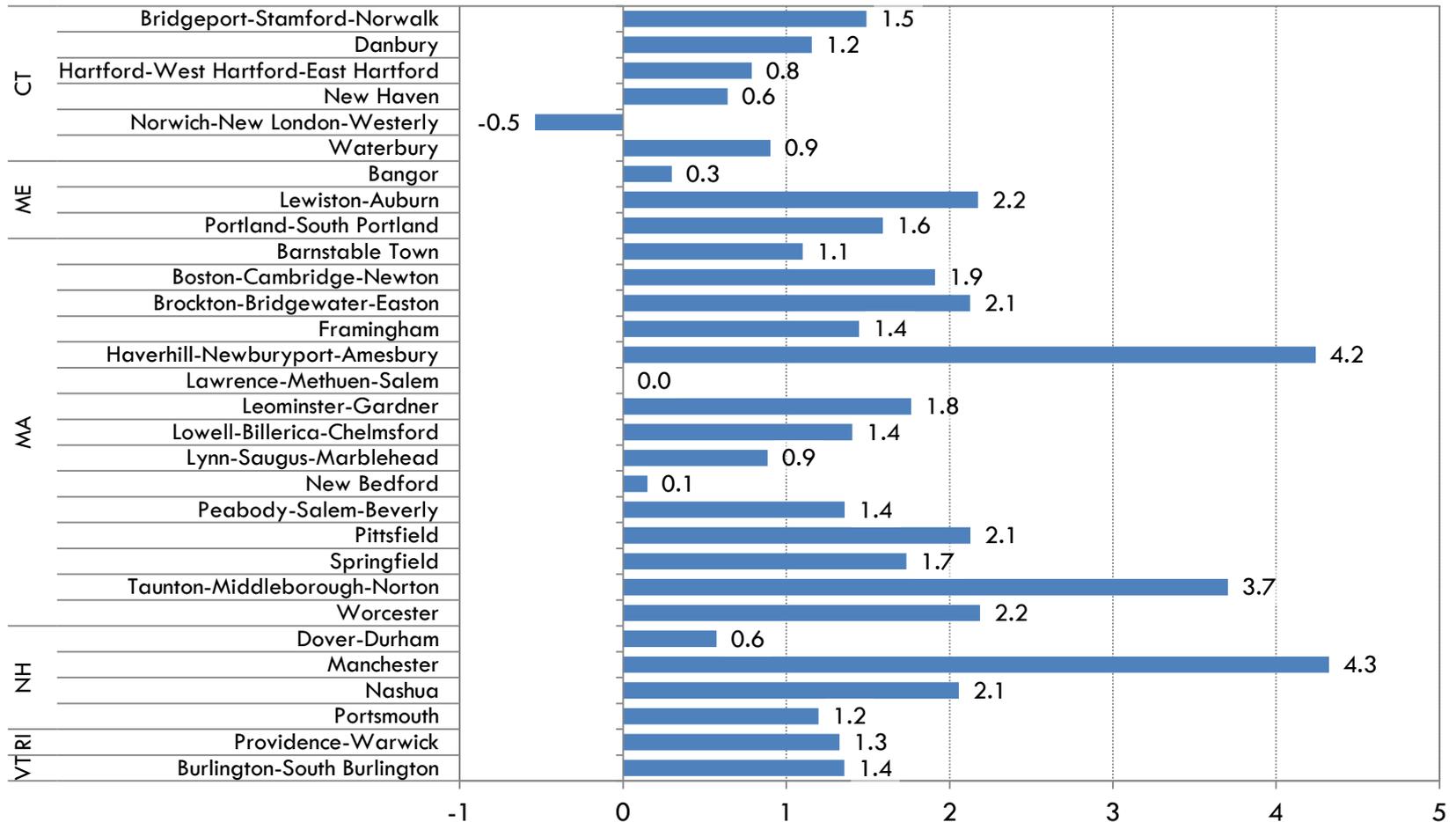
Employment Growth Rate Above Trend in All New England States Except Maine

	Annual Long-term Trend	Last 12 months		Since Peak	
	Percent	Percent	Number	Percent	Number
United States	1.4	1.7	2,447,000	4.6	6,315,000
New England	0.8	1.7	119,600	3.5	247,100
Connecticut	0.5	0.8	12,800	-1.7	-28,300
Maine	1.2	0.5	3,100	-1.2	-7,500
Massachusetts	0.8	2.2	78,300	7.4	247,700
New Hampshire	1.5	2.1	13,900	2.9	18,700
Rhode Island	0.7	1.1	5,300	-1.1	-5,500
Vermont	1.3	2.0	6,200	2.6	8,100

Note: “Last 12 months” refers to year-over-year growth through September 2016. “Annual Long-term trend” refers to average year-over-year growth for the period 1984-2015. “Since Peak” refers to employment change from each state’s pre-recession peak employment level.

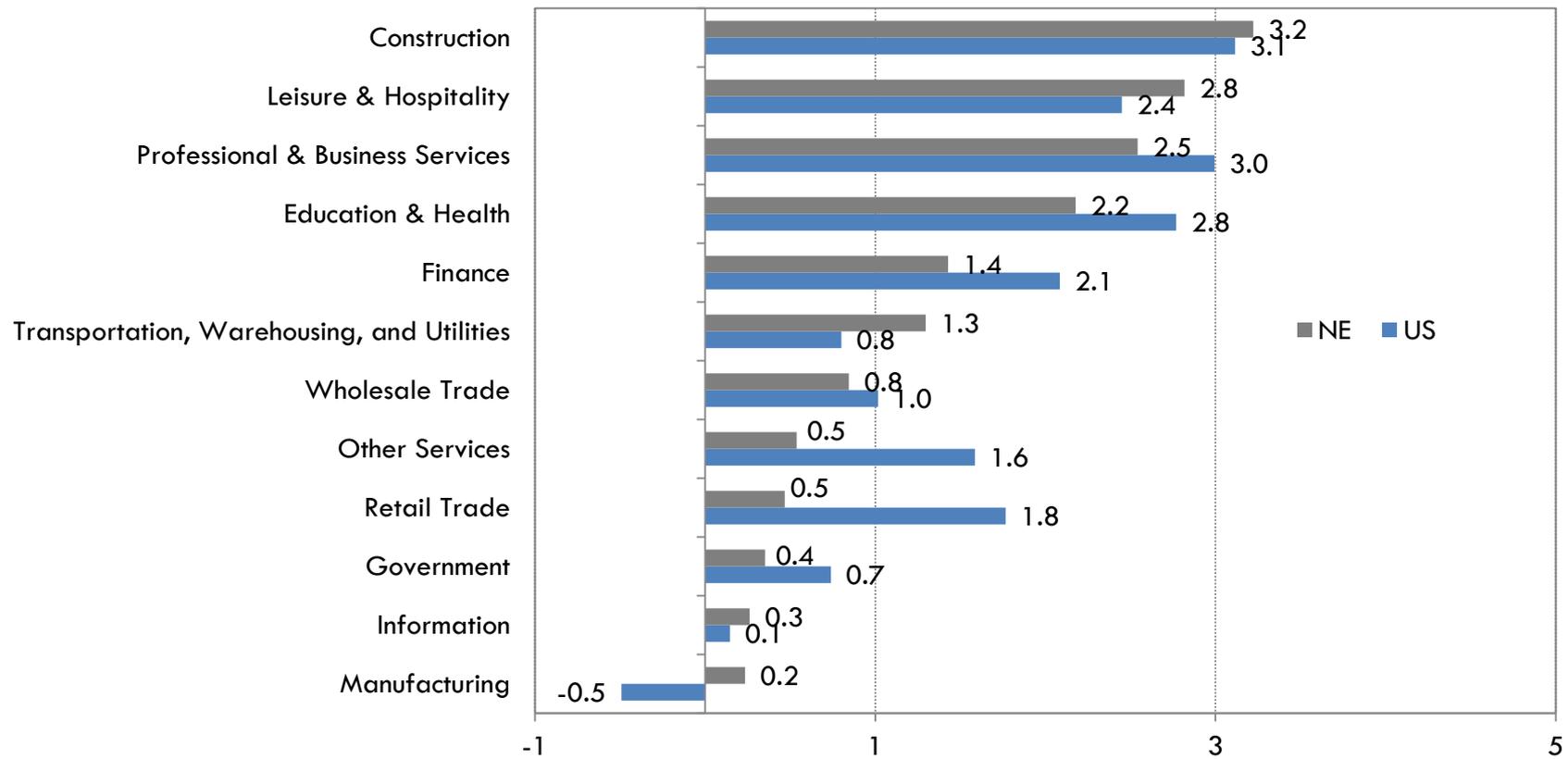
Most Metro Areas Seeing Decent Job Growth

Percent Change, September 2015 - September 2016



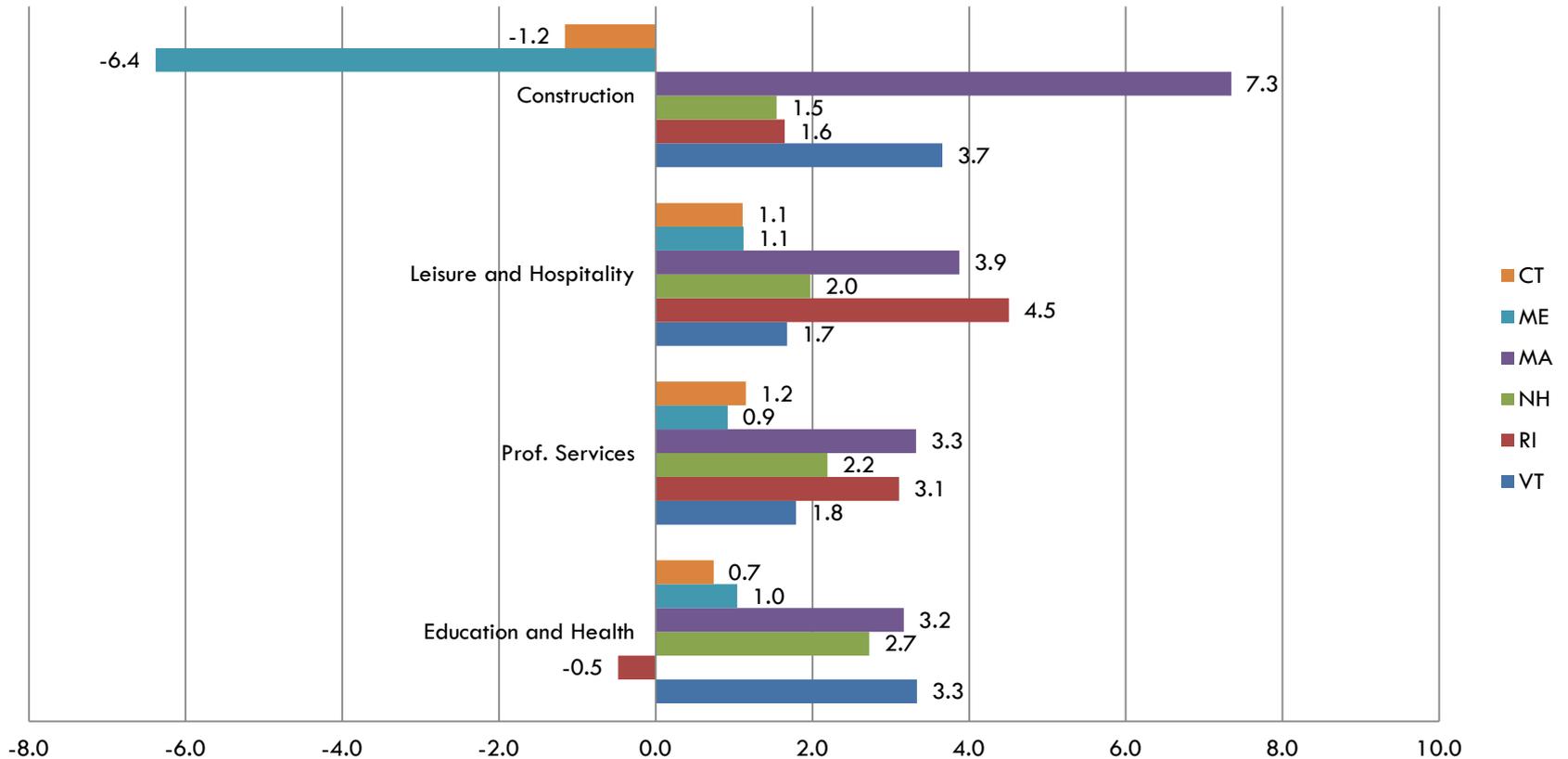
Construction Sector Experiencing Strong Rebound in Employment Growth

Percent Change, September 2015 - September 2016

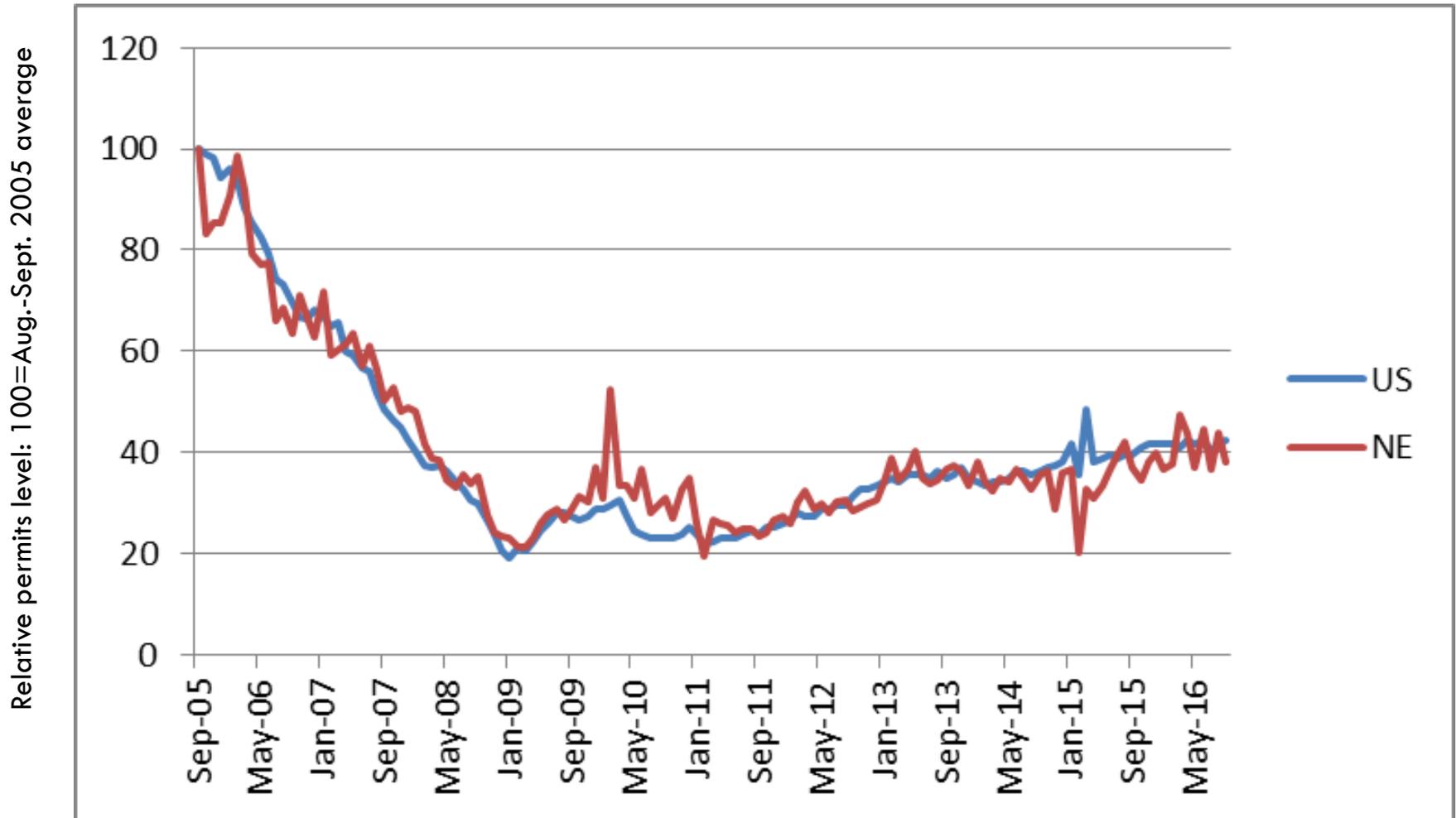


But Construction Employment Growth Varies Across States

Percent Change, September 2015 - September 2016

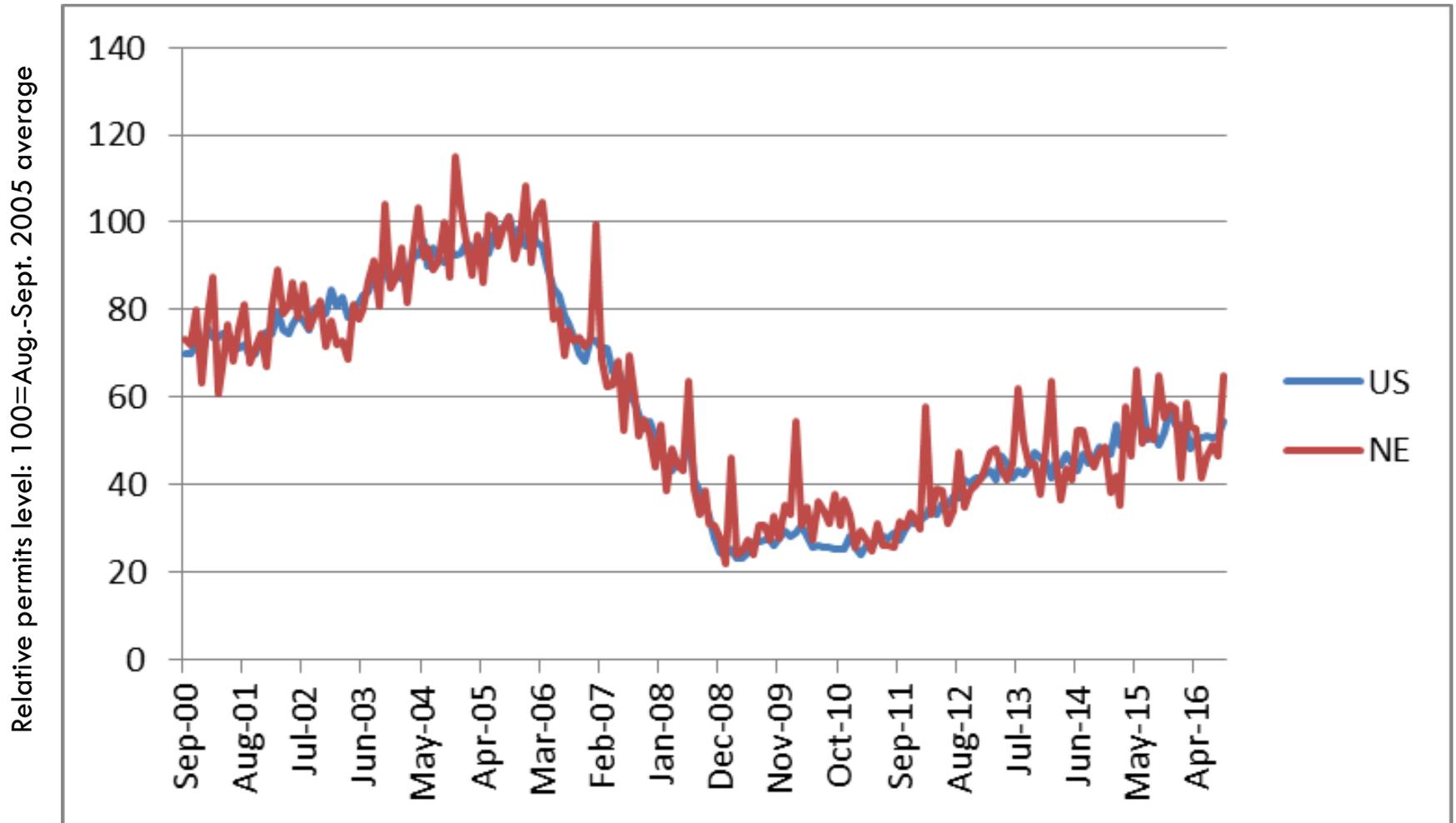


Single-Family Permits Still Well Below Pre-Recession Highs



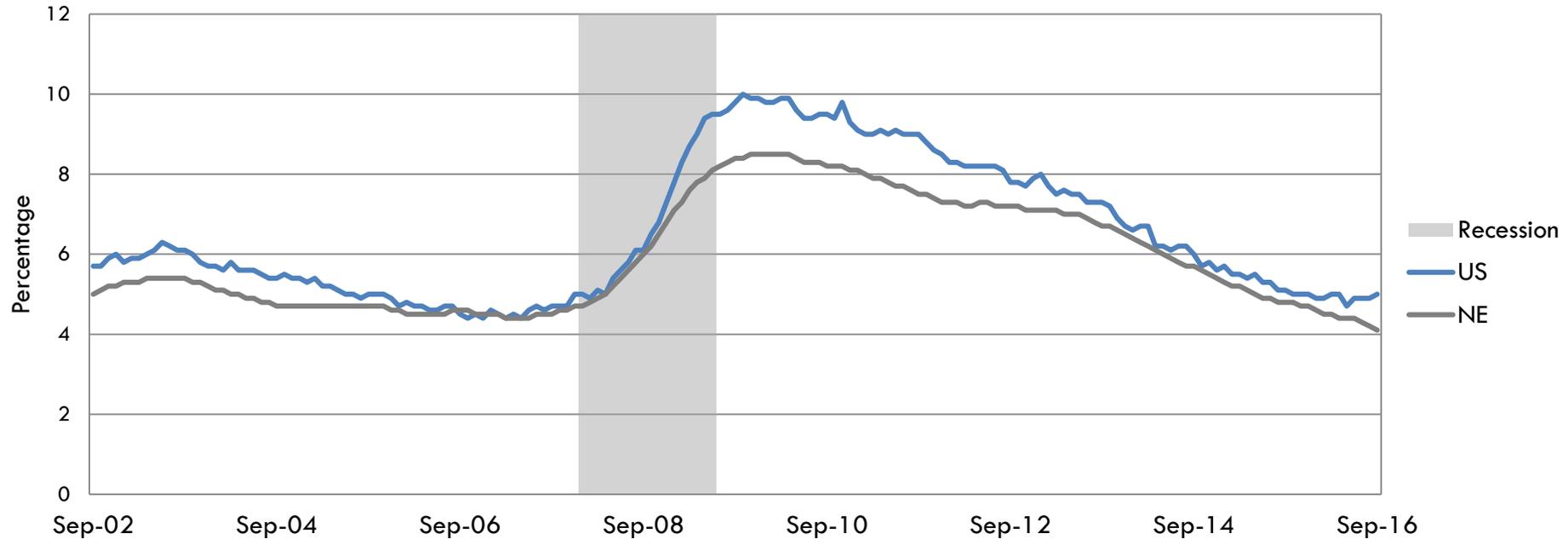
Source: U.S. Census Bureau; data for New England are seasonally adjusted by the Boston Fed.

Multifamily Permits Activity Only Slightly Better than Single-Family



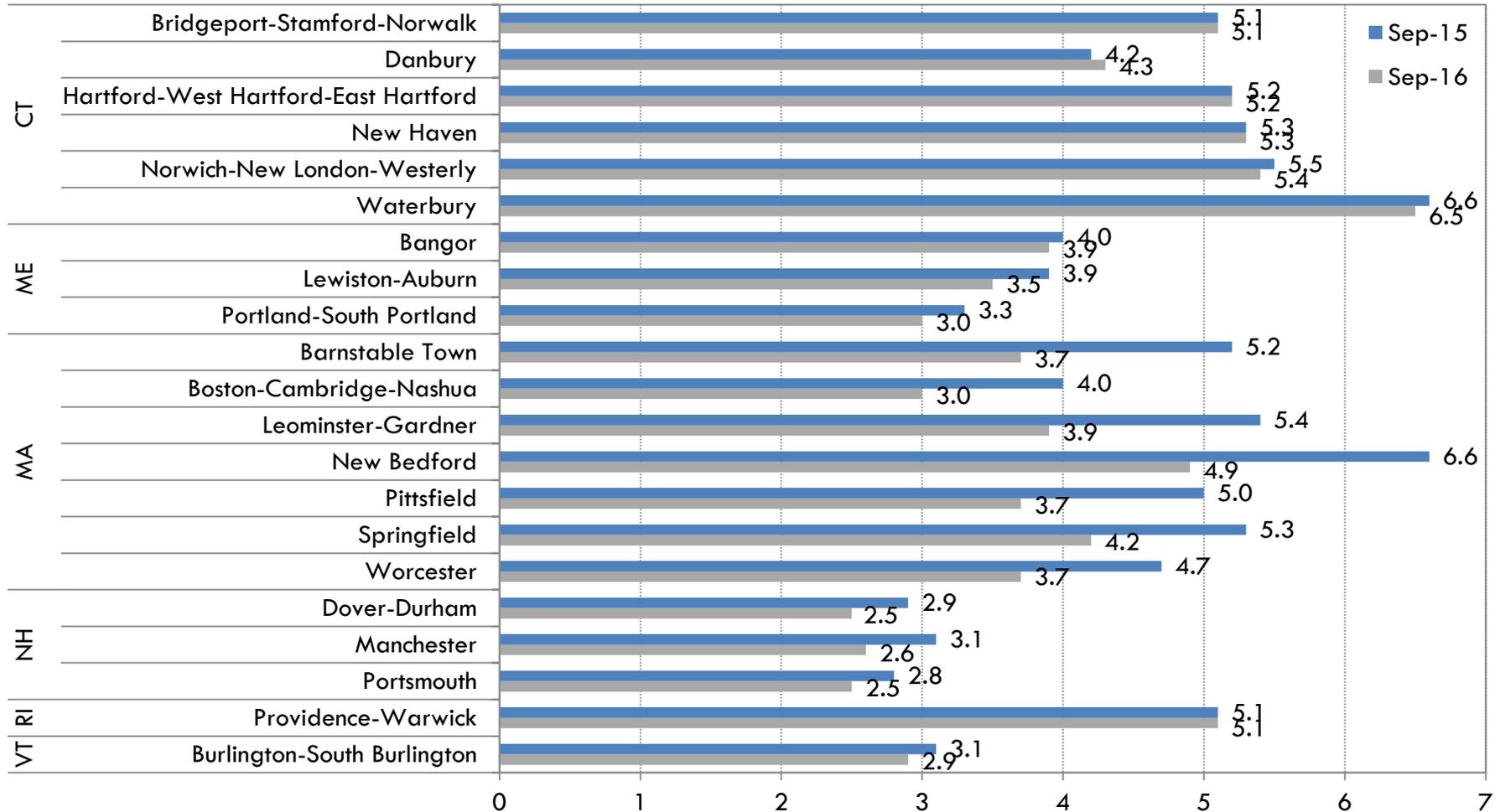
Source: U.S. Census Bureau; data for New England are seasonally adjusted by the Boston Fed.

Unemployment Rate for New England Below its Pre-Recession Minimum



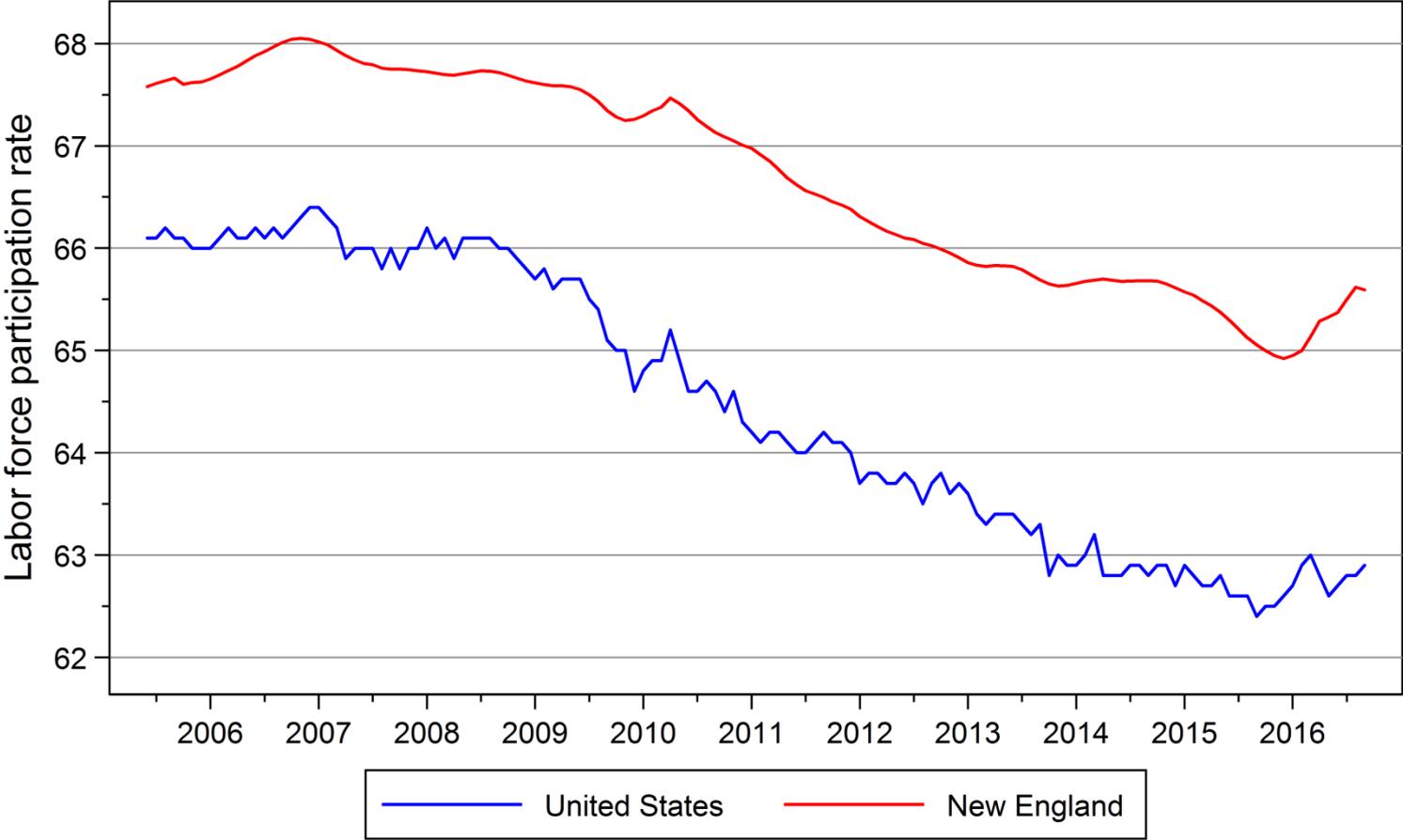
	Sep-15	Sep-16
United States	5.1	5.0
New England	4.8	4.1
Connecticut	5.3	5.4
Maine	4.2	4.1
Massachusetts	4.8	3.6
New Hampshire	3.3	2.9
Rhode Island	5.6	5.6
Vermont	3.7	3.3

Unemployment Rates Down Since 2015 in Most Metro Areas



Region's Labor Force Participation Rate Up Since January; Down Since 2007 (by less than in U.S.)

Exhibit 1a: Labor Force Participation Rate
June 2005 - Sept 2016



Source: Bureau of Labor Statistics; Seasonally-Adjusted Data

Maine Had Largest Decline in Labor Force Participation Since 2007

Labor Force Participation Rate Declines in New England States (Percentage Points)			
State	US peak (Jan. 2007) to Aug. 2016	2007 average to 2015 average	Each Area Peak-Trough*
United States	-3.6	-3.4	-4.0
Connecticut	-2.4	-2.4	-3.7
Maine	-3.7	-4.0	-5.2
Massachusetts	-2.0	-1.7	-2.6
New Hampshire	-1.5	-2.4	-2.8
Rhode Island	-3.8	-3.6	-4.2
Vermont	-4.0	-3.6	-4.9

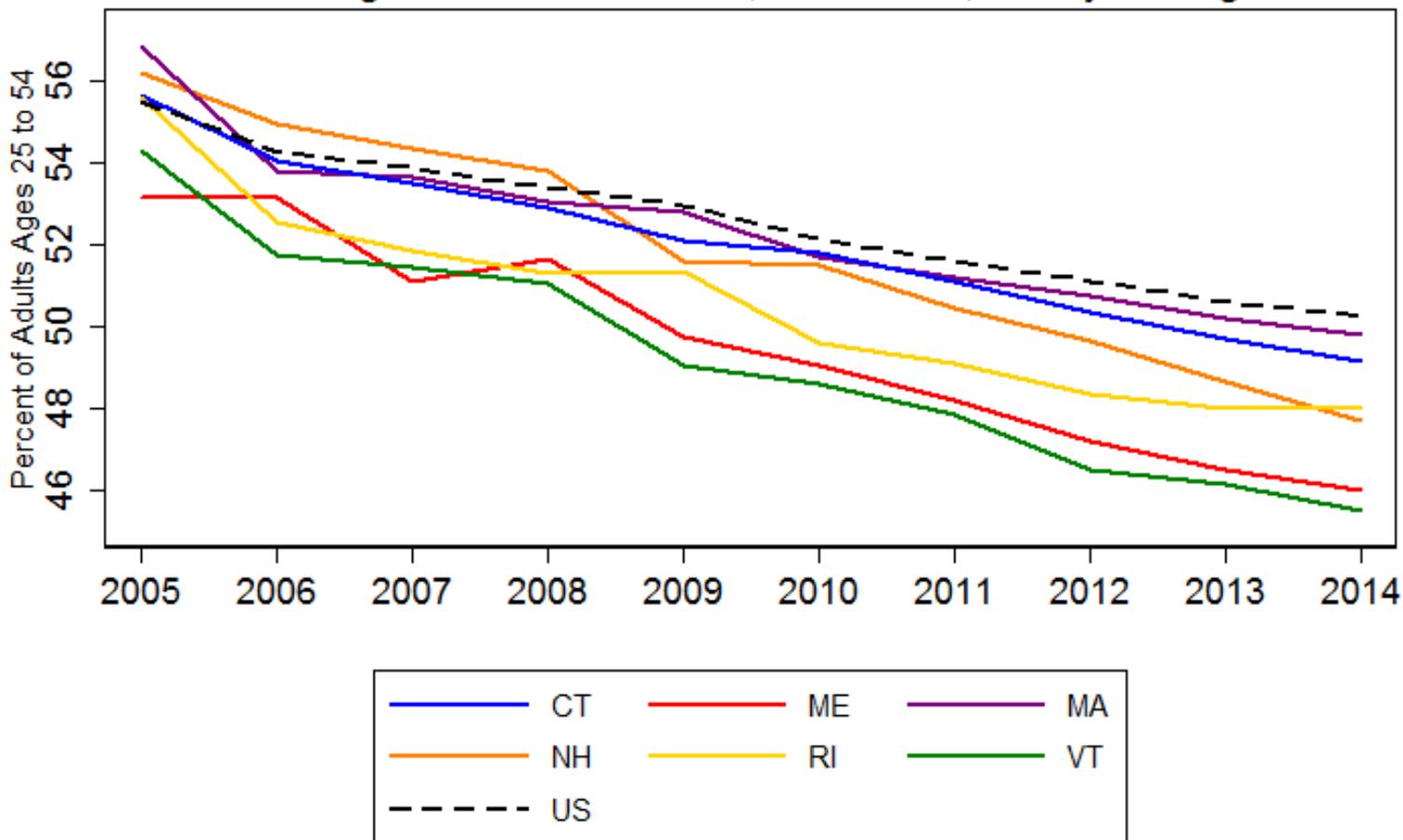
Source: Author's calculations based on data from the Bureau of Labor Statistics, provided by Haver.

*Note: Peaks were constrained to be in 2006 or later; peak and trough dates are as follows: US: Jan 07-Sep 15, CT: Apr 08-Nov 13, ME: Dec 06-Feb16, MA: Nov 06-Jan 16, NH: Jan 07-Jan 16, RI: Jan 07-Feb 16, VT: Oct 06-Dec 15.

New England States Lost More Prime Age Workers than U.S. Since 2005

Adult Population Share Ages 25 to 54

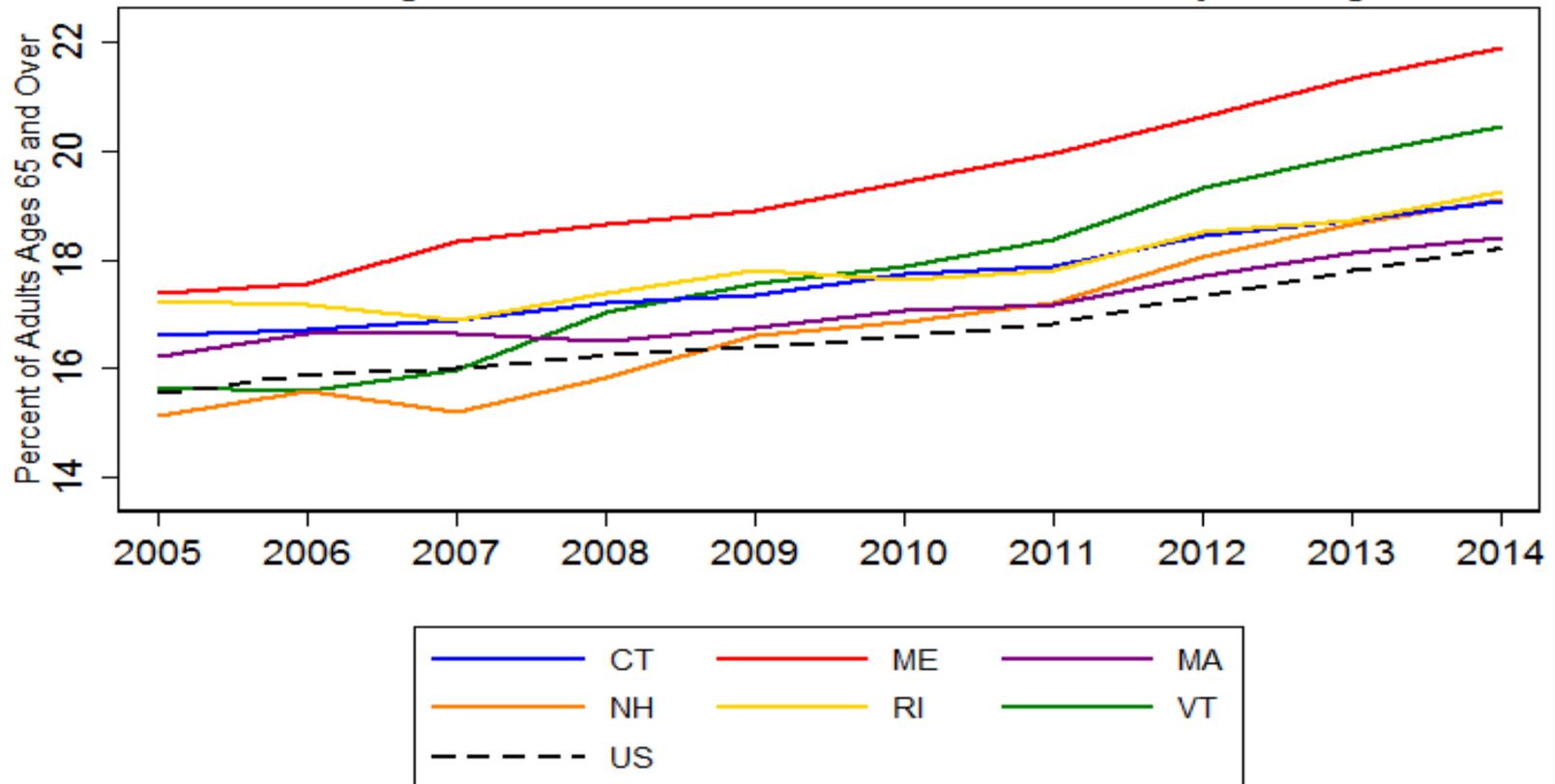
New England States and U.S., 2005-2014, Yearly Averages



Source: Census Bureau, American Community Survey. Adult population refers to individuals ages 16 and older.

...And Gained More Older Citizens

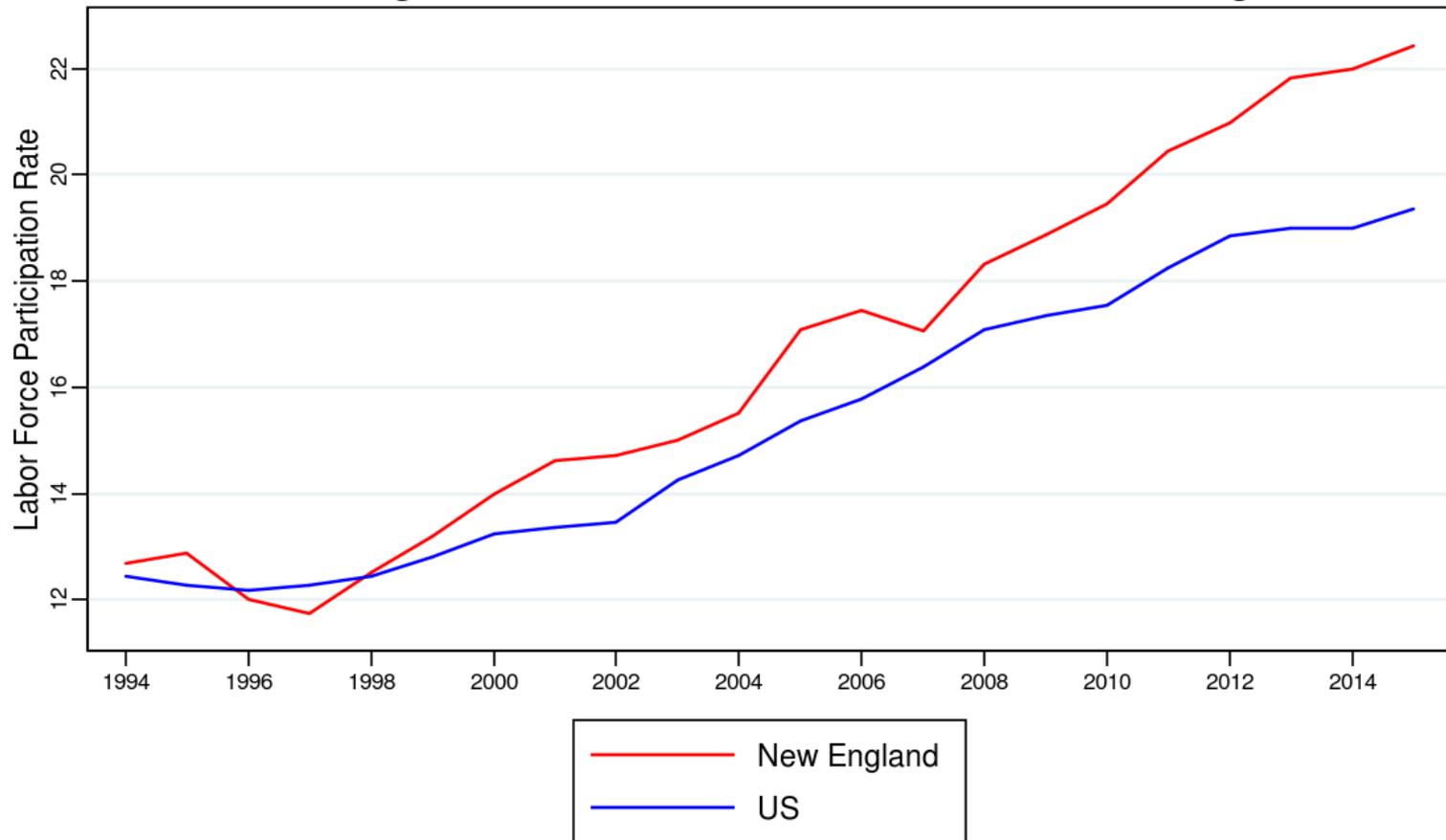
Adult Populaton Share Ages 65 and Over
New England States and U.S., 2005-2014, Yearly Averages



Source: Census Bureau, American Community Survey. Adult population refers to individuals ages 16 and older.

Labor Force Participation Among Region's Seniors Rising at Faster Rate than in U.S.

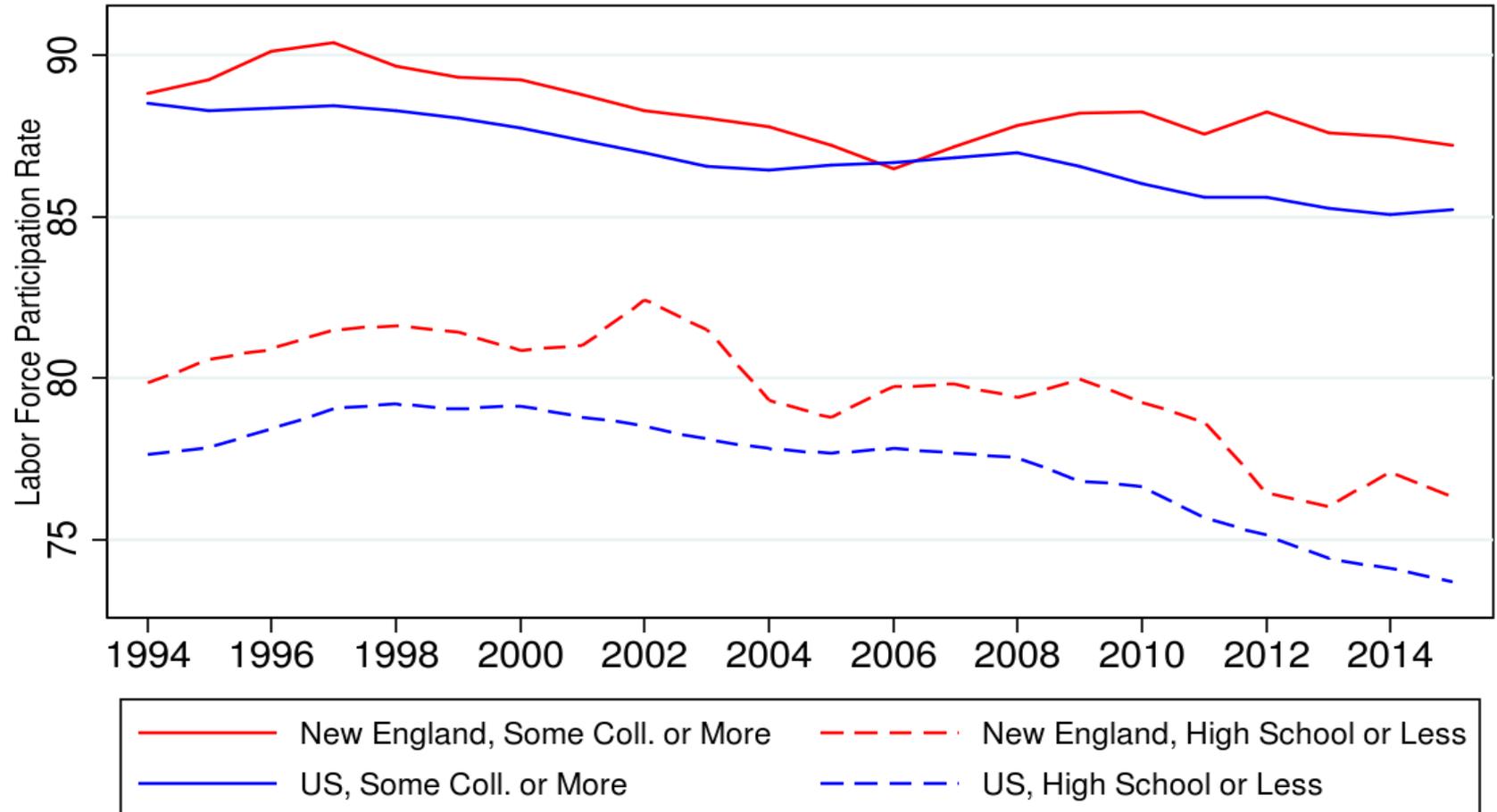
Labor Force Participation Rate, Ages 65 and Over
New England and U.S., 1994-2015, 12-Month Averages



Source: Author's calculations based on Bureau of Labor Statistics' Current Population Survey Integrated Public Use Microdata Series (IPUMS-CPS).

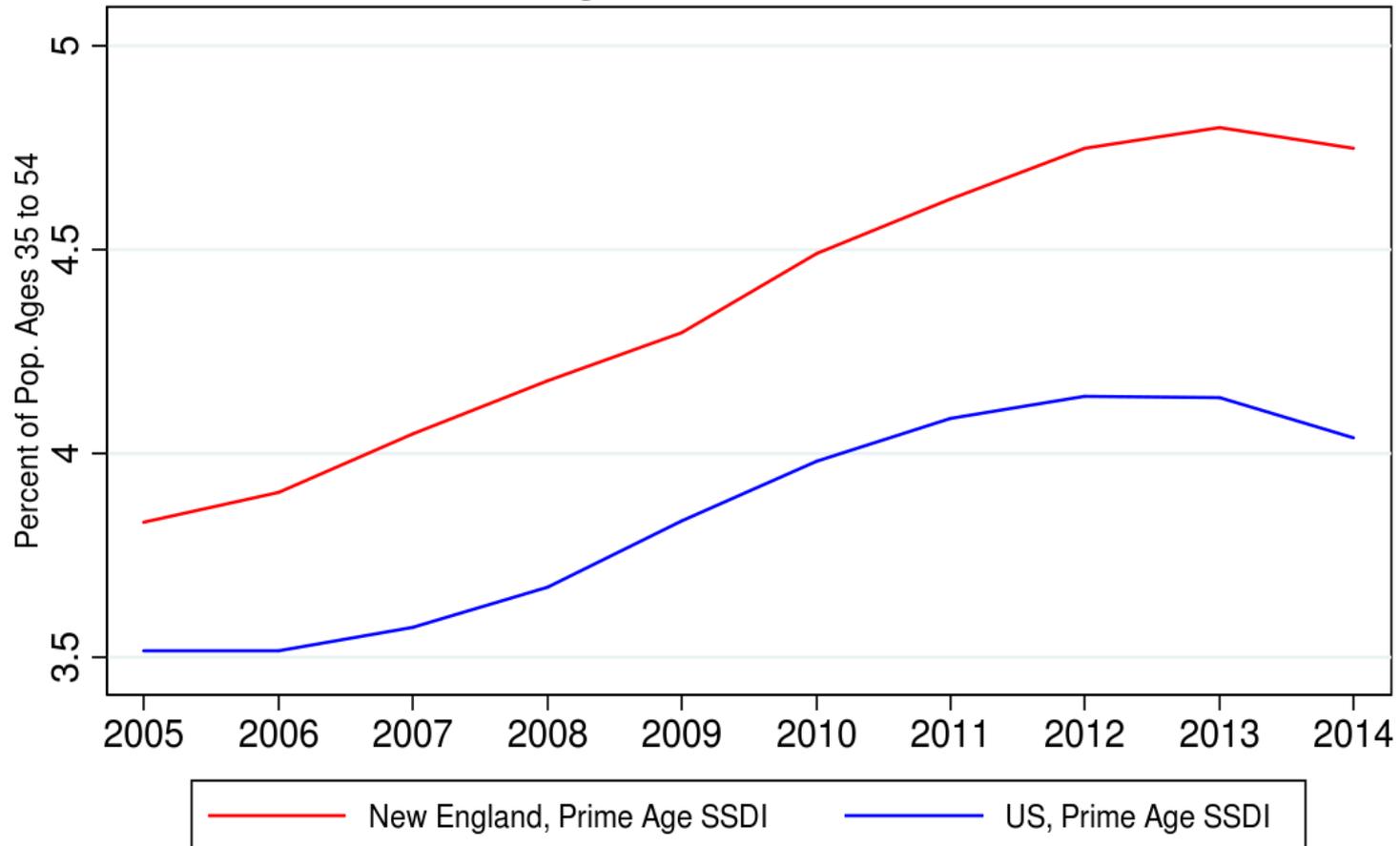
Prime-Age Participation Declining, But Less Steeply Among College-Educated

Labor Force Participation Rate, Ages 25 to 54
By Educational Attainment, New England and US, 1994-2015



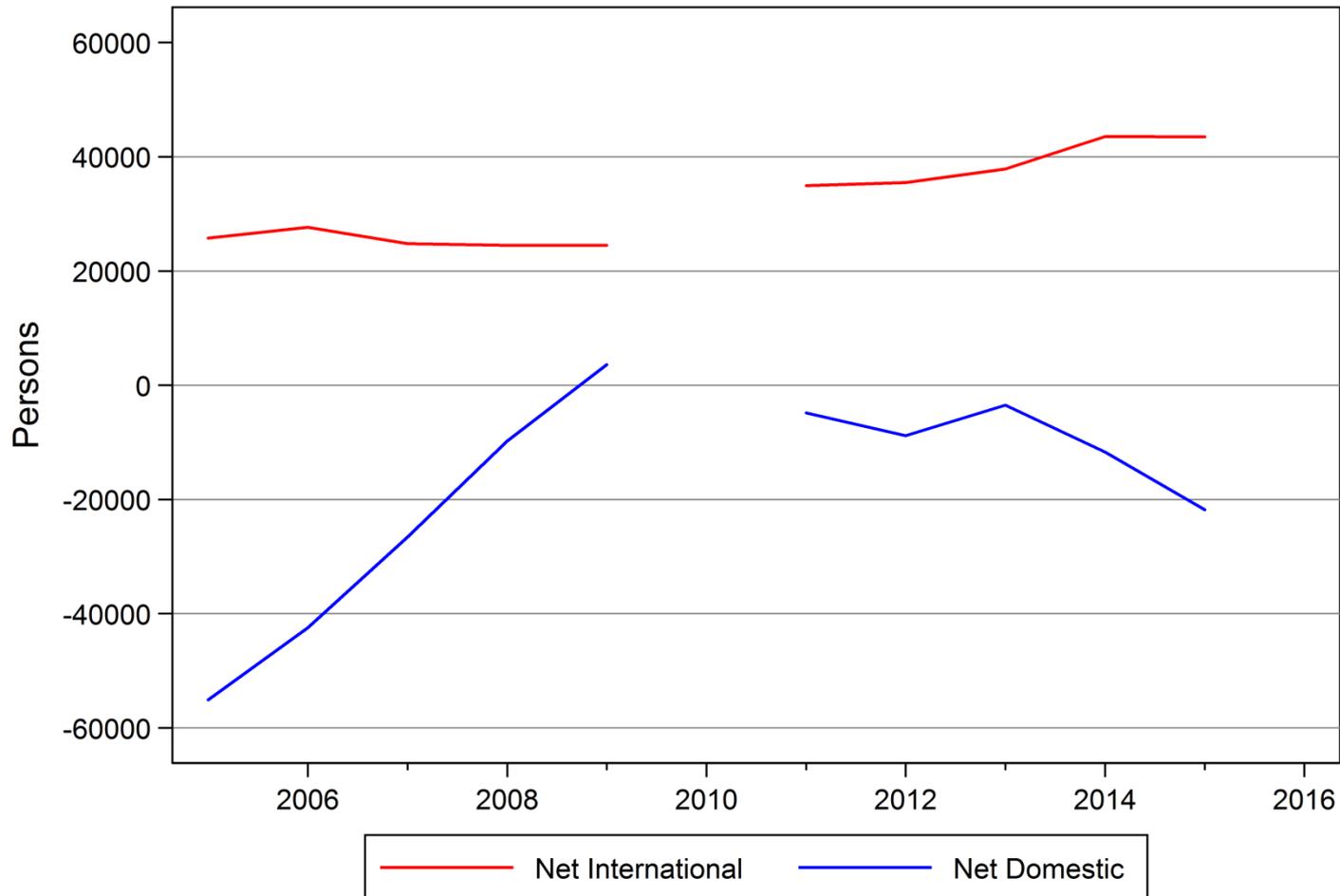
More Prime-Age Citizens Collecting Disability Insurance

Shares Collecting Disability Insurance, Ages 35 to 54
New England and U.S., 2005-2014



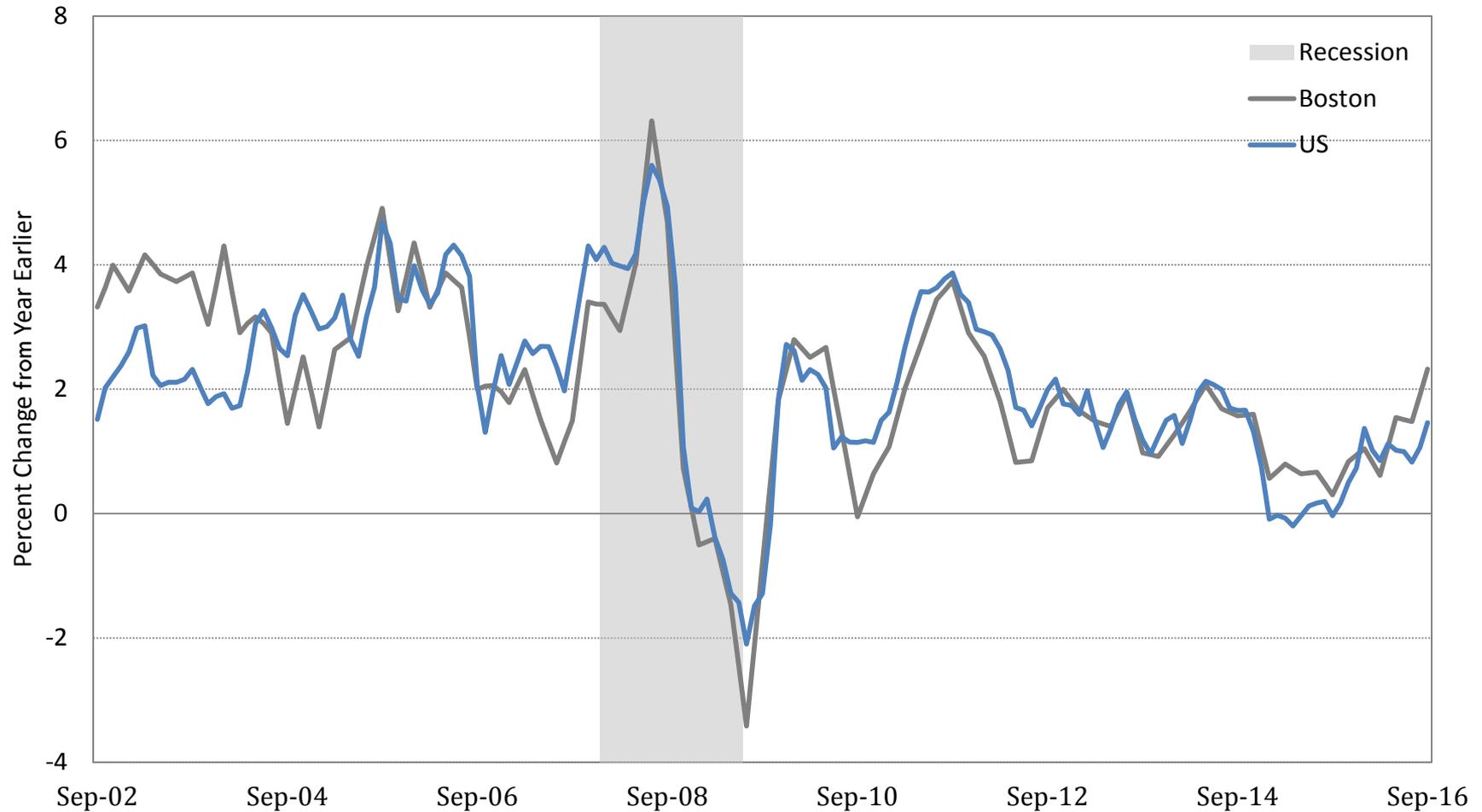
Source: Author's calculations based on data from the Social Security Administration and the American Community Survey.

Without International Migration, Massachusetts Population Would be Declining



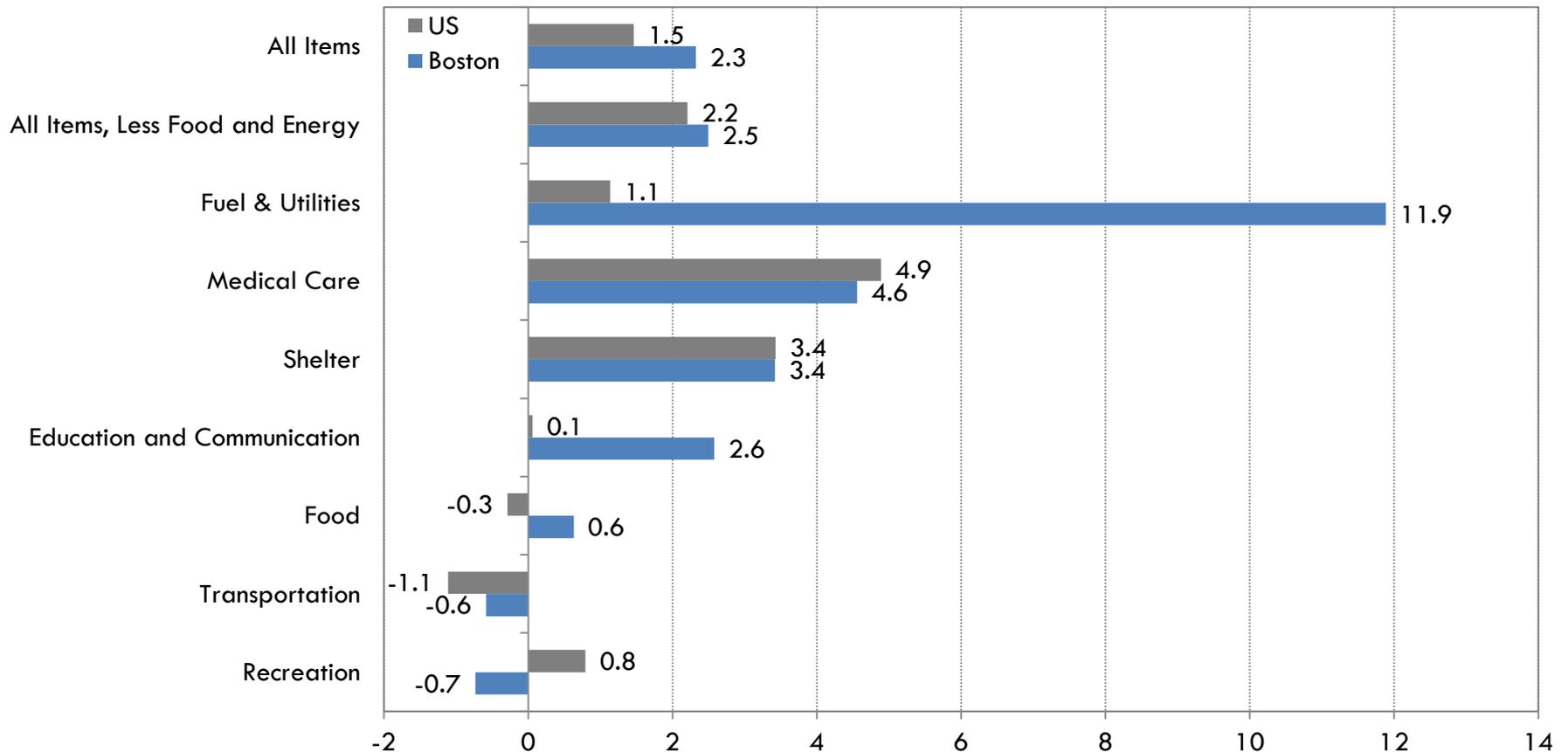
Source: Census Bureau/Haver Analytics

Headline CPI Inflation Above 2 Percent in Boston

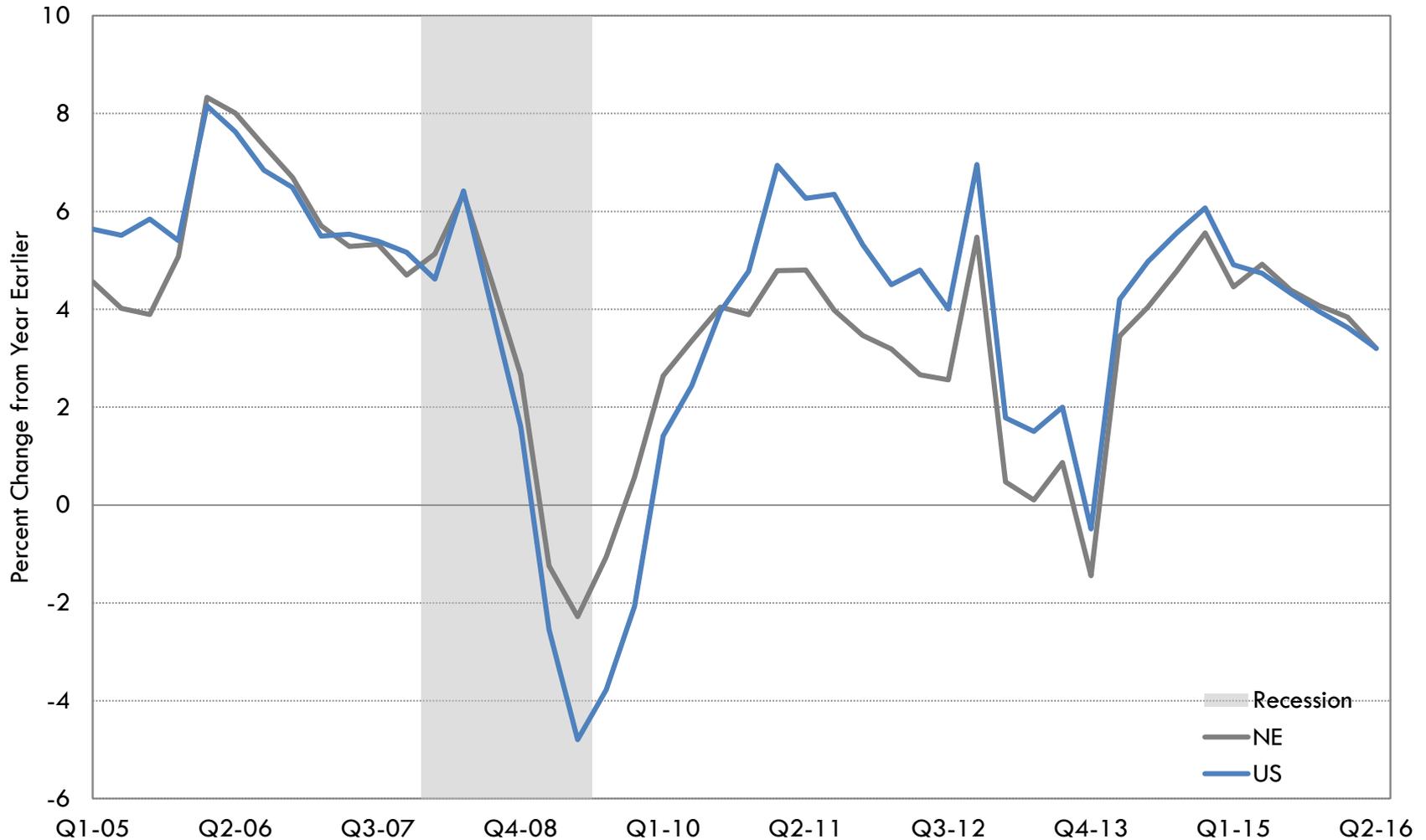


Fuel & Utilities Prices Surging in Boston Area (not Gasoline)

Percent Change, September 2015 - September 2016



Personal Income Growth Down Since Late 2014 in Region and U.S.



Source: Bureau of Economic Analysis, NBER, Haver Analytics

Wage Growth Higher in States with Lower Unemployment Rates

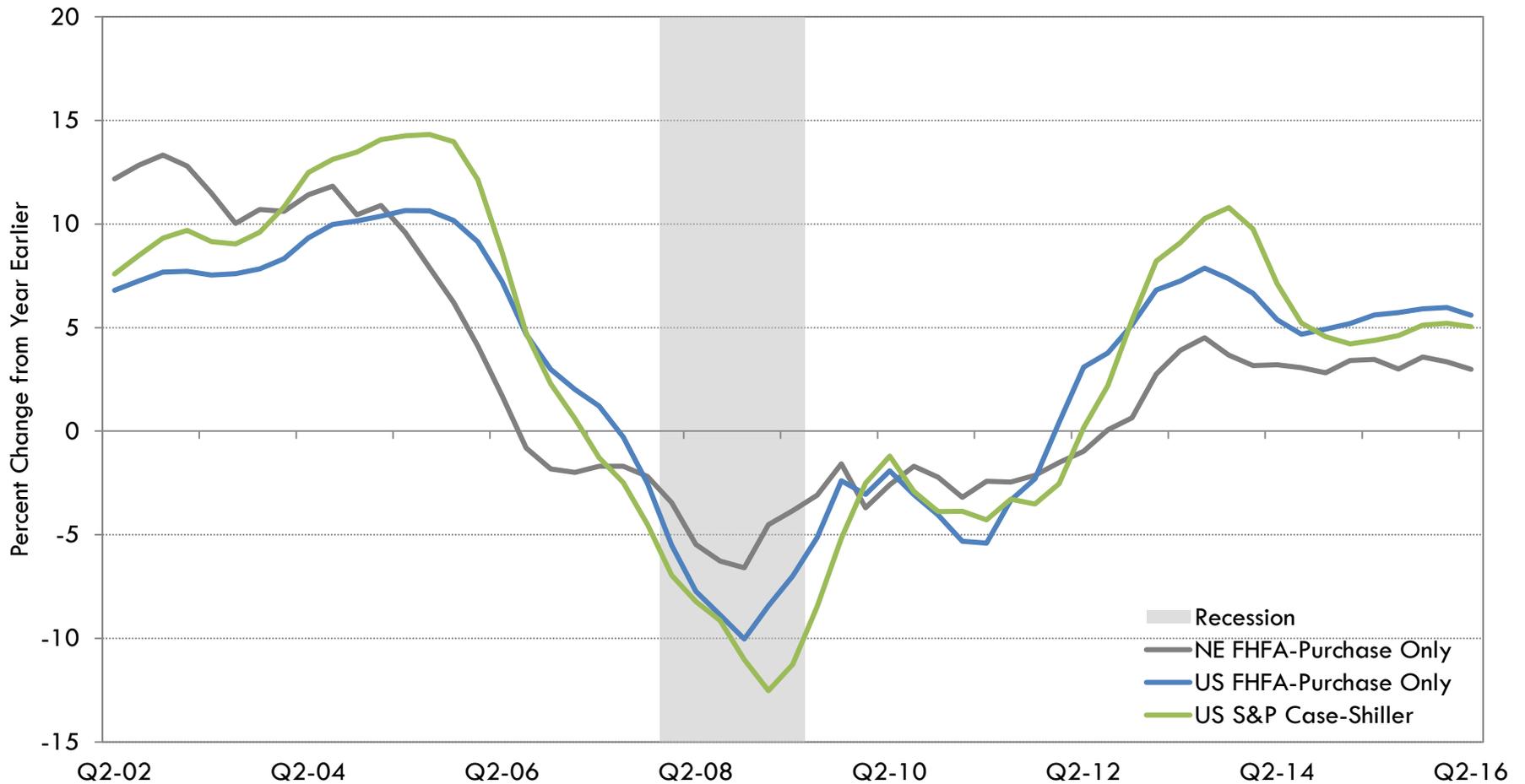
Exhibit 4.3: Income and Wage/Salary Changes - to Q2 2016

	Personal Income			Wage and Salary Disbursements		
	Jun-2016	1-Qtr. Chg.	1-Yr. Chg.	Jun-2016	1-Qtr. Chg.	1-Yr. Chg.
United States	15,900,879	1.0%	3.2%	8,098,471	1.2%	3.8%
New England	911,532	1.1%	3.2%	460,835	1.2%	3.3%
Connecticut	252,249	1.1%	2.5%	114,057	1.2%	2.0%
Maine	58,561	0.7%	3.3%	27,701	0.8%	3.8%
Massachusetts	438,596	1.1%	3.6%	242,556	1.3%	3.7%
New Hampshire	76,860	1.1%	3.7%	35,868	1.1%	4.9%
Rhode Island	53,949	0.9%	2.3%	26,043	0.9%	2.1%
Vermont	31,317	0.8%	3.3%	14,610	1.1%	4.2%

Source: U.S. Bureau of Economic Analysis/Federal Reserve Bank of Boston.

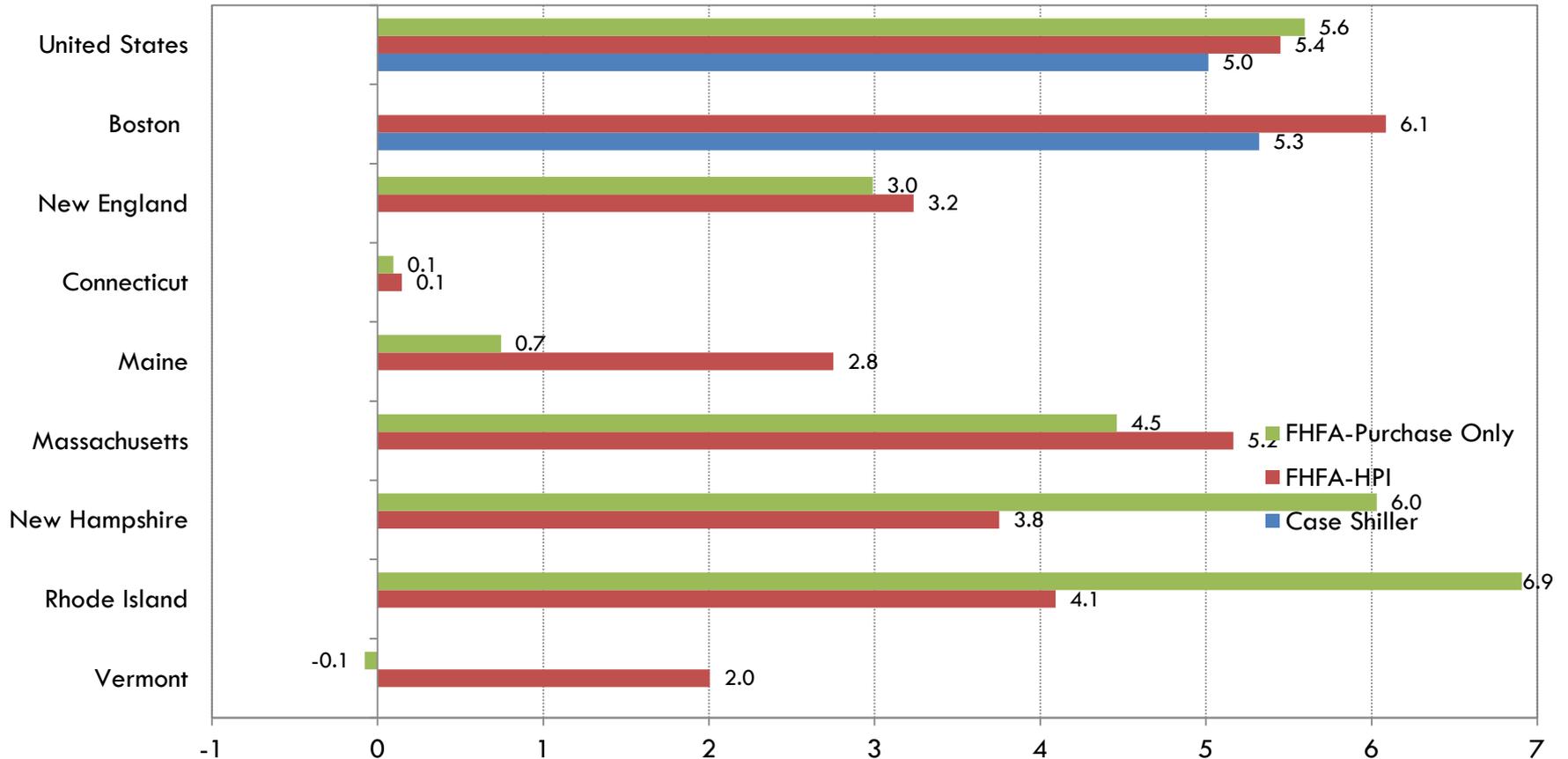
Note: Data represent millions of dollars and are seasonally adjusted.

House Price Increases Steady Since 2014; More Moderate in Region than U.S.



House Price Growth Below Average in CT, ME, VT

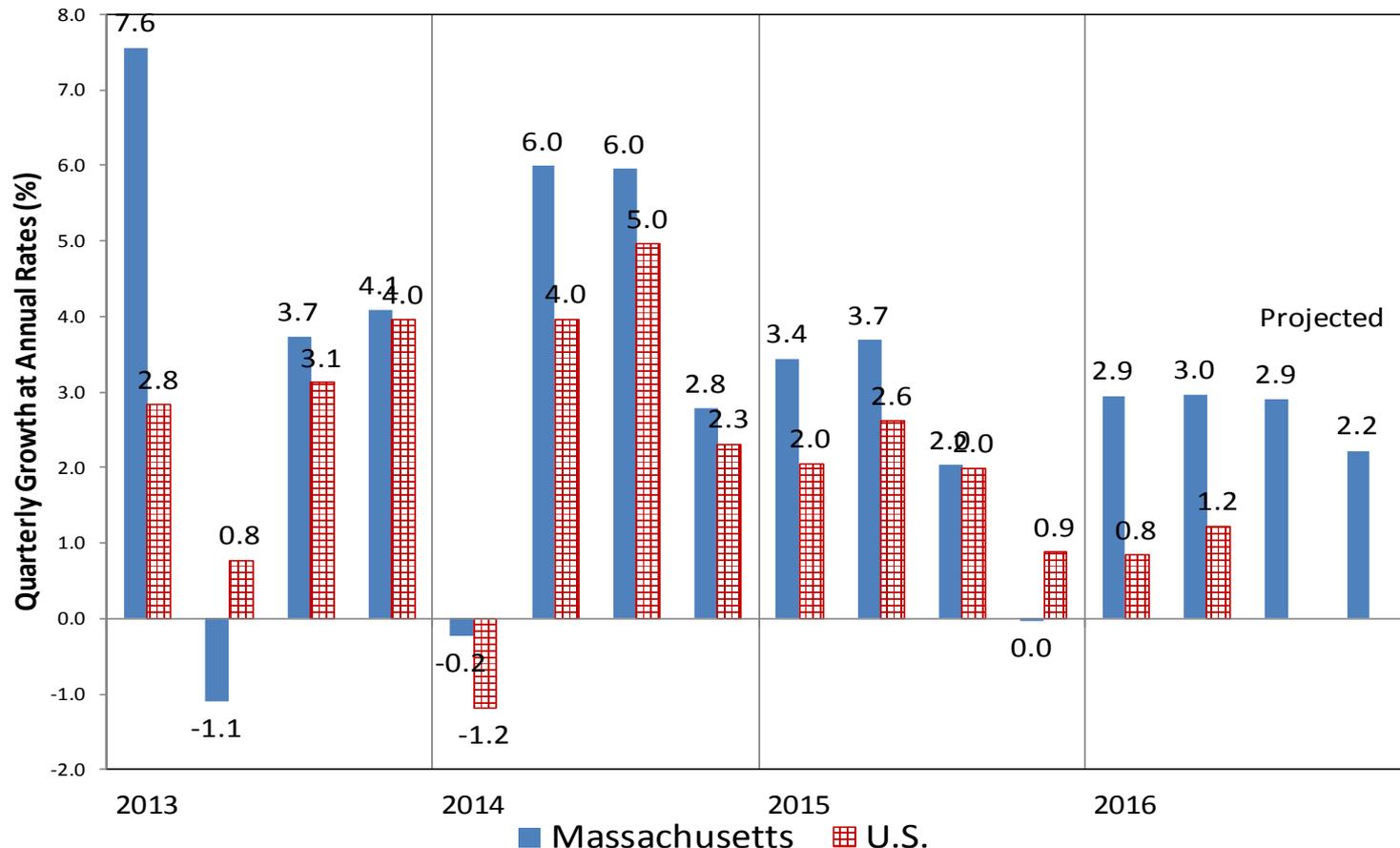
Percent Change, Q2 2015 - Q2 2016



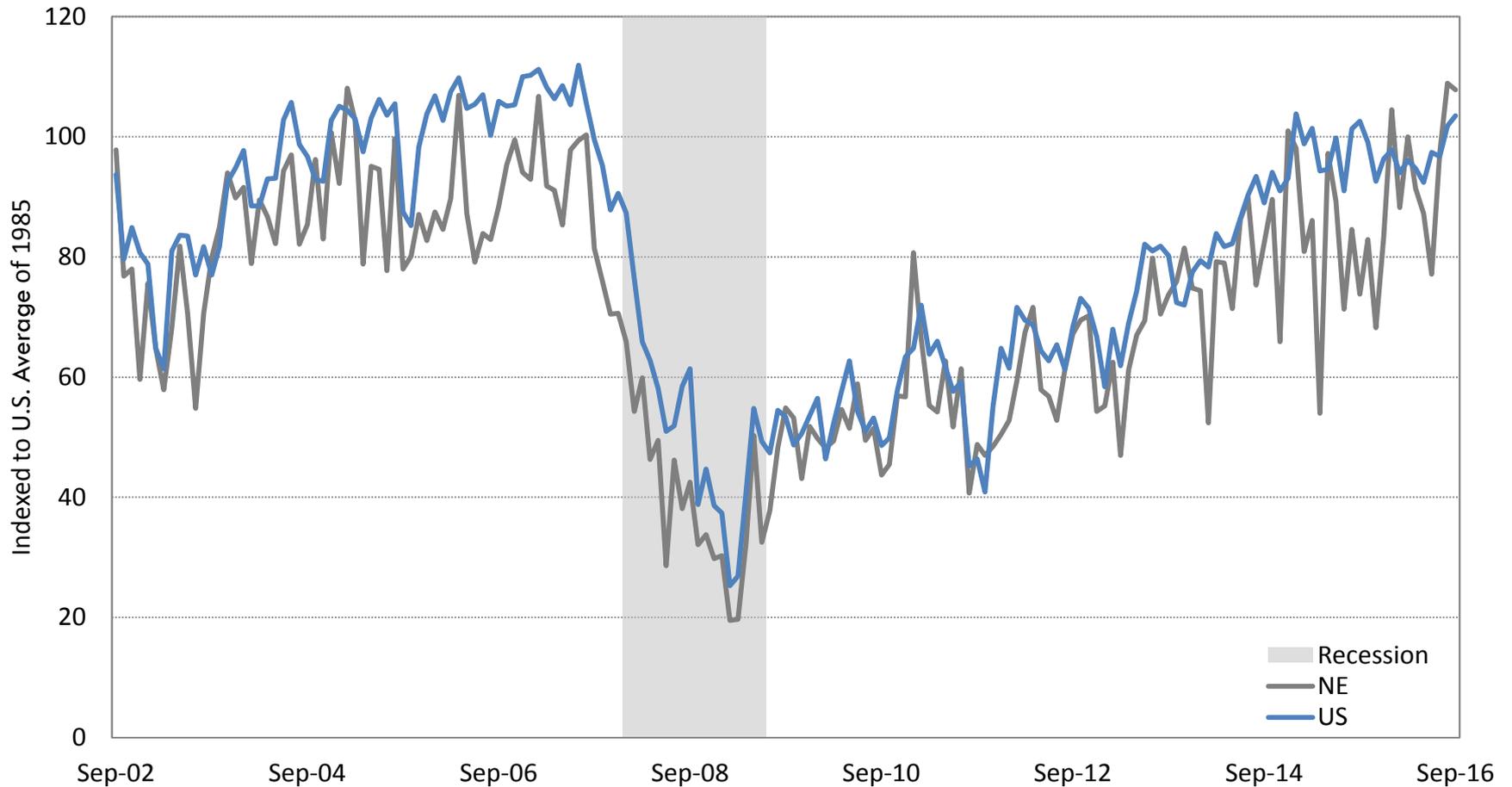
Econ. Growth Stronger in MA than in U.S., but Growth Pace Moderating in late 2016

Growth in Real Product, Massachusetts vs. U.S.

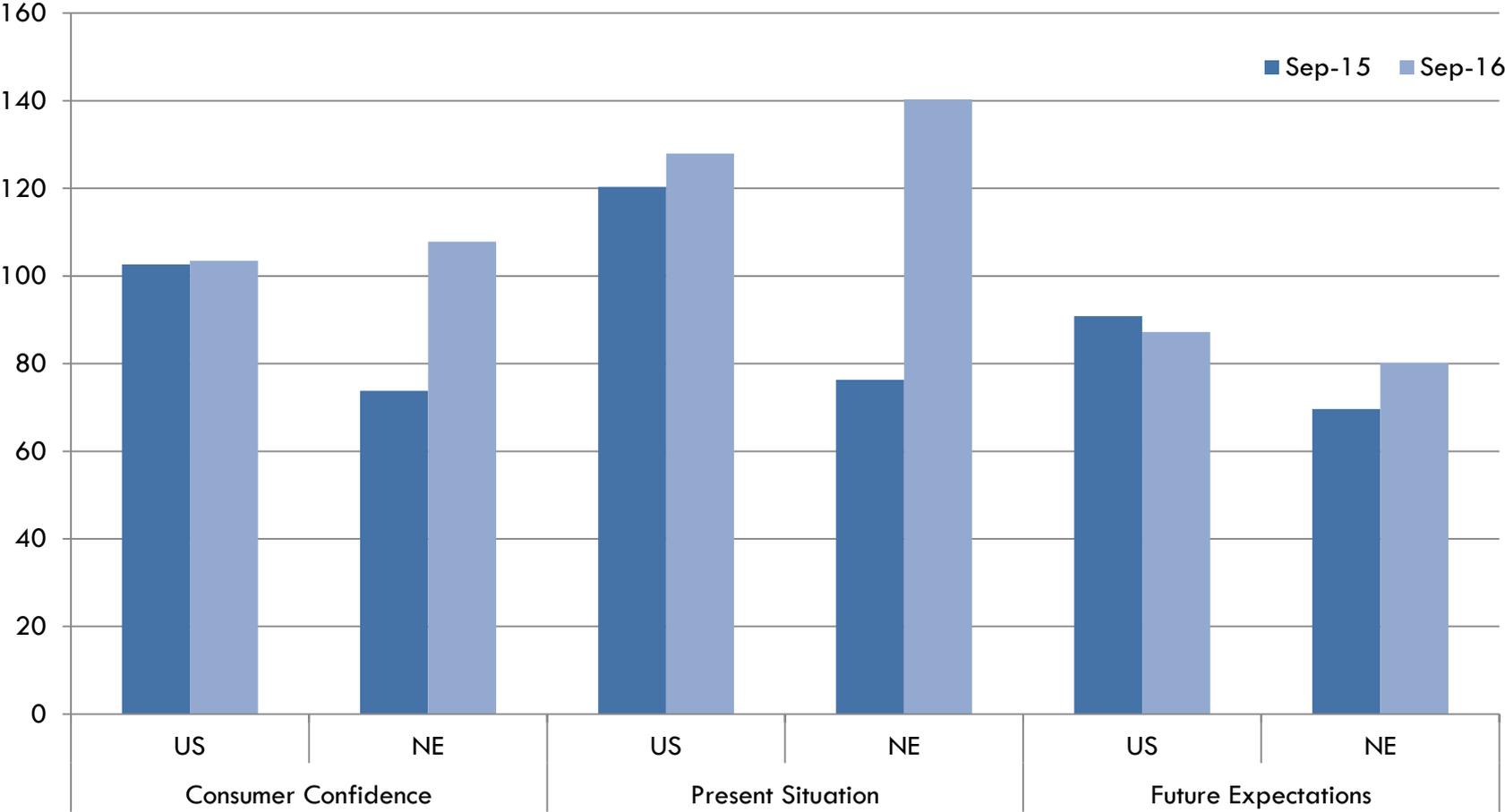
Source: U.S., Bureau of Economic Analysis; Massachusetts: MassBenchmarks



Consumer Confidence Back to Pre-Recession Levels in New England

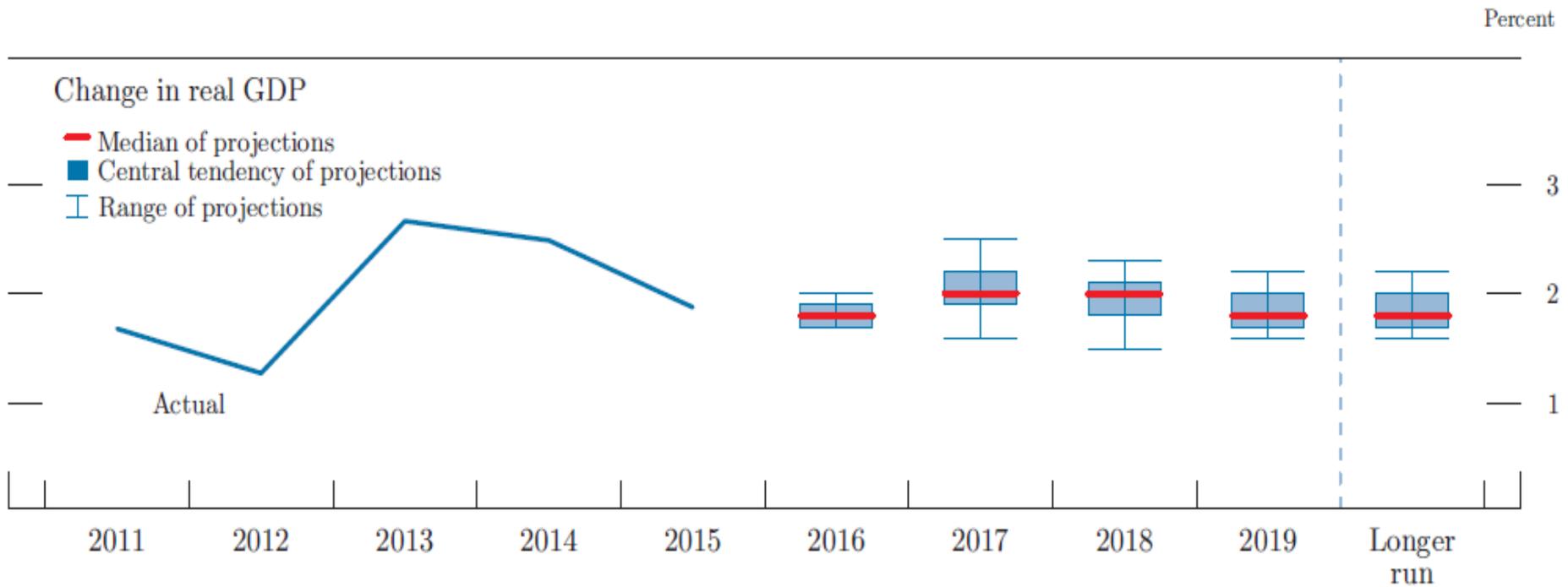


Present Confidence Improved More than Confidence in Future



Source: The Conference Board, Haver Analytics

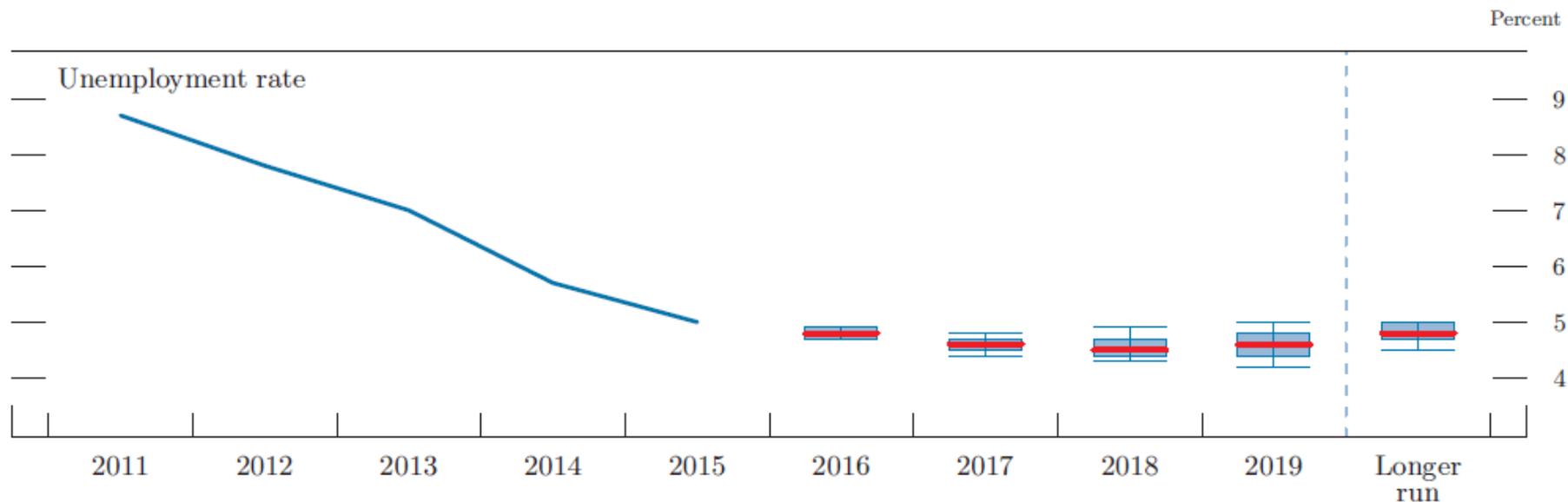
FOMC: GDP Growth May Increase in 2017-18, but Long-Run Growth Rate Below 2 Percent



Source: Minutes of the Federal Open Market Committee September 20-21, 2016.

<http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20160921.pdf>

FOMC: Unemployment Rate Drifts Down Further Through 2018; Settles at ~4.8 Percent in Long Run



Source: Minutes of the Federal Open Market Committee September 20-21, 2016.

<http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20160921.pdf>

FOMC: Inflation Higher in 2017, then Roughly Flat at ~2 Percent Through 2019 and Beyond



Source: Minutes of the Federal Open Market Committee September 20-21, 2016.
<http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20160921.pdf>

Risks to the Outlook

- Upside risks
 - Domestic labor markets tightening
 - Renewed fiscal stimulus?
 - Tax cuts, deregulation?
- Downside risks
 - Political uncertainty
 - Protectionist trade policy?
 - Tighter immigration policy?
- FOMC saw risks as “balanced” in latest statement
- Risks for the region:
 - Aging workforce, other drags on labor force participation
 - Reliance on international immigration