# The Great Depression, Golden age, and Global Financial Crisis

**ECONOMICS** 

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Lecture 17

## CONTEXT

- Good policies and institutions can promote economic growth and stabilize the economy during a recession. (Units 13-15)
- Major recessions and slowdowns in growth are due to policy and institutional failures.
  - What caused the economic failures of the last century?
  - What policy-making lessons can we learn from the past?

## POLICY: AGGREGATE DEMAND SHOCK

AD Shock Two sources for aggregate demand shock: change in households' consumption or firms' investment demand

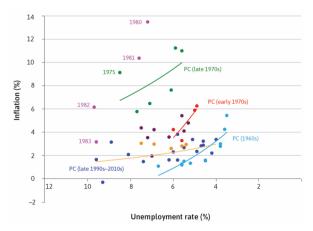
Stabilisation Government has two broad policies that it can use

to counter-act a aggregate demand shock and stabilise the economy

| Policy   | Instrument          | Expansionary | Contractionary |  |
|----------|---------------------|--------------|----------------|--|
| Fiscal   | Government spending | rises        | falls          |  |
|          | Tax                 | falls        | rises          |  |
| Monetary | Interest rate       | falls        | rises          |  |

## PHILLIPS CURVE

• Oil price shocks increase *inflationary expectations* and *inflation-stabilising unemployment rate* moving the Philips curve up



## PHILIPS CURVE

## Philips curve

unemployment inflation trade-off in the short run

Higher employment may results in inflation in the short run: increase workers' bargaining position *leads to* higher wages *leads to* higher cost of production leads to inflation

## The economy can either

- move along Philips curve as unemployment & inflation change
- or the Philips curve can shift due to the following reasons:
  - If people *expect inflation to be higher* in the future, the Philips curve would shift up
  - Unemployment rate which keeps inflation constant is called the *inflation-stabilising unemployment rate*. If it increases, the Philips curve would shift left.

# PERIODS IN THE US ECONOMY

|   | Names            | Dates     | US economy features   |
|---|------------------|-----------|---|
|   | 1920s            | 1921–29   | Low unemployment, high productivity growth, rising inequality                                 |
|   | Great Depression | 1929-41   | High unemployment, deflation, low investment, falling inequality                              |
|   | Golden age       | 1948–1973 | Low unemployment, high productivity growth & investment, falling inequality                   |
|   | Stagflation      | 1973–1979 | High unemployment and inflation, low productivity growth, lower profits                       |
| ٠ | Great moderation | 1979–2008 | low unemployment & inflation, investment slowing down, sharply rising inequality, rising debt |
|   | Financial crisis | 2008–2015 | High unemployment, low inflation, rising inequality   |

## **ECONOMIC EPOCHS: STYLISED FACTS**

Productivity three low points

hits a low point in 1931, 1979 and 2013

Unemployment High, low, cyclical and high again

high during the Great Depression, low till the 1979 and then cyclical with business cycles.

Re-emerges again in 2008 with the Financial crisis

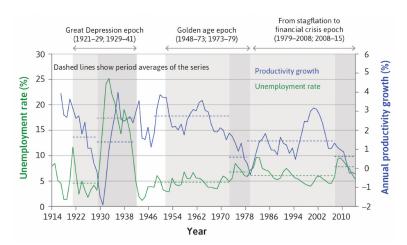
Inequality U-shaped

Richest 1% had 20% of income share in 1920s.

It declined till 1979 and then started rising to the levels of 1920s

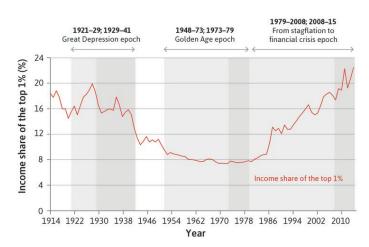
## 3 EPOCHS: UNEMPLOYMENT AND PRODUCTIVITY

## US: Unemployment and productivity



# 3 EPOCHS: INEQUALITY

## US: Inequality



## 1920s and the Great Depression

- *Dates*: 1921–1941
- Conventional wisdom before this epoch

Markets are self-correcting, efficient, and ensure the full use of resources.

- Economic outcomes in the epoch
  - Collapse of aggregate demand, high and persistent unemployment.
- Lessons learnt from the epoch

*Instability* is an intrinsic feature of the aggregate economy and aggregate demand can be stabilised by government policy.

• Best framework to understand the epoch

**Keynes** 

## THE GREAT DEPRESSION: CAUSES

Great the period during 1930s in which there was a sharp Depression decline in output and employment in many countries

Caused by 3 simultaneous positive feedback mechanisms in the US

Pessimism households reacted to the 1929 stock market crash by about future saving more, further decreasing consumption

Banking many banks failed because loans could not be repaid; system failure surviving banks raised interest rates

Deflation Prices fell due to falling demand

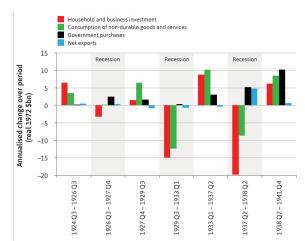
## THE PROBLEM OF DEFLATION

Deflation affects aggregate demand through several routes:

- the real value of *debt* increased; debt levels were relatively high. Many *debtors become insolvent*, which also hurt creditors.
- farmers reacted by *producing more to maintain their incomes*, but this reduced prices further, leading to deflation.
- households also *postponed the purchase* of durables, which further reduced aggregate demand

## THE GREAT DEPRESSION

shocks to AD The downswing was driven by big falls in household and business investment, and in consumption of nondurables

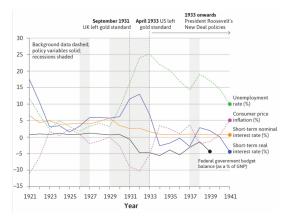


#### INITIAL POLICY ISSUES

Government policy both amplified and prolonged the shock:

Contractionary fiscal policy austerity to maintain balanced budget

Contractionary monetary policy real interest rate increased



## POLICY REFORM

Roosevelt's reforms

Roosevelt's reforms in 1933 changed expectations, which started economy recovery

The New Deal government spending on public works and

relief programmes to increase aggregate

demand and counter-act shock

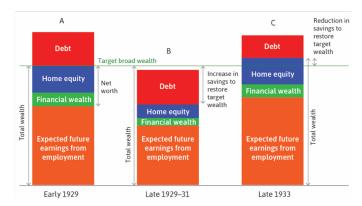
Fiscal Policy New Deal resulted in a budget deficit

Monetary Policy Nominal interest rate close to zero

Banking System reforms initiated to avoid bank runs

## POLICY REFORM

- Households cut consumption to restore target wealth during depression (1929-31) and
- increased consumption from 1933



## GOLDEN AGE OF CAPITALISM AND ITS DEMISE

- *Dates*: 1945–1979
- Conventional wisdom before this epoch

Government policy can implement an employment target by picking a point on the Phillips curve.

• Economic outcomes in the epoch

Late-60s decline in profits, investment, and productivity growth. Stable Phillips curve trade-off disappears.

• Lessons learnt from the epoch

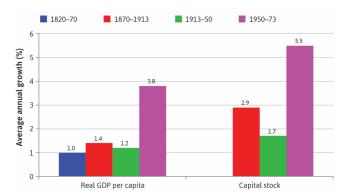
The need to maintain profits, investment, and productivity growth. The ability of a government to implement sustainable low unemployment using aggregate demand policies limited.

• Best framework to understand the epoch

Friedman

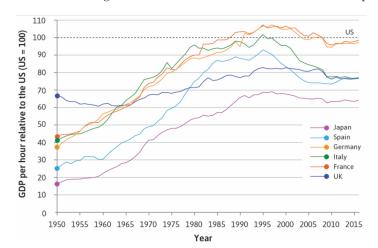
## THE GOLDEN AGE: 1945-1979

- 1945-1979 period with high productivity growth, high employment and stable inflation
- Living standards were doubling every 20 years due to *capital accumulation*.



## CATCH-UP GROWTH

• Poor economies grew faster than richer economics to catch up.



## GOLDEN AGE: CAUSES

#### Goods market

- Government's reassurance that a policy for supporting aggregate demand would be used when necessary
- Size of governments increased continuously

#### Money market

• Bretton Woods System was established

*Bretton Woods:* a post-war monetary system that maintained a system of fixed but adjustable exchange rates

#### Labour market

 Postwar agreement between employers and workers: sharing the gains of technological progress between workers and employers provided incentives for firms to innovate

## WORKERS AND EMPLOYERS

A *virtuous circle* of low unemployment, high profits and high investment:

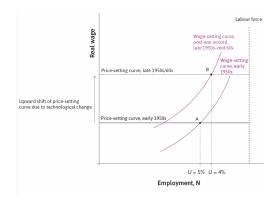
- High after-tax profits in many advanced economies
- Expectations of high profits led to high levels of investment
- High investment and technological progress created more jobs, keeping unemployment low

Fair-shares bargaining: Trade unions gave workers high bargaining power, which allowed wages to increase

*Technology adoption:* The union voice effect encouraged *cooperation* between workers and firms in the face of technology adoption

### USING THE LABOUR MARKET MODEL

- Technological progress *shifted the price-setting curve up*
- wage-setting curve shifted up due to increased worker bargaining power (informal agreement between employees and employers to share the gains to technological progress)



## POSTWAR ACCORD ACROSS COUNTRIES

#### Wage restraint

• achieved by a single centralized union, or coordinated among unions (e.g. *West Germany*)

#### Government's centralised wage policy

• set wages directly in state-owned firms, creating wage guidance (e.g. *France*)

#### Strong but fragmented unions

• resulted in weak coordination and opposition to technological progress, and the country's performance in the golden age was worse than elsewhere (e.g. *Britain*).

## COLLAPSE OF THE POSTWAR ACCORD

#### Price-setting curve eventually shifted down

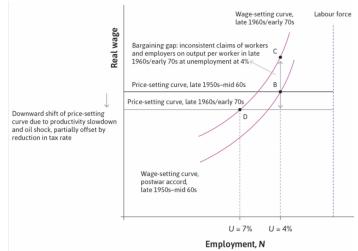
- Oil price shocks in the 1970s
- Economy-wide productivity slowdown
- Workers demanded higher wages

#### Workers' increasingly strong bargaining position implied that

- Employers bore the costs of the oil price shocks
- Lower investment and productivity growth
- Rising inflation and high unemployment

### COLLAPSE OF THE POSTWAR ACCORD

 $B \longrightarrow C \longrightarrow D$ 



## **STAGFLATION**

Stagflation Persistent high inflation combined with high unemployment. Result of an upward shift of Phillips curve.



## Types of Crises

#### **Great Depression**

Golden Age

Stagflation

caused by shocks and amplification mechanism of the aggregate demand active management of demand side by the government, while problems were creeping up on the supply side caused by shocks and amplification mechanism on both the demand and supply side

Problems on the supply side of the economy depressed the rates of profit, investment, and productivity growth.

## THE GREAT MODERATION

- *Dates*: 1979–2008
- Conventional wisdom before this epoch
   Instability has been purged from capitalist dynamics;
   minimally regulated financial markets work well.
- Economic outcomes in the epoch
   Financial and housing market crash of 2008.

## SUPPLY-SIDE REFORMS

Stagflation leads to policies centred on shifting the balance of power between employers and workers:

Restrictive monetary and fiscal policy

 governments tolerated high unemployment rates to lower inflation and reduce workers' bargaining power

Shifting the wage-setting curve down

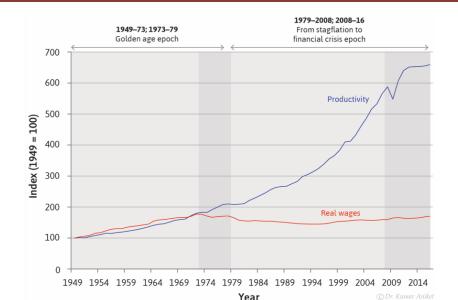
 through cuts in unemployment benefits and legislation that reduced trade union power

#### Results in "The Great Moderation"

- Productivity growth no longer shared with workers
- Low and stable inflation, falling unemployment
- Investment did not match the growth in profits

Introduction | Economic Epochs | The Great Depression | Golden Age | Oil Crisis | Great Moderation | Financial crisis | Lessons Learnt | Summary |
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# GREAT MODERATION



## PROBLEMS WITH THE GREAT MODERATION

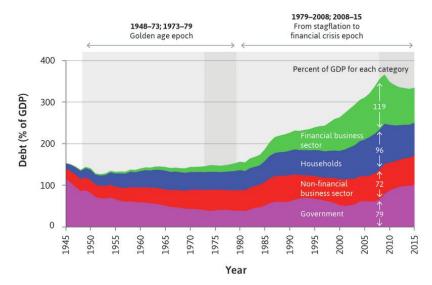
Rising inequality

Financial deregulation

results in higher debts as households improve their consumption via borrowing

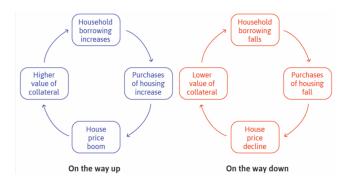
- Rising debt
- Increasing house prices
- Rising inequality due to end of fair-shares bargaining

## GREAT MODERATION



## HOUSING BOOM AND THE FINANCIAL ACCELERATOR

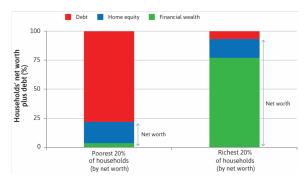
- Buying a house: mortgage requires a secured (collateralised) loan
- Financial accelerator: when house prices go up, so does the value of collateral, and households can borrow more.
- This pushes up house prices further and *sustains the bubble*.



### SUBPRIME BORROWERS

*Sub-prime borrowers:* borrowers with no collateralisable wealth

- Poor households usually require collateral to borrow.
- Home loans' risk falls when house prices are expected to rise
- Lenders ask for lower deposits, or even no deposit at all.

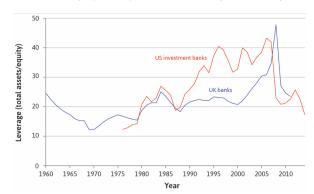


troduction Economic Epochs The Great Depression Golden Age Oil Crisis Great Moderation Financial crisis Lessons Learnt Summary

## FINANCIAL DEREGULATION

#### Banks lend more and more

*Great moderation, rising house prices,* and the development of fancy *new financial assets* (CDOs and MBSs) made it profitable for banks to *significantly increase lending* recklessly.

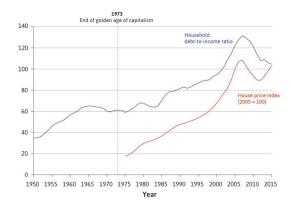


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## HOUSING MARKET

Households borrow more and more

High *debt-to-income ratio* lead to the house prices becoming unsustainable and collapsing in 2008 (*Financial Accelerator*)



## THE FINANCIAL CRISIS

 Great Moderation ended by the global financial crisis, triggered by fall in US house prices

#### THE FINANCIAL CRISIS

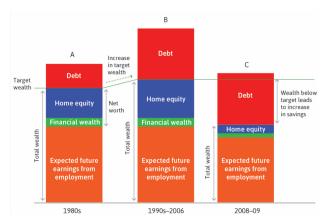
Great Moderation ended by the global financial crisis, triggered by *fall in US house prices* and started a range of feedback processes

- *Consumption fell* especially among poorer households with subprime mortgages (due wealth targeting)
- *Spillover effects* to the financial sector through the subprime mortgages because borrowers were caught in negative home equity and could not repay the loans
- Investment fell, which increased unemployment

In spite of bank bailouts and stabilisation policies, there followed a sustained global fall in aggregate output

## FINANCIAL CRISIS

rising house prices increased consumption through debt
 Household net worth shrank with rising unemployment
 Household cut consumption as wealth below target



## FROM STAGNATION TO THE FINANCIAL CRISIS

- *Dates*: 1979–2016
- Conventional wisdom before this epoch

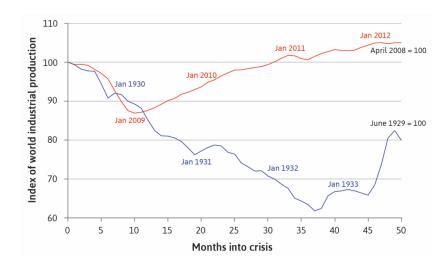
Instability has been purged from capitalist dynamics; minimally regulated financial markets work well.

- Economic outcomes in the epoch
   Financial and housing market crash of 2008.
- Lessons learnt from the epoch

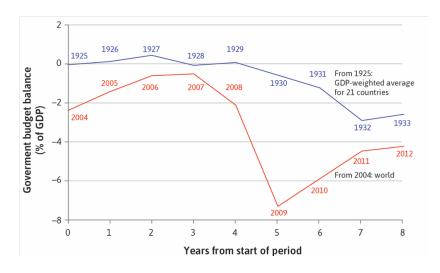
Debt-fuelled financial and housing bubbles can co-exist with low and stable inflation, and will destabilise an economy in the absence of appropriate regulations.

 Best framework to understand the epoch Minsky

## LESSONS LEARNT



## LESSONS LEARNT



| EPOCH   | DATES         | PRIOR<br>CONVENTIONAL<br>WISDOM  | THE LESSON  | WHAT<br>ECONOMISTS<br>LEARNED  | PRIMARY<br>AUTHOR |
|---|---------------|--|---|--|-------------------|
| 1920s AND<br>GREAT<br>DEPRESSION                    | 1921-<br>1941 | Markets are self-<br>correcting,<br>efficient, and<br>ensure the full<br>use of resources.                                     | Collapse of<br>aggregate<br>demand, high<br>and persistent<br>unemployment.   | Instability is an intrinsic feature of the aggregate economy     Aggregate demand can be stabilised by government policy     Demand matters  | Keynes            |
| GOLDEN AGE<br>OF CAPITALISM<br>AND ITS<br>DEMISE    | 1948-<br>1979 | Government policy can implement an employment target by picking a point on the Philips curve.                                  | Late 60s decline<br>in profits,<br>investment and<br>productivity<br>growth.<br>Stable Phillips<br>curve trade-off<br>disappears. | With given institutions, the need to maintain profits, investment and productivity growth can limit the ability of a government to implement sustainable low unemployment     Supply matters     Institutions matter | Friedman          |
| FROM<br>STAGNATION<br>TO THE<br>FINANCIAL<br>CRISIS | 1979-<br>2013 | Instability has<br>been purged<br>from capitalist<br>dynamics;<br>minimally<br>regulated<br>financial<br>markets work<br>well. | Financial and<br>housing market<br>crash of 2008.   | Debt-fuelled financial and housing bubbles will destabilise an economy in the absence of appropriate regulations     Institutions matter     Money matters   | Minsky            |

## DIFFERENT EXPERIENCES OF THE THREE EPOCHS

|  | Name of Period   | Differences between US and other rich countries |   |
|--|------------------|---|---|
|  | Great Depression | US  | Large, sustained downturn in GDP starting from 1929                     |
|  |                  | UK  | Avoided a banking crisis, experienced a modest fall in GDP              |
|  | Golden age       | US  | Technology leader   |
|  |                  | Outside US                                      | Diffusion of technology creates catch-up growth, improving productivity |
|  | Financial crisis | US  | Housing bubble creates banking crisis                                   |
|  |                  | Germany, Nordic countries                       |   |
|  |                  | Japan, Canada, Australia                        |   |
|  |                  |   | Did not experience bubble, largely avoided financial crisis             |

#### SUMMARY

- Epochs
  - Great Depression
  - Golden Age and Stagflation
  - Great moderation and Financial Crisis
- Economists have learned from the successes and the failures of the three epochs.
- Successful policies in each epoch did not prevent positive feedback processes that contributed to subsequent crises
- No school of thought has policy advice that would have been good in every epoch