

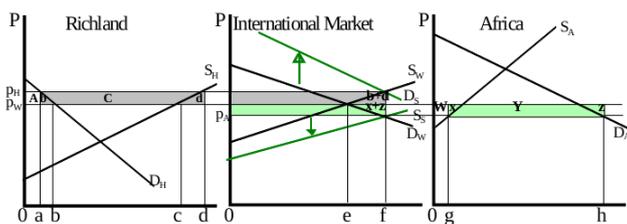
# International Trade and Monetary Systems

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## Homework Question 1

Cotton farmers in West Africa have complained that U.S. cotton subsidies make their farms uneconomical to operate. Use the two-country model of export subsidies to explain the effect of U.S. cotton subsidies on the world market for cotton.



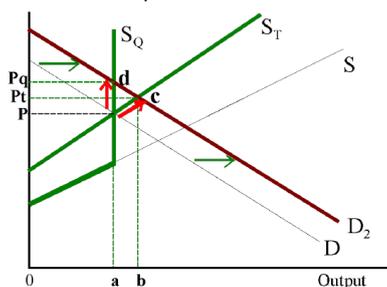
## Homework Question 2

Explain what happens to the effects of a fixed quota if the demand for imports declines. How would the effect of a decline in import demand differ if imports were restricted by a specific tariff?

## Some Differences Between Tariffs and Quotas

an increase in demand

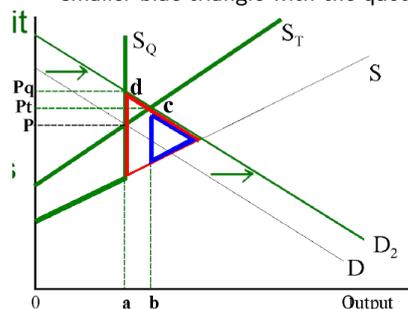
- ▶ If demand shifts, tariffs and quotas that were equivalent will have very different welfare effects.
- ▶ Under a tariff, an increase in demand creates a new market equilibrium at c.
- ▶ Under a quota, an increase in demand creates a new market equilibrium at d.



## Some Differences Between Tariffs and Quotas

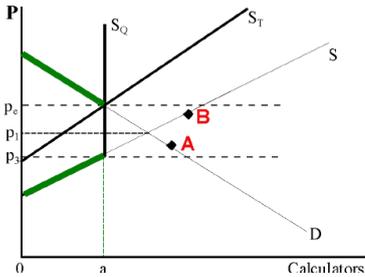
an increase in demand

- ▶ With a tariff, the price rises to  $P_t$ , with a quota to  $P_q$ .
- ▶ With a tariff the quantity imported rises from a to b, under a quota imports are unchanged.
- ▶ Deadweight loss is also less under a tariff, compare the smaller blue triangle with the quota's red triangle.



## Some Differences Between Tariffs and Quotas

- ▶ A quota may not ration rent opportunities efficiently.
- ▶ Consumers and producers along the green portions of the demand and supply curves should participate in the restricted trade.
- ▶ A quota could result in people at point A below the free trade price  $P_f$  getting import permits.



- ▶ Import permits may be denied to the lowest-cost suppliers and instead given to high-cost producers at point B.

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## Homework Question 3

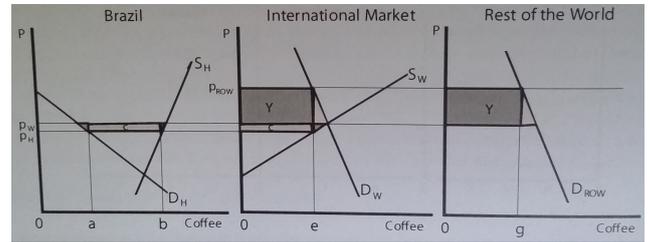


Figure 8.17 illustrates the case of inelastic foreign demand and the incidence of an export tax falling largely on the importing country. Illustrate the case of an export tax when foreign demand is highly elastic. What conditions will cause foreign demand to be elastic?

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## Who Imports Under a Quota?

- ▶ In the case of a tariff: the question of who gets to import is easy to answer: Whoever pays the tariff can import.
- ▶ In the case of a binding quota, who gets selected to import and who is prohibited from importing?

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## Who Imports Under a Quota?

With an import quota some type of rationing scheme must be devised.

- ▶ Common rationing schemes:
  - ▶ First come, first served.
  - ▶ Random drawing.
  - ▶ Proportional to previous years' imports.
  - ▶ Various economic, social, political, and other criteria.
  - ▶ Auction.
  - ▶ Arbitrary political decisions.
  - ▶ Lobbying (bribery).

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## Rent Seeking

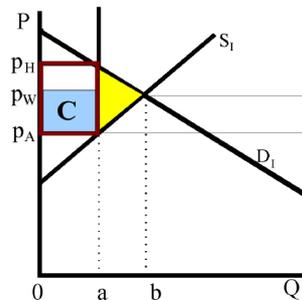
- ▶ Rent seeking activity is the intentional and planned use of society's scarce and costly resources in order to shift income and wealth from others to yourself.
- ▶ Rent seeking may try to distort an otherwise efficient economic process.
- ▶ Or, rent seeking may be carried out in order to undo or mitigate the effects of someone else's successful rent seeking at your expense.
- ▶ Overall, rent seeking activities subtract from economic output because real resources are used to affect a real transfer from one person or group to another.

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## The Costs of Rent Seeking

### How Much is a Quota Worth?

The costs of the resources used in rent seeking must be added to other costs of protection.

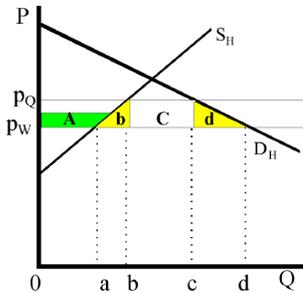


- ▶ Potential importers would be willing to spend some of the potential quota rent (the dark red box) to lobby policymakers to get the rent.
- ▶ If lobbying activities consume resources equal in value to the light blue area C, then the total costs to the world economy of the quota of  $bc$  would be equal to the deadweight losses (the yellow triangle  $a$ ) plus C.

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## The Costs of Rent Seeking

Potential importers are not the only ones who engage in rent seeking. Consumers may wish to organize to protect themselves against rent-seeking producers.



- ▶ Consumers would be willing to spend up to the lost consumer surplus ( $A+b+C+d$ ) to avoid the quota altogether.
- ▶ If lobbying costs consume half of the area  $A$ , then the green shaded area must also be added to the costs of protection.

## Dynamic Rent Seeking: Obstructing Creative Destruction

- ▶ For the process of creative destruction to work, there must be destruction as well as creation.
- ▶ In a Schumpeterian environment of innovative competition, lobbying for protection against foreign competition may be motivated not by producers' desire to increase producer surplus, but by the desire to slow the process of creative destruction and extend the period during which domestic innovators can reap profits.
- ▶ If such dynamic rent is successful, technological progress will slow, and welfare gains from economic growth will be lost.

## Dynamic Rent Seeking: Obstructing Creative Destruction

- ▶ The costs of dynamic rent seeking activity include the resources that are spent on obstructive activity rather than on the production of welfare-enhancing output.
- ▶ There are also the opportunity costs of lost future economic growth if the obstruction of competitive innovation is successful.
- ▶ Given the power of compounding, the opportunity cost of obstructing innovative activity can be enormous because the power of compounding magnifies even small changes in growth rates into large welfare changes.

## Dynamic Protectionism

The welfare costs of obstructive activity consist of:

- ▶ The resources that are spent on obstructive activity rather than production.
- ▶ The lost future economic growth if the obstructive activity is successful.

Clearly, the economic cost of obstructing innovative activity can be enormous when you consider how the power of compounding magnifies even small changes in growth rates into large welfare changes.

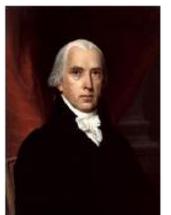
## Applying Economics to Politics

Why doesn't the world look like economists believe it should?

- ▶ Why do governments block free trade?
- ▶ Why are there still price ceilings and floors?
- ▶ Why are certain industries subsidized heavily (or taxed heavily) and others not at all?

If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary.

James Madison, 1751-1836



The assumption:  
incentives matter in politics as well

The big question: When does the self-interest of politicians and voters align with the social interest and when do these interests collide?

## Public Choice

- ▶ A symmetry of assumptions between private and public choices.
- ▶ Just like in private choice settings (markets):
  - ▶ Government is composed of real, imperfect people
  - ▶ Government is not composed of selfless angels/dispassionate philosopher-kings who only operate in the public good
  - ▶ Political agents are self-interested individuals who care about their own private interests
- ▶ The only difference is that these same self-interested exchanging people are operating under a different set of institutions (incentives)
  - ▶ market institutions vs. political institutions

Do you vote?

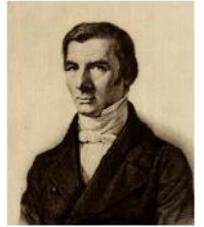
Does your vote count?

## Democracies typically face these problems:

- ▶ Voter ignorance
- ▶ Special interest power
- ▶ Political business cycles

## Rent Seeking

But how is this legal plunder to be identified? Quite simply. See if the law takes from some persons what belongs to them, and gives it to other persons to whom it does not belong. See if the law benefits one citizen at the expense of another by doing what the citizen himself cannot do without committing a crime.



Everyone wants to live at the expense of the state. They forget that the state lives at the expense of everyone.

Frederic Bastiat, The Law, 1848

## Voters and the Incentive to be Ignorant

- ▶ Rational Ignorance exists when the benefits of being informed are less than the costs of being informed.
- ▶ Voters are rationally ignorant about politics; the incentives to be informed are low.
- ▶ Ignorance about political matters is important for three reasons.
  1. Ignorance makes it difficult to make informed choices.
  2. Ignorance can lead to bad policy.
  3. Not everyone is rationally ignorant.

## Special Interests and the Incentive to Be Informed

- ▶ Some people have a lot at stake in a policy decision.
- ▶ Such voters tend to be rationally informed because their benefits from gathering information and influencing politicians are much greater than the costs of such efforts.

Do you support the right for corporations to donate as much as they want to political campaigns?

## The US sugar quota

- ▶ Due to a sugar import quota the price of sugar in the US is 3-4 times the world market price.
- ▶ Who is worse off with the quota?
- ▶ Who benefits from the quota?
- ▶ How is the political decision maker affected?

If everyone in the world gave you a penny, you'd become fantastically rich.

This insight is at the core of modern politics.

Sort the following government policies into Concentrated benefits and Diffuse Costs: use benefits, costs.

- Social Security
- Tax cuts for families
- Social Security Disability Insurance for the severely disabled
- National Park Service spending for remote trails
- National Park Service spending on the National Mall in Washington, DC
- Tax cuts for people making more than \$250,000 per year

Which beneficiaries are likely to stay better informed?

## Diffuse Costs, Concentrate Benefits

divide et impera

- ▶ In, e.g., the sugar quota case, the self interest of politicians does not necessarily align with the social interest.
- ▶ Those who are harmed are rationally ignorant and have little incentive to oppose the policy.
- ▶ Those who benefit are rationally informed and have strong incentives to support the policy.
- ▶ A self-interested politician may support a policy that damages many.

An initiative on Arizona's 2006 ballot would have handed out a \$1 million lottery prize every election: The only way to enter the lottery would be to vote in a primary or general election.

How do you think a lottery like this would influence voter ignorance?

## Who gets their way in a democracy?

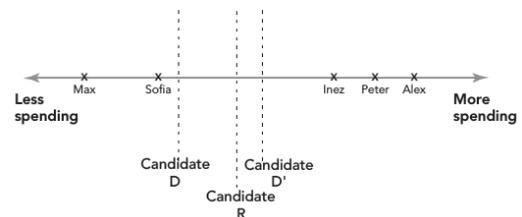
The Median Voter Theorem

The Median Voter Theorem argues that the median voter rules:

When voters vote for the policy that is closest to their ideal point on a line then the ideal point of the median voter will beat any other policy in a majority rule election.

## The Median Voter Theorem

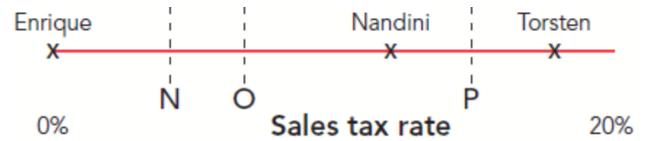
- ▶ Assume 5 voters, each with a preference on Social Security spending.
- ▶ Candidate D will receive 2 votes (Max & Sofia) and candidate R will receive 3 votes (Inez, Peter, & Alex).
- ▶ R could be beaten by candidate D', whose position is closest to the ideal position of the median voter.
- ▶ Over time, competition pushes both candidates toward the ideal policy of the median voter, which is the only policy that can not be beaten.



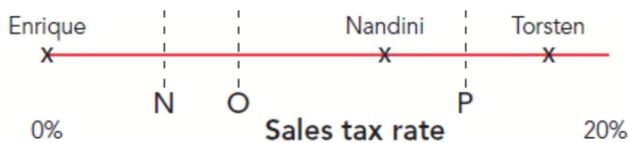
## The Median Voter Theorem

- ▶ Implications:
  - ▶ Politicians seek to represent the median voter to get elected.
  - ▶ Policy won't change unless the median voter views change.
- ▶ Exceptions:
  - ▶ If no candidate presents views close to the median voter, voters may refuse to vote for anyone.
  - ▶ When there are two or more issues at stake, there may not be a predictable outcome.
- ▶ The quality of the democracy we get depends on the wisdom (or rational ignorance) of the (median) voters behind it.

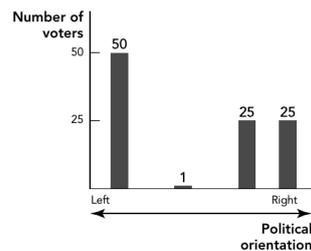
Suppose there are only two politicians running for office, N and O. Who will vote for N? Who for O? Which candidate will win the election?



1. Enrique and Nandini will vote for N and Torsten will vote for O. N will win the election.
2. Enrique will vote for N and Nandini and Torsten will vote for O. O will win the election.
3. Torsten will vote for N and Enrique and Nandini will vote for O. O will win the election.
4. Nandini and Torsten will vote for N and Enrique will vote for O. N will win the election.



O drops out of the campaign after the local paper reports that he hasn't paid his sales taxes in years. P enters the race, pushing for higher taxes, so it's N vs. P. Voters prefer the candidate who is closest to them. Who will vote for N? Who for P? Who will win? Who will lose?



1. Which group of voters will get their exact wish: the group on the left, the center-left, the center-right, or the right?
2. Now, four years later, it's time for a new election. Suppose that in the meantime, the two right-leaning groups of voters have merged: The 25 center-right voters move to the far right, forming a far-right coalition. In the new election, whose position will win now?
3. As you've just seen, there's a pivotal voter in this model. Who is it?