The Political Economy of Trade Policy

Paul Krugman
Producer gain = a
Consumer loss = a + b + c + d
Revenue = c

Deadweight loss = b + d
No tariff if the same weight is placed on everyone’s gains or losses

But this may not be true:

1. Revenue matters: c may count more than private gains or losses

2. Different groups may be differentially organized
Customs share of revenue
Table 1: Relationship between Trade Taxes and Per Capita Income

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable:</th>
<th>All trade taxes as a share of total tax revenue, 1984-86 average</th>
<th>Import duties as a share of total tax revenue, 1984-86 average</th>
<th>Export taxes as a share of total tax revenue, 1984-86 average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>0.353*</td>
<td>0.279*</td>
<td>0.065*</td>
</tr>
<tr>
<td>Per capita GDP (1985)</td>
<td></td>
<td>-0.037*</td>
<td>-0.030*</td>
<td>-0.011**</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>0.18</td>
<td>0.12</td>
<td>0.07</td>
</tr>
<tr>
<td>number of countries</td>
<td></td>
<td>77</td>
<td>77</td>
<td>77</td>
</tr>
</tbody>
</table>
Organization:

Mancur Olson, *The Logic of Collective Action*: political activity is a public good, tends to be undersupplied

Small, organized groups are more effective than large, diffuse groups

Tends to mean that producers “count” more than consumers
<table>
<thead>
<tr>
<th>Item</th>
<th>Summary data</th>
<th>Simulation, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time equivalent</td>
<td>Baseline 2005–13</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>2005</td>
<td>2006</td>
</tr>
<tr>
<td>Total sugar crop farming</td>
<td>7,489</td>
<td>7,337</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>6,088</td>
<td>5,937</td>
</tr>
<tr>
<td>Sugarbeets</td>
<td>1,401</td>
<td>1,400</td>
</tr>
<tr>
<td>Total sugar processing</td>
<td>13,083</td>
<td>12,758</td>
</tr>
<tr>
<td>Raw cane sugar</td>
<td>4,251</td>
<td>3,971</td>
</tr>
<tr>
<td>Refined cane sugar</td>
<td>2,722</td>
<td>2,674</td>
</tr>
<tr>
<td>Refined beet sugar</td>
<td>6,110</td>
<td>6,113</td>
</tr>
</tbody>
</table>
Sugar: per capita consumption is 66 lbs per year

Trade restrictions add $0.08 per pound

So consumer cost around $5 per year per capita, $1.5 billion

Producers get around $1 billion

So this is worth around $50,000 (?) per worker

Information asymmetry between producers and consumers
So, suppose politicians maximize $\Lambda^* \cdot \text{(Producer surplus)} + \text{Revenue} + \text{Consumer surplus}$ with $\Lambda > 1$

Consider a small increase in the tariff:

Most influential approach: Grossman-Helpman

Think of politicians as maximizing weighted sum of overall welfare and campaign contributions

Contributions give an extra “weight” to organized groups

So, suppose politicians maximize

$\Lambda^* \cdot \text{(Producer surplus)} + \text{Revenue} + \text{Consumer surplus}$

with $\Lambda > 1$

Consider a small increase in the tariff:
Always a net gain starting from zero tariff ...

Deadweight losses

Producer gain (multiply by $\Lambda - 1$)

Slightly higher tariff

World price + tariff

World price

Quantity
Rodrik’s paradox:

Assume political power such that we have to make a transfer of $x to each sugar worker. This could be done by

1. Giving every worker now in the industry $x
2. Giving $x to all current *and future* workers
3. Giving an employment subsidy that raises wages by $x
4. Giving a production subsidy that raises wages by $x
5. Imposing a tariff that raises wages by $x

Welfare ranking 1>2>3>4>5

So why do we do 5?
Possible answers:

Pro-revenue bias

Commitment mechanism: deliberately use inefficient income redistribution to impose self-restraint

Uncertainty, ignorance

Obfuscation?

Related question: why the anti-trade bias (tariffs and quotas much more common than export subsidies)

Maybe terms of trade?
Export subsidies can only be used by few members

- Only 25 members are entitled to use export subsidies.

- Combined, the European Union and the United States are entitled to provide around US$10 billion in export subsidies per year. The EU provided a total of around USD16 billion in export subsidies during 2001-05, mainly for dairy, sugar and beef exports.

![Export Subsidy Budgetary Entitlements](chart.png)

<table>
<thead>
<tr>
<th>Country</th>
<th>USD million</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>9,807</td>
</tr>
<tr>
<td>US</td>
<td>584</td>
</tr>
<tr>
<td>China</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
</tr>
</tbody>
</table>
Export subsidy: small economy

- **Price**
- **Quantity**

**Diagram Key:**
- S: World price plus subsidy
- D: World price

- Consumer loss: $a + b$
- Producer gain: $a + b + c + d$
- Cost to government: $b + c + d$
- Deadweight loss: $b + d$
Producer gain = a
Consumer loss = a + b + c + d
Revenue = c + e

Deadweight loss = b + d
Terms of trade gain = e
Export subsidy with market power

Price

Quantity

S

World price plus subsidy

World price before subsidy

World price after subsidy

Consumer loss: $a+b$
Producer gain: $a+b+c+d$
Cost to government: $b+c+d+e+f+g$
Deadweight loss: $b+d$
Terms of trade loss: $e+f+g$