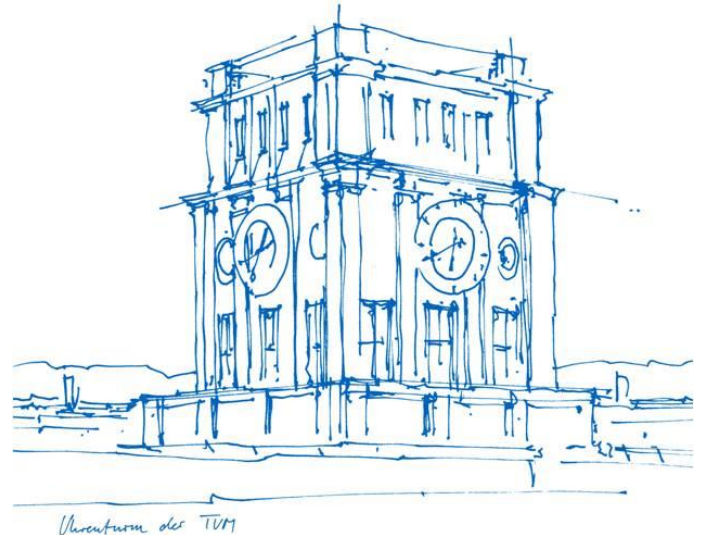


# Economics II – Macroeconomics

## X. Economic and Financial Crises

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# Outline

- I. Introduction to macroeconomics (chapter 1)
- II. Technological change and economic growth (chapter 2)
- III. The aggregate economy (chapter 13)
- IV. Aggregate demand and fiscal policy (chapter 14)
- V. The labour market (chapters 6 and 9)
- VI. Aggregate demand and unemployment (chapter 14)
- VII. Credit, banks and money (chapter 10)
- VIII. Inflation and monetary policy (chapter 15)
- IX. Technological progress, unemployment and living standards in the long run (chapter 16, [Mankiw: chapters 8.1, 8.2 and 9.1])
- X. Economic and financial crises (chapter 17)**

## X. Economic and financial crises

The Economy Ch. 17

- I. The Great Depression and the Golden Age**
- II. Stagflation and the financial crisis
- III. Covid-19 Crisis

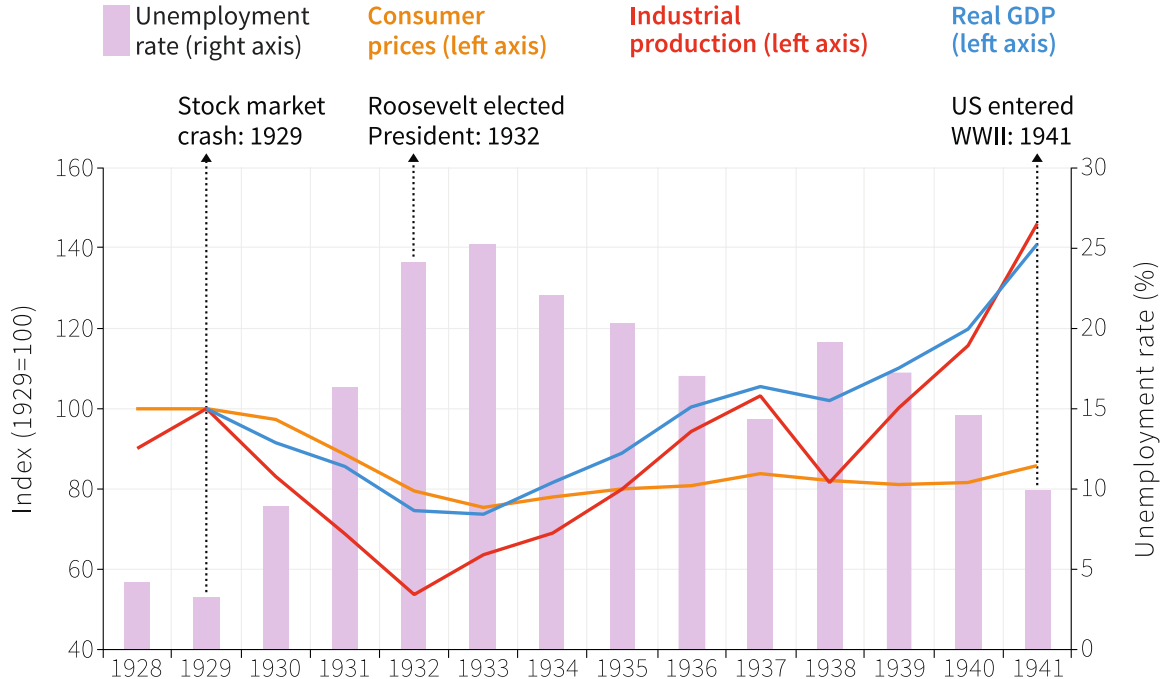
# The Great Depression

**The Great Depression:** The period during the 1930s in which there was a sharp fall in output and employment in many countries.

Caused by three simultaneous **positive feedback** mechanisms:

- I. Pessimism about the future – households reacted to the 1929 stock market crash by saving more, further decreasing consumption
- II. Banking system failure – many banks failed because loans could not be repaid; surviving banks raised interest rates
- III. Deflation – Prices fell due to falling demand

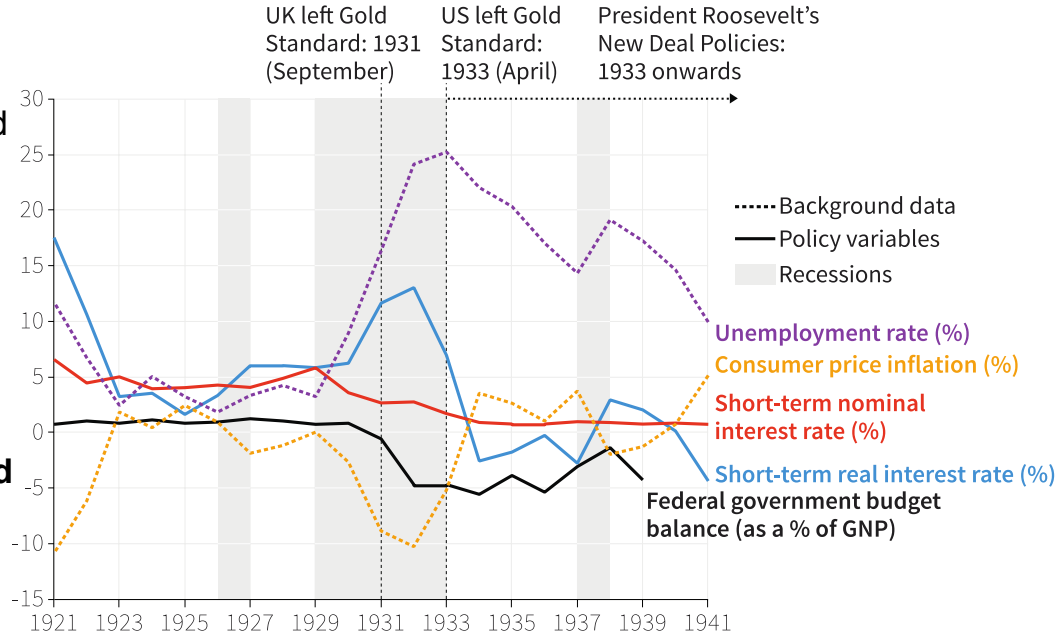
# The Great Depression



# Initial policy issues

Government policy both amplified and prolonged the shock:

- Fiscal policy – budget deficit shrank during the recession
- Contractionary monetary policy – real interest rate increased
- Sticking to the **gold standard (GS)** – large outflow of gold from the US

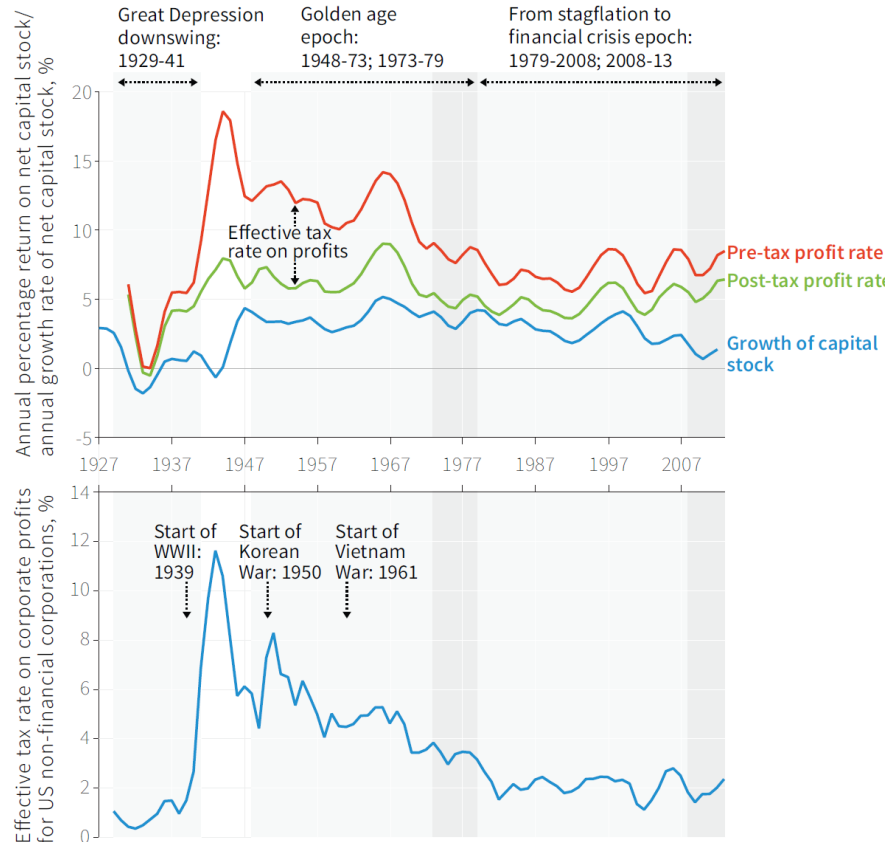


# Policy changes

- Roosevelt's 1933 reforms changed expectations, which started economy recovery.
- The **New Deal** – government spending on public works and relief programs to increase aggregate demand; resulted in a budget deficit
- US left the gold standard
- Nominal interest rate close to zero
- Banking system reforms to avoid bank runs

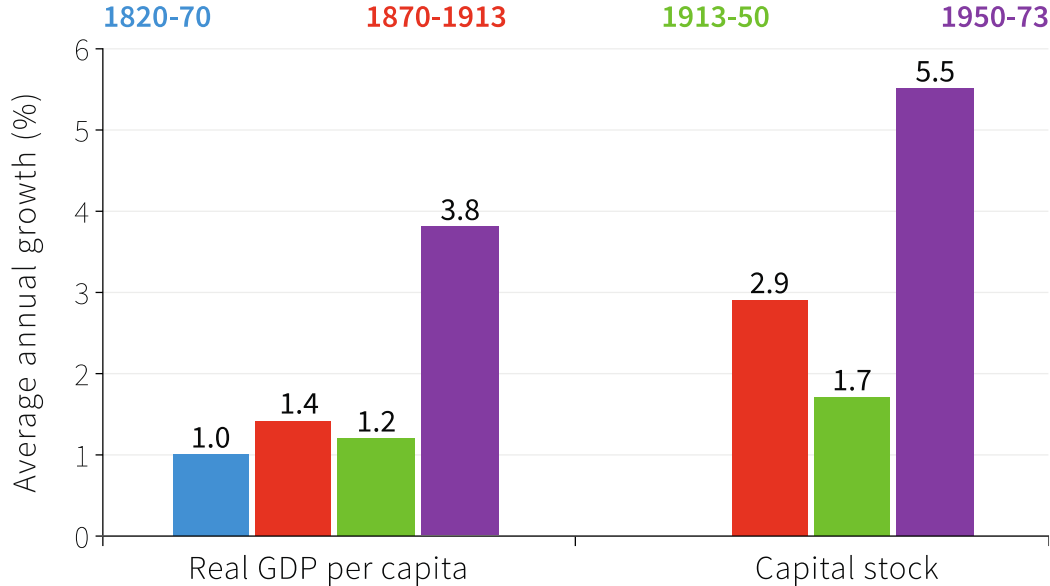
# The golden age

- The gap between the pre-tax (red) and post-tax (green) rate of profit declined during the golden age
- Based on expected profits after tax, entrepreneurs make investment decisions to get a step ahead of their competitors.
- Productivity growth reflects their collective decisions to invest in new machinery and equipment embodying improvements in technology.





# The (international) golden age



Data from 1820 to 1913 for 13 advanced countries, and for 16 countries from 1950.

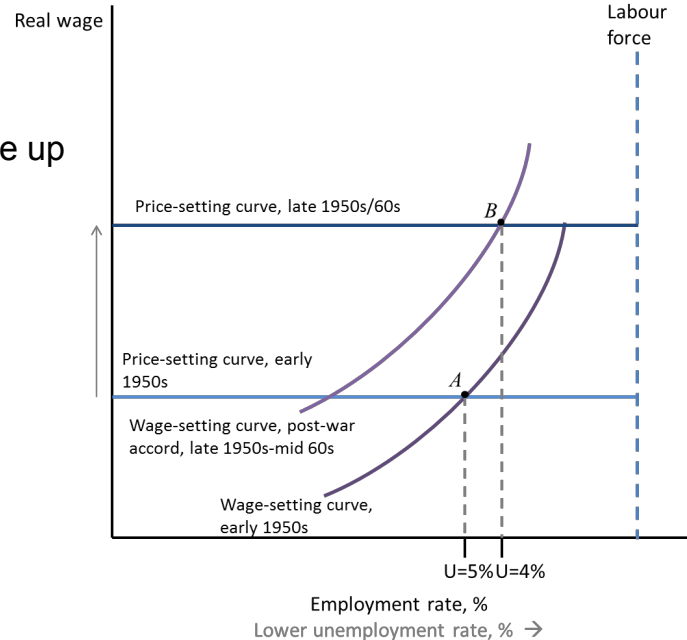
# The golden age: Key features

1. Changes in economic policymaking and regulation
  - Governments provided reassurance that policy would be used to support aggregate demand if necessary
  - The size of governments increased continuously
  - **Bretton Woods System** as a more flexible alternative to Gold Standard
2. The **postwar accord** between employers and workers
  - Sharing the gains of technological progress

# Using the labour market model

Technological progress shifted the price-setting curve up

Wage-setting curve shifted up due to increased worker bargaining power, but only modestly (informal agreement between employees and employers to share the gains to technological progress)



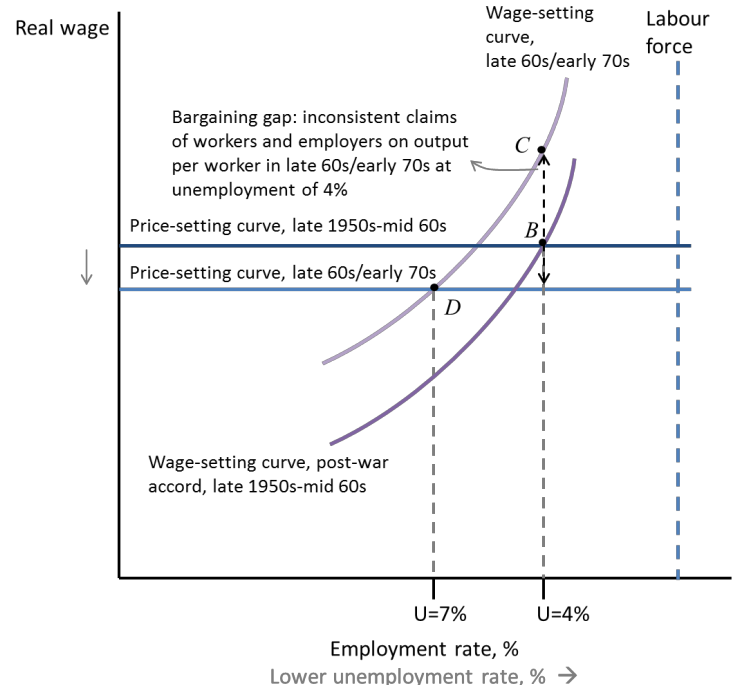
# Collapse of the postwar accord

Profit curve eventually shifted down:

- Workers demanded higher wages
- Economy-wide productivity slowdown
- Oil price shocks in the 1970s
- Partly offset by reduction in tax rate

Investment fell and productivity growth slowed, leading to rising inflation, falling profits, weak investment, and high unemployment

→ **stagflation**

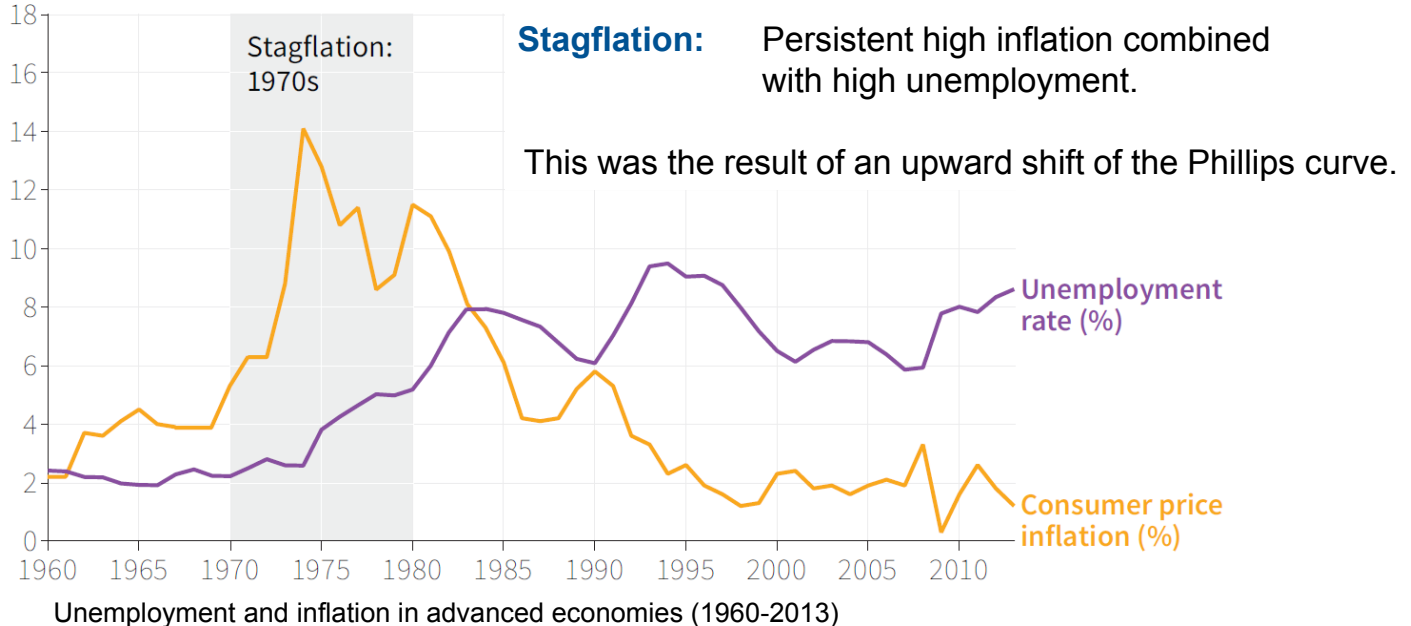


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# Stagflation



# Supply-side crisis

- The **Great Depression** was caused by problems of aggregate demand. It was a **demand-side crisis**.
- The **end of the golden age** was a **supply-side crisis**: problems on the supply side of the economy depressed the rates of profit, investment, and productivity growth.

# Supply-side reforms

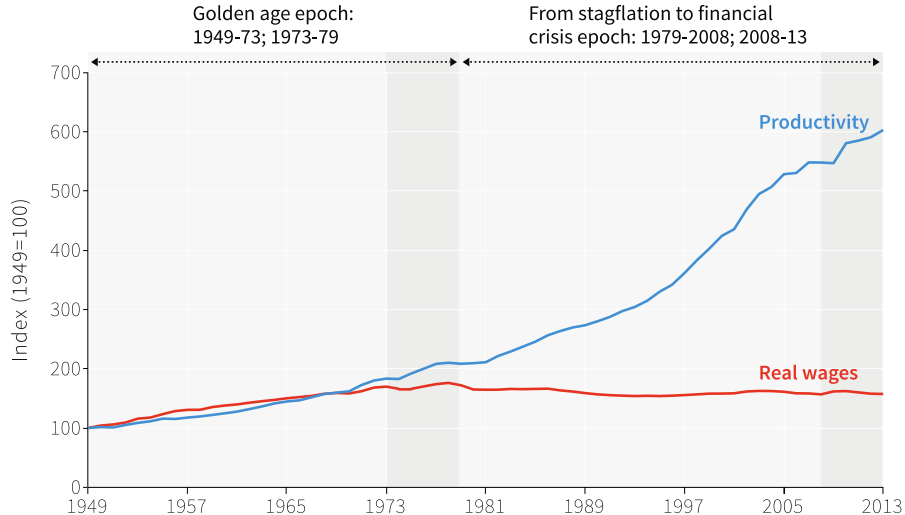
Policies centered on shifting the balance of power between employers and workers:

- **Restrictive monetary and fiscal policy** – governments depressed aggregate demand and tolerated high unemployment until inflation fell
- **Shifting the wage-setting curve down** via cuts in unemployment benefits and legislation that reduced trade union power



# Result: The Great Moderation

Before 1973: Fair-shares bargaining --> wages and productivity grew together  
After 1973: Productivity growth not shared with workers. For production workers in (US) manufacturing, real wages barely changed in the 40 years after 1973.



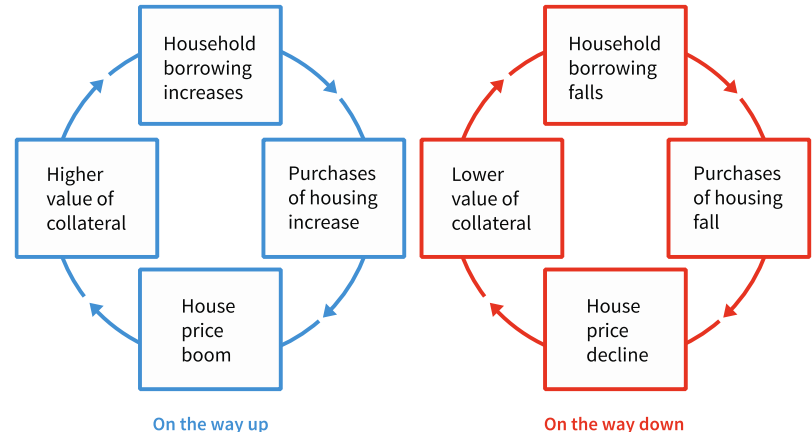
# Problems with the Great Moderation

The great moderation masked three changes that would create the environment for the most recent **global financial crisis**:

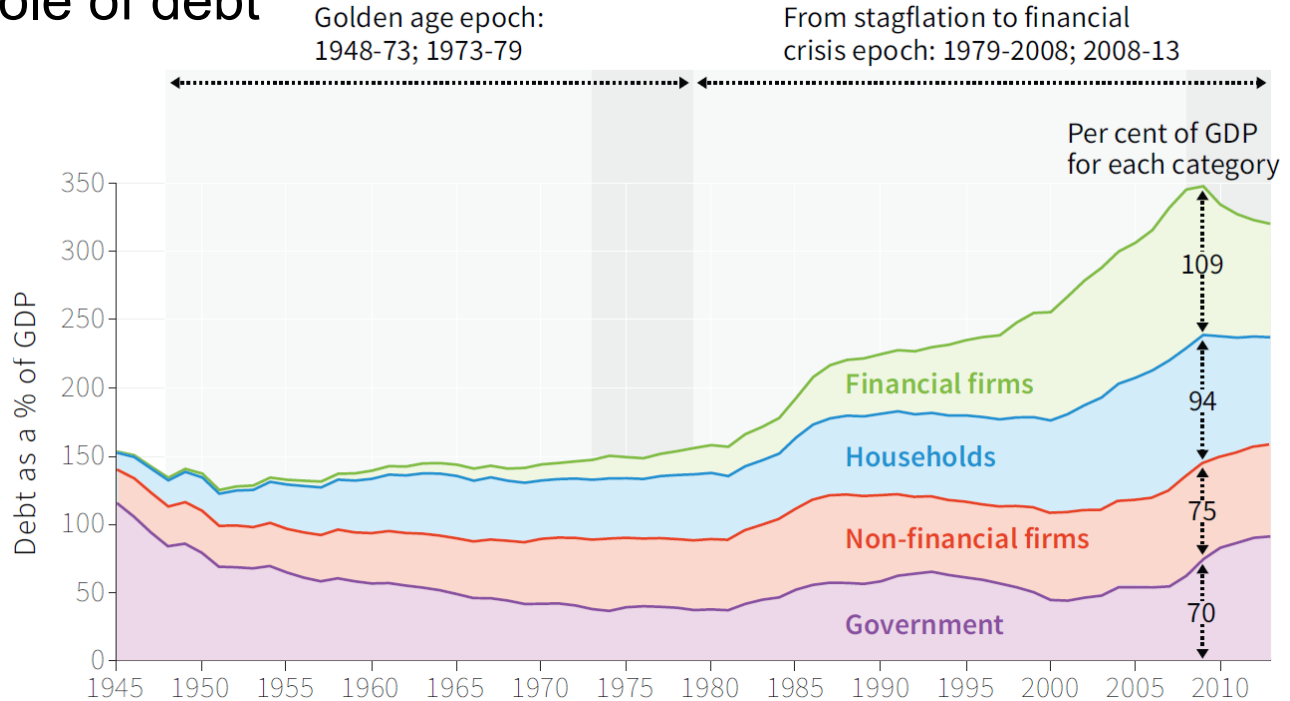
1. Rising debt – growth in household and financial sector debt due to **financial deregulation**
2. Increasing house prices – rise in borrowing and spending due to the **financial accelerator**
3. Rising inequality due to end of fair-shares bargaining

Redistribution via access to loans:

- **Affordable Housing Act**
- increasing debt
- increasing house prices

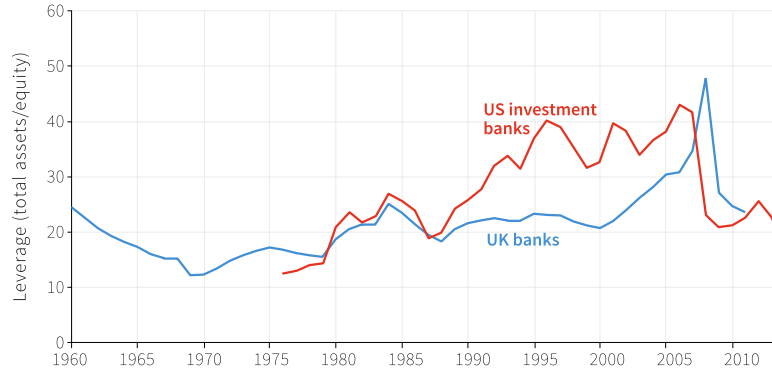


# The role of debt



# Financial deregulation

**Financial deregulation** contributed to the financial crisis:



- Poor households were allowed to use houses as collateral → more vulnerable to a fall in house prices
- Banks increased their borrowing
  - to extend more loans for housing
  - to extend more loans for consumer durables like cars and furnishings
  - *to buy more financial assets based on bundles of home loans*  
derivatives called *collateralised debt obligations* (CDOs): **mortgage-backed securities**, including **subprime mortgages**)

# The role of banks in the crisis

- Many banks were highly leveraged and at risk of **insolvency**.
- Financial assets were hard to value, so it was difficult to judge which banks were in trouble
- **Liquidity problems**: the high risk of default made banks unwilling to lend or only at a high interest rate (the '**credit crunch**')
- **Fire sales** reinforced the fall in asset prices and hastens the insolvency of banks (positive feedback process)

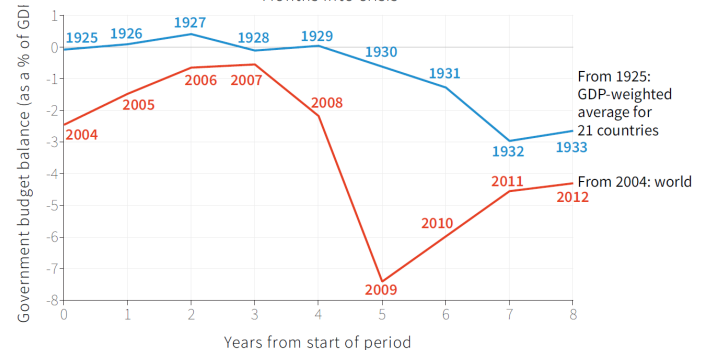
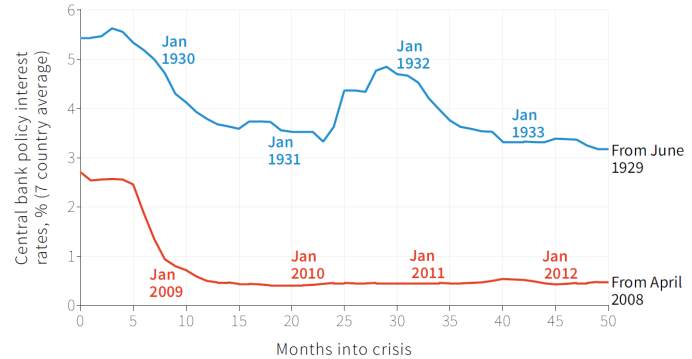
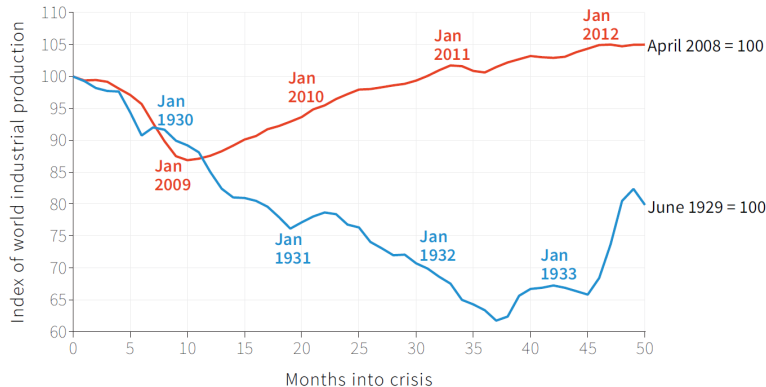
Governments had to rescue the banks

Recall: principal-agent problem encourages excessive risk-taking

# Policy responses to the crises:

- Fiscal policy
- Monetary policy
- Regulation of financial markets

**In 2008, monetary and fiscal policy responses were much larger and more decisive than in 1930**



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# The pandemic-induced recession

- **Firms:** interrupted supply chains, supply of workers, revenue from sales
- **Households:** interrupted employment, wages and salaries, purchases
- **Biosphere:** lower emissions

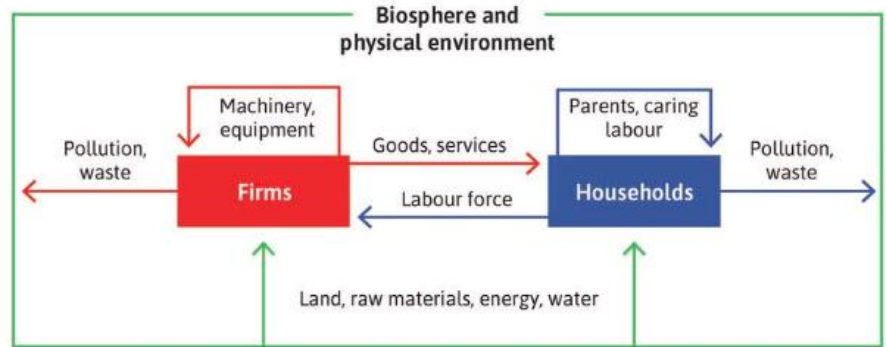


Figure 1.12 A model of the economy: Households and firms.

COVID-19 effects



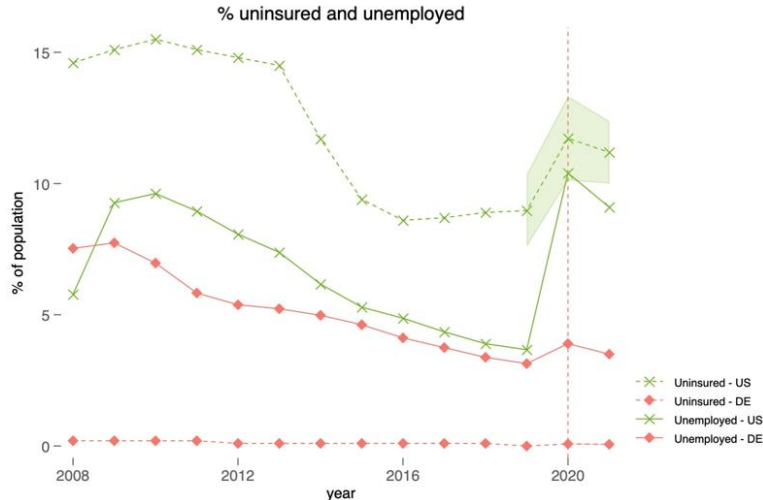
# Policy assignment during COVID-19 policy-induced recession

Countries with independent central banks	Macroeconomic objectives	Policy instruments
Monetary and macro-prudential policy	Survival of solvent businesses & households Financial stability (banks)	Cut policy interest rate to approx. zero QE to lower long-run interest rates Targeted access to central bank liquidity Loans
Fiscal policy	Expansion of health care Survival of solvent businesses Support for household incomes	Direct spending on health care (G) Wage subsidies (Transfers) Loans to business Income support (Transfers) Defer tax payments (T)
Combined fiscal and monetary policy	CB supports ability of government to fund its policies	Joint business loan schemes CB directly funds G 'monetary financing'

# Covid-19 and the nature of capitalism

Recall: **Capitalism** is an economic system in which the main institutions are **private property**, **markets**, and **firms**. However, other institutions (e.g., **governments**, **families**) are also important.

Because of differences between capitalistic countries can the impacts and responses to crises differ



# Summary

Great depression	→	<b>demand-side</b> crisis
Golden age	→	<b>supply-side</b> crisis
Financial crisis	→	<b>debt and banking</b> crisis
Corona crisis	→	<b>supply and demand</b> crisis

- Economists have learned from the successes and the failures of the three epochs
- But sources of crises can be complex
- Successful policies in each epoch did not prevent positive feedback processes that contributed to subsequent crises

# Learning objectives



# Learning objectives

- Get to know the main macroeconomic concepts:
  - Economic growth
  - Aggregate demand
  - Business cycles
  - Inflation
  - Employment and Unemployment
  - Fiscal policy
  - Monetary policy

# Learning objectives

- Three relevant markets
  - Market for goods
  - Market for labour
  - Financial market
- Understand how different groups of agents interact on these markets
- Understand how these markets interact

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