

MARYLAND REVENUE ESTIMATES

REVENUES & ECONOMICS

Office of the Comptroller
State of Maryland

Andrew Schaufele: Director, Bureau of Revenue Estimates

Disclaimer

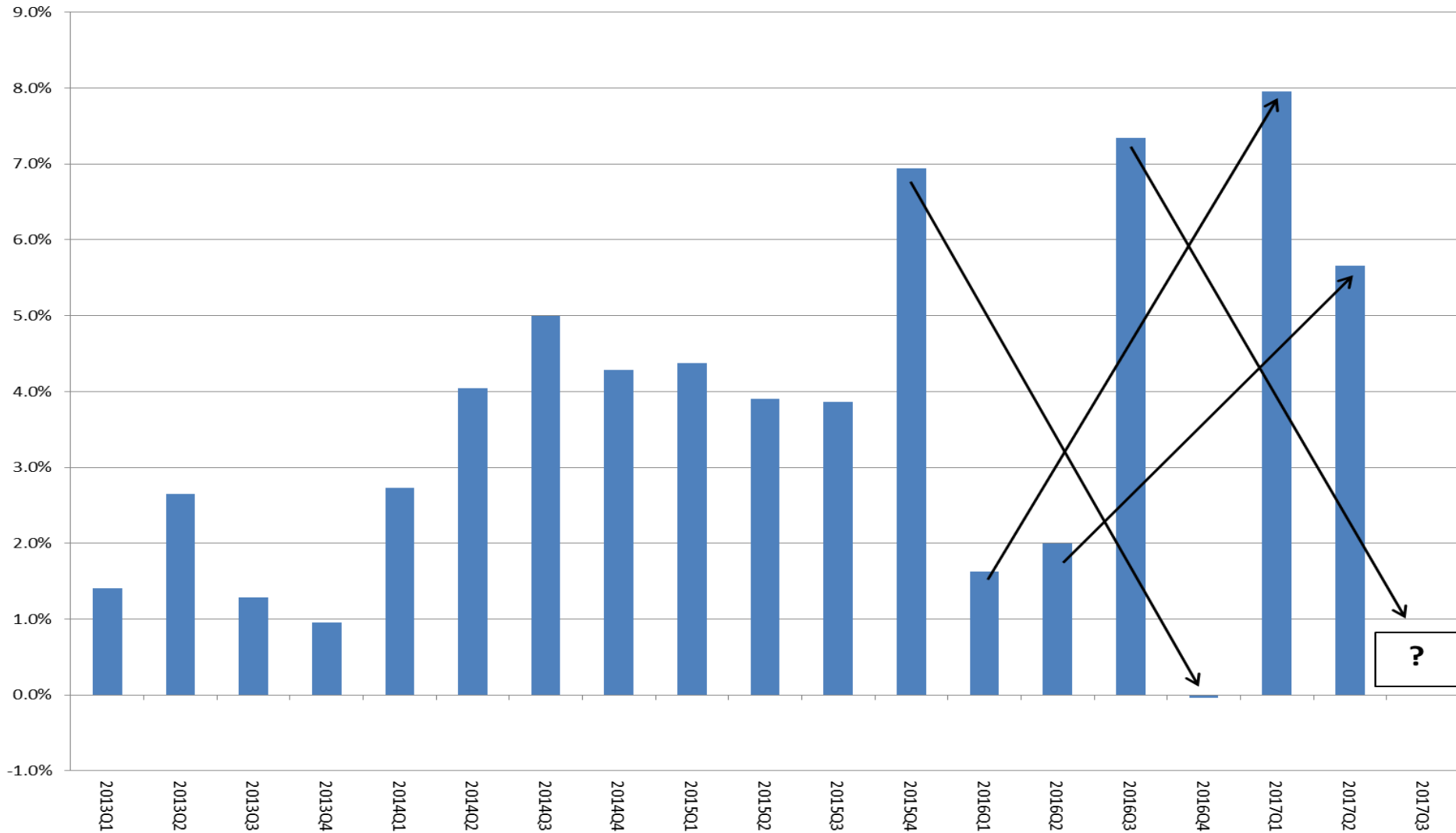
- I represent myself today
- Not the Comptroller, not the Board of Revenue Estimates

September GF Forecast

Tax Type	Approx Share GF	FY 2017 Closeout Variance	FY 2018 September Estimate
Personal Income Tax	54%	76,904	-15,143
Sales Tax	27%	-47,943	-72,236
Other	19%	61,332	35,063
Total Ongoing General Fund	100%	90,303	-53,008
Change From Previous Estimate		0.5%	-0.3%
Note: Dollars in Thousands			

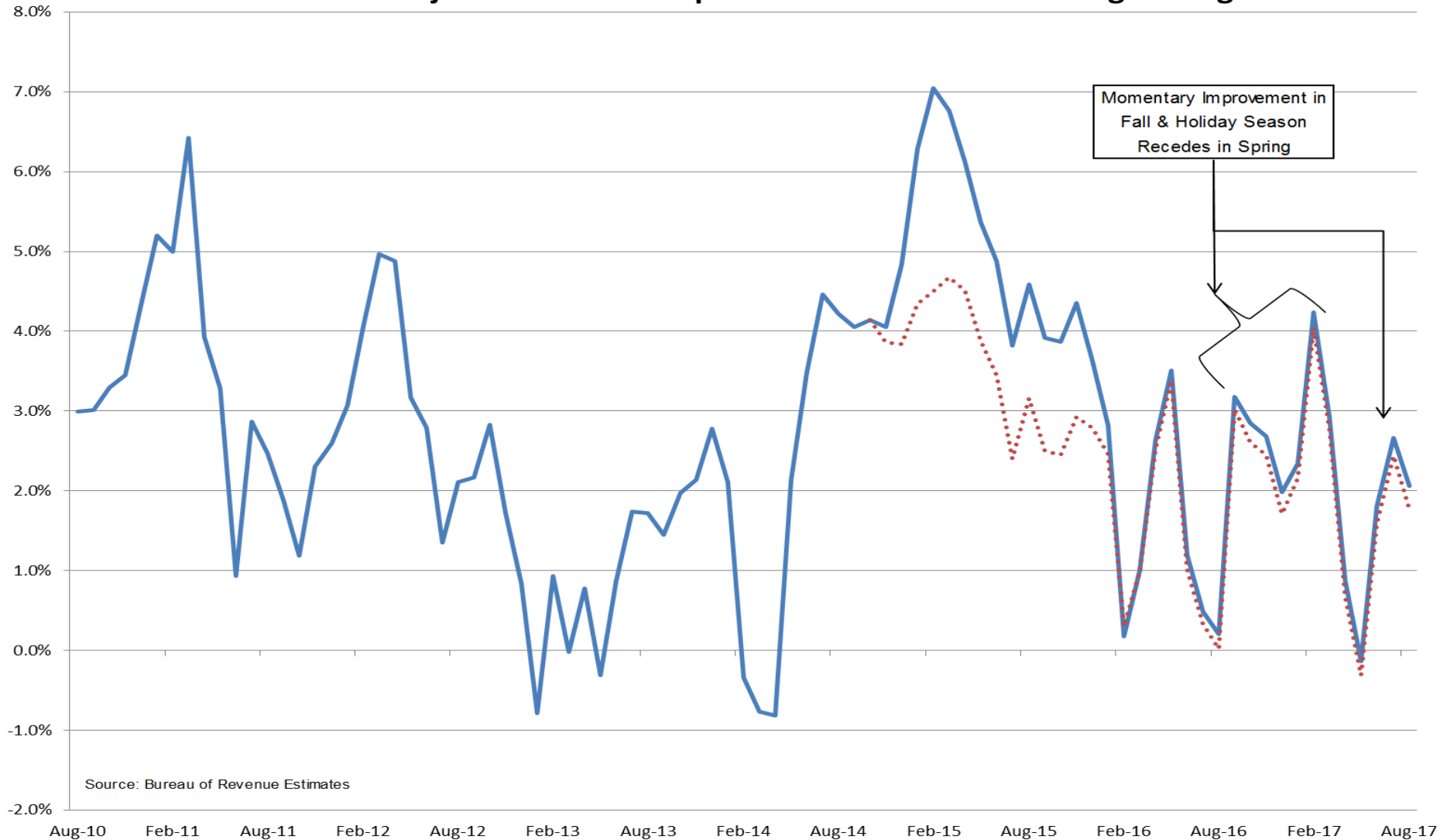
Closeout Buoyed by Withholding Timing

Attributable Withholding - Pay Period Timing Causing Quaterly Volatility



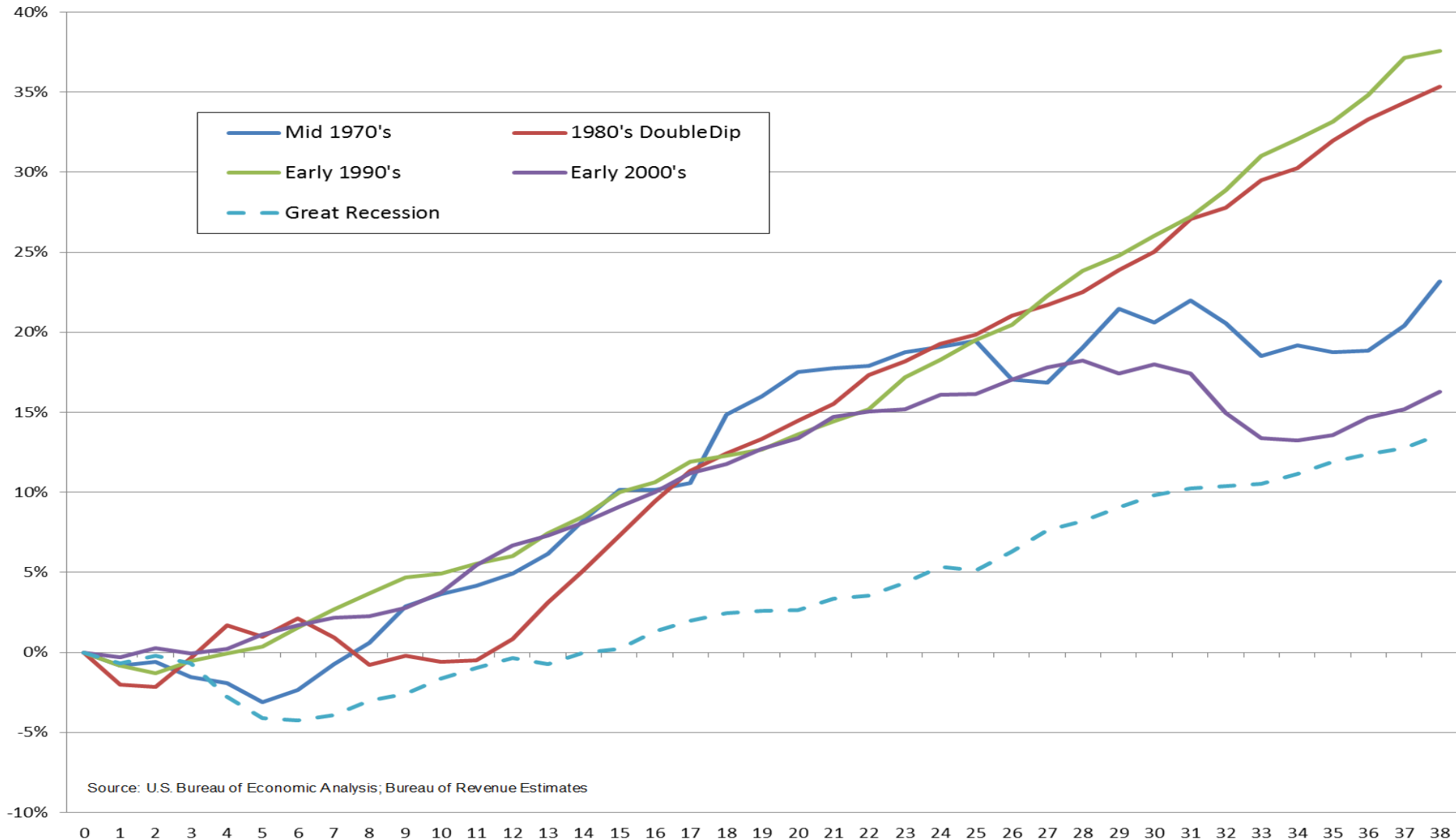
But Weak Sales Tax Saps Revenues – Ongoing Weakness

Sales Tax - Rate Adjusted Gross Receipts Growth - 3 Month Moving Average



National Economy – Lackluster Consistency

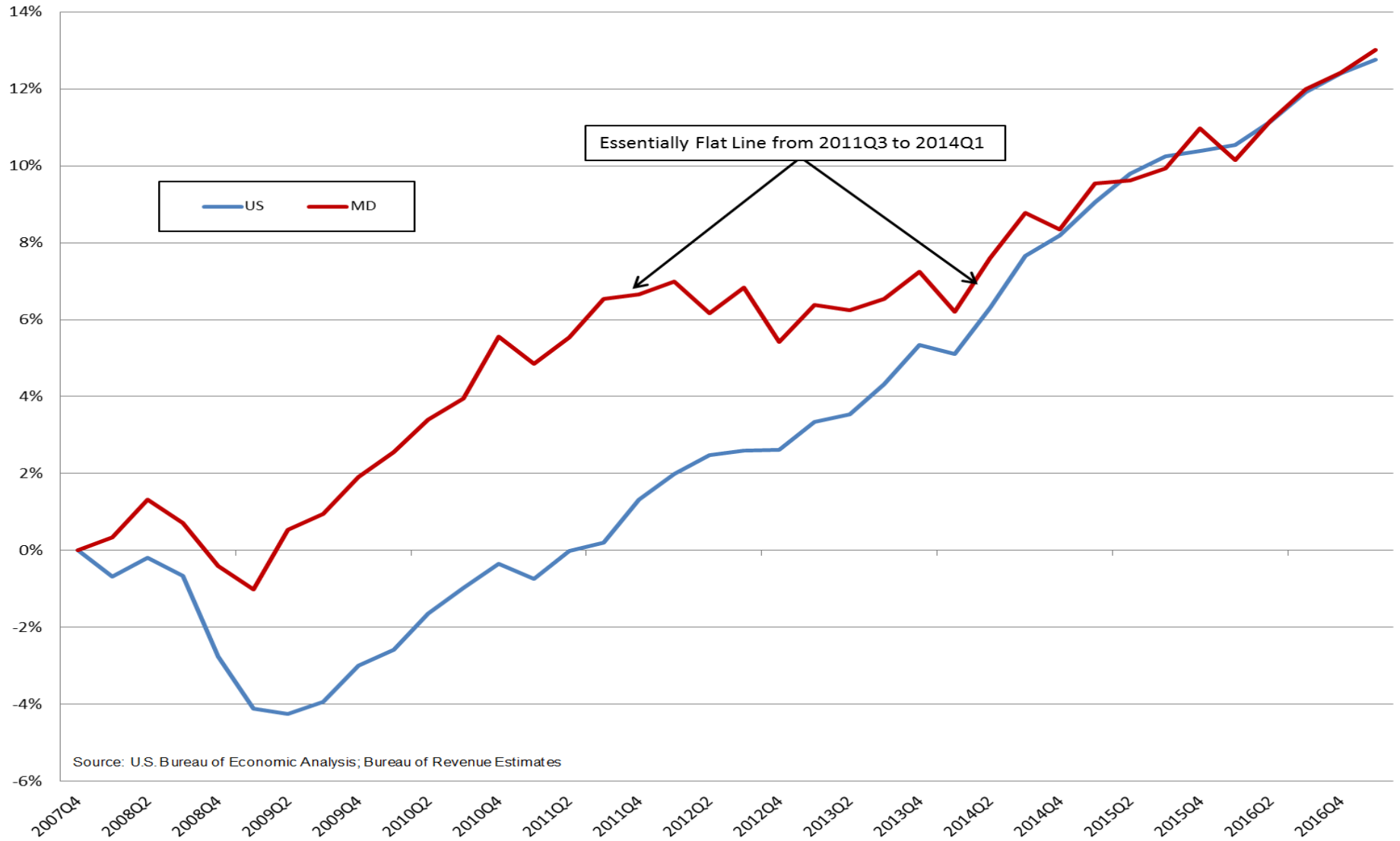
Historic Recessions -- % of Previous Peak GDP (Quarterly)



Source: U.S. Bureau of Economic Analysis; Bureau of Revenue Estimates

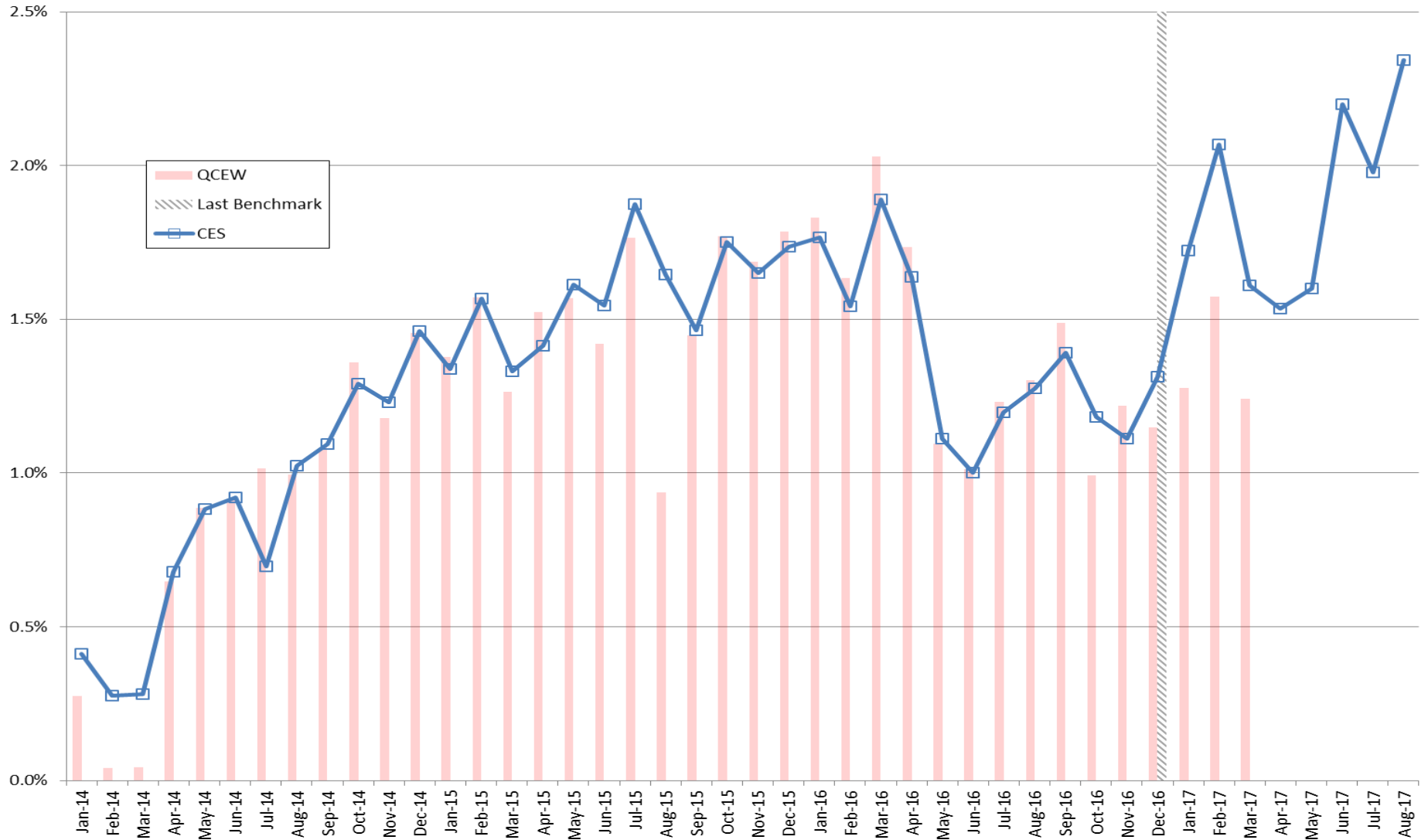
But MD Back on Pace With Nation

Real GDP Growth for MD and US, Indexed to 4th Qtr 2007



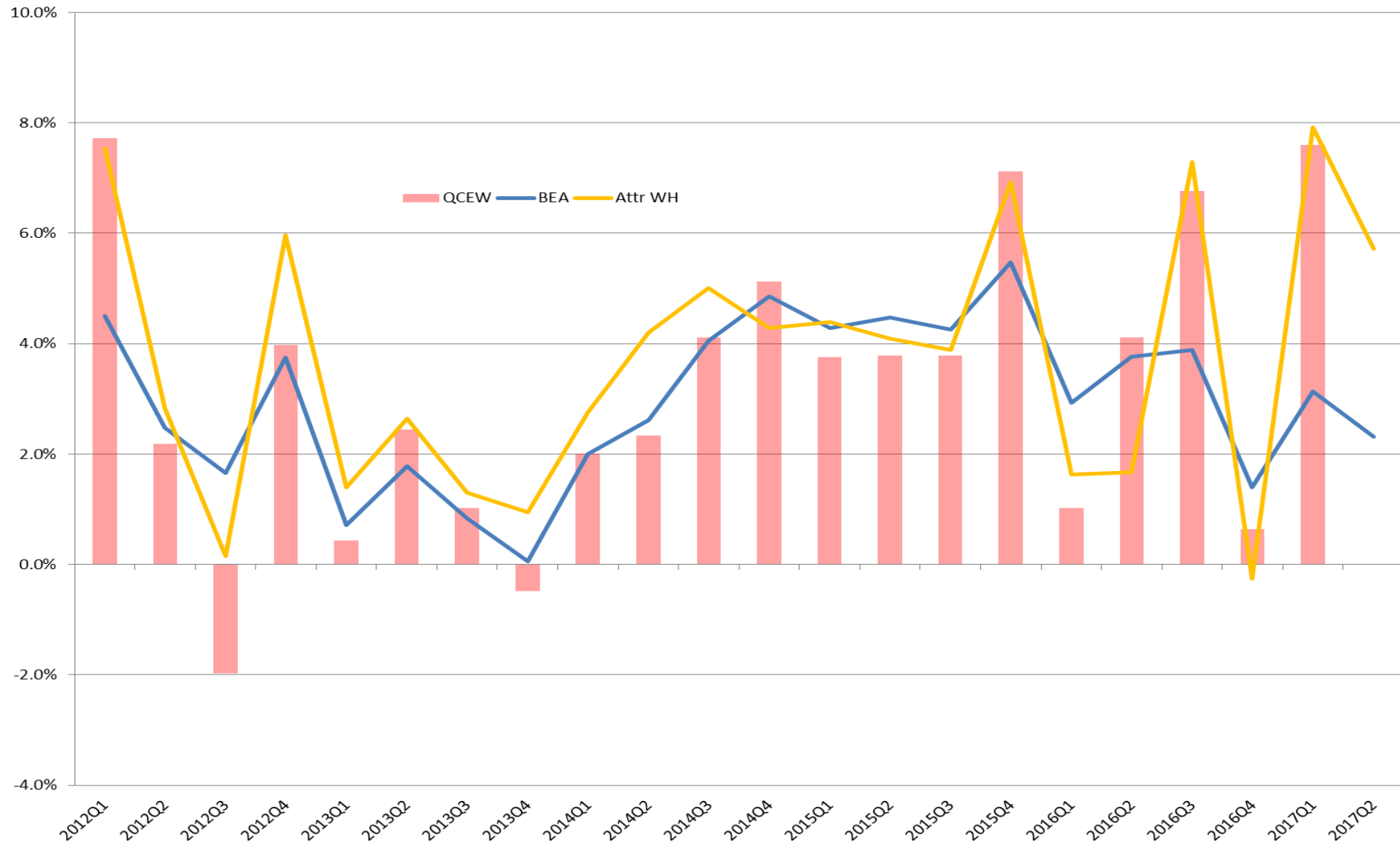
Employment Growth Strong – Even if Overstated

Maryland Employment -- CES versus QCEW



Wage Growth Muted Relative to Employment

Aggregate Wage History



Restraining Nominal Wage Growth

1. Job Growth Concentrated to Higher Degree in Lesser Paying Industries
2. Lack of Inflation – Inflation ~ 0.0% in 2015, 1.3% in 2016, & 2.1% YTD for 2017
3. Baby Boomer Retirement Replacements @ Lesser Wage Levels
4. Labor Force Productivity Flat or Declining in Expansion

Top 3 Wage Industries Contracted in Q1

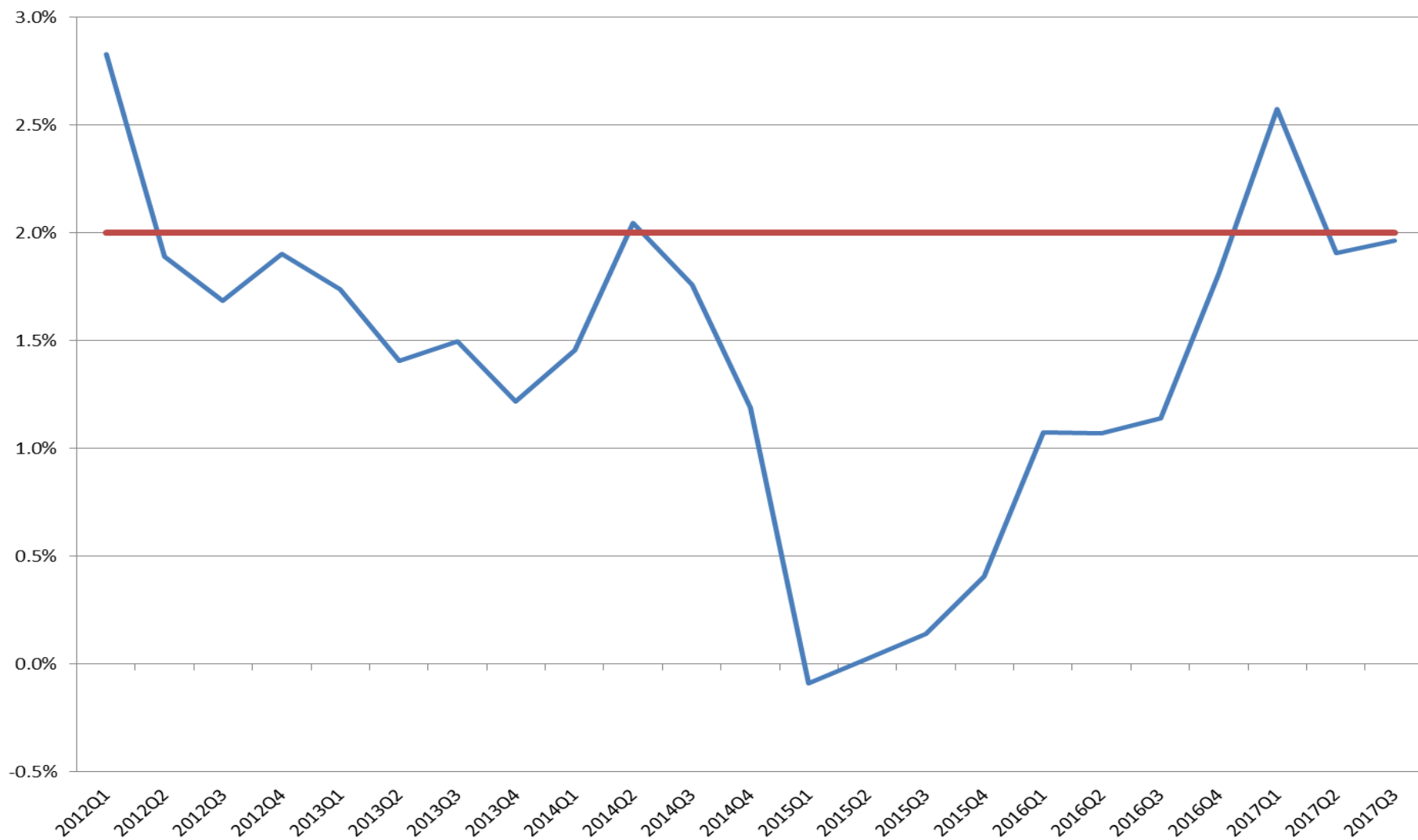
Employment Growth & Wages -- State of Maryland

2017Q1 YTD

Growth Factor Rank	Industry	(a) 2017Q1 YTD Employment Growth	(b) 2017Q1 YTD Share of Total	= (a) * (b) Growth Factor	2016 Average Wage	Average Wage Rank
	Total	1.4%	100.0%	1.4%	58,103	
1	Accommodation & Food Services	4.6%	8.6%	0.397%	20,409	22
2	Health Care & Social Assistance	2.4%	14.0%	0.337%	51,659	15
3	Construction	2.3%	6.0%	0.141%	62,502	10
4	Administrative & Support & Waste Management &	2.2%	6.2%	0.138%	41,371	17
5	Professional, Scientific, & Technical Services	1.2%	9.5%	0.110%	94,112	5
6	Federal Government	1.6%	5.6%	0.092%	99,351	4
7	Manufacturing	2.0%	4.0%	0.079%	73,861	8
8	Real Estate & Rental & Leasing	4.0%	1.7%	0.069%	61,754	11
9	Local Government	0.7%	9.6%	0.063%	54,385	14
10	Educational Services	2.0%	2.5%	0.051%	55,032	13
11	Transportation & Warehousing	1.3%	2.9%	0.037%	51,569	16
12	Other Services	1.0%	3.5%	0.035%	40,318	18
13	Wholesale Trade	0.5%	3.3%	0.018%	77,478	7
14	Information	0.9%	1.5%	0.013%	87,160	6
15	Arts, Entertainment, & Recreation	0.5%	1.5%	0.007%	32,509	20
16	Agriculture, Forestry, Fishing & Hunting	2.7%	0.2%	0.005%	35,006	19
17	Mining, Quarrying, Oil & Gas Extraction	-0.7%	0.0%	0.000%	67,115	9
18	Utilities	-0.2%	0.4%	-0.001%	119,486	1
19	Management of Companies & Enterprises	-0.6%	1.0%	-0.006%	109,341	2
20	State Government	-0.4%	3.7%	-0.015%	57,308	12
21	Finance & Insurance	-1.0%	3.6%	-0.034%	101,520	3
22	Retail Trade	-0.6%	10.8%	-0.060%	30,781	21

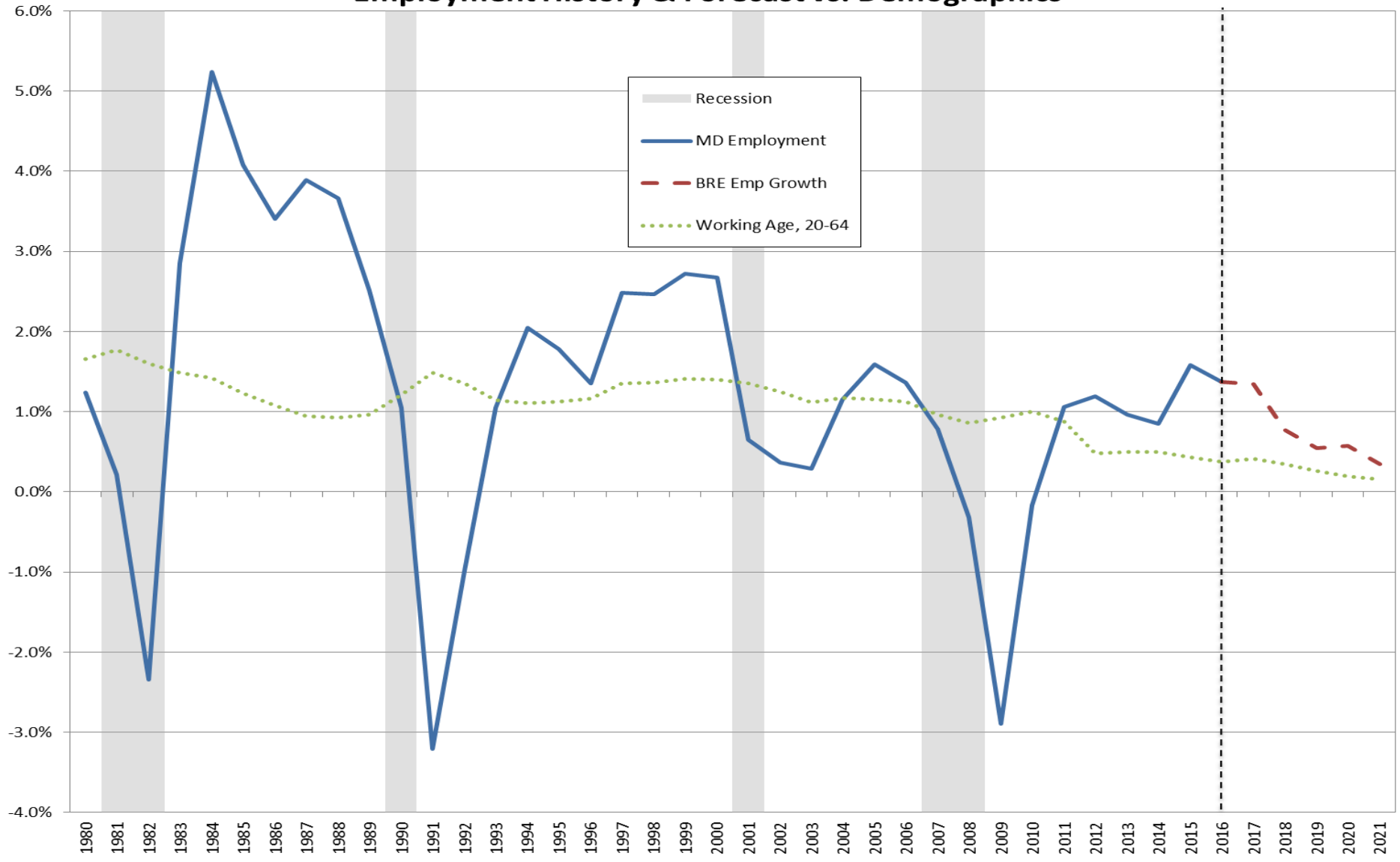
Employer Wage Policies Based on Prior Inflation

Inflation -- CPI



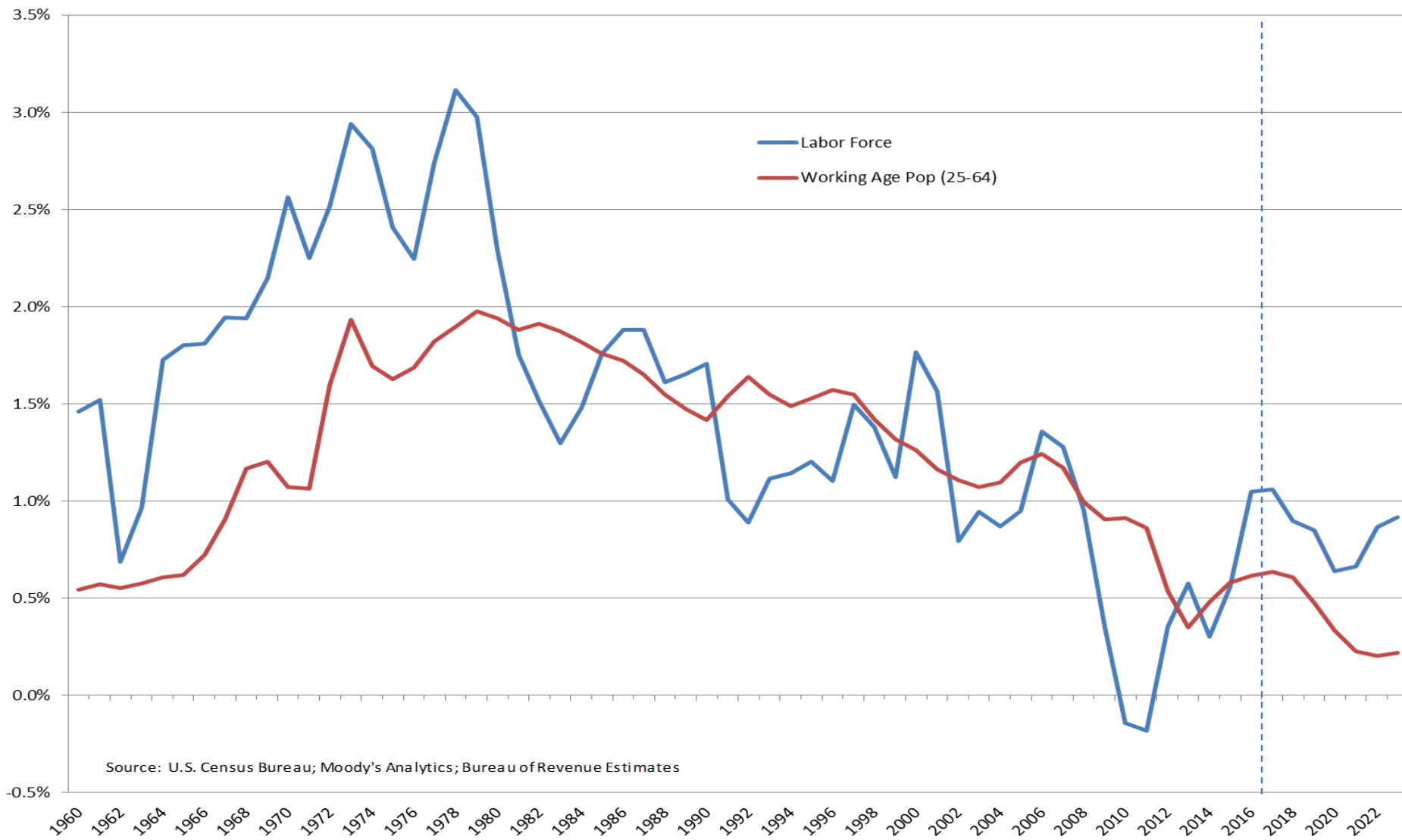
Slow Growth in Workers – But Millennials Absorbed

Employment History & Forecast vs. Demographics



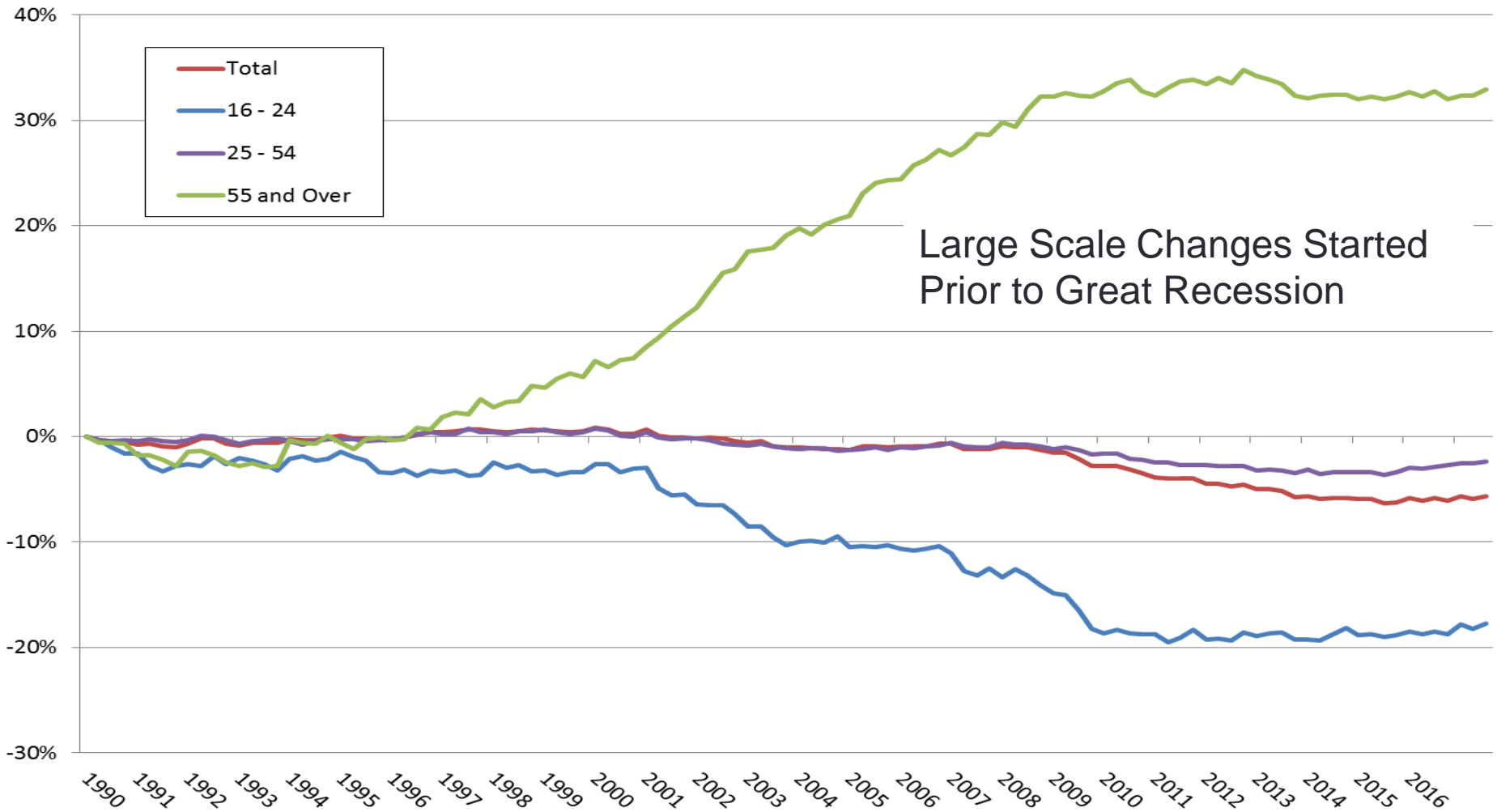
Only as Many Jobs as Workers

Working Age Population And The Labor Force (% Change 2 Yr MA)



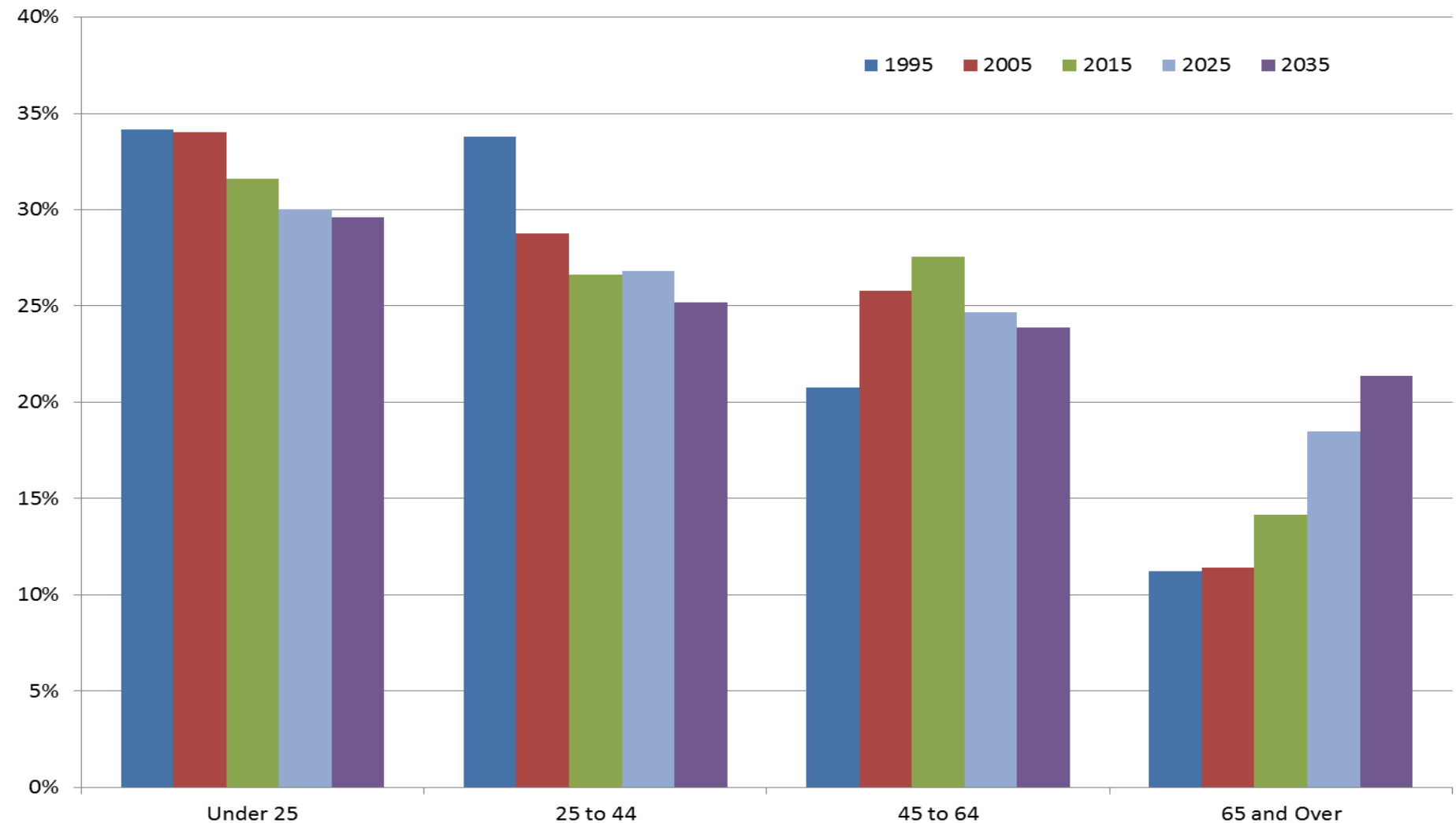
Older Workers Supplementing Labor Force – Younger Workers Bowing Out – Total Down!

Cumulative Change in National Labor Participation Rate



Demographics Explain Much Of New Normal

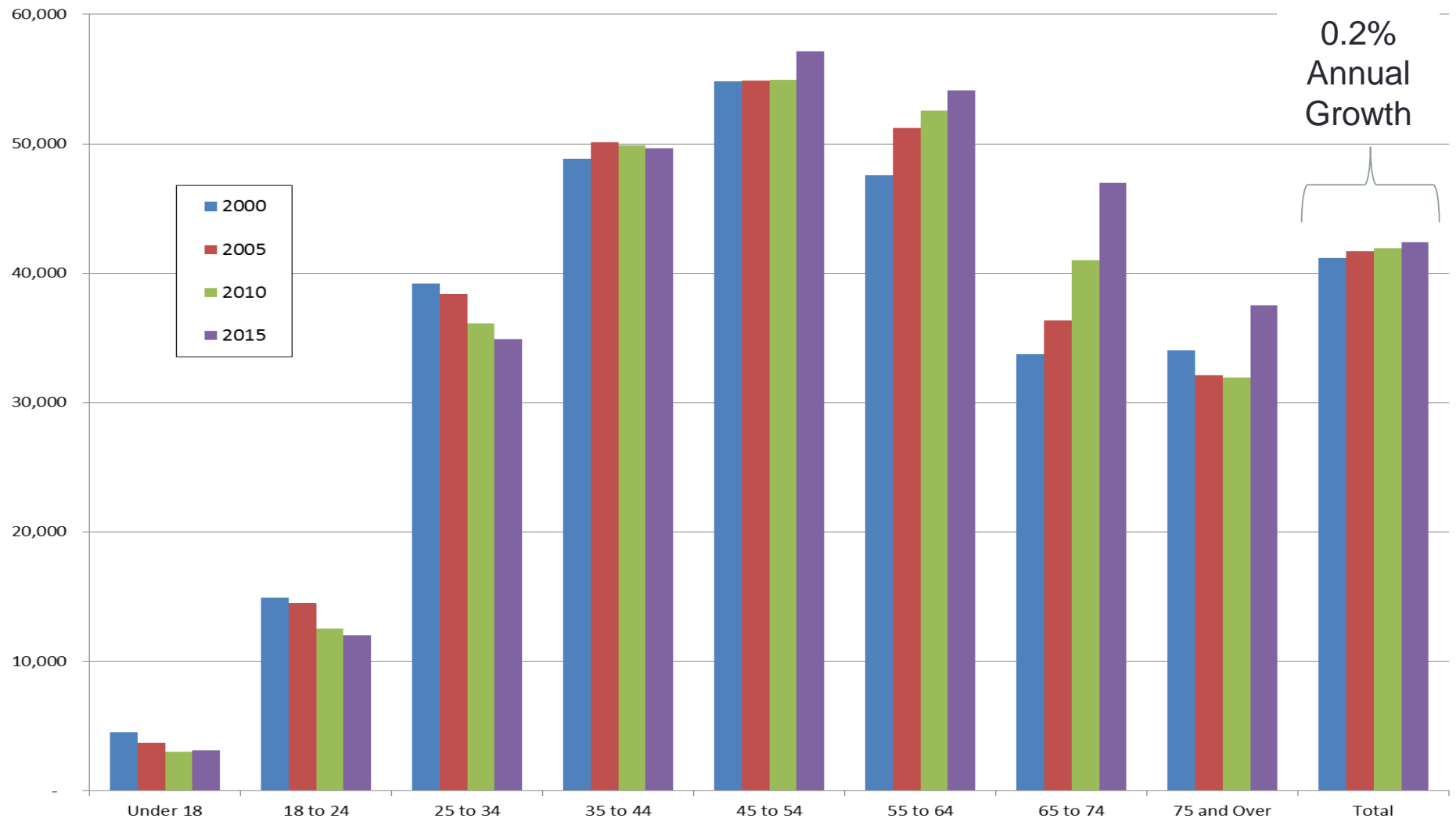
Age Distribution of MD Residents



Source: US Census; Moody's Analytics

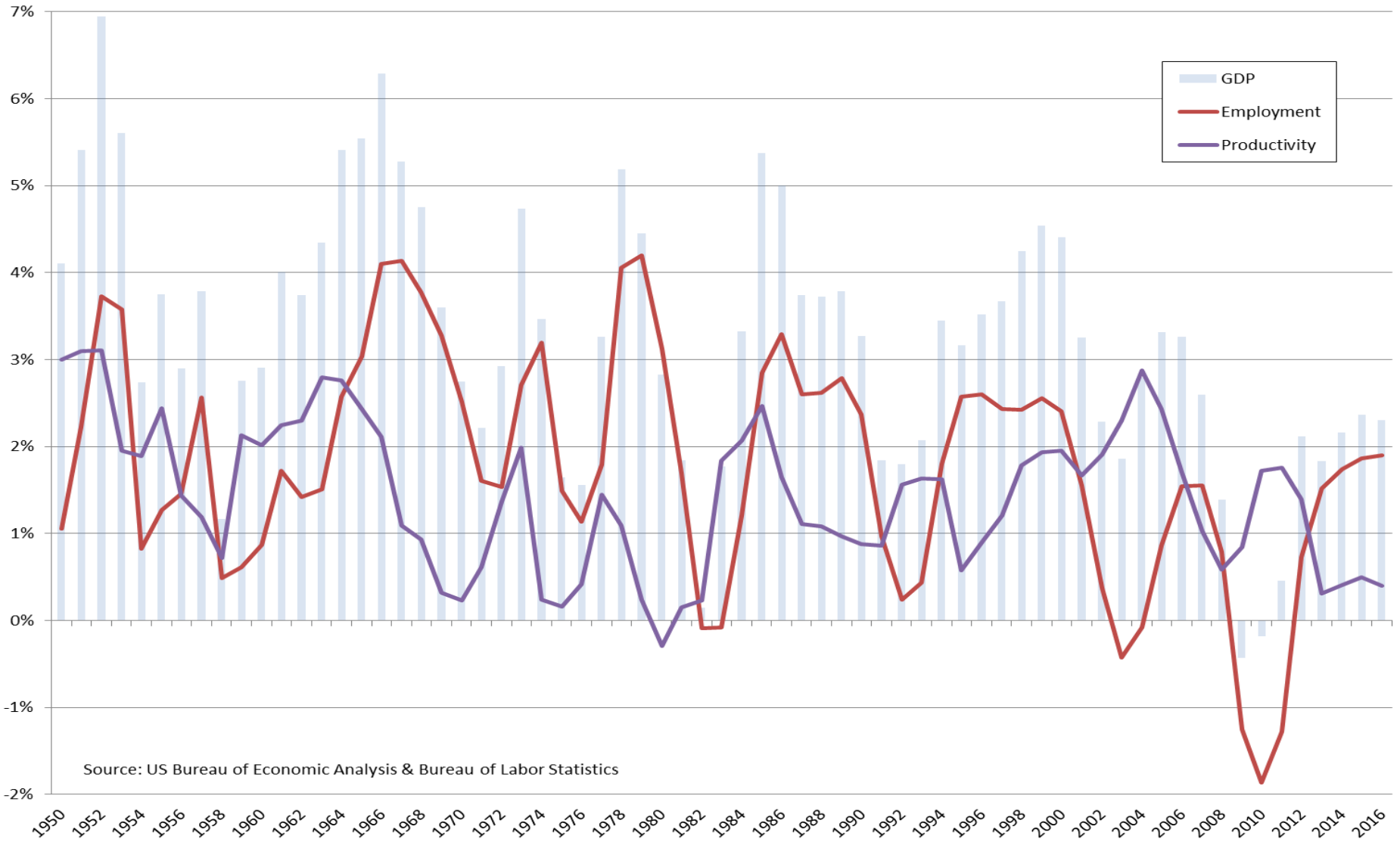
Median Income Growth Weak – Also, Age is Proxy for Productivity

Taxpayer Real Median FAGI (2015\$) -- State of Maryland



May Partially Explain Slowdown in GDP

Supply Side Factors and GDP -- 3 Year Moving Average



Economic Impacts

- Federal Reserve economists found changes in demographics:
 - explain nearly all the slowdown in trend growth and decrease in equilibrium real interest rates since the 1980s
 - caused steepest declines after 2000
 - caused US Labor participation to peak in 2000
- Implications for monetary policy
- A population at the ends of the age spectrum will earn, consume, save, and invest less than a middle aged population

Tax Impacts

- Online retailing, digital goods, sharing economy
- Older population means lower income and consumption tax revenue growth
- Consumers shifting spending to non-taxable services
 - Ex. out-of-pocket healthcare spending for older individuals
- Revenue Result Is:
 - Lower SUT collections per \$ spent by consumers
 - Lower aggregate income tax revenue

Demographics Have Government Spending Issues As Well A Lot of Bills Coming Due

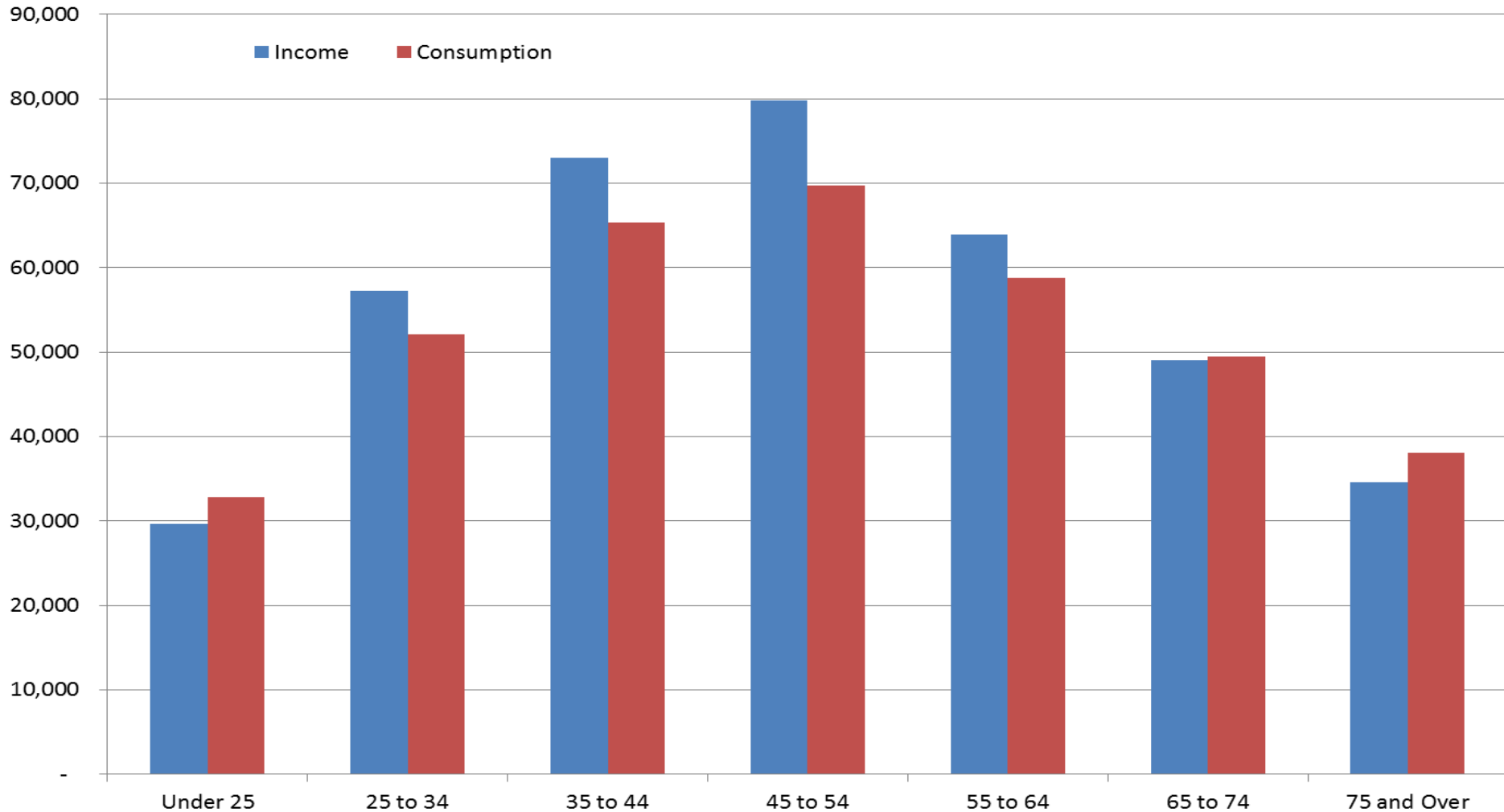
- Medicare
- Social Security
- Pension Liabilities

- Who's Going to Pay??
 - Increased Taxes?
 - Reduced Benefits?
 - Probably A Mix of Both
 - Trigger a Recession?????



Naturally, Consumption Decreases

US Average Money Income and Consumption Expenditures of Households in 2015 (by age of survey respondent)



Source: US Bureau of Labor Statistics

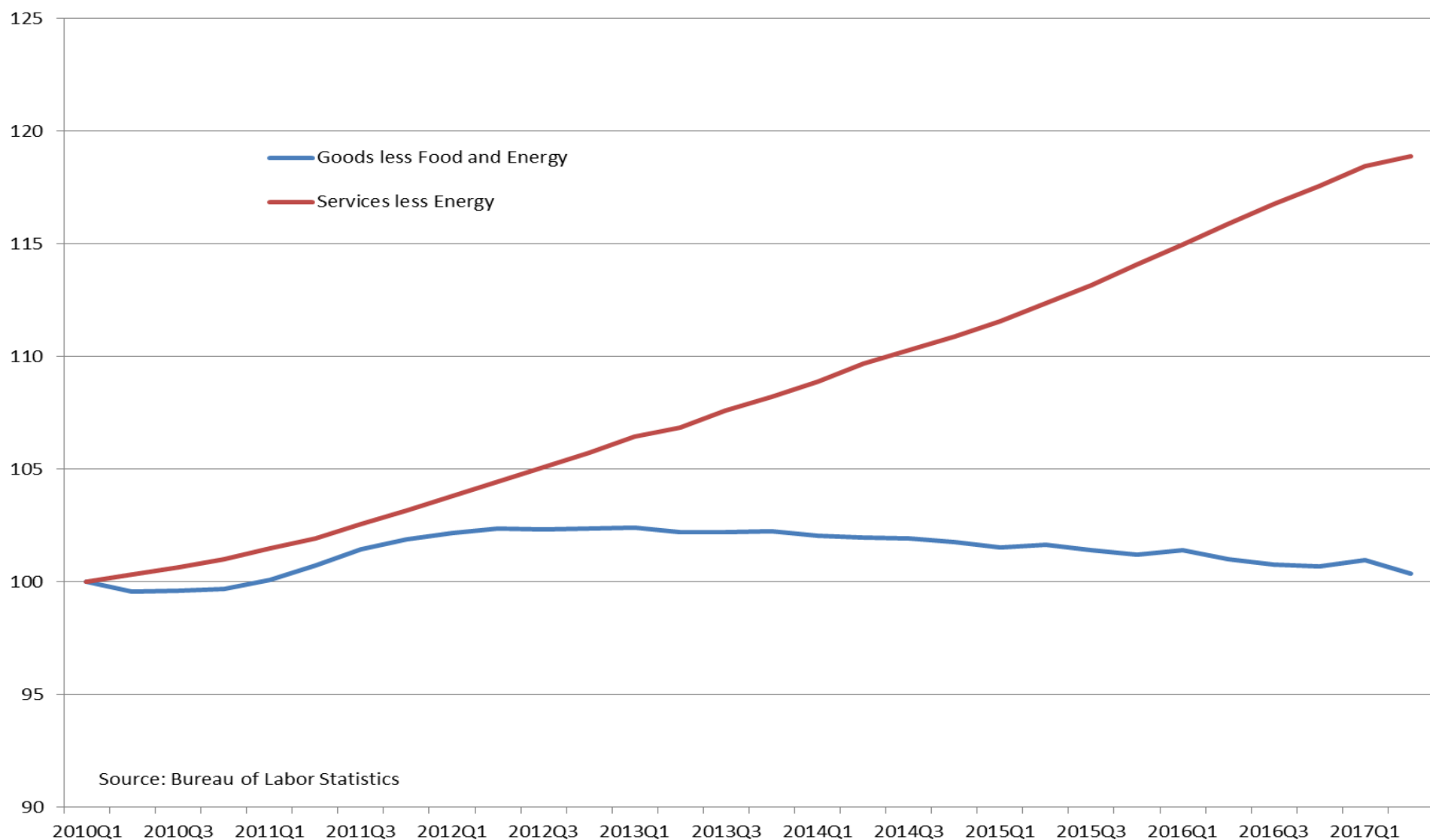
Underlying SUT Growth ~ 2.5%

Sales Tax - Rate Adjusted Gross Receipts Growth - 3 Month Moving Average



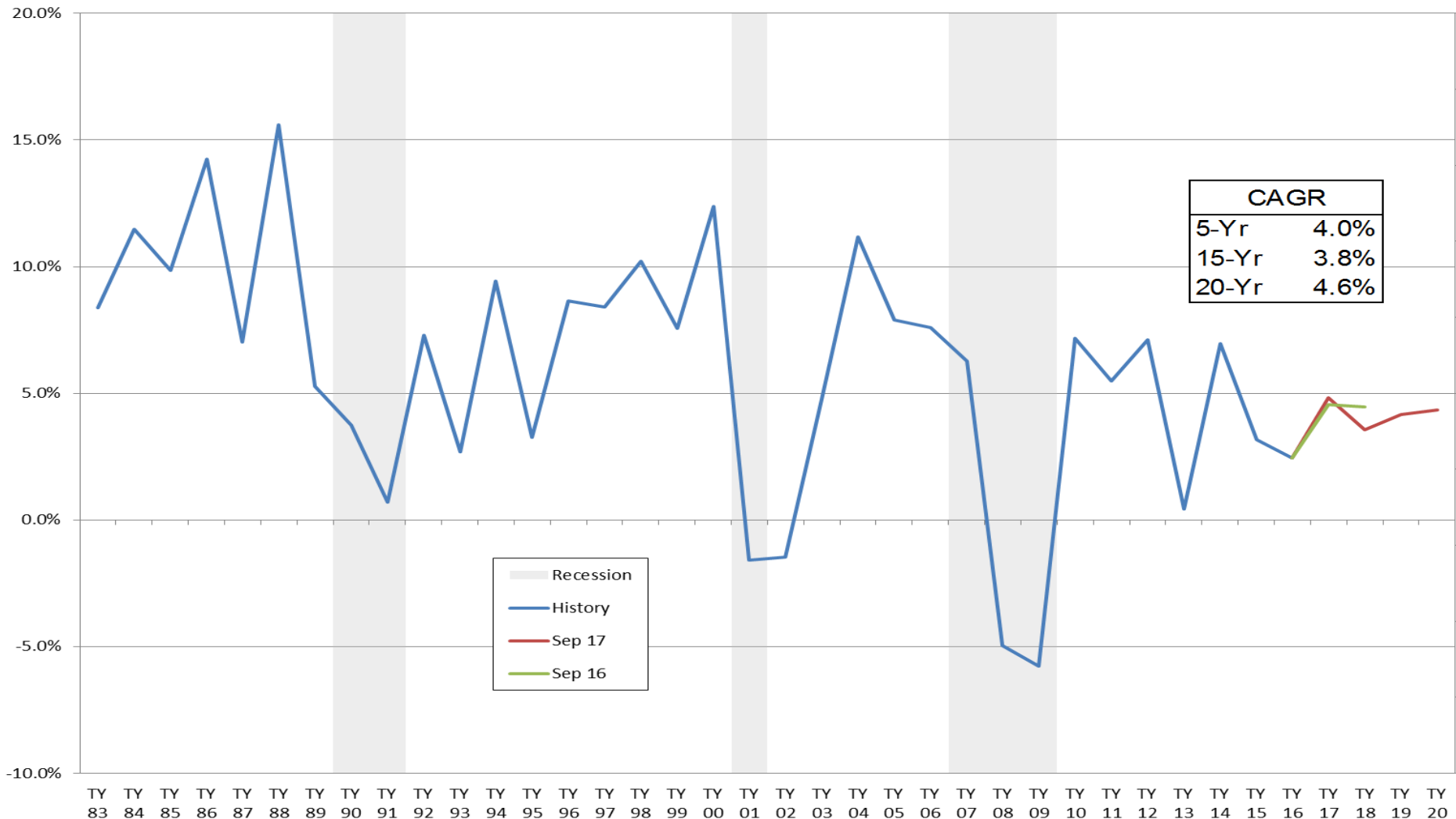
Goods Inflation Particularly Weak – Big Impact

Goods and Services Inflation Indexed to 2010 Q1



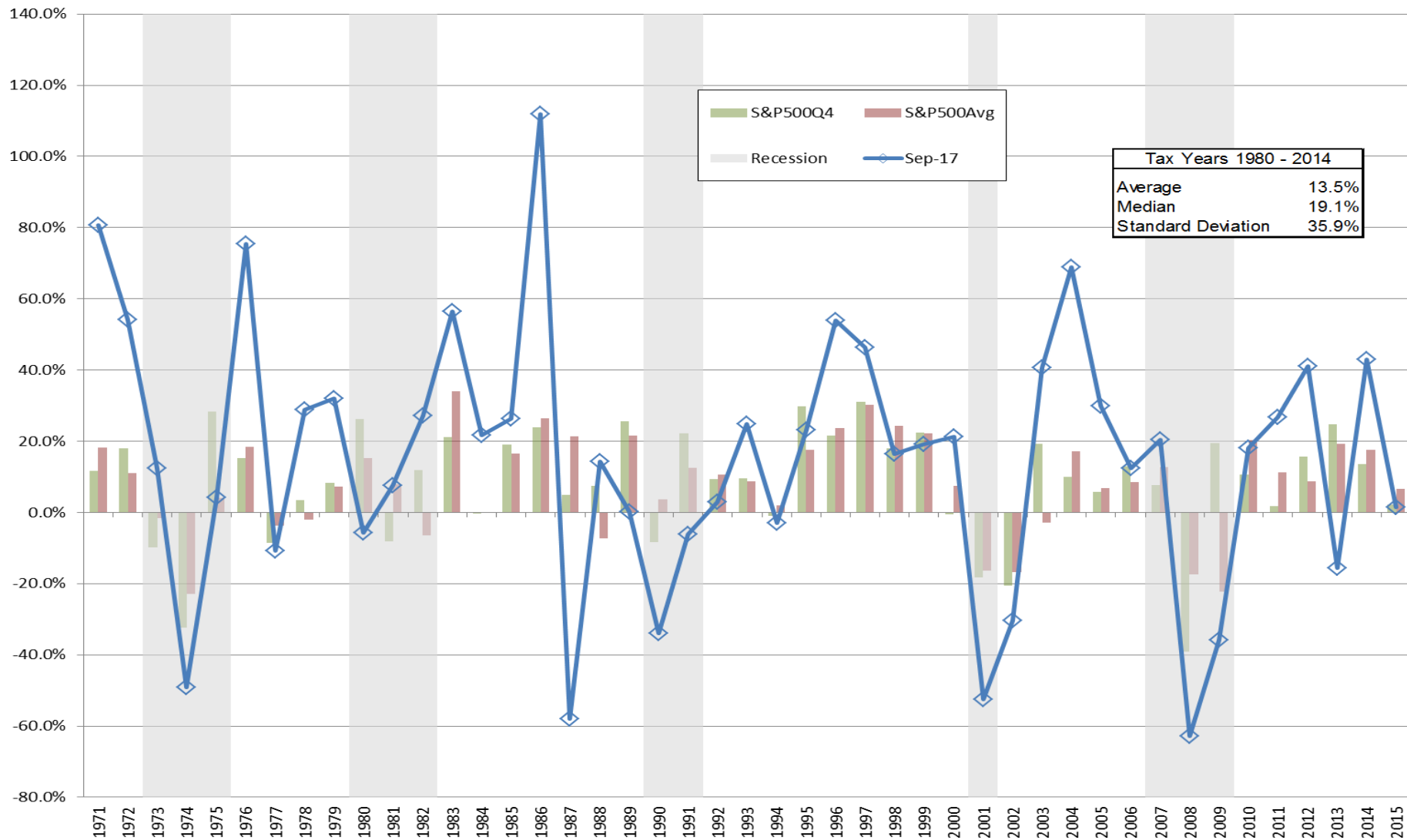
Slight Bump in TY17 – But Ongoing Growth ~ 4.3%

Estimate of Taxable Income - Baseline - Sep 2017



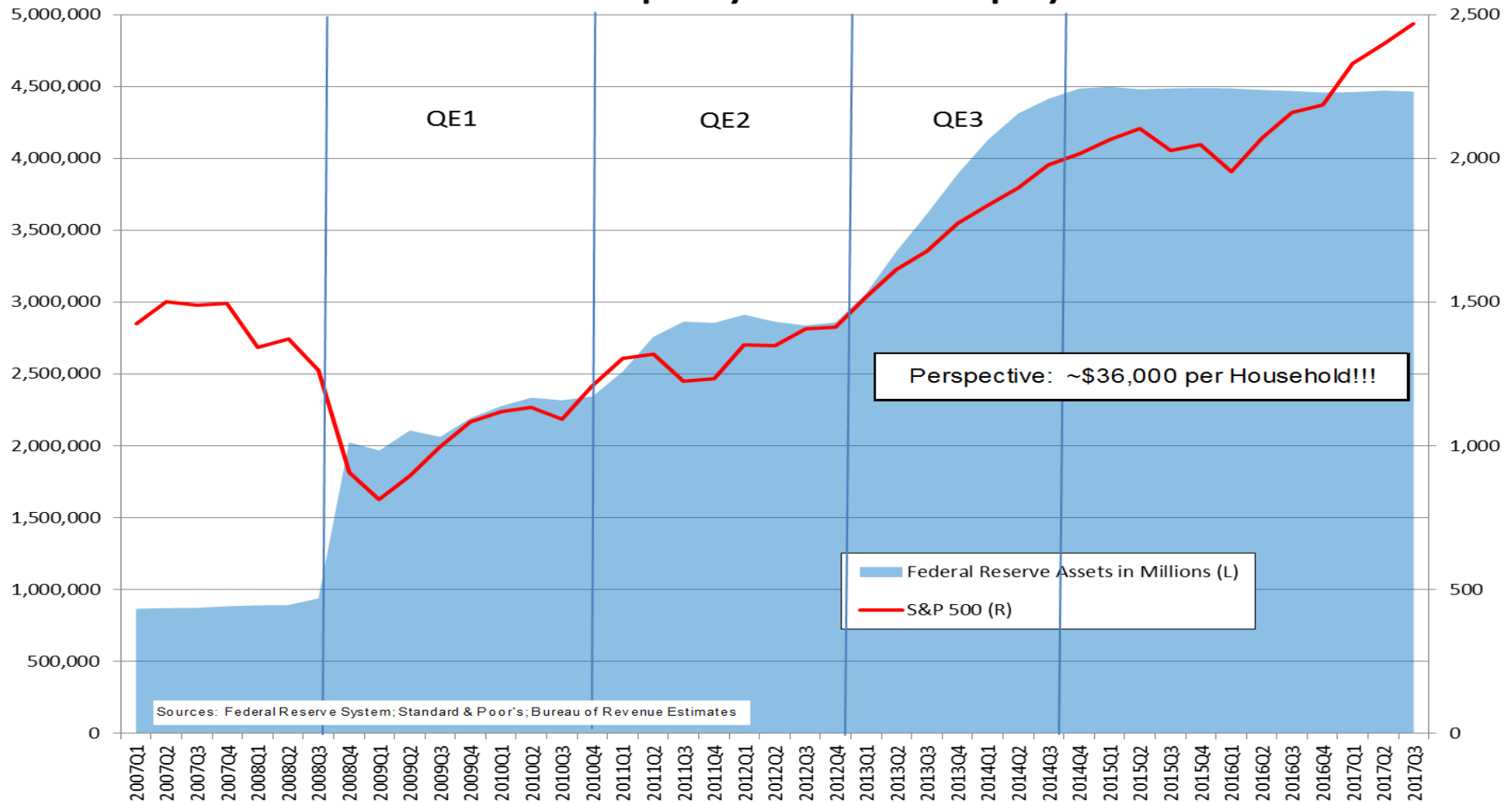
Despite Market – Gains Slowed for TY16

Total Capital Gains - Long History



Market Has Some Strong Fundamentals but Unwinding Creates Uncertainty

Federal Reserve Liquidity Actions and Equity Prices



Other Concerns/Risks

- Federal Tax Plan
 - Impact on MD Residents and Markets
 - The Loss of the State & Local Tax Deduction would send additional \$3 billion MD resident dollars to DC
 - BUT DON'T GET CAUGHT UP IN THESE ONE-OFFS
 - WHATEVER THEY DO WILL HAVE BROAD IMPACTS AND OFFSETS, WORRY ONCE THEIR PLAN IS MORE CONCRETE AND REAL ANALYSIS CAN OCCUR
- Rocket Man and a shift back to a more Aggressive US Geopolitical Role
 - World Geopolitics are always a concern
- Europe getting stronger, but fiscal policy a risk
- Learning Millennials Interests (e.g., don't like to gamble, yet)

State Budget Picture – Better than Expected

Source: DLS – SAC Briefing

Outlook for Fiscal 2019 Improves Comparison of July 2017 Forecast to the October 2017 Forecast (\$ in Millions)

	Estimated Cash <u>Balance</u>	Estimated Structural <u>Balance</u>
July 2017 Forecast	-\$742	-\$721
October 2017 Forecast	-251	-340
Difference	\$491	\$381
Reasons for Difference:		
Debt Service Premiums & Savings	\$227	\$227
Fiscal 2017 Closeout Revenues and Reversions	163	0
Medicaid Enrollment and Medical Expenditure Trends	154	154
Health Insurance Prescription Drugs and Balance	98	36
Other	68	44
Sept 2017 BPW Cuts and Revenues	62	42
Rainy Day Fund Transfer due to closeout sweeper	46	
Fiscal 2018 Deficiencies	-153	
BRE Revenue Revisions	-174	-122
Total	\$491	\$381

BPW: Board of Public Works

BRE: Board of Revenue Estimates

State Budget Picture – But Deficits Persist

Source: DLS – SAC Briefing

General Fund Budget Outlook Fiscal 2018-2023 (\$ in Millions)

	FY 2018 <u>Work. App.</u>	FY 2019 <u>Baseline</u>	FY 2020 <u>Est.</u>	FY 2021 <u>Est.</u>	FY 2022 <u>Est.</u>	FY 2023 <u>Est.</u>	FY 2019- 2023 Average Annual Change
Revenues							
Opening Fund Balance	\$259	\$111	\$0	\$0	\$0	\$0	
Transfer	0	191	38	36	35	36	
One-time Revenues/Legislation	15	0	0	0	0	0	
Subtotal One-time Revenue	\$274	\$302	\$38	\$36	\$35	\$36	
Ongoing Revenues	\$17,139	\$17,639	\$18,256	\$18,923	\$19,620	\$20,316	
Revenue Adjustments – Legislation	0	0	0	0	0	0	
Subtotal Ongoing Revenue	\$17,139	\$17,639	\$18,256	\$18,923	\$19,620	\$20,316	3.6%
Total Revenues & Fund Balance	\$17,413	\$17,941	\$18,294	\$18,959	\$19,655	\$20,352	3.2%
Ongoing Spending							
Operating Spending	\$17,882	\$18,487	\$19,518	\$20,433	\$21,295	\$22,169	
Education Trust Fund ¹	-487	-508	-515	-508	-515	-523	
Subtotal Ongoing Spending	\$17,394	\$17,980	\$19,003	\$19,925	\$20,780	\$21,646	4.7%
One-time Spending							
PAYGO Capital	\$10	\$78	\$50	\$50	\$31	\$31	
Legislation/One-time Adjustments/Swaps	-112	-61	0	0	0	0	
Appropriation to Reserve Fund	10	196	50	83	83	83	
Subtotal One-time Spending	-\$92	\$213	\$100	\$133	\$114	\$114	
Total Spending	\$17,302	\$18,193	\$19,103	\$20,058	\$20,893	\$21,760	4.6%
Ending Balance	\$111	-\$252	-\$809	-\$1,100	-\$1,238	-\$1,408	
Rainy Day Fund Balance	\$858	\$882	\$913	\$946	\$981	\$1,015	
Balance over 5% of GF Revenues	1	0	0	0	0	-0.4	
As % of GF Revenues	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Structural Balance	-\$255	-\$340	-\$747	-\$1,003	-\$1,159	-\$1,330	

GF: General Fund

PAYGO: pay-as-you-go

¹ Education Trust Fund is supported by revenues from video lottery terminals and table games.

Demographics Teaser

- BRE is close to completing a detailed report on age demographics that is scheduled for completion this December
- Quantifies specific income tax impacts from age shifts
- Will make data available at the state and county levels

Thank You

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