

# POLITICAL ECONOMY

Sponsored by a Grant TÁMOP-4.1.2-08/2/A/KMR-2009-0041

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June 2011

## Week 9

### Rent seeking

#### Rent seeking: Theory

- Another view of government:
- Groups try to influence politicians and bureaucrats,
- to take measures beneficial to them. E.g. granting monopolies, tariffs, quotas, regulation, transfers, etc.
- „Rent” simply means regular income that is not salary, not interest and not profit.

## The theory of rent seeking

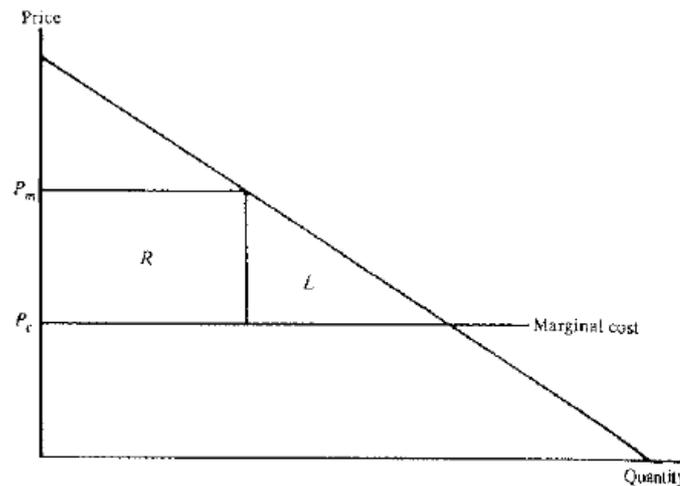


Figure 15.1. The social costs of monopoly with rent seeking.

L is social loss. But some of R could be, too!

There are three sorts of social cost here:

1. The efforts and expenditures of the potential recipients of the monopoly.
2. The efforts of the government officials to obtain or to react to the expenditures of the potential recipients.
3. Third-party distortions induced by the monopoly itself or the government as a consequence of the rent-seeking activity.

Careful! Net transfers, fees, bribes, etc. are *not* a sort of social cost!

## How much of R is lost?

Tullock (1980): risk neutral players invest in rent seeking, with the following expected gain to make:

$$E(G) = \left( \frac{I^r}{I^r + T} \right) R - I, \quad (15.2)$$

Where  $r$  is a parameter, determining whether returns to  $I$  are increasing or decreasing and  $T$  is the sum total of the others'  $I$ 's.

Then a necessary first order condition of a Nash equilibrium will be this:

$$\frac{rI^{r-1}R}{I^r + T} - \frac{rI^{r-1}I^r R}{(I^r + T)^2} - 1 = 0. \quad (15.3)$$

From which the symmetrical solution is:

$$I = \frac{(n-1)}{n^2} r R. \quad (15.4)$$

As long as  $I$ , plugged in (15.2), yields a non-negative value. That condition yields:

$$\frac{n}{n-1} \geq r. \quad (15.5)$$

What will be the proportion of  $R$  dissipated by rent seeking?

$$\frac{nI}{R} = \frac{(n-1)}{n} r. \quad (15.7)$$

We have to look at different cases now:  $r < 1$ ,  $r = 1$ ,  $r > 1$  but there is a solution,  $r > 2$ .

What if there is free entry?

$$\lim_{n \rightarrow \infty} \frac{nI}{R} = r. \quad (15.8)$$

This was Cournot. What about a Stackelberg-like leader-follower setup? (...)

Extensions:

## How much of R is lost? Extensions

- Risk aversion (is that a good assumption?) P-A situation! Entrepreneurs selected for courage (Knight). E.g. logarithmic  $U()$ . A lot rides on the size of the prize compared to the wealth of the seeker.
- Rent seeking gains could be defined otherwise
- ...

## Rent seeking through regulation

The Peltzman (1976) model:

$$V = V(U_R, U_C), \quad \frac{\partial V}{\partial U_R} > 0, \quad \frac{\partial V}{\partial U_C} > 0. \quad (15.20)$$

For simplicity, assume consumer and regulator utilities are linear in  $R$  and  $L$ ; that is,

$$U_R = R, \quad U_C = K - R - L, \quad (15.21)$$

where  $K$  is an arbitrary constant. Then assuming that the proper second-order conditions hold to ensure an interior maximum, the vote-maximizing regulator sets price,  $P$ , to satisfy

$$\frac{dV}{dP} = \frac{\partial V}{\partial U_R} \frac{dR}{dP} - \frac{\partial V}{\partial U_C} \frac{dR}{dP} - \frac{\partial V}{\partial U_C} \frac{dL}{dP} = 0 \quad (15.22)$$

or

$$\frac{\partial V}{\partial U_R} \frac{dR}{dP} = \frac{\partial V}{\partial U_C} \left( \frac{dR}{dP} + \frac{dL}{dP} \right). \quad (15.23)$$

We expect  $\delta V / \delta U_R > \delta V / \delta U_C$ , at least for low values of  $R$ . Why? Because producers are better organized than consumers: the problem of collective actions affects them less.

Will  $P$  be such that  $R$  be maximized?

No!

What sort of markets will be most likely to be regulated? Competitive? Oligopolies? Monopolies?

C + M!

# Rent seeking through tariffs, quotas and

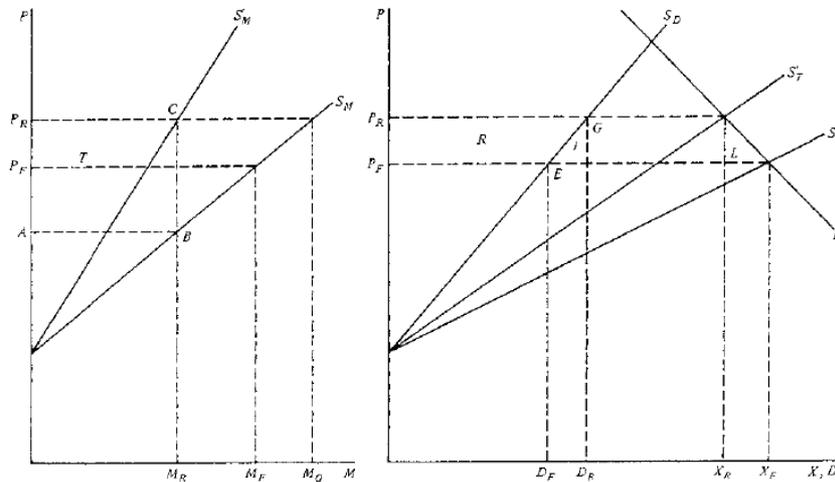


Figure 15.2. Imports and domestic production under tariffs and quotas.

→Endogenous protection models

Puzzle: why more tariffs than export subsidies?

## How large are the losses?

Two methods of estimation:

1. Based on  $R$
2. Based on lobbying spending, plus some advertising, plus some R+D,...

Estimates range between 0% and 50% (!) of GDP

Link between one's answer and one's attitude toward economic liberalism...