



COVID-19: Economic Implications and Policy Response

Golden Gate Computer Society

June 22, 2020
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Executive Director, NEED



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.



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
- Scott Baier, Clemson University
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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**



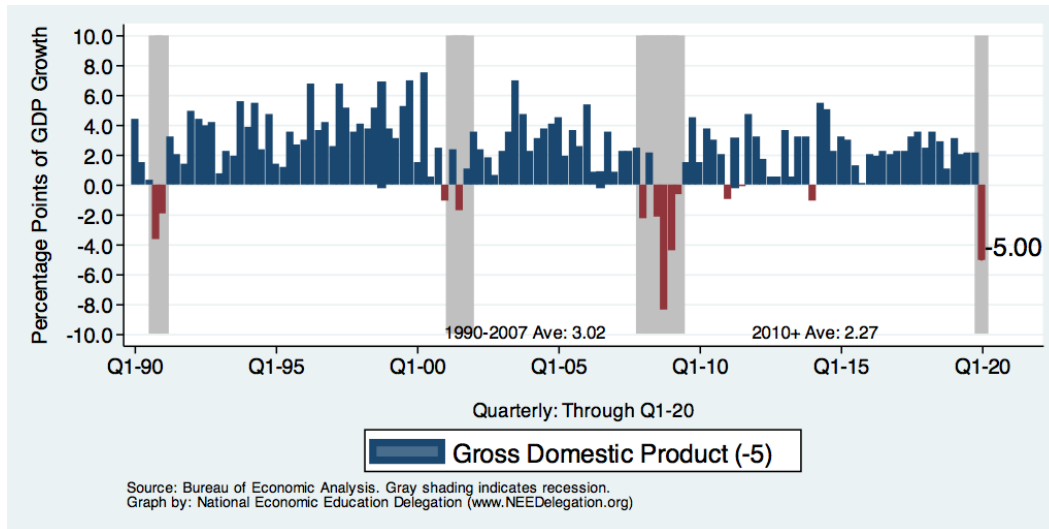
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What is this?

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

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Gross Domestic Product



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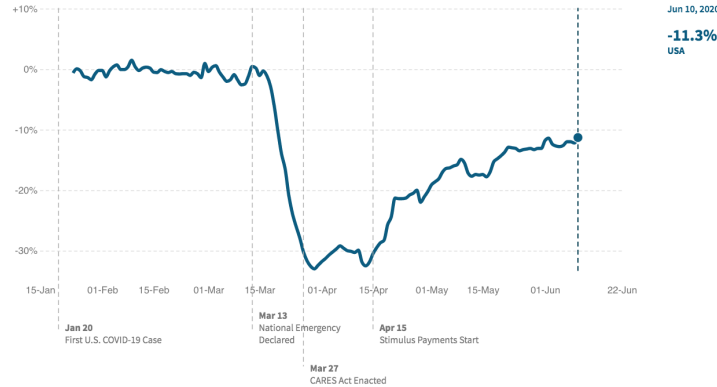
Spending is on the Rise

OPPORTUNITY INSIGHTS ECONOMIC TRACKER

HARVARD UNIVERSITY BROAD INSTITUTE BILL & MELINDA GATES FOUNDATION

Percent Change in All Consumer Spending*

In the United States, as of June 10 2020, total spending by all consumers decreased by **11.3%** compared to January 2020.



*Change in average consumer credit and debit card spending, indexed to January 4-31 2020 and seasonally adjusted. This series is based on data from Affinity Solutions.

last updated: June 17, 2020 next update expected: June 23, 2020

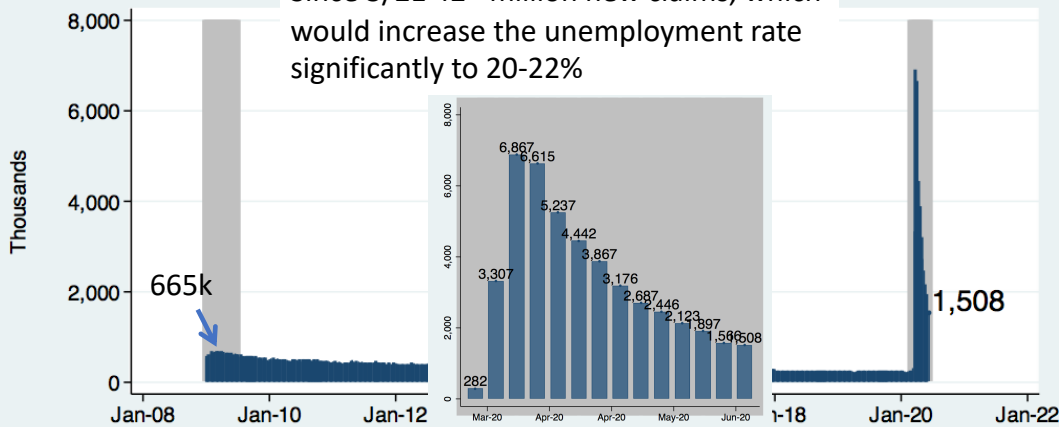
visit tracktherecovery.org to explore



Source: <https://tracktherecovery.org/>

Weekly New Unemployment Claims

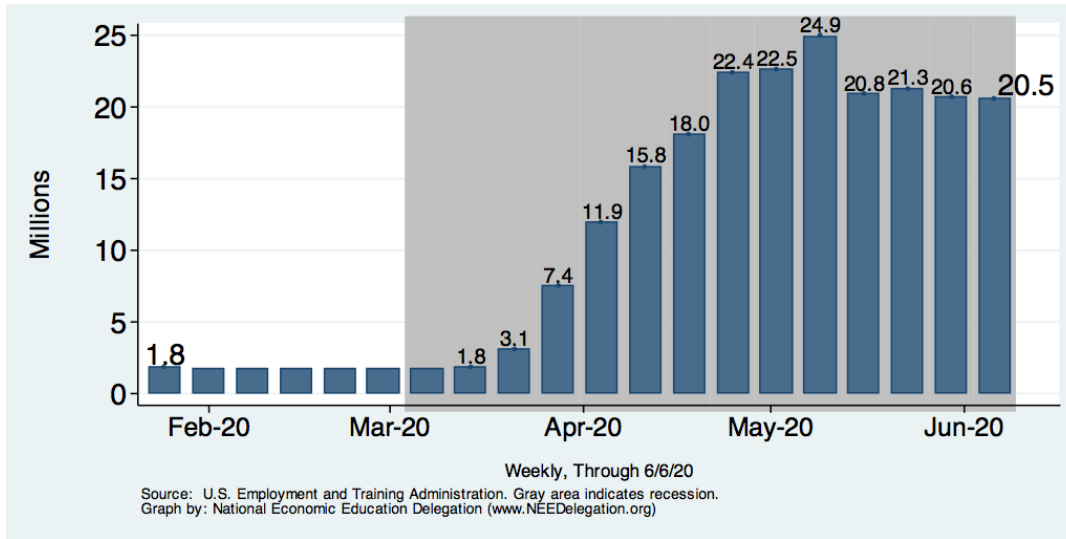
Since 3/21 42+ million new claims, which would increase the unemployment rate significantly to 20-22%



Source: U.S. Employment and Training Administration. Gray shading indicates recession. Graph by: National Economic Education Delegation (www.NEEDelegation.org)

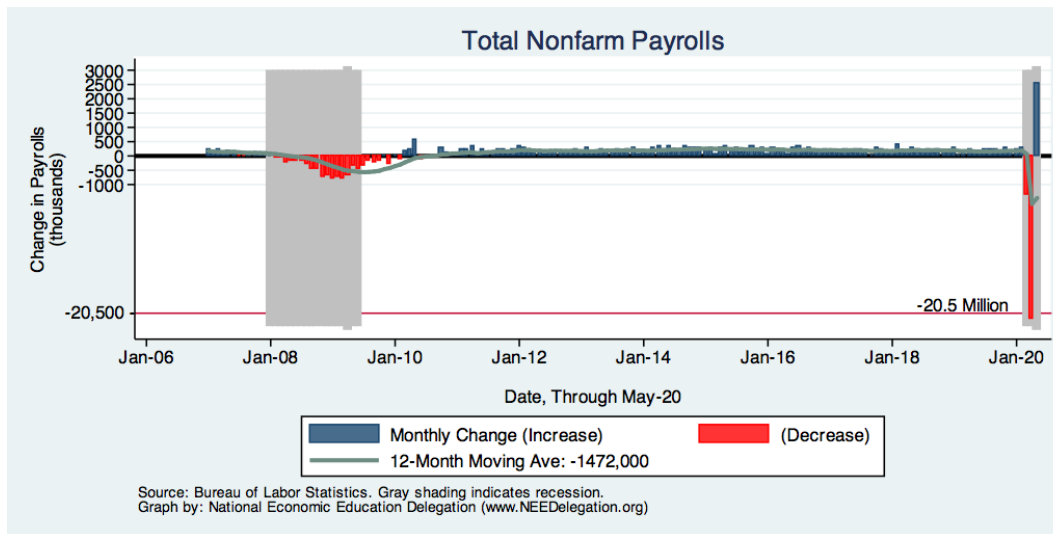


Continuing Unemployment Claims

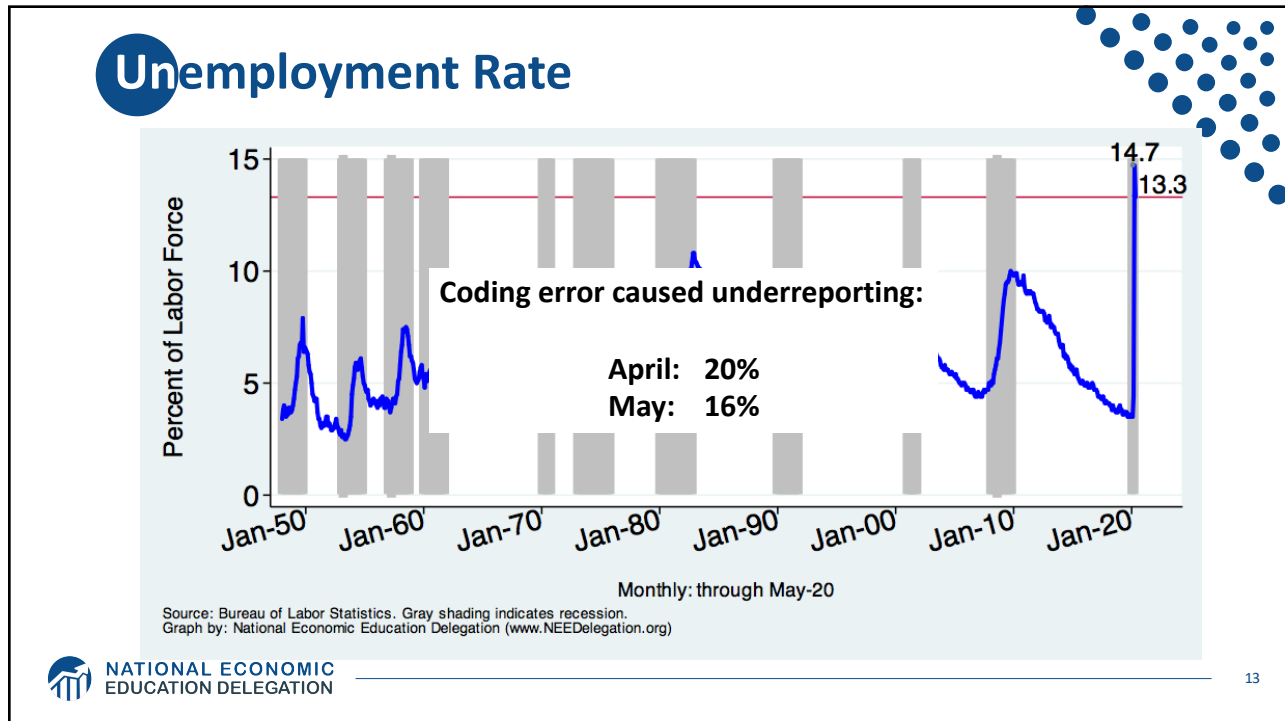


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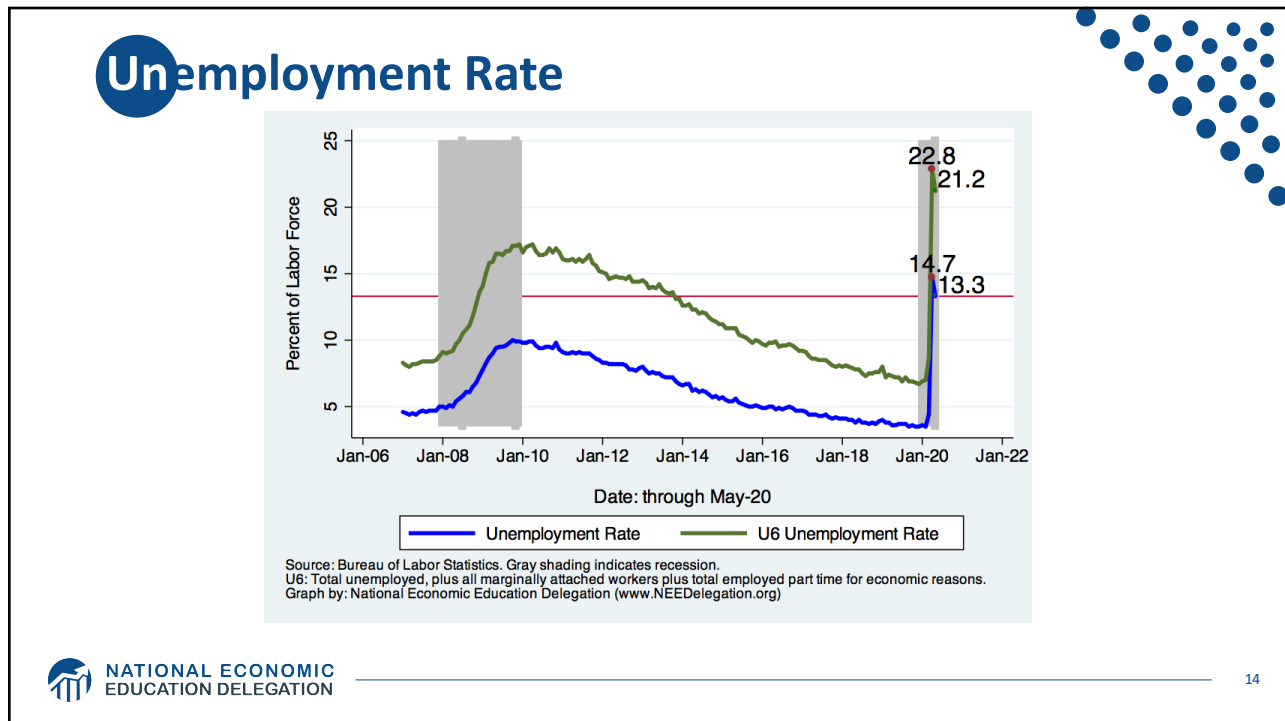
Monthly Changes in Nonfarm Employment



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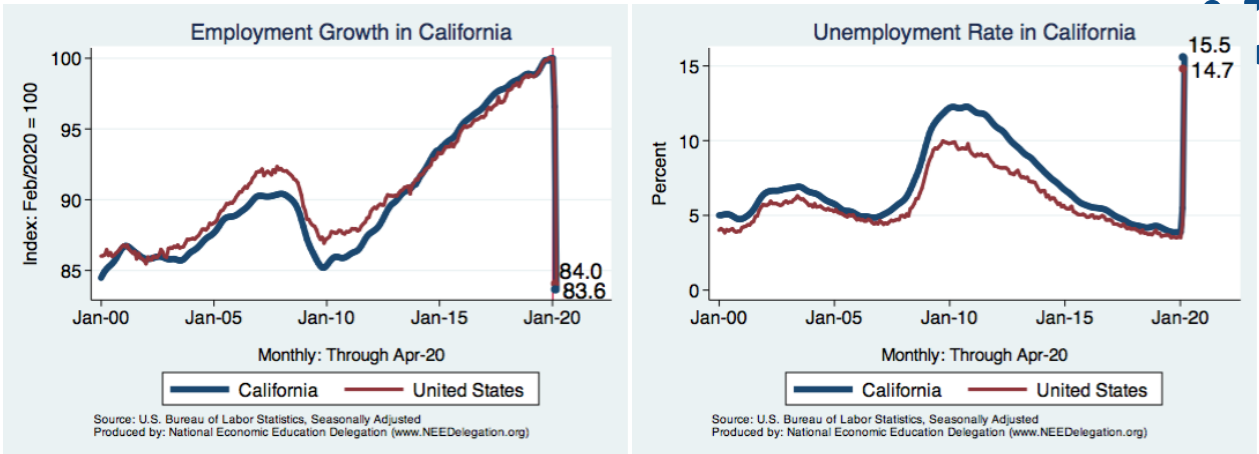


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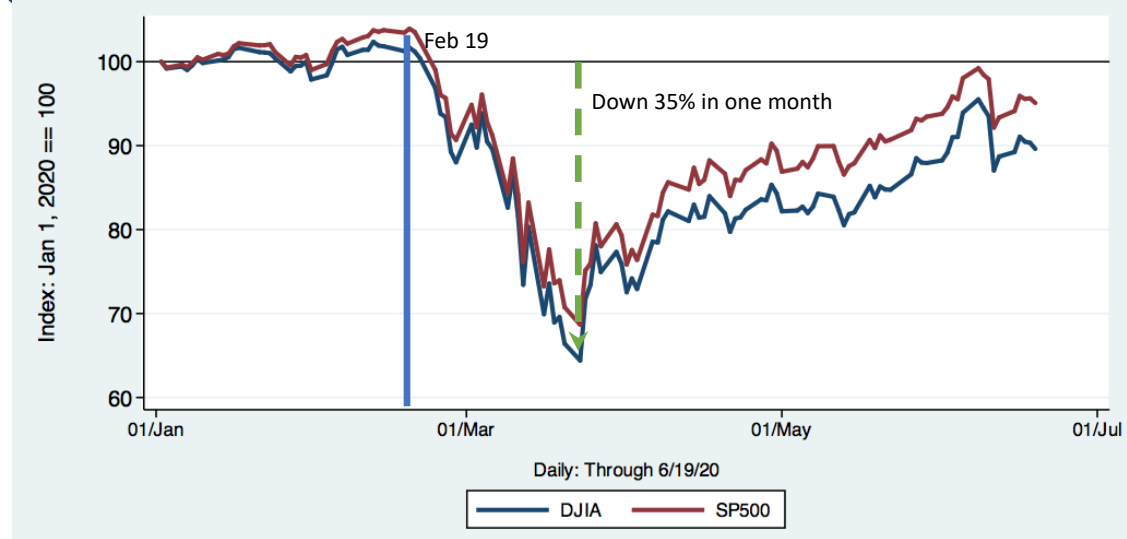
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Employment in California



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DJIA and S&P 500



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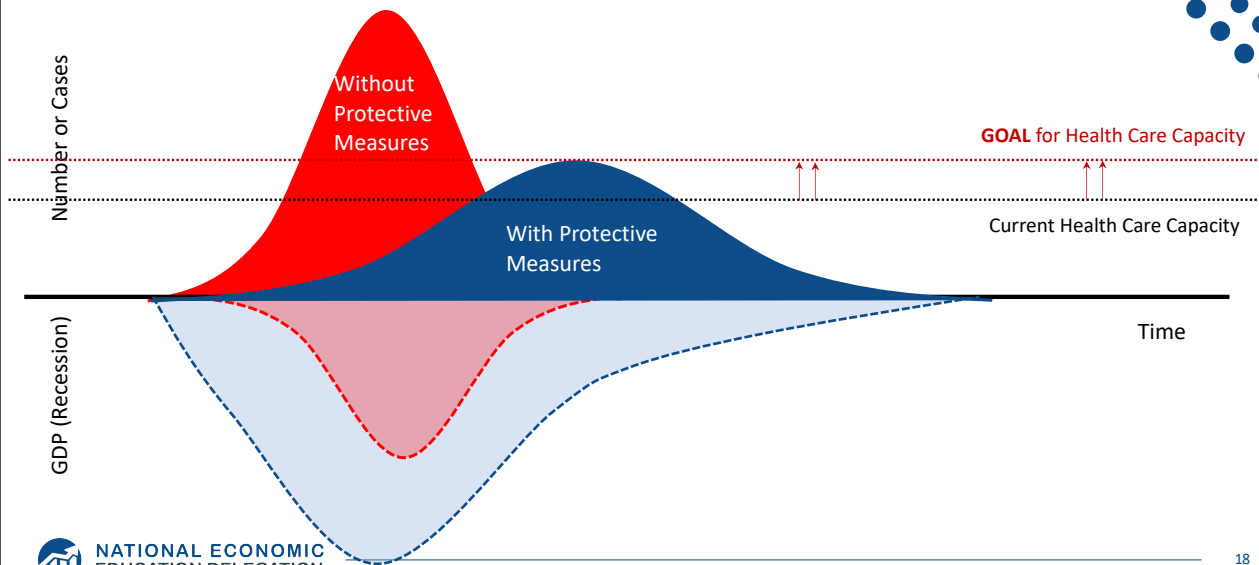
Process for Dealing with a Natural Disaster

- **Mitigation of effects**
 - Social Policy: SIP/Social Distancing
- **Tend to the vulnerable**
 - Fiscal Policy
- **Shore up structures**
 - Fiscal and Monetary
- **Rebuild**
 - Stimulus

There are corrolaries in this crisis.

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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

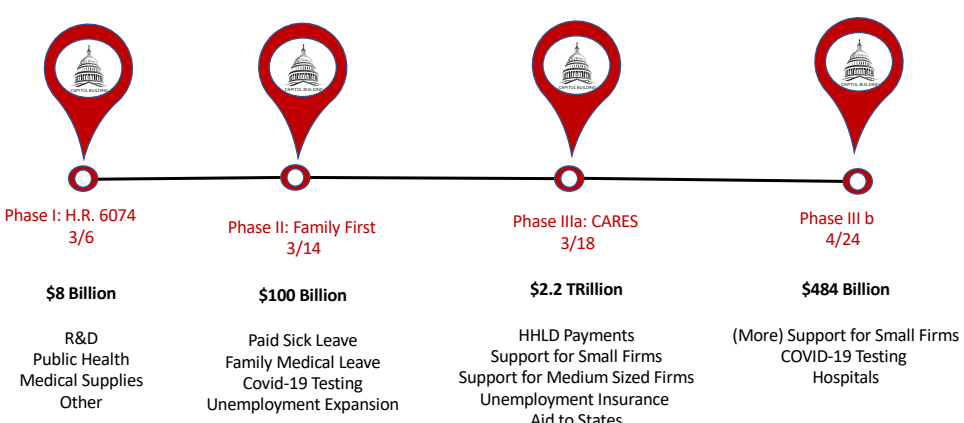


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<https://twitter.com/BetseyStevenson/status/1242180499566669828>

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Fiscal Policy Timeline – Social Insurance

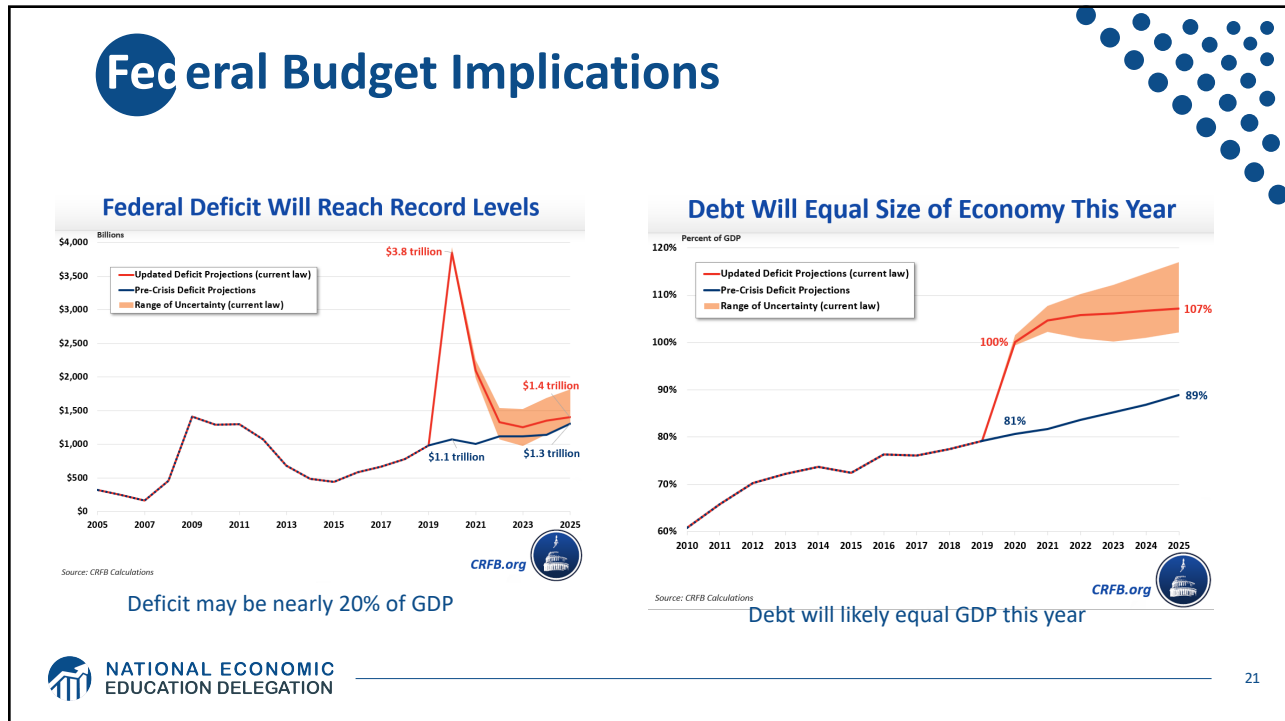


Phase I: H.R. 6074 3/6	Phase II: Family First 3/14	Phase IIIa: CARES 3/18	Phase III b 4/24
\$8 Billion	\$100 Billion	\$2.2 Trillion	\$484 Billion
R&D Public Health Medical Supplies Other	Paid Sick Leave Family Medical Leave Covid-19 Testing Unemployment Expansion	HHLD Payments Support for Small Firms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

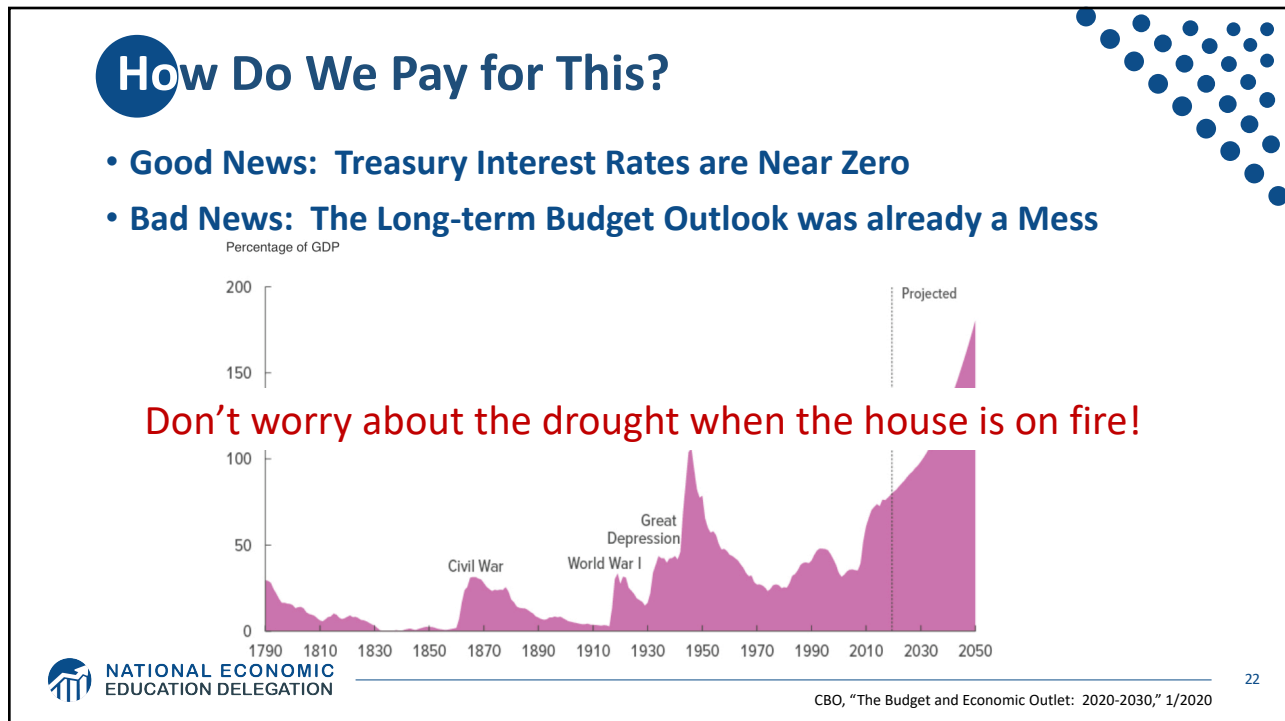


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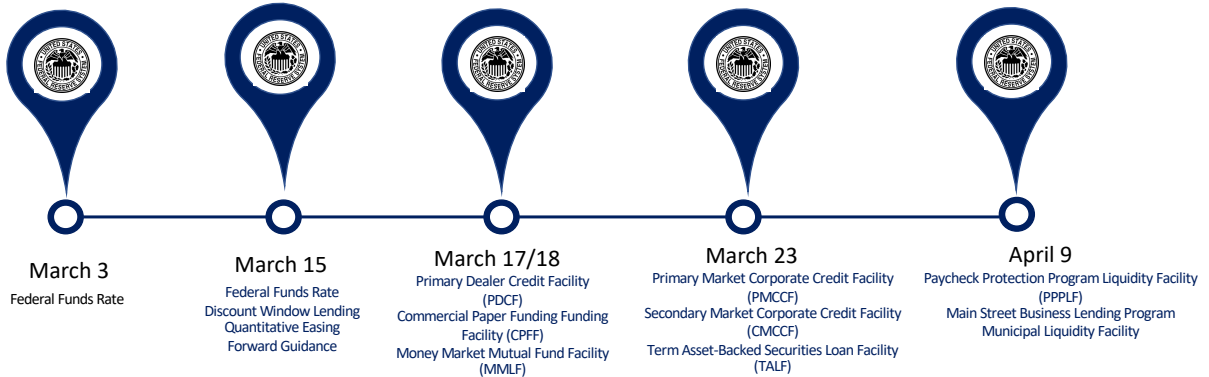
Monetary Policy – Federal Reserve

- **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

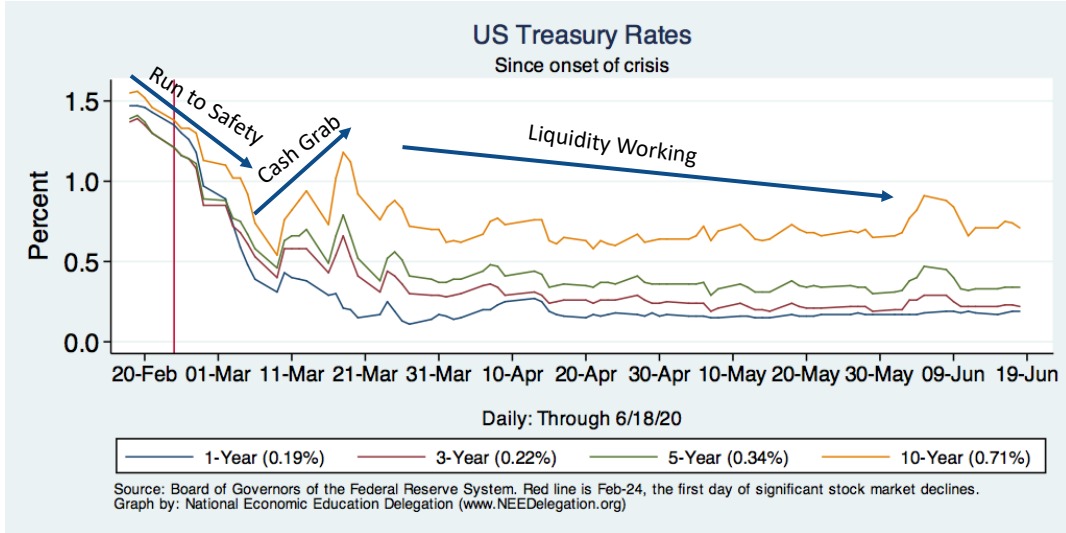
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Federal Reserve Timeline



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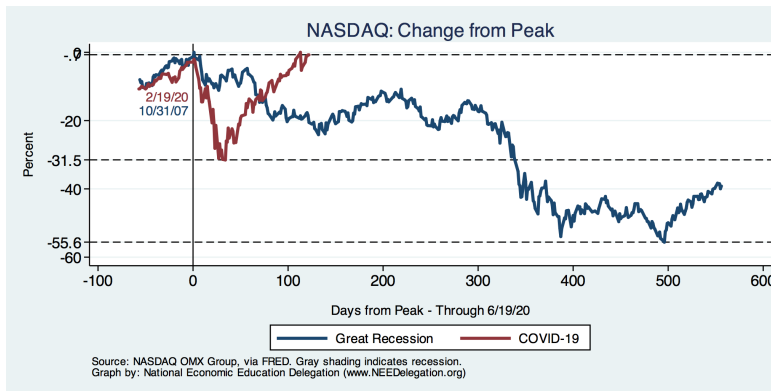
US Treasury Rates: A Safe Haven?



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Thoughts on Policies to Date

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



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Thoughts on Policies to Date

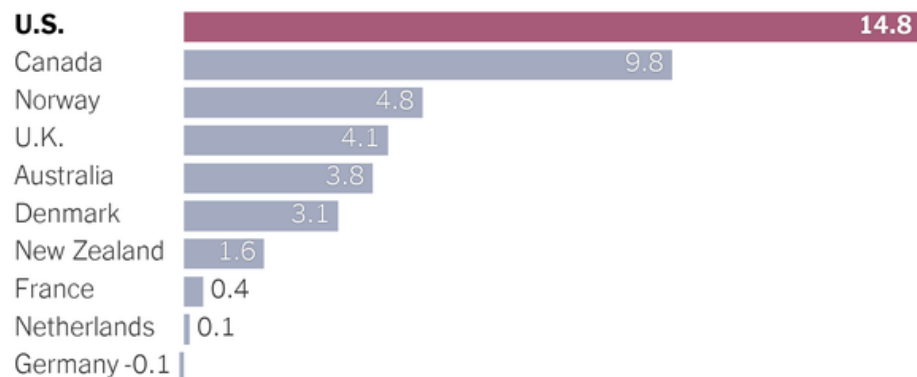
- **Costs are enormous, but we are doing the right thing!**
 - And we are doing it **VERY QUICKLY!**
- **Monetary policy: Heroic! A+**
- **Fiscal policy grade: Emergency Pass**
 - Direct cash payments
 - Are they really getting into the hands of those most in need?
 - Corporate or otherwise?
 - Right strategy to maintain employee-employer ties?
 - What about states and local governments?



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Other Countries Are Doing it Better

Unemployment claims as share of the labor force



By The New York Times | Source: Brookings



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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



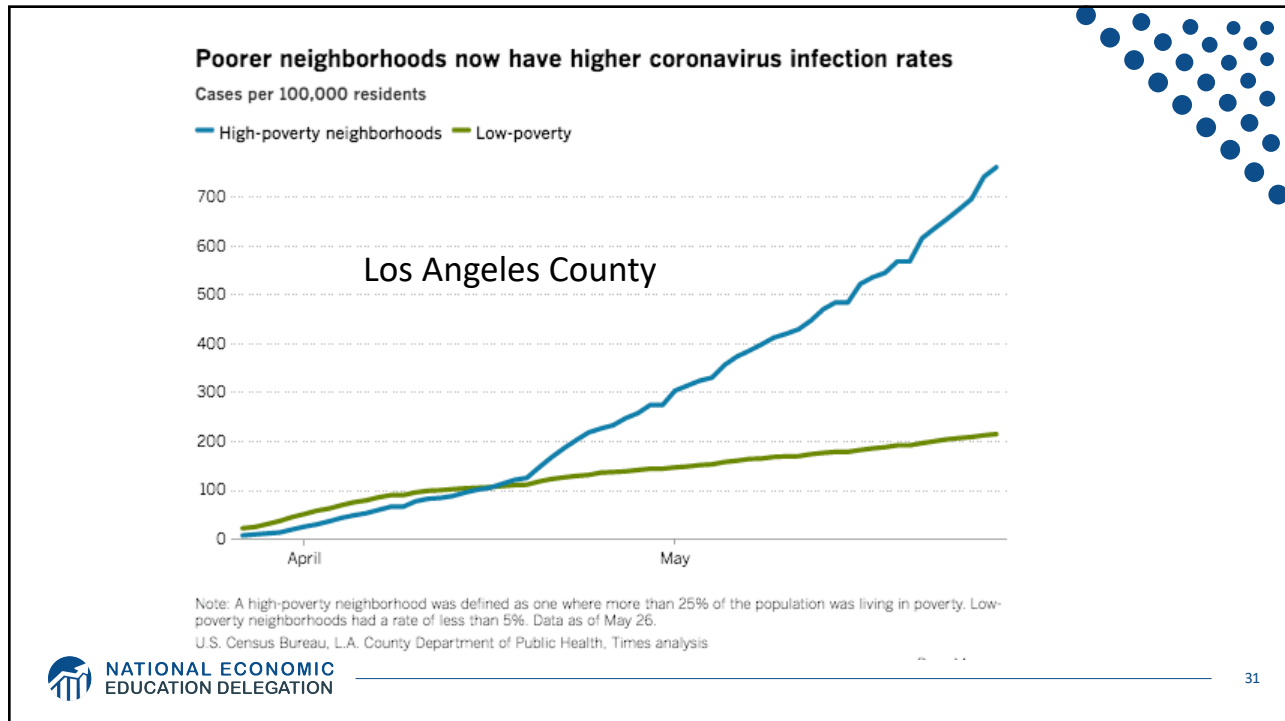
CA: \$54B Budget Shortfall?

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

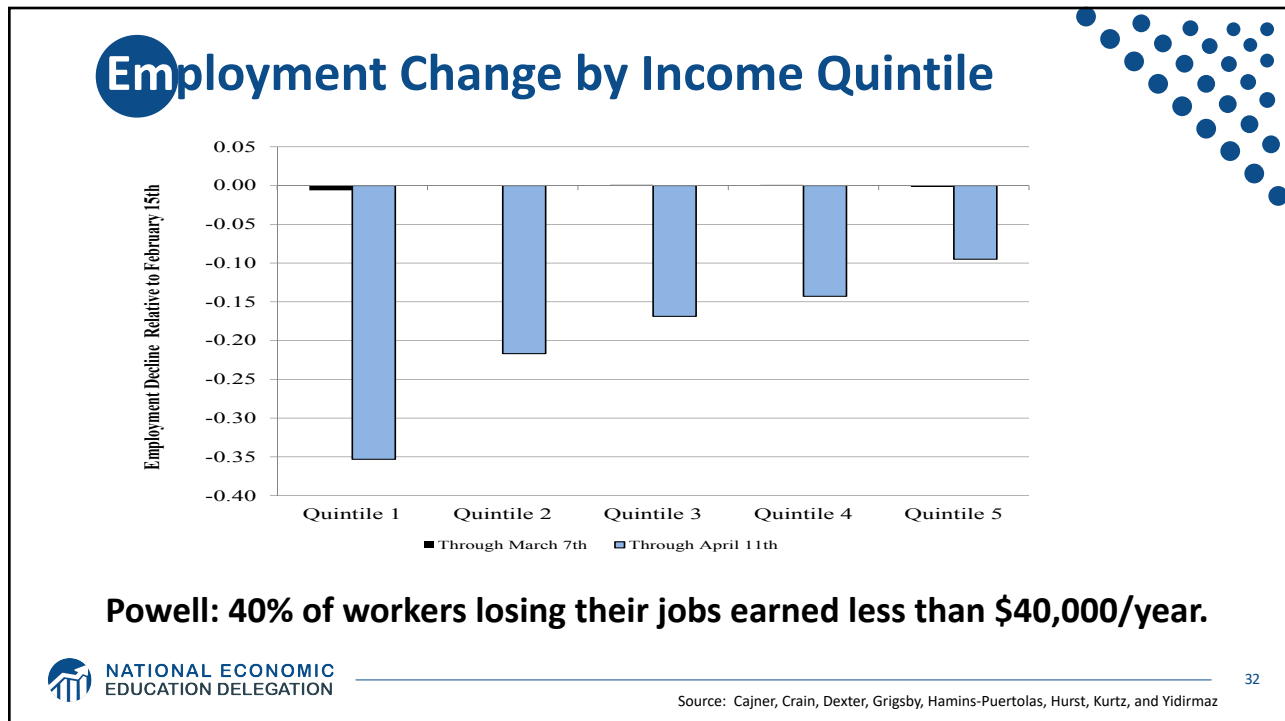
CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

Coronavirus and Inequality

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



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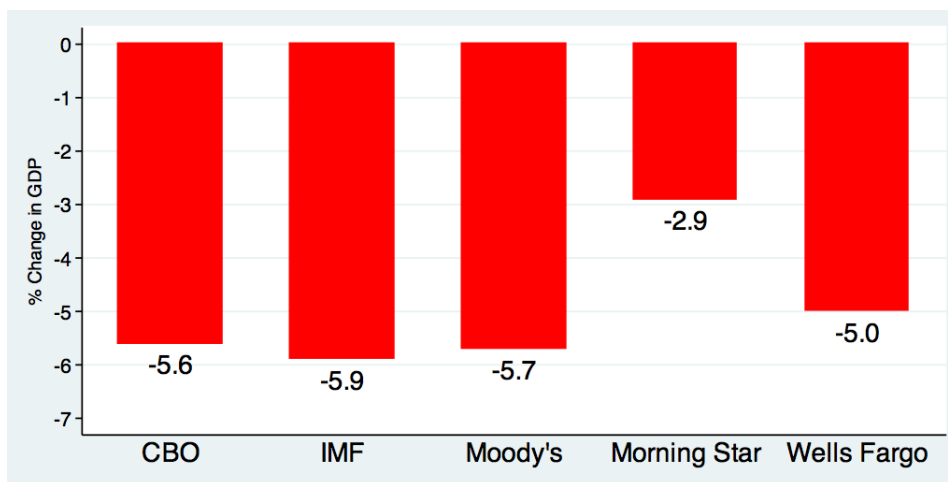
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What does the future bring?

- **Depends on ties between employers and employees.**
- **Further government policy**
 - Aid to state and local governments.
 - More aid to the vulnerable.
 - Ultimately stimulus – but when?
- **Structural changes to the economy?**
 - More telecommuting & telehealth.
 - More rapid adoption of technology.
 - The way we buy things.
- **A potentially dangerous reopening.**
 - Deaths, loss of public trust, costs to businesses.

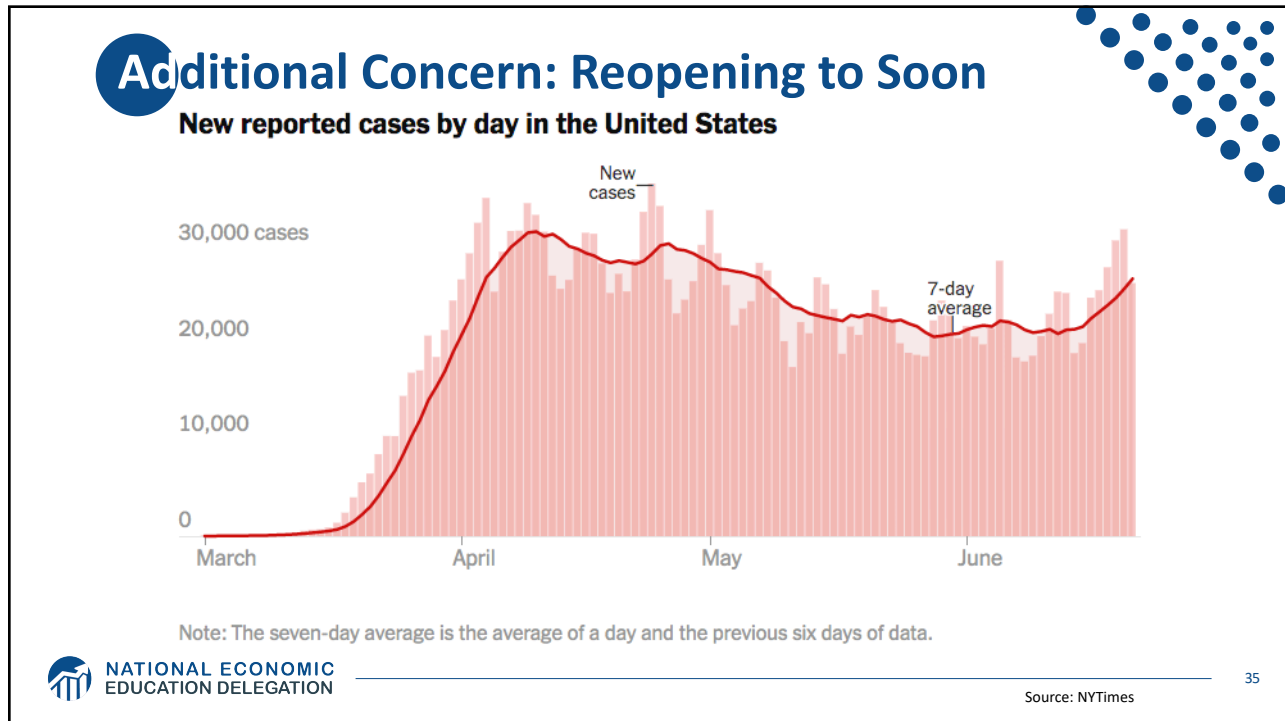
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GDP Growth Projections for 2020

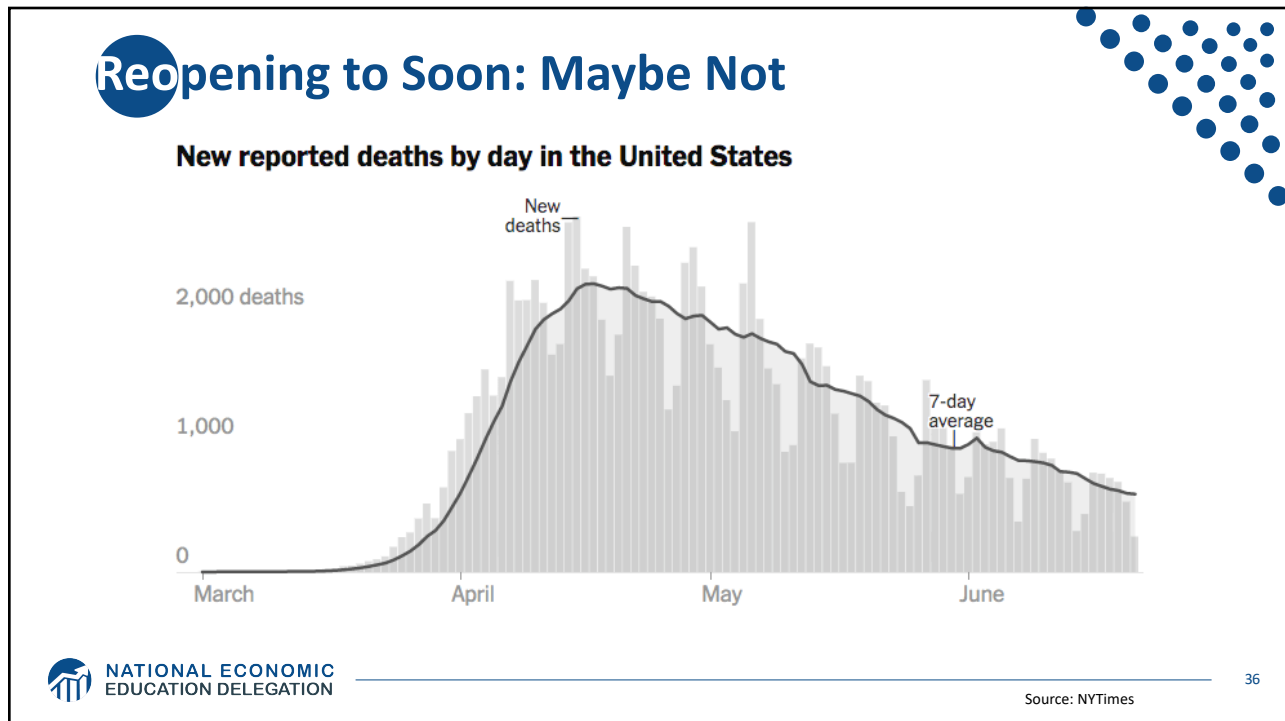


Most forecasts predict GDP growth will be between 4.0% to 5.0% In 2021

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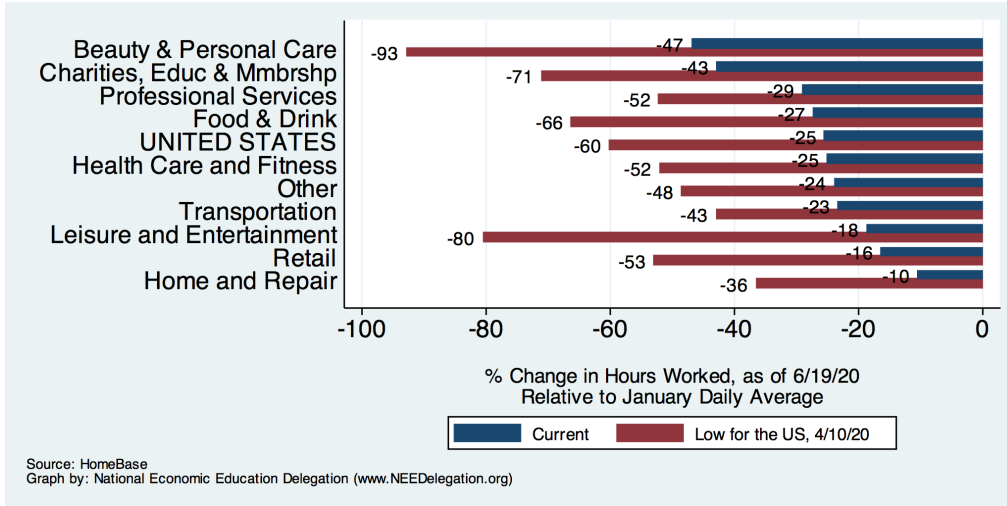


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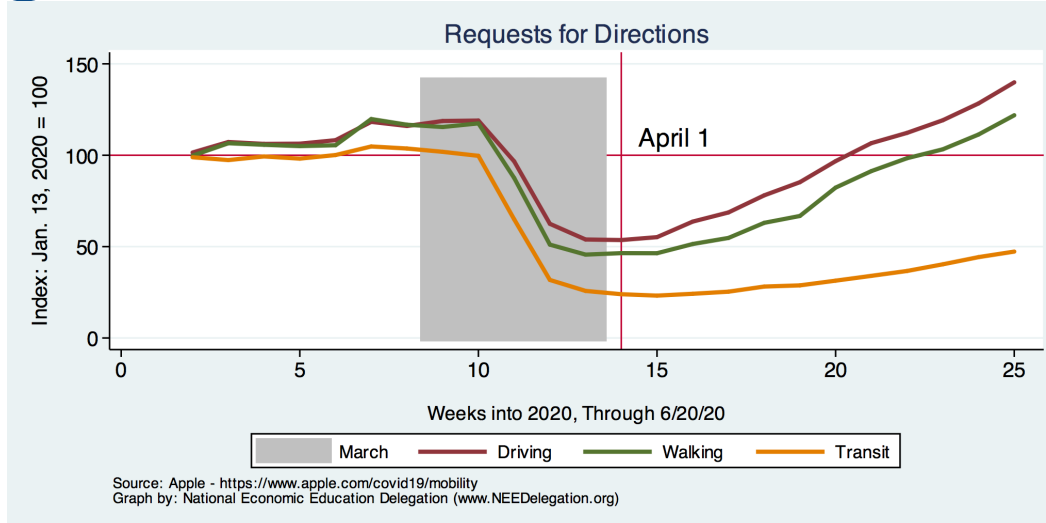
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Change in Hours Worked: Small Businesses



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Apple Mobility Trends



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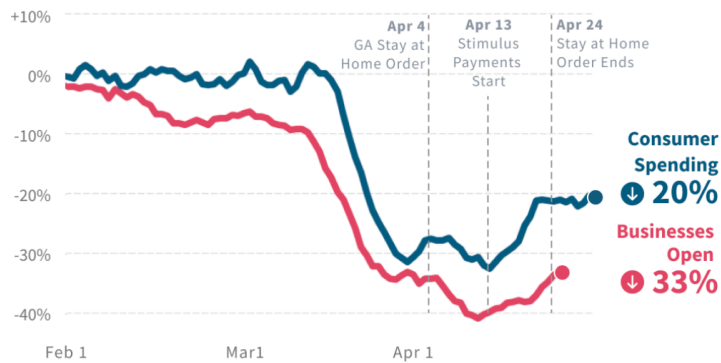
It's Not This Simple



Opening Back Up

Georgia Reopens But Wallets Don't

In Georgia, spending fell and many small businesses closed before the official "stay-at-home" order. The arrival of stimulus payments increased spending by 11 percentage points, but little has changed now that the "stay-at-home" order is lifted.



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
- **Reopening too soon will derail these projections.**
 - And will impose enormous costs: life and economy.
- **What comes next from an economic perspective?**
 - Uncharted territory.
 - Data are likely to vacillate between good and bad.



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Thank you!

Any Questions?

www.NEEDelegation.org

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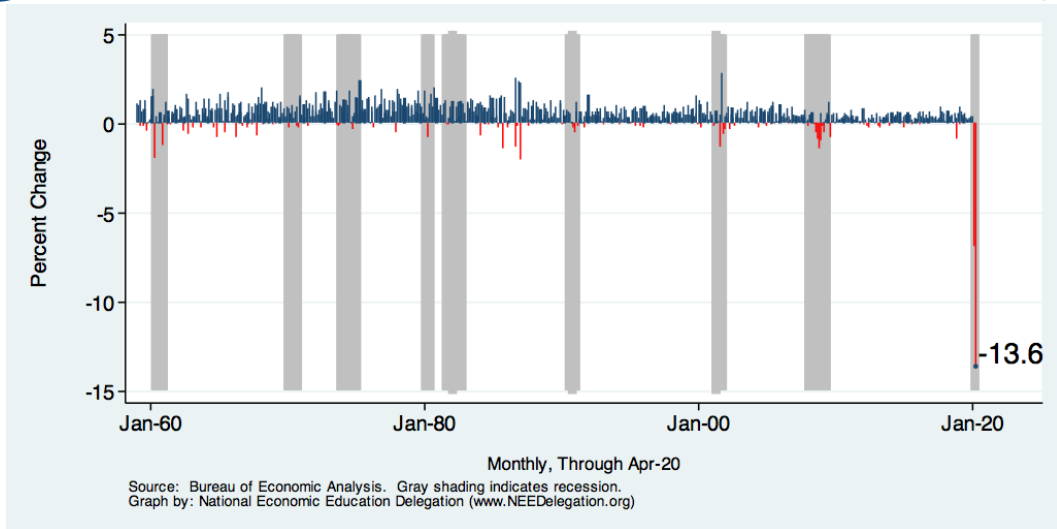
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Bonus Slides



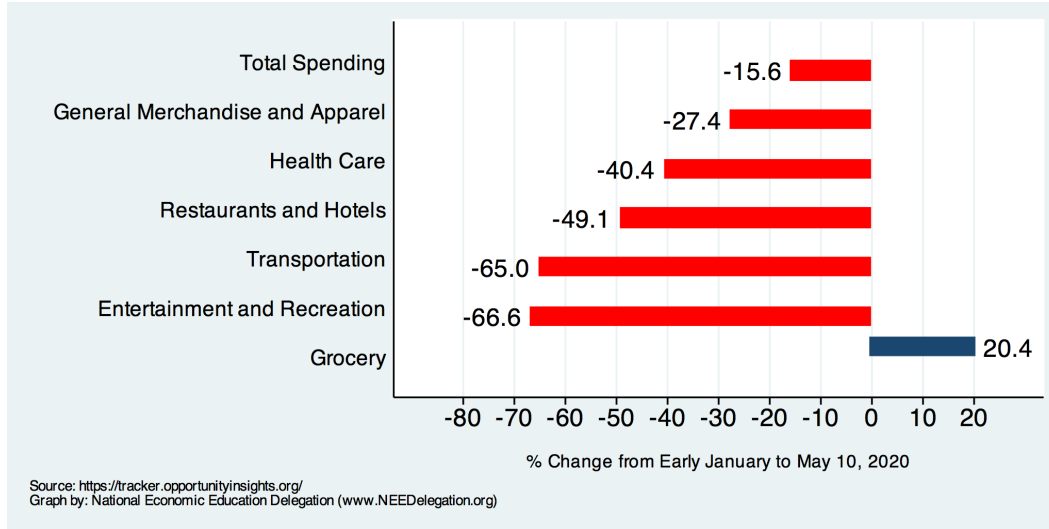
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Personal Consumption Expenditures



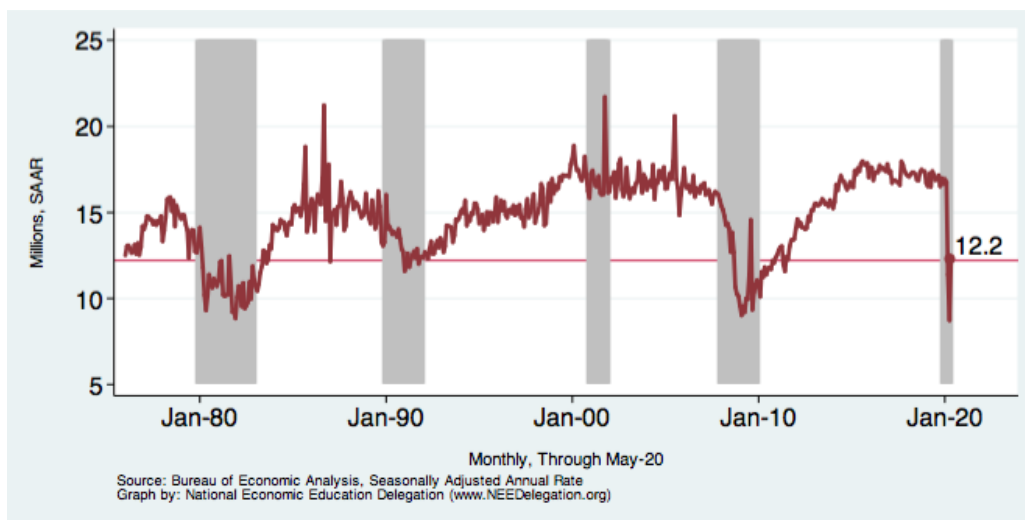
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Plunge in Consumer Spending



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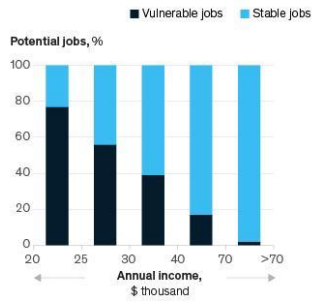
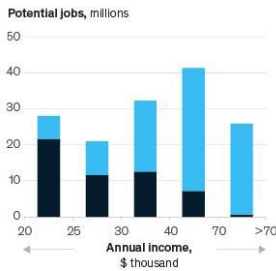
Automobile and Light Truck Sales



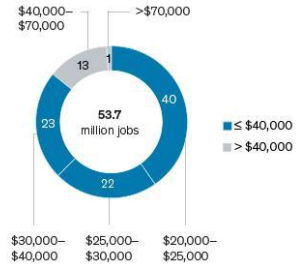
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Eighty-six percent of vulnerable jobs paid less than \$40,000 a year.

Level of job vulnerability,¹ by income band



Vulnerable jobs by annual income band¹ %

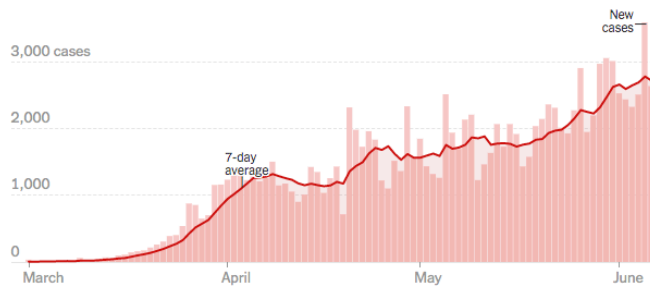


Note: Data may not sum to 100, because of rounding.
¹Vulnerable* jobs are subject to furloughs, layoffs, or being rendered unproductive (for example, workers kept on payroll but not working) during periods of high physical distancing.
 Source: LaborCube; McKinsey Global Institute analysis

McKinsey & Company

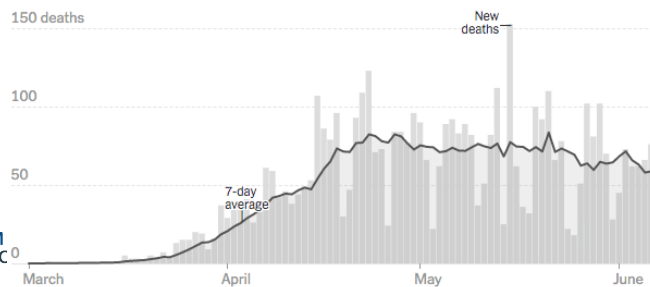
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New reported cases by day in California



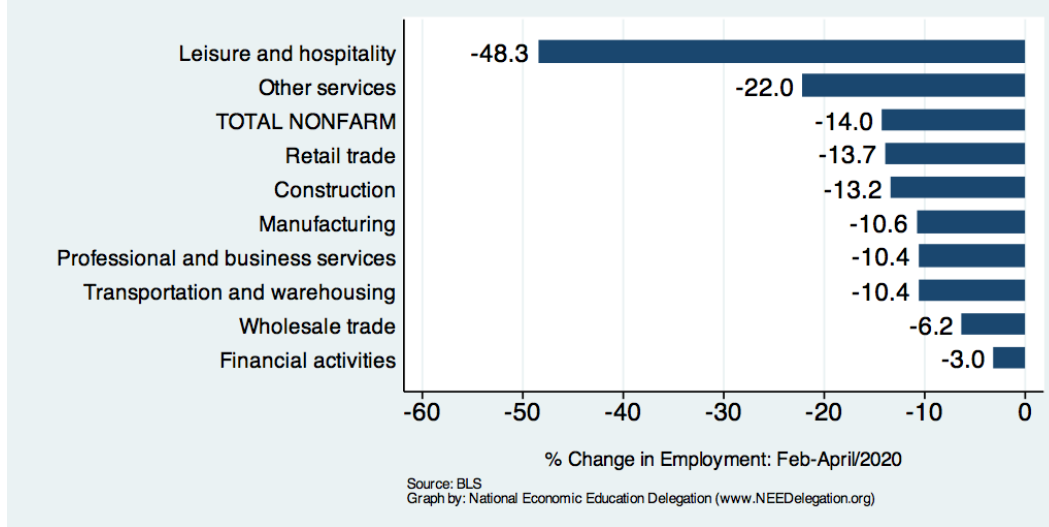
Note: The seven-day average is the average of a day and the previous six days of data.

New reported deaths by day in California

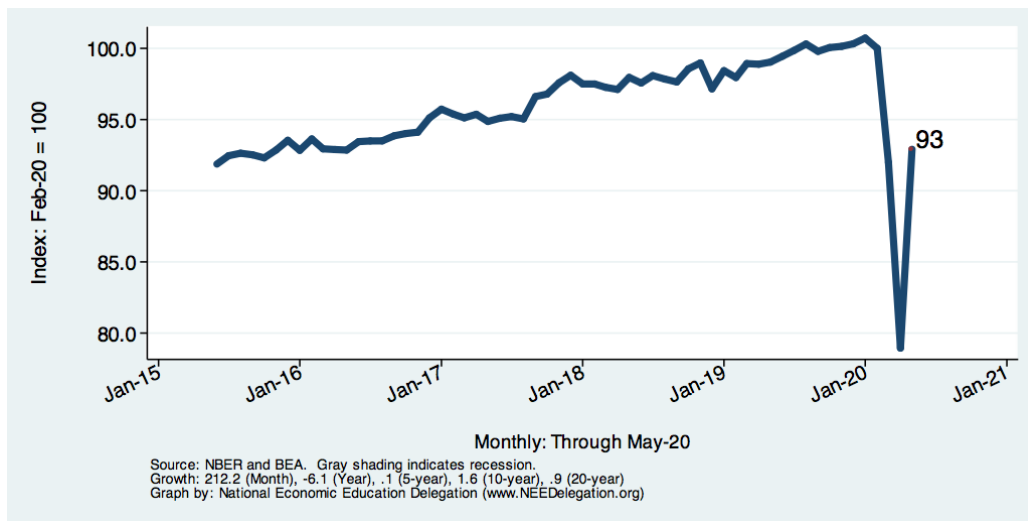


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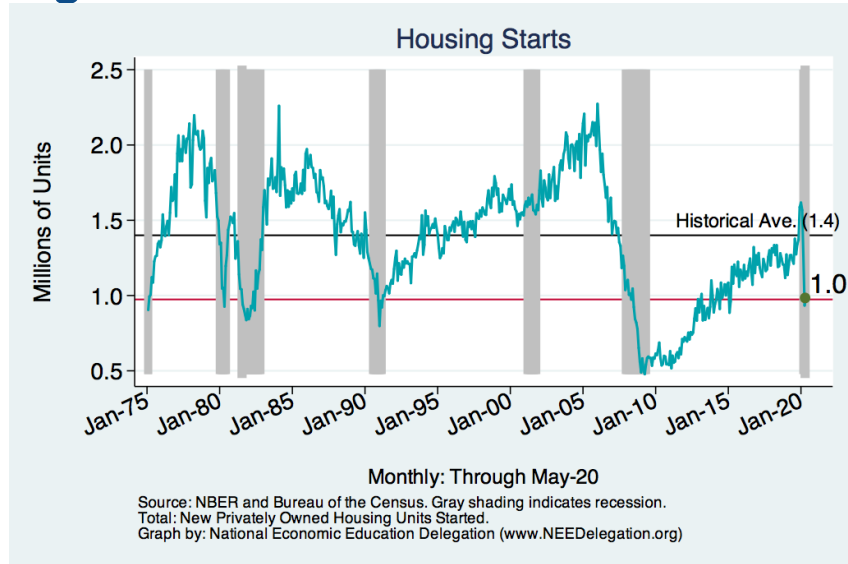
Low Wage Industries Hit Hardest



Retail Sales



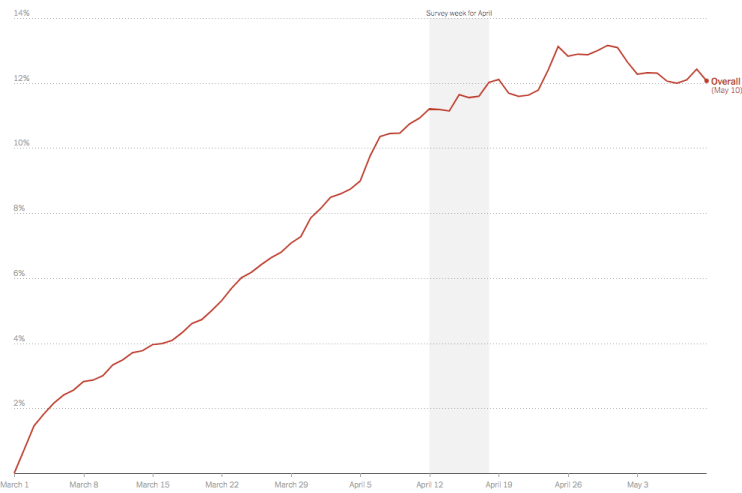
Housing Starts Plummet: Down 25% in March



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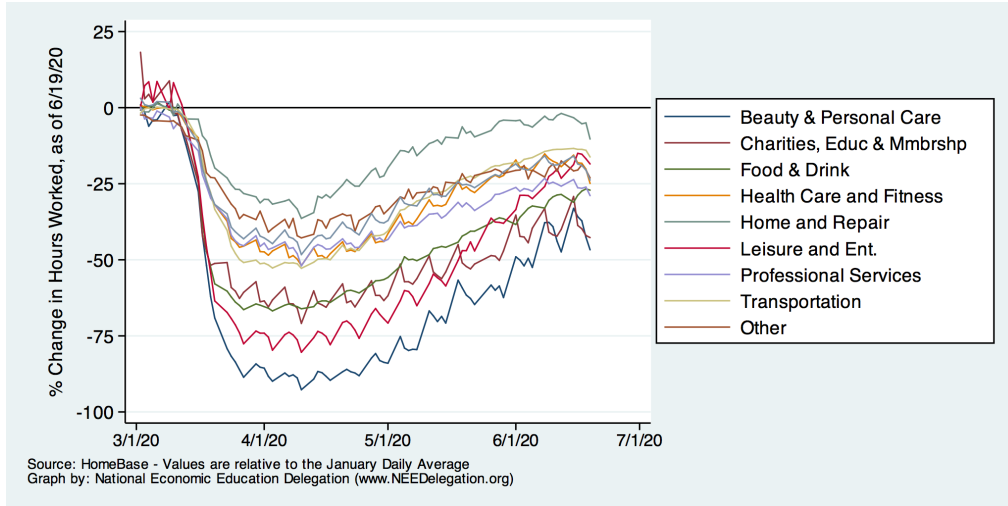
Job Losses Appear to be Slowing

March and April were devastating, but May seems to be flattening
Percent of workers newly nonemployed since March 1, 14-day rolling average



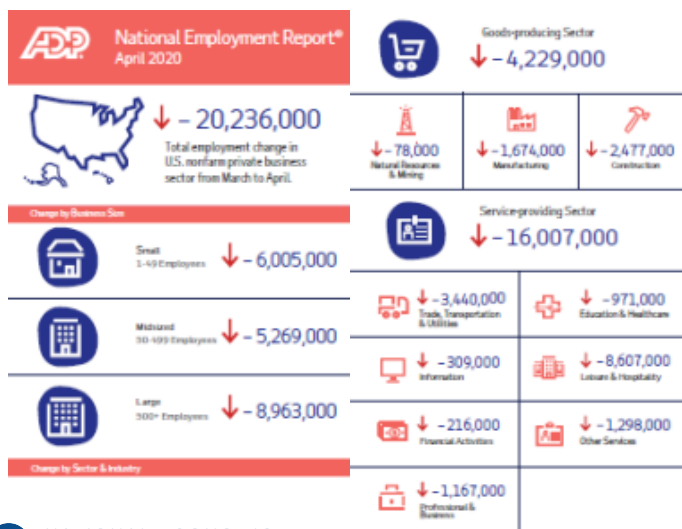
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Change in Hours Worked: Small Businesses



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Employment: The Word of the Month



“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%

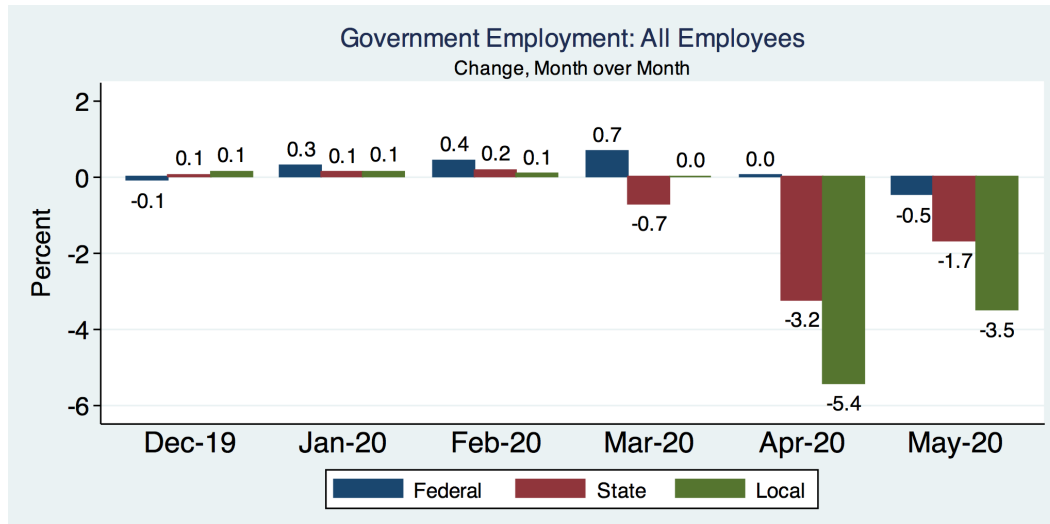
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Many Policy Alternatives

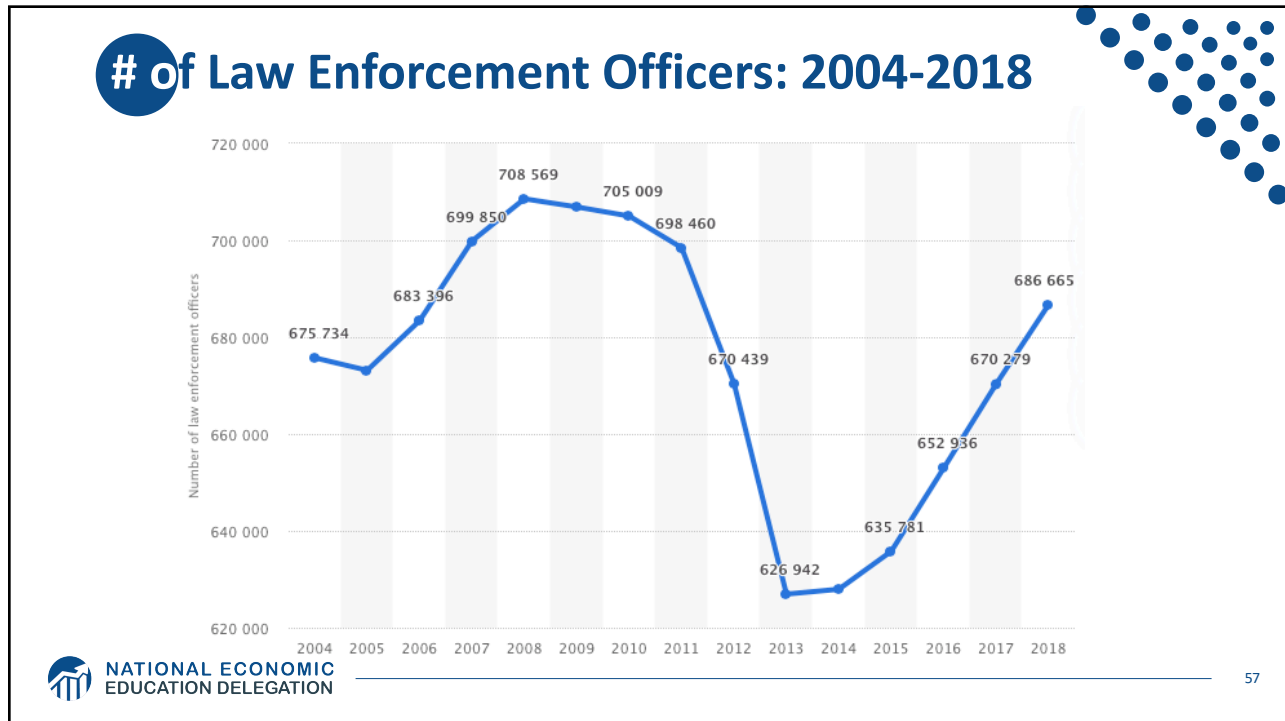
- **Denmark: Pay (discounted) salaries**
 - Keeps employees “on the job”.
- **Temporary UBI**
 - \$2k/adult for 6 months - \$3.6T
 - Grant if can prove need, otherwise a loan. Grants = \$240B
- **Payroll Tax Cut**
 - No. Designed to get people back to work. Not yet.
- **Excess revenue tax**
 - 10% or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

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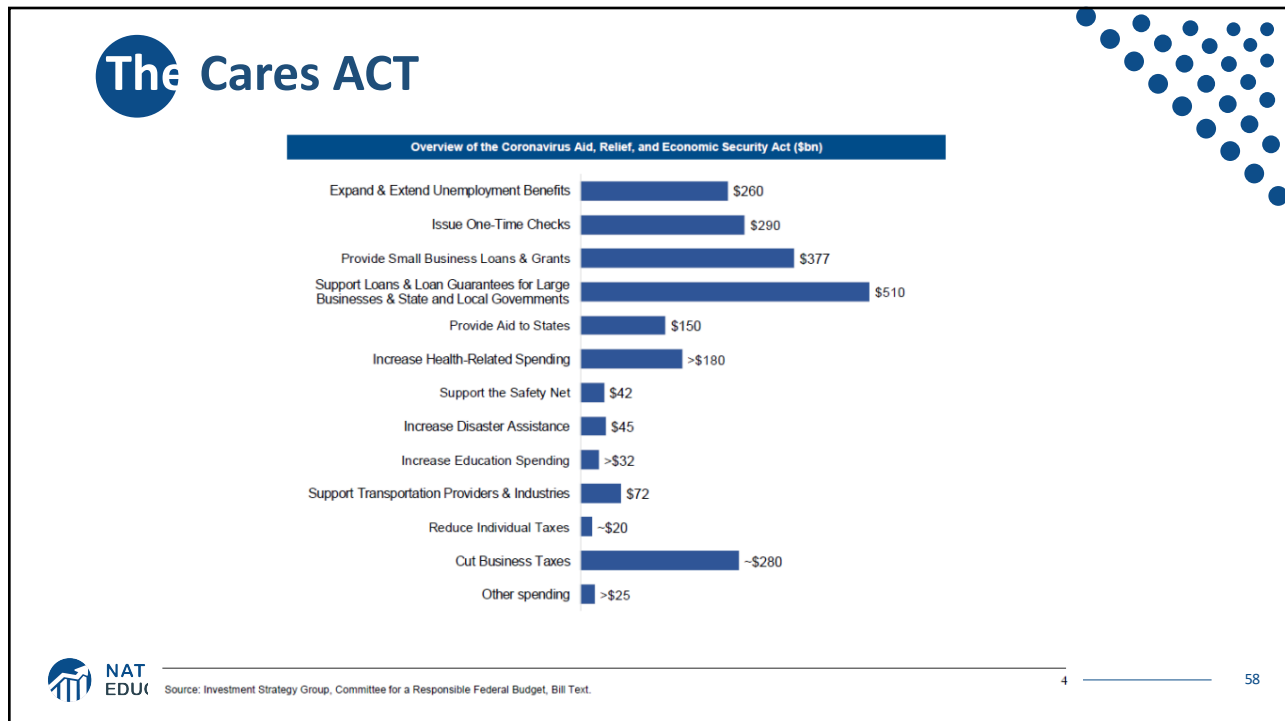
State & Local Gov'ts Are Tightening



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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
- 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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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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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



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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



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

Home Schooling – The Digital Divide Issue

