

## REVENUE ESTIMATES AND ECONOMIC OUTLOOK

MDGFOA Fall Conference  
October 29, 2021

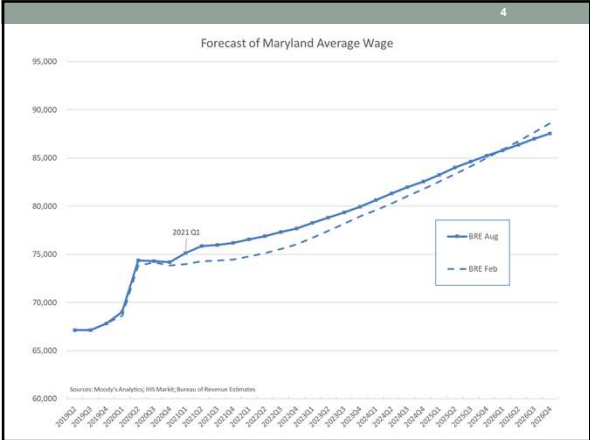
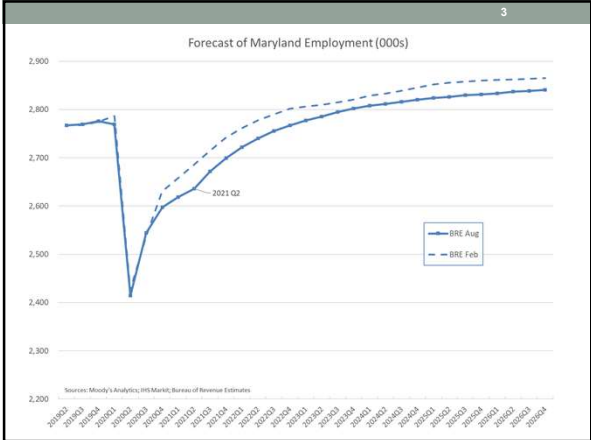
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### Summary of September Changes

	Fiscal Year 2021 Actual		Fiscal Year 2022		Fiscal Year 2023	
	\$ Change From Est	% Growth From Prior Year	\$ Change From Est	% Growth From Prior Year	\$ Change From Est	% Growth From Prior Year
Personal Income Tax	\$903	9.4%	\$396	0.8%	\$677	7.1%
Corporate Income Tax	\$323	39.0%	\$197	-1.1%	\$212	7.6%
Sales Tax	\$397	7.6%	\$281	5.9%	\$393	4.5%
Other	\$88	19.0%	\$122	-4.0%	\$86	-1.3%
<b>Total</b>	<b>\$1,711</b>	<b>11.8%</b>	<b>\$995</b>	<b>1.3%</b>	<b>\$1,368</b>	<b>5.5%</b>

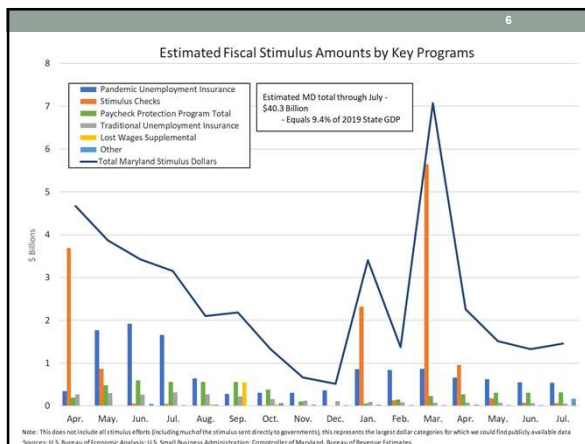
Notes: dollars in millions; amounts may not sum from rounding; Mar21 estimate adj for 2021 Session



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## Federal Stimulus

- Monetary Stimulus
  - Fed quickly and pre-emptively loosened monetary policy
  - Kept money circulating as demand for liquidity increased
  - Prevented a financial crisis
- Fiscal stimulus
  - Disbursed over \$4.7 Trillion to date
  - Gave cash to businesses and individuals, particularly unemployed
- Combined effect:
  - Total income continued growing
  - Quick recovery



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## Tax Year 2020 Explains Much of FY 21 over-attainment

- Personal income tax from tax year 2020 estimated to have grown 7.3%
  - Employment down 6.6% from prior peak by year-end
  - Job losses concentrated in low wage industries
    - Relatively progressive income tax structure
  - Shows the importance of non-wage income

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## TY 2017 Effective PIT Rates

Maryland Adjusted Gross Income	As % of AGI	
	Gross	Net
< \$25,000	2.8%	0.0%
\$25,000 < \$50,000	3.0%	2.4%
\$50,000 < \$75,000	3.4%	3.2%
\$75,000 < \$100,000	3.6%	3.4%
\$100,000 < \$125,000	3.7%	3.6%
\$125,000 < \$150,000	3.8%	3.7%
\$150,000 < \$175,000	4.0%	3.9%
\$175,000 < \$200,000	4.1%	4.0%
\$200,000 < \$250,000	4.3%	4.1%
\$250,000 < \$500,000	4.6%	4.3%
\$500,000 < \$1,000,000	5.0%	4.5%
> \$1,000,000	5.3%	4.3%
<b>Total</b>	<b>4.0%</b>	<b>3.6%</b>

Source: MD Bureau of Revenue Estimates – 2017 Tax Incidence Report

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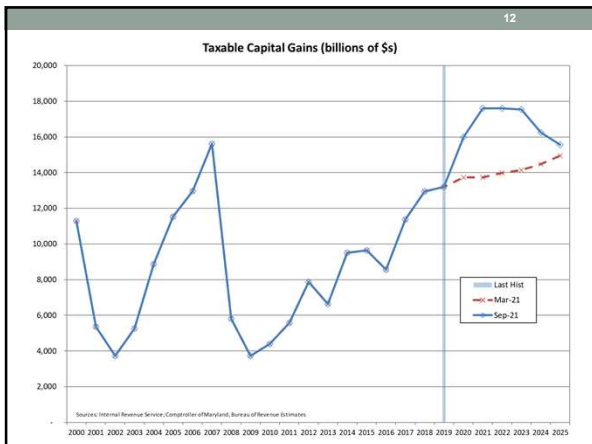
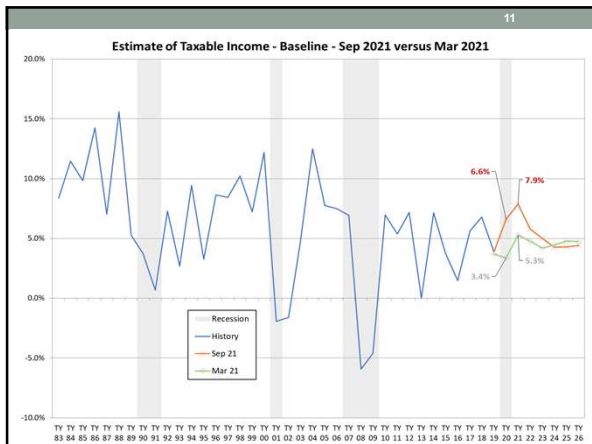
### Tax Year 2020 (cont...)

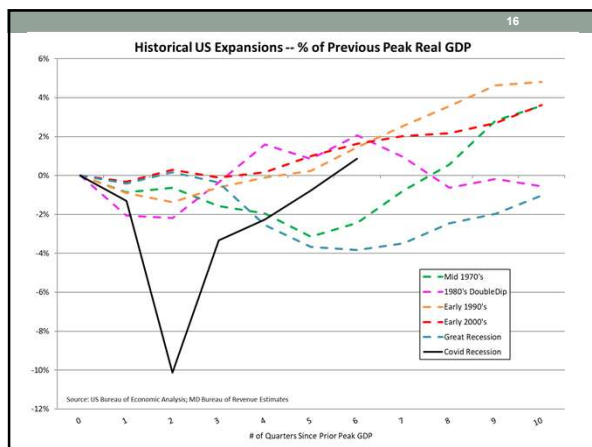
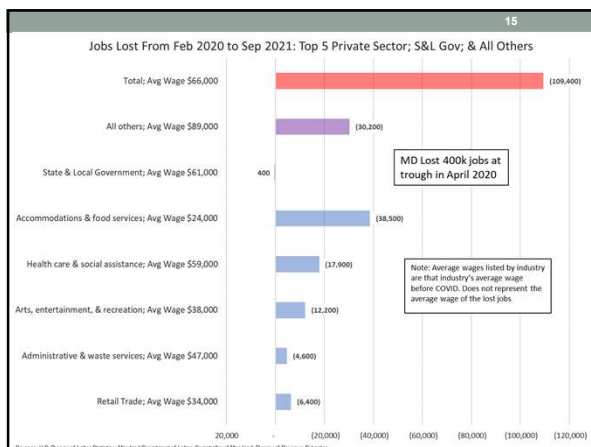
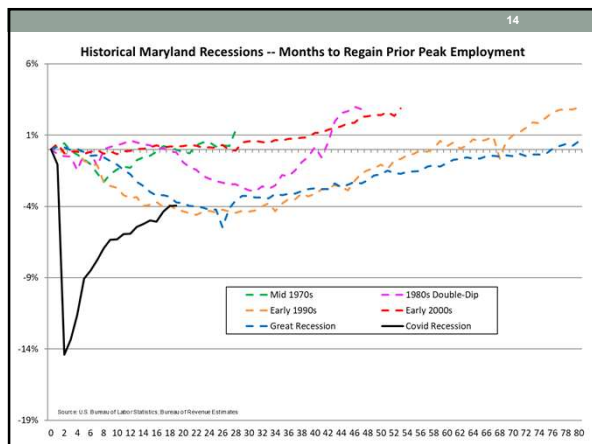
- S&P 500 fell 34% at the onset of the pandemic, then increased to 11% over its pre-pandemic peak by the end of 2020
  - Now over 32% higher than it was pre-pandemic
- Business profits strong as well
- Surge in payments on extended due date of 7/15

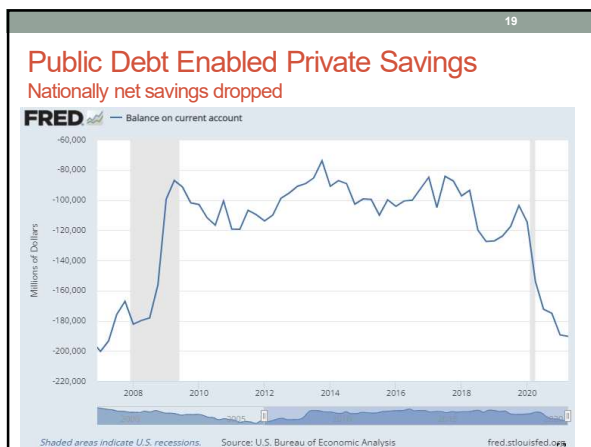
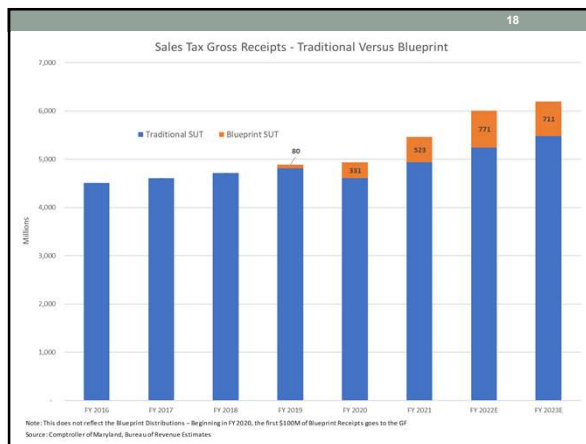
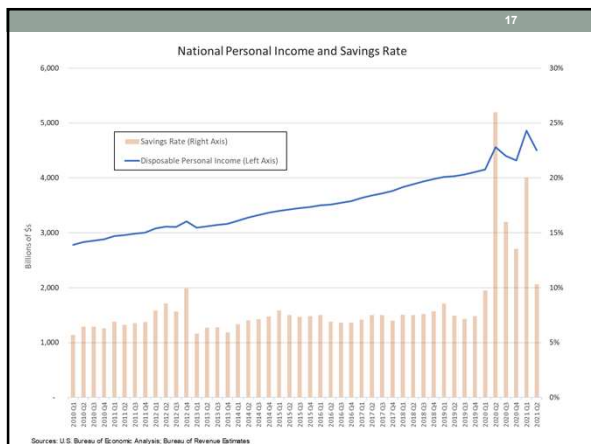
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### Upward revision to forecast

- Fed's new Average Inflation Target
  - Fed promises to make up for past misses
  - We expect marginally higher inflation over forecast horizon
    - ~ 2% vs ~1.5% annually during previous expansion
- Stimulus isn't over
  - Some of it is investment
- High private savings
  - boosts private investment
  - Consumers have savings available to sustain consumption
- Real Wage Growth
  - Job switching typically results in wage gains
    - Unprecedentedly high







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### COVID-19 Pandemic is Ongoing

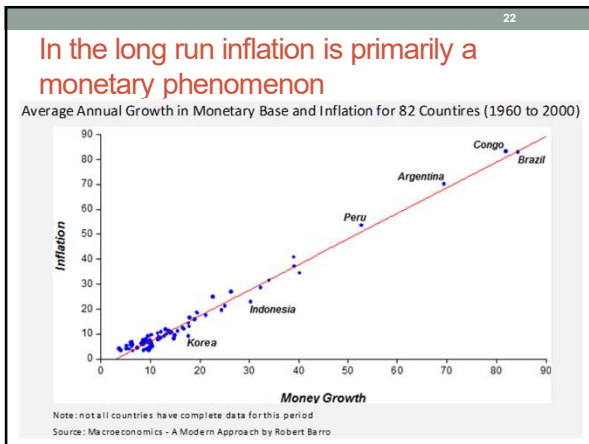
- Pandemic caused a negative demand and supply shock
  - Demand shock countered by stimulus
  - Supply shock ongoing because the pandemic is ongoing
- The worse the pandemic is the slower the recovery will be
- Lingering health issues will be a barrier to labor participation
- Loss of life is a loss of human capital

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### Inflation

- Year over Year CPI Inflation has been elevated since April
  - Caused by supply constraints that increase real prices
    - and a low inflation comparison period
- Econ Theory – 4 Causes of Inflation
  - Increase\* in money supply
  - Decrease\* in money demand
  - Negative supply shock (increases cost)
  - Positive demand shock (increases price)

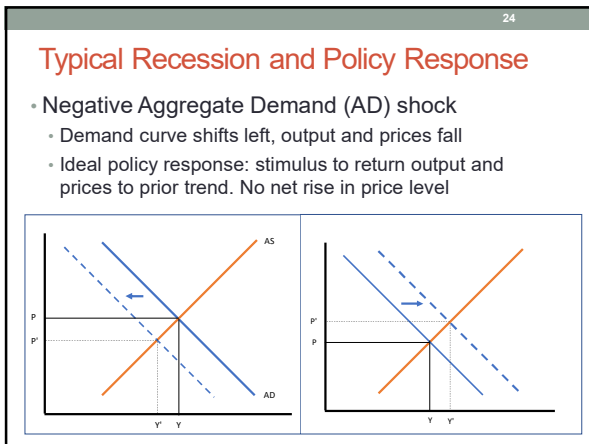
\*relative to market expectations

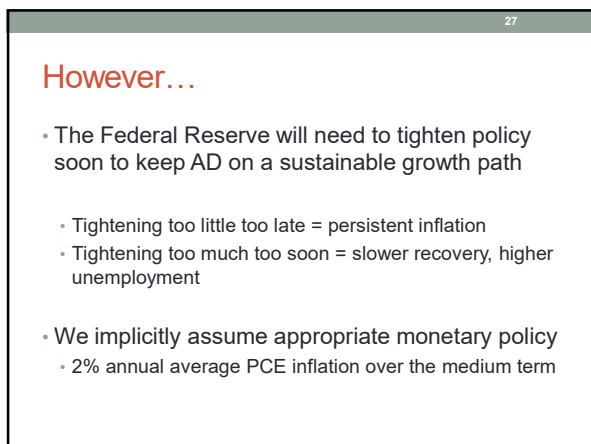
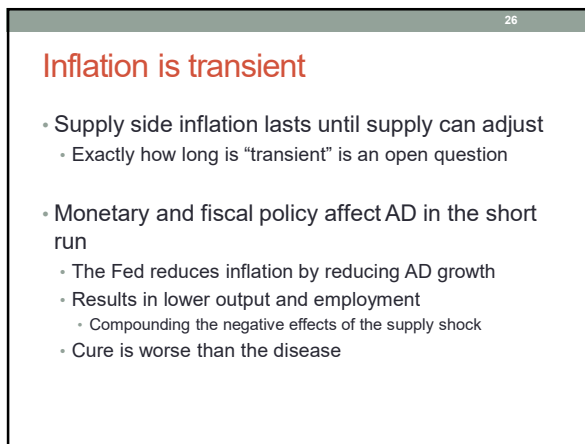
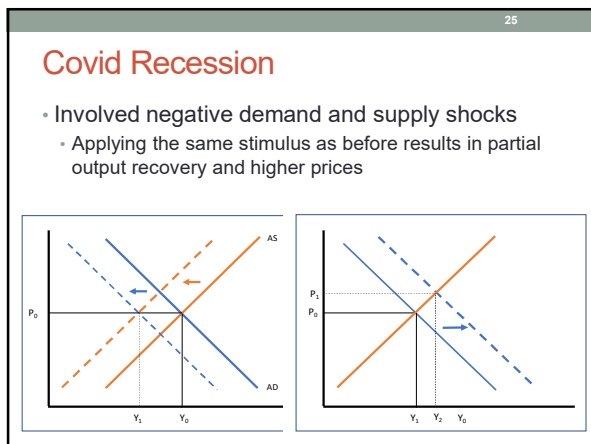


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### Non-Monetary Causes of Inflation

- Negative supply shocks and positive demand shocks increase prices *until* supply can adjust
  - By definition short-run in nature
- The price level changes in proportion to the cause





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### Things that don't cause inflation: Deficits

- AD stimulus puts upward pressure on real prices
- the change in AD matters, not the deficit
- Deficits create debt, not money

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### Things that don't cause inflation: Low Unemployment

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### “Wage Inflation”

- Negative framing of wage growth
- Wages are slow to adjust in the short run
  - Inflation drives nominal wages up with a lag
  - Nominal wage growth appears to drive inflation
  - Really the lagged *response* to the original cause of inflation
- Wage-Price Spiral?
  - Domestic wages are a fraction of total wage cost, which is a fraction of total cost
  - Real US wage increases have a muted effect on production cost, especially of goods

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### Year over Year Inflation and Real Average Wage Growth





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## Long Term Growth Prospects

- We forecast marginally higher growth than pre-Covid trend
- Government borrowing crowds out private investment
  - But public investment can pay off too
- Fed may have to hit the breaks soon
- Broad based wage growth
- Pent up demand and elevated savings
- Productivity growth should rise as millennials approach peak productivity years (40s)

## Thank You

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