



COVID-19: Economic Implications and Policy Response

Pearl You's Happy Hour

May 12, 2020
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Executive Director, NEED



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National Economic Education Delegation

• Vision

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

• Mission

- NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.

• NEED Presentations

- Are **nonpartisan** and intended to reflect the consensus of the economics profession.

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Who Are We?

- **Honorary Board: 48 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 500+ members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 45 Ph.D. Economists**

- Aid in slide deck development

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Available NEED Topics Include:

- **Coronavirus Economics**
- **US Economy**
- **Climate Change**
- **Economic Inequality**
- **Economic Mobility**
- **Trade and Globalization**
- **Trade Wars**
- **Immigration Economics**
- **Housing Policy**
- **Federal Budgets**
- **Federal Debt**
- **2017 Tax Law**
- **Autonomous Vehicles**
- **US Social Policy**

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Credits and Disclaimer

- **This slide deck was authored by:**

- Jon D. Haveman, NEED
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- **Disclaimer**

- NEED presentations are designed to be nonpartisan.
- It is, however, inevitable that the presenter will be asked for and will provide their own views.
- Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).



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Outline

- **What is this?**
- **Evidence of Impact**
- **Government Policy**
- **What to expect going forward**



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What is this?

- **A natural disaster – with important twists**
 - Global
 - Duration is unpredictable
 - Economic toll is enormous and potentially durable
- **A health crisis with enormous economic implications.**
 - A perfect storm of economic difficulty
 - Supply side
 - Demand side
 - Financial
 - Without a culprit



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Process for Dealing with a Natural Disaster

- **Mitigation of effects**
- **Tend to the vulnerable**
- **Shore up structures**
- **Rebuild**

This crisis requires the same approach and sequence.



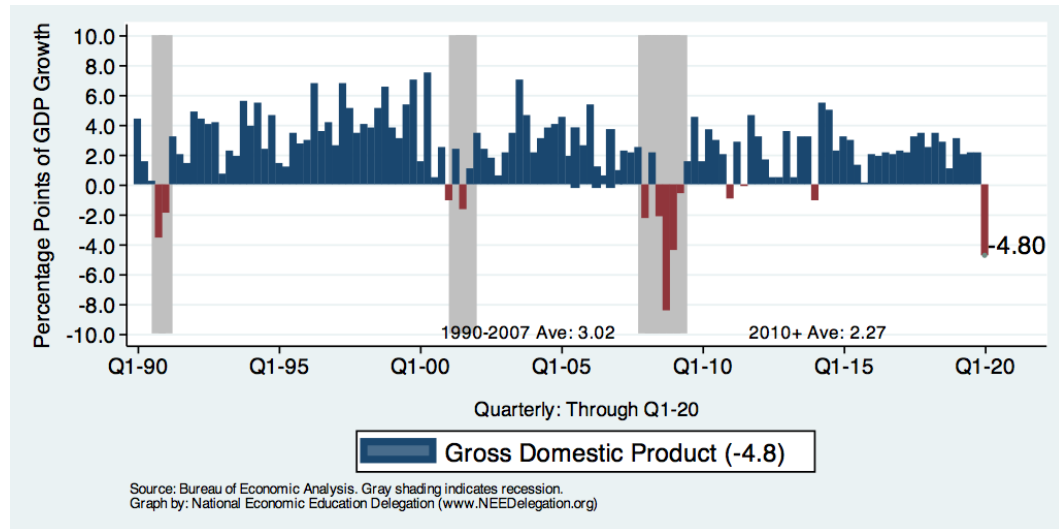
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Priorities for Government Policy

- **Policies to protect public health**
 - Long run benefits for the economy.
 - Though there may well be short run pain.
- **Policies to protect the economically vulnerable**
- **Policies to maintain structure of the economy**
 - Help firms stay in business, maintain ties with workers.
- **Policies to stimulate aggregate demand (rebuild)**
 - Long run – once the economic switch is turned back on.

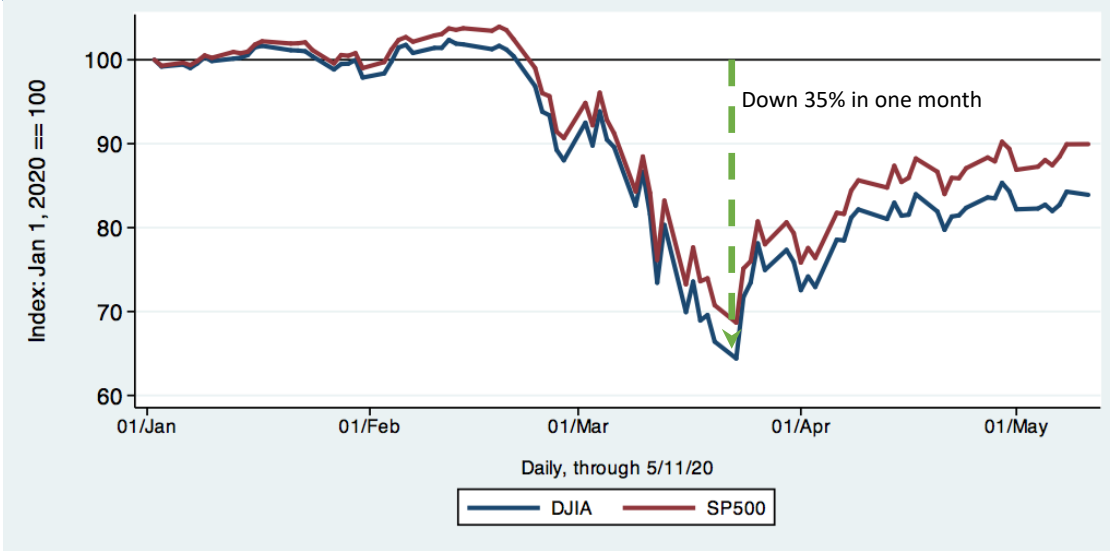
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Gross Domestic Product



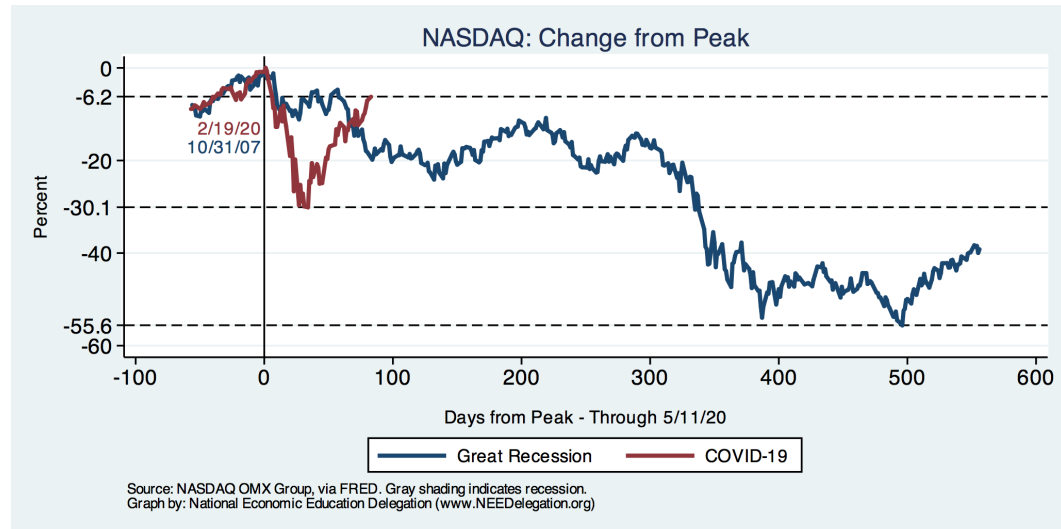
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DJIA and S&P 500



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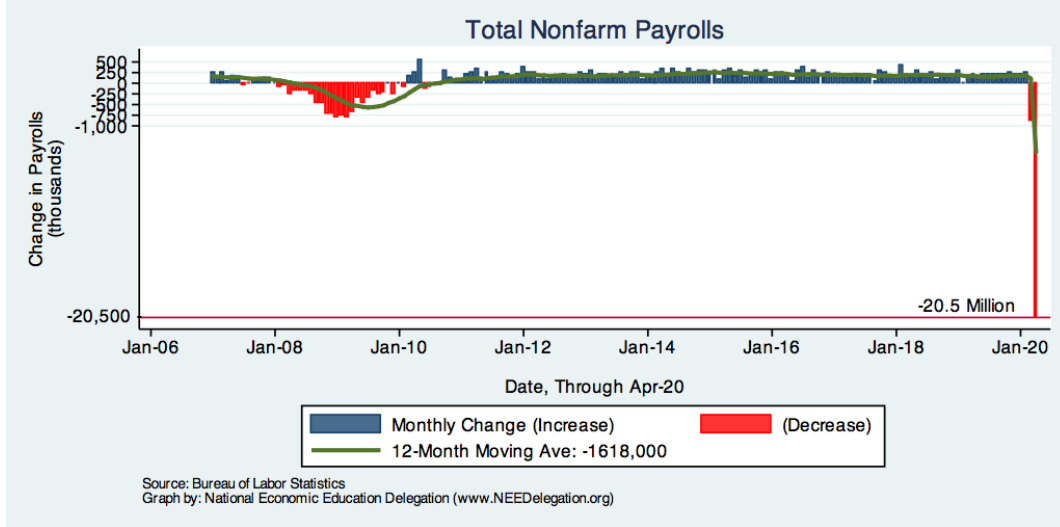
NASDAQ: Then (Great Recession) and Now



Source: NASDAQ OMX Group, via FRED. Gray shading indicates recession.
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

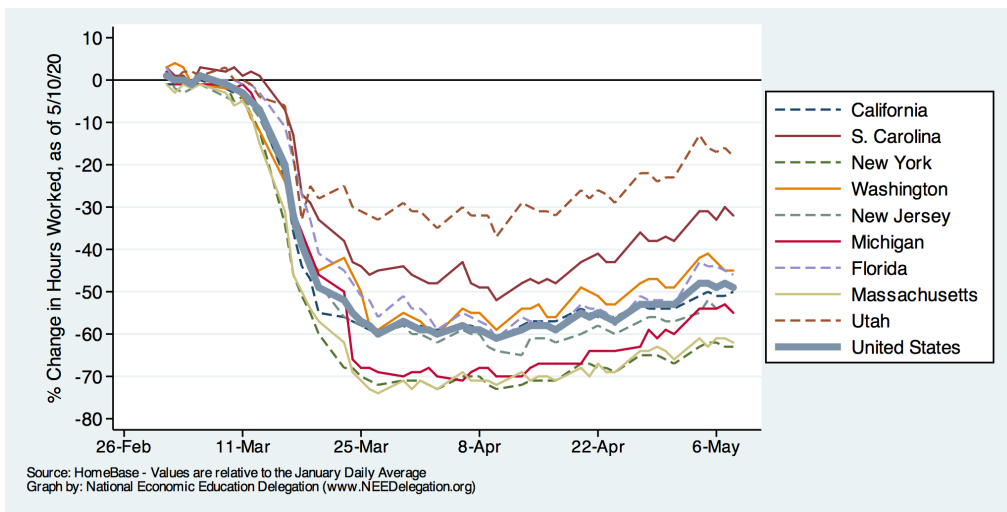
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Monthly Changes in Nonfarm Employment



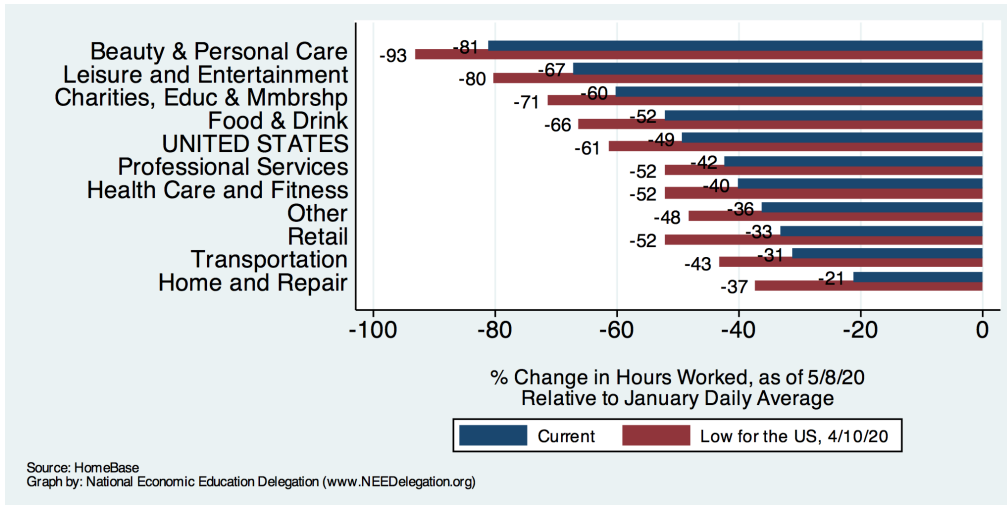
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Change in Hours Worked: Small Businesses



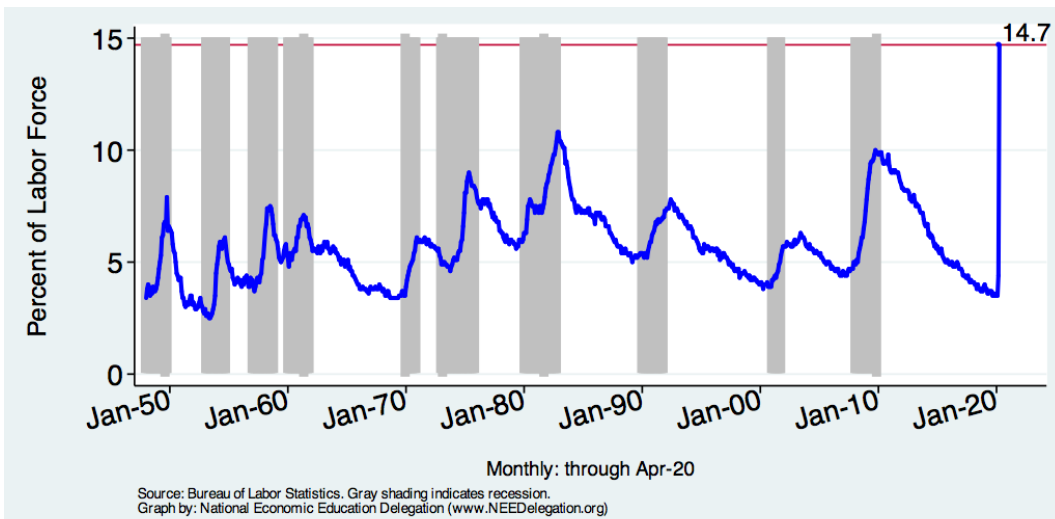
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Change in Hours Worked: Small Businesses

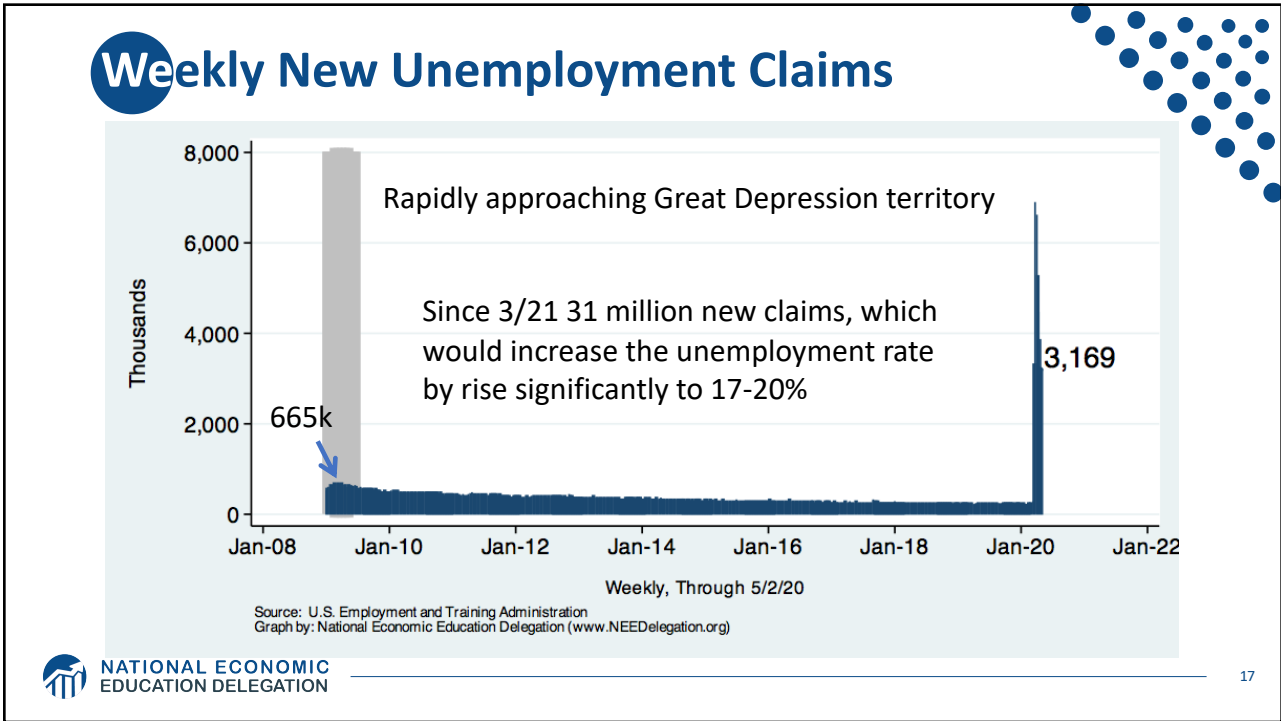


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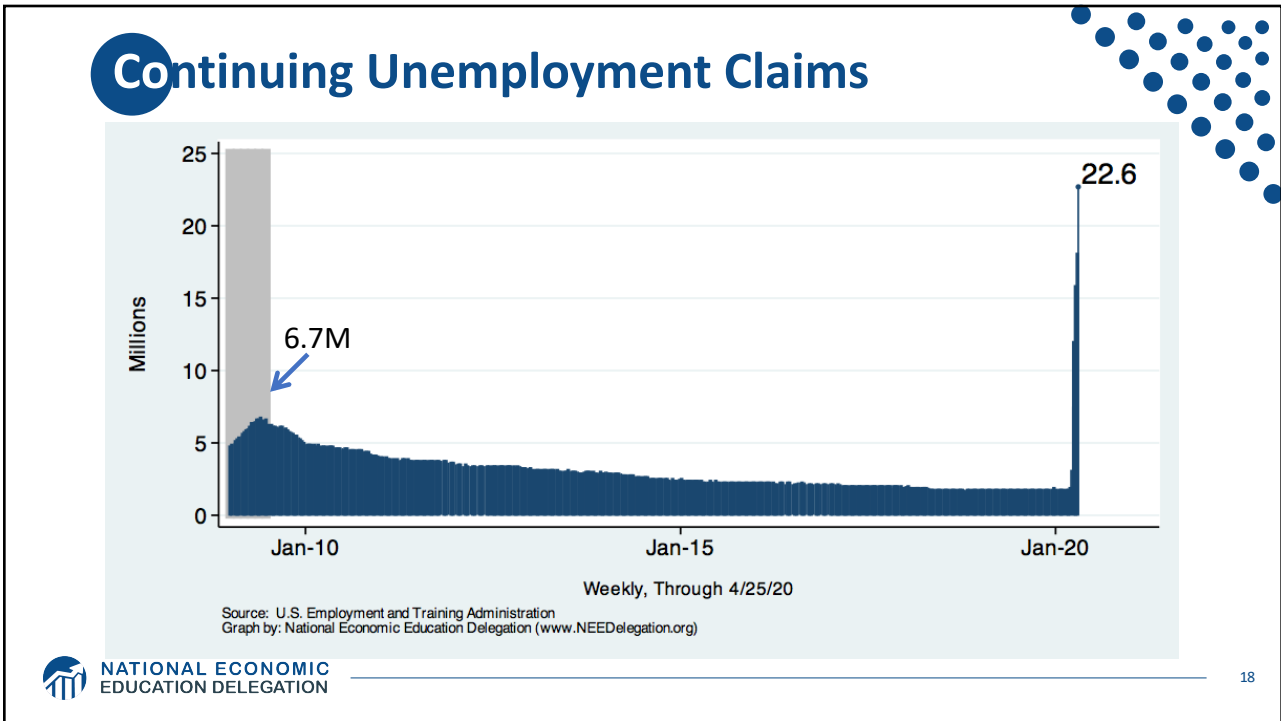
Unemployment Rate



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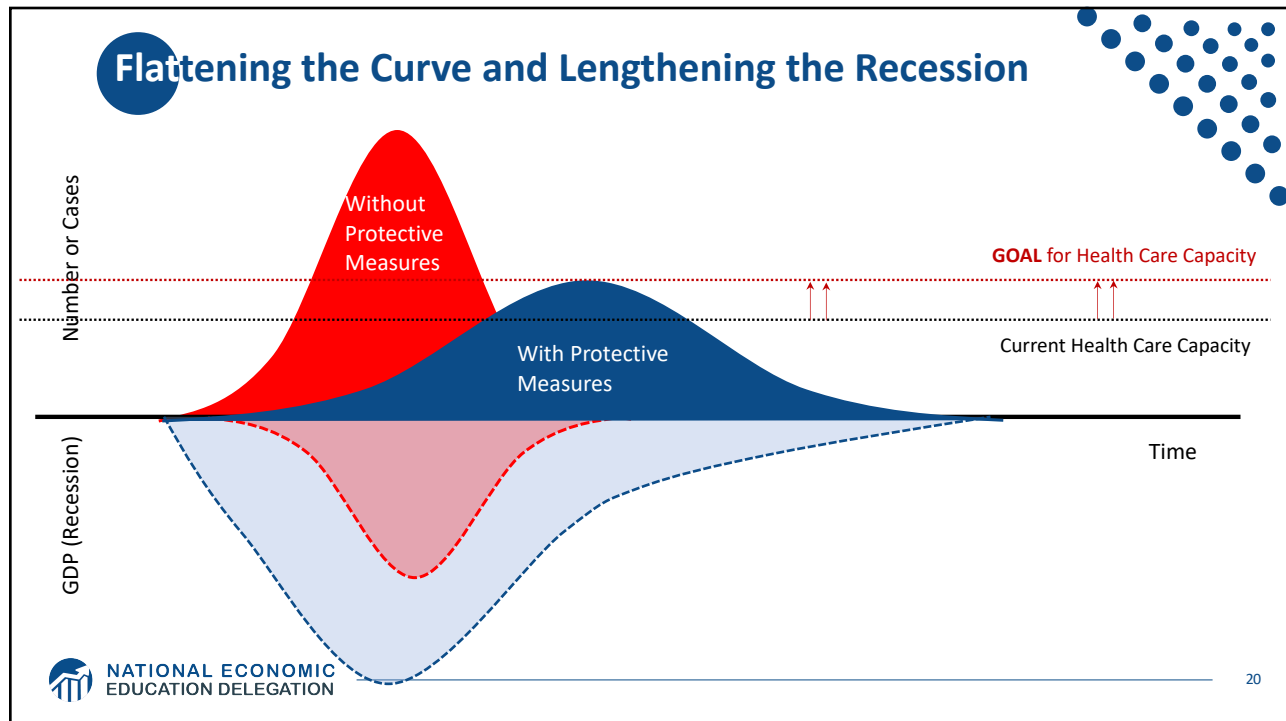
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A Tale of Three Policies Efforts

- **Social policy: Social Distancing**
 - Shutdowns on some industries versus others
 - Furloughs and lay-offs result
 - Vulnerable populations now more vulnerable
- **Fiscal Policy**
 - Business and taxpayer supports
 - Low-cost way to engage policy, but building danger later
- **Monetary Policy**
 - Back to Zero interest rates
 - Managing markets and inflation is out with the bath water

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Flattening the Curve and Lengthening the Recession



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BOTE Cost Benefit Analysis

BOTE: Back Of The Envelope

- **BENEFITS of social distancing:**

- \$7 million/life and 600,000 lives saved (\$4.2 trillion)
- Long term health issues avoided: 2 million at \$500,000 (\$1 trillion)
- **Total Benefit of Social Distancing: \$5.2 Trillion**

- **COSTS of “Shelter in Place” or “Lockdown”**

- There are about 70+ workdays in a quarter (plus March).
- **The cost of a “lockdown” is roughly \$1.3 Trillion**

Benefit: \$5.2 trillion > Cost: \$1.3 trillion



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<https://twitter.com/BetseyStevenson/status/1242180499566669828>

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What Economic Policy Can't Do in this Crisis

- **Typically, Monetary and Fiscal policies fight recessions by increasing aggregate demand (total spending)**

- Fiscal:
 1. Tax cuts
 2. Increased spending
- Monetary
 1. Reduce short-term interest rates
 2. Reduce long-term interest rates using (Q)uantitative (E)asing

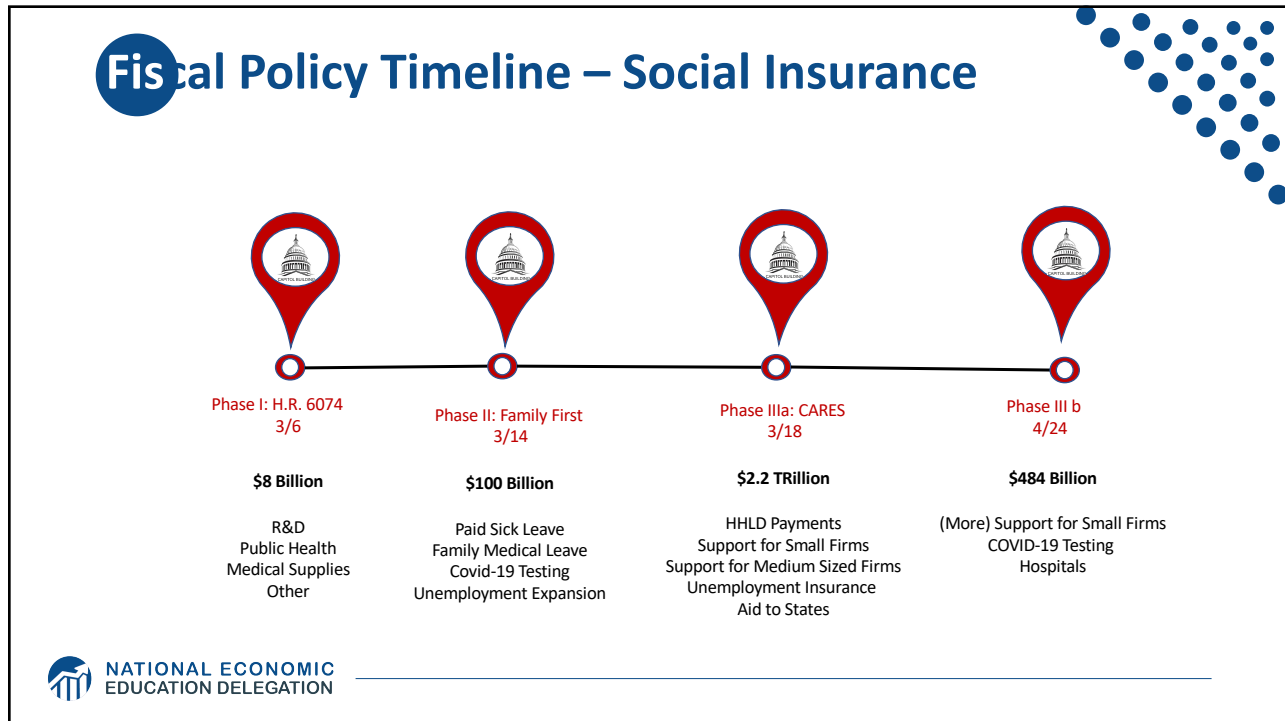
But, if people can't leave their homes changing these policies won't work – Go on a cruise because of tax cut or lower interest rate?



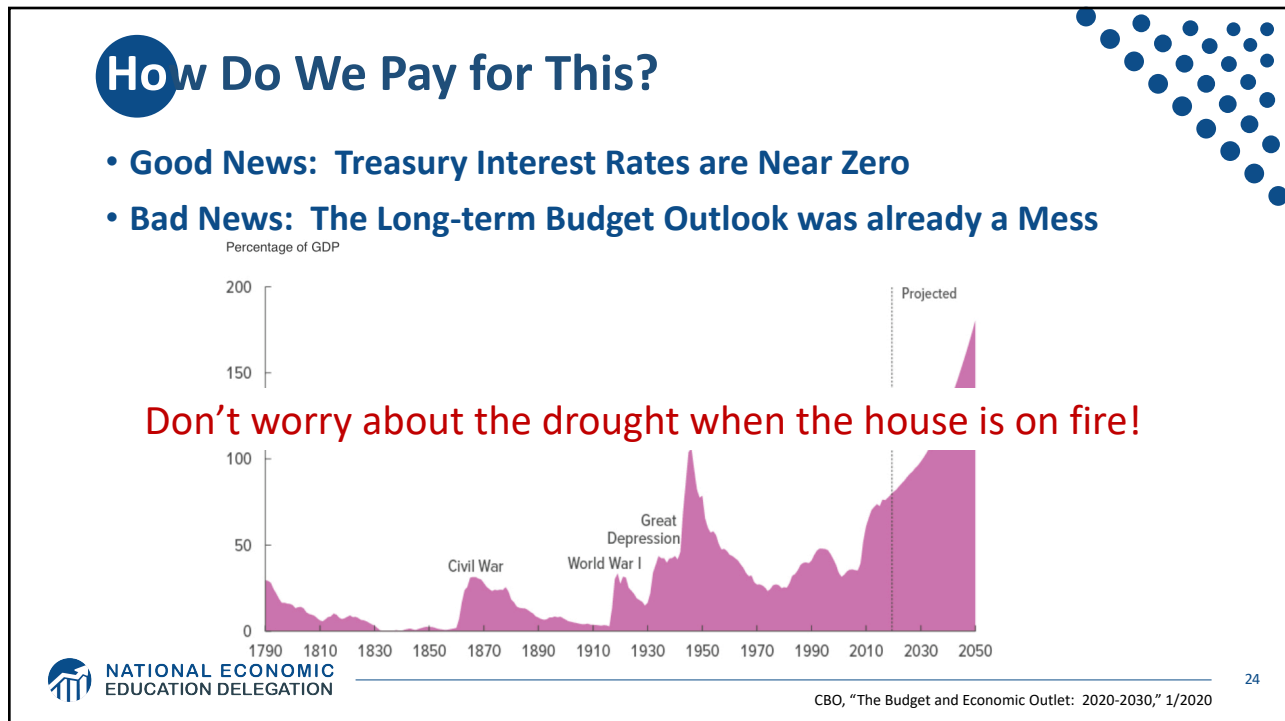
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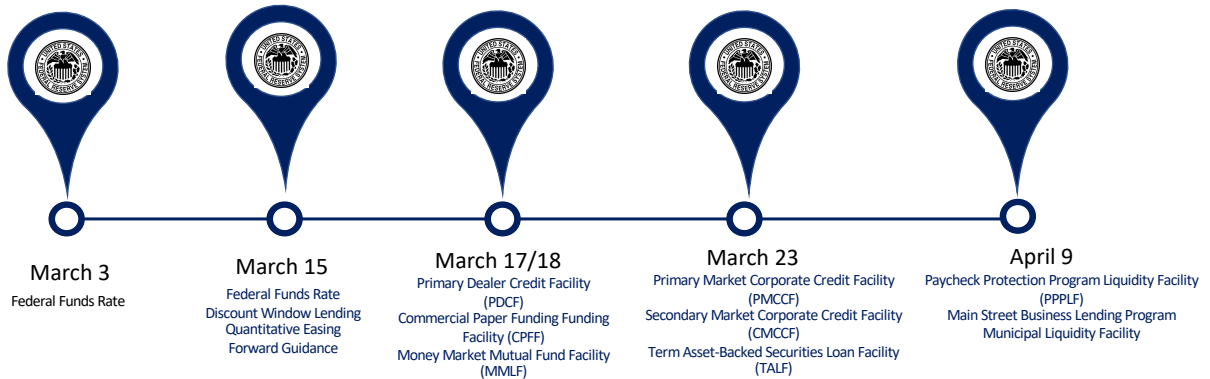
Monetary Policy – Federal Reserve

- **Two primary objectives**
 - Stabilize the economy
 - Maintain liquidity of the system

- **Actions in three forms:**
 - Traditional interest rate stimulus
 - Inject cash into the system
 - Shore up existing debt and structures

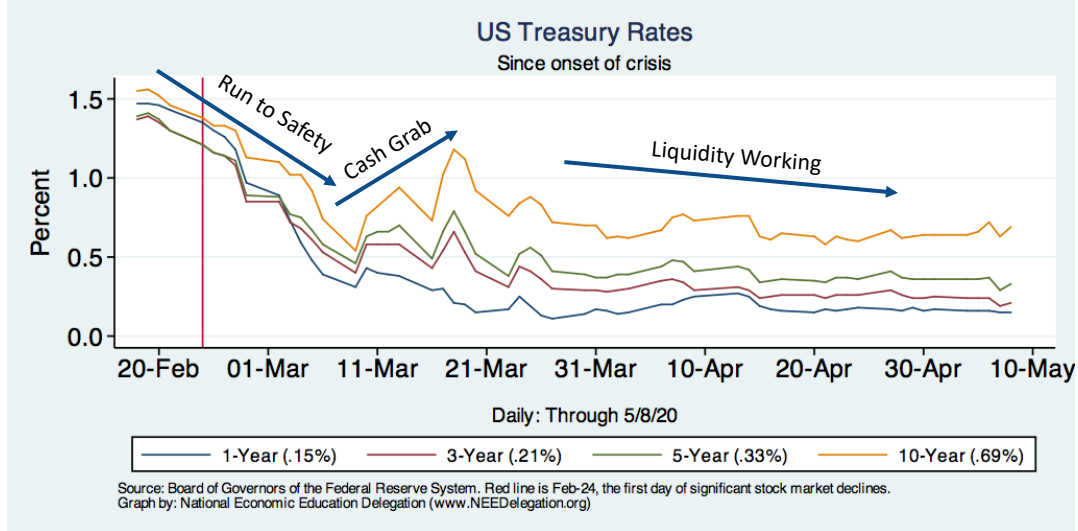
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Federal Reserve Timeline



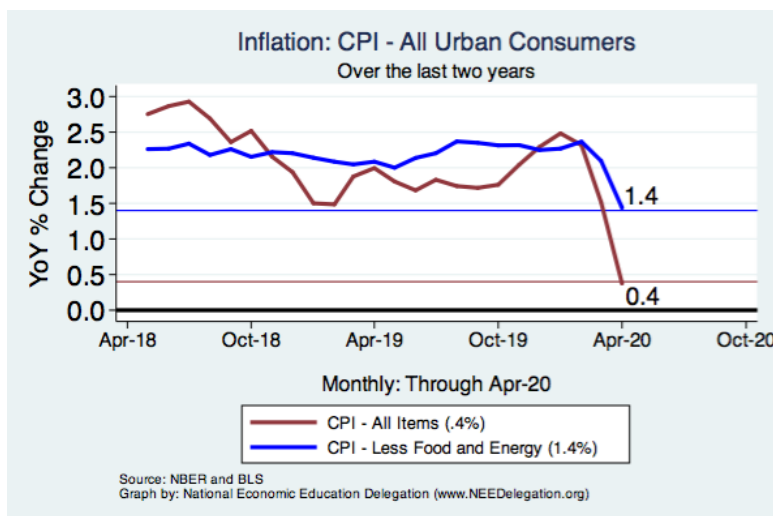
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US Treasury Rates: A Safe Haven?



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Inflation – Deflation is More Likely



If it shows up:

It's not one of our top 2 problems.

- 1) Illness/Deaths
- 2) Employment

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Thoughts on Policies to Date

- **Costs are enormous, but we are doing the right thing!**
 - And we are doing it **VERY QUICKLY!**
- **Monetary policy: Heroic!**
- **Fiscal policy grade: Emergency Pass**
 - Direct cash payments
 - Are they really getting into the hands of those most in need?
 - Right strategy to maintain employee-employer ties?
 - Enough for medical care?
 - The amount spent fighting the virus is relatively small.
 - **What about states and local governments?**



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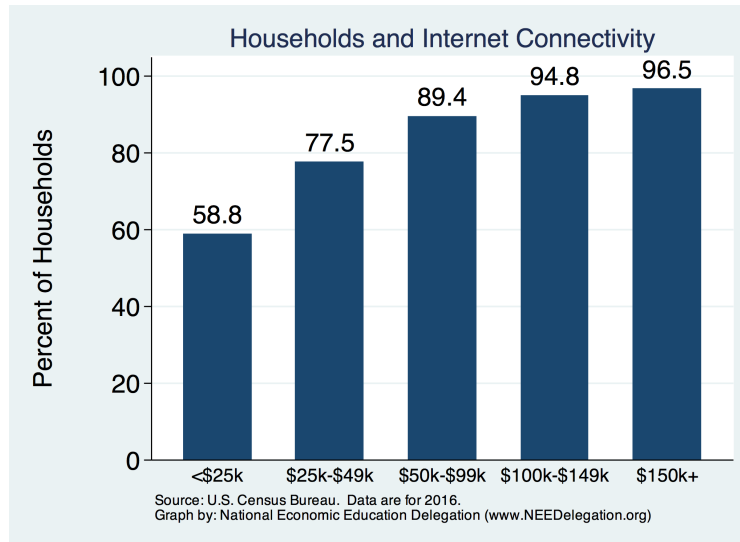
Coronavirus and Inequality

- **Racial inequities**
- **Telecommuting**
- **Primarily low wage jobs are at risk**
- **Resources to weather the storm**
- **Educational inequities**



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Home Schooling - Access to the Internet

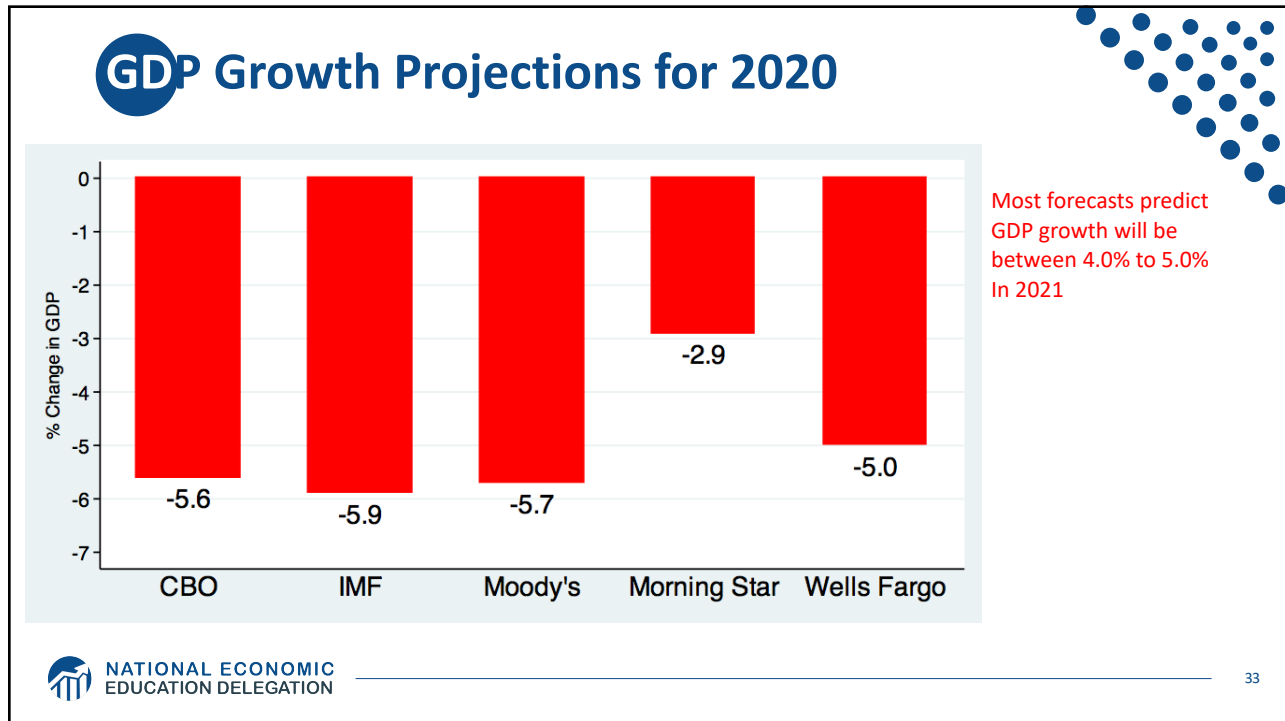


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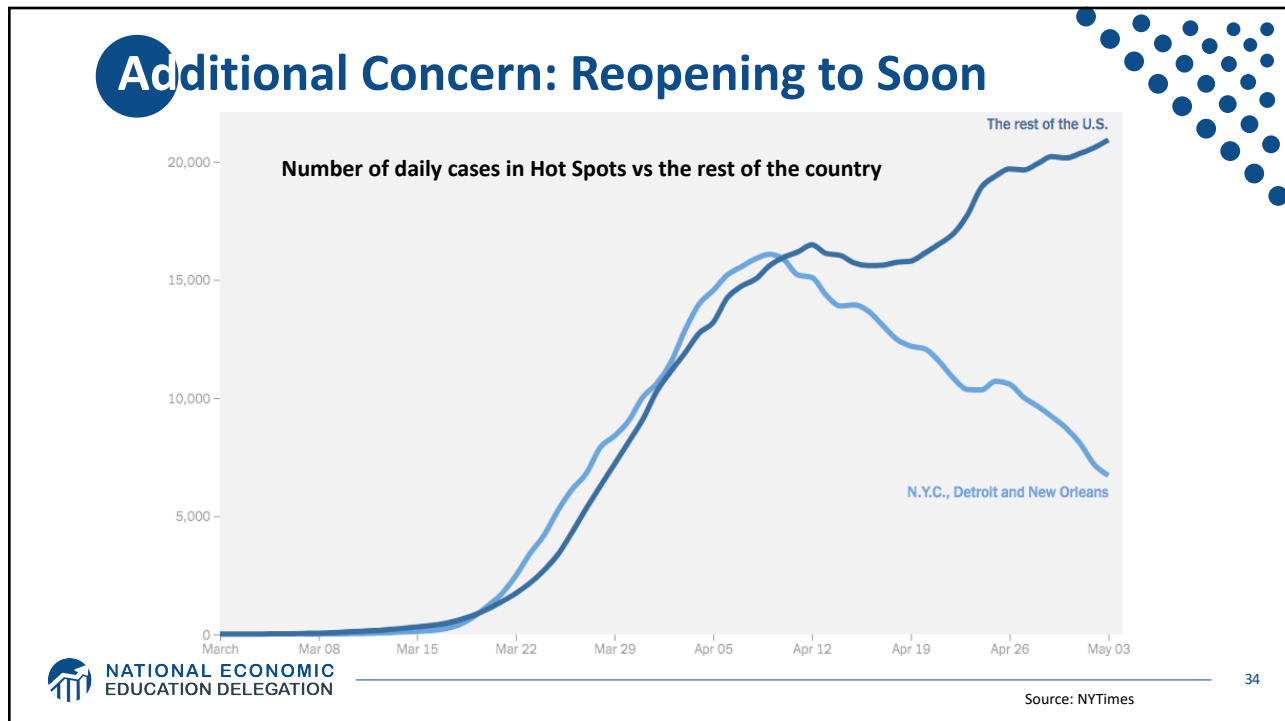
What does the future bring?

- **We won't need "shades" for quite some time.**
- **Depends on ties between employers and employees.**
- **Further government policy**
 - Aid to state and local governments.
 - Ultimately stimulus – but not soon.
- **Structural changes to the economy?**
 - More telecommuting.
 - More rapid adoption of technology.
 - The way we buy things.

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Conclusion

- COVID-19 is health crisis that has macroeconomic implications.
- The macroeconomic effects have impacted both supply and demand.
- GDP will likely contract between 5.0 and 6.0 percent this year.
- Positive growth will likely 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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Thank you!

Any Questions?

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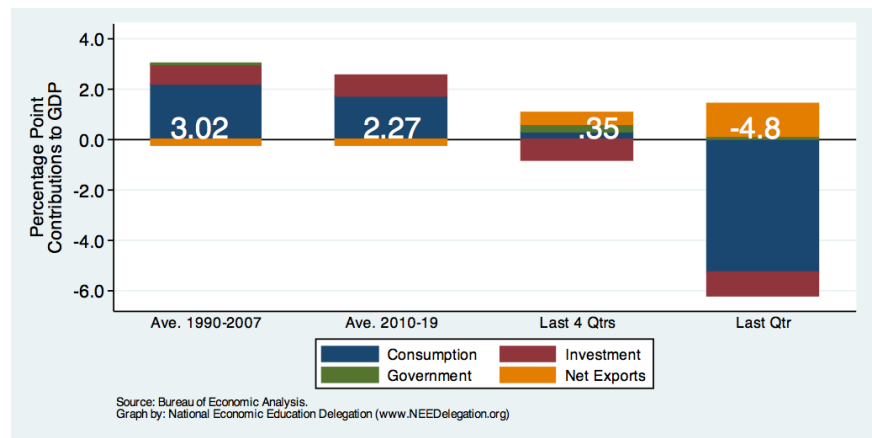
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Some Big Concerns

- 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 and business bankruptcies?
 - What is the future of companies that bring many people together?
 - Cruise Lines.
 - Theaters.
 - Sports.
 - Malls.
 - Looming State and Local Fiscal Crisis
 - Small business bankruptcy

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GDP 2020:Q1



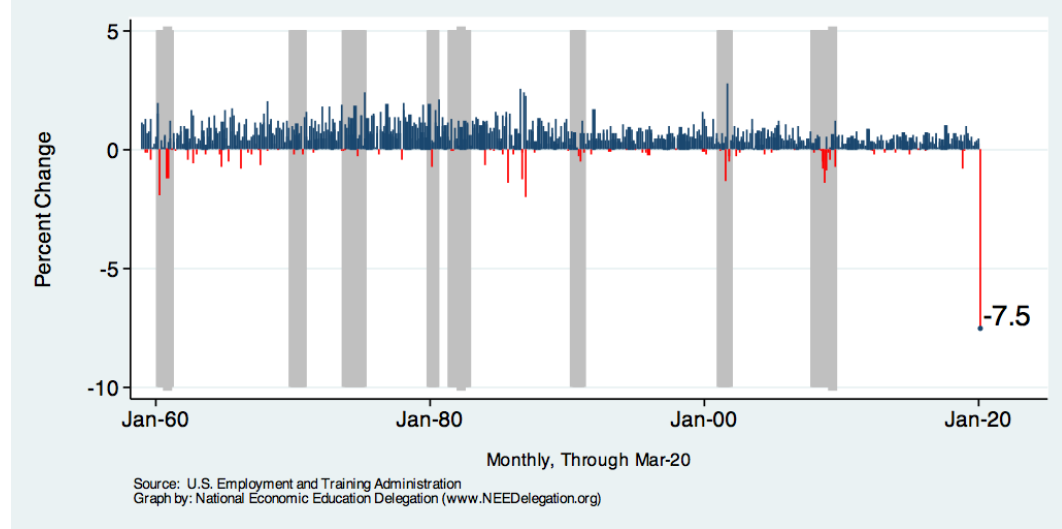
Contributions from different expenditure components :

- Consumption: -5.26
- Investment: -0.96
- Government: 0.13
- Net Exports: 1.30

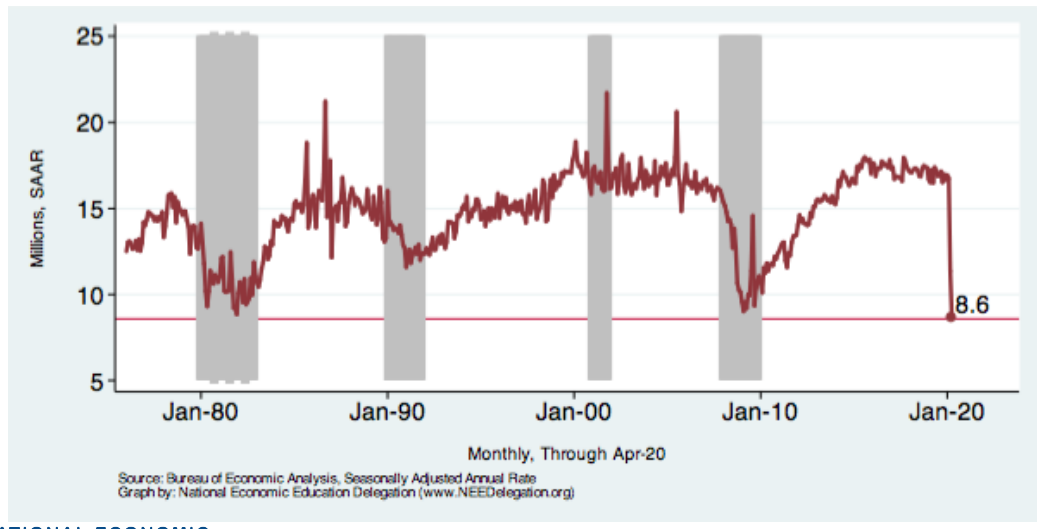
Note: The economic impact of COVID-19 likely only had an impact the last two to three weeks of 2020:Q1 GDP

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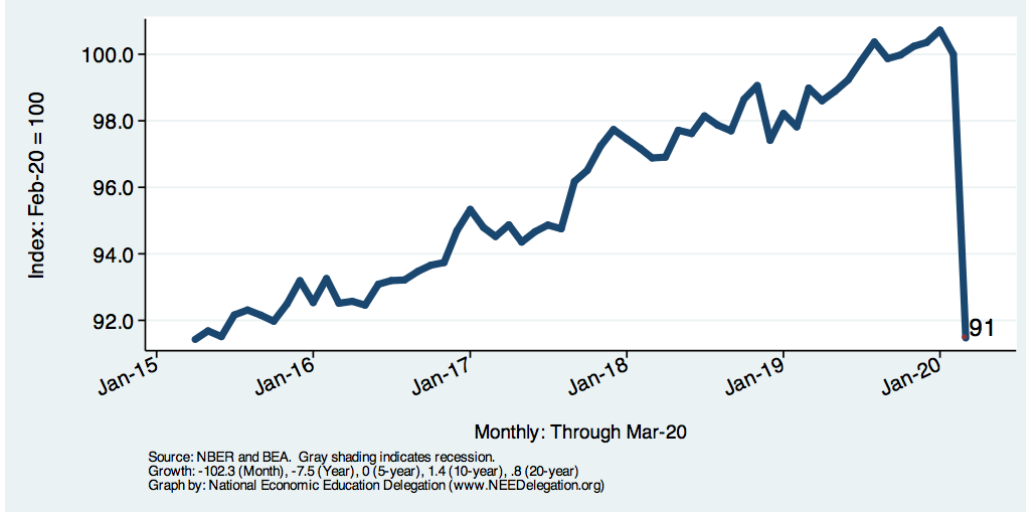
Personal Consumption Expenditures



Automobile and Light Truck Sales

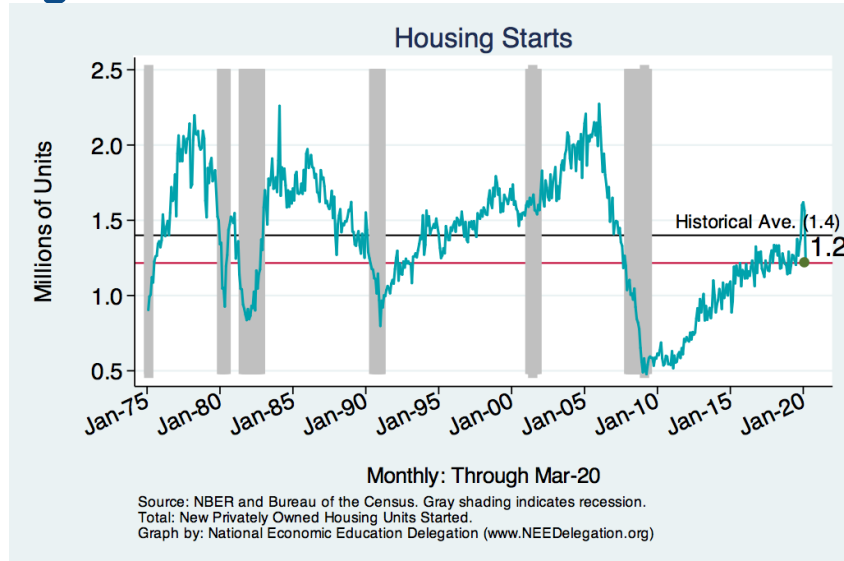


Retail Sales

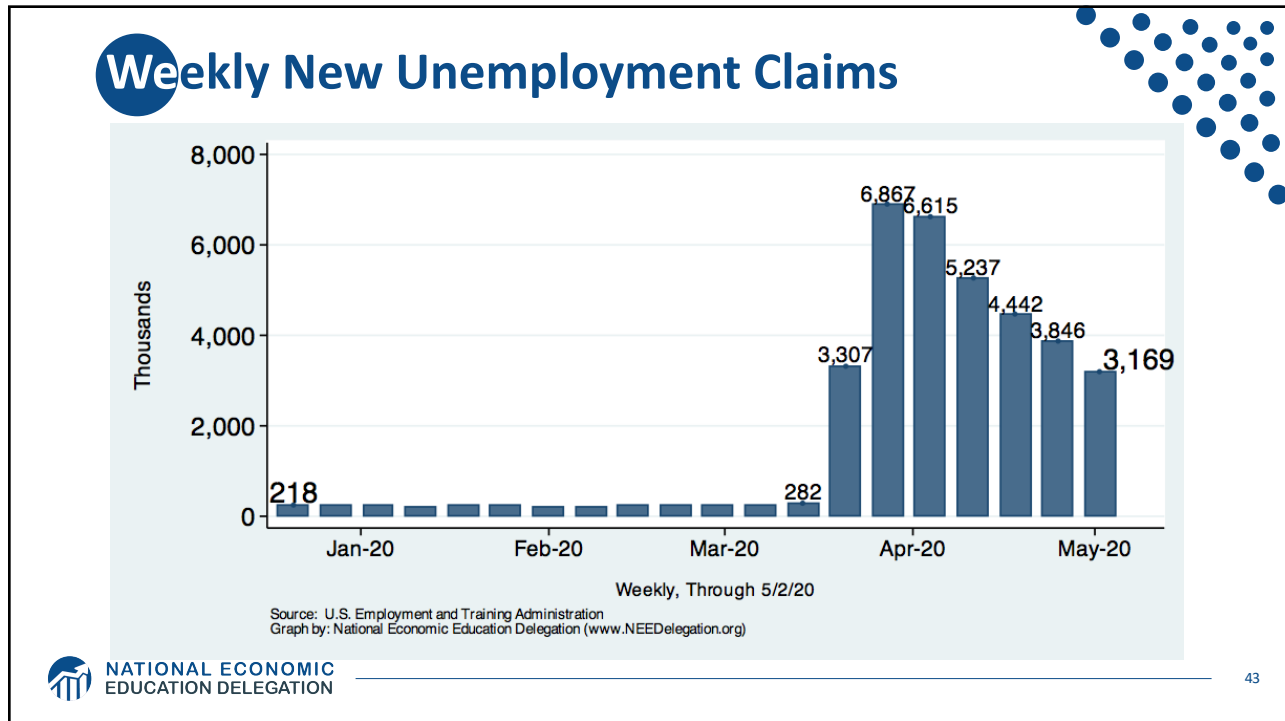


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Housing Starts Plummet: Down 25% in March



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Employment: The Word of the Month

National Employment Report®
April 2020

Goods-producing Sector
↓ -4,229,000

↓ -78,000
Natural Resources & Mining

↓ -1,674,000
Manufacturing

↓ -2,477,000
Construction

Service-providing Sector
↓ -16,007,000

↓ -3,440,000
Trade, Transportation & Utilities

↓ -971,000
Education & Healthcare

↓ -309,000
Information

↓ -8,607,000
Leisure & Hospitality

↓ -216,000
Financial Activities

↓ -1,298,000
Other Services

↓ -1,167,000
Professional & Business

“Job losses of this scale are **unprecedented**. The total number of job losses for the month of April alone was more than double the total jobs lost during the Great Recession,” said Ahu Yildirmaz, co-head of the ADP Research Institute.

Biggest % Losses at Smallest Firms:
SM: 21.5%; MID: 17.4%; LG: 13.4%

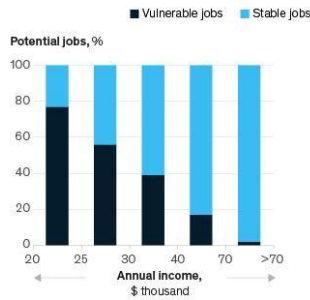
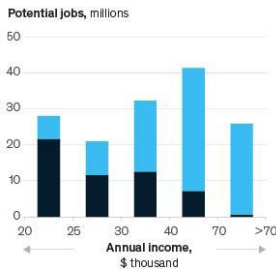
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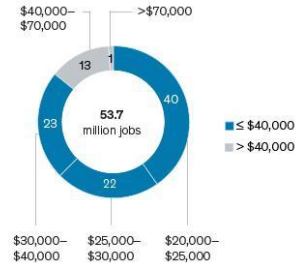
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Eighty-six percent of vulnerable jobs paid less than \$40,000 a year.

Level of job vulnerability,¹ by income band



Vulnerable jobs by annual income band¹ %



Note: Data may not sum to 100, because of rounding.
¹Vulnerable* jobs are subject to furloughs, layoffs, or being rendered unproductive (for example, workers kept on payroll but not working) during periods of high physical distancing.
 Source: LaborCube; McKinsey Global Institute analysis

McKinsey & Company

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Financial Insecurity Before Coronavirus

- 40% of Americans don't have the cash to pay for a \$400 emergency expense
- 25% have no retirement or pension savings
- Less than 60% can answer at least three basic financial literacy questions correctly.
- 1 in 5 of adults knows someone impacted by the opioid crisis.
- About 25% of borrowers who attended a for-profit college are behind on student loan payments compared with about 10% who attended a public or private college

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Source: The Federal Reserve, Survey of Household Economics and Decisionmaking,

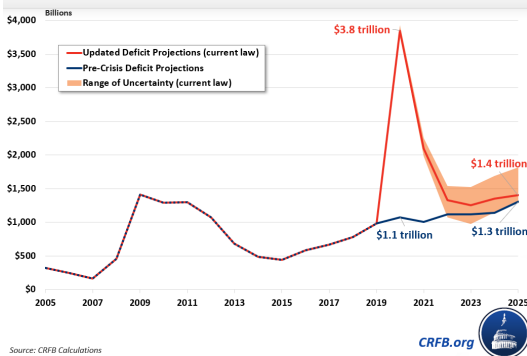
Fiscal Policy Timeline

Phase	Amount (\$ bn)	Action
Phase 1 March 6	\$8	Emergency response, health care, vaccine development, prevention
Phase 2 March 18	\$100	Paid sick leave, unemployment insurance, free virus testing
Phase 3 Pending	\$250	Direct cash payments to families with income cap; \$1,200 per adult, \$500 per child
	\$250	Enhanced unemployment benefits
	\$350	Small business loans up to 250% of monthly payroll
	\$100	Corporate tax changes
	\$17	Community lending
	\$500	Loans & loan guarantees for businesses, incl. airlines
	\$180	State and local governments & Education
	\$100	Hospitals
TOTAL	\$1.5-2.5 Trillion	7-12% of GDP

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Federal Budget Implications

Federal Deficit Will Reach Record Levels

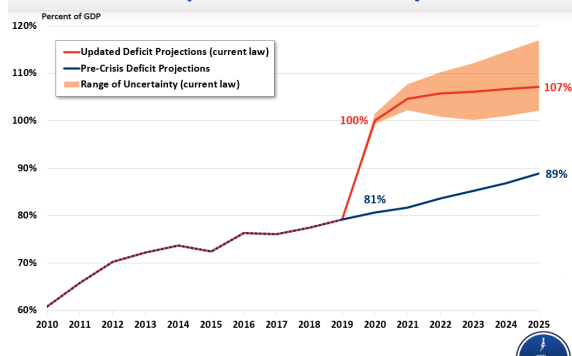


Source: CRFB Calculations

CRFB.org

Deficit may be nearly 20% of GDP

Debt Will Equal Size of Economy This Year



Source: CRFB Calculations

CRFB.org

Debt will likely equal GDP this year

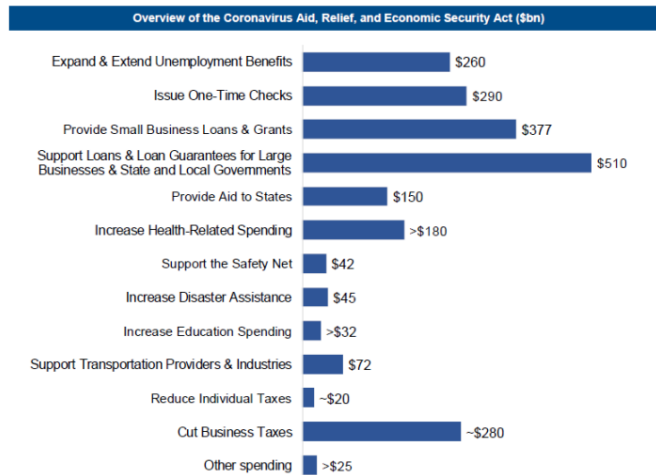
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Many Policy Alternatives

- **Denmark: Pay (discounted) salaries**
 - Keeps employees “on the job”.
- **Temporary UBI**
 - \$2k/adult for 6 months - \$3.6T
 - Grant if can prove need, otherwise a loan. Grants = \$240B
- **Payroll Tax Cut**
 - No. Designed to get people back to work. Not yet.
- **Excess revenue tax**
 - 10% or more above normal, taxed at high rate. (Amazon, Zoom)
- **Many others...**



The Cares ACT



Aid to Households

Payments to Individuals		
\$269bn (1.3% of GDP)		
Eligibility	Program	Terms & Process
<ul style="list-style-type: none"> - Taxpayers with incomes up to \$99,000 (or \$198,000 joint) based on 2019 tax return (2018 if not available) 	<ul style="list-style-type: none"> - Tax rebate of \$1,200 (or \$2,400 for a joint tax return) - Additional \$500 rebate per child 	<ul style="list-style-type: none"> - Rebate phases out gradually for incomes greater than \$75,000 (\$150,000 joint) - Rebates sent "as rapidly as possible" targeted for early April

Increased Unemployment Insurance		
\$250bn (1.2% of GDP)		
Eligibility	Program	Terms & Process
<ul style="list-style-type: none"> - Individuals qualifying for standard unemployment compensation - Individuals not previously qualifying for unemployment compensation, such as contractors and the self-employed 	<ul style="list-style-type: none"> - Provides standard unemployment compensation (roughly 50%) for 39 weeks, vs standard 26 weeks - Additional \$600 pay per week through July 31 (4 months), even if unemployment compensation exceeds previous wage level 	<ul style="list-style-type: none"> - Pay is immediate, vs. standard one-week waiting period



Aid to Small Businesses

Small Business Loans & Payroll Subsidies		
\$377bn (1.8% of GDP)		
Eligibility	Program	Terms & Process
<ul style="list-style-type: none"> - Small businesses < 500 employees (< 500 per physical location for accomm. and food services sector) - Sole proprietors, contractors, self-employed individuals - Businesses operational, with employees on payroll, on Feb. 15 	<ul style="list-style-type: none"> - Small business obtains loan for 2.5x monthly payroll, up to \$10 million - Loan forgiven when used for employee pay, rent or mortgage interest, and utility payments 	<ul style="list-style-type: none"> - Business eligible if operational and having employees on Feb 15 (repayment ability not considered) - Amount forgiven prorated to account for layoffs and pay decreases - Government guarantee at 100% rate (vs. 75% for traditional SBA loans) - Banks earn fee up to 5% for originating loan - Payments deferred up to 1 year - Banks hold loans on balance sheet with zero risk rating



Aid to Airlines

Relief for Specific Distressed Sectors		
\$46bn (0.2% of GDP)		
Eligibility	Program	Terms & Process
- Airlines, air cargo, and national security/aerospace sectors	<ul style="list-style-type: none"> - Direct lending: airlines (\$25bn), air cargo (\$4bn), and national security/aerospace (\$17bn) - Grants to pay wages, salaries and benefits: airlines (\$25bn), air cargo (\$4bn), airline contractors (\$3bn) 	<ul style="list-style-type: none"> - Alternative financing not available - Short loan duration, < 5 years - Stock buybacks and dividend payments prohibited until 1 year after date of loan repayment - Exec comp restrictions - Must retain 90% of employment level as of March 24 - Majority of employees must be based in US

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Aid to Business

Tax Deferral and Tax Cuts		
\$668bn (3.2% of GDP) in 2020; \$286bn (1.4% of GDP) over 10 yrs		
Policy	Description	Amount
NOL carryback	Carry back losses 5 years to offset profits from prior years	\$89bn (0.4% of GDP)
Modify pass-through loss limitation	Eases the limitation on pass-through loss, so they can use excess losses to generate refunds	\$140bn (0.7% of GDP)
Employee retention credit	Payroll tax credit equal to 50% of wages paid by employers through Dec. 31, 2020, whose businesses were shut down or revenues declined by 50% vs. the same quarter the prior year.	\$55bn (0.3% of GDP)
Payroll tax delay	Delays payment of 2020 payroll taxes, with half due by 12/31/2021 and half due 12/31/2022	\$350bn (1.7% of GDP) benefit in 2020, repaid in 2021/2022
Interest deductibility	Increase deductibility of interest from 30% to 50% of EBITDA for 2020	\$13bn (0.06% of GDP)

ESF & Federal Reserve Corporate and Municipal Credit Facility		
\$454bn (2.2% of GDP)		
Eligibility	Program	Terms & Process
<ul style="list-style-type: none"> - Corporate sector - State / municipal sector 	<ul style="list-style-type: none"> - Lend directly or purchase debt from issuer - Purchase debt in the secondary market - Treasury endeavors to implement 13(3) facility targeted at nonprofits and businesses between 500-10k employees. 	<ul style="list-style-type: none"> - Requires loan collateralization, taxpayer protection, borrower solvency - Buybacks, dividends, executive compensation restricted for the life of the loan and one year following; - Treasury may waive these requirements if necessary - Congressional oversight

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Aid to States

Federal Spending & Aid to States			
\$490bn (2.3% of GDP)			
Expenditure	Description	Amount (\$bn)	% of GDP
Aid to States	To offset declining revenues; Allocated by population with minimum \$1.25bn	\$150bn	0.7
Hospitals & medical	Reimbursement to providers and other health expenses	\$130bn	0.6
FEMA	For disaster relief fund to aid states and localities and other operations	\$45bn	0.2
Transportation	Grants to transportation systems and airports	\$35bn	0.2

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

Monetary Policy Timeline

	Date	Action
Stabilization	March 3	Fed Funds Rate Lowered 1.75-1.5 to 1.25-1
	March 15	Fed Funds Rate Lowered to 0.25-0 Announced QE of \$700 billion
Liquidity	March 17	Commercial Paper Funding Facility Primary Dealer Credit Facility
	March 18	Money Market Mutual Fund Liquidity Facility
	March 23	Primary Market Corporate Credit Facility Secondary Market Corporate Credit Facility Term Asset-Backed Securities Loan Facility Unlimited QE
		TBA

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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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Federal Reserve: Ensure Financial Market Stability

- **In mid-March, Treasury and Mortgage Backed Securities markets began behaving irregularly as the demand for liquidity increased.**
 - **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.
 - o The Fed increased the offerings to \$1 trillion (from \$100 bn) in overnight repos, and
 - o \$500 billion in one month **and** three-month repos (from \$20bn 2/wks).



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



