



Module:
Public Sector
Economics

Lecturer:
Dr Stephen Weir

Government Failure

Public Choice Theory

- Individuals indicate how much they want of a private good through the price mechanism
- How do the public indicate the level of public expenditure & public services they require?

Public Choice Theory

- They do this through the voting mechanism
- Collective decision making rules provide or seek to provide a mechanism for aggregating peoples preference of the level of public expenditure, level of taxes and provision of public goods

Rational Voter Model

- The decision to vote is assumed to reflect the expected utility from doing so
- The Paradox of Voting – People vote even though the expected utility of voting is negative
- Consider a party or policy “X” that an individual would like to see win an election

Rational Voter Model

- The voter calculates the utility that the party or policy will bring him. i.e. $U(X)$
- The voter calculates the likelihood P that his vote is decisive and makes a difference
- The value of P depends on, (a.) the size of the electorate and (b.) how close the election is
- The expected utility from the act of voting is $P[U(x)]$
- However we must consider the costs of voting “ C ”

Rational Voter Model

- The expected utility from participating in the electoral system is
- $E(U) = P[U(X)] - C$
- Since any individuals chance of affecting the outcome is minuscule the expected utility is negative
- Irrational to vote

Rational Voter Model

- Any validity?
- Is turnout higher when costs are lower?
- Yes, turnout higher when dry
- Is turnout higher when outcome is more uncertain?
- Yes, Bush v. Kerry, Scottish Independence Referendum
- Is turnout higher amongst those who have most to gain?
- Yes, Richer people have higher turnout

Rational Voter Model

- Rational voter model too simplistic
- Takes no account of citizenship, political activism, tradition, community, social structure
- The individual may get utility from taking part in the democratic process
 - i.e. Voting yields positive utility D
 - $E(U) = P[U(X)] - C + D$

Ethical Voter Model

- The rational voter model assumes voters are purely self-interested
- Voting involves some level of altruism
- $O_i = U_i + \theta \sum U_j$
- where $\theta = 0$, voter is selfish
- Where $\theta = 1$, voter is altruistic
- If $\theta > 0$ expected utility of voting rises, the individual is more likely to vote

Arrow's Impossibility Theorem

- Will the voting mechanism reflect accurately the views of the electorate
- Arrow's Impossibility Theorem states that no voting system exists that satisfies
 - 1. Transitivity
 - 2. Non-dictatorial choice
 - 3. Independence of irrelevant alternatives
 - 4. Unrestricted domain

Arrow's Impossibility Theorem

	A	B	C
1 st	X	Y	Z
2 nd	Y	Z	X
3 rd	Z	X	Y

- The table above shows voters A, B, & C's preferences between alternatives X, Y, & Z
- Under majority voting we get the following results:
 - xPy by a majority (Voters A&C)
 - yPz by a majority (Voters A&B)
 - Then if we impose collective rationality, transitivity implies xPz

Arrow's Impossibility Theorem

	A	B	C
1 st	X	Y	Z
2 nd	Y	Z	X
3 rd	Z	X	Y

- But by majority rule vote
 - zPx by a majority (Voters B&C)
 - Only A has preference xPz so when we impose transitivity A is a dictator
- Majority vote fails the “Arrow criteria”
- It can be shown that all other voting mechanisms also fail the Arrow criteria

Arrow's Impossibility Theorem

- Where, for example
 - xPy by a majority (Voters A&C)
 - yPz by a majority (Voters A&B)
 - But zPx (Voters B&C)
- We have the Condorcet Paradox
- This will lead to an inconclusive outcome as we have just seen
- If we restrict preferences to “single peaked preferences” majority voting will reach a definitive outcome (Note we are violating the unrestricted domain requirement)

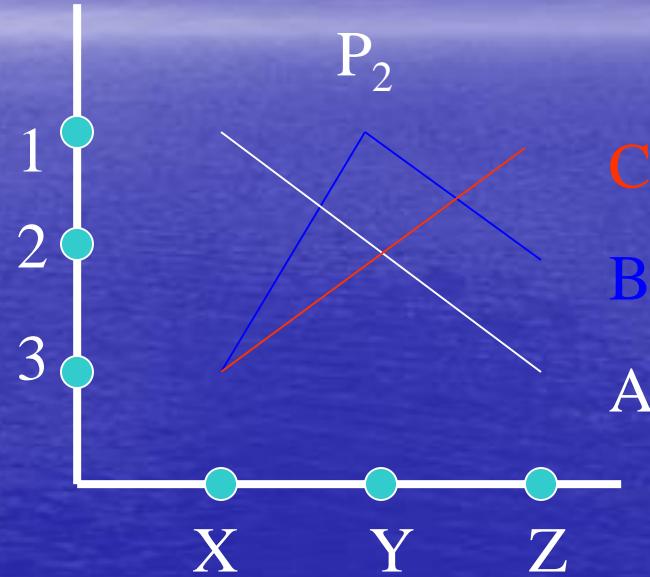
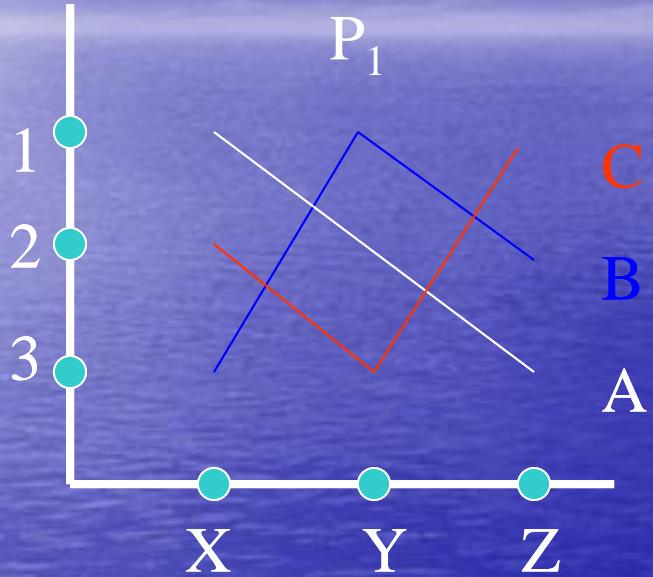
Arrow's Impossibility Theorem

P_1	A	B	C
1 st	X	Y	Z
2 nd	Y	Z	X
3 rd	Z	X	Y

P_2	A	B	C
1 st	X	Y	Z
2 nd	Y	Z	Y
3 rd	Z	X	X

- XpY (Voters A&C)
 - YpZ (Voters A&B)
 - ZpX (Voters B&C)
 - Non-Transitive
- YpZ (Voters A&B)
 - ZpX (Voters B&C)
 - YpX (Voters B&C)
 - Transitive

Arrow's Impossibility Theorem



- Under P_1 one voter (C) has multi-peaked preferences
- Under P_2 all voters have single peaked preferences

Arrow's Impossibility Theorem

- If multi-peaked preferences could be eliminated then we would have a majority voting system that no longer suffered from the Condorcet paradox
- Consider the following
 - X – High Spending
 - Y – Medium Spending
 - Z – Low spending
- Consider Voter C in P_1 . Is that ranking of preference likely?

Median Voter Theorem

- With single-peaked preferences the key to success is attracting the median voter
- Consider again voting on the level of government expenditure
- The voters will be spread across a range from those who favour a large amount of government expenditure to those who favour very little
- If there are n -voters, the median voter is $n/2$
- The party that captures the median voter wins

Government Failure

- Government failure – when activities of the state fail to promote efficiency
- Two main sources
- 1. The procedures of a democratic system can lead to a pareto inefficient outcome
- 2. The actions of the state are usually executed by an intermediary

Government Failure

- Bureaucrats and politicians act as agents of the electorate
 - A principal-agent arrangement leads to inefficiency when
 - 1. There is asymmetric information between the agent and principal
 - 2. The goals of the agent and principal differ
 - 3. If there are costs to the principal observing the actions of the agent

Bureaucracy & Bureaucrats

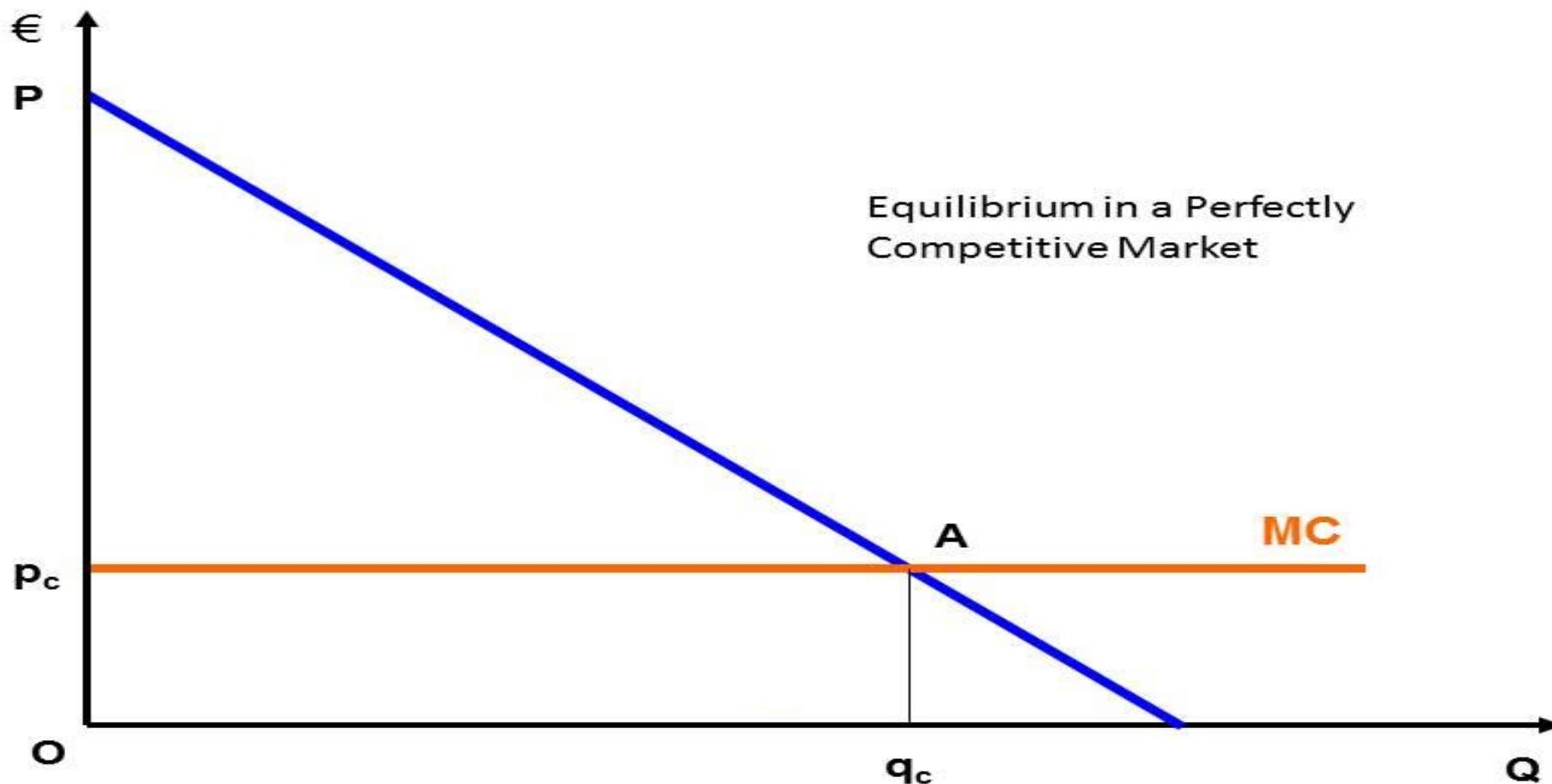
- Members of the bureaucracy may not have the same goals of the government or the people
- They may have goals of increasing salary, power, personal prestige, size of department, increased budget etc.
- William Niskanen (1968) The Monopoly Bureaucracy
- The bureaucracy extends up until the government is indifferent between having the bureaucracy and abolishing it

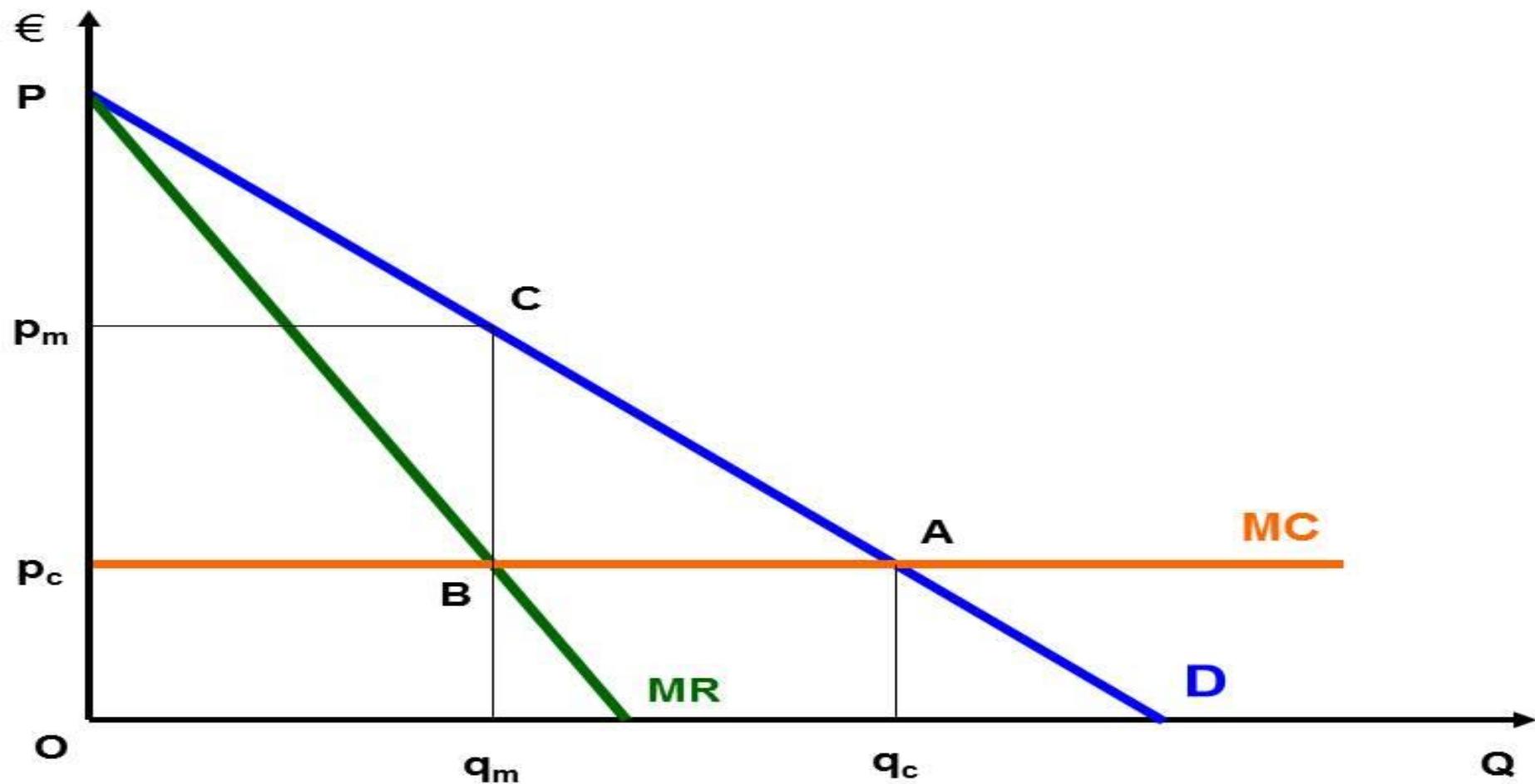
Rent Seeking

- There are two ways of accumulating wealth
 - Engaging in productive activity
 - Using political power to take wealth off someone else
- The first way of accumulating wealth generally increases the welfare of society while the second reduces it
- Using political power to take wealth of someone else is known as *rent-seeking*

Rent Seeking

- Rent seeking is damaging to the economy
 - Opportunity Cost - Both the lobbyist & government official could have spent their time in a productive activity
 - Vicious circle – if rent-seeking appears to be successful in an economy, more & more people are drawn in to it as an activity. Consequently, less & less people actually produce goods & services
 - Rent-seeking creates monopoly distortions. Welfare enhancing exchanges go unfulfilled





Interest Groups and Rent Seeking

- Interests groups are a powerful force in democracies
- They need not be detrimental to welfare
- They provide valuable information on the benefits and costs of policy implications
- An interest group is more likely to be successful if its policy suggestions lead to a pareto improvement

Who Succeeds in Rent Seeking?

- Wealthy individuals or corporations
 - Plato o Plomo
- Interest/lobby groups
 - 1. Supply its membership with a private good (to stop free riding)
 - 2. Have small(ish) membership
 - 3. Be reasonably homogenous so that policy conflicts are minimised
 - 4. Have low organisational costs
 - 5. The payoff for success is large and certain
 - 6. Countervailing force

Corruption

- Corruption is the illegal use of public power for private gain
- "...the single greatest obstacle to economic & social development"
- Corruption damages the incentive structure of society

Corruption

- Why does corruption damage economic growth?
 - Wastes tax-payers money
 - Officials over pay for basic services in order to receive kickbacks
 - Distorts policy
 - Projects funded that are not necessary. "roads that go nowhere"
 - Undermines rule of law
 - Rules made that benefit certain people or are selectively enforced
 - Corrupt officials do not want a strong independent judiciary

Corruption

- Through what means can government officials engage in corruption?
 - Regulation
 - Authorisation/permits
 - Taxation
 - Transfers and subsidies
 - Financial repression
 - Government spending
 - Use of assets
 - Privatisation
 - Public/private partnerships

How can Corruption be reduced?

- Appointing high quality & honest officials
- Leading by example
- Strong informal norms of honesty & accountability
- Ensure officials are paid appropriately
- Clear & unambiguous rules, laws & bureaucratic process
- Appropriate & proportionate punishment for corruption
- Open & free press
- Freedom of information legislation
- Separation of powers
- Term limits on office