

The Impact of Covid-19

How will US Politics, Banks and Financial Markets
Shape the Future of the Global Economy?

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August 1, 2020

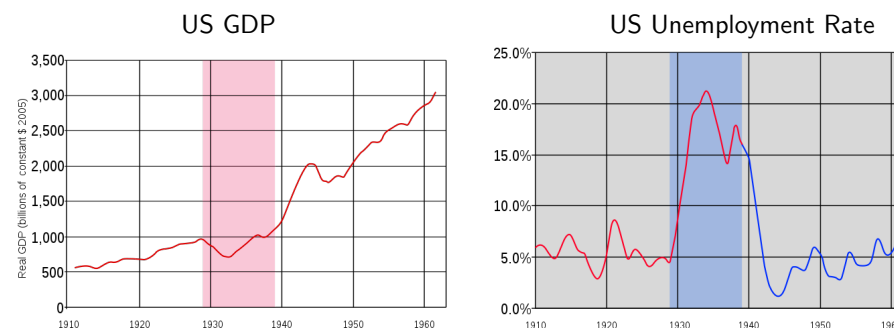
Outline

- Central banks have responded to Covid-19 with unprecedented interventions in financial markets which, effectively, amount to printing cash to buy company stocks and bonds, household debt and even their own government securities
- Under Donald Trump, the strategic aim of the US seems to be to increase prices of US assets and decrease the values of 'safe-havens' – specifically, the US dollar, gold and silver, and bitcoin and other cryptocurrencies
- Similar tactics were used during the **Great Depression** of the 1930s – i.e. currency and gold price manipulation, with a sustained economic stimulus
- And since the **Banking Crisis** of 2008, the same tools have been deployed continuously, to mask the true weakness of the US economy
- What can we learn from the way that government's handled the two previous crises? How will banks and financial markets respond to the packages employed today?

Part I: The Great Depression

- How did the US economy fare after the 1929 stock market crash?
- What role did banks play?
- How were financial markets used to implement economic policy?
- How did the US economy recover?

US Economy in the 1930s



After the stock market crash of 1929, high unemployment in the US → **deflation**
→ The US government aimed to increase exports via **US dollar devaluation**
→ To fund infrastructure and boost manufacturing, also **increased money supply**

1934 Gold and Silver Acts

Changing gold and silver from currencies to commodities

1934 Gold Reserve Act

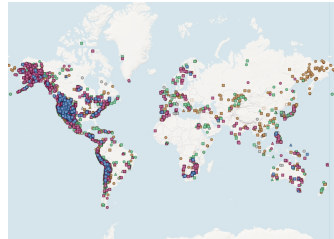


Confiscated @ 1 oz. = \$20.67

Revalued @ 1 oz. gold = \$35

Result 1: US dollar ↓

1934 Silver Purchase Act



50% seigniorage → silver certificates

Result 2: ↑ silver price

Result 3: ↑ money supply

Role of Commercial Banks

Commercial banks contributed to the 1920s stock market bubble by finding a loophole in banking laws, setting up subsidiaries, now called **investment trusts**, to trade in stock markets

1932: Glass-Steagall Act



Clear distinction between activities of commercial and investment banks

Role of Central Bank

Extension of 1913 Federal Reserve Act → 1933 Emergency Banking Act



Federal Open Markets Committee (FOMC)

- Federal Reserve Bank Presidents + Board Members
- Controls interest rates and the money supply, issuing and trading **treasury securities** in **open market operations** with **primary dealers**

Role of Social Media

Franklin D. Roosevelt (1933 – 1945) **Fireside Chats**

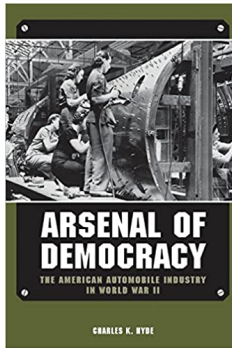


1937: Second Downturn in the Economy

1938: Accounting Reforms → Ban on Market-to-Market (MtM)

Recovery from Great Depression

With the outbreak of WW2 car manufacturing almost ceased
→ changed to manufacture military equipment



- 2,600,000 trucks
- 600,000 jeeps
- 50,000 tanks
- 300,000 war planes
- Millions of guns and bombs



Unemployment ↓ Industrial Production ↑ 15% p.a.
Gross National Product ↑ from \$88.6bn in 1939 to \$135bn in 1944

Bretton Woods

All 44 Allied countries met in 1944 to stabilize exchange rates



- US agreed to adhere to gold standard: 1oz. gold = \$35
 - Allies agreed to peg their exchange rates to USD within 1%
 - International Monetary Fund (IMF) established with Special Drawing Rights to help maintain parity with US dollar
- 2020 XDR = USD 41.73%, EUR 30.93%, CNY 10.92%, YEN 8.33%, GBP 8.09%

Exchange Stabilization Fund

- Established in 1934 as response to UK's Exchange Equalisation Account using \$2bn profits made from confiscated gold
- Originally used to intervene in foreign exchange markets to stabilize the value of US dollar vs. gold
- Bretton Woods Agreement gave permanent authority to the ESF to finance short-term loans to Latin America and other countries in financial crisis
- By October 2009, ESF held assets worth \$105 billion, including \$58.1 billion in special drawing rights (XDR) from the IMF



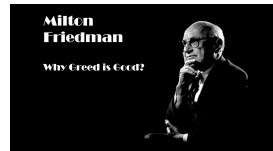
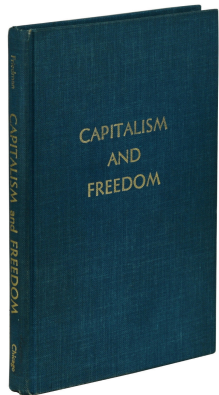
Part II: The 2008 Banking Crisis

- What drove the post-WW2 US stock market boom?
- How did changes in US banking laws re-shape financial markets?
- What caused the banking crisis of 2008?
- Why are prices of US stocks and bonds still increasing today?

US Economy in the 1950's and 1960's

The Birth of Monetarism

Efficient market economics rather than stabilising exchange rates



- Milton Friedman → **restricting money supply** to control inflation
- **Greed-is-Good** philosophy → middle classes replaced commercial banks role in stock price booms

Stock Price Boom \neq Re-Investment of Profits

- By 1965, **60% of company stock** was owned by the middle classes
- But **only 6% of profits** were re-invested in the company
- **45% went to shareholders** and the rest went to highly-paid executives

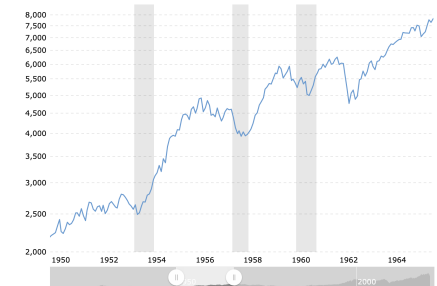
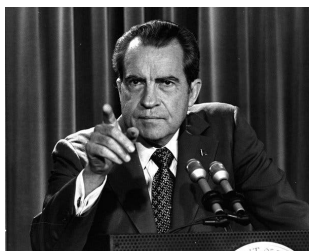


Figure 4: S&P500 returns for individual decades since 1940
Source: Bloomberg, Guinness Atkinson Asset Management

	Total return	Price appreciation	Dividends	Dividends as % of total return
1940s	143.1%	34.8%	108.3%	75.7%
1950s	467.4%	256.7%	210.7%	45.1%
1960s	109.5%	53.7%	55.8%	51.0%
1970s	76.9%	17.2%	59.7%	77.6%
1980s	389.2%	227.4%	161.8%	41.6%
1990s	432.2%	315.7%	107.5%	25.4%
2000s	-9.1%	-24.1%	15.0%	Not meaningful
Average	228.6%	125.9%	102.7%	52.7%

Nixon, Clinton and Bush



Nixon (1969 – 1974)

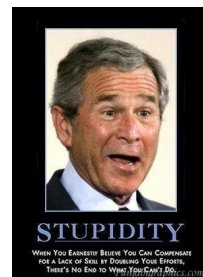
1970: Allows ESF to deal in stocks and bonds

1971: Drops the Gold Standard



Clinton (1993 – 2001)

1999: Repeals the Glass-Steagall Act



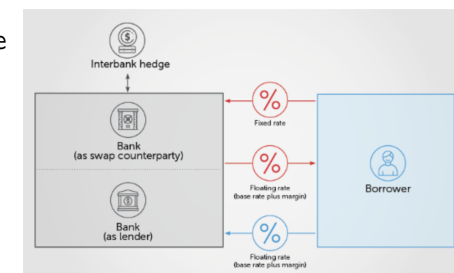
G.W. Bush (2001 - 2009)

2007: Reinstates MtM Accounting

Interest Rate Swaps (IRS)

Different accounting practices drive demand for IRS

- **Cash Accounting** → Companies prefer to have fixed rate loans
- **MtM Accounting** → Banks prefer to give floating rate loans
- Around **\$400tr notional outstanding** in IRS



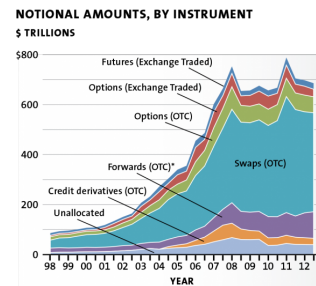
Interbank hedging of IRS requires liquid bond markets

Monetary Policy of Central Banks



- Following recession of 2001-2
Alan Greenspan kept interest rates too low for too long
- Notional traded on financial derivatives soared as **all** banks searched for **yield**

By 2008 derivatives trading exceeded $10 \times$ world GDP by notional amount

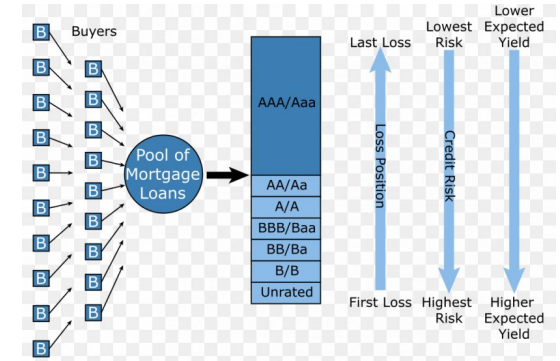


*Includes forex swaps, equity-linked swaps, and commodity swaps.
The amounts outstanding for these categories are small and BIS reports their data with forwards.
Source: Bank for International Settlements, June 2013

Role of Investment Banks

Securitisation of sub-prime debt

- Commercial banks buy **mortgage backed securities** (MBS) underwritten by investment banks
- Investment banks further underwrite **collateralised debt obligations** (CDO)
- Investment banks also sell default insurance for MBS and CDO via **credit default swaps** (CDS)

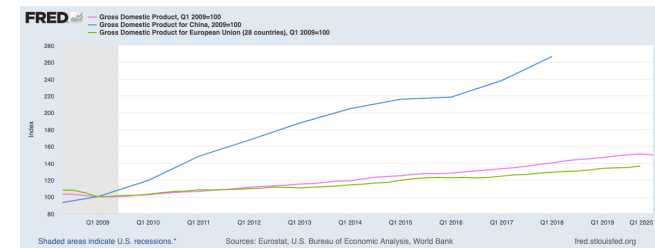


2008: Banks and Financial Markets Collapse

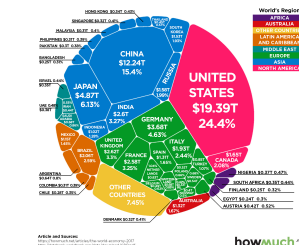


- Rating agencies** colluded with investment banks → tranches retain good credit ratings
- Toxic financial bomb** → 2011 European sovereign debt crisis
- Federal Deposit Insurance Corporation (FDIC) closed 465 US banks from 2008 to 2012
- Unlike bank accounts **money market funds** (MMF) are not FDIC-insured
- Investors withdrew more than \$250bn from this vital source of liquidity for US corporations – **\$3.535** ↓↓ **\$3.288 trillion in 10 days**
- US Treasury used **\$23bn in ESF** to prop up values of shares in MMFs

Fast Forward from 2009 to 2019



2019 GDP: US ~ \$22tr, EU ~ \$18tr, China ~ \$15tr



Quantitative Easing

2009 – 2017: Three Rounds of QE

- Fed buys securities including its own treasuries but also MBS etc.
- ↑ money supply, ↑ balance sheet

2017: Unwinding of US Federal Debt

- Deflation balance sheet ⇒ No more QE
- ⇒ Money market squeezes and US stock prices ↓

2019: QE4 Repurchase Operations (Repo)

- September 2019 → first interest rate cuts since 2008
- \$60bn T-Bills purchased per month in overnight repos by Fed

Part III: Central Banks' Response to Covid-19

- New tools for extreme monetarist policies
- The Federal Reserve's last resorts?
- Who are the winners and losers
- Financial market dislocation
- Are prices of 'safe-haven' assets being manipulated?
- Global economic outlook

Repo : New Monetary Policy Tool

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Repurchase Agreement Operational Details

In accordance with the most recent Federal Open Market Committee (FOMC) directive, the Open Market Trading Desk (the Desk) at the Federal Reserve Bank of New York will conduct a series of overnight and term repurchase agreement operations (repos) to support effective policy implementation and the smooth functioning of short-term U.S. dollar funding markets.

Securities eligible as collateral for both overnight and term operations include Treasury, agency debt, and agency mortgage-backed securities. Treasury Dealers will be permitted to submit up to two propositions per security type per operation at rates equal to or greater than the operation minimum bid rate, which is set at the rate of interest on excess reserves (IOER) plus a spread. The operation calendar and parameters are subject to change.

Monthly Schedule of Overnight and Term Repurchase Agreement Operations

CURRENT PERIOD Summary: The Desk plans to conduct overnight repo operations on most business days and a series of term repo operations. The aggregate operation limit of all operations is \$50 billion and operations will occur on the same day as the operation date unless otherwise noted.

OPERATION DATE	OPERATION DATE	TIME	MINIMUM BID RATE
Friday, 6/12/2020	Monday, 6/15/2020	8:15 - 8:30 a.m.	IOER + 10 basis points
Tuesday, 6/16/2020	Tuesday, 6/16/2020	8:15 - 8:30 a.m.	IOER + 5 basis points
Wednesday, 6/17/2020	Friday, 6/19/2020	8:15 - 8:30 a.m.	IOER + 5 basis points
Monday, 6/22/2020	Monday, 6/22/2020	1:30 - 1:45 p.m.	IOER + 5 basis points
Tuesday, 6/23/2020	Tuesday, 6/23/2020	8:00 - 8:15 a.m.	IOER + 10 basis points
Tuesday, 6/23/2020	Tuesday, 6/23/2020	8:15 - 8:30 a.m.	IOER + 10 basis points
Tuesday, 6/23/2020	Tuesday, 6/23/2020	8:15 - 8:30 a.m.	IOER + 10 basis points
Tuesday, 6/23/2020	Tuesday, 6/23/2020	8:15 - 8:30 a.m.	IOER + 10 basis points

Note: This calendar was last updated on 6/11/2020

Data

Historical Repurchase Operation Schedule & Parameters

PREVIOUS PERIODS

Announcements

Statement Regarding Repurchase Operations June 11, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

Statement Regarding Treasury Securities Management Functions and Repurchase Operations May 13, 2020

Statement Regarding Repurchase Operations May 13, 2020

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Statement Regarding Treasury Bill Purchases and Repurchase Operations May 13, 2020

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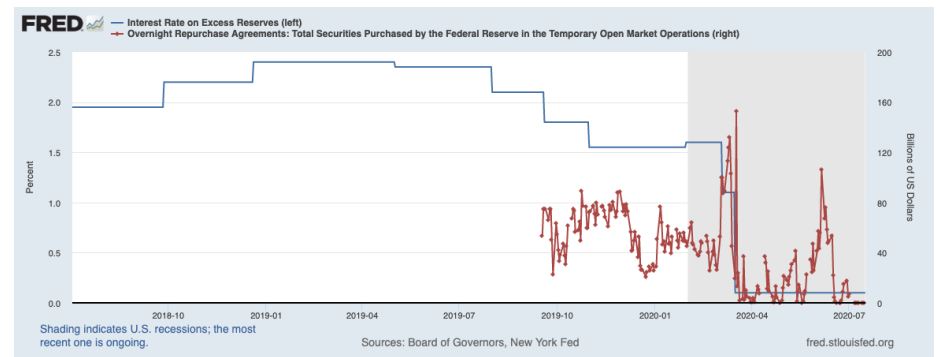
Statement Regarding Repurchase Operations May 13, 2020

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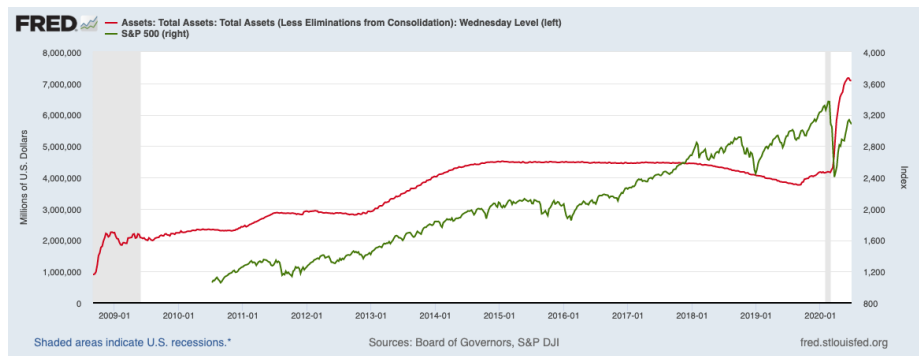
Statement Regarding Repurchase Operations May 13, 2020

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Interest on Excess Reserves (IOER) & O/N Direct Repo



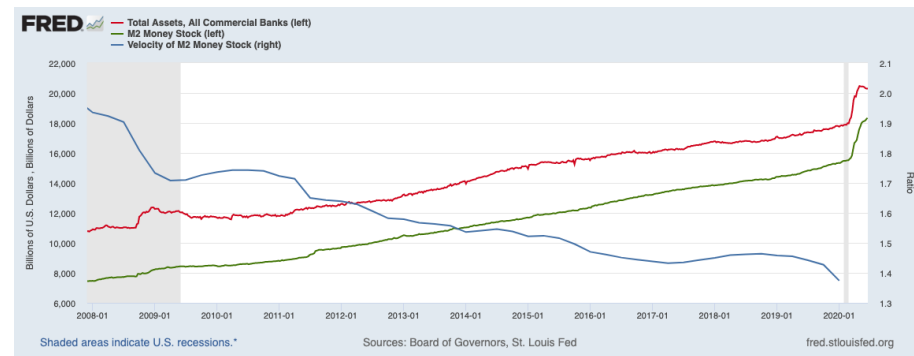
Balance Sheet Expansion \$1tr ↑ \$7tr



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Money Supply



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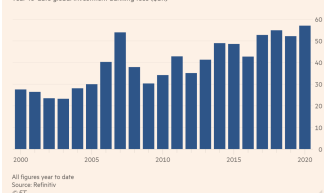
Hedge Fund and Investment Bank Profits

Single-Manager Hedge Funds

	May-20	Apr-20	2020 YTD	12 Months
Hedge Funds	2.89	5.67	-2.95	1.80
HF - Event Driven Strategies	3.72	5.91	-7.54	-4.58
HF - Equity Strategies	3.63	7.37	-5.11	1.73
HF - Credit Strategies	1.74	1.96	-5.66	-3.01
HF - Relative Value Strategies	1.70	2.35	0.38	3.23
HF - Macro Strategies	1.59	2.99	-0.03	5.68
HF - Multi-Strategy	1.43	5.21	-2.59	2.71
Activist	3.85	7.62	-7.80	-1.32
Discretionary	3.19	6.32	-4.37	1.32
Volatility	1.87	4.12	-1.01	4.18
Systematic	1.47	3.91	-0.02	1.85
HF - North America	4.36	7.22	-1.41	4.14
HF - Emerging Markets	2.73	5.30	-6.60	-0.30
HF - Developed Markets	2.51	4.24	-3.41	2.28
HF - Asia-Pacific	2.32	5.55	-4.46	0.92
HF - Europe	1.34	3.83	-4.86	-1.48
HF - BRL	3.22	5.14	-6.11	3.61
HF - USD	3.08	5.95	-2.46	2.14
HF - GBP	2.95	3.99	-3.81	0.71
HF - EUR	1.86	3.54	-3.42	-1.45
HF - JPY	-0.26	1.97	-6.97	-4.11
HF - Large (\$1bn plus)	3.19	5.01	-1.48	4.48
HF - Emerging (Less than \$100mn)	2.85	5.88	-3.88	0.53
HF - Medium (\$500-999mn)	2.66	4.42	-4.94	0.02
HF - Small (\$100-499mn)	2.55	4.38	-4.18	1.76

Investment banking fees hit a record in the first half of 2020

Year-to-date global investment banking fees (\$bn)



Total investment banking fees are up 9 per cent from the first half of 2019, according to Refinitiv. That includes a 30 per cent jump in revenues from underwriting bonds and a 37 per cent rise in fees tied to stock sales.

Deutsche Bank first quarter investment bank profit beats all of 2019

Profits in the division were €622m, nearly 150% up on the same period last year and more than the €445m it made in the whole of 2019

By Paul Clarke
April 29, 2020 8:35 am GMT



Deutsche Bank's shrunken investment bank generated more profit in the first quarter of 2020 than it did in all of last year as the German lender benefited from a huge upswing in bond issuance and increased trading revenues because of the Covid-19 crisis.

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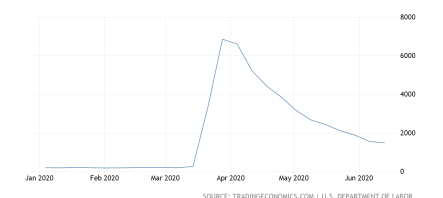
US Household Economics

Covid Aid Relief and Economic Security (CARES) Act of 27 March 2020

Today there is **\$14.3tr** of household debt. Consumer loans have been massively securitised by banks and P2P lenders

Four US government stimulus packages (so far) pledge about **\$3tr** to help small business and consumers, aims to prevent wave of defaults triggering another credit crisis

50 million new jobless claims in the US since March 2020



Real unemployment rate 24% or more

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Credit Crisis Looms

Term Asset-Backed Securities Loan Facility

- Federal Reserve banks and Blackrock are buying **\$300bn** of securities backed by **MBS, car loans, credit card debt, student loans, etc.**
- They are also buying new **corporate debt** in exchange for credit lines up to four years, for all investment-grade companies (e.g. GM alone has a credit line of **\$2bn**)
- Also buying corporate debt in the **secondary market** – around **\$2.5bn** of large corporate bonds (AT&T, Berkshire Hathaway Energy, McDonalds, etc) and corporate bond exchange-traded funds

ESF Bailout for Money Market Funds

CARES Act allows \$500bn from ESF for general “bailouts”

- MMFs are high-quality short-term assets – like bank deposits but not FDIC guaranteed
- Sector provides **\$4.8tr** of liquidity, but with **zero** or **negative** interest rates MMFs again threatened by investor withdrawal

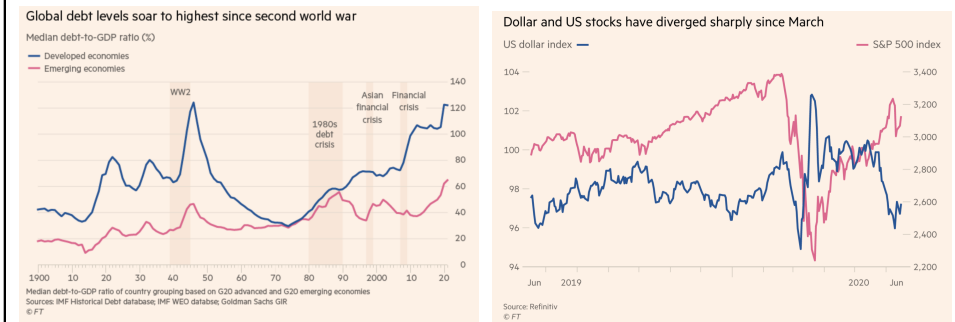


- MMF managers have started to bail out prime funds

Fed's Last Resorts to “Stabilise” Financial Markets

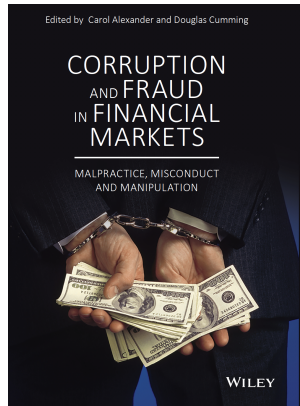
- Acting as a lender of last resort to investment funds**
The ESF is used to guarantee value of MMFs
- Acting as a lender of last resort to securities firms**
Primary Dealer Credit Facility gives funds direct to banks ↔ Fed
- Acting as a securities dealer of last resort**
The Fed now intermediates on both sides of the repo market
- Acting as a securities underwriter of last resort**
For investment-grade corporate bonds or loans to 4 -year maturity
- Acting as a securities buyer of last resort**
Buying US corporate bonds and ETFs on the secondary market.

QE Goes Global → Markets Dislocate



US dollar defends returns on US stocks and bonds

No Safe Haven



Bitcoin History: When DDoS Attacks Made BTC's Price Drop

FEATURED
by Kot Sadegh

Mar 4, 2020

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ECB Pandemic Emergency Purchase Programme

Banks rush to borrow record €1.3tn at negative rates from ECB

Central bank offers ultra-cheap loans to prevent pandemic becoming credit crunch

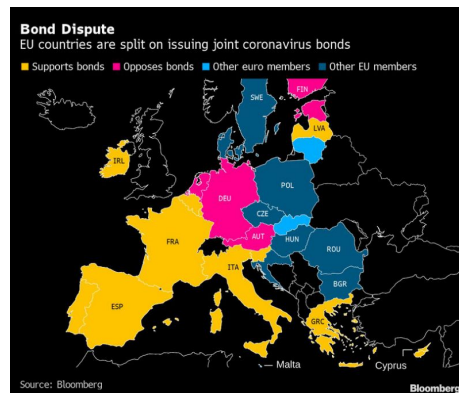


By offering multiyear loans to banks at an interest rate below its main deposit rate, the ECB is effectively providing a subsidy for the banking system © REUTERS

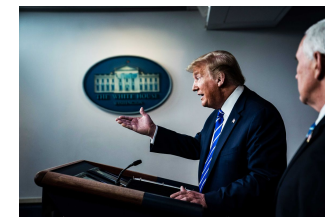
- Negative interest up to -1%
- €765bn ($\sim 60\%$) for banks to repay maturing ECB loans
- €543bn ($\sim 40\%$) to buy new government bonds → **red bonds**
- Highly profitable carry trade

Coronabonds

- Backed by all member states → low interest → **blue bonds**
- Joint responsibility → **no incentive to reduce debt**
- Suggest imposing country-specific limits to blue bond financing and financing the remaining debt using red bonds

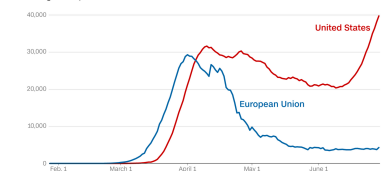


Global Economic Outlook



New coronavirus cases in the US vs. the EU

Soaring daily reported cases in the US and low EU numbers show why Americans are facing a European travel ban.



- ↑↑ **Debt** → 2 or 3 times GDP
- ↑↑ **Unemployment** → deflation
- ↑↑ **Export pressures** → negative interest rates and trade tariff wars
- ↑↑ **ESF resources** → competitive currency devaluations
- ↑↑ **Nationalisation of capital markets** → yield curve controls