



*Southern Legislative Conference
70th Annual Meeting*

Slow and Low: The Economic and Financial Outlook

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Slow and Low: The Economic and Financial Outlook

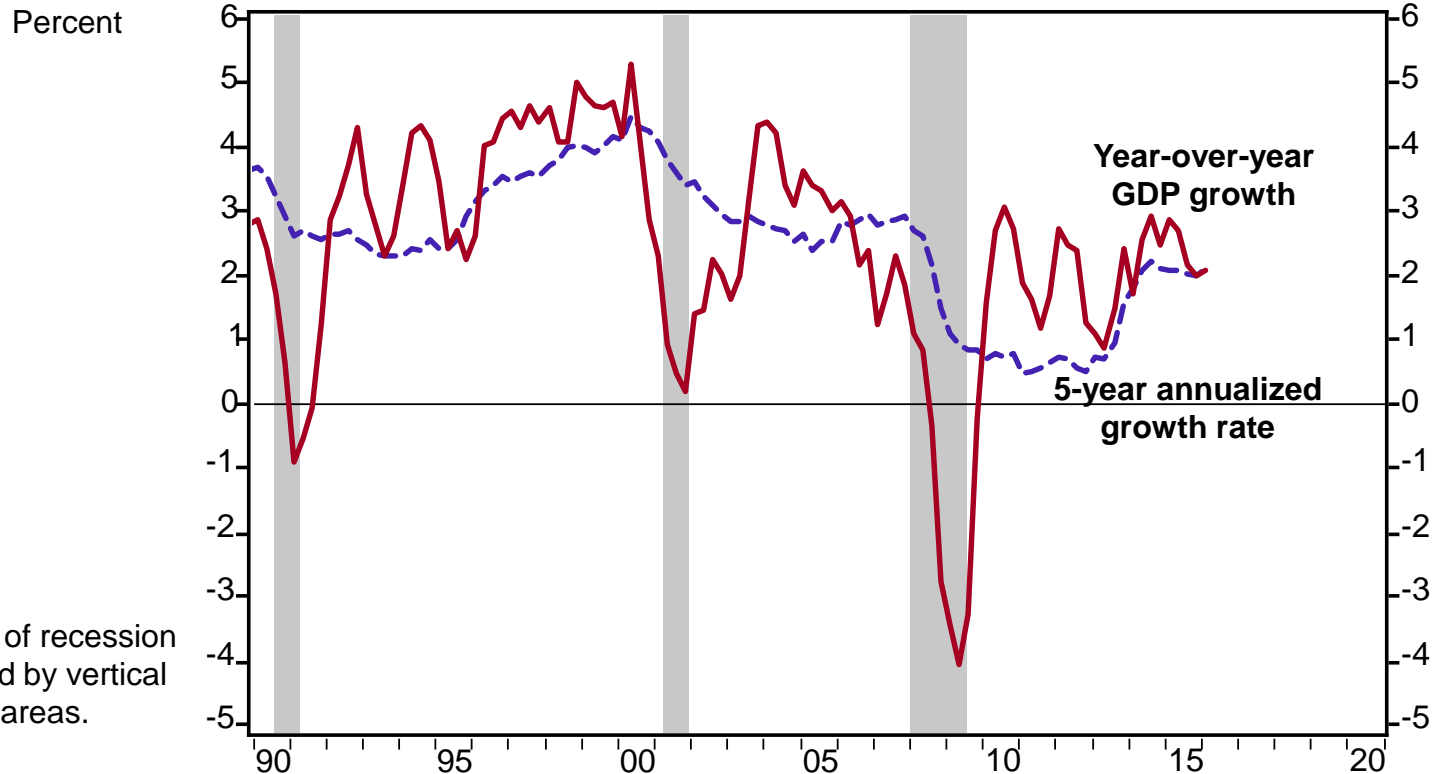
- **The national economic outlook for 2016**
 - **Modest growth with downside risks**
 - **Tame inflation**
 - **Historically low interest rates**
- **The SLC region**
 - **Strengths: Relatively fast population growth, low costs—especially housing**
 - **Biggest economic challenge: Education**
- **Long-term economic and financial outlook**
 - **Slow growth and low inflation**
 - **Low interest rates and asset returns**
 - **Fiscal pressures building: Federal and some states**



Slow and Unsteady: Economic Recovery Moves Into Its 8th Year

Growth Rate of Real Gross Domestic Product (GDP)
Percent change from year ago

Trend Growth Rate of Real GDP
Five-year annualized percent change

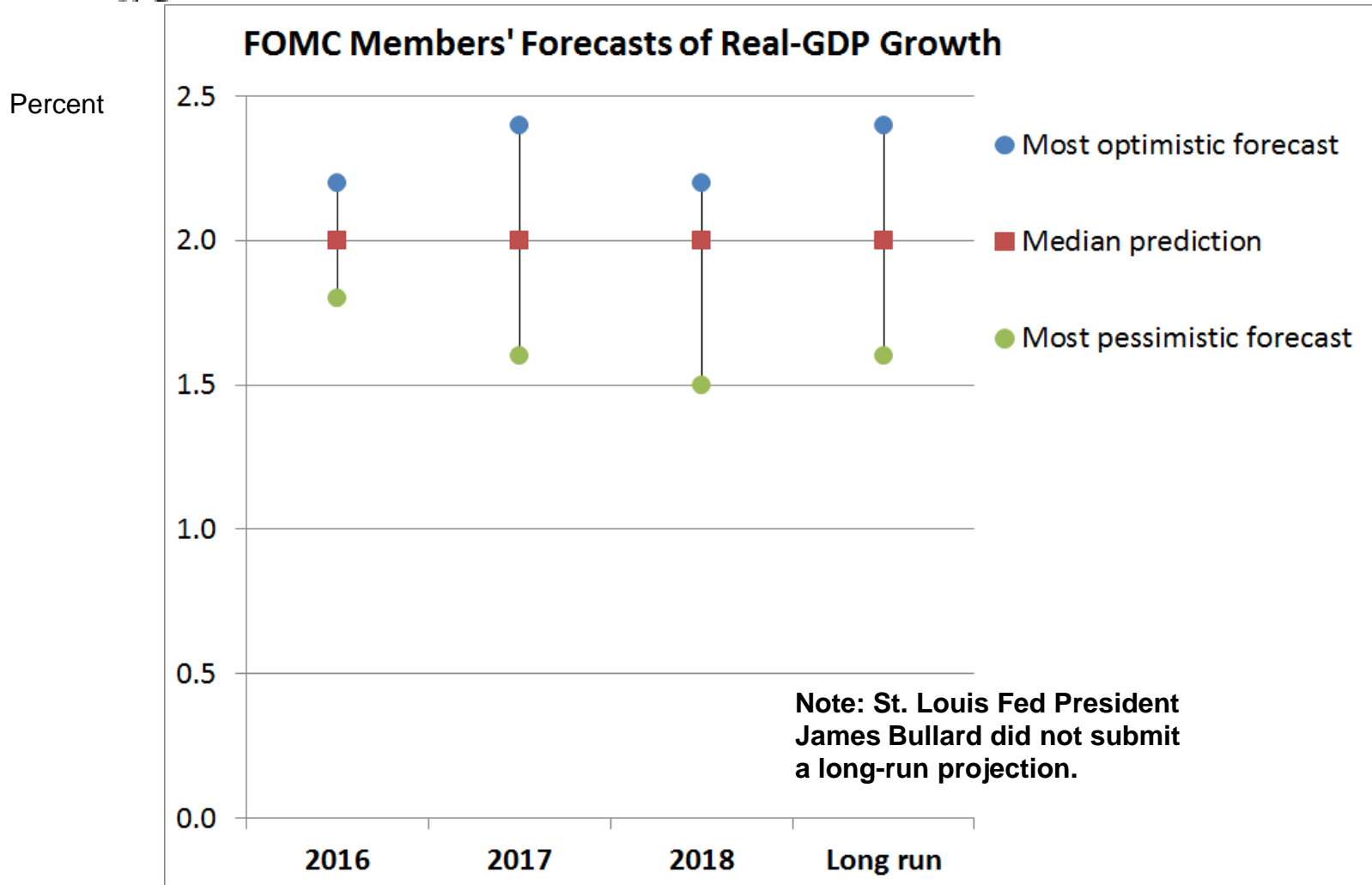


Source: Bureau of Economic Analysis /Haver Analytics

Quarterly data through Q1.2016



The New Normal: Fed Consensus Predicts 2-Percent Growth Forever

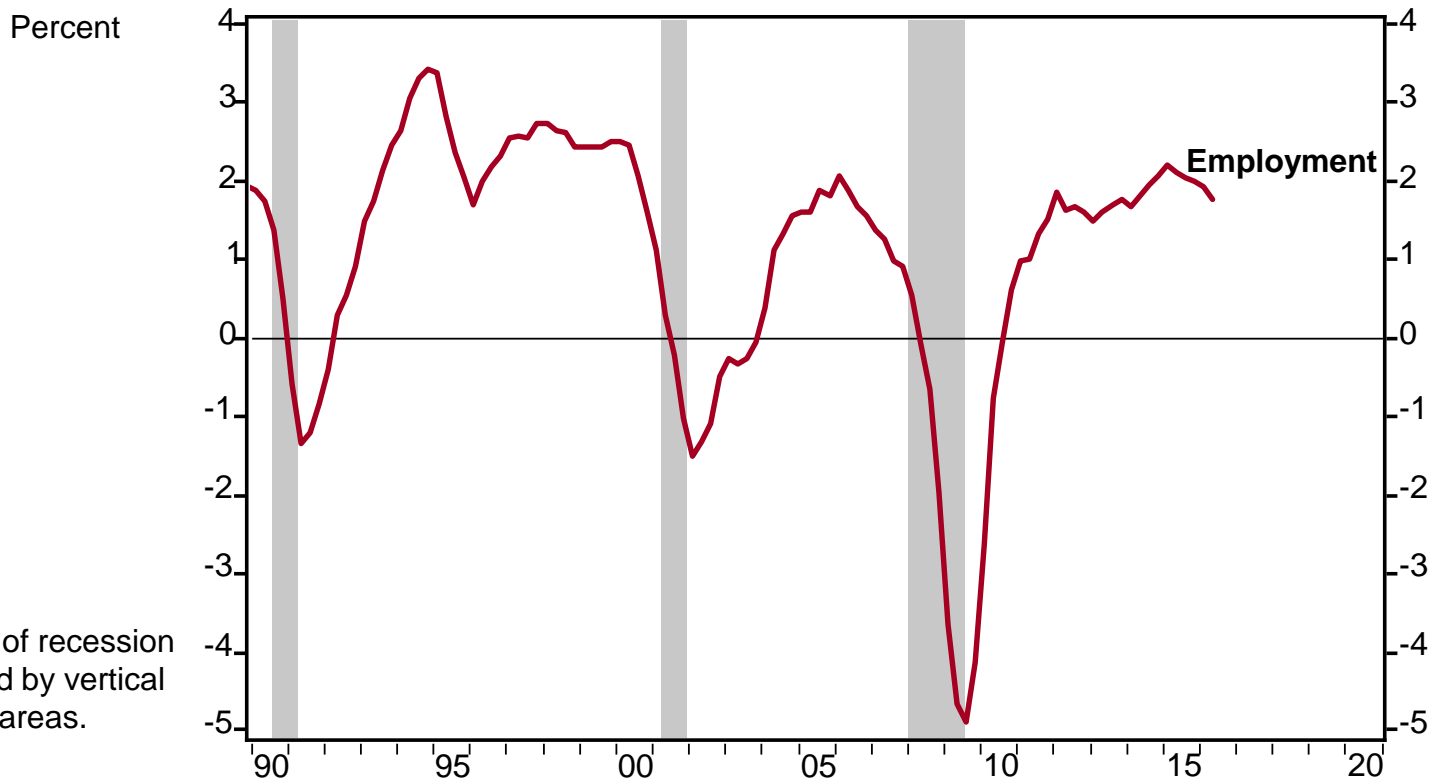




Employment Is Growing...

Growth Rate of Nonfarm Payroll Employment

Percent change from year ago



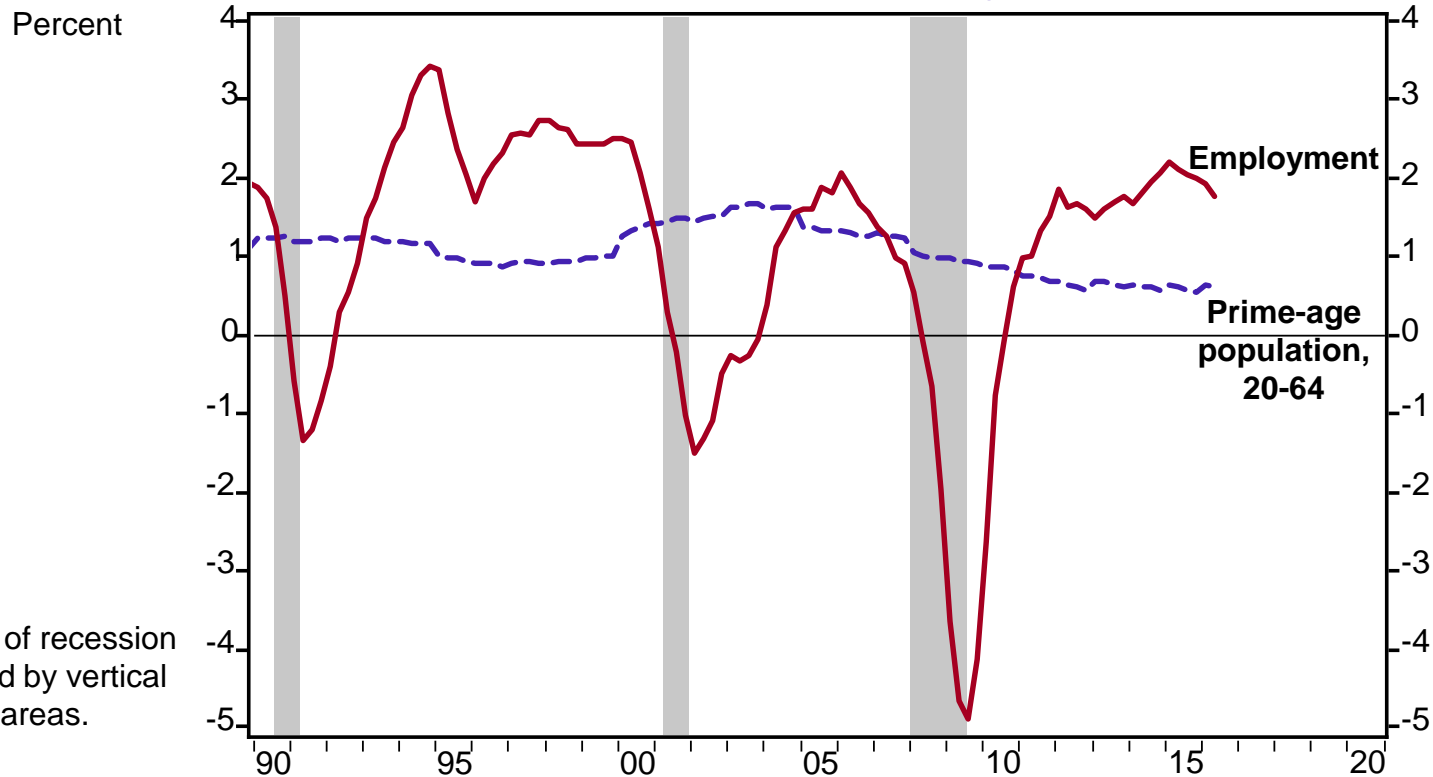
Source: Bureau of Labor Statistics /Haver Analytics Quarterly data through Q2.2016



... *Faster Than Potential Workforce*

Growth Rate of Nonfarm Payroll Employment
Percent change from year ago

Growth Rate of Prime-Age Population, Ages 20-64 Years Old
Five-year annualized percent change



Periods of recession indicated by vertical shaded areas.

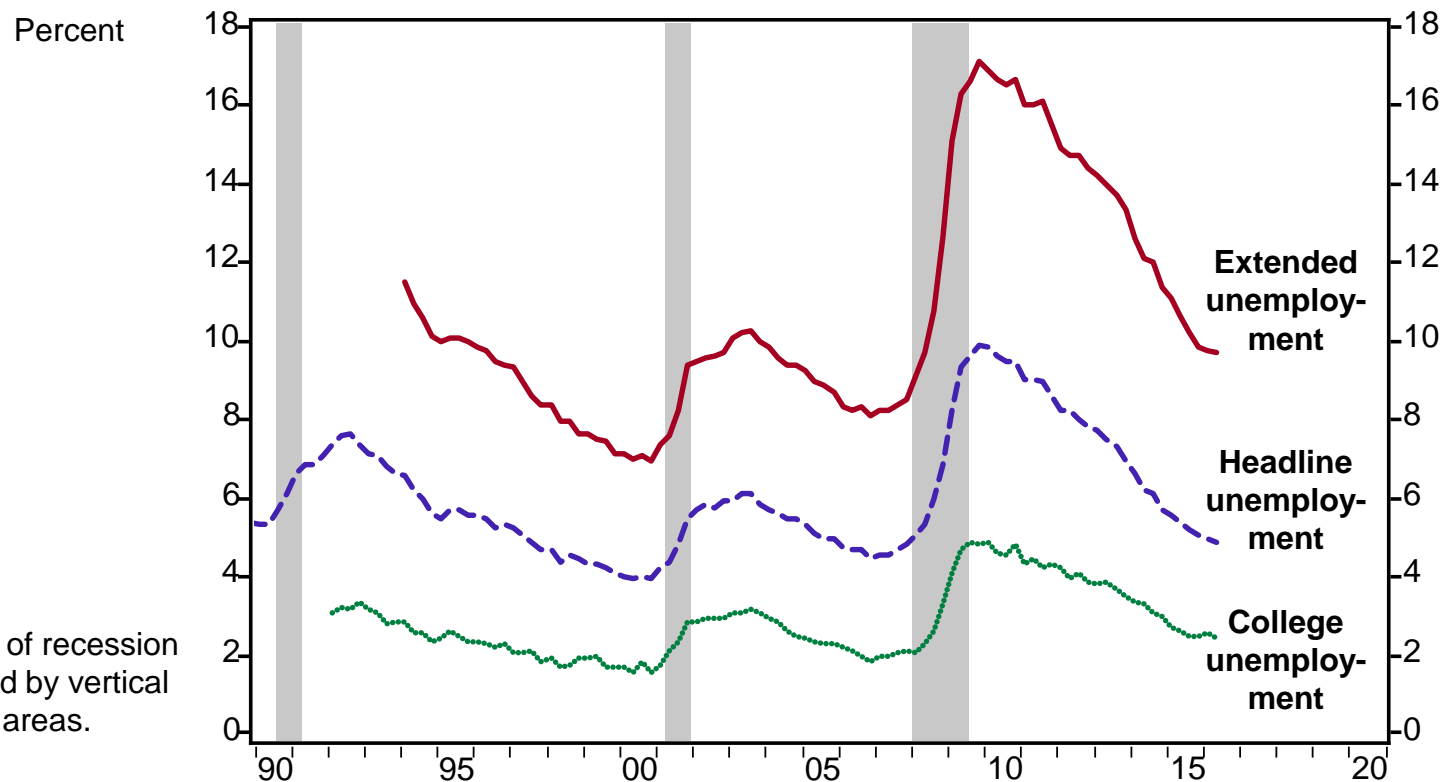
Source: Haver Analytics

Quarterly data through Q2.2016



Unemployment Rate Unlikely to Fall Much Further

Extended Unemployment: Incl. Discouraged + Invol. Part-Time, 16+
Headline Unemployment Rate: Actively Searching, 16+ Years Old
College-Grad Unemployment: Actively Searching, 25+ Years Old



Periods of recession indicated by vertical shaded areas.

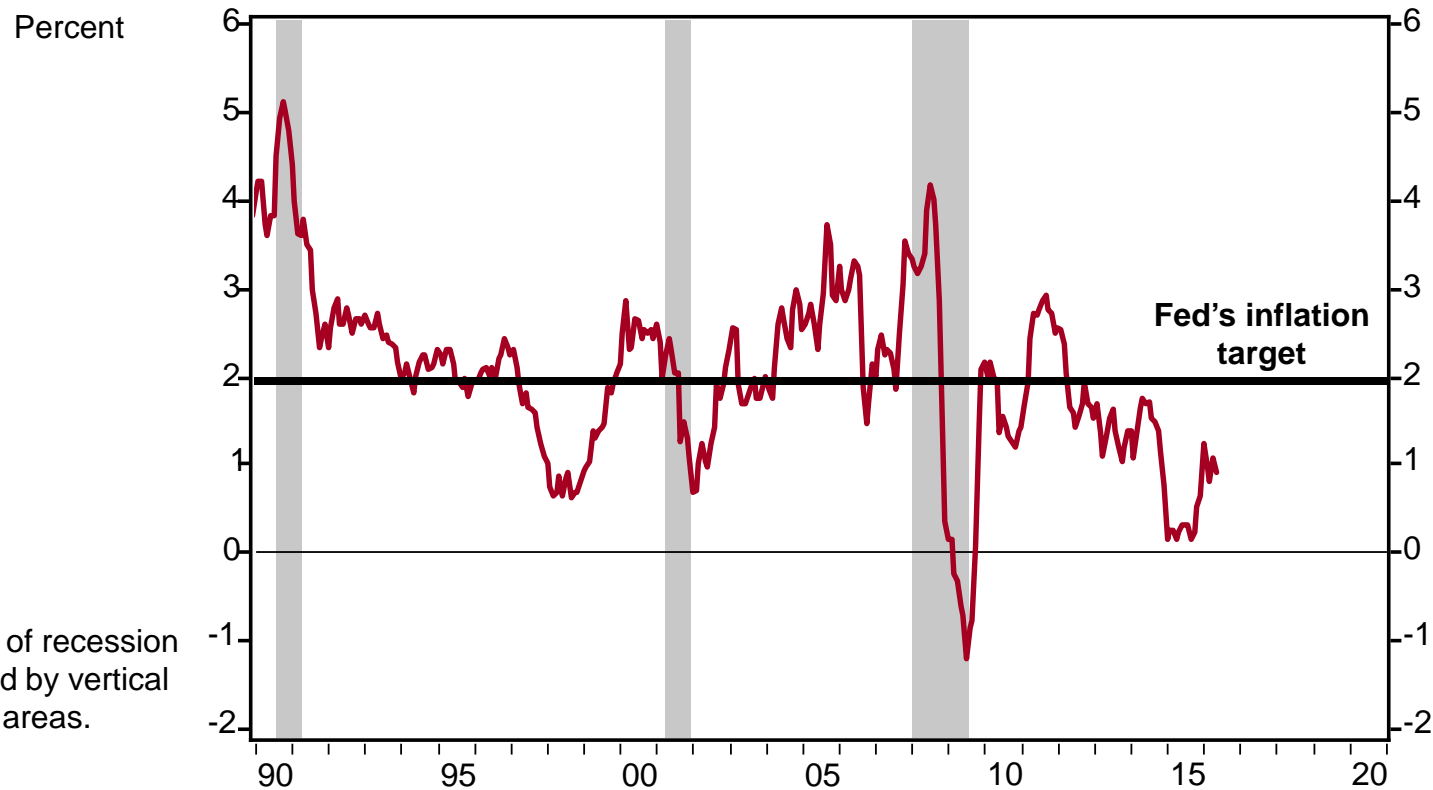
Source: Bureau of Labor Statistics /Haver Analytics Quarterly data through Q2.2016



Inflation Is Below Fed Target of 2%

Inflation Rate: PCE Chain-Price Index

Percent change from year ago



Periods of recession indicated by vertical shaded areas.

Source: Bureau of Economic Analysis /Haver Analytics

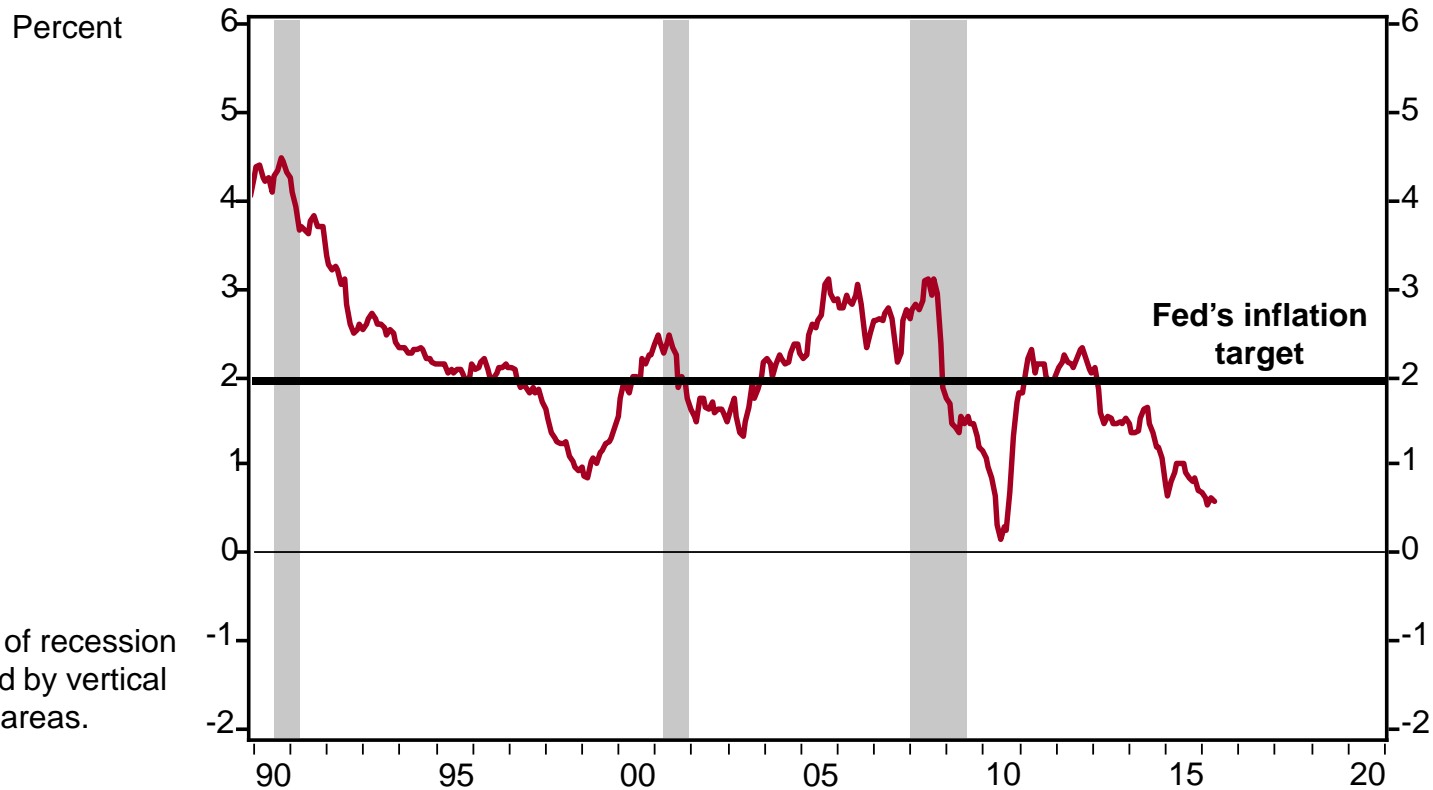
Monthly data through May 2016



Inflation Trend Is Weak

Inflation Rate: PCE Chain-Price Index

2-year annualized percent change



Periods of recession indicated by vertical shaded areas.

Source: Bureau of Economic Analysis /Haver Analytics

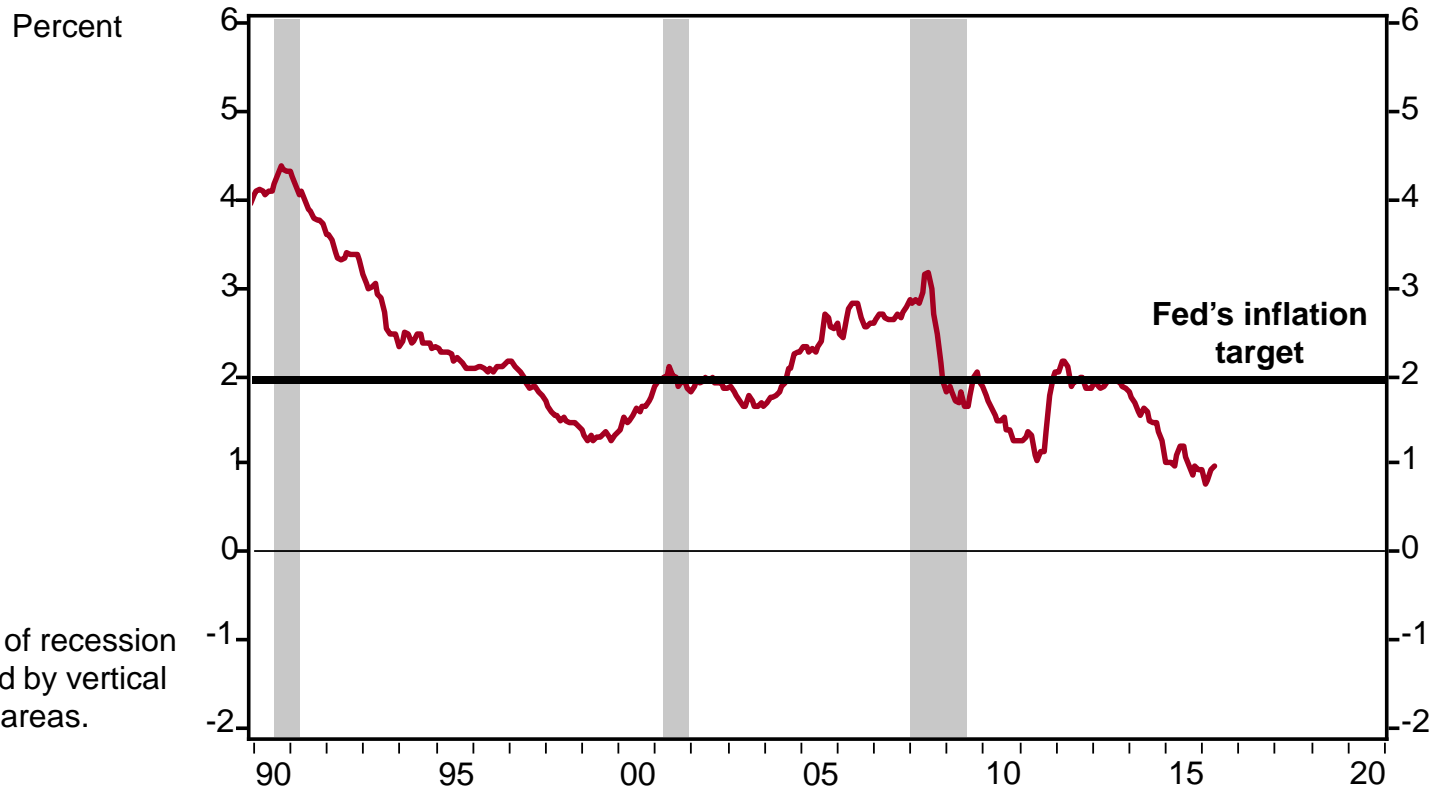
Monthly data through May 2016



Inflation Trend Is Weak

Inflation Rate: PCE Chain-Price Index

3-year annualized percent change



Source: Bureau of Economic Analysis /Haver Analytics

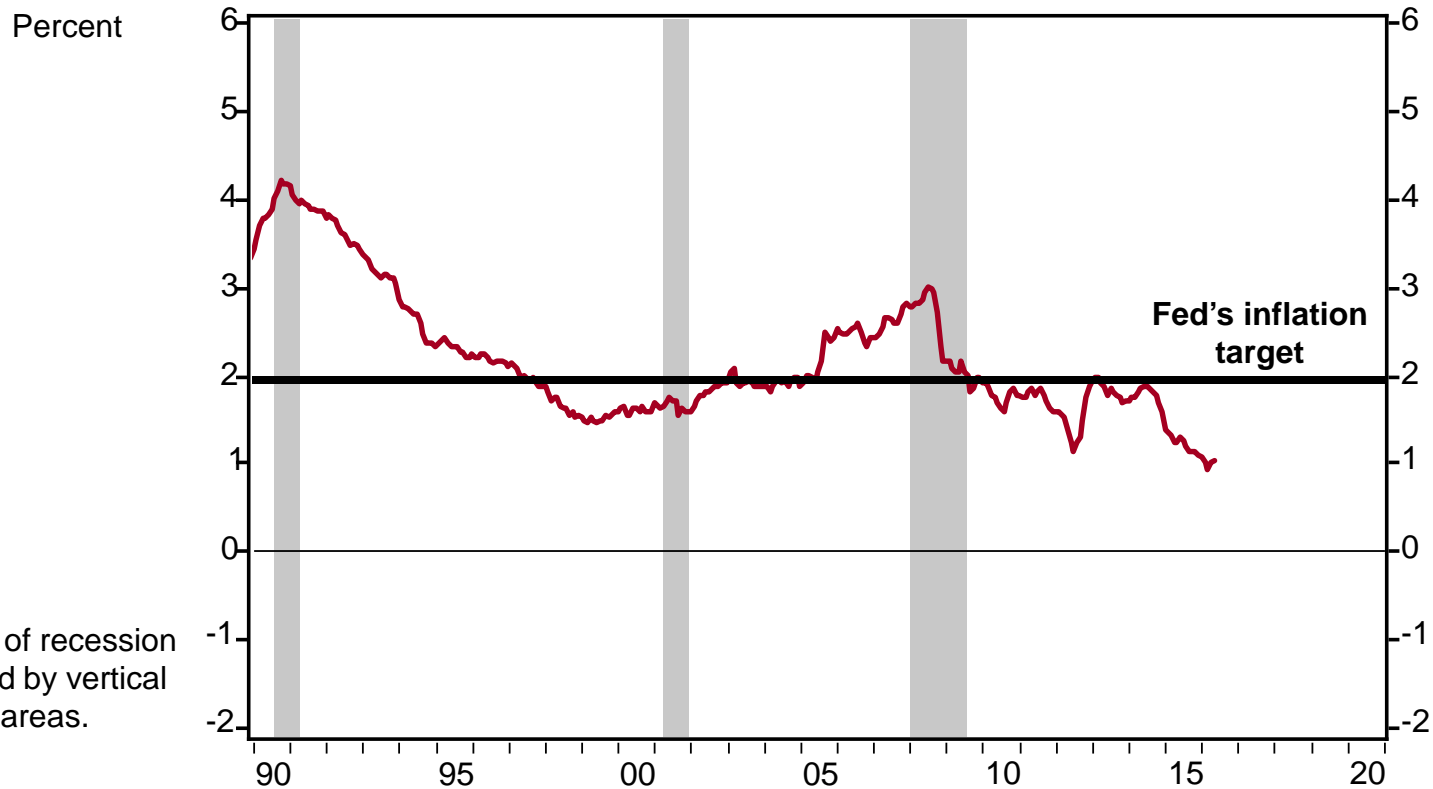
Monthly data through May 2016



Inflation Trend Is Weak

Inflation Rate: PCE Chain-Price Index

4-year annualized percent change



Source: Bureau of Economic Analysis /Haver Analytics

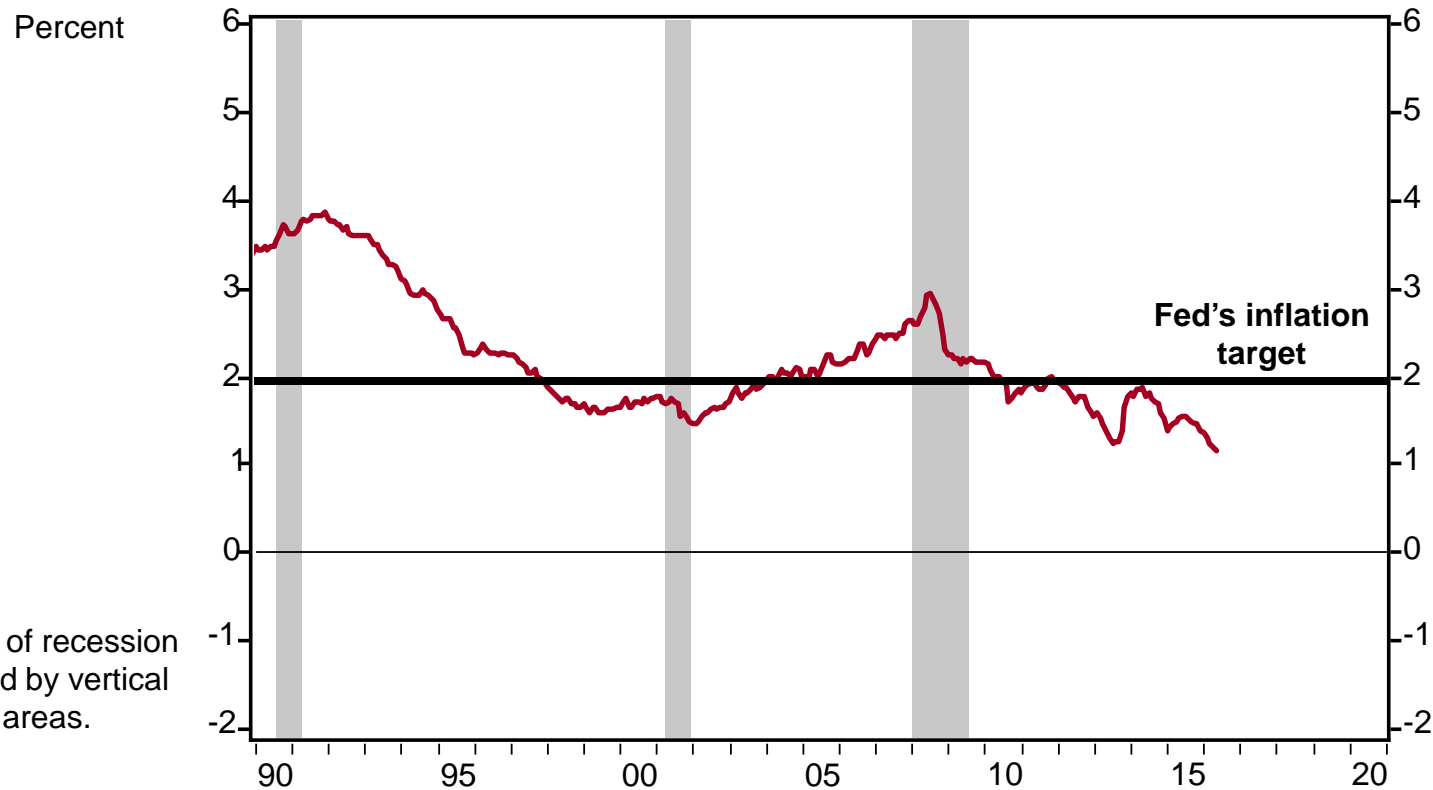
Monthly data through May 2016



What If We're Hit With a Deflationary Shock—Like Brexit or a Recession?

Inflation Rate: PCE Chain-Price Index

5-year annualized percent change



Periods of recession indicated by vertical shaded areas.

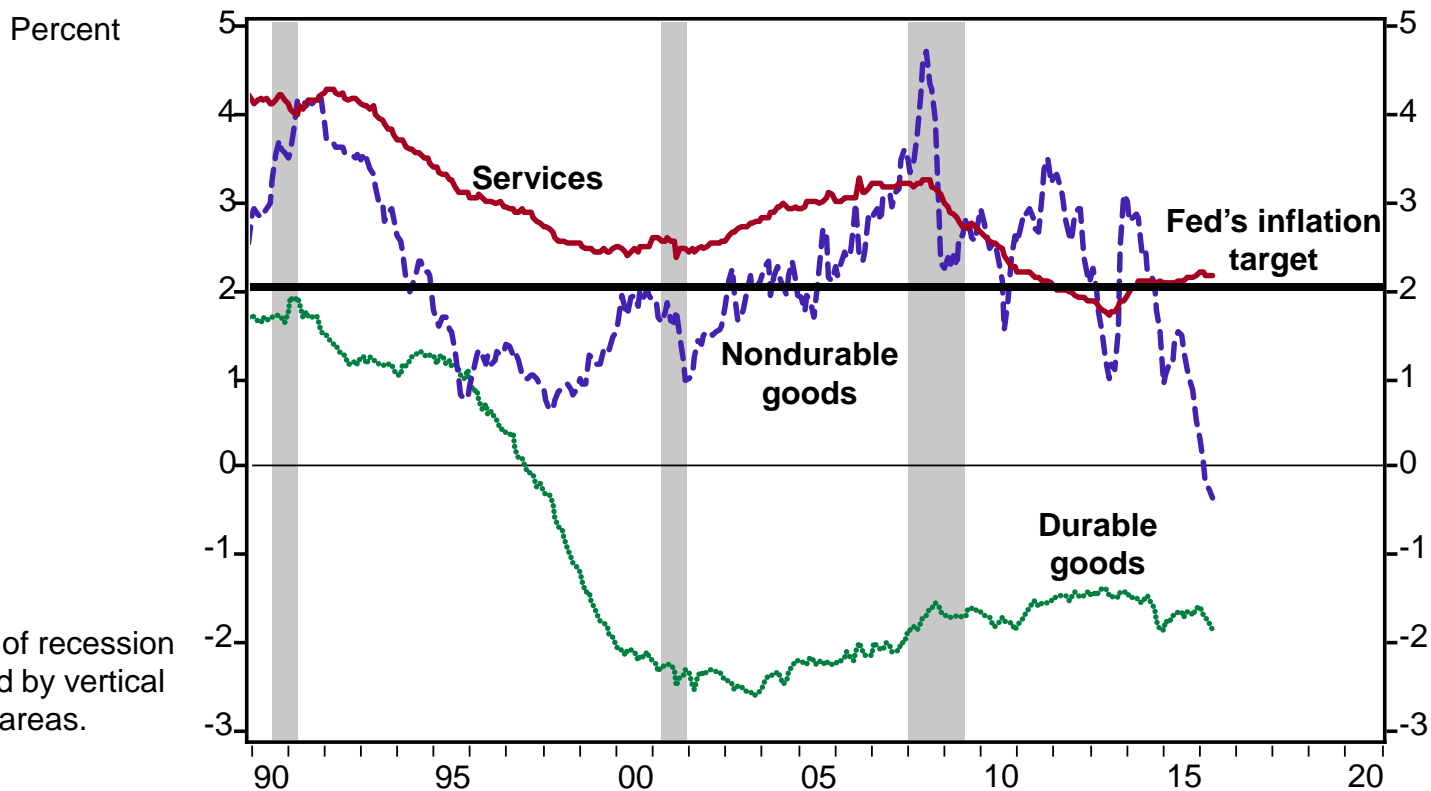
Source: Bureau of Economic Analysis /Haver Analytics

Monthly data through May 2016



Why Is Inflation Falling? Globalization, Technology and Competition

Smoothed (5-yr annualized) PCE Inflation Rate for Services
Smoothed (5-yr annualized) PCE Inflation Rate for Nondurable Goods
Smoothed (5-yr annualized) PCE Inflation Rate for Durable Goods



Periods of recession indicated by vertical shaded areas.

Source: Bureau of Economic Analysis /Haver Analytics

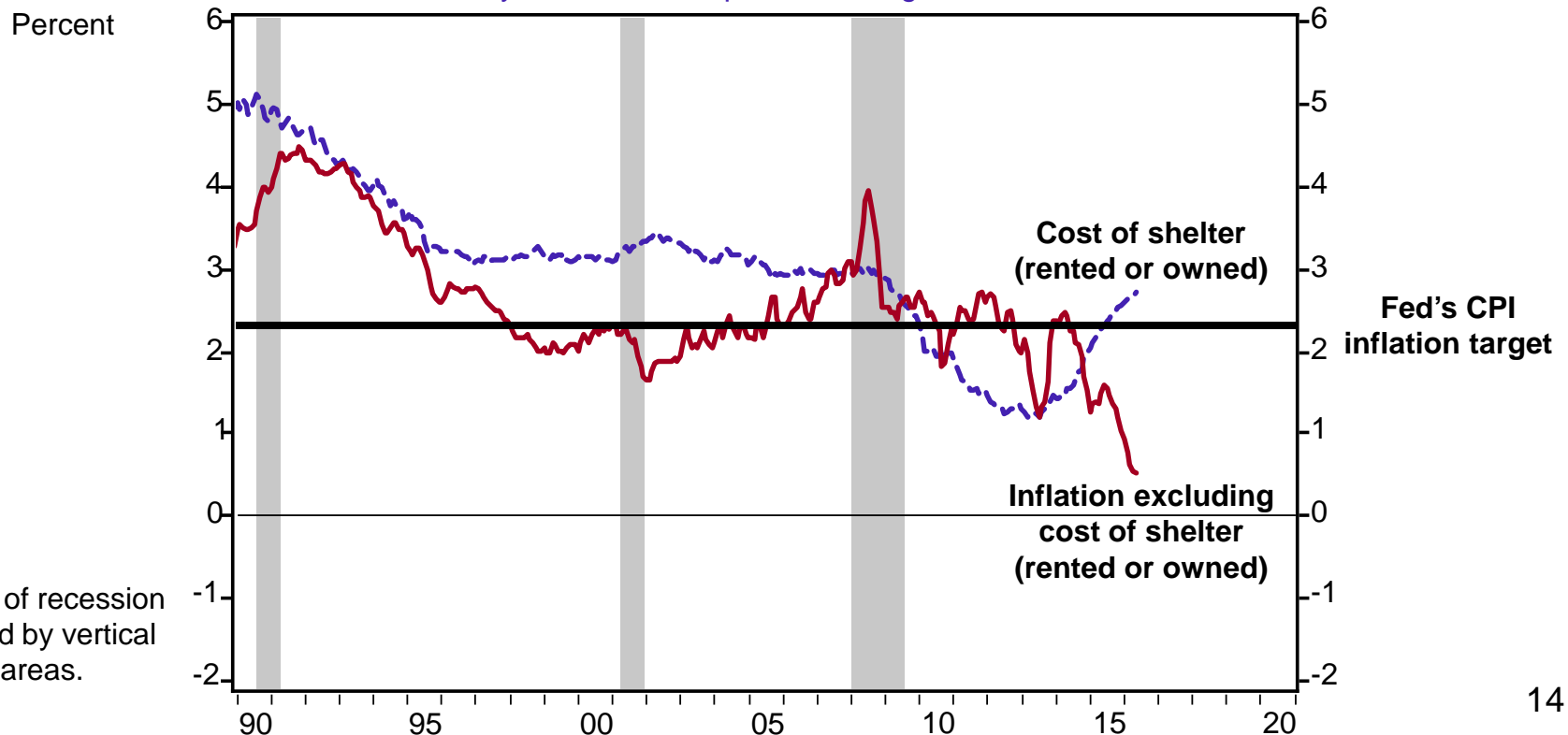
Monthly data through May 2016



Rebounding Housing Costs Are Masking Falling Inflation In Other Items

Smoothed CPI Inflation Rate: All Items Ex Shelter (Rented or Owned)
5-year annualized percent change

Smoothed CPI Inflation Rate: Shelter (Rented or Owned)
5-year annualized percent change



Periods of recession indicated by vertical shaded areas.

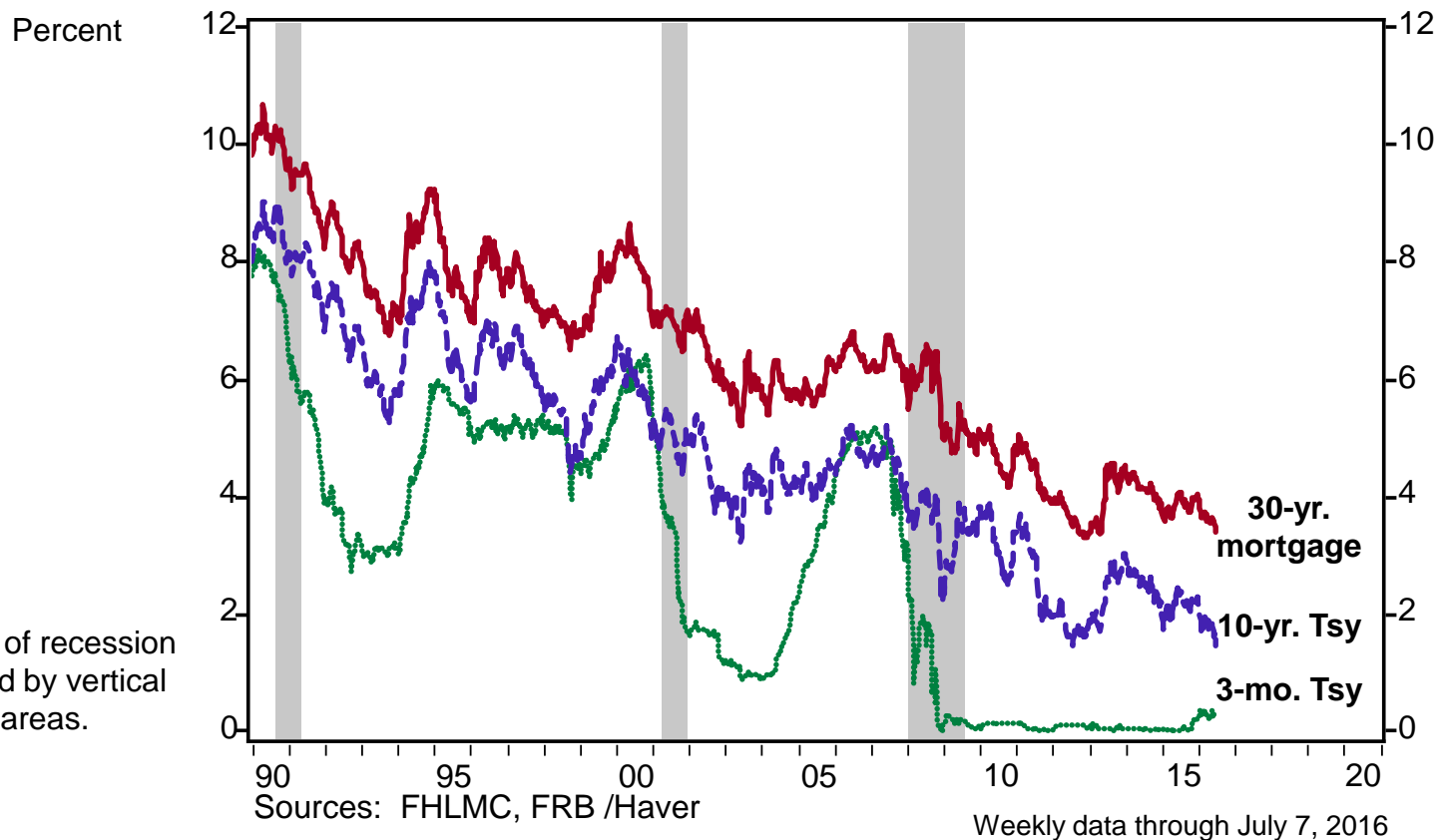
Source: Bureau of Labor Statistics /Haver Analytics

Monthly data through May 2016



Interest Rates Can't Go Much Lower— Can They?

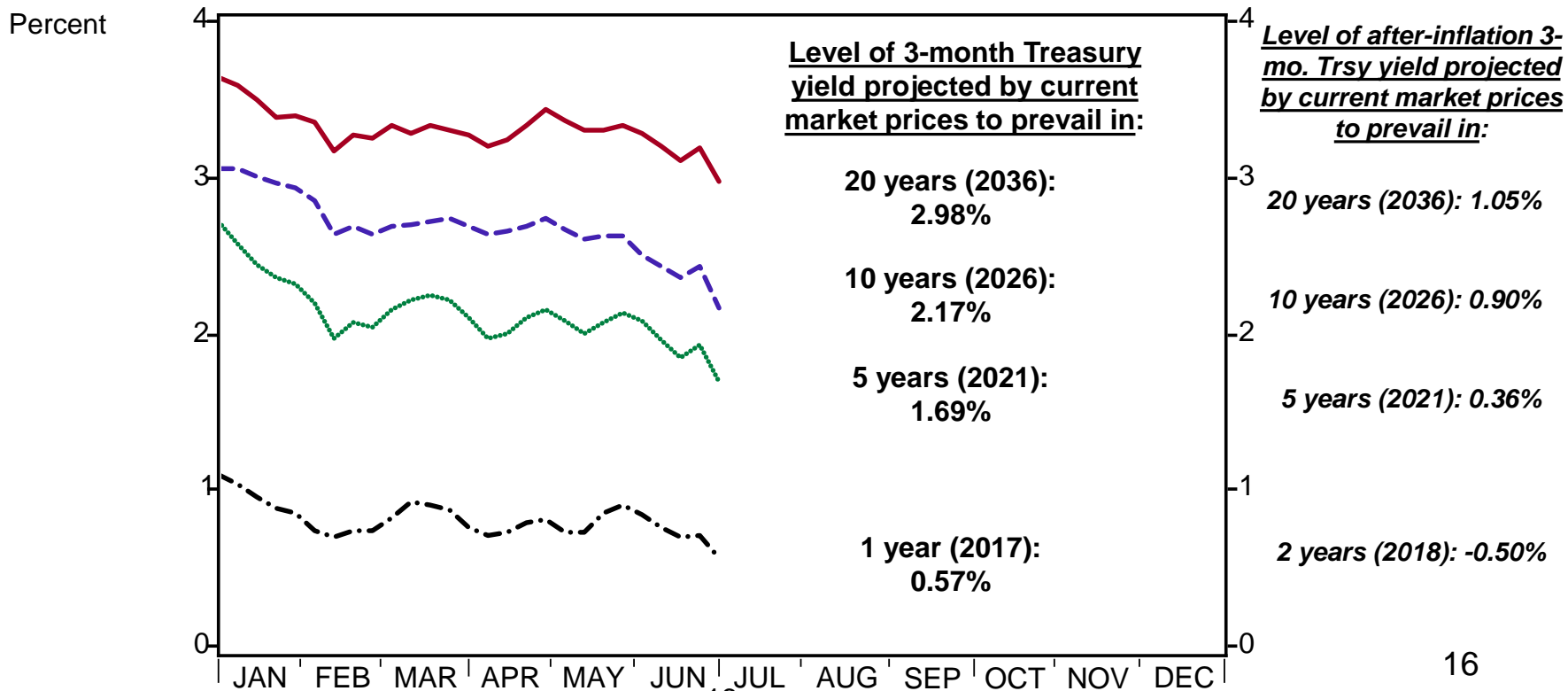
30-Year Fixed-Rate Mortgage
10-Year Treasury Note
3-Month Treasury Bill





Brexit Knocked Long-Term Interest-Rate Expectations Even Lower

- Treasury Forward Rate: 3-Mo. Trsly Yield Projected 20 Years in the Future
- Treasury Forward Rate: 3-Mo. Trsly Yield Projected 10 Years in the Future
- Treasury Forward Rate: 3-Mo. Trsly Yield Projected 5 Years in the Future
- Treasury Forward Rate: 3-Mo. Trsly Yield Projected 1 Year in the Future



Source: Federal Reserve Board /Haver Analytics: Weekly data through July 1, 2016



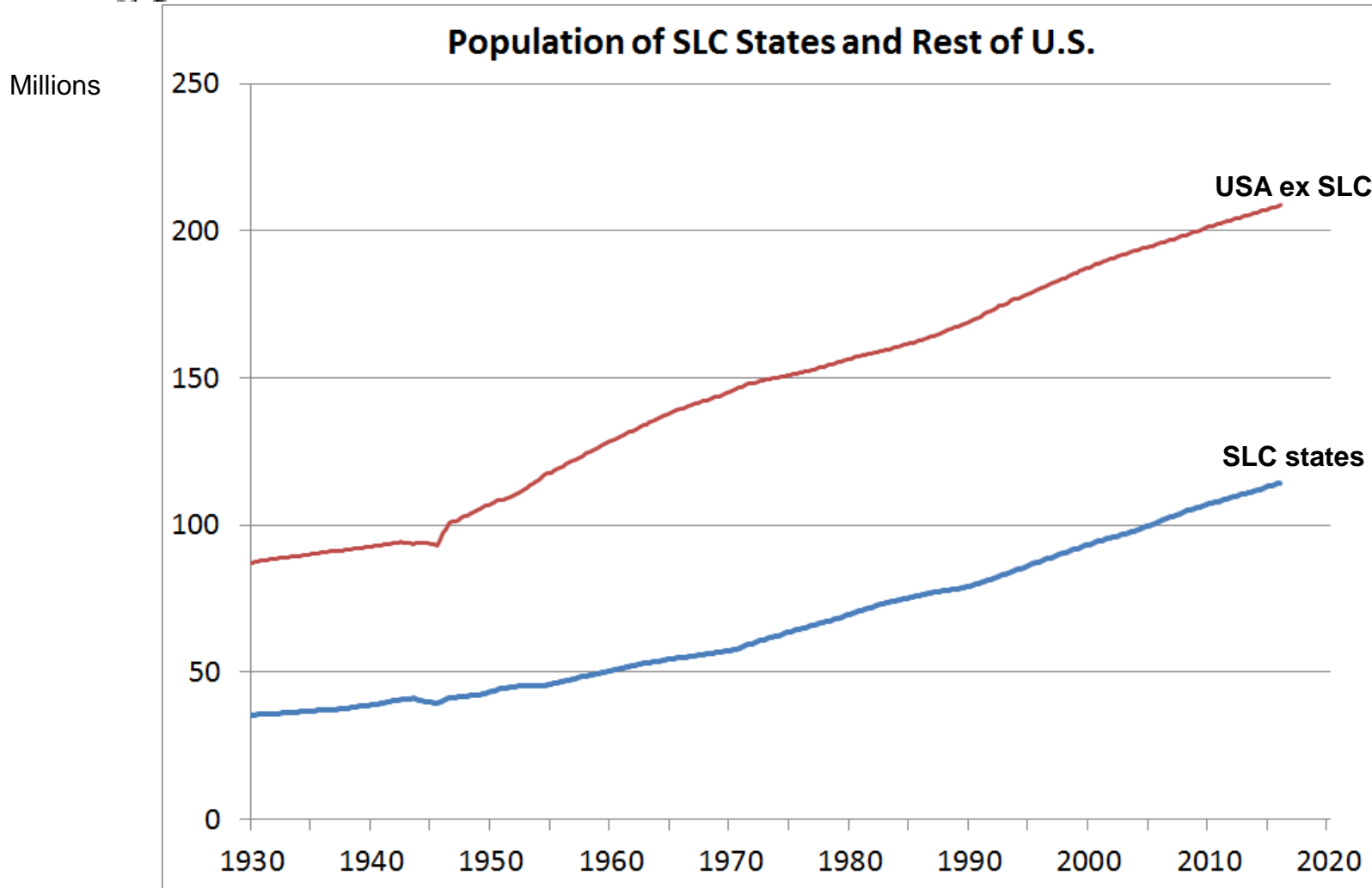
The SLC Region

- **Strengths**
 - **Relatively fast population growth**
 - **Low costs, especially housing**

- **Biggest economic challenge: Education**
 - **Home-grown labor force requires stronger primary and secondary schools**
 - **Can leading states in the SLC region maintain a steady inflow of college-educated workers?**
 - **Can other states begin to attract a better-educated workforce?**



Population in SLC States: 114 Million

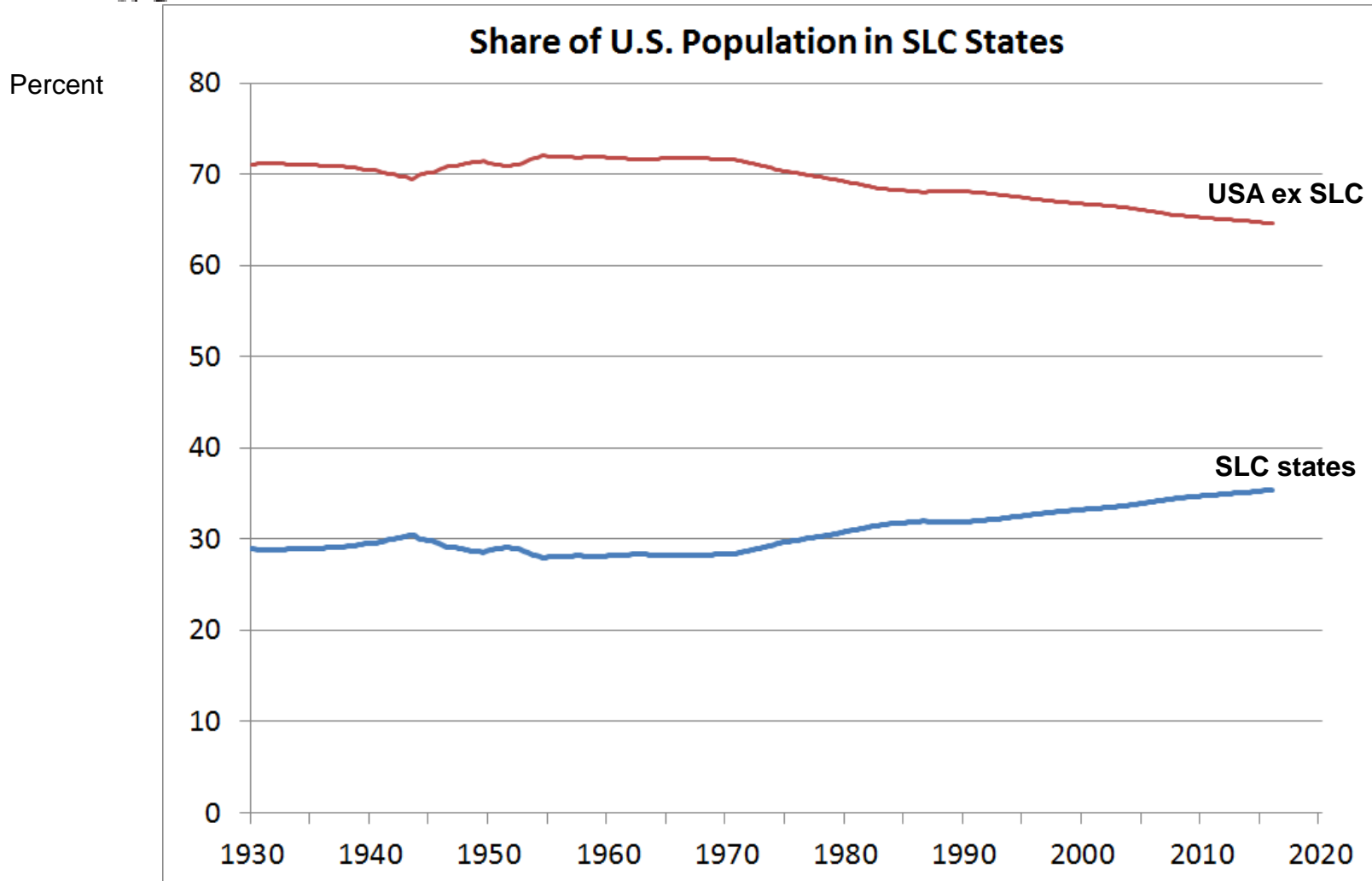


Source: Census Bureau

Quarterly data through Q1.2016



SLC States Represent 35 Percent of U.S. Population



Source: Census Bureau

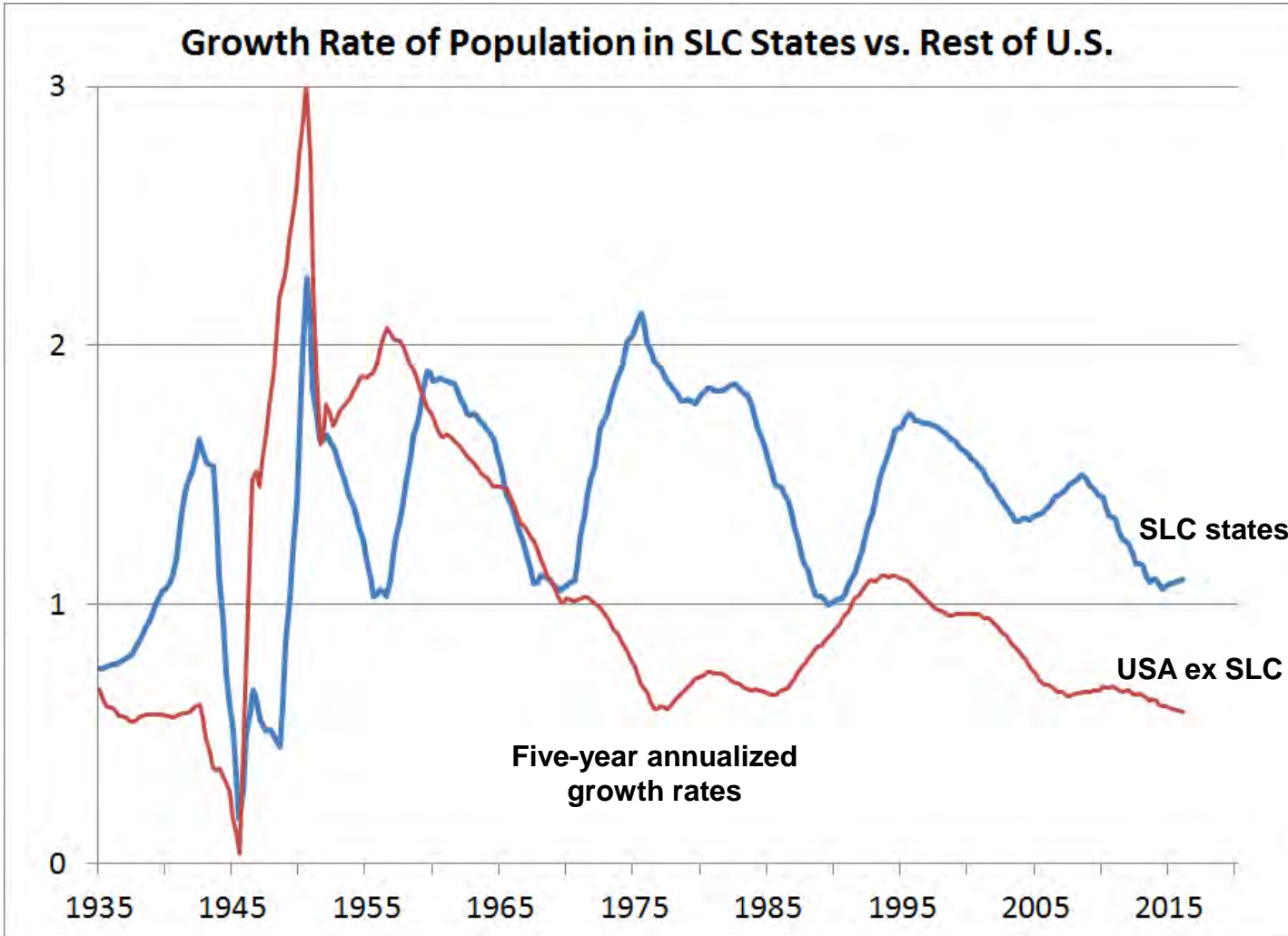
Quarterly data through Q1.2016



SLC Population-Growth Rate of 1.1% Far Exceeds 0.6% Rate in Rest of U.S.

Growth Rate of Population in SLC States vs. Rest of U.S.

Percent



Source: Census Bureau

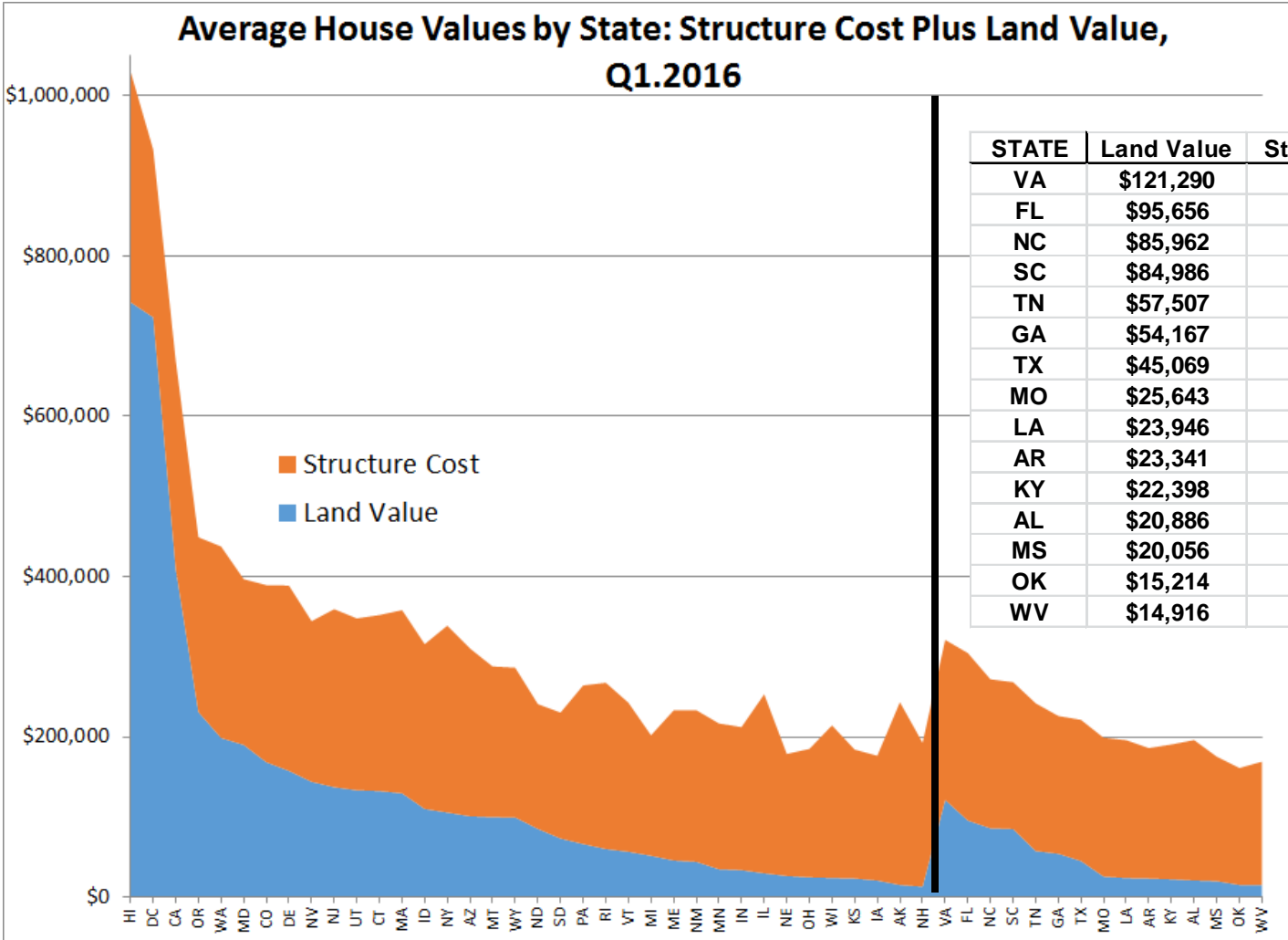
Quarterly data through Q1.2016



Housing Costs in SLC States Are Low— Primarily Due to Low Land Prices

Average House Values by State: Structure Cost Plus Land Value, Q1.2016

House values in dollars



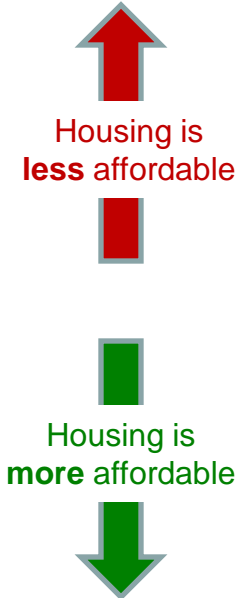
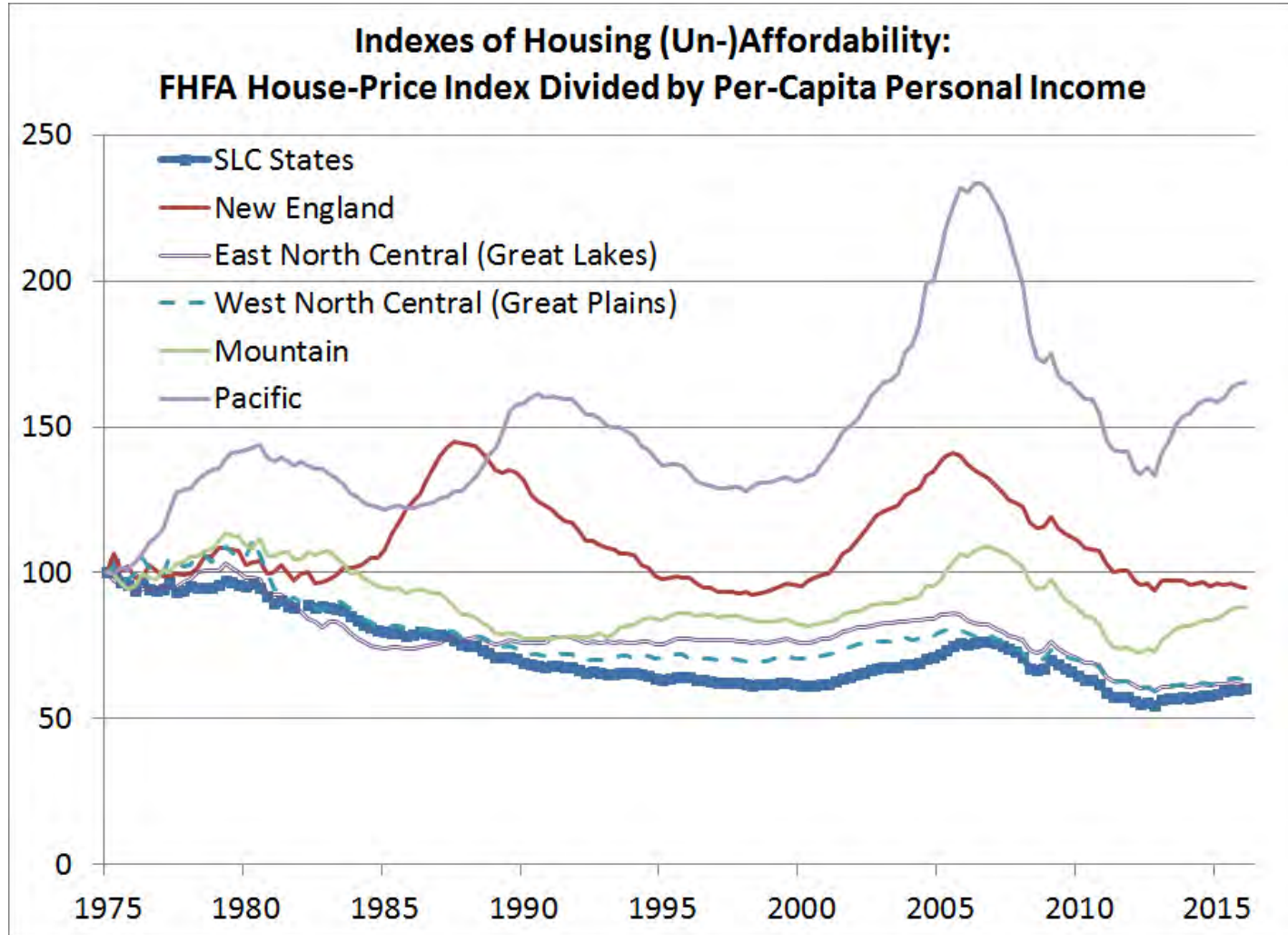
STATE	Land Value	Structure Cost
VA	\$121,290	\$199,632
FL	\$95,656	\$208,825
NC	\$85,962	\$185,788
SC	\$84,986	\$183,264
TN	\$57,507	\$184,355
GA	\$54,167	\$171,883
TX	\$45,069	\$176,045
MO	\$25,643	\$173,168
LA	\$23,946	\$171,955
AR	\$23,341	\$162,662
KY	\$22,398	\$168,134
AL	\$20,886	\$175,061
MS	\$20,056	\$155,215
OK	\$15,214	\$145,912
WV	\$14,916	\$154,157

Source: Lincoln Institute of Land Policy



Housing Is Not Just Cheap in SLC States—It's Affordable

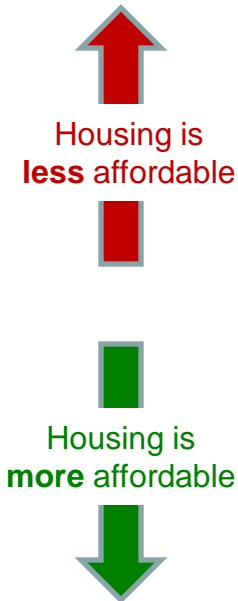
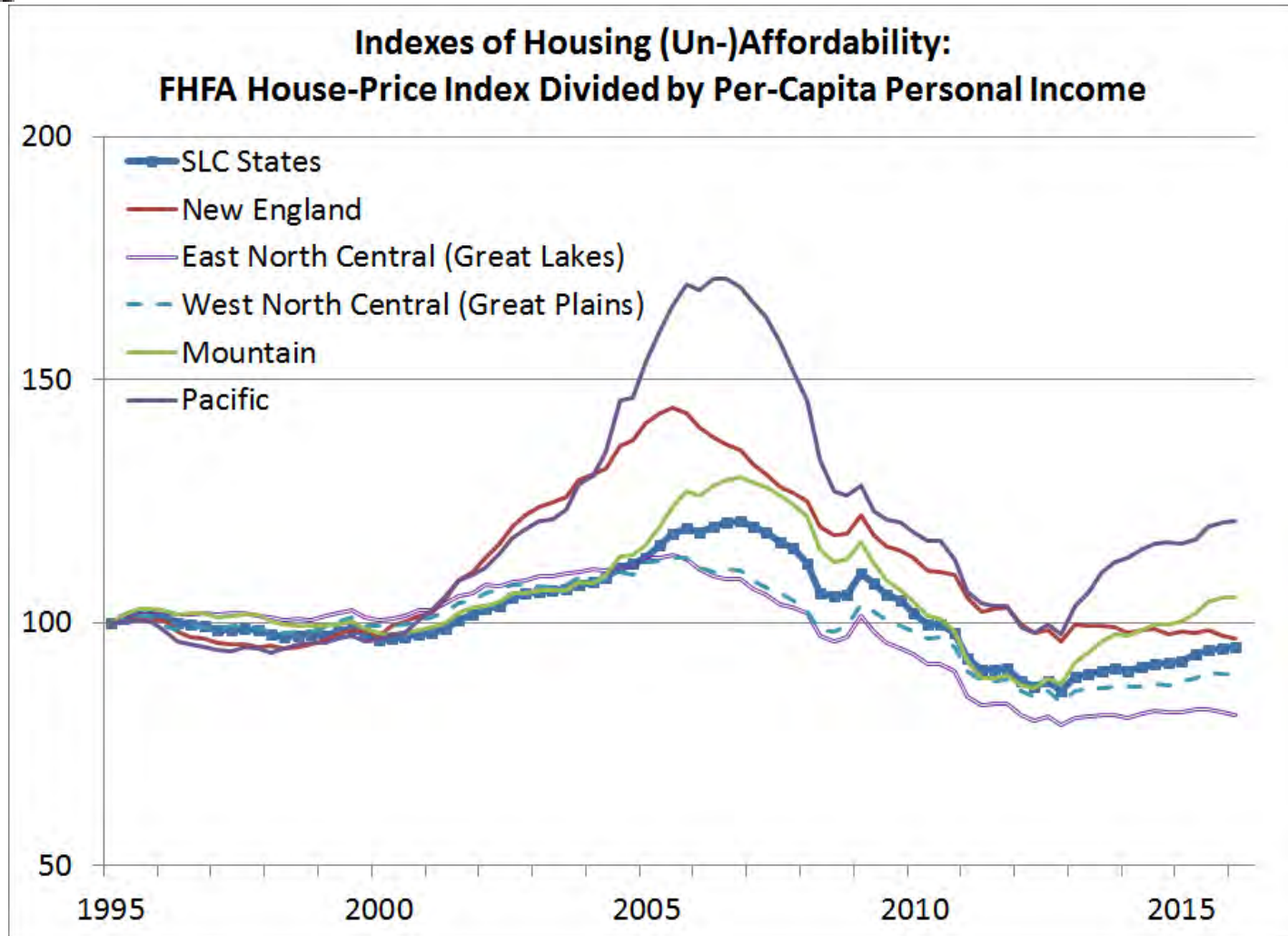
Index values equal 100 in 1975





Housing Affordability Has Varied Less Recently in SLC States Than Elsewhere

Index values equal 100 in 1995





SLC States Rank Low in High-School Graduation Rates

State	Rank for high-school graduates	Share of adults with HS diplomas
Wyoming	1	0.92
Minnesota	2	0.92
Alaska	3	0.91
Iowa	3	0.91
New Hampshire	4	0.91
Vermont	5	0.91
Montana	6	0.91
Hawaii	8	0.90
Utah	9	0.90
Maine	10	0.90
North Dakota	11	0.90
South Dakota	12	0.90
Nebraska	13	0.90
Wisconsin	14	0.90
Kansas	15	0.90
Washington	16	0.90
Colorado	17	0.89

State	Rank for high-school graduates	Share of adults with HS diplomas
Oregon	18	0.89
Massachusetts	19	0.89
Maryland	20	0.89
Connecticut	21	0.89
Idaho	22	0.88
Michigan	23	0.88
Pennsylvania	24	0.88
Ohio	25	0.88
Delaware	26	0.87
New Jersey	27	0.87
Missouri	28	0.87
Indiana	29	0.87
Virginia	30	0.87
Illinois	31	0.86
Oklahoma	32	0.86
Florida	33	0.85
New York	34	0.85

State	Rank for high-school graduates	Share of adults with HS diplomas
Rhode Island	35	0.85
North Carolina	36	0.84
Arizona	37	0.84
Georgia	38	0.84
Nevada	39	0.84
South Carolina	40	0.84
Tennessee	41	0.83
New Mexico	42	0.83
West Virginia	43	0.83
Arkansas	44	0.82
Louisiana	45	0.82
Alabama	46	0.82
Kentucky	47	0.82
California	48	0.81
Mississippi	49	0.80
Texas	50	0.80



Many SLC States Rank Below Average in 4-Year-College Graduation Rates

State	Rank for college graduates	Share of adults with college degrees
Massachusetts	1	0.38
Colorado	2	0.36
Maryland	3	0.37
Connecticut	4	0.36
New Jersey	5	0.35
Virginia	6	0.34
Vermont	7	0.33
New York	8	0.32
New Hampshire	9	0.32
Minnesota	10	0.32
Washington	11	0.31
Illinois	12	0.31
Rhode Island	13	0.31
California	14	0.30
Hawaii	15	0.30
Kansas	16	0.30
Oregon	17	0.29

State	Rank for college graduates	Share of adults with college degrees
Delaware	18	0.29
Utah	19	0.29
Georgia	20	0.28
Montana	21	0.27
Nebraska	22	0.27
Maine	23	0.27
Alaska	24	0.27
North Carolina	25	0.27
Pennsylvania	26	0.26
North Dakota	27	0.26
Wisconsin	28	0.26
Arizona	29	0.26
Texas	30	0.26
Florida	31	0.25
New Mexico	32	0.25
Missouri	33	0.25
Iowa	34	0.25

State	Rank for college graduates	Share of adults with college degrees
South Dakota	35	0.25
Michigan	36	0.25
South Carolina	37	0.24
Ohio	38	0.24
Idaho	39	0.24
Wyoming	40	0.24
Tennessee	41	0.23
Oklahoma	42	0.23
Indiana	43	0.23
Alabama	44	0.22
Nevada	45	0.22
Louisiana	46	0.21
Kentucky	47	0.21
Mississippi	48	0.20
Arkansas	49	0.19
West Virginia	50	0.17



Many SLC States Rank Below Average in Advanced-Degree Rates

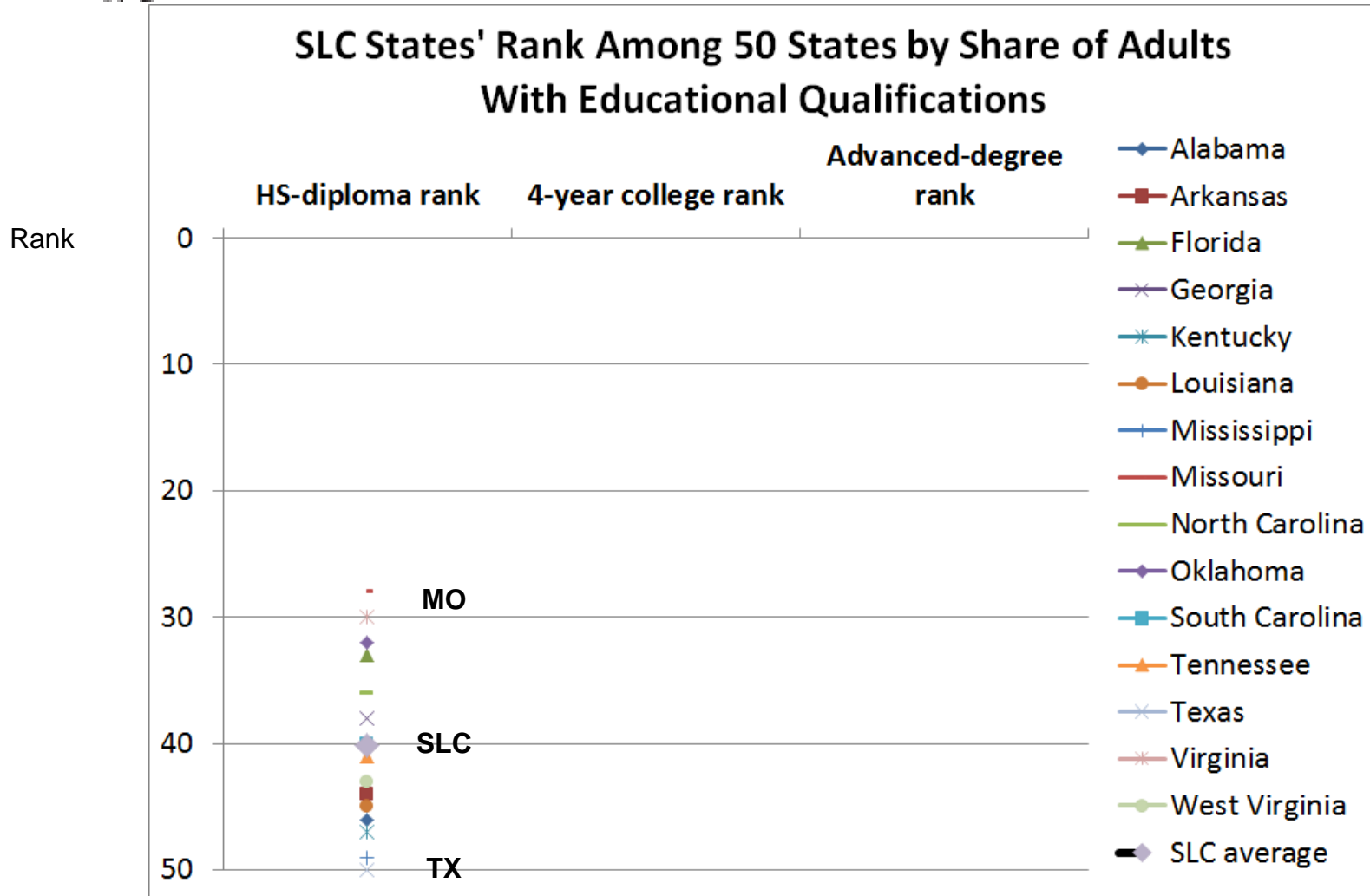
State	Rank for advanced degrees	Share of adults with advanced degrees
Massachusetts	1	0.164
Maryland	2	0.160
Connecticut	3	0.155
Virginia	4	0.141
New York	5	0.140
Vermont	6	0.133
New Jersey	7	0.129
Colorado	8	0.127
Illinois	9	0.117
Rhode Island	10	0.117
Delaware	11	0.114
New Hampshire	12	0.112
Washington	13	0.111
California	14	0.107
Oregon	15	0.104
New Mexico	16	0.104
Minnesota	17	0.103

State	Rank for advanced degrees	Share of adults with advanced degrees
Kansas	18	0.102
Pennsylvania	19	0.102
Hawaii	20	0.099
Georgia	21	0.099
Maine	22	0.096
Missouri	23	0.095
Michigan	24	0.094
Arizona	25	0.093
Utah	26	0.091
Alaska	27	0.090
Florida	28	0.090
Nebraska	29	0.088
North Carolina	30	0.088
Ohio	31	0.088
Kentucky	32	0.085
Texas	33	0.085
Wisconsin	34	0.084

State	Rank for advanced degrees	Share of adults with advanced degrees
South Carolina	35	0.084
Montana	36	0.083
Indiana	37	0.081
Wyoming	38	0.079
Tennessee	39	0.079
Alabama	40	0.077
Nevada	41	0.076
Idaho	42	0.075
Iowa	43	0.074
Oklahoma	43	0.074
South Dakota	45	0.073
Mississippi	46	0.071
Louisiana	47	0.069
North Dakota	48	0.067
West Virginia	48	0.067
Arkansas	50	0.061



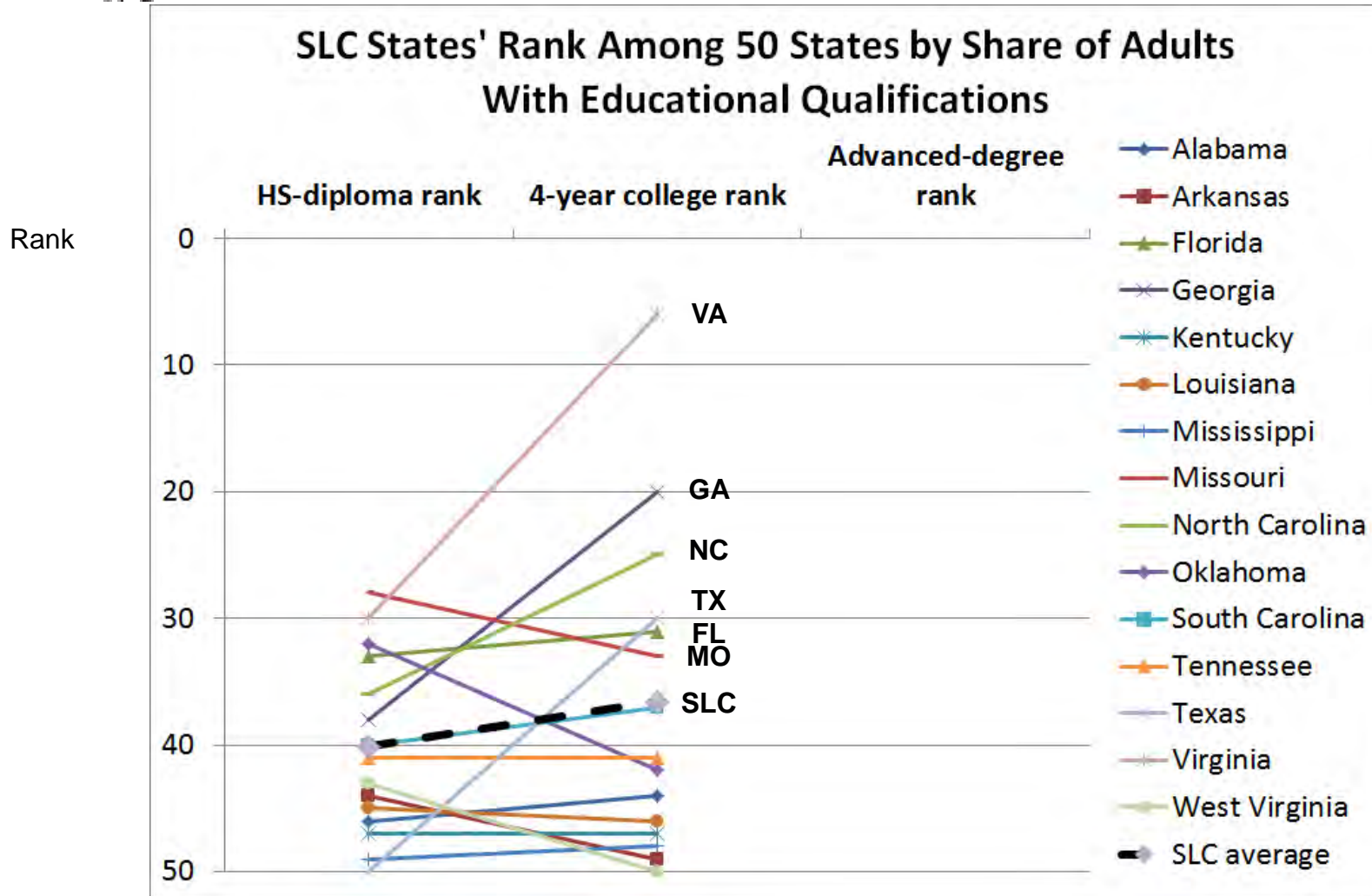
SLC-Region High-School Graduation Rates Are Low...



Source: Dept. of Education



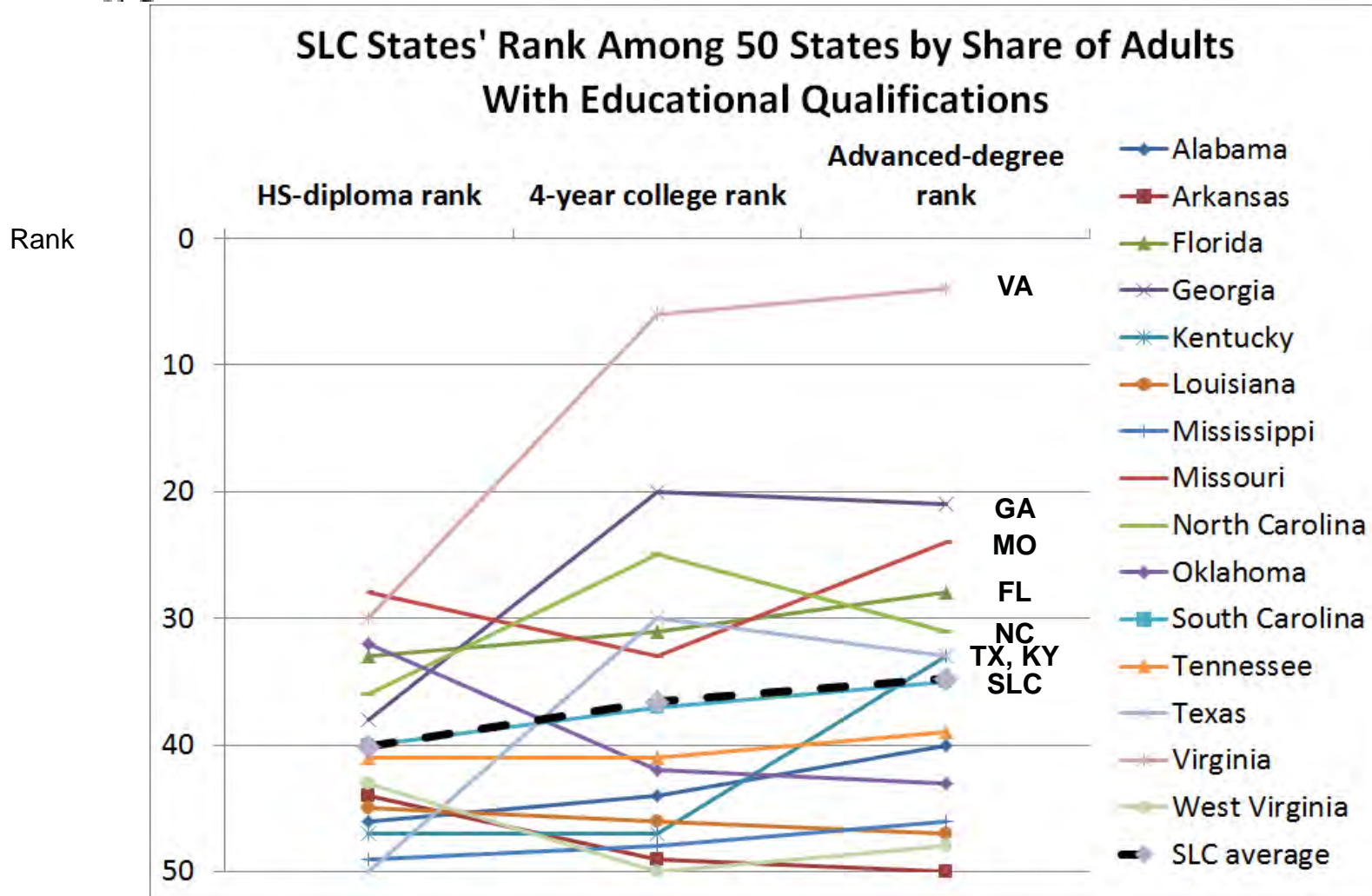
... But Several SLC States Attract Many College Graduates



Source: Dept. of Education



SLC Advanced-Degree Rate Slightly Better Still



Source: Dept. of Education



The Long-Term Economic and Financial Outlook

- **What to expect in the years ahead**
 - **Slow growth and low inflation**
 - **Low interest rates and asset returns**
 - **Growing fiscal pressures at Federal level and in some states**



Growth Slowdown From 3% to 2% Appears Permanent

CBO Forecast of Real-GDP Growth Rate

Average annualized percent over previous 10 years



Source: Congressional Budget Office Annual data through 2015; forecasts 2016-25



Why the Growth Slowdown?

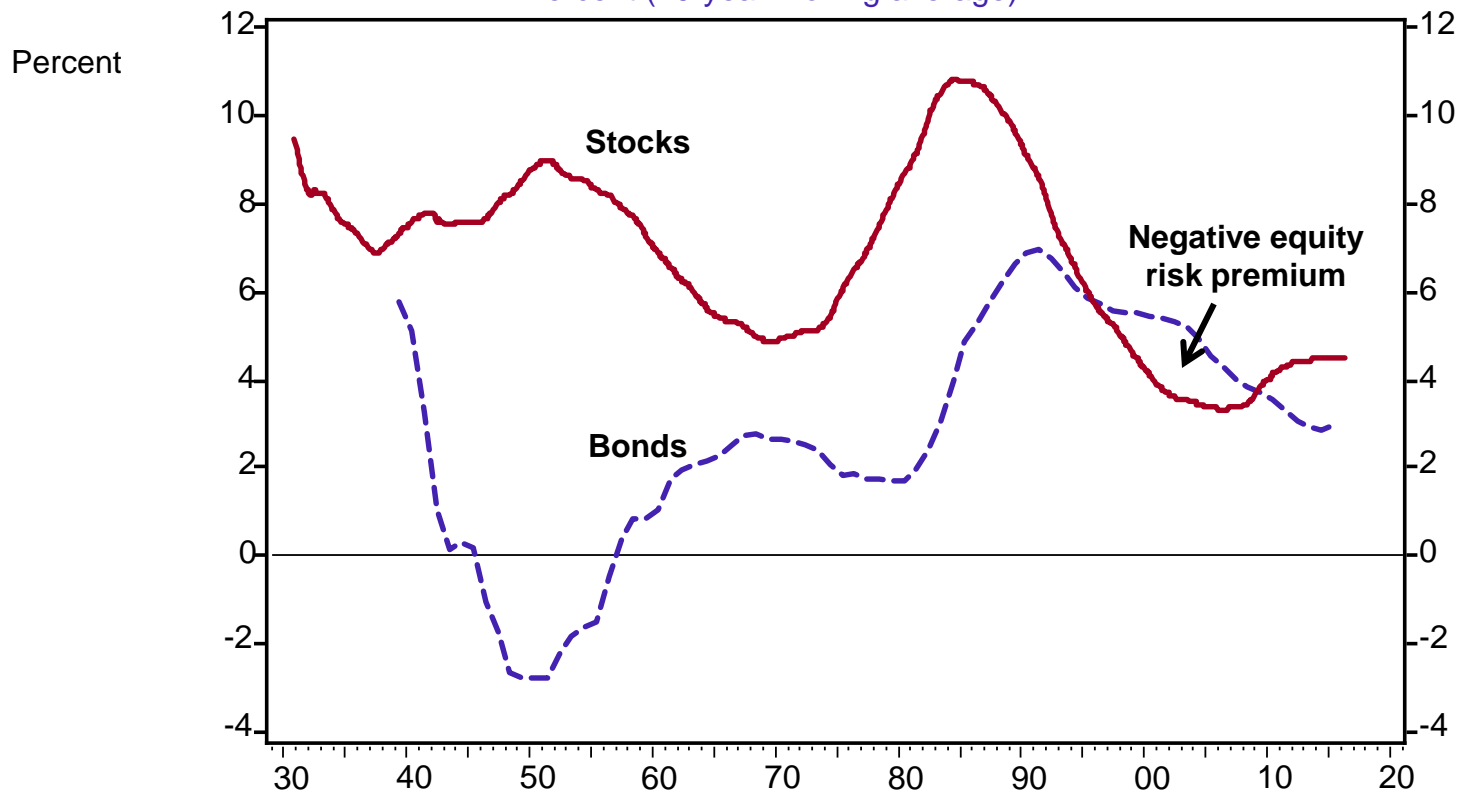
- **Slow growth of the labor force**
- **Weak productivity growth**
- **Lingering recession effects**
 - **Deleveraging**
 - **Tighter credit conditions, including tougher regulation**
 - **Low labor-force participation rate**
 - **“Scarring” effects**



The Long Period of Expensive U.S. Stocks Continues

Expected Real U.S. Stock Return: E/P Ratio Using CAPE
Percent (10-year moving average)

Expected Real Aaa Bond Return: Aaa Yield Minus Trailing GDP Deflator ...
Percent (10-year moving average)



Sources: S&P, BLS, Federal Reserve Board

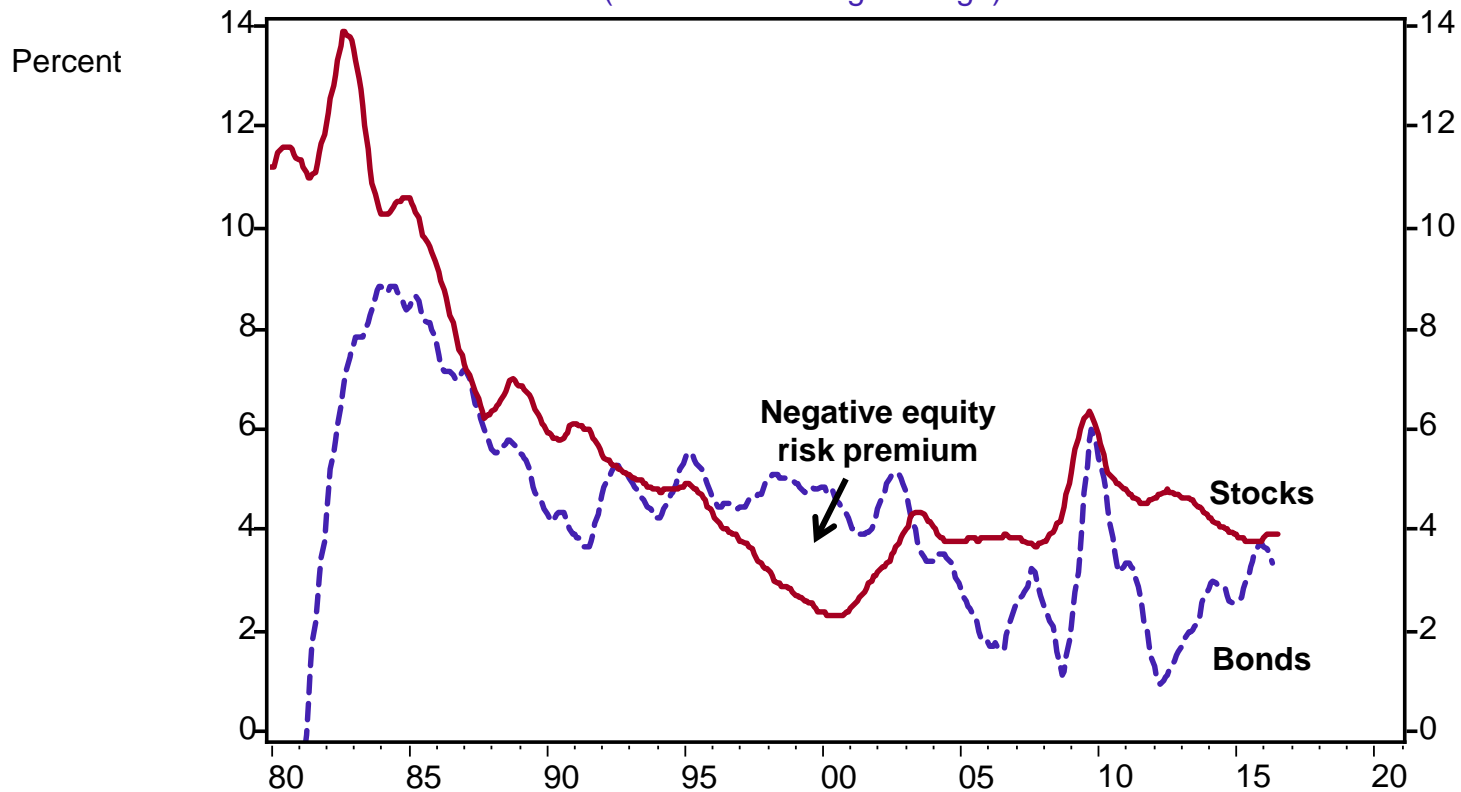
Monthly through April 2016



Expected Real U.S. Stock and Bond Returns Are Low

Expected Real U.S. Stock Return: E/P Ratio Using CAPE
Percent (12-month moving average)

Expected Real Aaa Bond Return: Aaa Yield Minus Trailing CPI Inflation
Percent (12-month moving average)

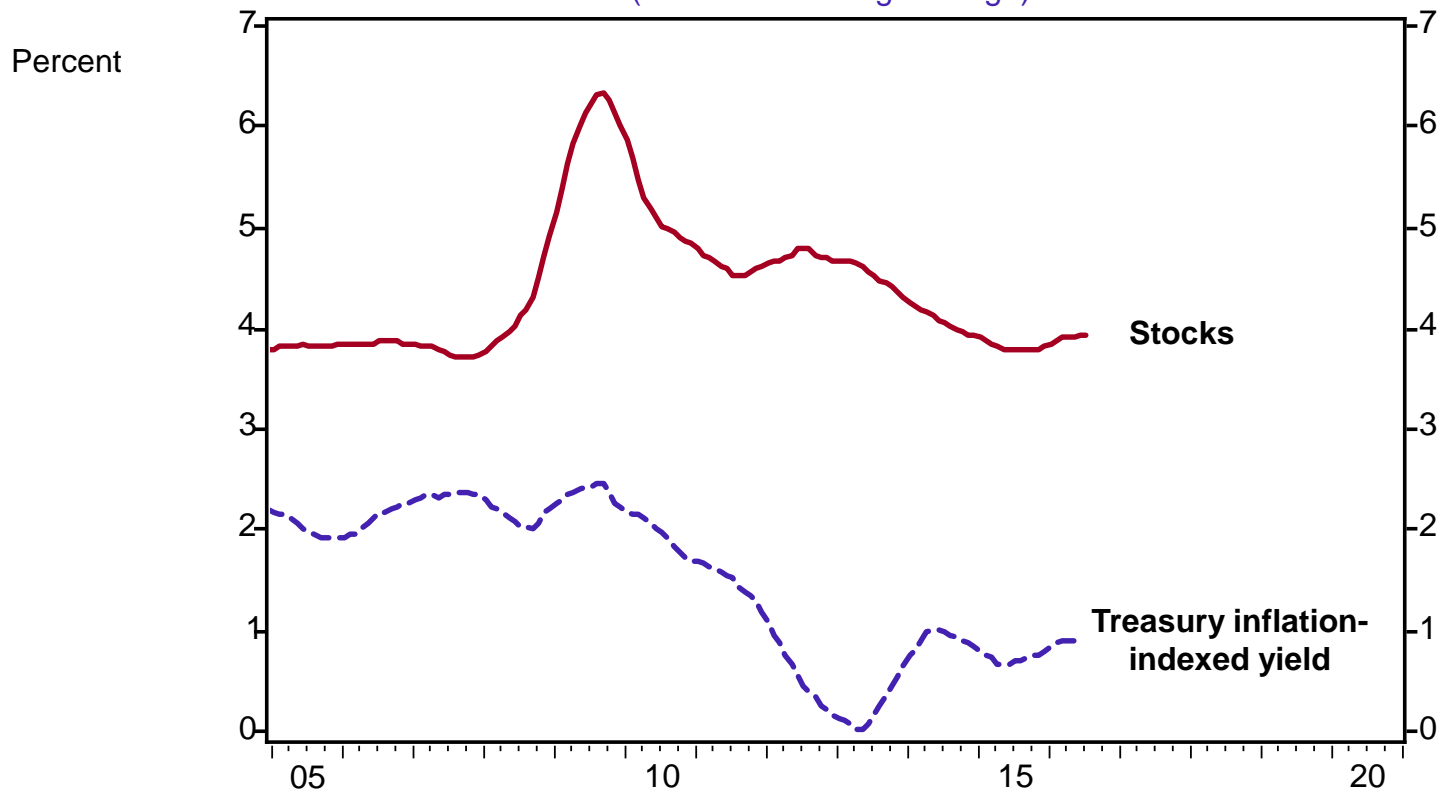




Very Low Guaranteed Real Returns Signal Pessimistic Growth Expectations

Expected Real U.S. Stock Return: E/P Ratio Using CAPE
Percent (12-month moving average)

Guaranteed Long-Term Real Return: 10-Year Trsny Inflation-Indexed Yield
Percent (12-month moving average)

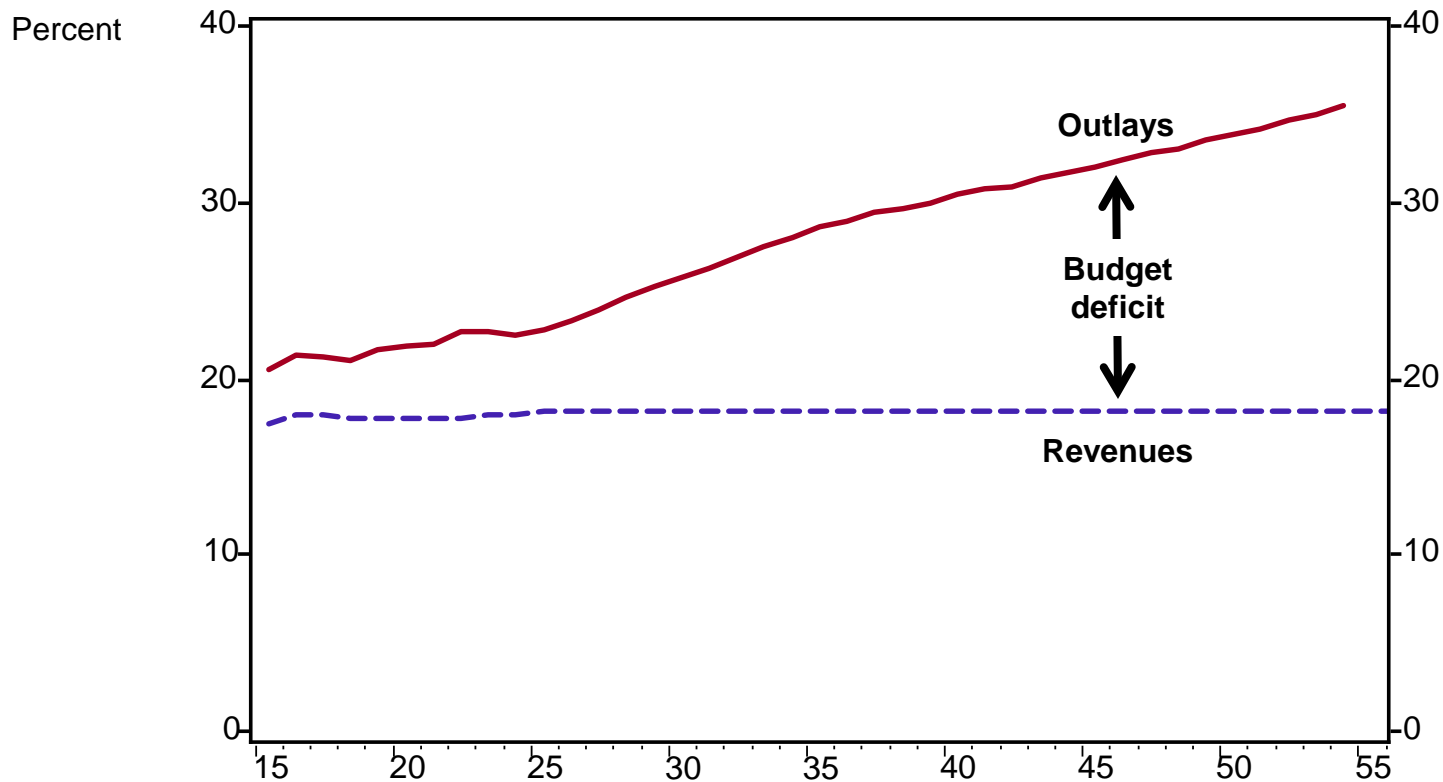




Federal-Government Budgets Likely to Create Ever-Larger Deficits

Federal-Government Outlays as % of GDP: CBO 'Best Guess'
Percent

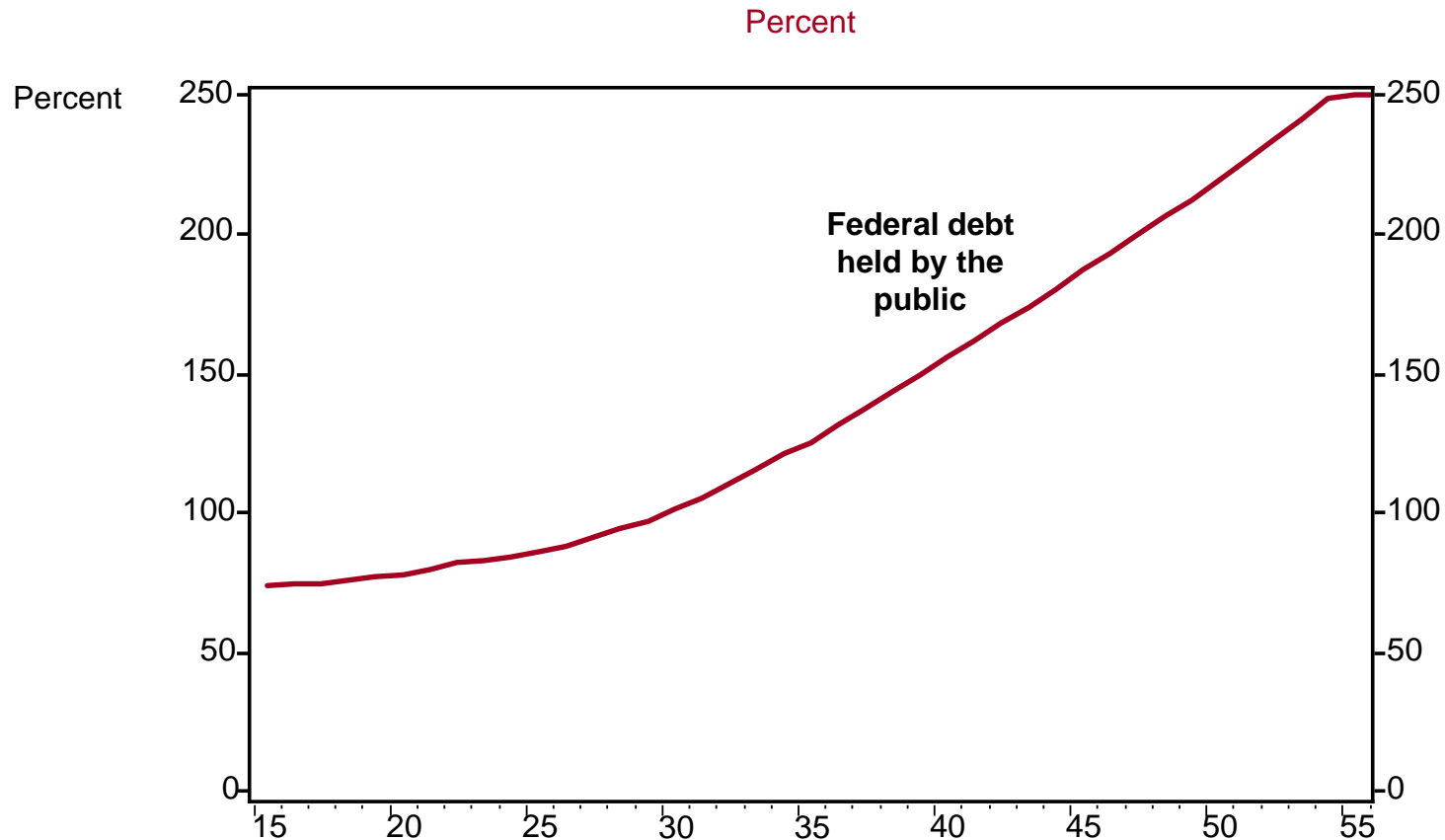
Federal-Government Revenues as % of GDP: CBO 'Best Guess'
Percent





Result: Federal Debt Will Explode As Percent of GDP

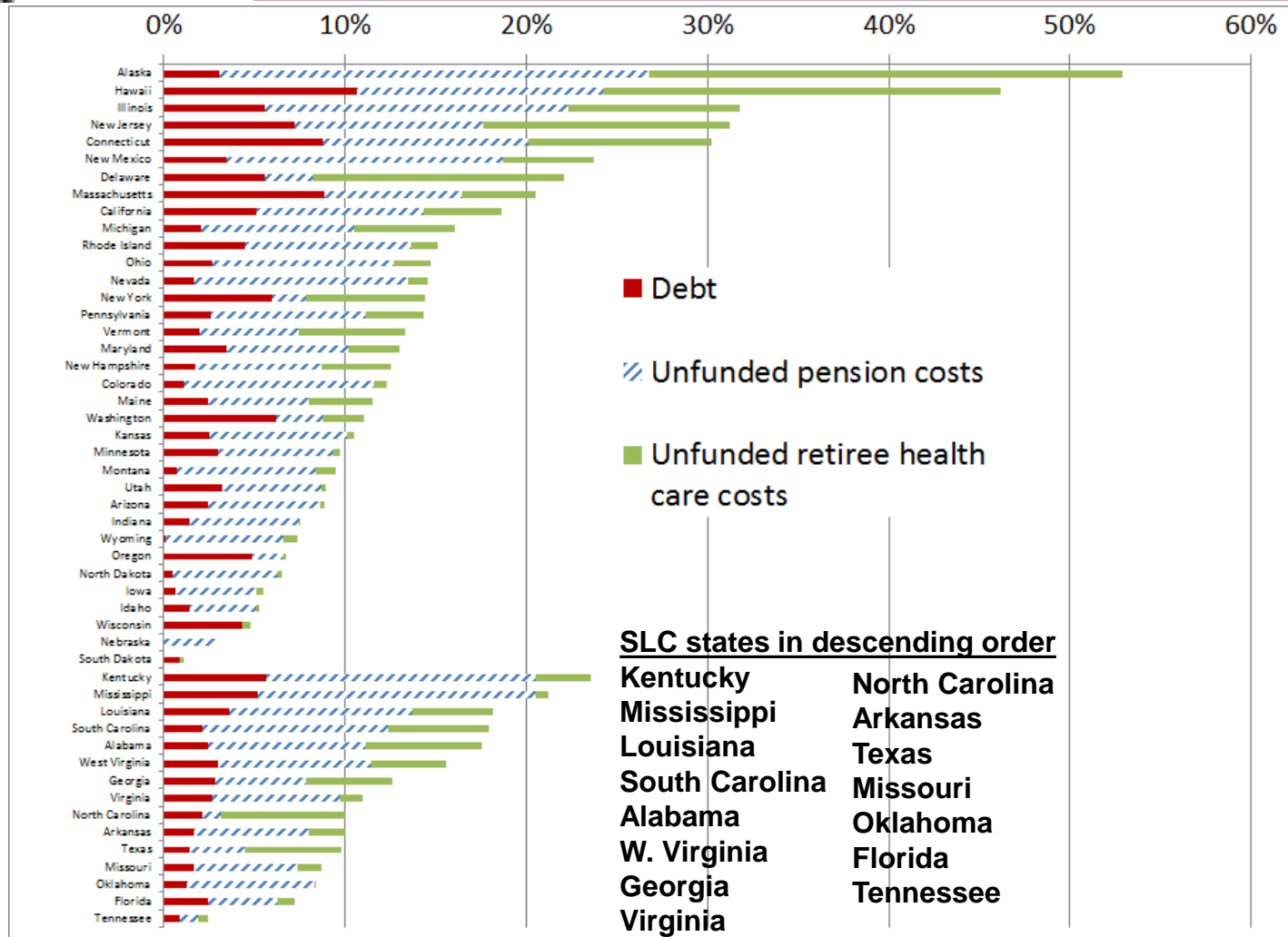
Federal Debt Held by the Public as Percent of GDP: CBO 'Best Guess'





Long-Term Fiscal Situation in Most SLC States Looks Manageable

Debt, unfunded pension and unfunded retiree health-care costs as percent of state personal income, 2013





In Sum: The Outlook is For Slow Growth, Low Interest Rates and Financial Returns

- **The U.S. economy is growing at about a 2-percent pace, down from 3 percent before the Great Recession.**
- **Downside risks are from overseas adjustments and diminishing slack at home.**
- **The SLC region has good growth potential but needs to improve primary and secondary education for the 21st-century economy.**
- **Interest rates and returns on financial assets are likely to remain historically low.**