



COVID-19: Economic Implications and Policy Response

CA Maritime Affairs & Navigation Conf.

May 15, 2020
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Executive Director, NEED



1

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.

2

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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3

3

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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4

Credits and Disclaimer

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

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- Geoffrey Woglom, Amherst College (Emeritus)

- **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).



5

Outline

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



6

What is this?

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



7

Process for Dealing with a Natural Disaster

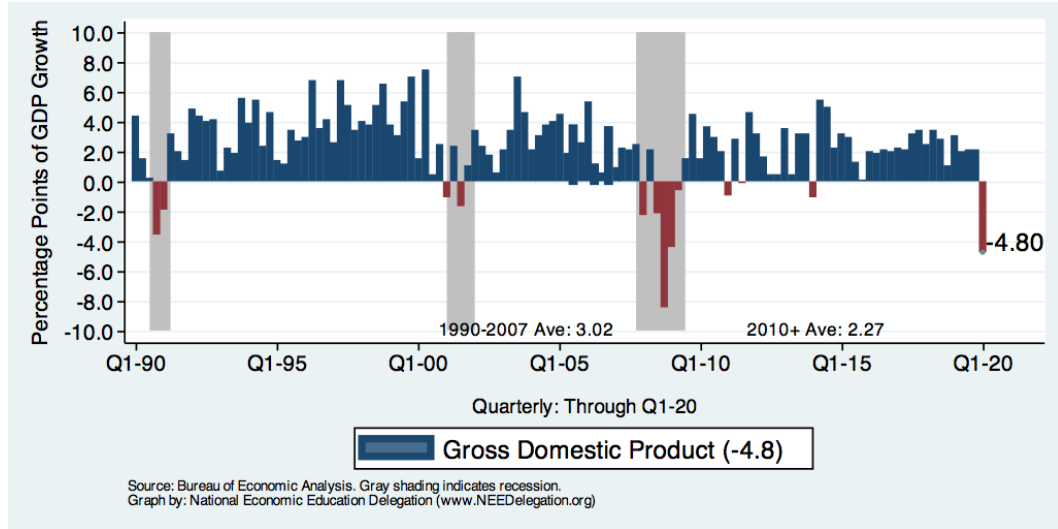
- **Mitigation of effects**
 - Policies to protect the public health.
- **Tend to the vulnerable**
 - Policies to protect economically vulnerable.
- **Shore up structures**
 - Policies to maintain the structure of the economy.
- **Rebuild**
 - Economic stimulus – but not yet!

This crisis requires the same approach and sequence.

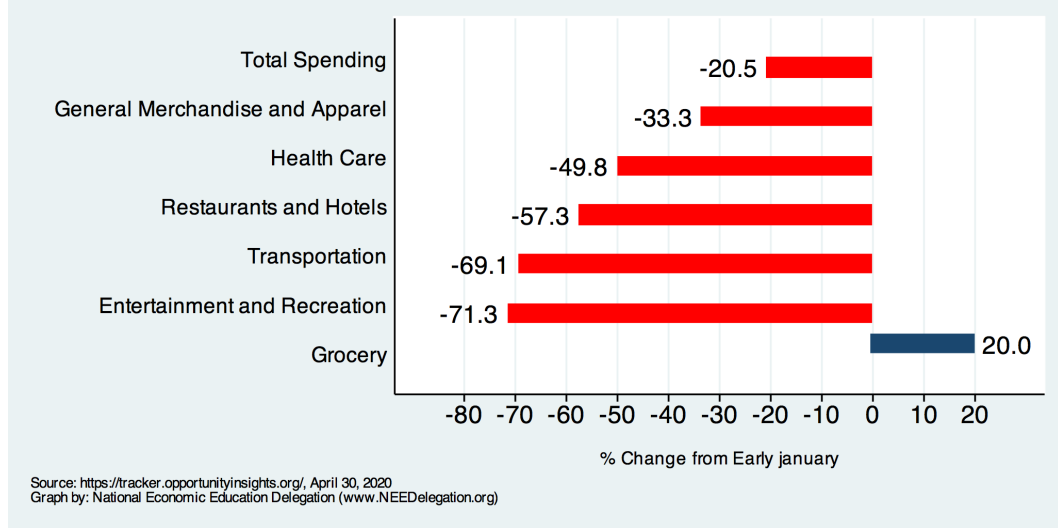


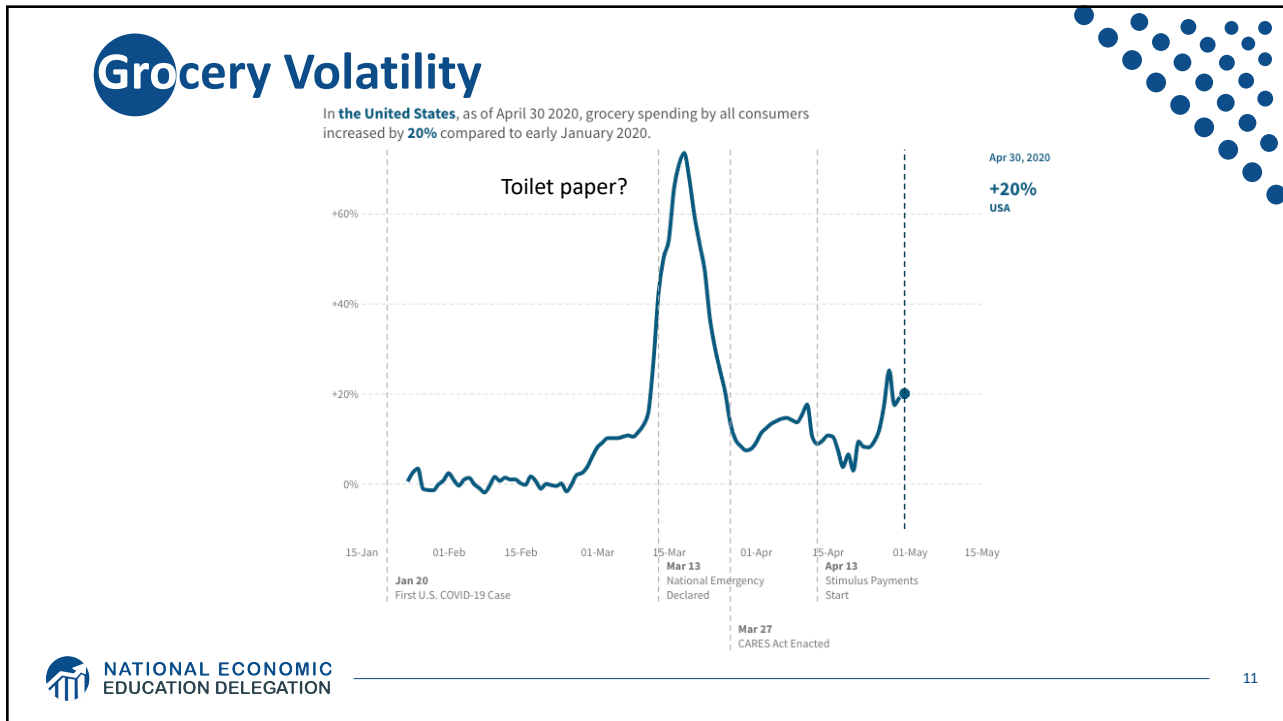
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Gross Domestic Product

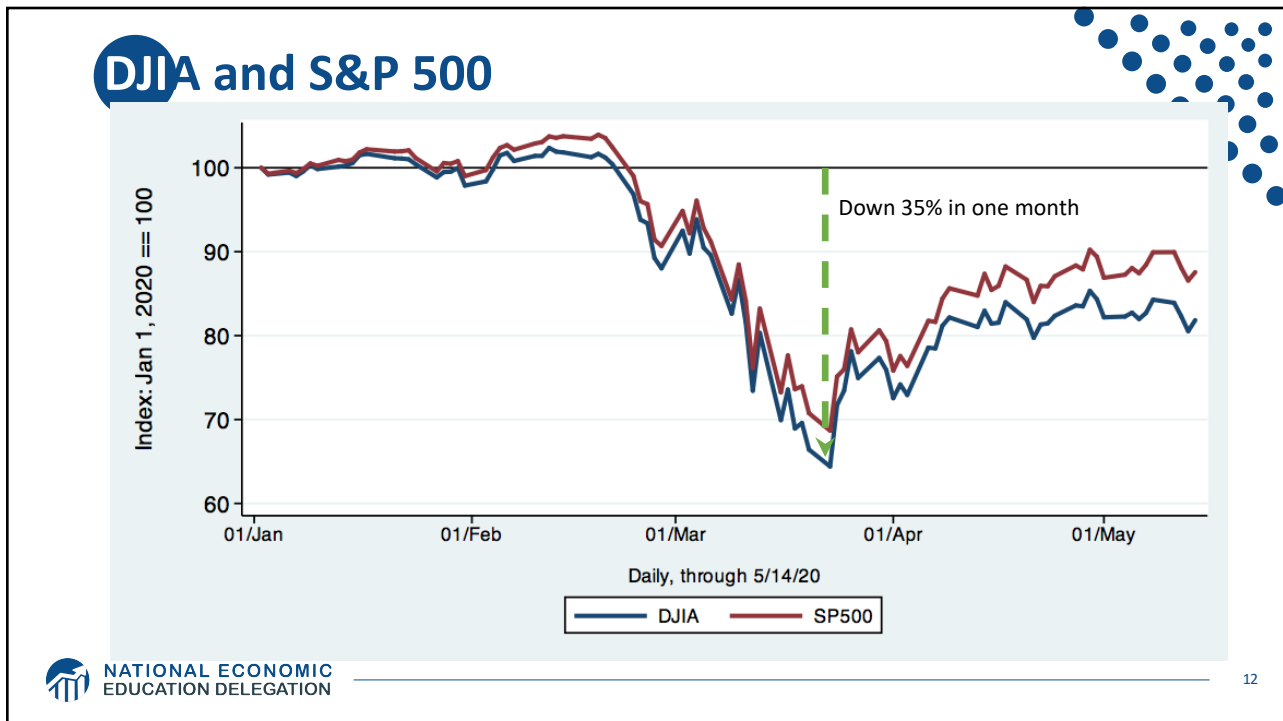


Plunge in Consumer Spending



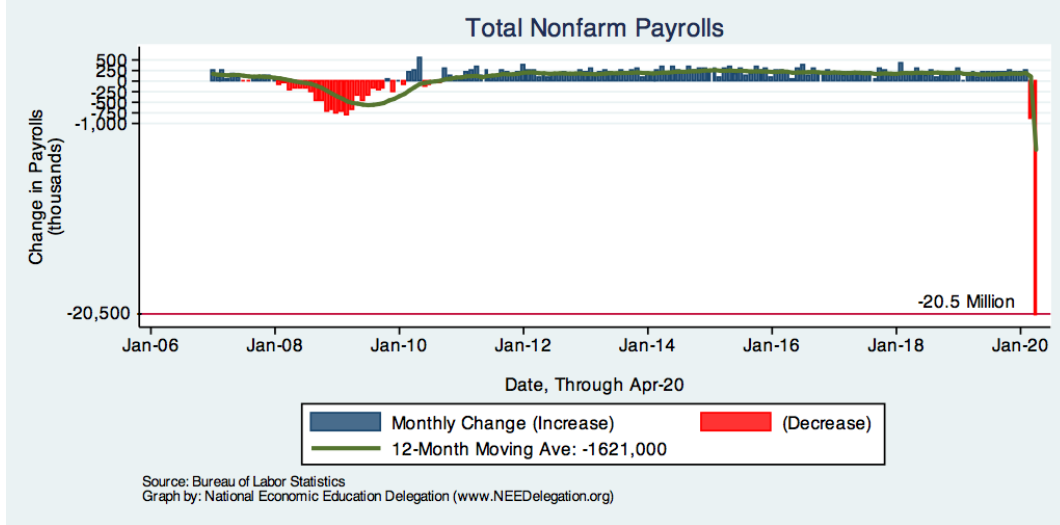


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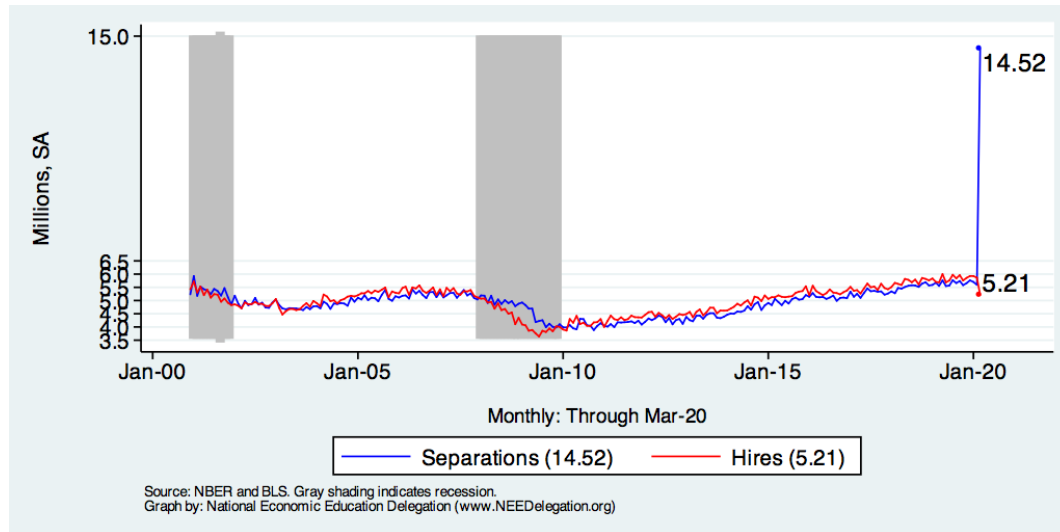
12

Monthly Changes in Nonfarm Employment



13

Separations: Quits and Layoffs

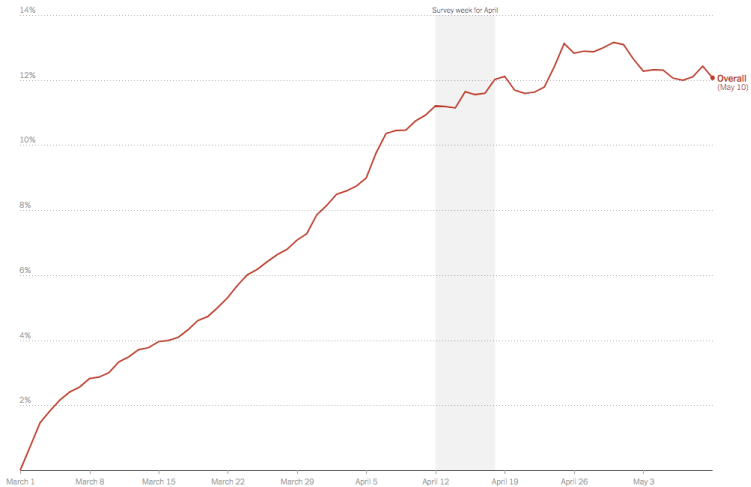


14

Job Losses Appear to be Slowing

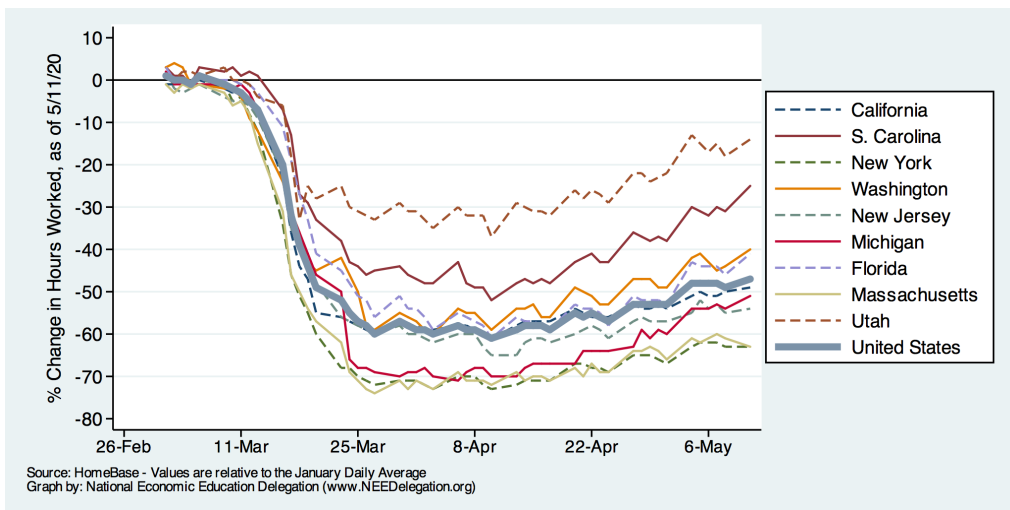
March and April were devastating, but May seems to be flattening

Percent of workers newly nonemployed since March 1, 14-day rolling average



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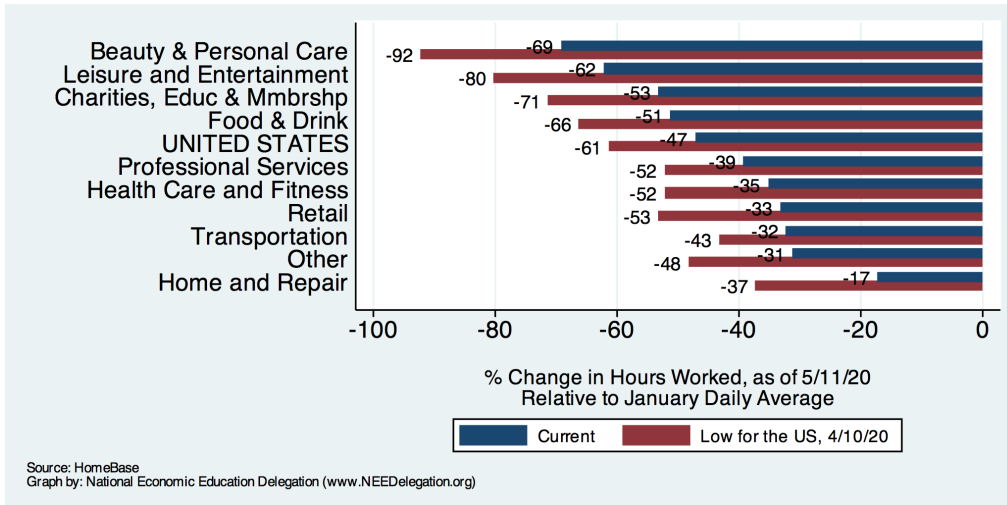
Change in Hours Worked: Small Businesses



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

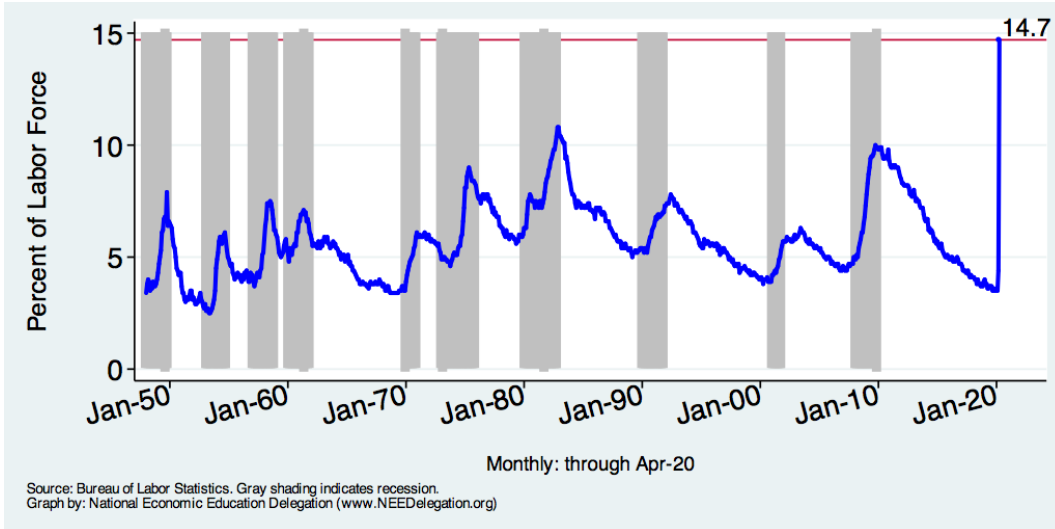
16

Change in Hours Worked: Small Businesses



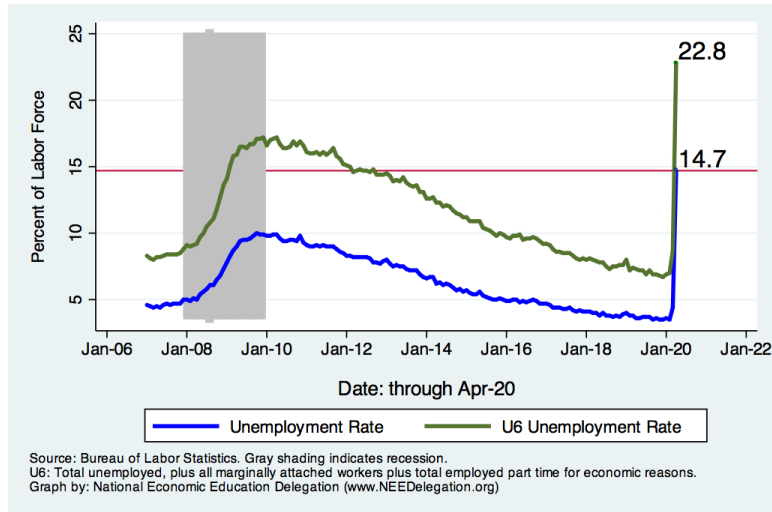
17

Unemployment Rate



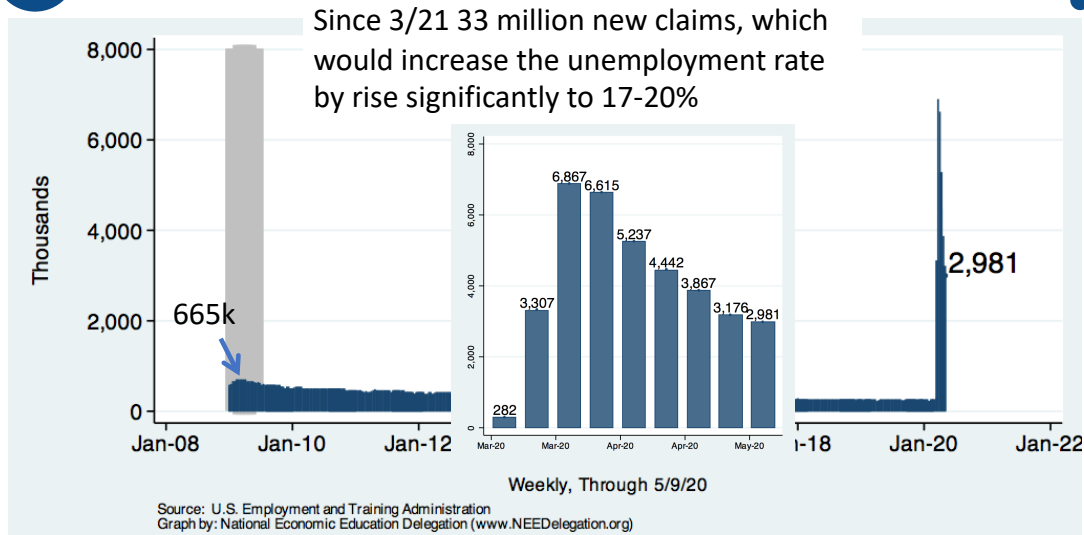
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Unemployment Rate



19

Weekly New Unemployment Claims



20

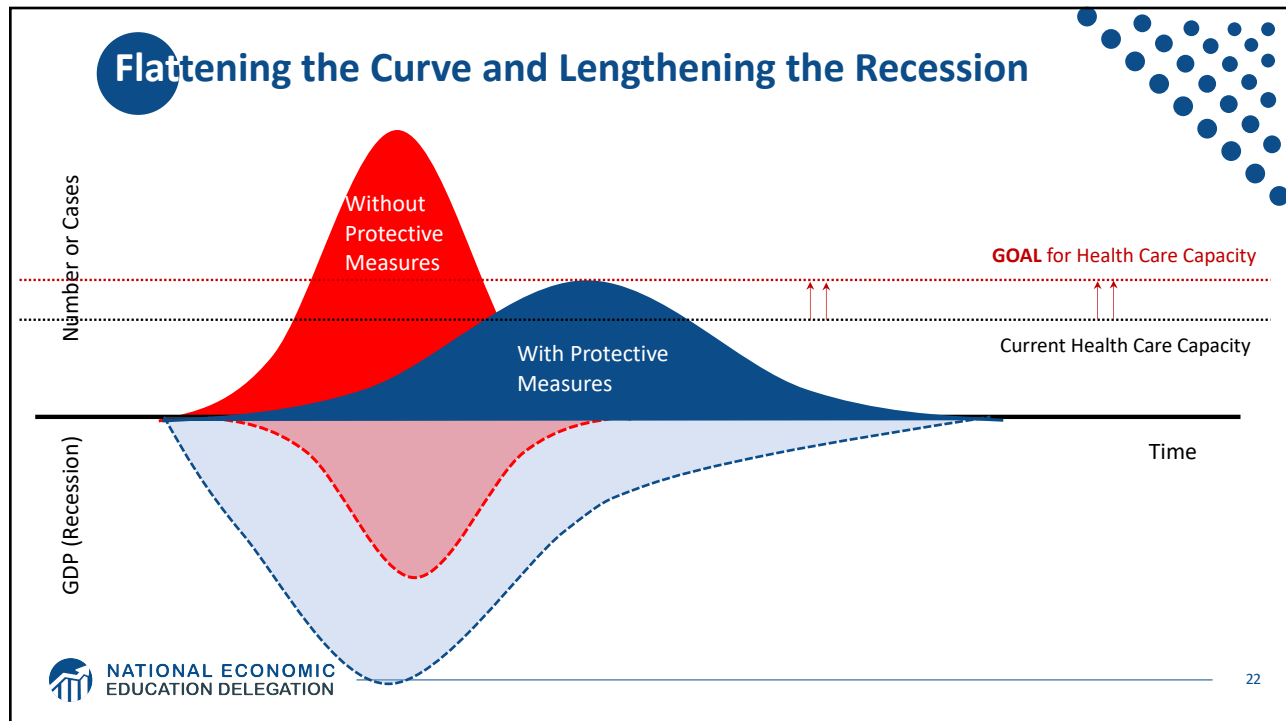
A Tale of Three Policies Efforts

- **Social policy: Social Distancing**
 - Shutdowns in some industries more than others
 - Furloughs and lay-offs result
 - Vulnerable populations now more vulnerable
- **Fiscal Policy**
 - Business and taxpayer support
 - 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



21

Flattening the Curve and Lengthening the Recession




22

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

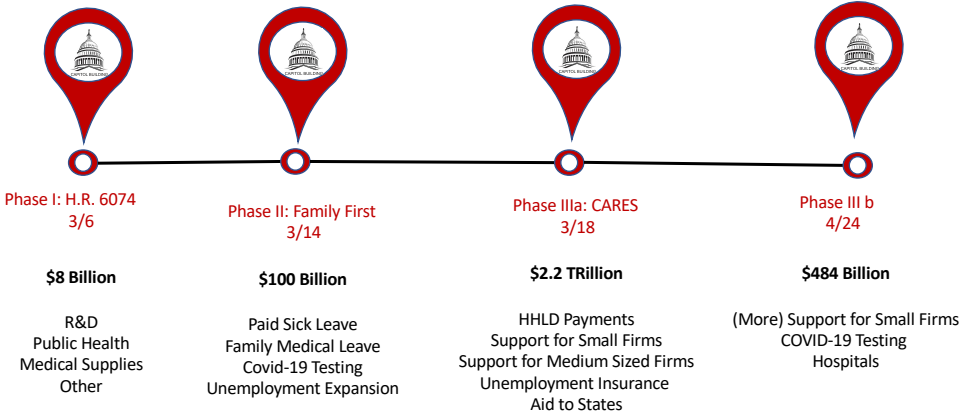


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<https://twitter.com/BetseyStevenson/status/1242180499566669828>

23

Fiscal Policy Timeline – Social Insurance



Phase I: H.R. 6074 3/6	Phase II: Family First 3/14	Phase IIIa: CARES 3/18	Phase III b 4/24
\$8 Billion	\$100 Billion	\$2.2 Trillion	\$484 Billion
R&D Public Health Medical Supplies Other	Paid Sick Leave Family Medical Leave Covid-19 Testing Unemployment Expansion	HHLD Payments Support for Small Firms Support for Medium Sized Firms Unemployment Insurance Aid to States	(More) Support for Small Firms COVID-19 Testing Hospitals

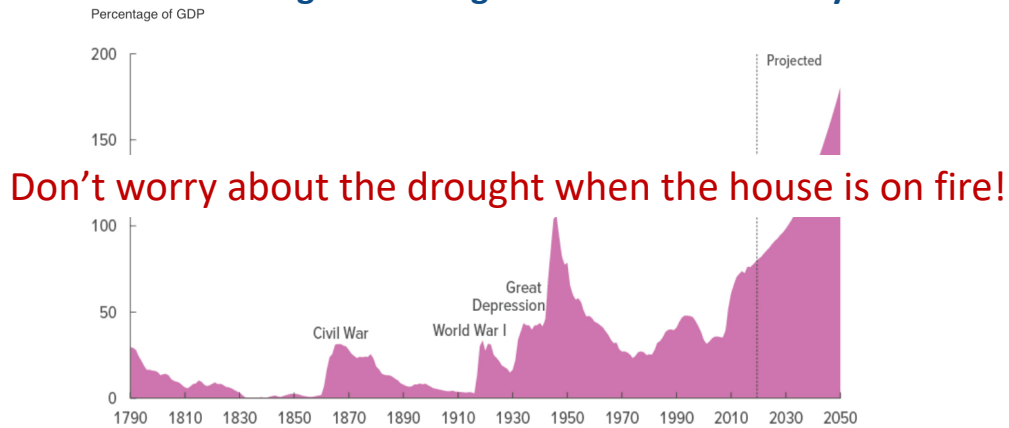


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How Do We Pay for This?

- **Good News: Treasury Interest Rates are Near Zero**
- **Bad News: The Long-term Budget Outlook was already a Mess**



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CBO, "The Budget and Economic Outlook: 2020-2030," 1/2020

25

Monetary Policy – Federal Reserve

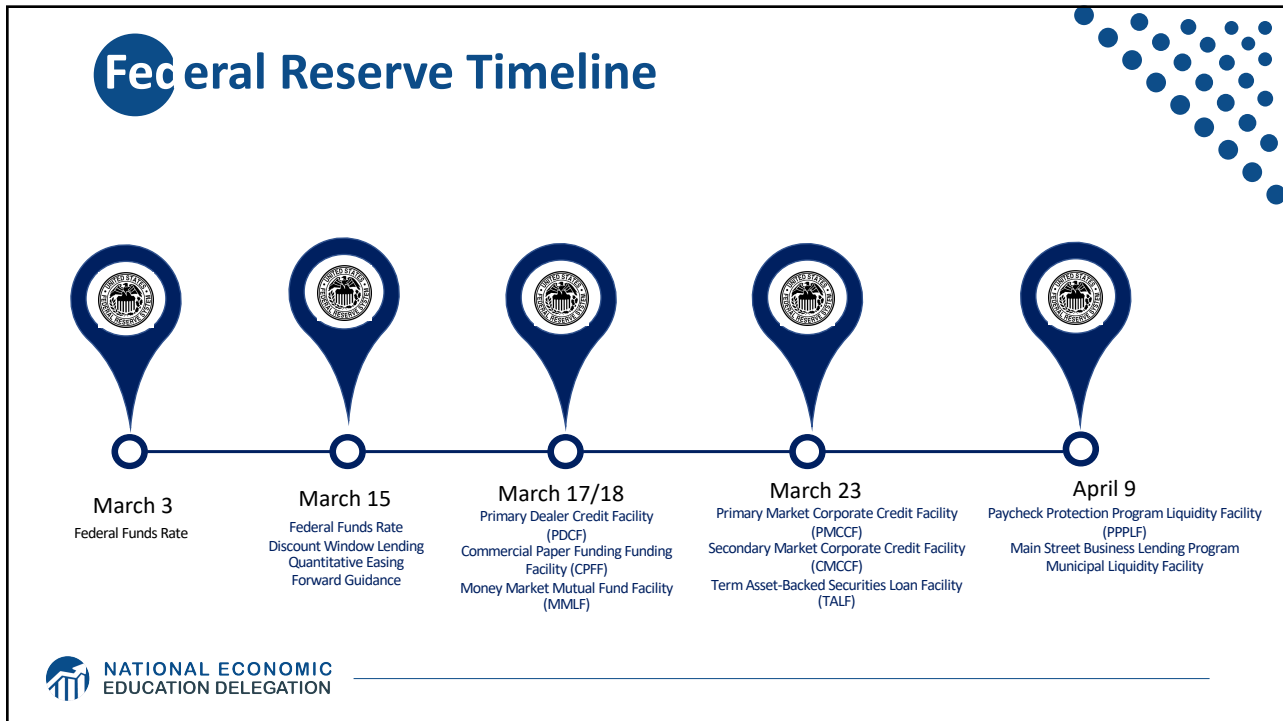
- **Two primary objectives**
 - Stabilize the economy
 - Maintain liquidity of the system
- **Actions in three forms:**
 - Traditional interest rate stimulus
 - Inject cash into the system
 - Shore up existing debt and structures



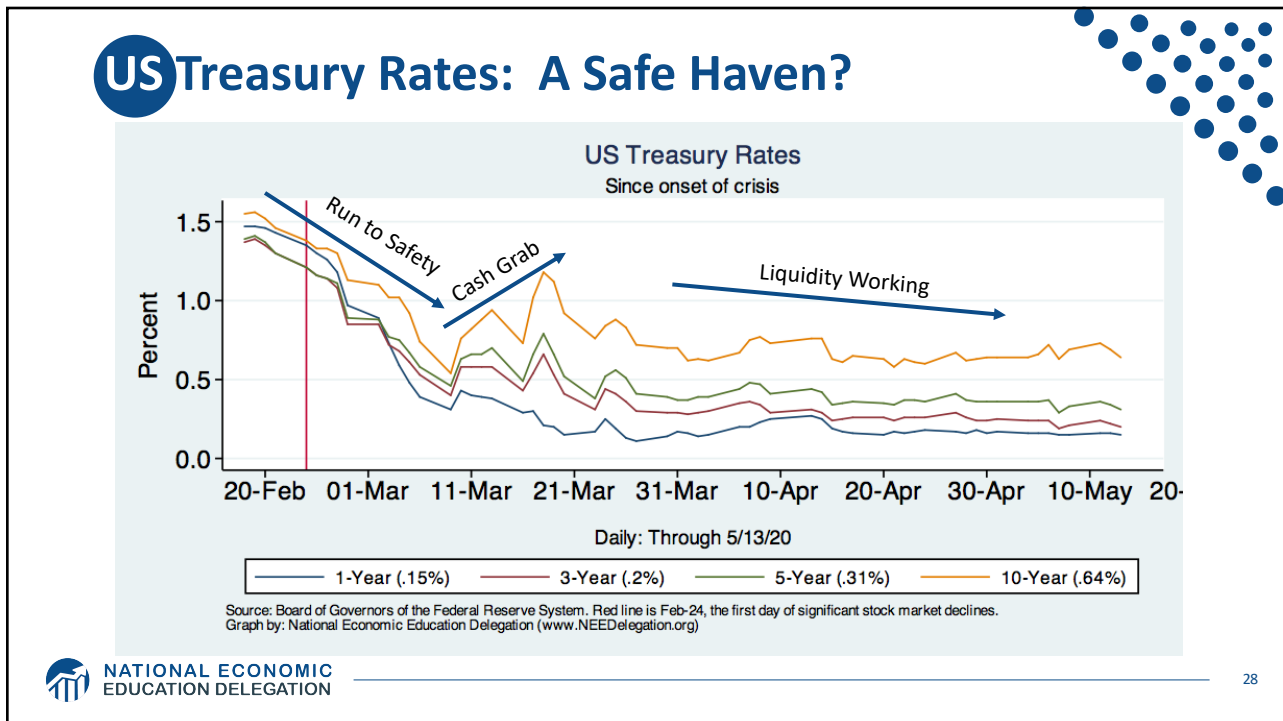
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26

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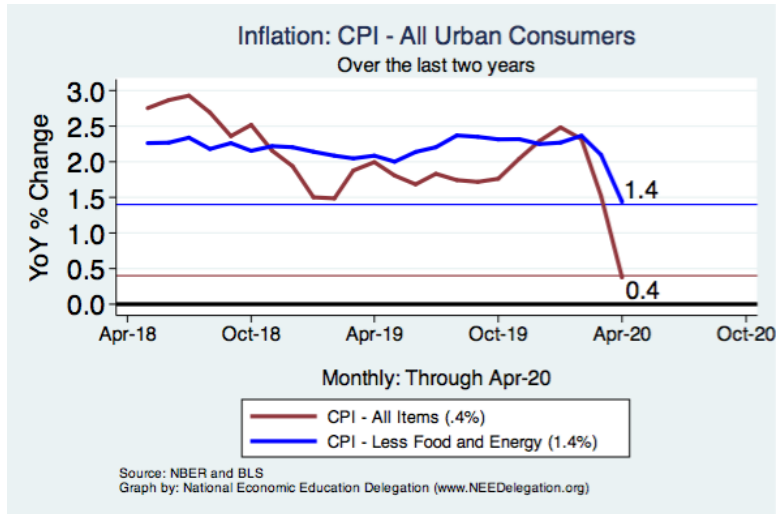


27



28

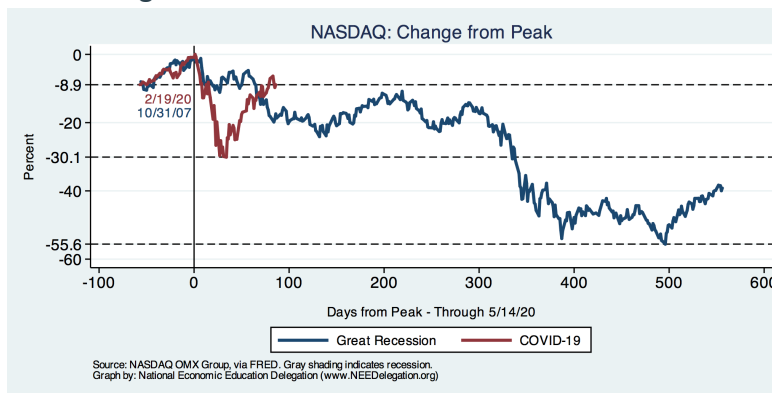
Inflation – Deflation is More Likely



If it shows up:
 It's not one of our top 2 problems.
 1) Illness/Deaths
 2) Employment

Thoughts on Policies to Date

- **Costs are enormous, but we are doing the right thing!**
 - And we are doing it **VERY QUICKLY!**



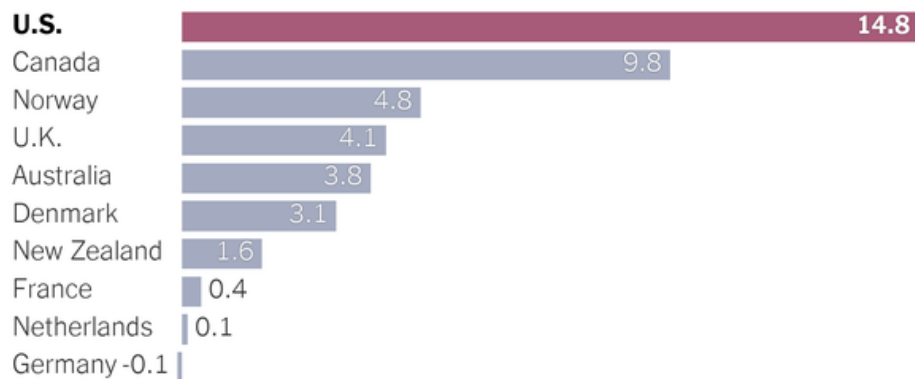
Thoughts on Policies to Date

- **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?
 - Corporate or otherwise?
 - Right strategy to maintain employee-employer ties?
 - **What about states and local governments?**

31

Other Countries Are Doing it Better

Unemployment claims as share of the labor force



By The New York Times | Source: Brookings

32

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



CA: \$54B Budget Shortfall?

* Estimated based on CBPP calculations
 Source: Pre 2014: CBPP survey; 2020 and following: CBPP calculations

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

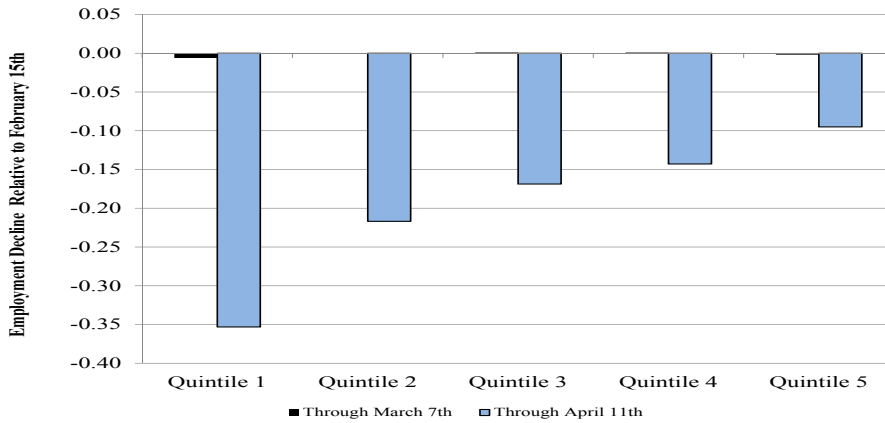
33

Coronavirus and Inequality

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

34

Employment Change by Income Quintile



Powell: 40% of workers losing their jobs earned less than \$40,000/year.

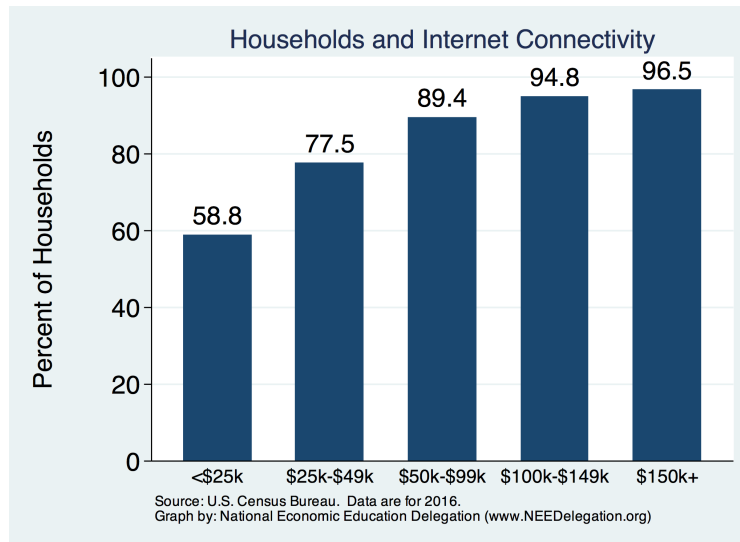


Source: Cajner, Crain, Dexter, Grigsby, Hamins-Puertolas, Hurst, Kurtz, and Yidirmaz

35

35

Home Schooling – The Digital Divide Issue



36

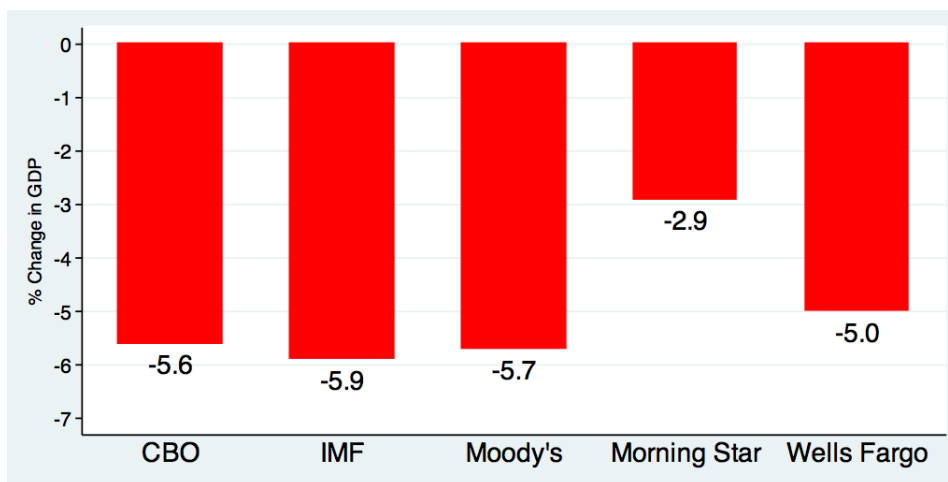
36

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.

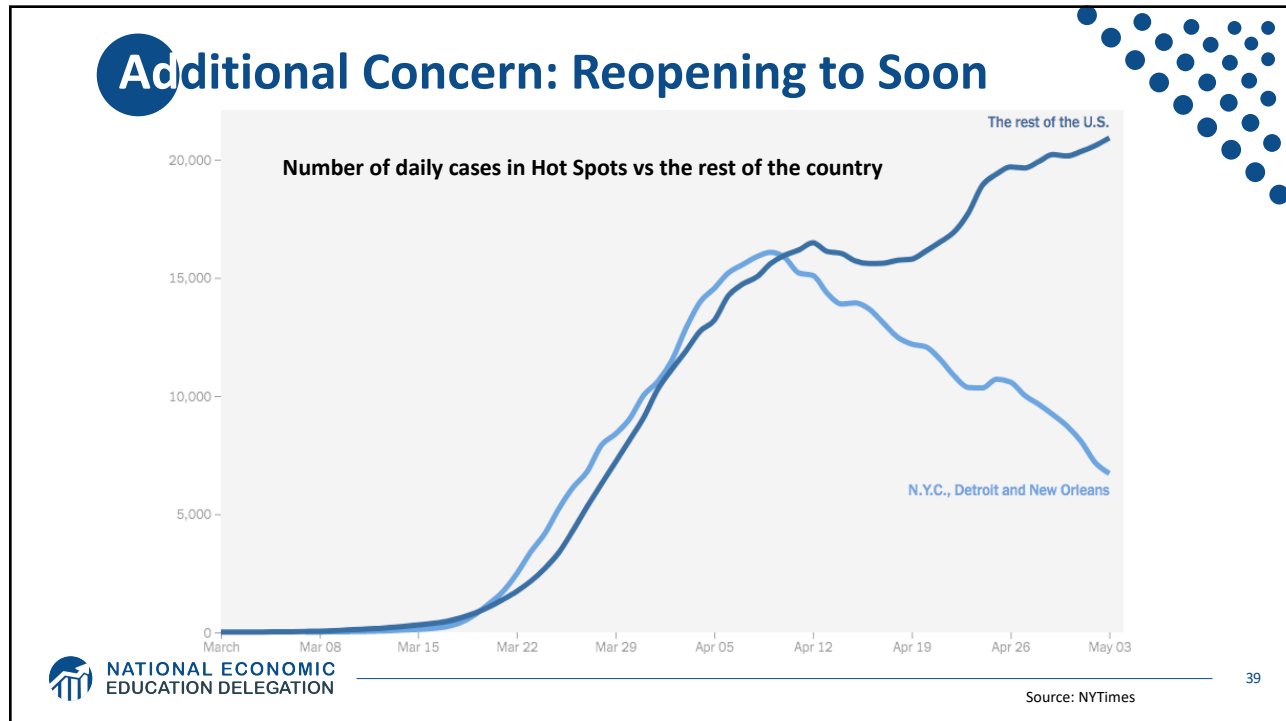
37

GDP Growth Projections for 2020



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

38



39

Conclusion

- **COVID-19 is health crisis that has macroeconomic implications.**
 - With enormous built-in inequities.
- **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.**
- **How do we plan for the next pandemic?**
 - What are the lessons for our safety net?

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40

Thank you!

Any Questions?

www.NEEDelegation.org

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41

41

Some Big Concerns

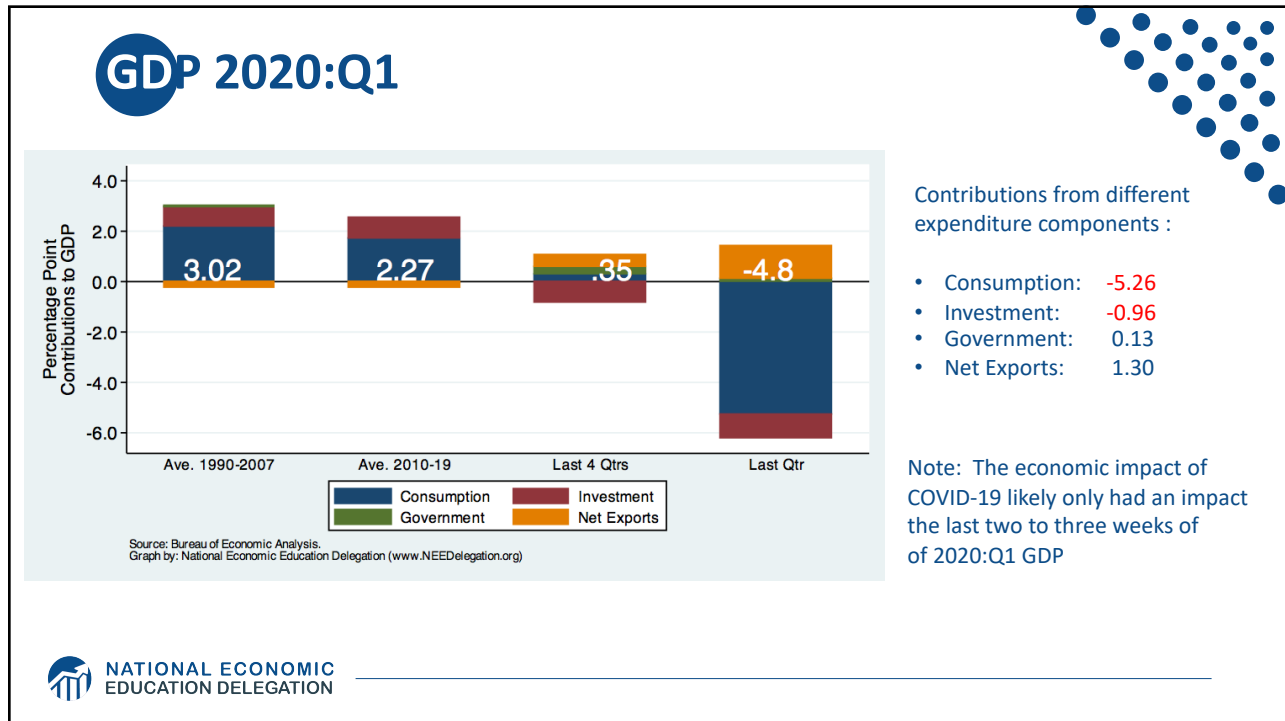
- P. Krugman, “Right now the economy is in the equivalent of a medically induced coma...” (*NYTimes*, 4/16).
- We are trying to keep the patient alive, but damage is being done;
 - How many personal and business bankruptcies?
 - What is the future of companies that bring many people together?
 - Cruise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



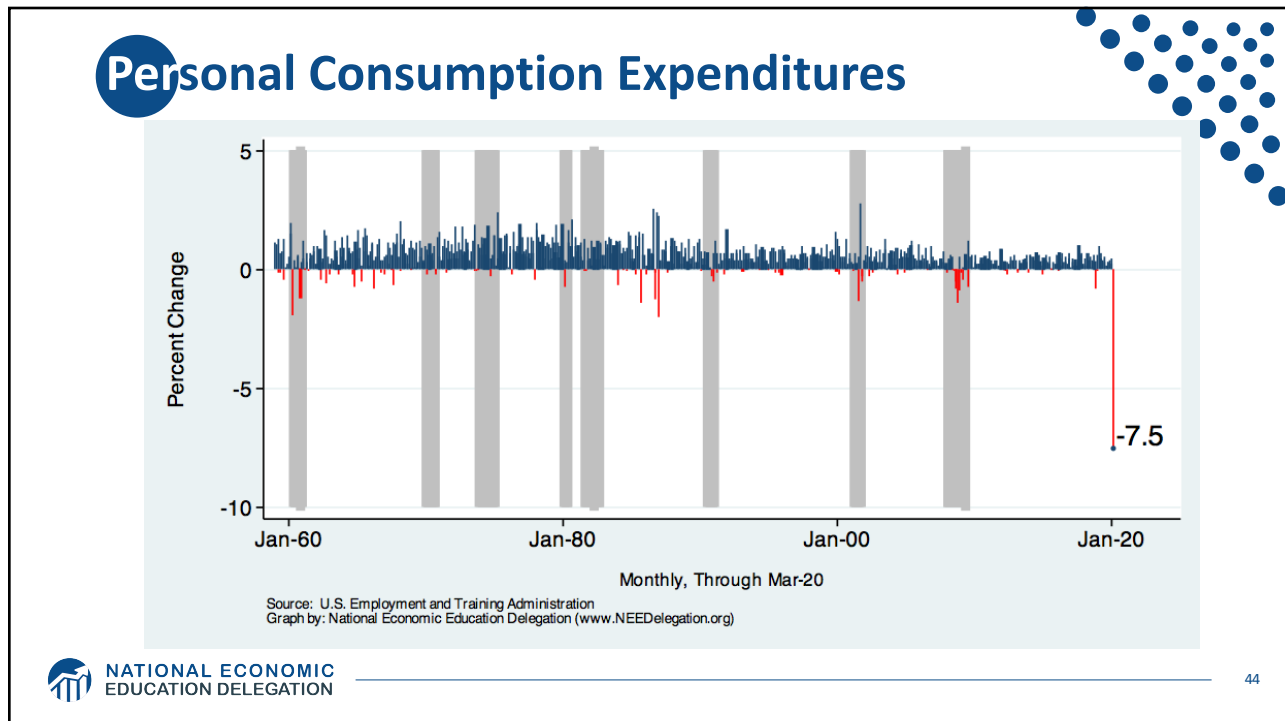
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42

42

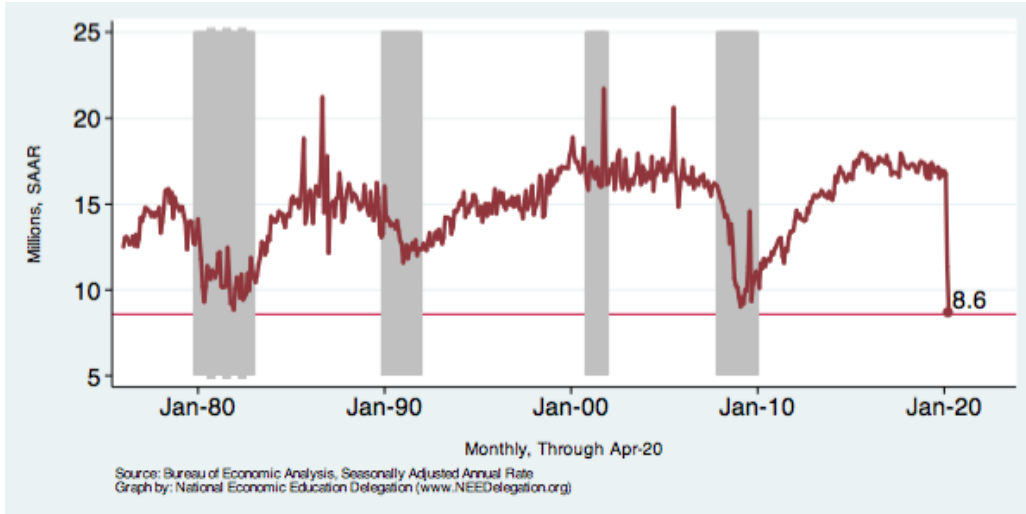


43



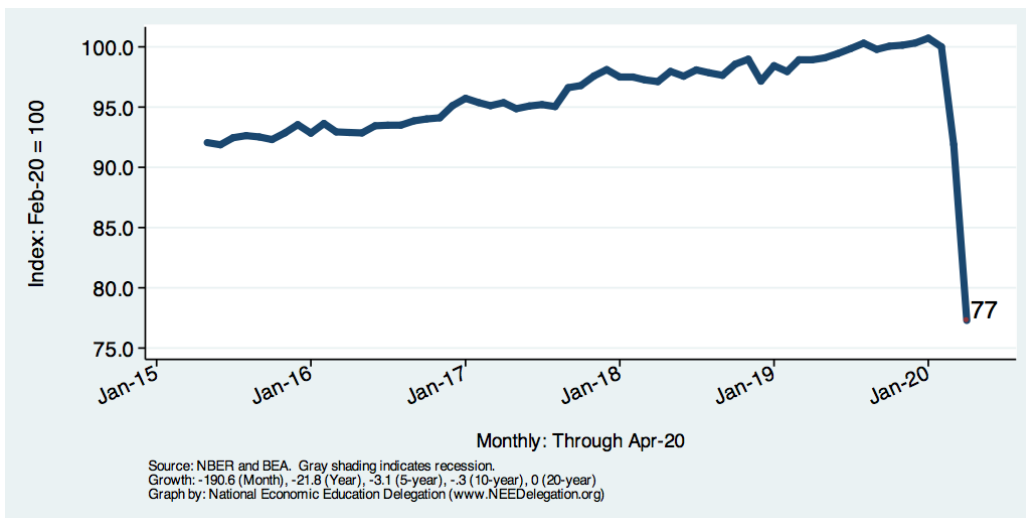
44

Automobile and Light Truck Sales



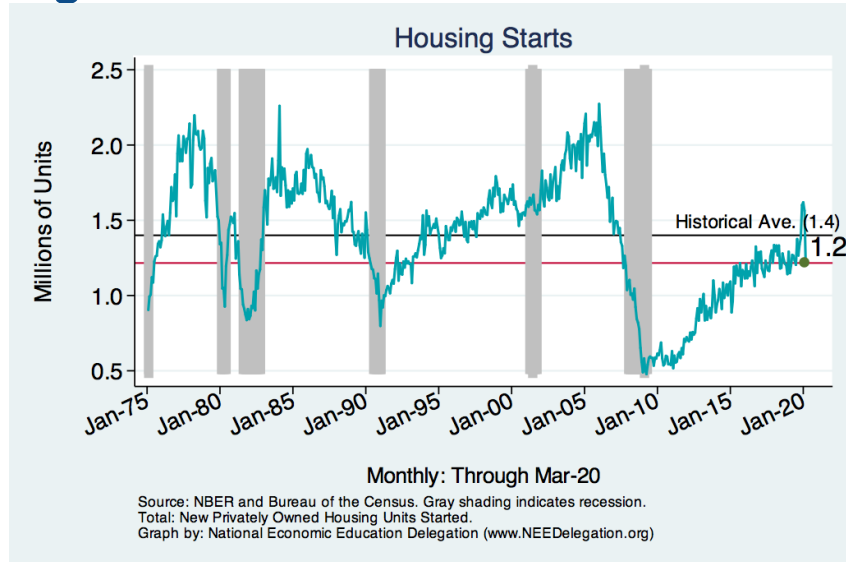
45

Retail Sales



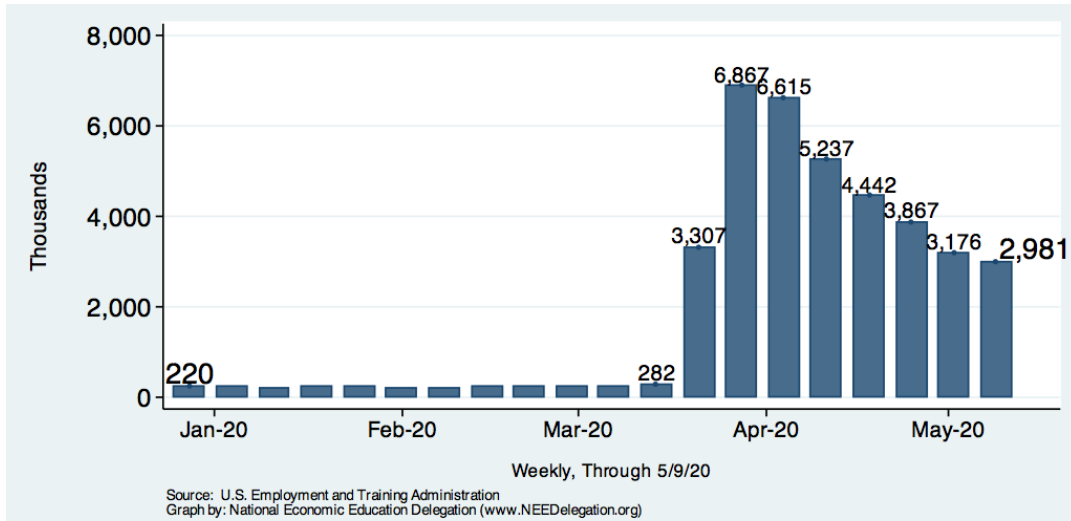
46

Housing Starts Plummet: Down 25% in March

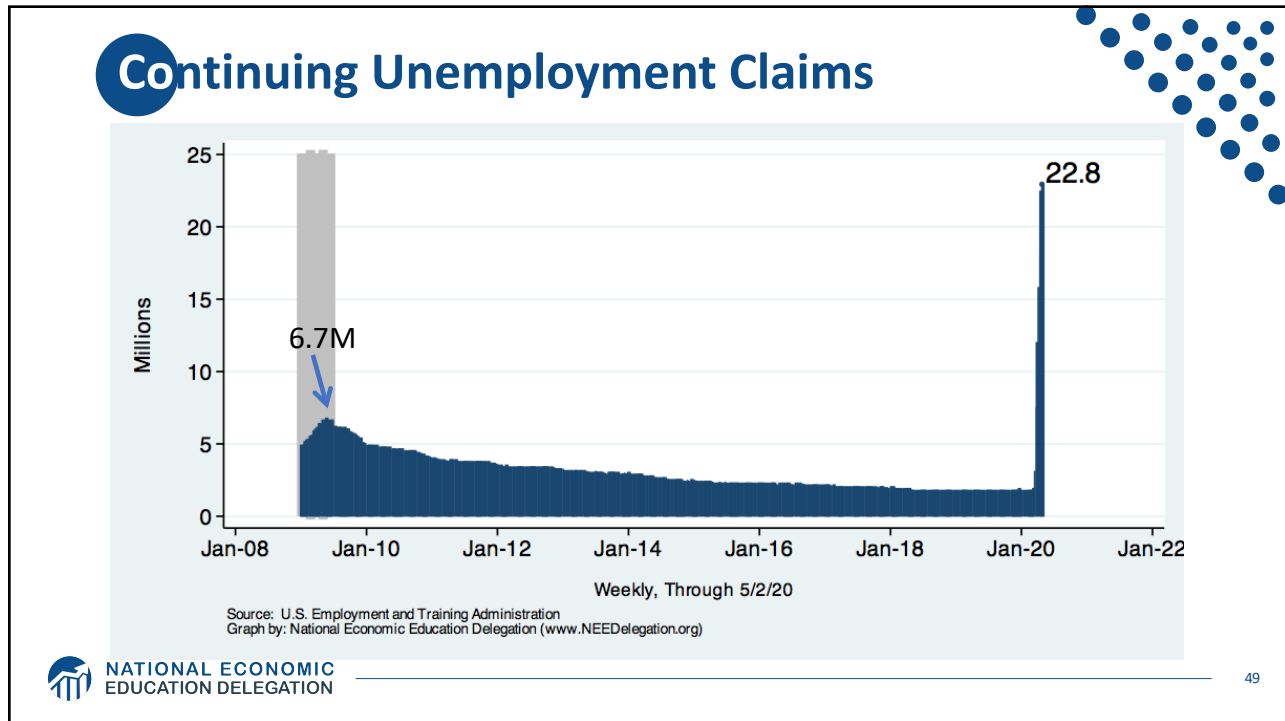


47

Weekly New Unemployment Claims



48



49

Employment: The Word of the Month

ADP National Employment Report®
April 2020

↓ -20,236,000
Total employment change in U.S. nonfarm private business sector from March to April.

Change by Business Size

- Small (1-49 Employees) ↓ -6,005,000
- Midsize (50-499 Employees) ↓ -5,269,000
- Large (500+ Employees) ↓ -8,963,000

Change by Sector & Industry

- Professional & Business ↓ -1,167,000
- Financial Activities ↓ -216,000
- Information ↓ -309,000
- Trade, Transportation & Utilities ↓ -3,440,000
- Other Services ↓ -1,298,000
- Leisure & Hospitality ↓ -8,607,000
- Education & Healthcare ↓ -971,000

Goods-producing Sector
↓ -4,229,000

- Natural Resources & Mining ↓ -78,000
- Manufacturing ↓ -1,674,000
- Construction ↓ -2,477,000

Service-providing Sector
↓ -16,007,000

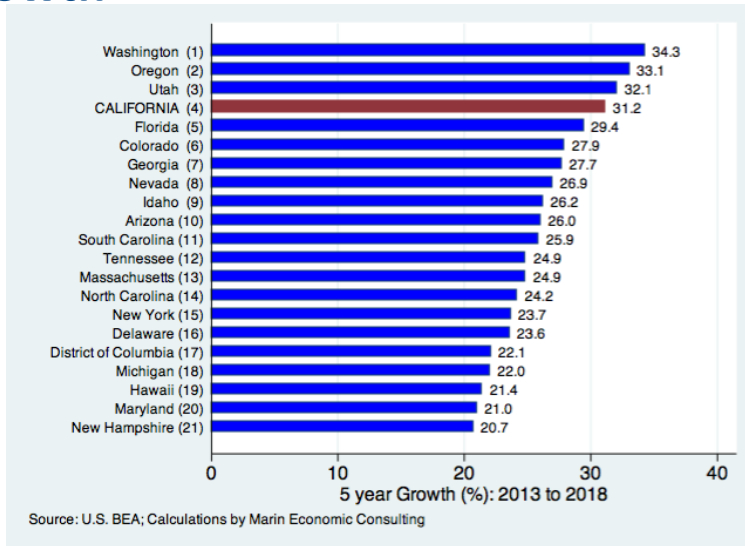
“Job losses of this scale are **unprecedented**. The total number of job losses for the month of April alone was more than double the total jobs lost during the Great Recession,” said Ahu Yildirmaz, co-head of the ADP Research Institute.

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

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50

GSP Growth

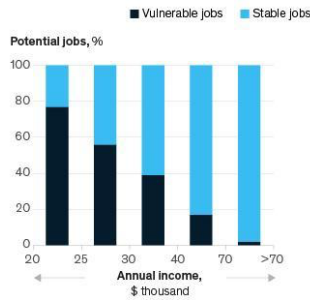
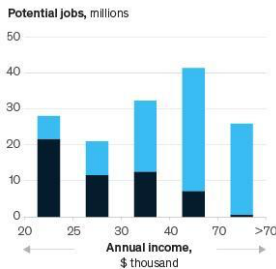


For More Graphs on California's Economy

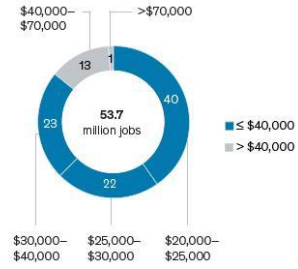
• <https://needelegation.org/LocalGraphs/>

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

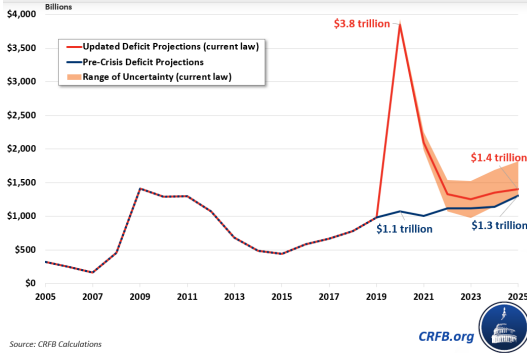
- 40% of Americans don't have the cash to pay for a \$400 emergency expense
- 25% have no retirement or pension savings
- Less than 60% can answer at least three basic financial literacy questions correctly.
- 1 in 5 of adults knows someone impacted by the opioid crisis.
- About 25% of borrowers who 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,

Federal Budget Implications

Federal Deficit Will Reach Record Levels

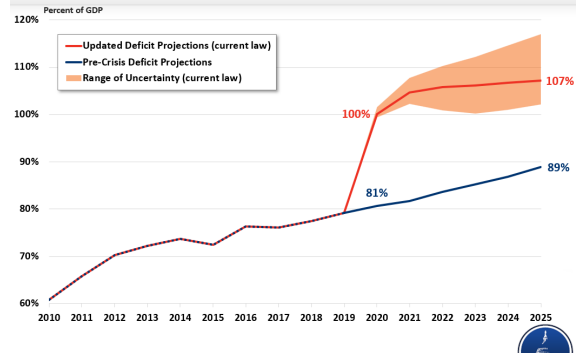


Source: CRFB Calculations



Deficit may be nearly 20% of GDP

Debt Will Equal Size of Economy This Year



Source: CRFB Calculations



Debt will likely equal GDP this year



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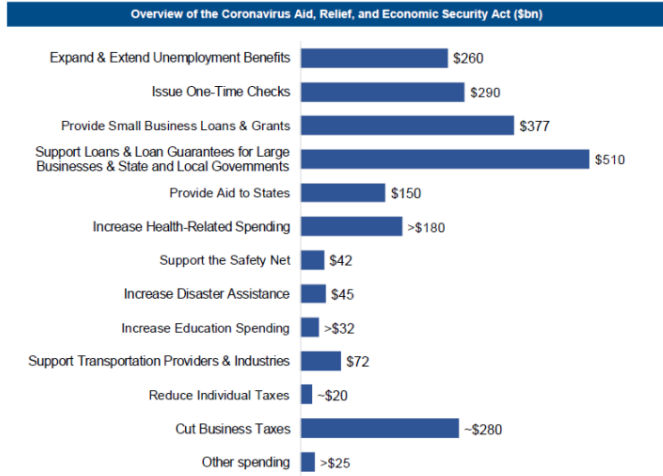
Many Policy Alternatives

- **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...**



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The Cares ACT



Source: Investment Strategy Group, Committee for a Responsible Federal Budget, Bill Text.

57

Aid to Households

Payments to Individuals		
\$269bn (1.3% of GDP)		
Eligibility	Program	Terms & Process
- Taxpayers with incomes up to \$99,000 (or \$198,000 joint) based on 2019 tax return (2018 if not available)	- Tax rebate of \$1,200 (or \$2,400 for a joint tax return) - Additional \$500 rebate per child	- 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
- Individuals qualifying for standard unemployment compensation - Individuals not previously qualifying for unemployment compensation, such as contractors and the self-employed	- 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	- Pay is immediate, vs. standard one-week waiting period



58

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

59

Aid to Airlines

Relief for Specific Distressed Sectors		
\$46bn (0.2% of GDP)		
Eligibility	Program	Terms & Process
<ul style="list-style-type: none"> - 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

60

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

61

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

62

SBA Distribution

Distribution of PPP Eligible Firms			
Firm Size	Percent of Firms	Percent of Employment	PPP Loan Size (est)
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

63

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

64

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.



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).

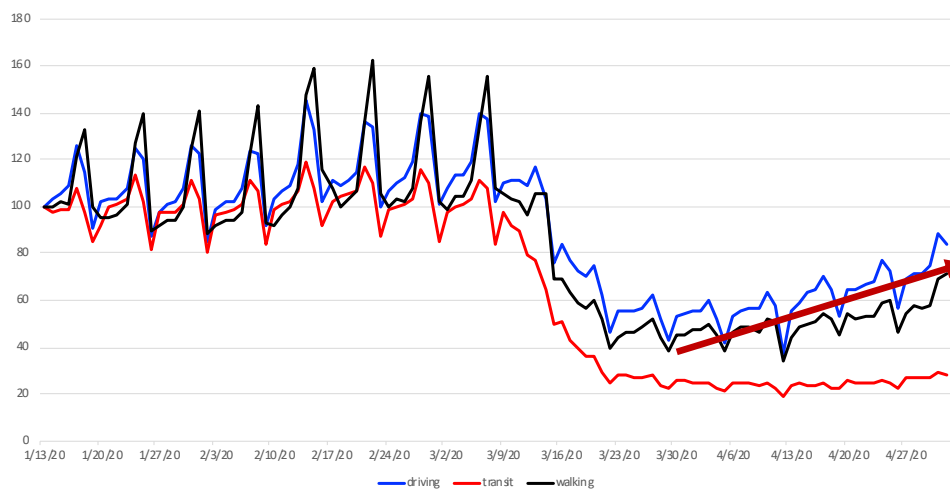


Federal Reserve: Support Corporations and Business

- 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

67

Apple Mobility Trends



68