The Federal Reserve and the COVID-19 Crisis

ECON 40364: Monetary Theory & Policy

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Readings

- Cecchetti and Schoenholtz: Contagion: Bank Runs and COVID-19
- Cecchetti and Schoenholtz: COVID-19: What can monetary policy do?
- Cecchetti and Schoenholtz: Fed Goes to War: Part 1
- Cecchetti and Schoenholtz: Fed Goes to War: Part 2
- Cecchetti and Schoenholtz: Fed Goes to War: Part 3
- Cecchetti and Schoenholtz: Fed Lets Its Big Stick Speak Powerfully
- Cheng, Skidmore, and Wessel: What's the Fed Doing in Response to the COVID-19 Crisis?

The Economic Shock

- COVID-19 is an unprecedented economic shock the likes of which we have not seen
- Not really even clear what kind of shock it is
  - Supply? Lockdowns and closures leave physical capital idle, reduce labor input, etc ($\downarrow \ Y^p$)
  - Demand? People “flee” from economic activity to avoid the virus – no vacations, meals out, business travel, etc. ($\downarrow \ \bar{C}$ & $\bar{I}$)
- In reality, a mixture of both . . . right now seems to have been more demand-driven than supply. Firms have proven pretty nimble in adjusting to new normal

Pandemic vs. Bank Run

- In "Contagion: Bank Runs and COVID-19," Cecchetti and Schoenholtz argue that the information issues of a pandemic and a bank run are similar, and that therefore policy actions ought to be similar
- In a bank run, you know that some banks are in trouble, but can't determine which. So you "run" from all banks
- In a pandemic, you know that some people are sick, but can't determine who. So you "run" from economic activity and social interaction
- Policy lessons from bank runs: manage the information environment, do "stress tests," bank "holidays," "isolate" failing banks, help restore confidence of the public in the remainder
- Similar for a national pandemic strategy – test and isolate, give public confidence that they can go about their economic lives

What Can Policy Do?

- Monetary policy is well-suited to fight/counter demand shocks, but not supply shocks (COVID-19: What can monetary policy do?, Cecchetti and Schoenholtz)
- COVID-19 surely reduced Y^P because of supply-side issues (and likely quite persistently) – this is not something that the Fed ought to try to fight
- The Fed has nevertheless engaged in massive and unprecedented policy actions since March 2020
- The objective has not been to avoid a recession (which was/is unavoidable)
- The objective has been twofold:
  1. Prevent a collapse of financial and credit markets from exacerbating the direct economic effects of the virus itself
  2. Set the stage for the economy to be able to recover once the virus is past (i.e. a vaccine)

Prevent Financial Amplification

- Bad economic shocks can trigger financial panics (e.g. Great Recession)
- One key objective of the Fed has been to prevent a run dynamic from taking hold
- To do so:
  - Flood financial markets and financial institutions with liquidity
  - Why? So that they can continue to perform operations, avoid fire sale dynamics, and continue to extend credit to good borrowers
- So far, this seems to have worked well

Set the Stage for Recovery

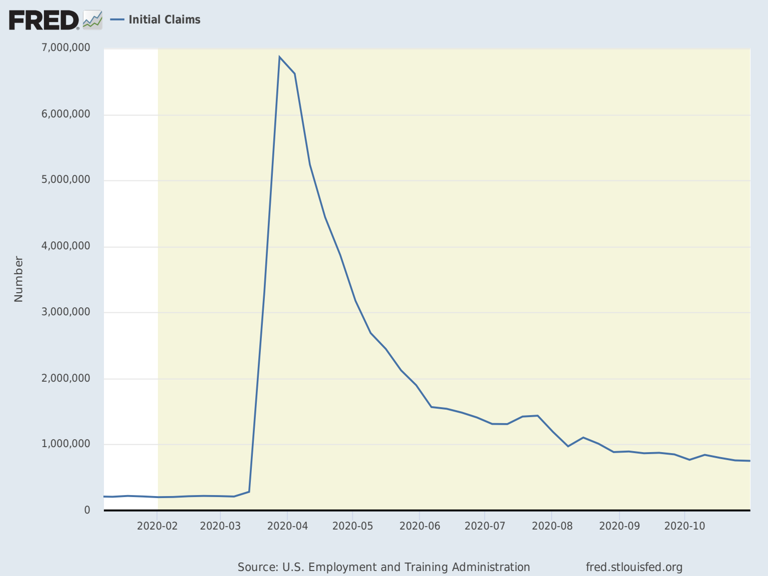
- Bernanke (1983) argued that bank failures in Depression destroyed information. This exacerbated asymmetric information and led to impairment of credit market functioning
- This is still true today
- But it also extends potentially to non-financial firms
  - They are collections of information about suppliers and consumers
  - They cannot simply fail and be replaced by a new firm without significant costs
- So part of the objective in the extraordinary policy responses has been to keep firms afloat during the pandemic so that they are there when things return to some semblance of normalcy (e.g. Paycheck Protection Program, direct lending to non-financial firms)
- Too early to tell, but also seems to be working

The Facts

- The US has experienced an extremely sharp economic decline – e.g. second quarter GDP declining by roughly one-third (annualized!, so about 8 percent quarterly) and unemployment reached more than 14 percent
- In late March, we were on the verge of a significant financial crisis, which would have made the economic decline worse and more long-lasting
- But we avoided that – the economy has recovered far stronger than anyone (myself included) predicted
- In large part, I think, due to the actions of the Fed

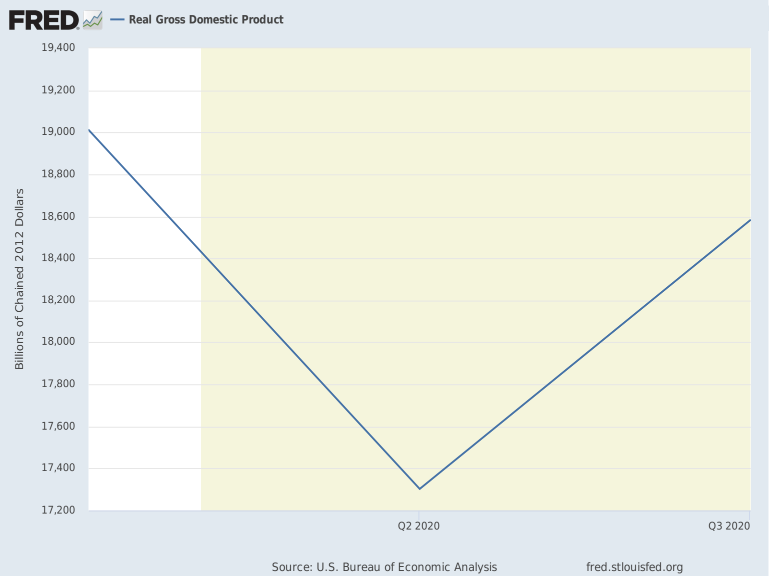
ECONOMY

Initial Unemployment Claims

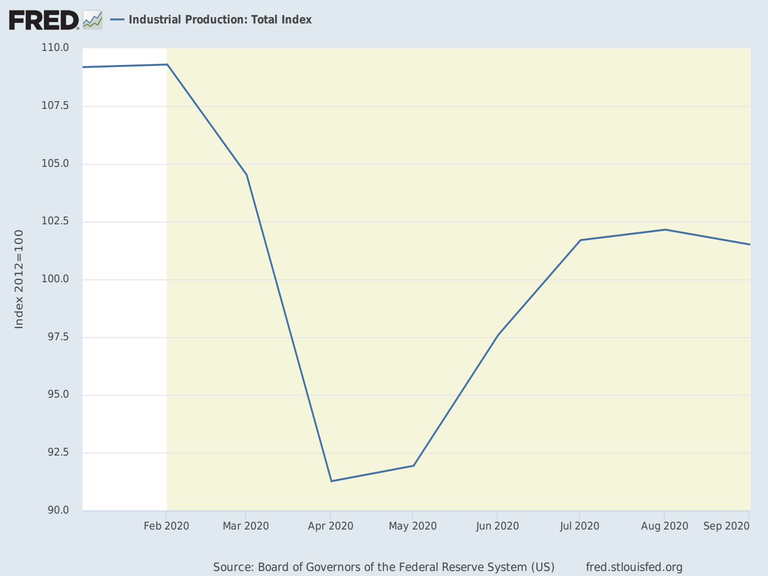


Unemployment Rate

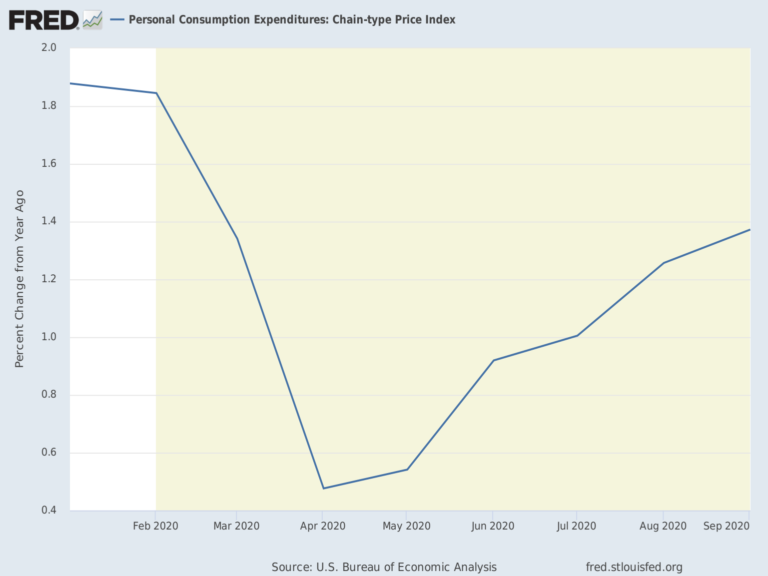
Real GDP


FRED
Real Gross Domestic Product
19,400
19,200
19,000
18,800
18,600
18,400
18,200
18,000
17,800
17,600
17,400
17,200
Billions of Chained 2012 Dollars
Q2 2020
Q3 2020
Source: U.S. Bureau of Economic Analysis
fred.stlouisfed.org

Industrial Production

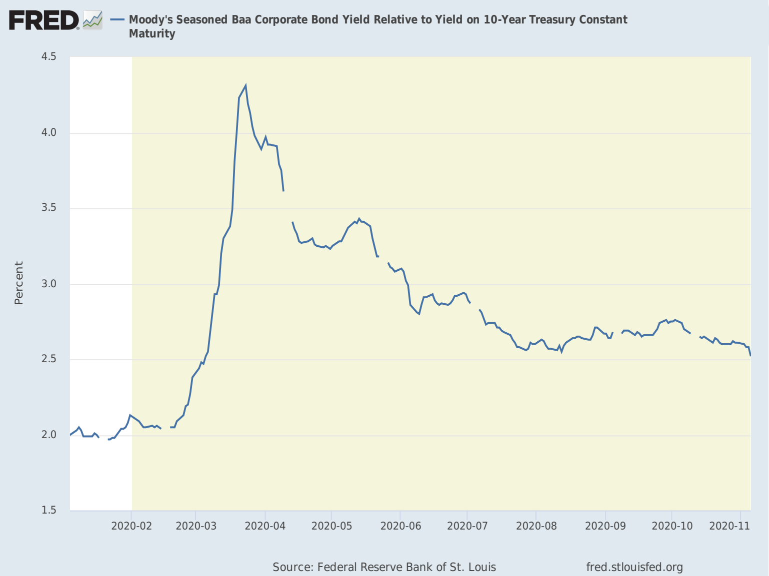


Inflation


FRED
Personal Consumption Expenditures: Chain-type Price Index
Percent Change from Year Ago
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul 2020
Aug 2020
Sep 2020
Source: U.S. Bureau of Economic Analysis
fred.stlouisfed.org

FINANCIAL MARKETS

Credit Spread

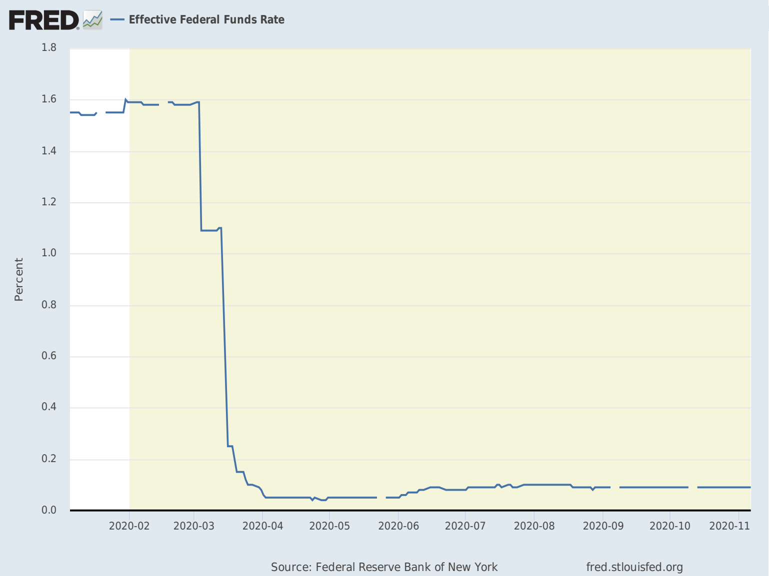


Stock Market

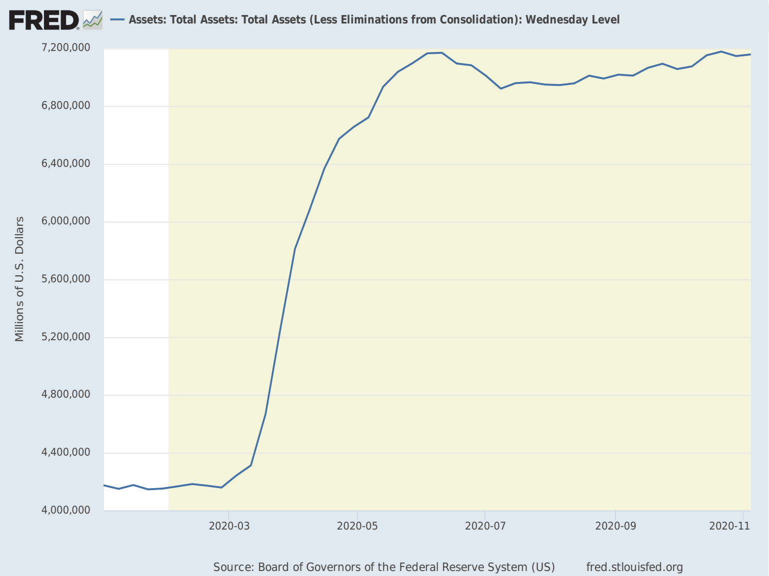
Stock Market Volatility

MONETARY POLICY

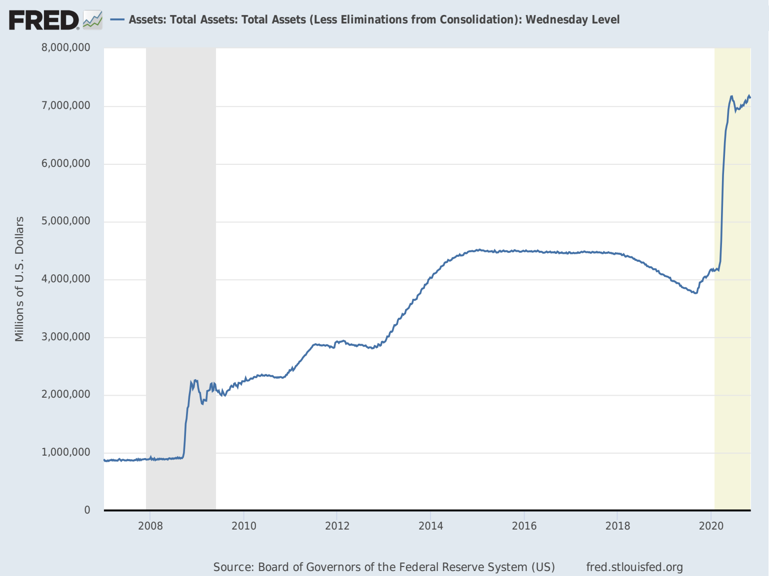
Fed's Policy Rate



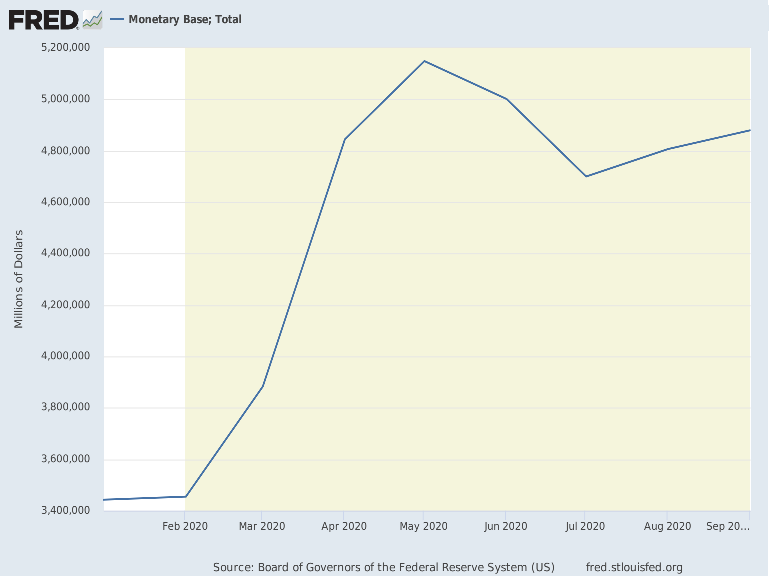
Fed’s Balance Sheet



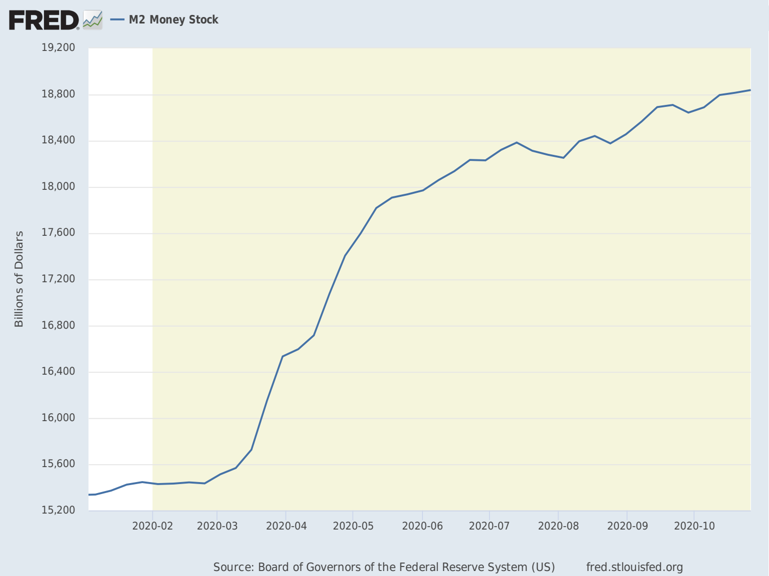
Fed's Balance Sheet: Compared to Great Recession



Monetary Base



Money Supply



What Exactly Did the Fed Do? Part I

- Aggressively lowered Fed Funds Rate
  - 50 bps on March 3
  - 100 bps over weekend of March 14-15
- Brought back QE/LSAPs
  - March 15: $700 billion ($500 billion of Treasuries, $200 billion of MBS)
  - March 23: QE *infinity*
- Resuscitated Great Recession era facilities:
  - Commercial Paper Funding Facility (March 17)
  - Primary Dealer Credit Facility (March 17)
  - Money Market Mutual Fund Liquidity Facility (March 17)
  - Term Asset Backed Securities Loan Facility (TALF) (March 23)

What Exactly Did the Fed Do? Part II

- The Fed ventured into new but somewhat familiar territory, starting March 23
  - e.g. QE infinity
  - Removing regulatory capital and reserve requirements
- But it did more drastic things, including provision of credit to non-financial firms
  - Primary and Secondary Market Corporate Credit Facilities (March 23)
  - Main Street Lending (announced March 23, later given more details on April 9)
  - Municipal Liquidity Facility (April 9)
  - Paycheck Protection Program Liquidity Facility (April 9)

Taking on Private Credit Risk

- By law, the Fed is only allowed to purchase securities backed by the government (e.g. Treasuries or agency-backed MBS), and can only lend to banks
- But financial intermediation in the US has changed – serving as lender of last resort requires the Fed to in some cases by market-maker of last resort, and potentially buyer of last resort
  - Requires some work-arounds in the law: need Treasury permission/backing (invoking the modified clause 13(3)), and/or has to set up "special purpose vehicle" (SPV) to lend money to, where the SPV can then buy the assets
  - But practically doesn't seem to be a constraint on the Fed
- Buying non-financial assets with credit risk invariably involves distributional choices that perhaps ought to be left to elected authorities (Fed Goes to War: Part 3, Cecchetti and Schoenholtz)
- Potentially jeopardizes independence

Did it Work?

- Judging from timing, evidently yes
- The Fed announced its most drastic policy interventions on March 23 (announcement)
- It was March 23 that financial markets turned around
  - The stock market reversed course
  - Credit spreads declined
  - Market volatility declines
- Note the interest rate cuts and announcement of large QE were a week earlier
- So it seems that the Fed venturing into purchasing securities with credit risk and lending to non-financial firms did work and helped prevent financial panic
  - Which almost surely has contributed to the better-than-expected economic performance since early-Summer

The Fed's Big Stick

- What is remarkable about the March 23 announcements . . .
- The Fed has basically not bought any non-financial securities with credit risk and has made limited loans to non-financial companies
- As emphasized in Fed Lets Its Big Stick Speak Powerfully (Cecchetti and Schoenholtz), the Fed's words seem to have mattered a great deal
- Just the promise to lend to non-financial corporations had the effect of stabilizing the financial system
- Similar to Mario Draghi's 2012 "whatever it takes" statement

Potential Risks

- What the Fed has done seems to have worked . . . for now
- But there are certainly risks, not only to independence but also potential moral hazard concerns, financial stability risks, and of course the possibility of inflation
- The view generally has been – do whatever it takes and worry about consequences later
- But we are now engaging in extraordinary actions for the second time in a little more than a decade
- When is it too much and when do we start having problems?

Other Issues Going Forward

- The Fed's actions have increased the money supply by more than 20 percent; inflation has stabilized somewhat and has not persistently fallen
  - But at what point do we worry about inflation becoming a problem?
  - Fed is effectively monetizing fiscal deficits
  - Historically, this usually spells trouble
  - Crisis is not a time to worry about inflation and moral hazard, but need an "exit strategy"
- Long-term interest rates are very low
  - 10-year Treasury is 50 bps right now
  - Never got below 150 bps after Great Recession
  - Limited room for unconventional policy (QE and forward guidance) to work?

10-Year Treasury