Class 2 - 2022 - 2023

From the origins of monetarism to unconventional monetary policy

Class outline

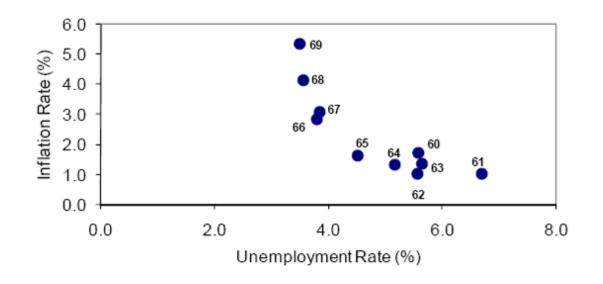
From "The Good Old Days" to the rise of monetarism

The long road to Jackson Hole

The Brave New World after the Global Financial Crisis

1. The Good Old Days of monetary stability ©

Figure 1. U.S. Consumer Price Index (CPI) Inflation and Unemployment Rates in the 1960s.



BRETTON WOODS
MONETARY CONFERENCE

In 1944 the United States government chose the Mount Washington Hotel as the site for a gathering of representatives from 44 countries. This was to be the famed Bretton Woods Monetary Conference. The Conference established the World Bank, set the gold standard at \$35.00 an ounce, and chose the American dollar as the backbone of international exchange. The meeting provided the world with a badly needed post war currency stability.

Data Source: U.S. Bureau of Labor Statistics

Source: Dr. Econ, what is the relevance of the Phillips curve to modern economics?, Federal Reserve Bank of San Francisco, March 2008 (https://www.frbsf.org/education/publications/doctor-econ/2008/march/phillips-curve-inflation/)

3-6-3 Banking of the 1950s and 1960s

- Pay interest on deposits of 3%
- Lend at 6%
- Be on the golf course at 3pm

Banking and finance were essentially fairly standard middle-class professions.



Banking and finance compartmentalized and regulated

In US: interstate banking prohibited

Glass Steagall 1933 split commercial and investment banking

Regulation Q: capped interest rates on savings deposits

Mortgages financed by Savings & Loans (US) and Building societies UK)

The "City" – clubby atmosphere

Separation between jobbers and brokers

Between retail "high street" banks and "merchant banks"

The rise of inflation: "Follow the Money"

• In 1960s: inflation started rising – too much demand: Vietnam war, Great Society, and space race.

- Demand push

 cost pull
- Low unemployment > pay rises
- Challenge to authority
- Challenge to social norms
- Civil rights, greater freedom for women
- PERMISSIVE MONETARY POLICY (in US)





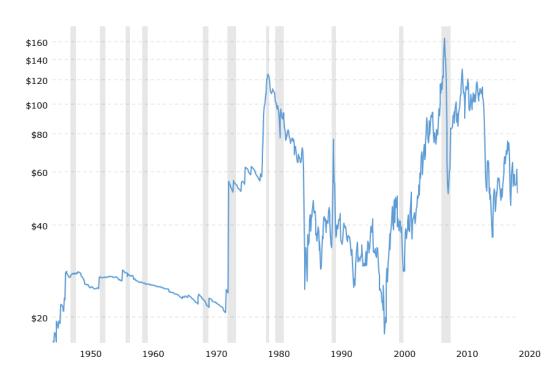
Fiat money - 1971



 1971: Nixon announced suspension of Bretton Woods (https://www.youtube.com/watch?v=iRzr1QU6K10)

• A fall in dollar, and a surge in global inflation.

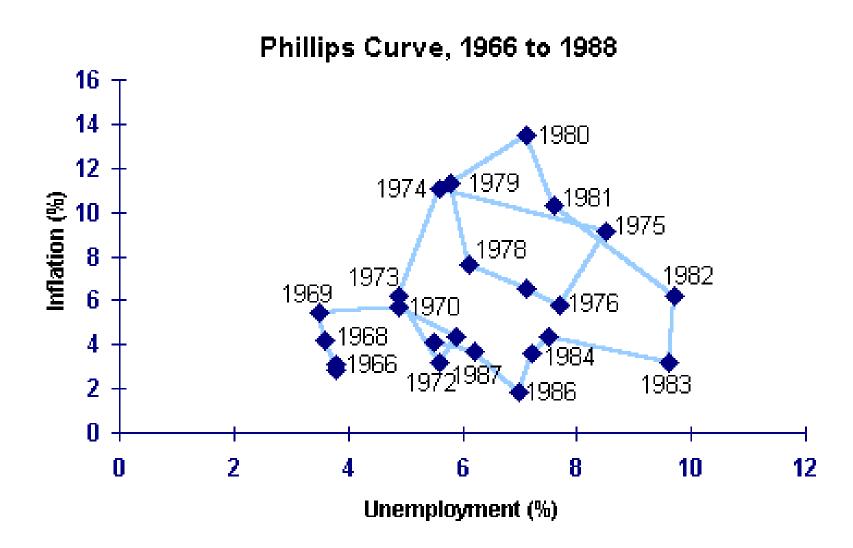
Oil Shocks



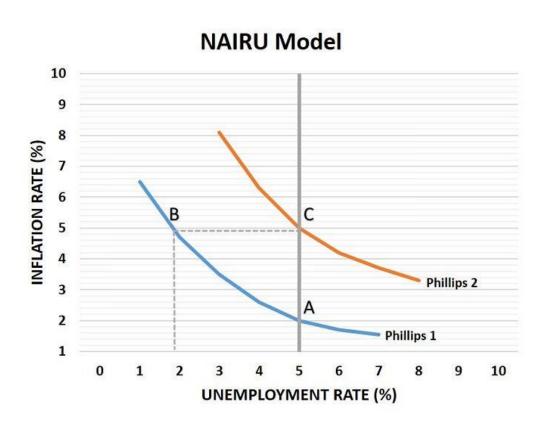
Source: Macrotrends (https://www.macrotrends.net/1369/ crude-oil-price-history-chart).

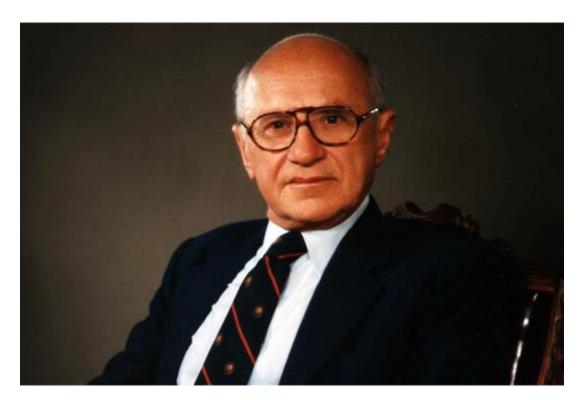
- Compounded by first oil price shock 1973-4
- Recession and inflation (demand leakage, higher energy and raw material prices) > STAGFLATION (The Economist).
- The first oil shock to Elton John and Benny and the Jets: https://www.youtube.com/watch? v=Qb-sRuGiGFY
- Club of Rome: *The Limits of Growth* (1973?)

And then... 😊



A New World





$$MV = PT$$

Federal Funds Rate



2. The long road to Jackson Hole



A lesson from the Kiwis - 1990



Direct inflation targeting!

No intermediate targets (no more M0, M3, etc., or currency pegs)

Taylor Rule (1992)

$$i_t = \pi_t + r_t^* + a_\pi (\pi_t - \pi_t^*) + a_y (y_t - \bar{y}_t).$$

i_t = target short term nominal interest rate (FFR)
 r*t = assumed equilibrium real interest rate (i.e. output and demand in balance and prices are stable)
 Πt = rate of inflation (GDF deflator)
 Π*t = the desired rate of inflation (usually 2%)
 yt = logarithm of real GDP
 yt = logarithm of potential output

The Jackson Hole consensus (during the "Great Moderation": mid-1980s to GFC)

- Independent central banks, and policy managed by expert committees;
- Direct inflation targeting (no intermediate targets like the money supply);
- Short term interest rates (Federal funds rate) as the instrument to meet this target (in conformity with "Tinbergen's Rule" that the number of targets;
- Policy for setting rates was forward-looking, given the time lags of "monetary channels";
- To be credible and enforce expectations, policy has to be transparent and communicated clearly to markets.

Robert Lucas – January 2003



"My thesis in this lecture is that macroeconomics in this original sense has succeeded: Its central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades."

3. The Brave New World (late 2008)

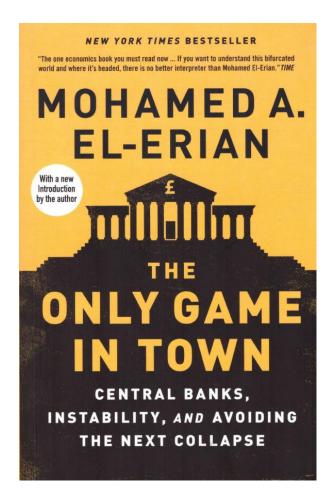
Ultra-low interest rates

• QE

Forward guidance

• Even a clear unemployment target

The 2010s – dominated by monetary policy



Governments essentially relied on central banks to provide cheap money and liquidity.

Help re-finance banks indirectly.

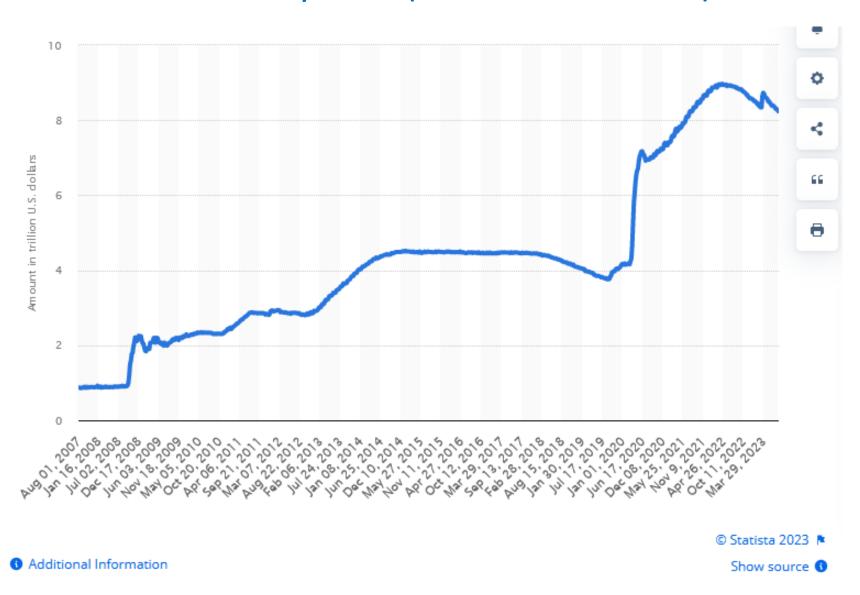
Repeated use of QE:

US: QE1 Nov 2008, QE2 Nov 2010, QE3 Sept 2012

June 2013 "taper" > "taper tantrum" > reversal till October 2014... QE4 March 2020

UK: QE after GFC, then again after Brexit referendum in 2016, and in March 2020

Value of assets on the balance sheet of the Federal Reserve from August 2007 to July 2023 (in trillion US dollars)



Prompt: What are the long term implications of the build up in central bank reserves due to quantitative easing? ChatGPT4 replied (May 2023):

Quantitative easing (QE) is a monetary policy where a central bank purchases longer-term securities from the open market to increase the money supply and encourage lending and investment. While QE can help stimulate economic activity, it also has several potential long-term implications:

- 1. Inflation Risk: The large-scale creation of new money can lead to inflation, where the general level of prices for goods and services rises. This risk is particularly high if the economy recovers faster than expected and the central bank is unable to withdraw the additional liquidity quickly enough.
- 2. Asset Price Bubbles: By lowering interest rates and flooding the financial system with money, QE can potentially lead to mispricing of risk and the inflation of asset price bubbles, which can be harmful if they burst.
- **3. Balance Sheet Risks for Central Banks:** QE increases the size of central bank balance sheets, exposing them to potential losses if interest rates rise (because the value of the bonds they hold would fall). This could, in theory, undermine confidence in the central bank.
- **4. Currency Depreciation:** If a country continues to increase its money supply through QE while other countries do not, it could lead to depreciation in its exchange rate. This can be beneficial for exports but harmful for imports and could contribute to inflation.

- **5. Reduced Market Discipline:** Prolonged QE might lead financial markets to become overly reliant on central bank support, reducing market discipline and potentially encouraging excessive risk-taking.
- 1. Income Inequality: QE can also lead to increased wealth and income inequality. This is because the policy tends to boost the prices of assets like stocks and homes, which are mostly owned by wealthier individuals.
- 2. Sovereign Debt Levels: QE can contribute to higher levels of government debt if it is used to finance government spending. Over time, this could create concerns about fiscal sustainability and put upward pressure on interest rates.
- **3. Interest Rate Sensitivity:** When central banks need to start tightening monetary policy, even small increases in interest rates could have a large impact on the economy due to the high level of debt accumulated during the QE period.
- **4. Effectiveness of Monetary Policy:** If central banks resort to QE too frequently, it may reduce the effectiveness of this tool over time, as markets and investors might become desensitized to these measures.
- Central banks need to navigate these issues carefully. The challenge is to stimulate the economy enough to avoid deflation and high unemployment, without creating too much inflation or causing financial instability. The longterm implications of QE are still a topic of much debate among economists and policymakers.

Secular Stagnation

- Reinhart & Rogoff: debt pile-up
- Robert Gordon: declining productivity
- Bernanke: continuation of "global savings glut"
- Krugman: old style liquidity trap
- Conclusions:
 - Constraint is on the demand side
 - Competitive monetary easing > currency wars
 - Coordinated fiscal expansion





https://larrysummers.com/category/secular-stagnation/

Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for United States



2019 New Thinking on Inflation and fiscal policy

At the Fed:

- Extensive review of low-inflation environment
- "Fed listens" > town hall consultations
- Toleration of above target inflation to compensate for years of below-target inflation

O. Blanchard (presidential address of AEA, 2019):
 Long term (real) interest rates on govt debt tend to be less than rate of growth > greater sustainability of govt. deficits and debt...?

And then came Covid...

Take outs

 The post-war monetary and financial regime was very stable – centred on the US and the gold standard

 It broke down for many reasons, notably inflation > profound policy changes, with the switch from Keynesianism to monetarism

• It took a long time to reach the "Jackson Hole Consensus", which then seemed immutable (until the GFC)

The 2010s were completely unreal... paved the way to new inflation?