

Econ 1115: Principles of Macroeconomics

Lecture 21: Finance, Risk, Recessions and Financial crises

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Outline

- 1 Review
- 2 Recessions
- 3 The Great Recession

Other things to note from last class:

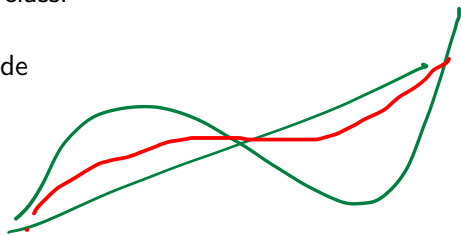
- Fiscal policy and supply side

Other things to note from last class:

- Fiscal policy and supply side
- Automatic stabilizers

— progressive tax system

— unemployment benefits



$$G = T$$

budget balanced

Other things to note from last class:

- Fiscal policy and supply side
- Automatic stabilizers
- Budget surplus vs budget deficits

$$G > T$$


Taxes \rightarrow G $\xrightarrow{\text{spends}}$ govt. spending

Other things the same, automatic stabilizers tend to

- a. raise expenditures during expansions and recessions.
- b. lower expenditures during expansions and recessions.
- c. raise expenditures during recessions and lower expenditures during expansions.
- d. raise expenditures during expansions and lower expenditures during recessions.

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Answer: c

- Financial markets and financial institutions facilitate the movement of funds from savings (households) to borrowers (consumers or businesses)

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- Savers can directly provide funds to borrowers, buy bonds, or buy stocks

↓
loan
(100)

Savings: The portion of income left after households pay taxes and consumption

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Investment: Purchase of new capital by businesses (not the purchase of stocks and bonds)

The role of arbitrage

- What should be the value of an asset?

$$\begin{array}{r} \text{Year 1} \rightarrow \$1000 \\ \text{2} \rightarrow \$1000 \\ \text{3} \rightarrow \$1000 \\ \hline \$3000 \end{array}$$

- What should be the value of an asset?
- PV of all future income from that assets

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- The amount of money you would be willing to trade today for a specific amount in the future

- What should be the value of an asset?
- PV of all future income from that assets
- The amount of money you would be willing to trade today for a specific amount in the future
- How do you calculate that?

\$1000



A

2011



\$1000 + x

$$PV = \frac{\text{Future payment}}{(1 + \underline{r})}$$

discount
rate

$$= \frac{1000}{(1 + 0.20)}$$

$$= \underline{\underline{\$870}}$$

~~I pay to~~

You pay \$

Would you prefer a 50-50 chance of \$200 or a guaranteed \$100

~~option 1~~

H → 190
T → 10

~~option 2~~
↓
\$100

Would you prefer a 50-50 chance of \$200 or a guaranteed \$100

Risk - Most people are risk averse - we prefer certainty. We can manage risk with insurance or through diversification

Efficient Market Hypothesis: The price of an asset reflects all publicly available information about the value of the asset.

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Stock prices change are **random** and cannot be predicted.

Cannot systematically beat the market.

Derivatives: A financial instrument whose value is derived from other underlying assets.

The types of derivatives:

- Futures

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- Options

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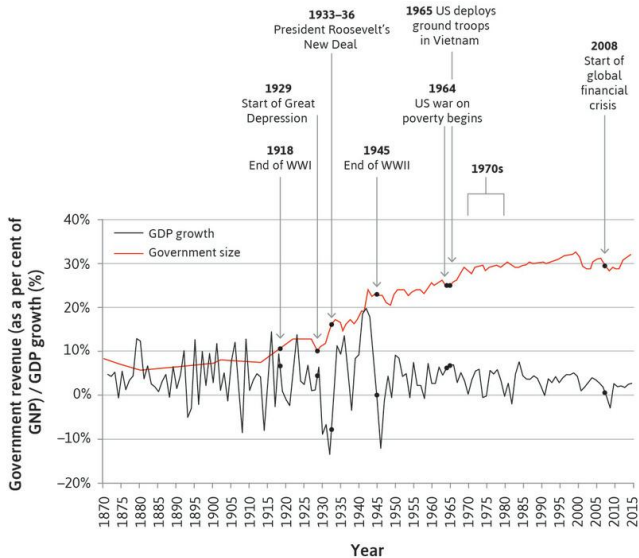
- Futures
- Forwards
- Options
- Swaps

Outline

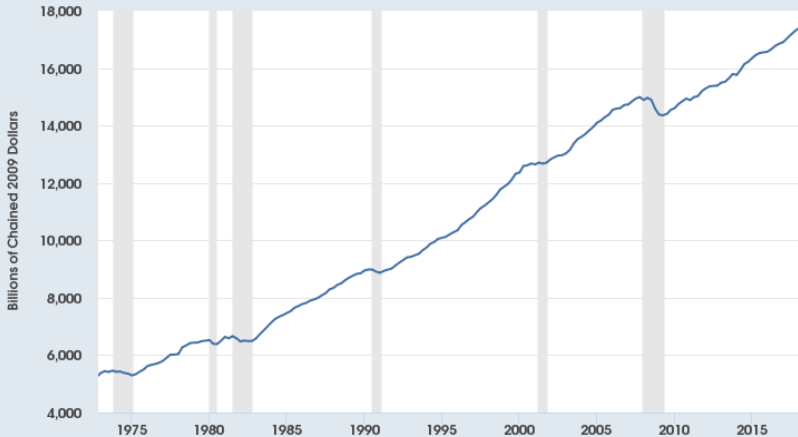
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A brief history of US recessions

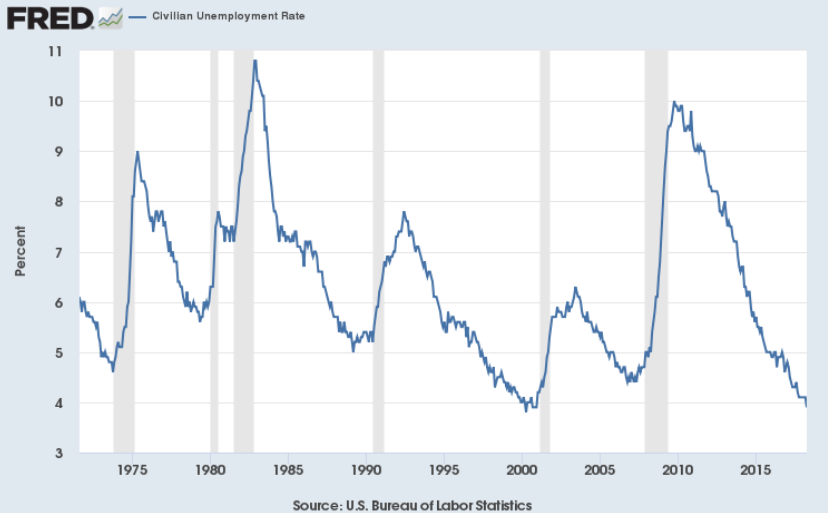
- In the US (and similarly in many other countries around the world, recessions were common and happened quite regularly in the 19th century and early 20th century.
- However, the Keynesian view revolutionized government's role in stabilizing the economy and reducing the frequency and the effects of a recession.



FRED — Real Gross Domestic Product



Source: U.S. Bureau of Economic Analysis



Costs of an economic downturn

- Lost output and Okun's Law
- High unemployment and lost wages
- On a lower growth path?
- Psychological and social costs, including crime, depression and suicides.