MARYLAND REVENUE ESTIMATES

REVENUES & ECONOMICS OCTOBER 2018

Office of the Comptroller State of Maryland

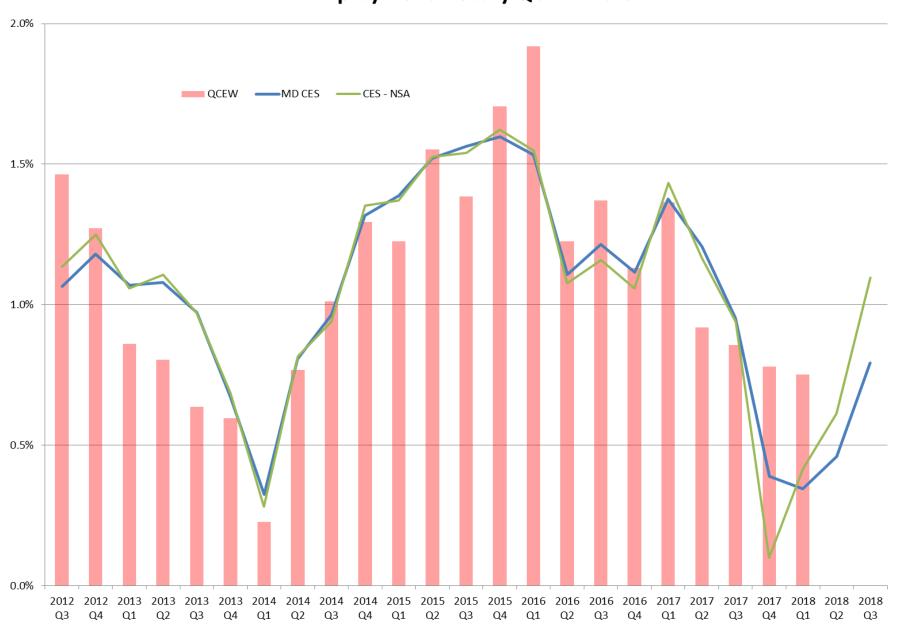
Andrew Schaufele: Director, Bureau of Revenue Estimates

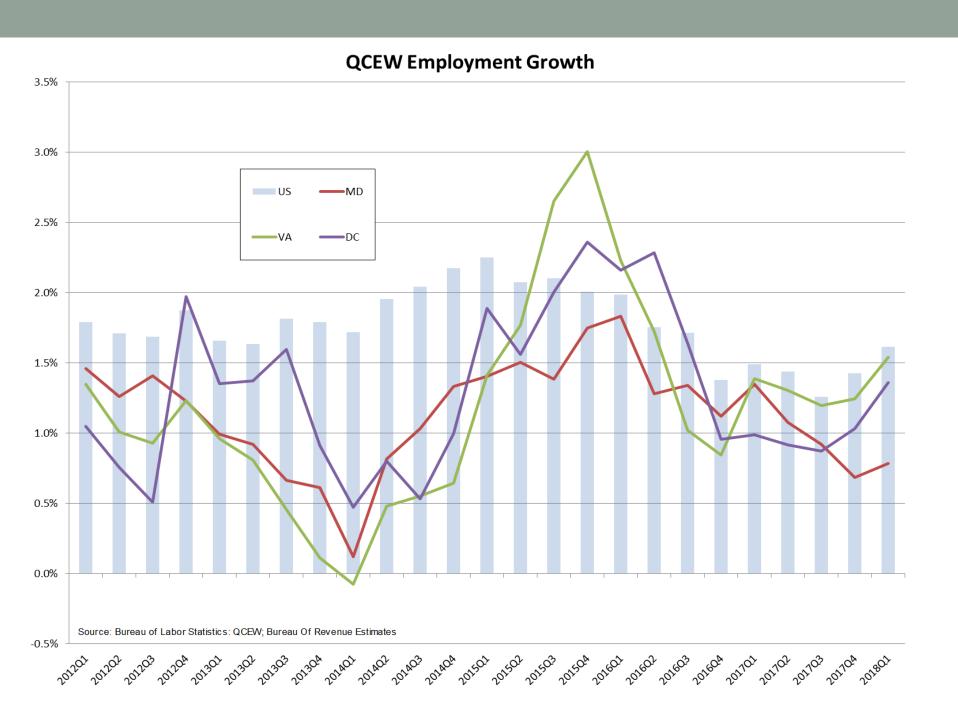
Disclaimer

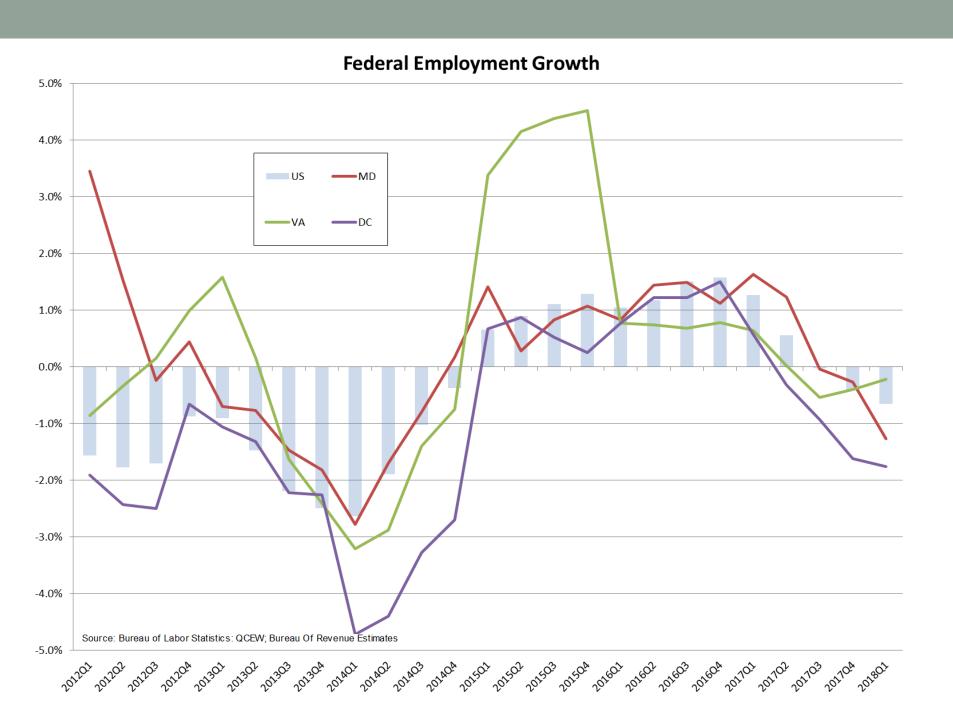
- I represent myself today
- Not the Comptroller, not the Board of Revenue Estimates

Real GDP Growth, Indexed to 4th Qtr 2007 20% 15% Essentially Flat Line from 2011Q3 to 2014Q1 10% 5% -5% Source: U.S. Bureau of Economic Analysis; Bureau of Revenue Estimates -10%

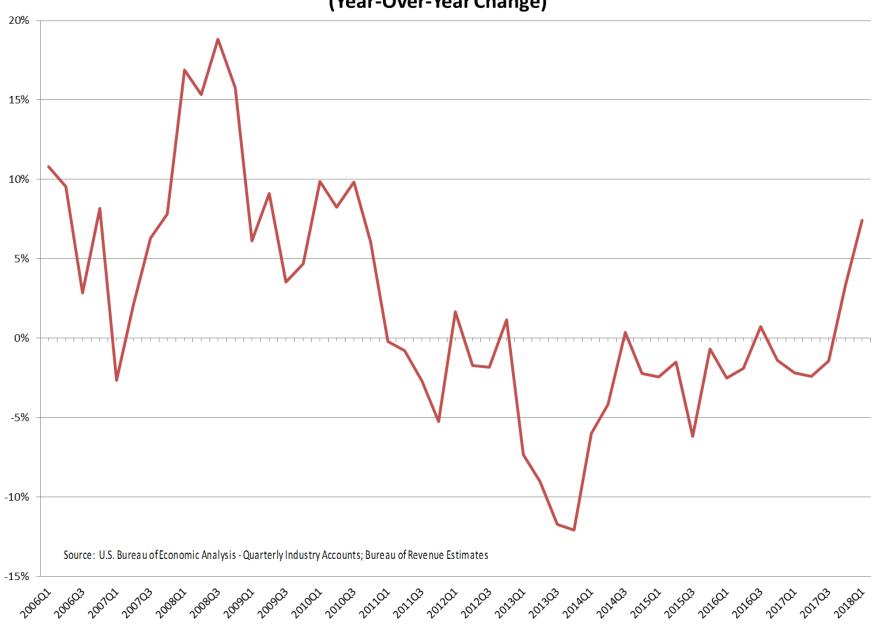
MD Employment History QCEW v CES

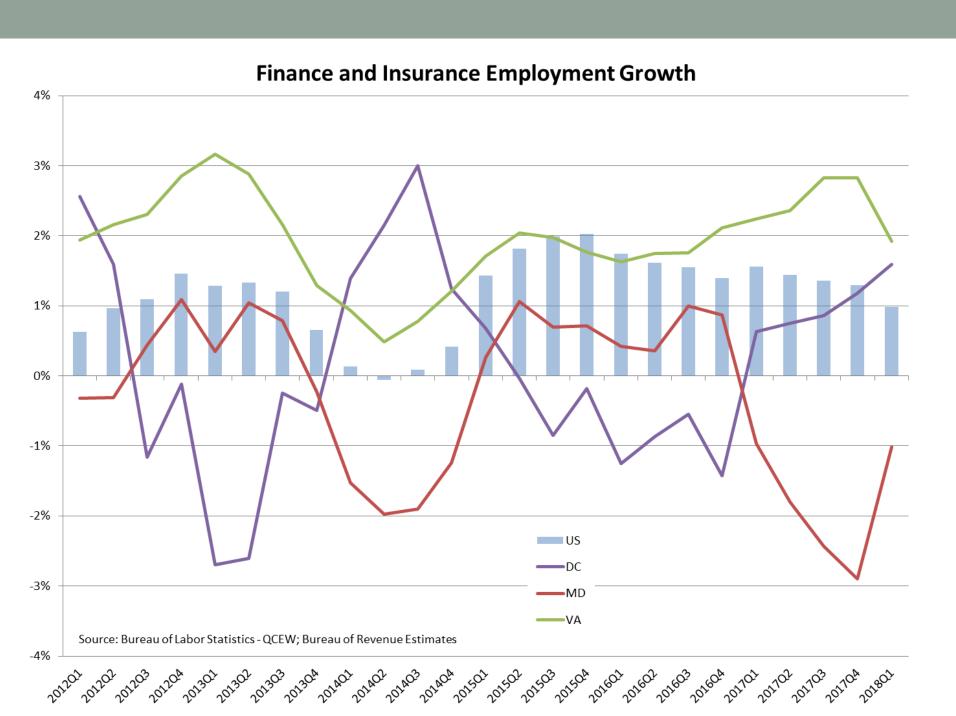




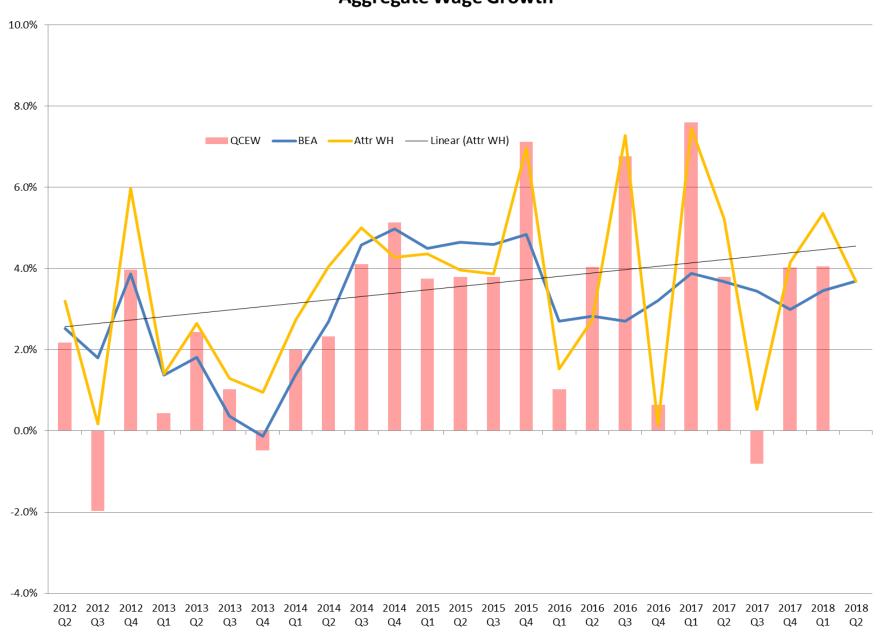


Federal Government Purchases of Input Goods & Services (Year-Over-Year Change)

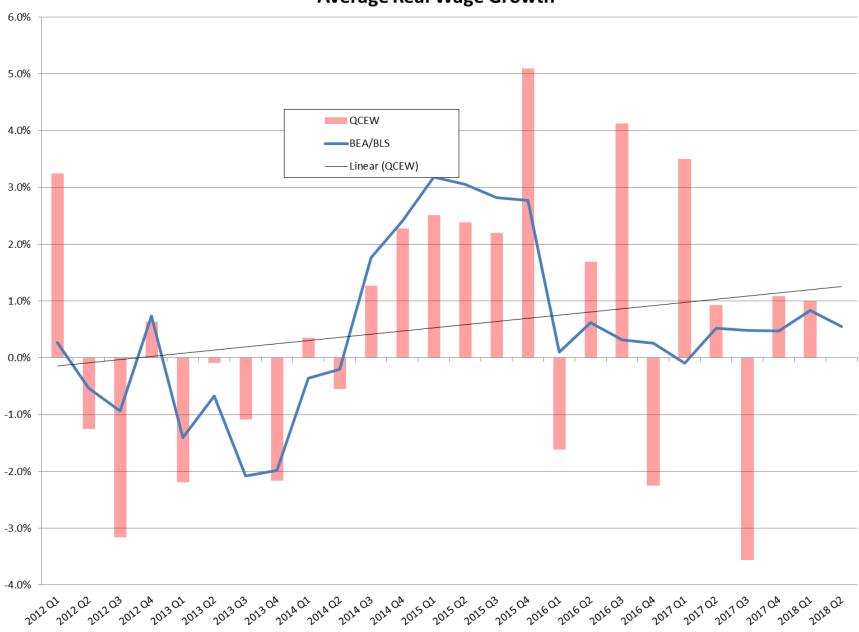




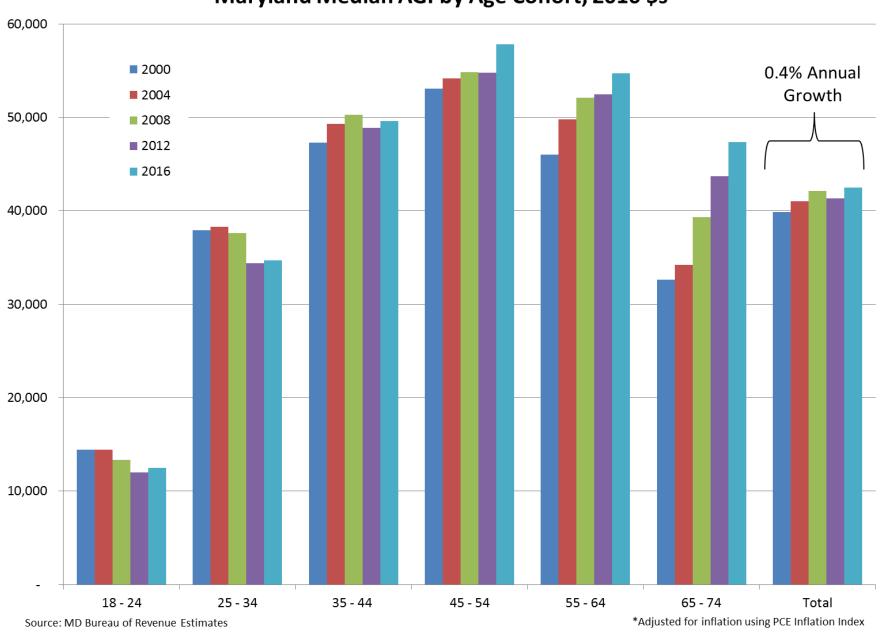
Aggregate Wage Growth



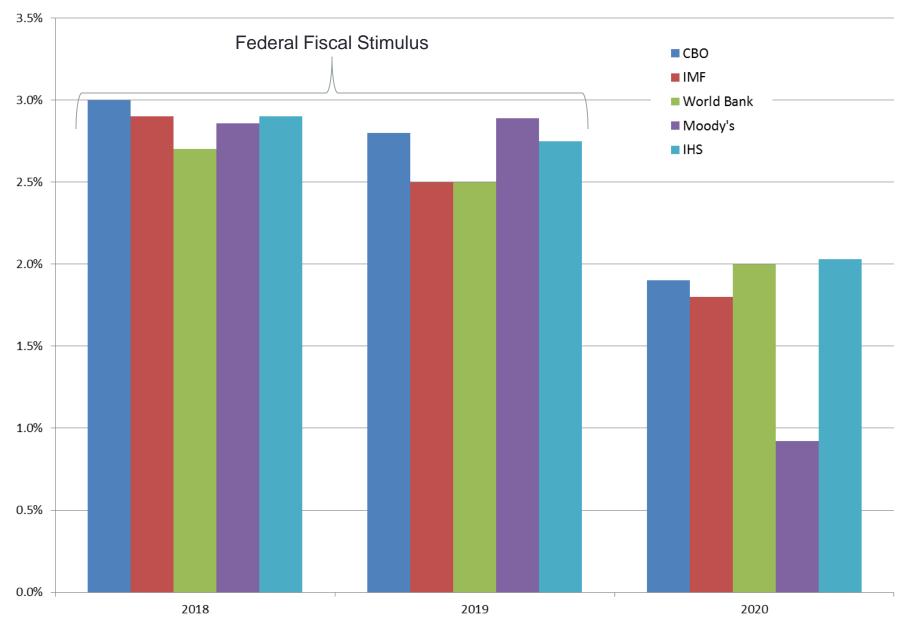
Average Real Wage Growth



Maryland Median AGI by Age Cohort, 2016 \$s*



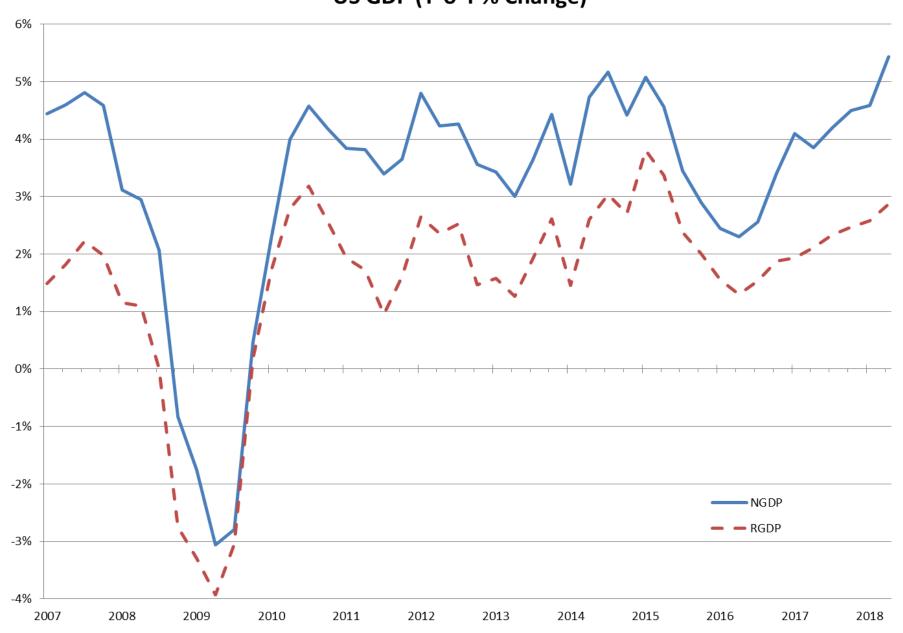
Real GDP Growth Forecasts



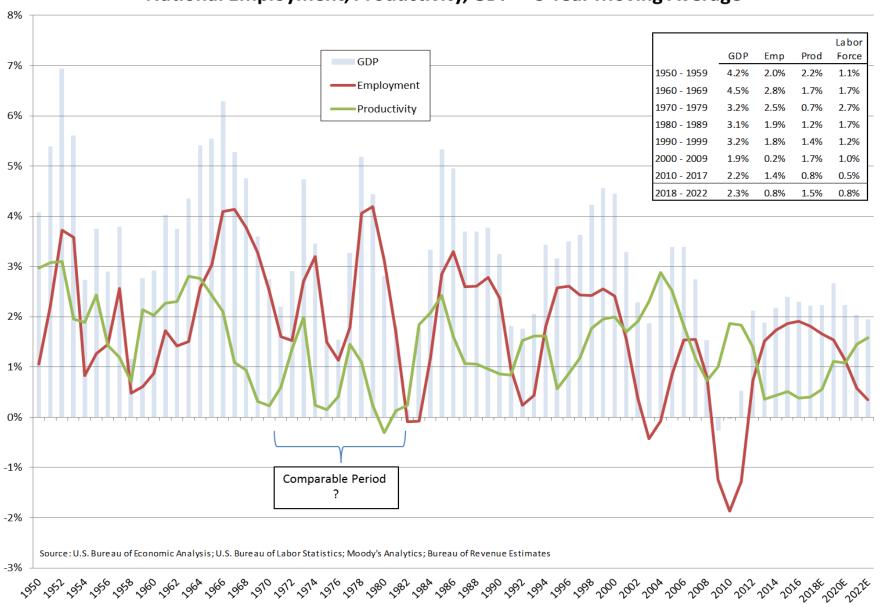
US Inflation (Y-o-Y % Change)



US GDP (Y-o-Y % Change)



National Employment, Productivity, GDP -- 3 Year Moving Average



Econ Outlook from September Forecast (% growth)

Calendar Year	Employment	Personal Income	Aggregate Wages	Average Wage
	Sep 18	Sep 18	Sep 18	Sep 18
2016	1.2	3.6	3.0	1.7
2017	1.1	3.1	2.6	1.5
2018	0.7	3.6	3.9	3.2
2019	0.8	4.2	4.0	3.2
2020	0.6	3.9	3.9	3.3
2021	0.5	3.7	3.3	2.9
2022	0.4	3.9	3.5	3.0

Almost unchanged from our prior outlook – In fact, we've been expecting wage growth to accelerate to 3.2% in 2018 since 2013!

But Revenues are Robust – Aren't They??

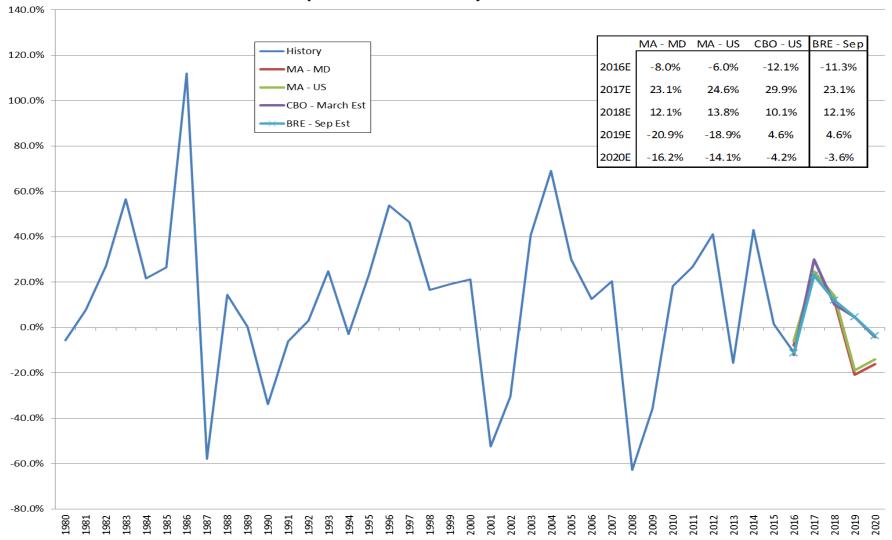
September 2018 General Fund Estimate

Tax Type	Approx Share GF	FY 2018 Closeout Variance	FY 2019 September Estimate	FY 2020 September Estimate
Personal Income Tax	54%	218	178	238
Sales Tax	27%	34	112	155
Other	19%	86	35	15
Total Ongoing General Fund	100%	339	325	407
Change From Previous Estimate		2.0%	1.8%	2.2%

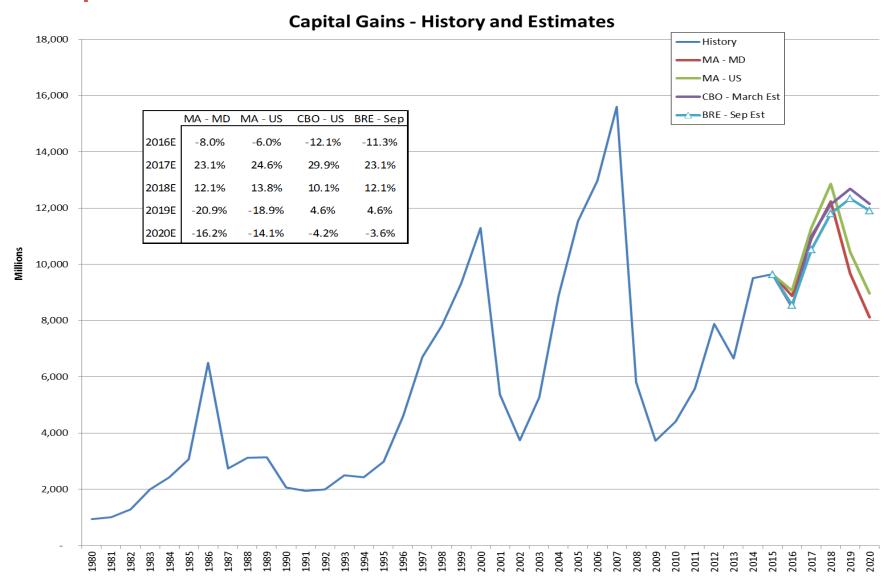
Note: Dollars in Millions; FY20 change is relative to planning numbers; \$62M for sales tax from SCOTUS decision in FY19 and \$99M in FY20

Capital Gains Are Back



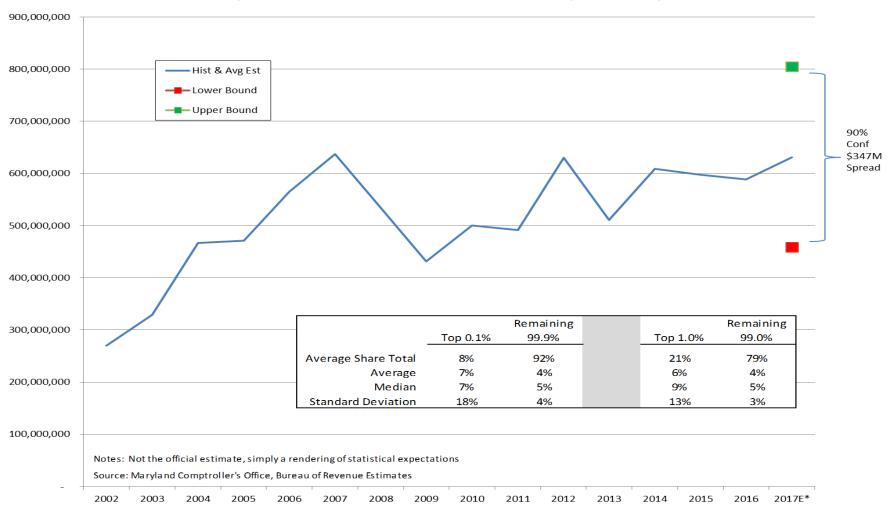


Capital Gains Are Back



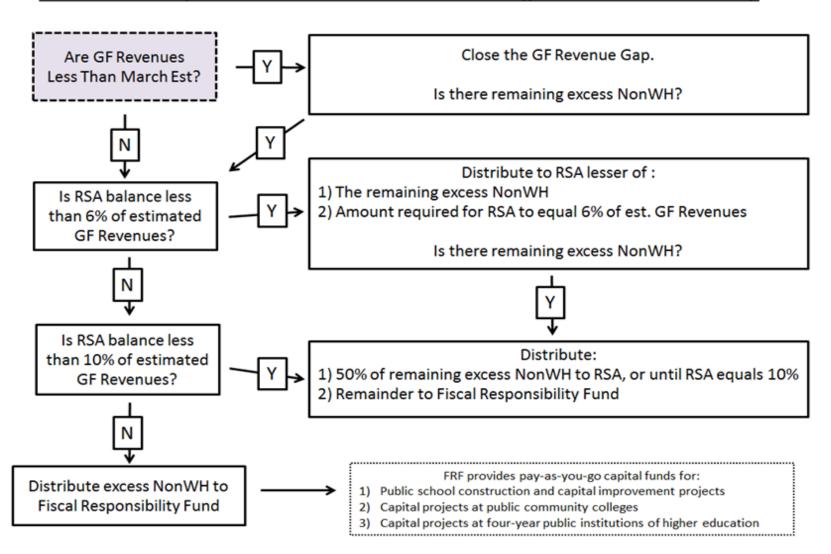
Income Concentration & Taxpayer Behavior

Maryland Income Tax Collections from Top 0.1% Payers



We Have A Volatility Hedge – Great Policy

Revenue Volatility Distributions: Flow of Non-Withholding Amount that Exceeds Cap



Risks Abound – Many Exogenous Estimates

Descr	iption of Extraordi	nary Explicit Re	evenue Adjustme	ents	
TCJA	FY19	FY20	FY21	FY22	FY23
Personal Income Tax	397,355,607	300,650,704	309,858,959	319,239,828	328,890,767
Corporate Income Tax	76,556,610	58,931,254	102,102,286	146,837,052	146,837,052
Remote Sales - Wayfair Desc	FY19	FY20	FY21	FY22	FY23
Sales Tax	62,864,261	99,115,999	109,941,430	114,508,543	119,534,655
Total Incr	536,776,479	458,697,958	521,902,675	580,585,423	595,262,474
MGA Responses	FY19	FY20	FY21	FY22	FY23
Standard Deduction Incr Kirwan DownPay	(56,587,000) (200,000,000)	(44,228,000)	(49,748,000)	(55,441,000)	(61,473,000)
	Baselining Attempt				
		Estimated	Adj For Above		
	FY18	4.4%	4.4%		
	FY19	5.6%	2.9%		
	FY20	2.6%	2.7%		
	FY21	3.5%	3.6%		
	FY22	3.7%	3.8%		
	FY23	3.5%	3.6%		

Risks Abound

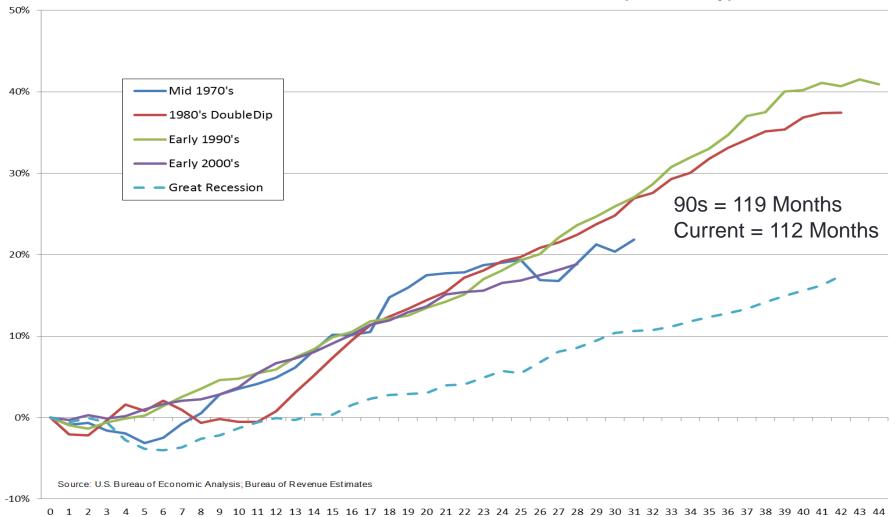


We Do Not Predict Recessions

- Nobody can predict recessions with any sort of accuracy
- If we did, a recession would cut the revenues by 4% to 6%
 - That would lead to significant budget cuts, often erroneously
- Instead, we warn of heightened risk
- It is up to the budgeter to register that risk and react accordingly

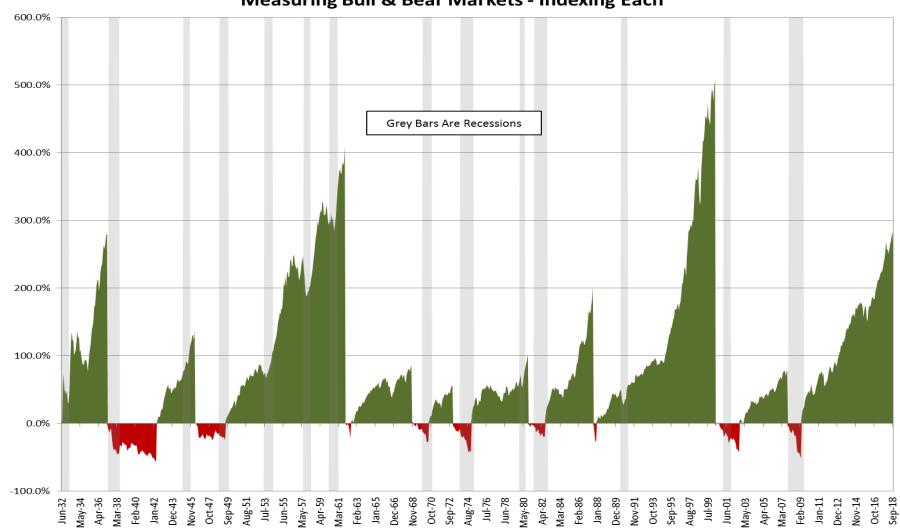
Expansion Headed to Unprecedented Tenure

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



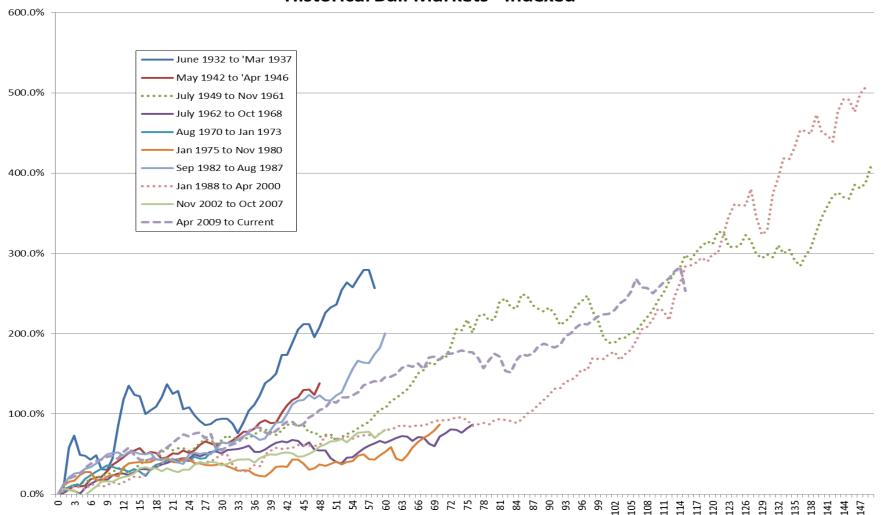
Can the Bull keep running??





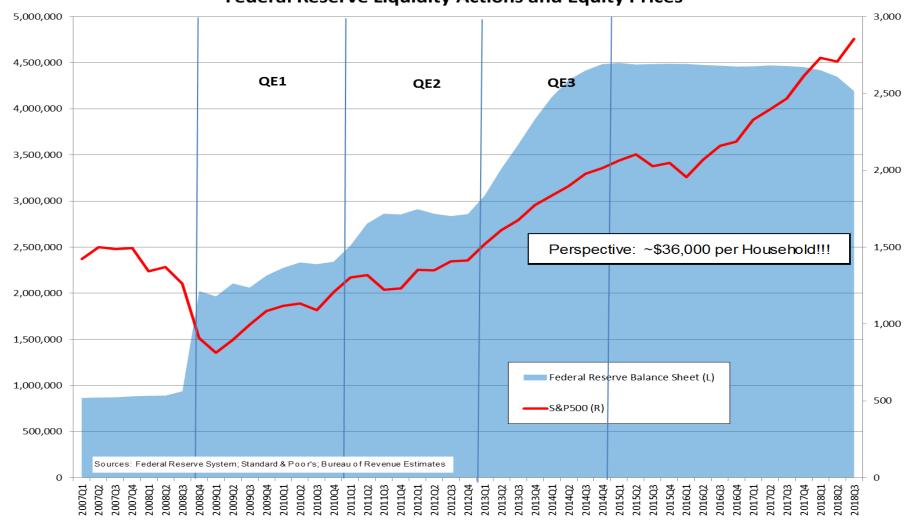
Can the Bull keep running??

Historical Bull Markets - Indexed



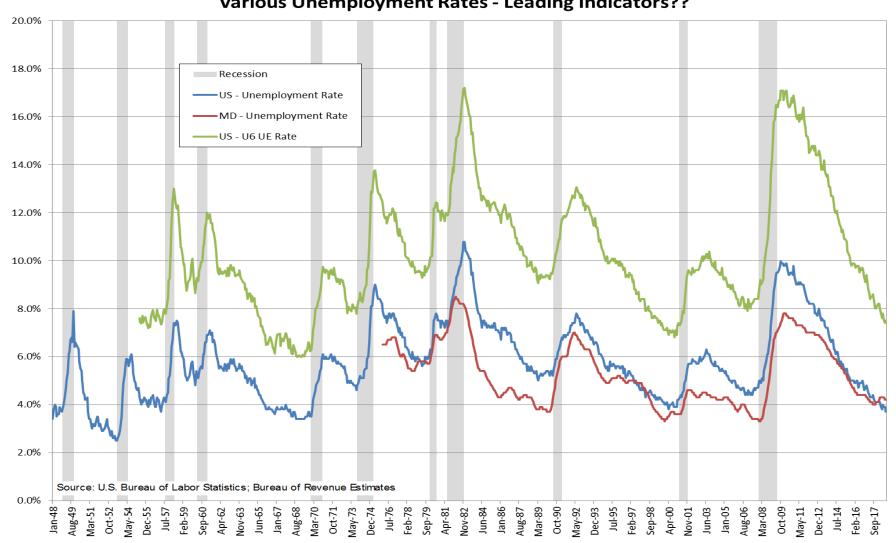
On Top of Raising Rates – FRB Unwinding Balance Sheet





Unemployment very low





Conclusion

- The near-term looks strong, even with a moderate market correction
- We may finally be heading up the upward slope of a business cycle
- Optimistic scenarios have growth slowing to 2% smoothly
- Risk of recession is heightened
 - Many potential points of failure lots of pressure on FRB
- If we are indeed in for a near-term boost in revenue, then
 it may make sense to grow reserves for
 inevitable correction

Thank You

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