

Equity

- Market outcomes can be inefficient (dwl present) or inequitable
 - Either might justify government intervention
- Equity
 - Distribution of income:

Quintile	Cumul. % of people	% of income	Cumul. % of income
1	20	5	5
2	40	11	16
3	60	16	32
4	80	24	56
5	100	44	100

- Lorenz Curve:

Wealth Distribution

- Top 1% of US families has 1/3 of wealth
- Next 9% has 1/3
- Bottom 90% has 1/3

- Should we redistribute?

Market Failure

- Under conditions for perfect competition, markets lead to efficient outcomes
- But other circumstance lead to **market failure**:
 - Monopoly (we've seen)
 - Pure public goods
 - Common property
 - Externalities
 - Information asymmetry

Public Goods

- Defn: goods which are nonrival and nonexcludable
 - Nonrival – my consumption does not affect your ability to consume
 - $MC=0$
 - Affects whether price should be positive
 - Nonexcludable – cannot prevent people from getting access
 - Affects whether market can provide

	Nonrival	Rival
Non-excludable	Public goods	Common property
excludable	Marketable public good	Private goods

- “Free rider problem” – tendency of people not to pay for goods if they can get them regardless of whether they pay
 - Consequence of nonexcludability
- How can society provide pure public goods?

Optimal Provision of Public Goods

- With private goods, each person chooses how much she wants.
 - On margin, $MU=p$
- With public goods, each person consume the same amount
 - Different persons have different valuations
- Social problem: determine the right amount of the public good
- Solution: vertical summation of demand curves
- E.g. laser missile systems

Now add cost

When Does Voting Yield Optimal Public Good Allocation?

- Suppose individuals are identical.
 - How will they vote on a public goods and tax scheme?

- They will choose the optimum

Non-Identical Individuals:

- Median Voter Theorem
 - Political parties will pursue policies that maximize the net benefit of the median voter
 - (Revisit application of Nash)
 - Median – 50th percentile
 - As many above as below
 - Tax Rate example

Median Voter and Public Goods

- Imagine a world with 5 types of people

	1	2	3	4	5	MC
1 st unit	10	10	5	5	5	30
2 nd unit	5	5	0	0	0	30