



Econ 208

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Lecture 18
Financial Intermediation
Review



Today

- Finish credit rationing
- Review
- Info about final



Financial Intermediaries

- Zero expected profits

$$l^*(X)X + (1 - l^*(X)) * 0 - (1 + r)(1 - a) = 0$$

$$\alpha X \left(1 - \frac{X}{q}\right) - (1 + r)(1 - a) = 0$$

- Solution for X :

$$X(a) = \frac{q - \sqrt{q^2 - 4 \frac{q}{\alpha} (1 - a)}}{2}$$



Financial Intermediaries

- Let $a^*(r)$ be

$$a^*(r) = 1 - \frac{\alpha q}{4(1+r)}$$

- If $a < a^*(r)$ then the agent will never get a loan
 - Credit rationing!



Financial Intermediaries

- In equilibrium, three classes of agents
 - $a < a^*(r)$: forced savers, credit rationed
 - $a^*(r) < a < 1$: borrowers
 - $a > 1$ savers, self finance a project



Review

- Review



Economic Principles

- Models we've seen
 - Trade-offs
 - Preferences
 - What happens if there is an exogenous change
- Competitive equilibrium: prediction of the model



Economic Principles

Competitive Equilibrium

- Structure:
 - Consumers maximize utility subject to the budget constraint
 - Firms maximize profits
 - Markets clear
- If competitive equilibrium is efficient, one can solve it by using the Social planner's problem:
 - Maximize utility subject to the production abilities of the economy (PPF)



Government Policies

- Fiscal policy
 - What happens if government increases expenditures?
 - What happens if government cuts taxes?
- Monetary policy
 - What happens if government increases money supply (long run, short run)
- Regulation of Financial Institutions



Fiscal Policy

What happens if government increases expenditures?

■ Main Results:

- Increase in output, labor supply
- Decrease in consumption (crowding out)
- Fiscal multiplier λ : \$1 change in govt expenditures \rightarrow λ change in GDP
 - Theory: ≤ 1 ; depends on efficiency of public spending, elasticity of labor supply
 - Empirical Evidence: $\sim 0.8-1.4$



Fiscal Policy

What happens if government increases taxes?

- Main Results
 - Ricardian Equivalence: no change in consumption
 - Path of govt debt is irrelevant
 - Reason: no wealth effects
- Failure of Ricardian Equivalence
 - Heterogeneity (in wealth or age)
 - Distortive taxes
 - Imperfect credit markets

Fiscal Policy

Failure of RI: Heterogeneity across generations

- Social Security: Intergenerational redistribution
 - Real effects of different social security schemes
 - PAYG vs. FF
 - PAYG better if population growth rate $>$ interest rate

Fiscal Policy

Failure of RI: Distortive taxes

- Labor taxes: Laffer Curve
 - US vs. Europe: differences in labor taxes can explain a large part of differences in GDP per person
- Ramsey problem: How should taxes be chosen?
 - Tax Smoothing
 - Use debt to finance **temporary** increases in spending



Monetary Policy

How is it conducted?

- Money multiplication process
 - $M1 = m1 * M0$
- Central bank can affect M1 in several ways:
 - Change required reserves (affects m1)
 - Open Market Operations (affects reserves and M0)



Monetary Policy

Long Run Effects

- Increases in money supply \Leftrightarrow increases in prices
- No effect on output or consumption



Monetary Policy

Short Run Effects

- Unexpected money supply changes decrease unemployment (Phillips Curve)
 - “confusion” of real and nominal changes
 - Cannot be used for systematic monetary policy
- Can explain inflation in 1960's-1970's



Monetary Policy

Institutions producing Sound Monetary Policy

- Central banks are tempted to increase inflation in the short run
- Commitment to low inflation is key to a good monetary policy
- Examples of commitment:
 - Independent central bankers
 - Inflation Targeting



Regulation of Financial Intermediation

- Bank runs:
 - Productive assets need to be liquidated
 - deposits are liquid, while investment is illiquid
 - Money multiplier decreases
- Solution:
 - Deposit Insurance
 - Possible problems: moral hazard
 - Suspension of Convertibility



Final

- Monday June 8, 4-6
- Closed books closed notes
- No calculator
- Structure:
 - Multiple choice ($\sim 25\%$)
 - Longer questions
 - Examples:
 - Equilibrium consumption and savings
 - Distortive Taxation, Social Security
 - Monetary policy (Phillips curve)
- I'll post review questions/last year's final today