COVID-19: Economic Implications and Policy Response

Boulder Valley Rotary Club
April 21, 2020
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Who Are We?

- **Honorary Board: 47 members**
  - 2 Fed Chairs: Janet Yellen, Ben Bernanke
  - 6 Chairs Council of Economic Advisers
    - Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
  - 3 Nobel Prize Winners
    - 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:

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

Credits and Disclaimer

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Outline

- Economic Dimensions to this Crisis
- Why this Crisis is Different
- What Fiscal & Monetary Policies Can Do
- Prospects for Economic Recovery

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Initial Optimism

- Originally, believed that COVID-19 would be largely contained within a few countries and would disrupt manufacturing supply chains.
- The more a country's manufacturing relied on these supply chains the bigger the impact on GDP.
- Still the effect was likely to be to slow GDP by 0.25 to 0.50 from its baseline prediction.

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The Escalation of the Economic Effects

Most Importantly, most services require face-to-face contact

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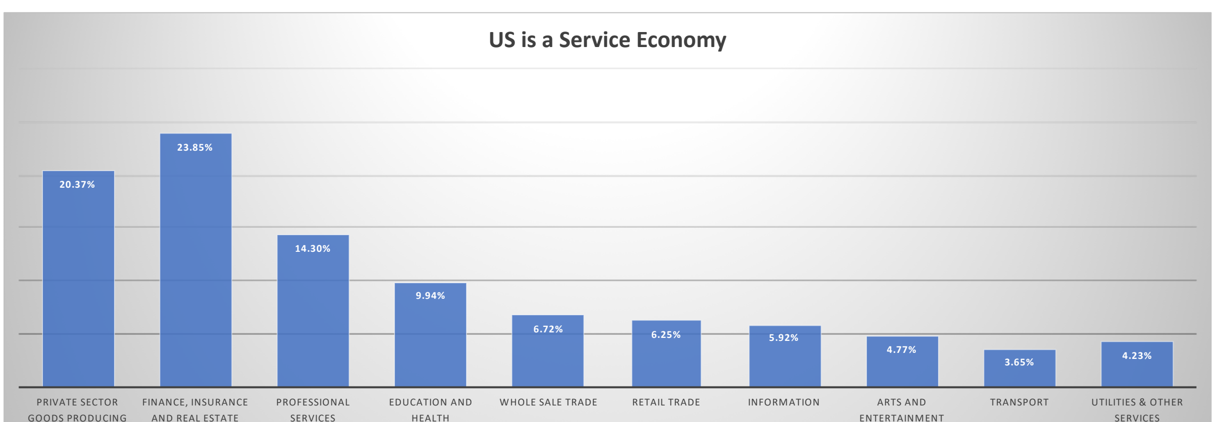
Coronavirus Disruptions

(2018 Data from BEA)



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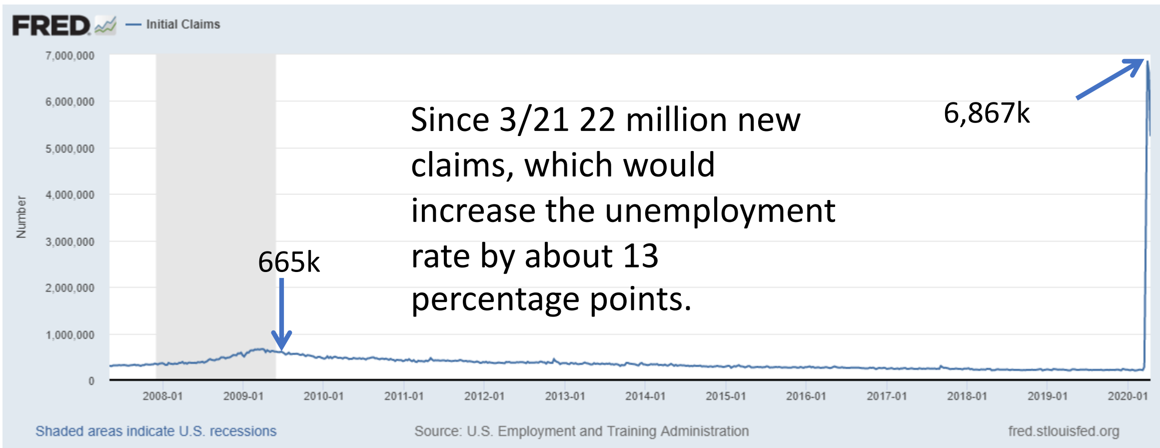
Initial Claims for Unemployment



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But these numbers understate the changes in uncertain ways

- **Initial claims for unemployment are based on the number of successful applications**
  1. States unemployment offices have been deluged with large backlogs.
  2. Employment Status isn't obvious anymore – you aren't working but you still have your job
- **Monthly unemployment reports (next one on May 8th) are worse**
  - Unemployment rate is based on a household survey
  - Number of jobs gained or lost is based on a survey of firms

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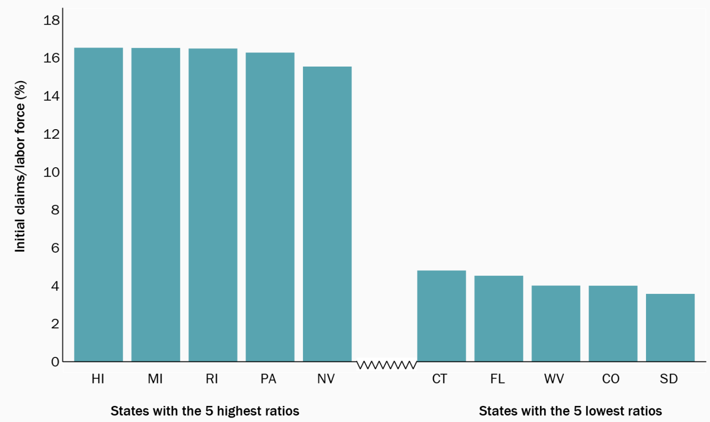
Relative Changes are important

Figure 1: Initial Unemployment Insurance Claims to Labor Force Ratio, by State

Advance State Claims Filed During The Weeks Ending March 21, March 28, and April 4



Source: DOL Unemployment Insurance Weekly Claims, April 2 & April 9, 2020; BLS State Employment and Unemployment, February 2020.
Note: Three weeks of not seasonally adjusted advance claims divided by not seasonally adjusted February 2020 labor force.

Economic Studies at BROOKINGS

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Change in Sales is probably more reliable

Retail Sales -- Monthly Percent Change

	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Total	0.2	0.0	0.8	-0.4	-8.7
Ex.-Autos	-0.2	0.5	0.7	-0.4	-4.5
Ex.-Autos, Ex.-Gas	-0.2	0.4	0.9	-0.2	-3.1
Retail Control*	-0.3	0.3	0.6	-0.2	-3.5
Autos	1.6	-1.8	0.8	-0.5	-25.6
Gasoline	0.6	0.9	-0.3	-2.9	-17.2
Clothing	-0.1	2.8	-1.1	-1.6	-50.5
General Merchandise	0.1	0.1	0.5	-0.1	6.4
Nonstore**	-0.4	-0.5	0.3	0.7	3.1

Retail sales excluding sales from motor vehicle dealers, gasoline stations, and building materials, garden equipment, and supply dealers.

*** Primarily online and catalog sales; also includes sales by fuel-oil dealers.*

Source: U.S. Census Bureau via Haver Analytics

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Financial Markets Take a Plunge

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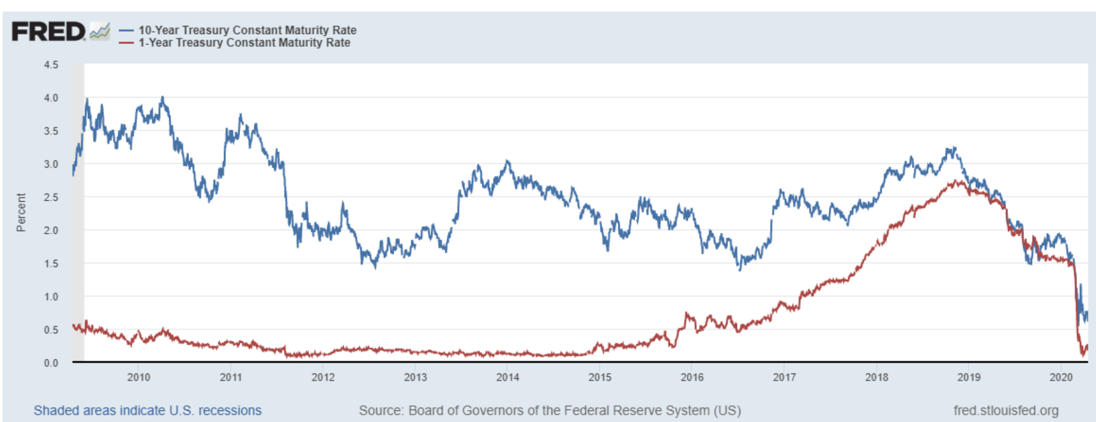
But You Have to Put Your Money Somewhere!



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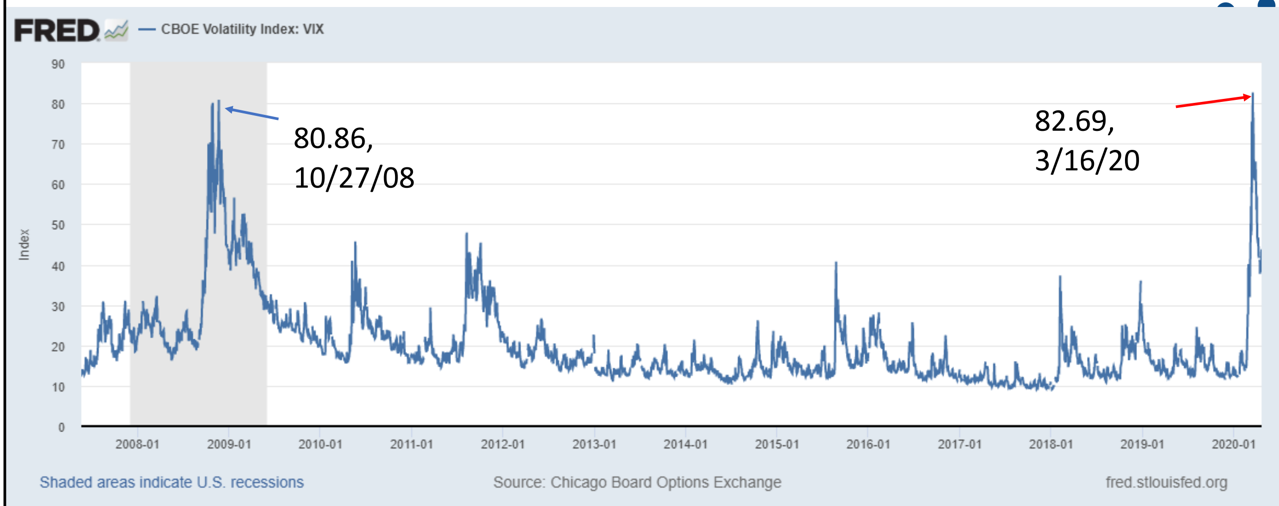
The Fear Index: the VIX



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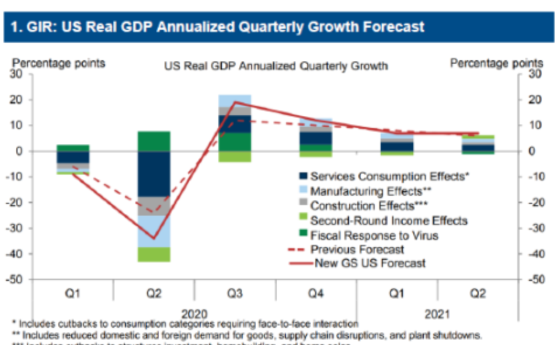
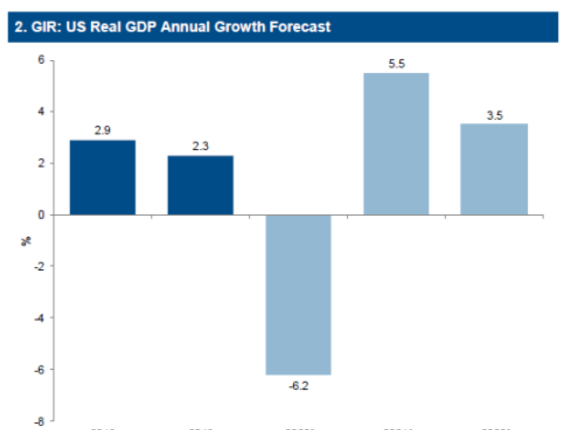
How Bad Could it Get?





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This Time is Different

- **Great Depression and Recession (Demand Shocks)**
  - A Financial Crisis due to inadequate regulation, which led to
  - A Collapse of demand with persistent high unemployment
- **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.
- **"Health Shock:" public health requires cessation of economic activity**

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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)easing

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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What Economic Policy Can Do in this Crisis

- Aid households, firms, state and local governments and credit markets in order to *survive* the crisis.
- In this way, the goal of policy is to minimize long-term damage caused by the crisis.
- When the pandemic is under control, the economy can regain former strength as quickly as possible.

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Thank you Goldman Sachs

- **The Next 3 Slides are from:**

"The US Coronavirus Aid, Relief, and Economic Security Act & the Economic and Investment Implications (Seventh in a Series)"

March 31, 2020

https://www.goldmansachs.com/insights/talks-at-gs/04-01-20-cares-act-impact-on-us-economic-outlook-f/report.pdf

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Fiscal Policy in the Crisis

Phase 1	Phase 2	Phase 3
Coronavirus Preparedness and Response Supplemental Appropriations Act	Families First Coronavirus Response Act	Coronavirus Aid, Relief, and Economic Security Act
• Became law: 6 March 2020 • Estimated cost: \$8.3bn • Focus: Primarily increased funding for the Department of Health and Human Services to respond to the outbreak	• Became law: 18 March 2020 • Estimated cost: \$105bn • Focus: Paid sick leave, unemployment insurance, free testing	• Became law: 27 March 2020 • Estimated cost: \$2.3tn • Focus: (Please see next page)

Source: Investment Strategy Group; Committee for a Responsible Federal Budget; Joint Committee on Taxation.

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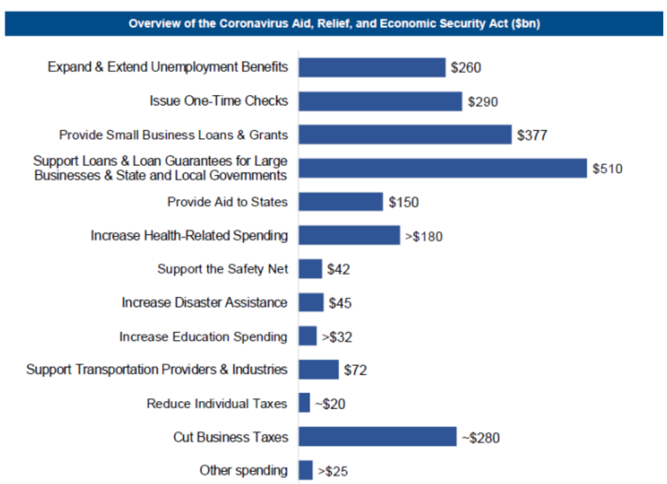
The Cares ACT



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

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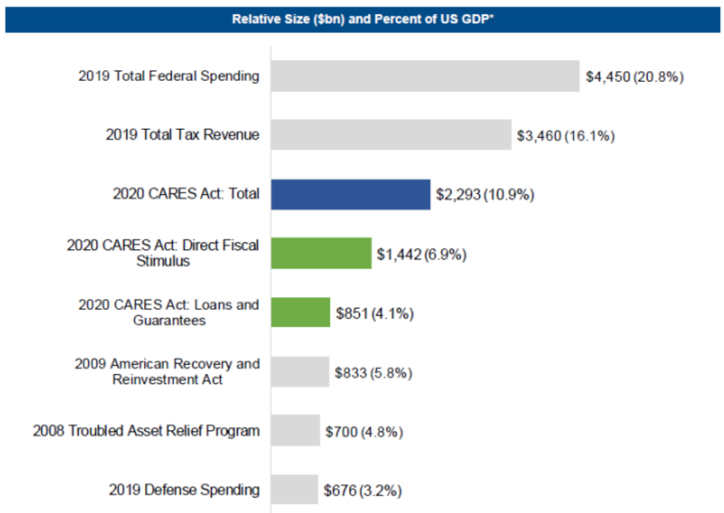
Putting Cares Spending in Perspectivre



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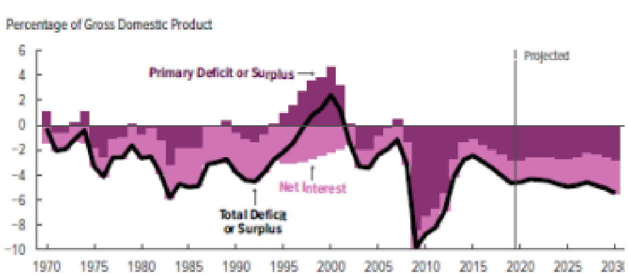
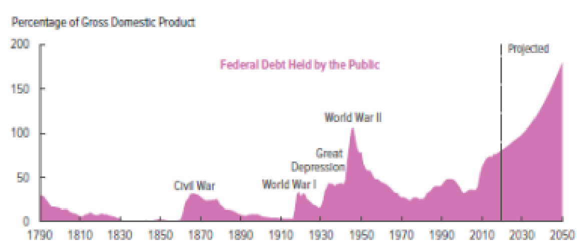
How Do We Pay for This?

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





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

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Monetary Policy: 2008 Redux, but Bigger and Faster

I. Short-term Interest Rates

1. March 3, the Fed lowers the target range for the federal funds rate from 1.75-1.5 percent to 1.25-1.0 percent.
2. March 15, the Fed lowers the target range to 0.25-0.0 percent, essentially 0.

II. QE

1. March 15, the Fed announces a QE program
   1. $500 billion in Treasuries and
   2. $200 billion in agency mortgage-backed securities.
2. March 23, QE is unlimited and should include commercial mortgage-backed securities

Liquidity Measures

- **In a Financial Crisis, nobody wants to lend, which can lead to panics, bank runs and the destruction of credit markets.**
- **The Fed must act as the "Lender of Last Resort" to keep credit flowing and to minimize long-term damage to these markets.**

In Contrast to 2008, Quick Fed Action

I. The Fed saw emerging panic during Mid March

1. Liquidity all of a sudden became scarce in the Market for US Treasuries (*NYTimes, 3/12/20)*
2. The next week institutional investors withdrew 11% of their holdings of money market mutual fund shares. (*WSJ, 3/21)*

II. In the current crisis the Fed acted immediately to provide liquidity to a myriad of credit markets and to encourage continued bank lending

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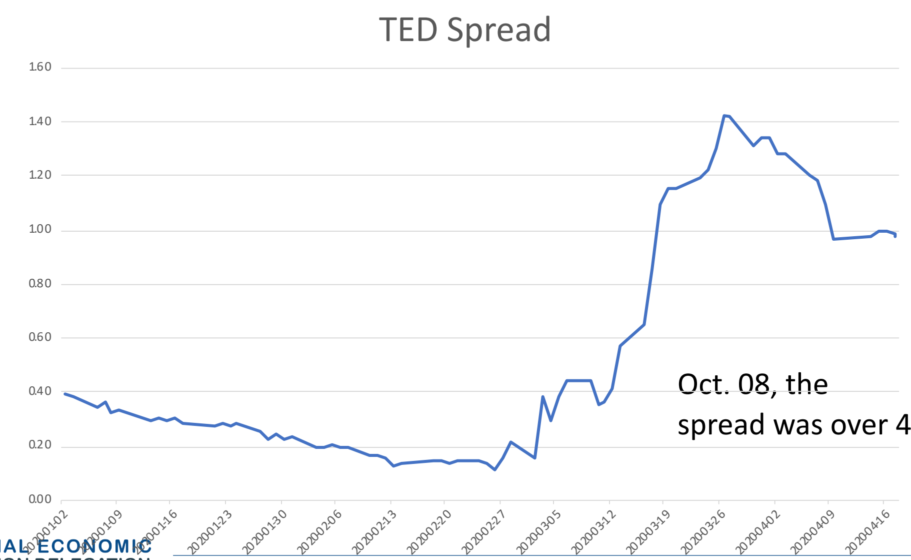
Bank Credit Risk Recently



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Fed Liquidity Measures taken from 3/15-23

- **Loans and Support to Credit Markets Participants:**
  - Primary Dealer Credit Facility
  - Money Market Mutual Fund Liquidity Facility More active participation in the "Repo" market which provides wholesale short-term financing
  - Loans to Foreign central banks: swaps
- **Encouraging Bank Lending**
  - Lowers the discount rate and encourages its use by non-troubled banks
  - Eliminates reserve requirements
  - Temporarily reduce bank capital requirements

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Combined Fed & Treasury Measures

- **(P)aycheck (P)rotection (P)rogram $337billion to firms with 500 or fewer employees (in 1 location!)**
  - Loans made by banks, Fed will acquire 95%
  - Loans forgivable, losses to the Treasury
- **"Main Street Lending Program" 4-year loans to firms with under 10,000 employees $600 billion**
  - Again loans made by banks, Fed acquires 95%
  - Loan losses borne by banks and Treasury up to $75 billion
- **Congressional Oversight??**

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Don't Add Apples and Oranges

- **"White House economic adviser Larry Kudlow on Tuesday projected that the total economic stimulus to be enacted by the federal government will reach $6 trillion."** ***National Review,*** **3/24**
  - $4 trillion from the Fed in "liquidity measures"
  - $2 trillion from Congress
- **Apples: Loans which we hope will be repaid (e.g., Main Street Lending)**
- **Oranges: Tax Cuts, Grants and Other Spending (e.g., PPP)**
- **In the 2008 crisis the Fed made money on its crisis lending**

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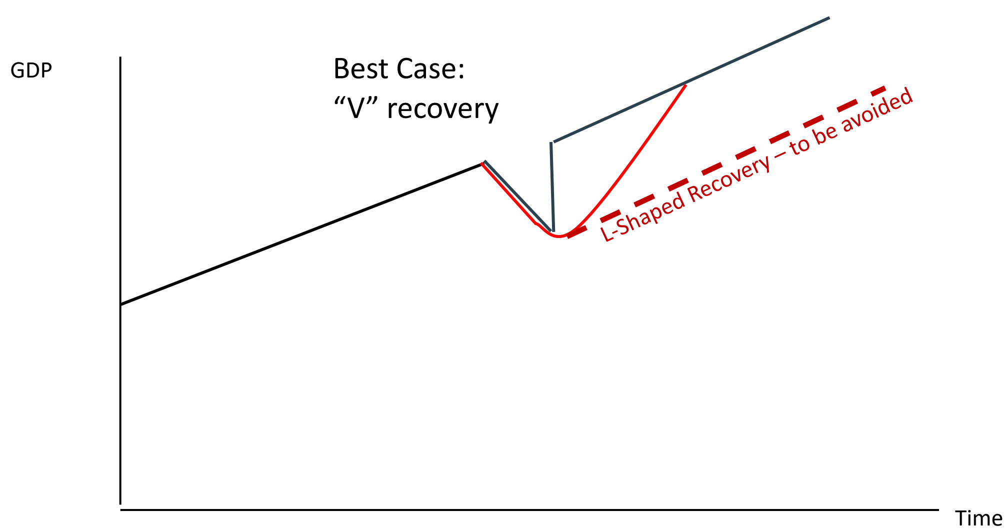
What Shape Will the Recovery Take?



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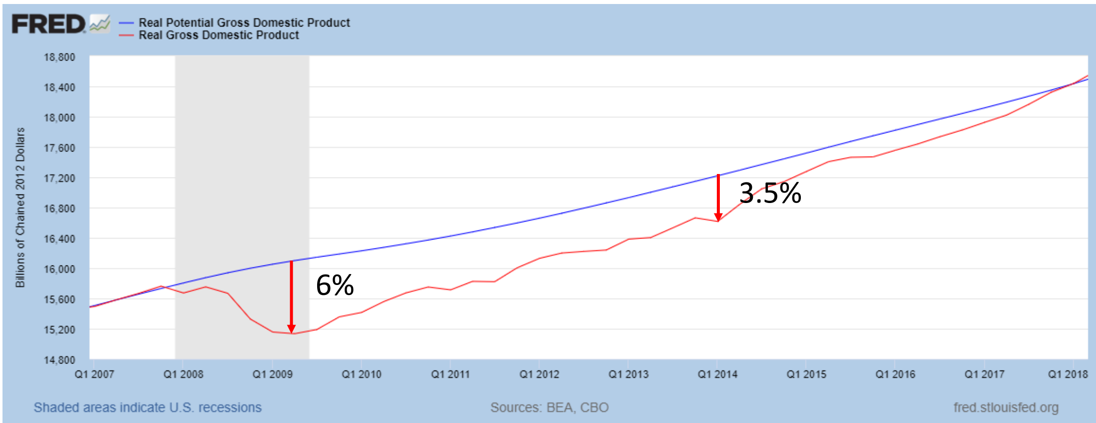
Recovery from the 2008 Crisis



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Lessons from the Last Recovery

- **Reasons for Optimism**
  - 2007 economy was rife with unsustainable financial speculation: housing bubble.
  - Financial markets and institutions badly damaged by the crisis.
  - Fiscal and Monetary policy responses could have been quicker and bigger.

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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

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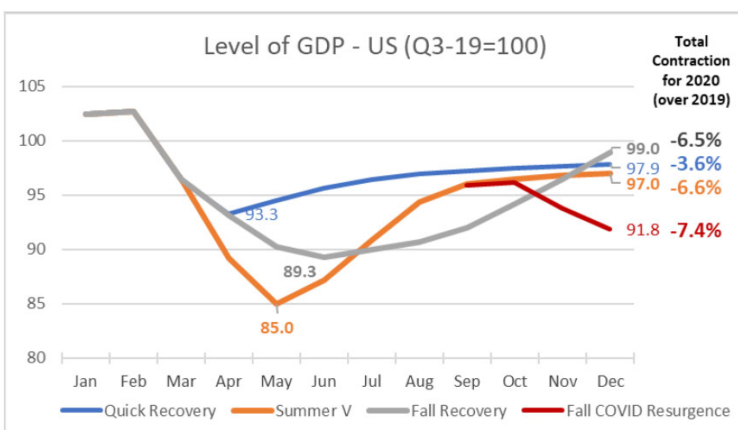
A Lot Depends on the Course of the Disease



Source: The Conference Board, April 2020

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Thank you!

Any Questions?

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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

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Aid to Small Businesses

Small Business Loans & Payroll Subsidies		
$377bn (1.8% of GDP)		
Eligibility	Program	Terms & Process
- 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	- 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	- 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

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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	- 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)	- 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	- 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.	- 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

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