Macroeconomics after J.M. Keynes

- In 1950s and 1960s Keynesian economic policy became very popular in Western world.

- The 2\textsuperscript{nd} World War gave boost to practical Keynesianism – massive government spending in many areas of the economy.

- Some followers of Keynes in 1950s-60s introduced the so-called policy of functional finance (FF policy).
Policy of functional finance

• FF policy – to use monetary and fiscal policy to achieve high employment, price stability and high growth.

• In practice:
  – In times of growing unemployment government has to increase budget deficit and the money supply
  – In times of low unemployment government has to do the opposite - decrease budget deficit and decrease the money supply
Macroeconomics and policy in 1950s-60s

• Golden Age of interventionism in economic policy

• (Modified) Keynes’s economic theory and policy became central in Western world.
Neoclassical reaction to Keynes

- Neoclassical economists already in 1937 attempted to incorporate Keynesian economic into neoclassical framework.
- The project of absorbing Keynesian views occupied the minds of neoclassical economists for about another two decades (to the mid 1950s).
- In this period a new approach to macroeconomics appeared, which synthesized neoclassical and Keynesian views – **neoclassical synthesis** (NS).
- NS constituted the heart of macroeconomics of business cycles up to the 1980s.
IS-LM model

- IS curve represented combinations of interest rates and output for which planned savings and planned investment were equal.
- The LM curve represented combinations in which the demand for money equalled the fixed supply of money.
- The crossing point of the curves determined the equilibrium level of output and interest rate where both commodity and money markets clear.
The IS-LM Model
IS-LM model

• In IS-LM model you could obtain both Keynesian and neoclassical models as special cases (for example you could obtain Keynesian solution with the assumption of highly inelastic LM curve).

• In 1950s-1960s neoclassical synthesis (IS-LM model) was thought of as a correct representation of the problem of business cycles. Economists disagreed only with respect to the values of the parameters of the model.

• Model allows for analyzing various effects of combinations of fiscal and monetary policies on the level of national income and employment.

• Served as a popular tool for interventionist stabilization policy.
Keynes and IS-LM model

• IS-LM model says nothing about the cause of the business cycle
  – Volatility of investments for Keynes
• IS-LM model does not include Keynes’s analysis of uncertainty
  – For Keynes uncertainty affects both demand for investments and cash money
• The model does not explain the general level of prices (mainstream critique)
Philips curve

- In late 1950s, IS-LM model was supplemented with Philips curve as a tool of explaining the level of prices in the economy.
- Philips curve describes negative relationship between inflation and unemployment.
- Philips curve gave another powerful argument for government interventionism – it suggested that you can control at least one important macro variable – inflation or unemployment.
Phils curve
Decline of IS-LM analysis

- IS-LM model was rejected in macroeconomics in 1970s
- Problems with IS-LM model:
  - does not accurately explain inflation
  - not formulated in terms of GE model
- So, neoclassical synthesis died out in 1970s.
The opposition to Keynesian economics in 1950s-1960s: **Monetarism**

- **Founder**
  Milton Friedman (1912-2006)

- Similar to classical and neoclassical macroeconomics in spirit, assumptions and conclusions

- Economic fluctuations are temporary and automatically erased by market powers, if government does not intervene in the economy
Three major contributions of monetarists to scientific economics

• (1) *Money supply as a major cause of business cycles*: that movements in the money supply have been the primary cause of business fluctuations and that movements in aggregate demand for goods have relatively little impact.

• (2) *natural rate of unemployment hypothesis*: belief that there exists a unique rate of unemployment that is associated with non-accelerating inflation and that, in the long run, the economy will settle at such an unemployment rate.

• (3) *superiority of monetary policy rules*: assertion that monetary policy is much more effective than fiscal policy in fighting business cycles; following a steady money supply growth rule is, at least in the long run, better than a discretionary, counter-cyclical monetary policy.
Money as the cause of business cycles

• Keynesians argued that movements in aggregate demand (esp. investments) are the primary cause for business cycles

• Friedman wanted to show that it is money supply and especially changes introduced by the government or its institutions (monetary powers)

• Friedman, Anna Schwartz, *A Monetary History of the United States* (1963)

• Historical-econometric study - both numbers and the story

• They analyzed many historical episodes of economic depressions and tried to find phenomena preceded them – in this way to find causes of the business cycles

• They searched mainly for forces that changes money supply, like such as monetary policy decisions, bank panics, etc.
Money as the cause of business cycles

• They „found” that expansions/contractions in nominal GDP were always preceded by expansions/contractions in the money supply.

• „Found” because it is a contested result, critics argue that it was not rigorous econometrically

• Among other arguments, Friedman and Schwartz argued that the Great Depression of the 1930s was not the result of insufficient aggregate demand but rather that it resulted from a fall in the supply of money, the result of a misconceived contractionary Federal Reserve monetary policy
Money as the cause of business cycles

• In this way, they wanted to justify monetarist view that changes in money supply, especially those designed on purpose by the government are the primary cause of economic depressions.

• Against Keynesians, they argued that changes in money supply introduced by government are the main cause of business cycles, while Keynesian reasons (changes in aggregate demand) are less important.

• So, it is not capitalism and businesspersons which are to be blamed for business cycles, but the government.
Natural rate of unemployment

• Philips curve – a negative relationship between inflation and unemployment
• Suggests that there is a permanent trade-off between these two variables and that it could be used in policy-making
• Friedman and others in 1968 provided theoretical arguments against long-run trade-offs between inflation and unemployment
• In their models, workers’ decisions about labour supply depend on the expected real wage (i.e. corrected by the expected inflation rate)
Natural rate of unemployment

- Let’s start at $U^*$
- Inflation expected by workers is 0
- Government increased aggregate demand in order to reduce unemployment
- Workers increase labour supply (perceived price inflation still 0, they think that their real wages have increased) - move to the point (a)
- They suffer from ‘money illusion’
- But in the end they realize that there is price inflation at $\Pi_1$
- They decrease $L_s$ - move to the point (b)
- So the long-run Philips curve is vertical at the natural rate of unempl.
Natural rate of unemployment

• Implications of Friedman’s analysis
• There is no trade-off between inflation and unemployment in the long-run
• You can not use monetary policy to achieve permanently the preferred combination of these two objectives (inflation and unemployment rates)
• Strong anti-Keynesian, anti-interventionist argument (in the area of stabilization policy)
• Argument based on the so-called adaptive or static expectations of workers about prices – inflation is perceived today to be what it was yesterday (simple extrapolation)
Monetary policy by fixed rules

• Instead of trying to fight or smooth out the business cycle by discretionary changes in money supply, monetary authority (e.g. the Federal Reserve) should follow a strict rule of expanding the money supply at a steady rate.
• The rate of growth of money supply should be equal, for example, to the rate of growth of the real national output.
• Or it could be any number between 3 to 5% per year
• The most important thing is that the rule is fixed and economic agents could build stable price expectations
• This solution would eliminate the major cause of business cycles in monetarist view – discretionary changes in money supply by the Federal Reserve
Main arguments of Milton Friedman

• In general, strongly against (Keynesian and other) government interventionism
• Against discretionary policies
• Preferred fixed rules for policy – no room for mistaken actions of policy-makers
• Distrusted both in government officials’ motives for good policies and abilities to implement efficient policies
• Government’s role in the economy should be very limited (justice and defence, supplying money according to fixed rules etc.)
• Not only a theoretical economist – also an economic philosopher and a public intellectual writing extensively on the benefits of free market solutions in all spheres of life
  – Against compulsory military service, criminalization of drug use, criminalization of prostitution, public monopolies (e.g. post office), licensing of doctors, and many other government regulations
• Supported classical liberal or libertarian solutions in socio-economic life
Monetarism in 1980s

• Strict monetarism died out in 1980s
  – you can not control the money supply (financial innovations introduced by banking sector)
  – empirical studies suggested that money is able to exert a significant influence on real variables (growth, employment)
  – no basis in microeconomic theory (General Equilibrium)

• What survived from monetarism?
  – A view that inflation is caused mainly or largely by changes in money supply
  – An idea of independent monetary powers (e.g. politically independent central banks)