### Global Financial Crisis 2007-2008

- What happened?
- Early 2000s, very low interest rates by Fed (1% June 2003 to June 2004) to fight deflation after Internet stock crash in 2000 and broader crash in 2001, following 9/11
- Global savings glut
- Housing market boom
- Followed by a collapse
- Beginning with the sub-prime sector

## Lehman Brothers: September 2008

- August 2007: BNP Paribas freezes funds
- September 2007: Northern Rock bank run
- March 2008: Bear Stearns bailout (absorbed by JP Morgan, already chaired Jamie Dimon)
- September 7, 2008 Fannie Mae and Freddie Mac placed in conservatorship (they were essential nationalised, as the government guaranteed \$5 trillion in mortgage loans)
- September 15, 2008: Lehman Brothers file for bankruptcy
  - A conspiracy (unlikely) moral hazard argument (markets have to work)
- September 16, 2008: AIG bailout up to \$85 bn

### "Why had no-one predicted the crisis?"

The Queen opening a building at the LSE, November 2008

British Academy replied in a letter on 17 June 2009, reasons:

- 1/ many did foresee the crisis: problems of timing, and willingness to act how?
- 2/ many warnings about global imbalances, global savings glut, equity withdrawal etc.

The Global "Savings Glut" (Bernanke) and The "Minotaur Economy" (Varoufakis)



# "global surplus recycling mechanism" (GSRM)

US: consumer of last resort after post 9/11 global slowdown, US was holding up world demand

China (especially) and other Asian countries were lending to the US and exporting to the US

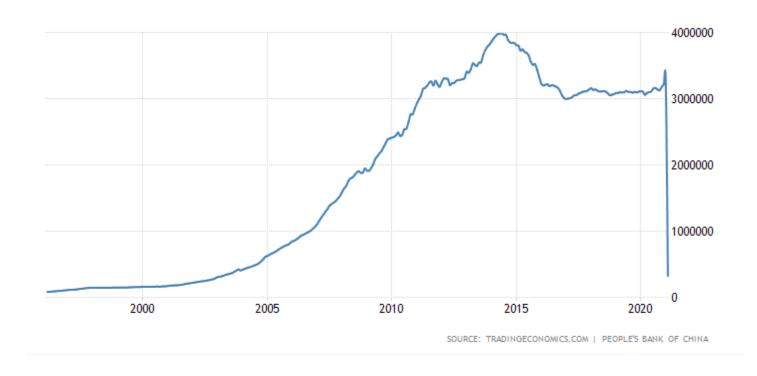
US trade balance: the "consumer of last resort" (2003: Rogoff "the best recovery money can buy")

Sustainable for ever?



SOURCE: TRADINGECONOMICS.COM | BUREAU OF ECONOMIC ANALYSIS (BEA)

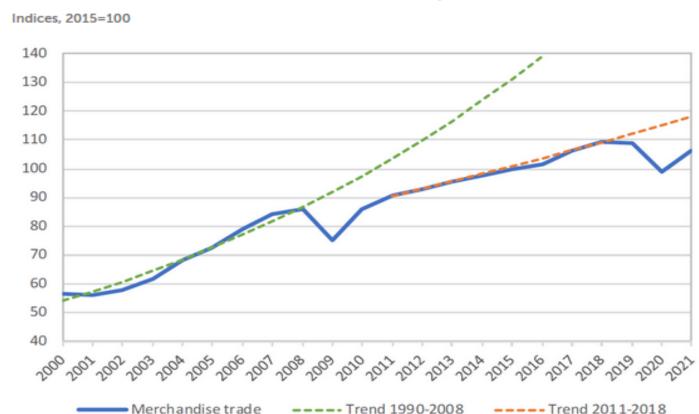
# China Foreign Exchange Reserves (Trading Economics)



Source: https://tradingeconomics.com/china/foreign-exchange-reserves

### Globalisation: trade/GDP

Chart 1 - World merchandise trade volume, 2000-2021



Source: WTO Secretariat.

Note: Figures for 2020 and 2021 are projections.

Source: WTO press release 6 October 2020.

### Letter to the Queen continued 2

- 3/ wishful thinking combined by all politicians charmed by the market models good at predicting short-term, small risks.
- 4/ people trusted the skills of bank management;
- 5/ a general "feel good" factor: households cheap goods and credit; bankers making money; governments receiving taxes
   > a psychology of denial;
- 6/ the authorities lacked instruments to "take away the punch bowl" "light-touch" regulation;
- 7/ inflation low > no sign of overheating;
- 8/ everyone seemed to being doing their job; failure to see series of interconnections.
- 9/ psychology of herding.

### Other factors:

- Chuck Prince, CEO Citigroup: "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing," 9 July 2007 to FT.
- Fraud, especially as boom intensifies (Martin Wolf)
- Raghuram Rajan: 2005 warning Jackson Hole
  - 2010 "Let them eat credit" > neoliberalism fueled by credit as household income stagnated.
- André Orléan: when credit is cheap and asset prices are rising, rising prices lead to higher demand!
- Hyman Minsky: "stability breeds instability"

### Massive intervention

- Interest rates slashed
- Fed and other central banks lent massively to markets in the face of the credit crunch: Bagehot's principle to lend "quickly, freely and readily", at a penalty rate of interest, to any bank that can offer "good securities" as collateral. (Lombard Street, 1873)
- Numerous short-term lending facilities established (Fed even substituted itself for the commercial paper market)
- Globally, public authorities mobilised \$14 trillion to provide direct capital to banks and guarantees.

### No return to normal

• There was re-regulation – next course

But monetary policy remained abnormal until the end of 2021.

 Yes, some moderate increases in Fed funds rate, and some rundown of QE

But the essential direction of policy remained "exceptional"

### NEW YORK TIMES BESTSELLER

"The one economics book you must read now ... If you want to understand this bifurcated world and where it's headed, there is no better interpreter than Mohamed El-Erian." TIME

# MOHAMEDA. EL-ERIAN

With a new Introduction by the author

# ONLY GAME IN TOWN

THE

CENTRAL BANKS,
INSTABILITY, AND AVOIDING
THE NEXT COLLAPSE

### Unconventional monetary policy

- Quantitative easing:
  - US (QE1, QE2 and QE3) November 2008 to October 2014: \$4.5 trillion
  - UK (March 2009 to end 2012: £375 billion); the policy was relaunched in August 2016 after Brexit referendum
  - ECB January 2015 €60 billion per month
- Forward guidance including unemployment targeting!

- What does this mean for banking?
  - Negative interest rates
  - "search for yield" speculative investments

### How successful?

• John Kay: QE a "leaky bucket" (2013) — House of Lords (2021): QE an "imperfect policy tool"

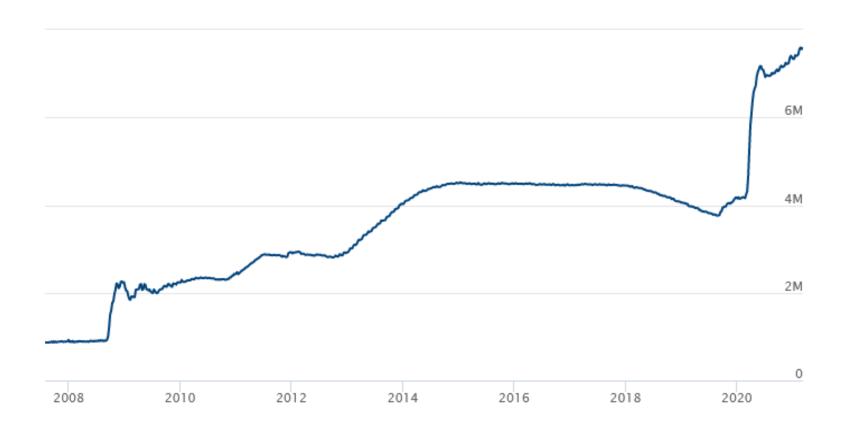
• Fiscal policy followed by "austerity" in Europe after 2010, because of traditional public spending worries, and Reinhart & Rogoff empirical study: when debt exceeds 90% of GDP it leads "on average" to a fall in growth rate of 1%.

• Eurozone experienced a significant public spending crisis: sovereign debt crisis.

### And then came Covid-19

- US GDP collapsed at an annual rate of 30% in Q2 / 2020
- 22 million jobs lost in first two months:
  - Unemployment rose from 50-year low of 3.5% to 15% in April 2020
- Monetary and fiscal response unprecedented
  - From December 2019 to March 2021 nearly \$5.8 trillion was provided in fiscal support in the US (28% of GDP)
  - Similar measures in the UK notably to support "furlough schemes"

### US Federal Reserve: Recent balance sheet trends



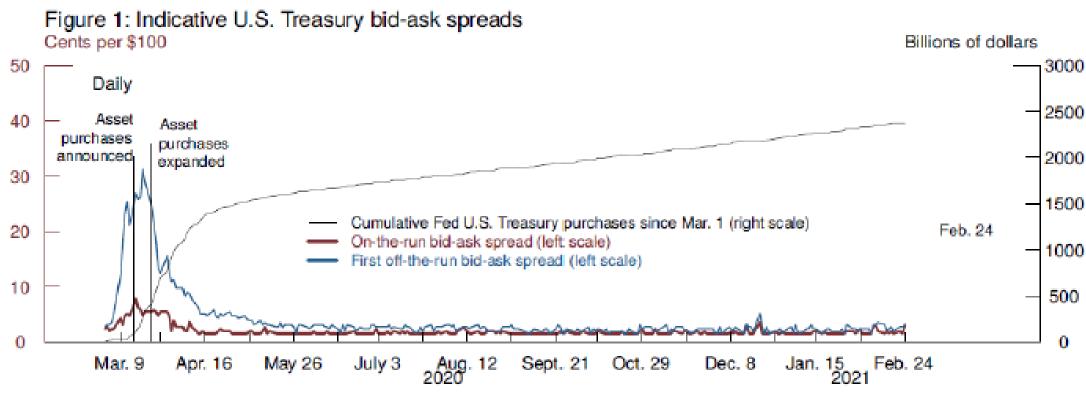
Source: https://www.federalreserve.gov/monetarypolicy/bst\_recenttrends.htm

## Fed used 5 types of actions

- 1/ conventional policy cutting interest rates; forward guidance; restarting QE (of MBSs) and repo ops.
- 2/ liquidity to markets (commercial paper, mutual fund markets, dollar swap lines for foreign banks)
- 3/ facilities to support flow of credit to households, businesses, state and local governments
- 4/ temporary recalibrations to regulations and supervisory practices to encourage banks to provide credit to households and businesses.
- 5/ intervention in currency markets "swap lines" to stabilise currency movement.

Source: Richard H. Clarida, Burcu Duygan-Bump, and Chiara Scotti, "The COVID-19 Crisis and the Federal Reserve's Policy Response", Finance and Economics Discussion Series (FEDS), June 2021, retrieved 4 November 2021.

### Repo operations to bring down market interest rates

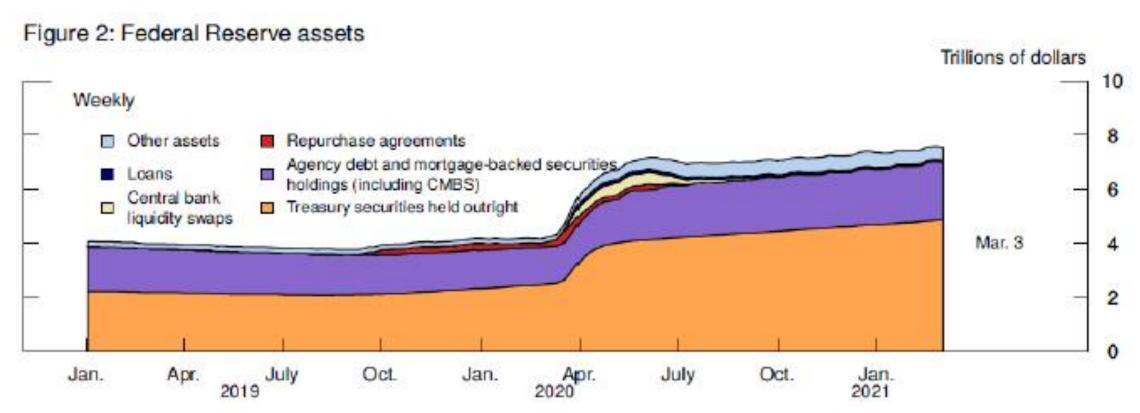


Note: Indicative bid-ask spreads for 10-year Treasury note. On March 15, the Federal Open Market Committee announced an increase of its holdings of Treasury securities by at least \$500 billion and its holdings of agency mortgage-backed securities (MBS) by at least \$200 billion. On March 23, the Federal Reserve announced it would continue to purchase Treasury securities and agency MBS in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions.

Source: Federal Reserve Bank of New York.

## Asset purchases under renewed QE

(June 2020 Fed meeting: \$80 bn Treasury securities and \$40 of agency MBS per month)



Note: "Other assets" include unamortized premiums and discounts on securities held outright, the Commercial Paper Funding Facility, the Secondary Market Corporate Credit Facility, and the Municipal Liquidity Facility. "Loans" consist of primary, secondary, and seasonal credit as well as other credit and liquidity facilities, including the Primary Dealer Credit Facility, the Money Market Mutual Fund Liquidity Facility, and the Paycheck Protection Program Liquidity Facility. CMBS is commercial mortgage-backed securities.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

### **Takeouts**

- Financial globalization has been a long, complex process
- In the run-up to the GFC, macroeconomics was looking the other way
- There were many warnings of a crash, but regulators and operators could not and would not act
- Monetary policy and interest rates in the major economies have been profoundly unusual since the end of 2008
- The authorities were careful and reactive to ensure market liquidity at the start of Covid
- But where do we go now?