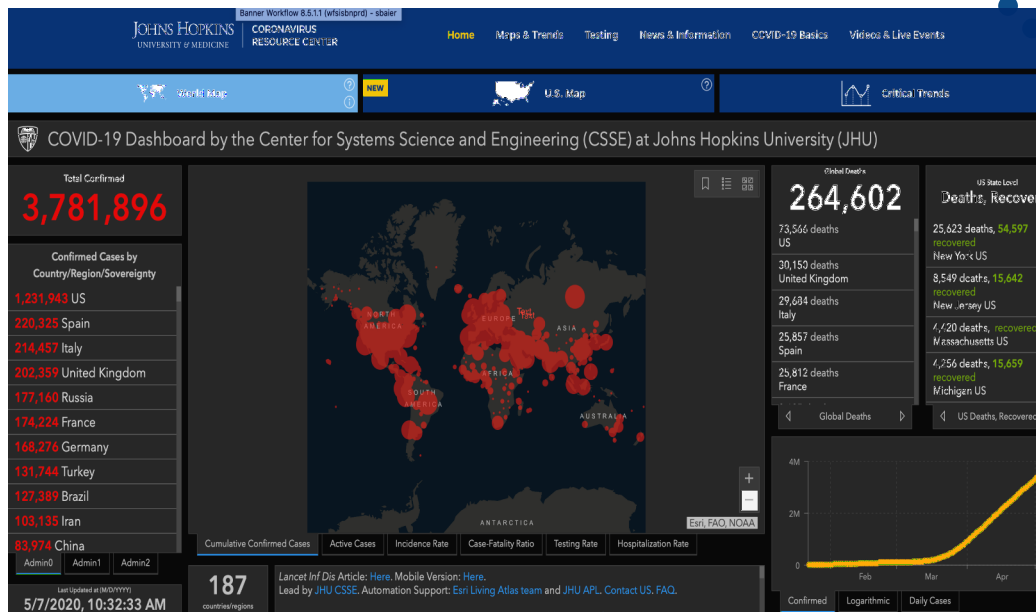


COVID-19: Economic Implications and Policy Response

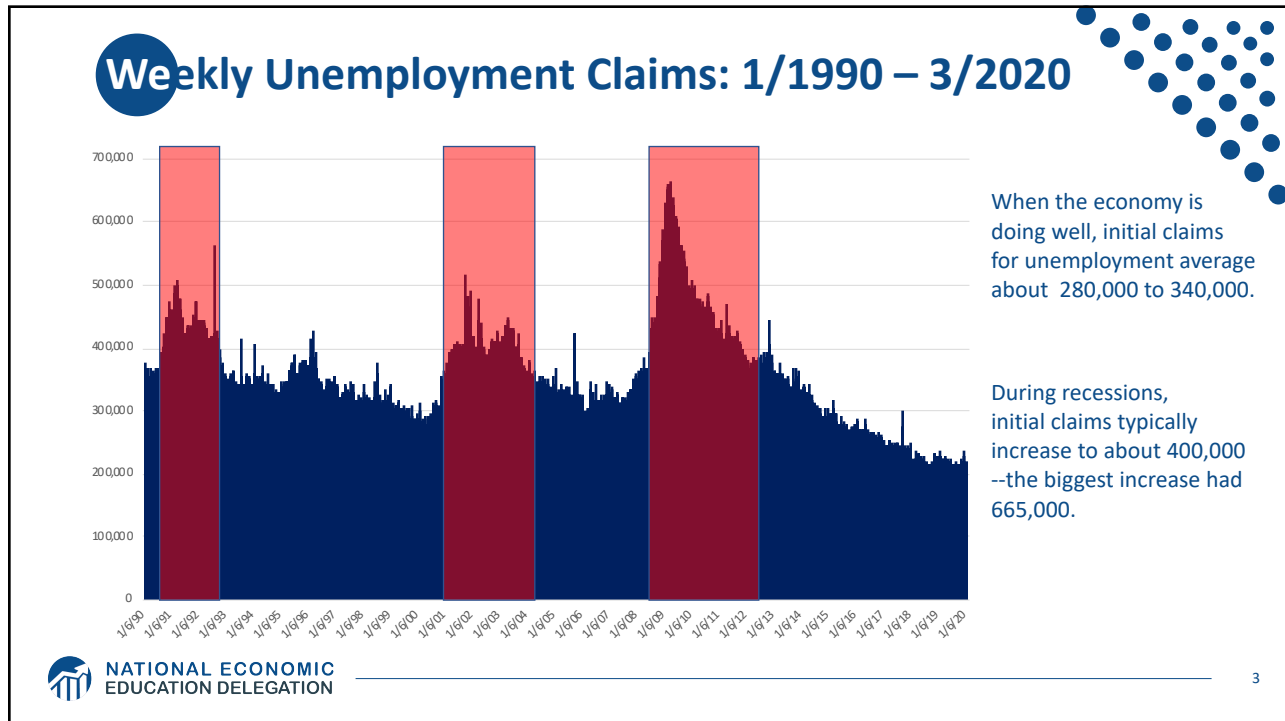
Scott L. Baier
Clemson University
and
National Economic Education Delegation



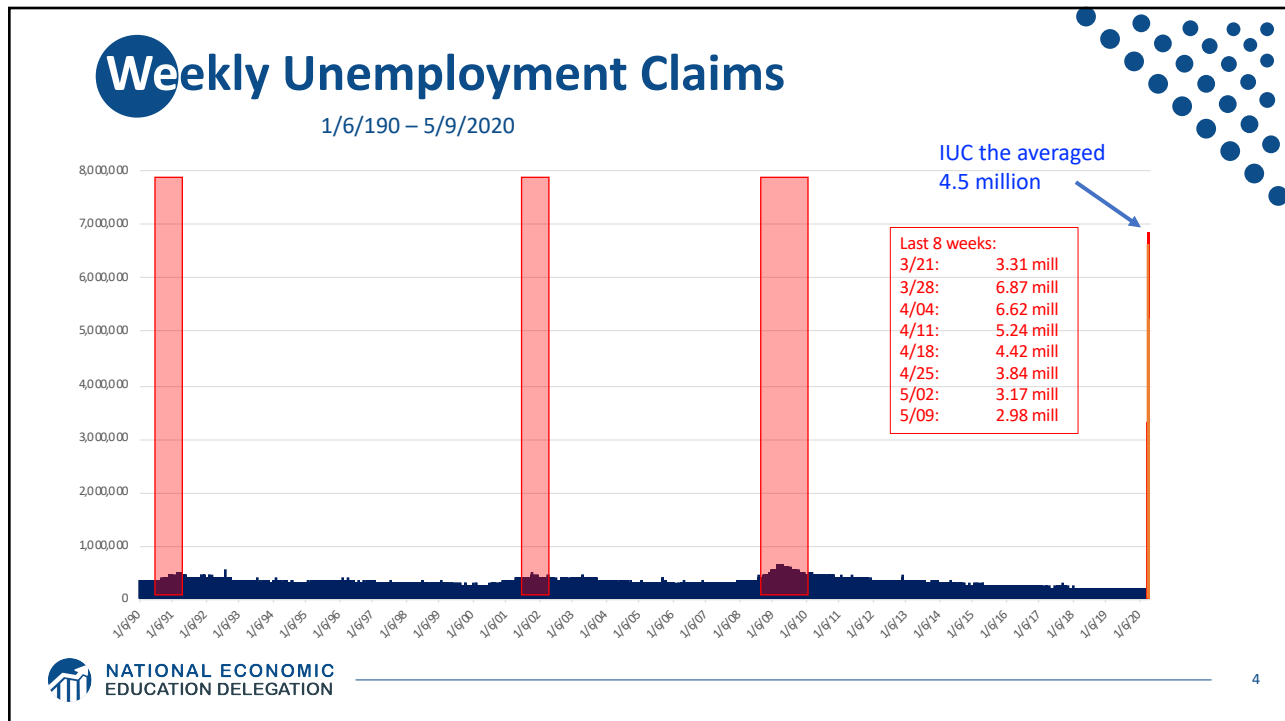
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This Time is Different

- **Great Depression**
 - A Financial Crisis which and (initial) flawed policy response
 - that resulted in persistent high unemployment
- **Great Recession**
 - A Financial Crisis
- **Oils Crisis of 1975 due to a sharp rise in the price of oil (Supply Shocks)**
- **Prior to the pandemic none of the above:**
 - Financial markets were not in trouble.
 - Real GDP growth was strong buoyed by strong consumer spending.
 - Unemployment and inflation were both low.
 - Oil prices were falling.
- **COVID-19 – “Health Shock”**
 - Supply Shocks: Disrupted supply chains
 - Demand Shocks: Limit market transaction in order to reduce the spread
- **Spanish Flu (1918)**
 - Structure of production and consumption is notably different

5

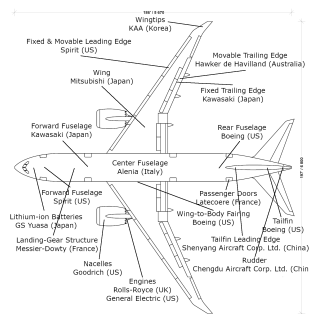
Early COVID-19 Timeline



Dec 31
First case detected
In Hubei Province

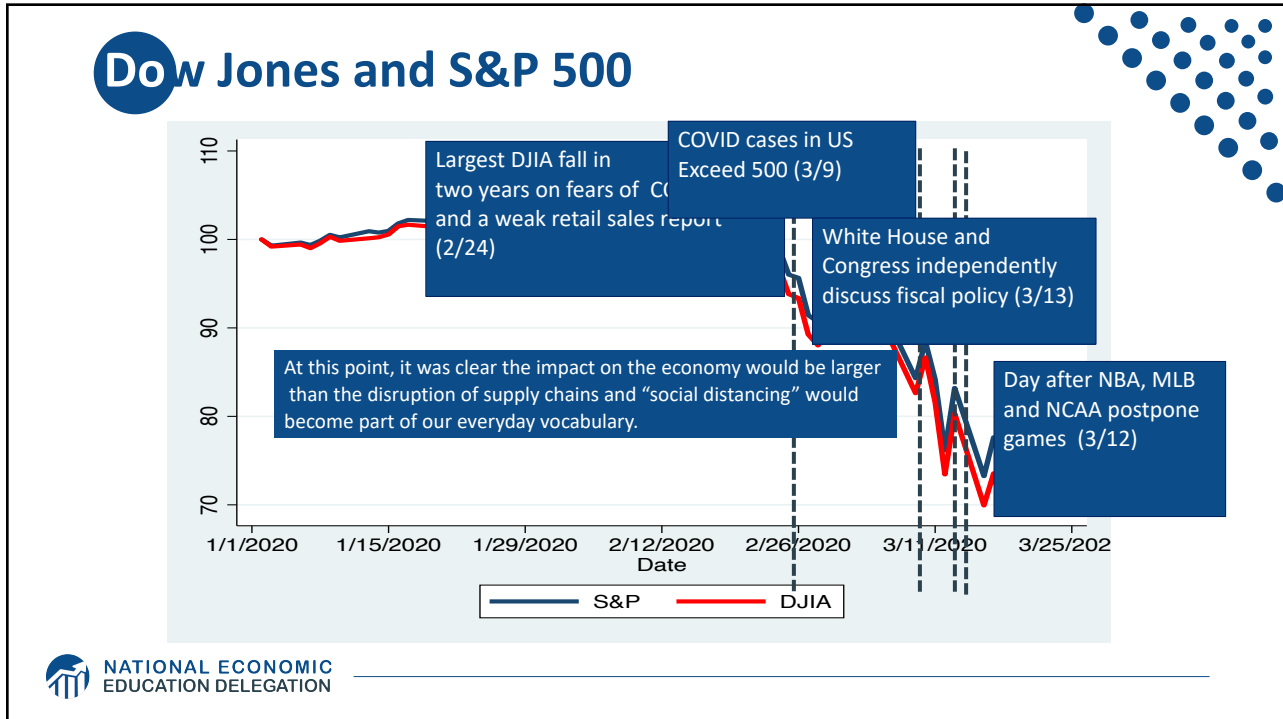
Jan 20
First case outside
China (Thailand,
Japan, and South Korea)

Jan 31
White House
Internationa

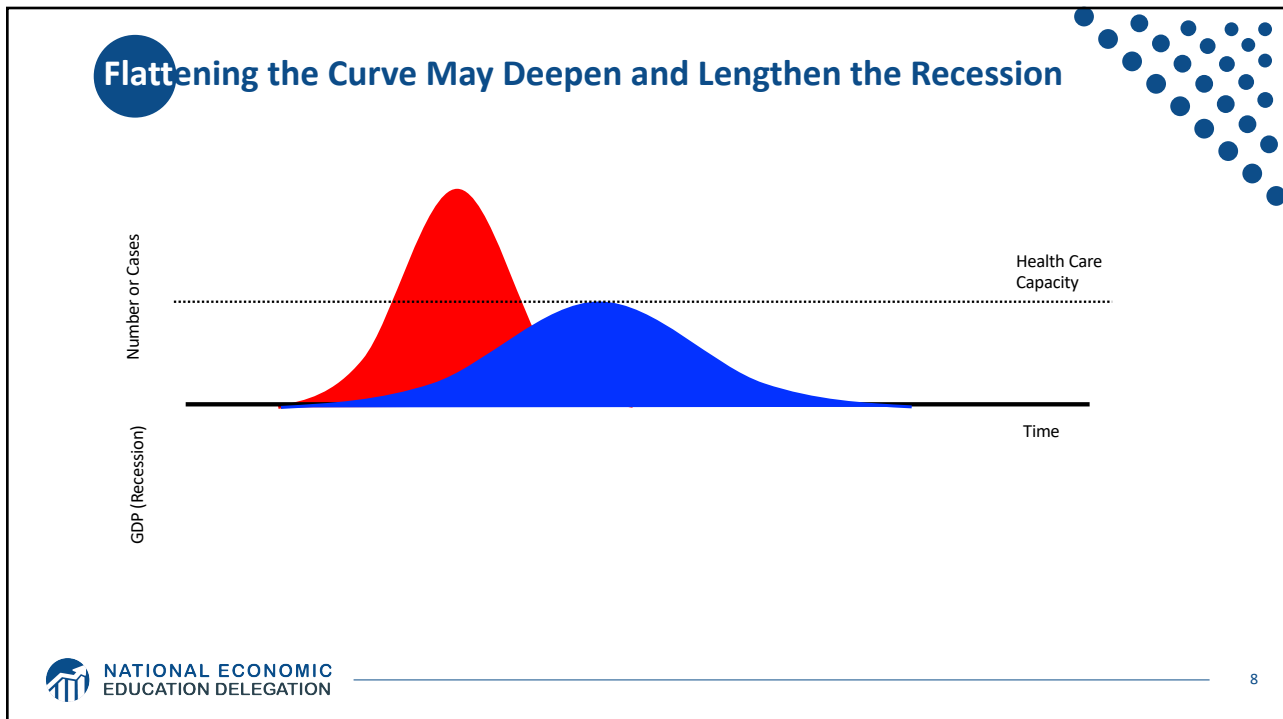


Countries	Share of World GDP	Manufacturing as a Share of GDP
United States	24%	11%
Canada	2%	10%
UK	3%	9%
Germany	5%	20%
France	3%	10%
Italy	2%	15%
Spain	2%	11%
Japan	6%	21%
China	16%	29%

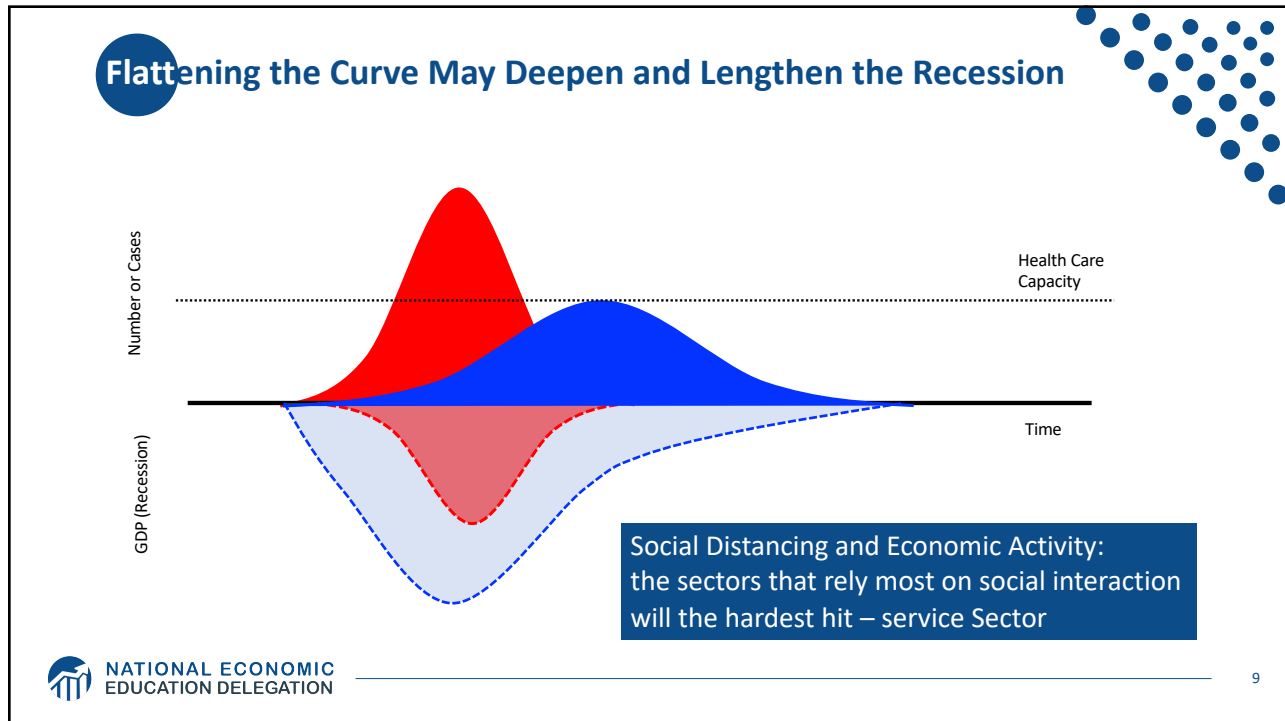
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From Supply Chains to a Sudden Drop in Demand

Countries	Share of World GDP	Manufacturing as a Share of GDP	Services as a Share of GDP
United States	24%	11%	77.4%
Canada	2%	10%	66.7%
UK	3%	9%	71.0%
Germany	5%	20%	61.8%
France	3%	10%	70.3%
Italy	2%	15%	66.3%
Spain	2%	11%	67.7%
Japan	6%	21%	69.1%
China	16%	29%	52.2%

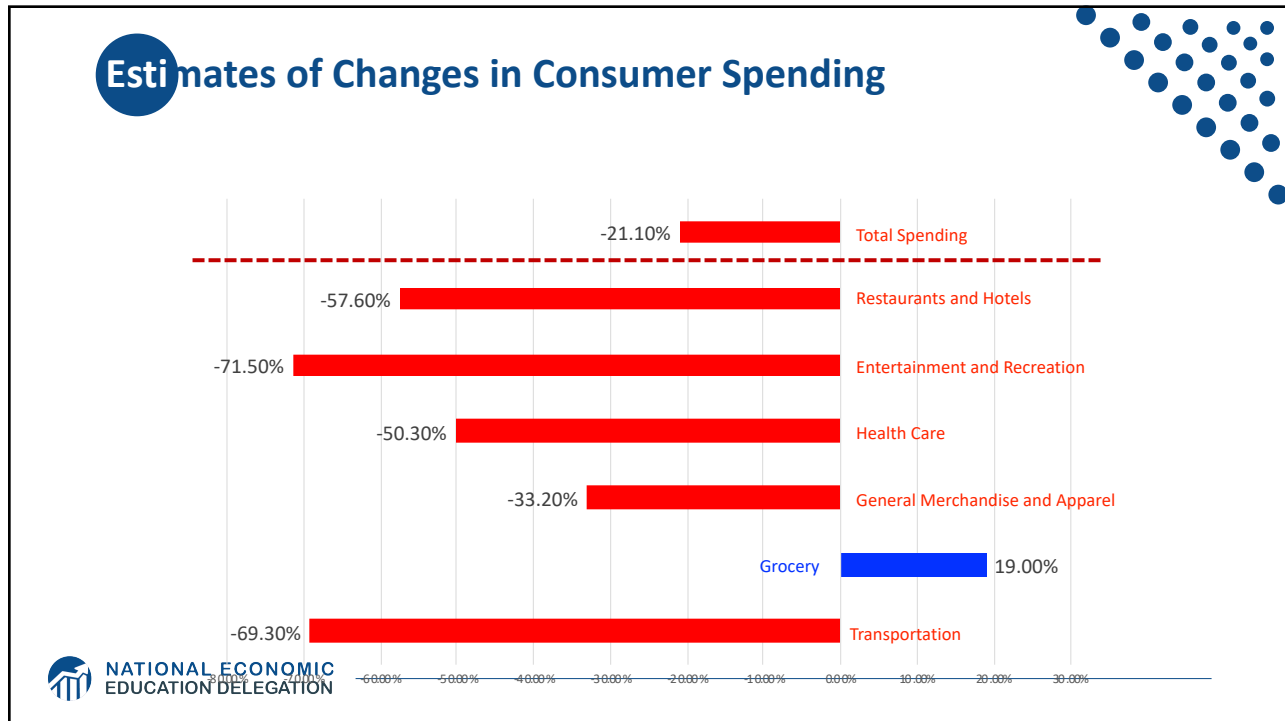
Supply Chain Effect

Sudden Demand Drop

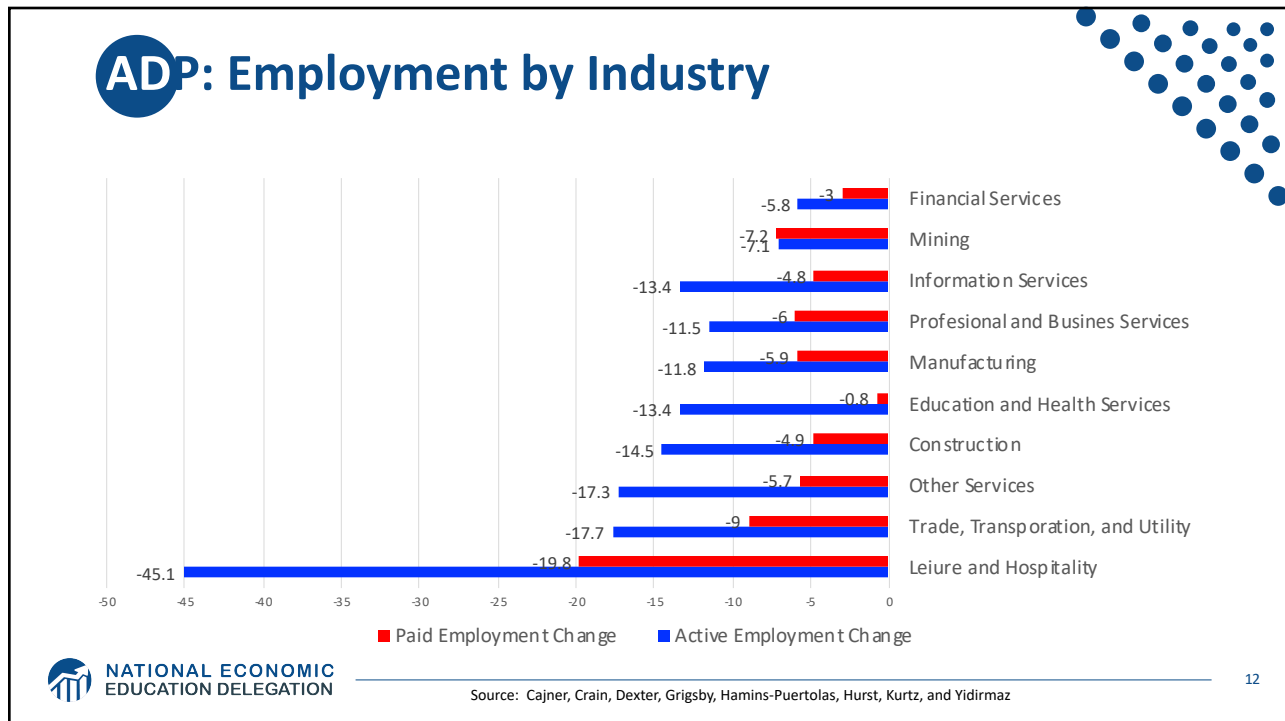
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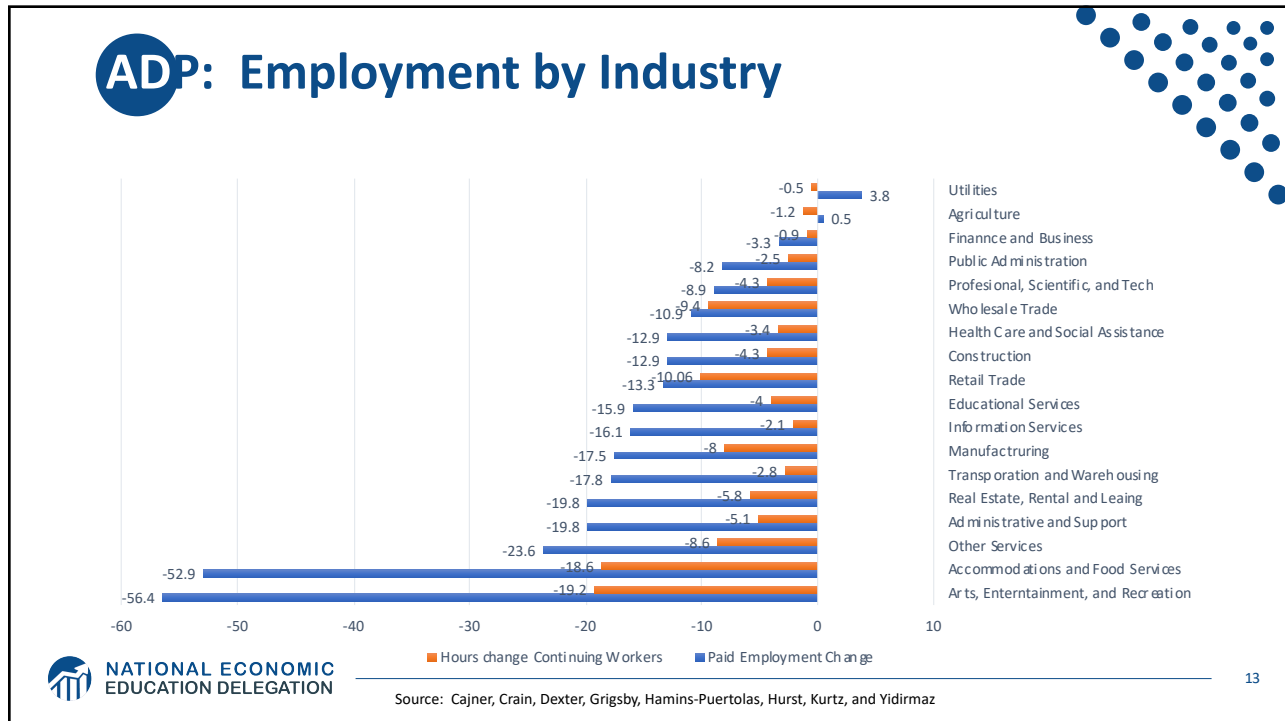
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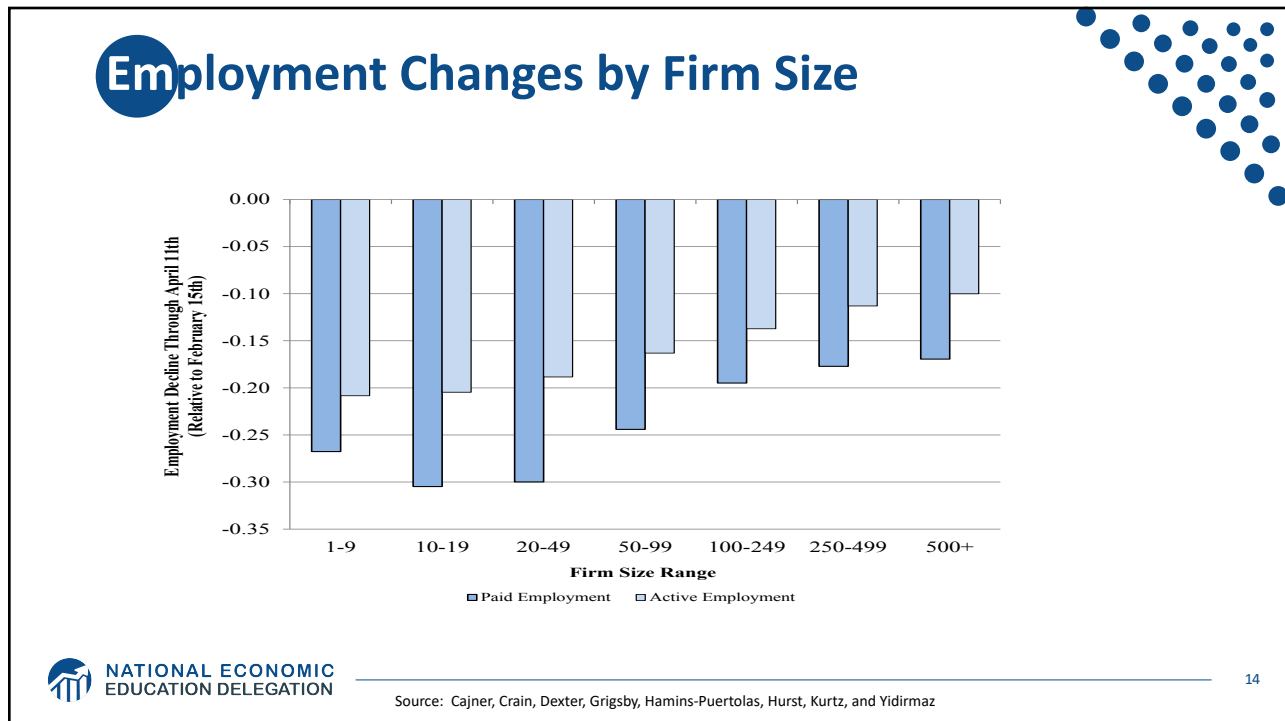
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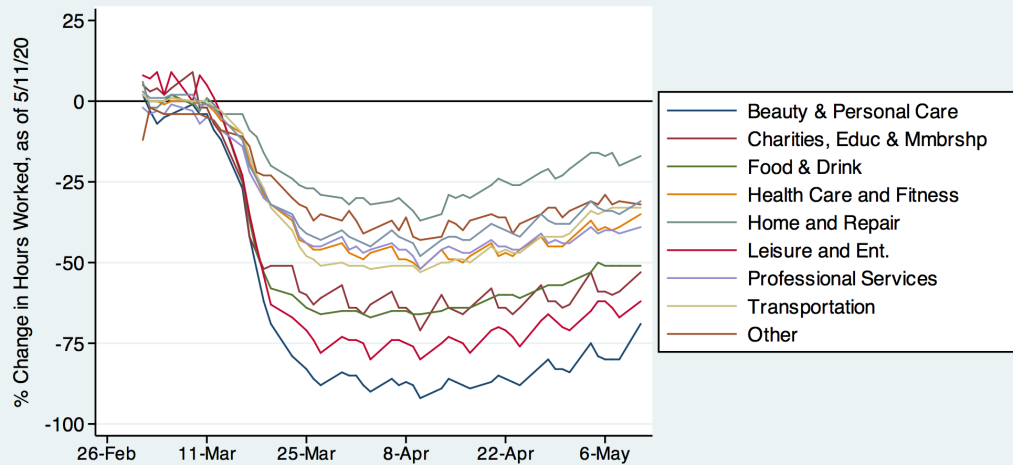
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Employment Changes by Firms Exiting



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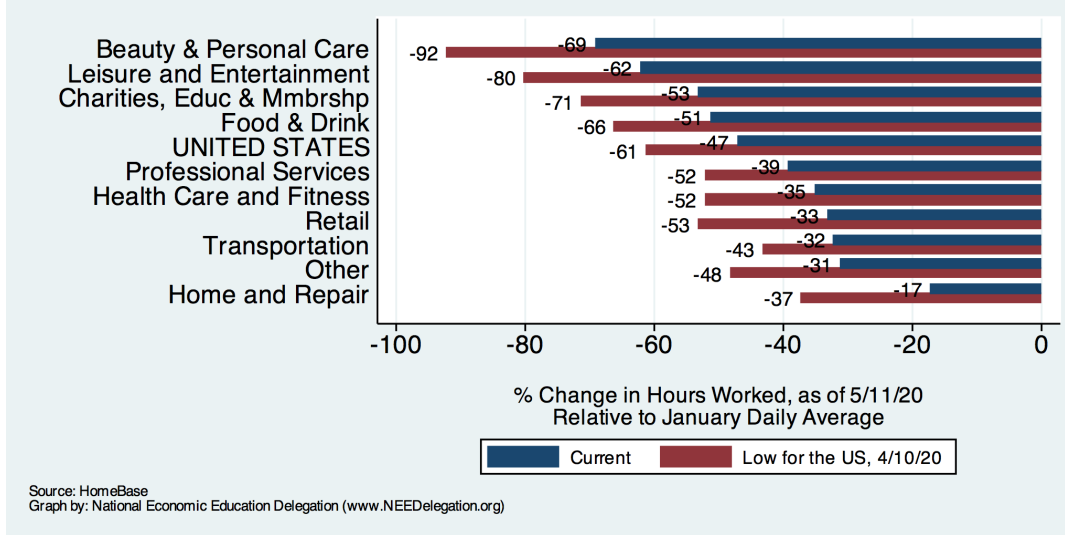
Percent Change Hours Worked



Source: HomeBase - Values are relative to the January Daily Average
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

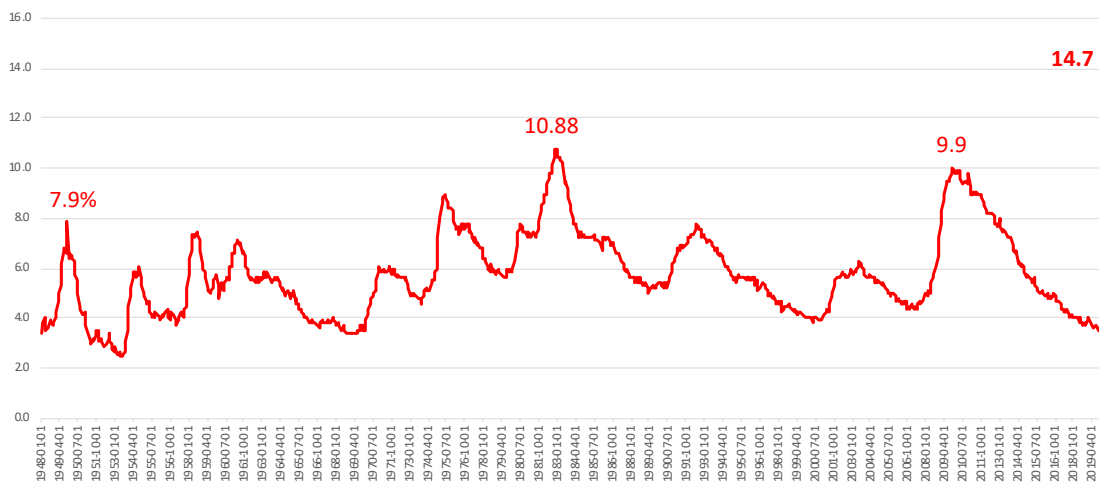
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Percent Change Hours Worked



17

Unemployment Rate



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Recessions: Historical Perspective

Start Date	Recession Duration	Time to Peak Unemployment	Peak Unemployment
Nov 1948	11 mos.	12 mos.	7.9%
July 1953	10 mos.	13 mos.	6.1%
Aug 1957	8 mos.	10 mos.	7.5%
April 1960	10 mos.	11 mos.	7.5%
Dec 1969	11 mos.	12 mos.	6.1%
Nov 1973	16 mos.	17 mos.	9.0%
July 1981	16 mos.	17 mos.	10.8%
July 1990	8 mos.	11 mos.	7.8%
Mar 2001	8 mos.	26 mos.	6.2%
Dec 2007	18 mos.	27 mos.	9.9%
Mar 2020*	2 mos.	2 mos.	14.7%

Unemployment typically peaks after the recession ends

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Government Response: This Shock is Different

- **This economic shock is a “health shock” with externalities that have (large) macroeconomic consequences.**
- **The fiscal and monetary response is not one where we can or should think about Keynesian versus Classical Solutions.**
- **Response should be to target the cause of the problem and provide income support for individuals and some financial support for firms.**
 - Cause of the problem is COVID-19 and its contagion.
 - Social distancing reducing income and production
 - (We hope) The economic shock is not structural and on the “other side”. We hope that structurally things will be the same; therefore, we would like to preserve employment-employer matches.

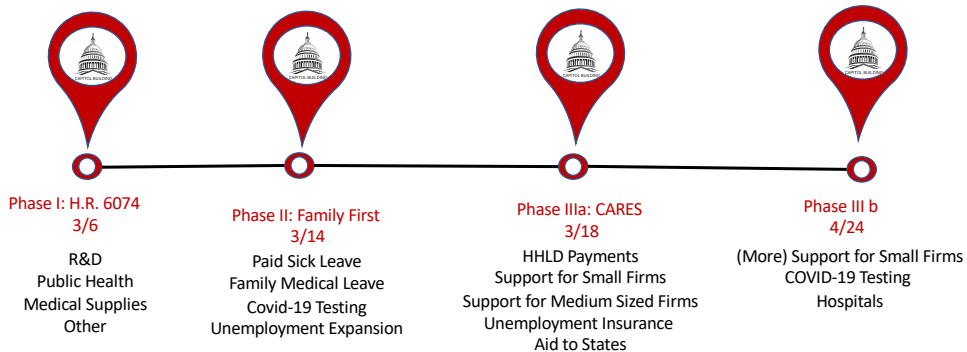
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Government Response: Fiscal Response

- Respond to the impacted sector(s) – health crisis,
- Provide income support for the lower income and most vulnerable,
- Provide support to maintain employer - employee matches, and
- Provide support for the sectors that are most exposed to the shock.

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Fiscal Policy Timeline



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Government Response (Phase 2): Family First (H.R. 6201)

- Free testing for anyone whose doctor recommends it
- Expand family and medical leave
- Paid emergency sick leave
- Additional employment benefits

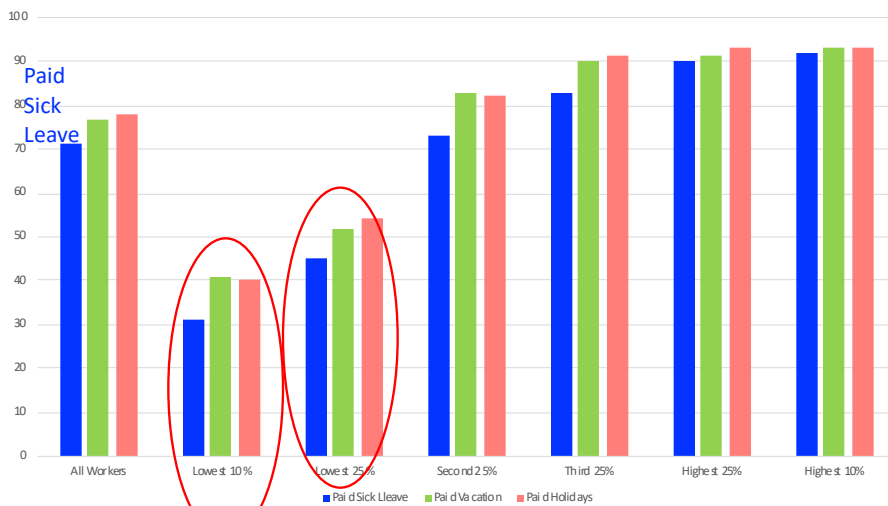
Clearly this is designed to increase testing and support social distancing and (self) quarantines

Food assistance: Supplemental Nutrition Assistance Program (SNAP) and Home-Delivered Nutritional Services



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Paid Leave by Income Category



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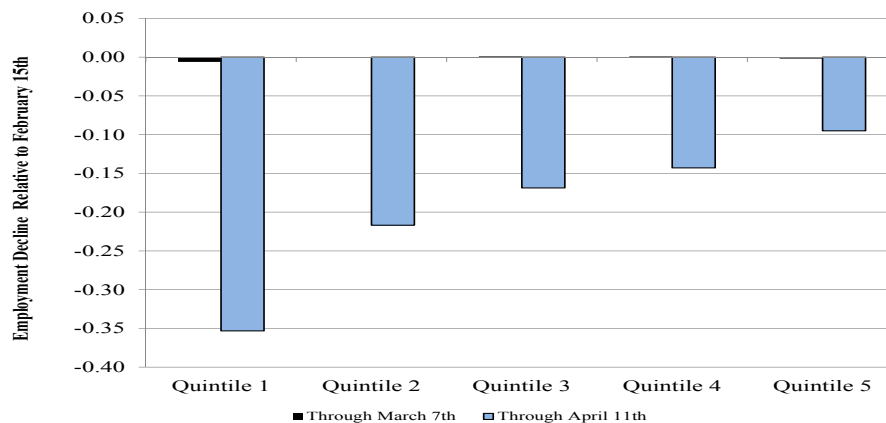
Fiscal Response: CARES Act (H.R. 748)

- **Direct payment to households \$1,200 for every adult and \$500 for every child – similar to the 2008 rebate but purpose is different.**
- **Small business loans (Paycheck Protection Program)-- \$350 billion**
 - <500 employees and designed to cover six (6) weeks of payroll.
- **Economic Stabilization Fund (Main Street Lending Program) – \$500bn**
 - for medium sized firms,
 - state and local municipalities, and
 - passenger and cargo air carriers, and firms maintaining national security.
- **Expand unemployment benefits**



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Employment Change by Income Quintile



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PPP Loan Major Recipients By Industry

Industry	Amount (Billions)	Percent of Loans
Construction	\$44.9	13.1
Professional, Technical and Scientific, Services	\$43.3	12.7
Manufacturing	\$40.9	12.0
Health Care and Social Assistance	\$39.9	11.7
Accommodation and Food Service	\$30.5	8.9
Retail Trade	\$29.4	8.6
Wholesale Trade	\$19.5	5.7

These seven (7) industries account for nearly 75% of the PPP loans

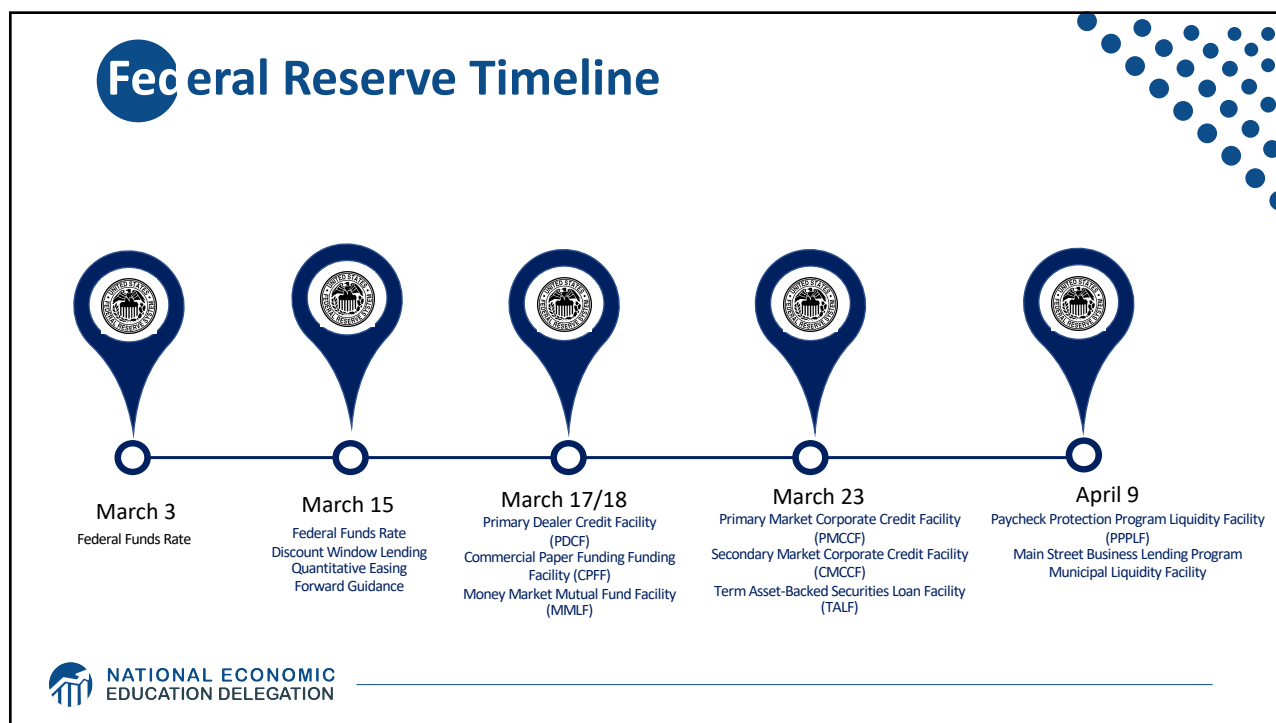
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SBLA Distribution

Firm Size	Distribution of PPP Eligible Firms		PPP Loan Size (est)
	Percent of Firms	Percent of Employment	
under 5	61.9%	9.8%	\$16,985
5 to 9	16.9%	11.0%	\$57,239
10 to 19	10.6%	14.0%	\$121,470
20 to 99	9.1%	35.3%	\$387,137
100 to 499	1.5%	29.9%	\$2,248,253

But Is It Enough? Loans: are for 8 weeks

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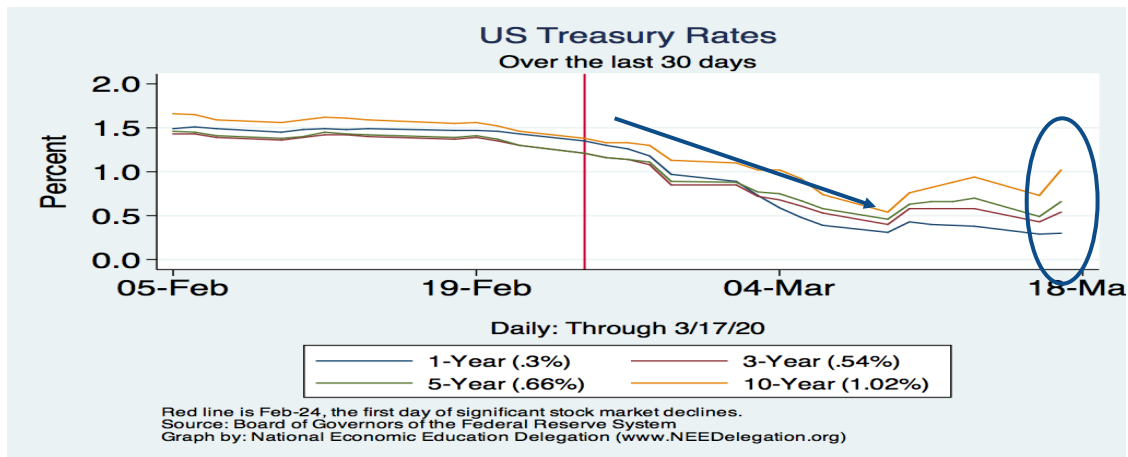
Federal Reserve: Standard Operations

- **Federal Funds Rate:** The Federal Reserve lowered the targeted Federal funds rate on March 3 and again on March 15 moving the targeted Federal Funds rate to zero.
- **Discount Window Lending:** Lowered the interest rate it charges banks to borrow from 1.75% to 0.25%.
- **Reserve Requirement:** Lowered the reserve requirement to zero.
- **Forward Guidance:** Honed during the Great Recession the Fed tries to set market expectations on the time path of interest rates over time.

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US Treasury Rates: A Safe Haven?



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Federal Reserve: Ensure Financial Market Stability

- **Securities Purchases (Quantitative Easing):** Fed Response: purchase treasuries and mortgage backed securities (3/15).
- Re-launched the **Primary Dealer Credit Facility (PDCF)** in order “smooth market functioning and facilitate the availability of credit to businesses and households (3/17).
- Re-instituted the **Money Market Mutual Fund Liquidity Facility (MMLF)** to “assist money market mutual funds in meeting demands for redemptions by households and investors enhancing overall market function and credit provision to the *broader economy.*”
- Increased liquidity in the **repo market**. The repo market is where firms borrow and lend cash and short-term securities. The Fed was offering \$100 billion in overnight loans and \$20 billion in two-week loans.
 - The Fed increased the offerings to \$1 trillion (from \$100 bn) in overnight repos, and
 - \$500 billion in one month **and** three-month repos (from \$20bn 2/wks).

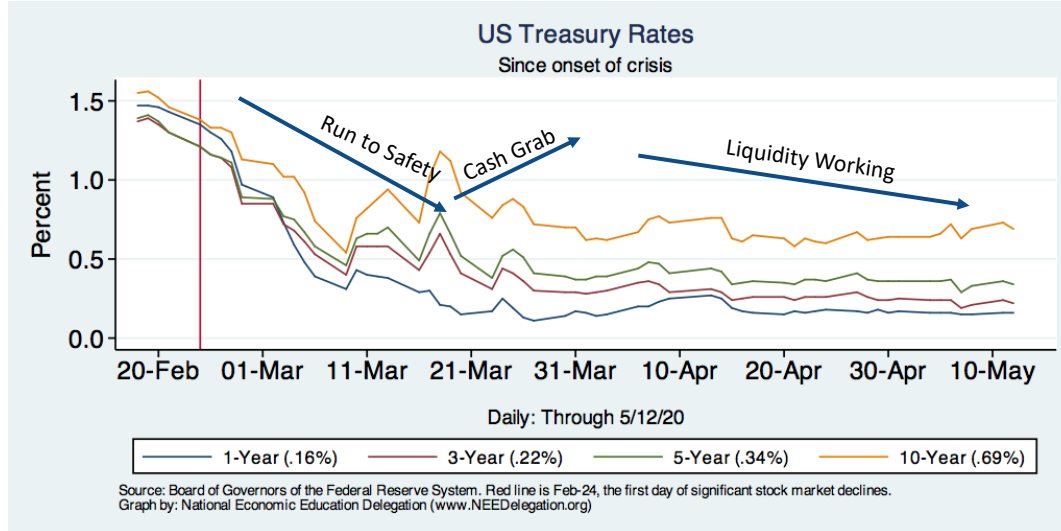


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US Treasury Rates: A Safe Haven?



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Federal Reserve: Support Corporations and Business

- Created the **Primary Market Corporate Credit Facility (PMCF)** allows the Fed to lend directly to corporations by buying new bond issuances and providing loans (3/17).
- Instituted the **Commercial Paper Funding Facility (CPFF)** the Fed can purchase commercial paper from firms at a given interest rate – effectively, the Fed is lending directly to firms. (3/17)
- **Main Street (Expanded) Loan Facility:** Through the CARES Act these two programs offer four-year loans to US businesses with up to 10,000 employees or revenues less than \$2.5 billion. (4/9)
- **Paycheck Protection Program Facility:** Facilitates loans under the Small Business Administration Paycheck Protection Program



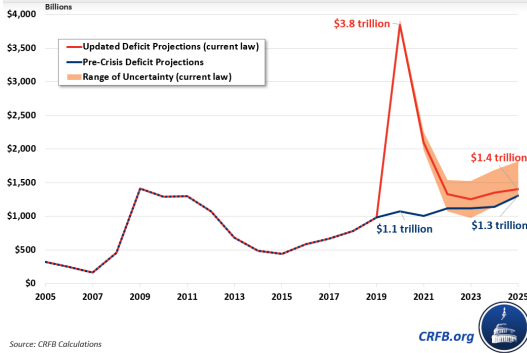
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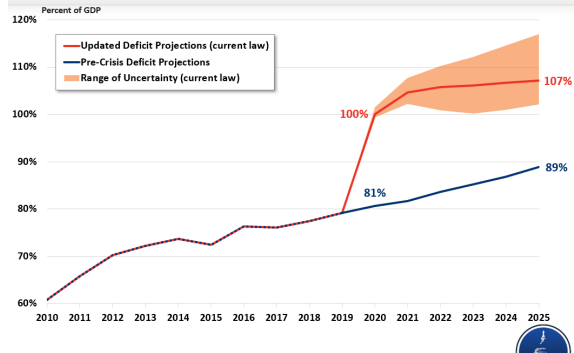
Federal Budget Implications

Federal Deficit Will Reach Record Levels



Deficit may be nearly 20% of GDP

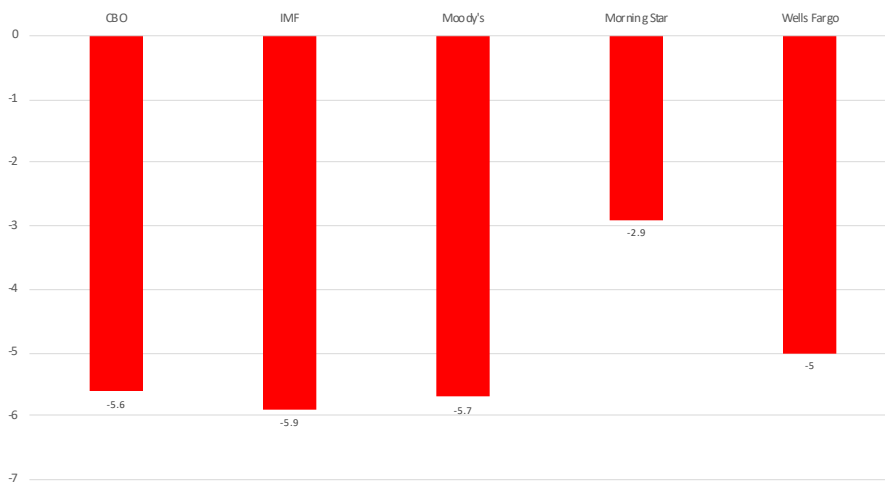
Debt Will Equal Size of Economy This Year



Debt will likely equal GDP this year

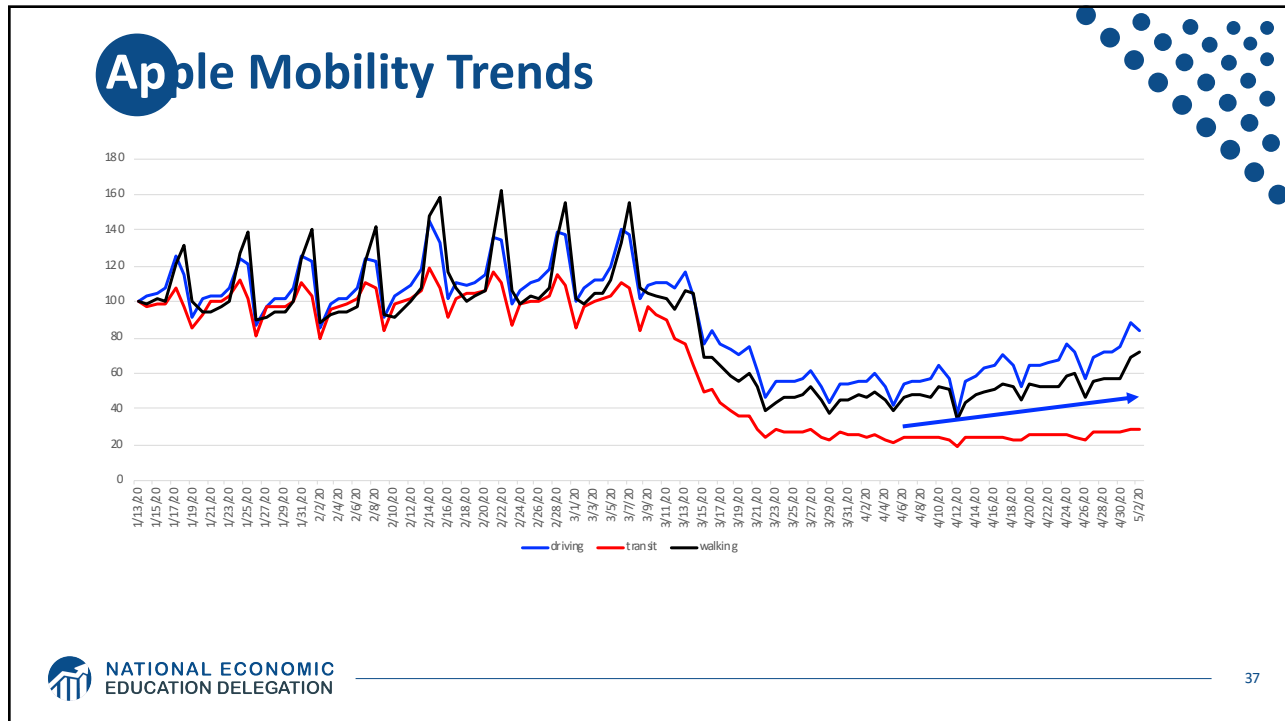
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GDP Growth Projections for 2020



Most forecasts predict GDP growth will be between 4.0% to 5.0% in 2021

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Some Big Concerns

- P. Krugman, “Right now the economy is in the equivalent of a medically induced coma...” (NYTimes, 4/16).
- We are trying to keep the patient alive, but damage is being done;
 - How many personal bankruptcies?
 - What is the future of companies that bring many people together?
 - o Cruise Lines.
 - o Theaters.
 - o Concerts
 - o Air Travel
 - o Sports.
 - o Malls.
 - Looming State and Local Fiscal Crisis
 - Bankruptcies of Small Firms

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Projected State Budget Shortfall Unprecedented

FIGURE 1

COVID-19 State Budget Shortfalls Could Be Largest on Record

Total state budget shortfall in each fiscal year, in billions of 2020 dollars



* Estimated based on CBPP calculations

Source: Pre 2014: CBPP survey; 2020 and following: CBPP calculations



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Conclusion

- COVID-19 is health crisis that has macroeconomic implications.
- The macroeconomic effects that have impacted both the supply and demand.
- GDP will likely contract between 5.0 and 6.0 percent this year.
- Positive growth may return in 2021 as long as there are preventative medicines and treatments.
- No easy answers – trade-offs are between bad outcomes.
- How do we plan for the next pandemic?
- Find the silver lining.



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