Economics of Globalization

Sciences Po Saint-Germain-en-Laye

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 - The owners of the abundant factor tend to win while the owners of the scarce factor tend to lose.
- \longrightarrow As a result countries may want to regulate trade \longrightarrow trade policy.

Trump tariffs + Add to myFT

Donald Trump says US truck imports to face 25% tariff from November 1

 $\label{lem:comes} Announcement comes on eve of talks in Washington with Canadian Prime Minister Mark Carney$



Next week

- Session on international taxation.
 - Very topical issue:
 - How to promote social justice in a globalized world?
 - How to tax capital (and workers) when they are internationally mobile (wealth tax, tax competition, etc.)?
- Course given with Samuel Delpeuch
 - Researcher at the EU Tax Observatory and French Council of Economic Analysis.
 - Former economist at the OECD, participated to negociations for the reform of international taxation.

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 - Trade restrictions allowed for **safety reasons** (environment, public health, etc.).
- The WTO works with trade rounds where countries negotiate tariff reductions.
 - → Eight trade rounds since 1947, Doha round opened since 2001.
 - World trade system needs to be rebuilt.

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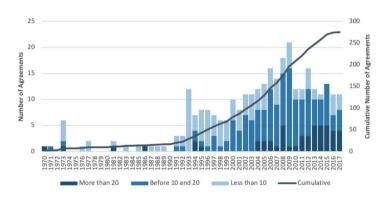
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- **Deep trade agreements** have an expanded scope. They target international economic law on top of multilateral trade rules.
- This includes agreements about international investment, labor, protection of intellectual property rights, environment.
- These agreements are generally seen as favoring corporate power.
 - e.g. Investor-States Dispute Settlements (ISDS) where foreign investors can pursue State when they change their regulation (in particular labor, environmental, health regulations).
 - Evidence of intense lobbying by large multinational firms.

New Trade Agreements

Figure 1 Number of policy areas covered in regional trade agreements, 1970-2017



Source: Hofmann et al. (2017).

- A tariff is a **tax** levied when a good is imported.
 - Specific tariffs: tax per unit.
 - Ad valorem tariffs: percentage of good value.
- Oldest form of trade policy and large source of income in pre-modern taxation system and in developping countries.
- Designed to protect specific domestic sectors by raising the prices of foreign goods.

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- The WTO also allows some type of temporary trade barriers (anti-dumping or countervailing measures against foreign subsidies).

Theory of Trade Policy

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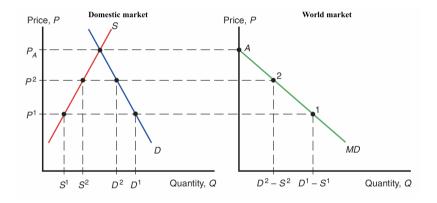
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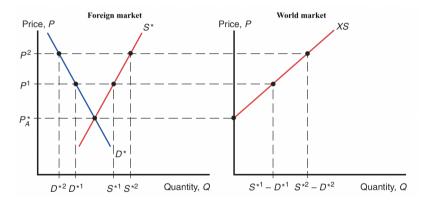
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- We can construct the import demand curve and the export supply curve.

Basic Tariff Analysis: Home import demand curve



Import demand curve: as the price increase, home consumers demand less while home producers supply more, so that the demand for import decreases.

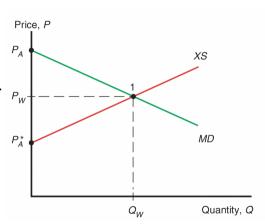
Basic Tariff Analysis: Foreign export supply curve



Export supply curve: as the price increase, foreign producers supply more while foreign consumers demand less, so that the export supply increases.

Basic Tariff Analysis

- The equilibrium world price is where home import demand equals foreign export supply.



Basic Tariff Analysis

- Now introduce a specific tariff of t\$.

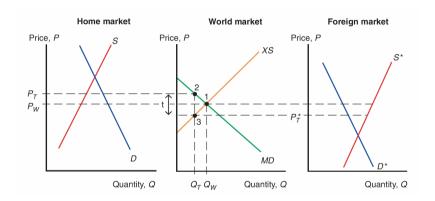
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 - The price received by foreign producers is P_T^* The price received by domestic consumers is $P_T = P_T^* + t$
- The equilibrium quantity should be consistent with these two different prices.

Basic Tariff Analysis

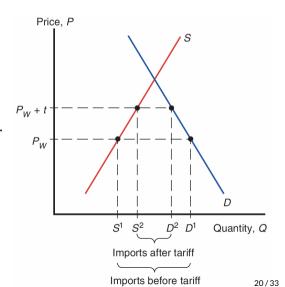


A tariff raises the price in Home while lowering the price in Foreign. The volume of trade decreases. Home producers supply more, while Foreign producers supply less.

- After the introduction of the tariff, the quantity exchanged decreases compared to the free-trade equilibrium.
- The price in both countries is between the autarky price and the free-trade price.
- The price of domestic producers is raised and the quantity imported decreases: domestic producers are protected from international competition.

- The tariff is not fully passed-through to consumers: exporters' bear a part of the tariff by decreasing their price.
 - Producers prefer to decrease their price to counter the decrease in demand.
 - Works only for large countries that can influence the world price.
 - The economic incidence of the tariff (who ultimately pays the tax), is different from the legal incidence (who remits the cash to the tax authority).

- Small countries do not lower the foreign price of the good it imports through tariffs.
- All the tariff is paid by domestic consumers.



Basic Tariff Analysis

- We know the effect on prices and quantities, but what is the global effect on "welfare"?

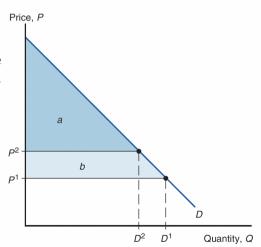
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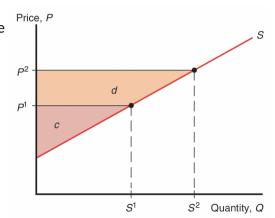
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- We are going to assume that 1\$ is worth the same for the society point of view whoever it is allocated.
 - (This must not be the case! To deal with this, economists have imagined social welfare functions. Theories of justice deal with these questions.)
- We also assume that trade protection only benefits producers, not workers (while consumers are also workers).

- Consumer surplus corresponds to the welfare derived by consumers when they buy a good.
- Consumer surplus is equal to the area above the demand curve.



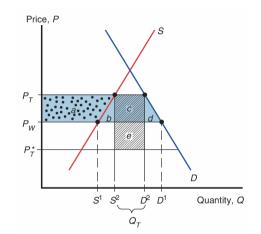
- Producer surplus corresponds to the welfare derived by producers when they sell a good

 — their profits.
- Producer surplus is equal to the area above the supply curve and below the price.



Basic Tariff Analysis

- This figure puts together consumer surplus and producer surplus.
- There is a third agent: the governement.
 - Collects the tariff which is equal to the difference between the foreign producer price (P_T^*) and the domestic price (P_T) .
 - Tariff revenues = $(P_T P_T^*) \times Q_T$, with Q_T the quantity imported i.e. the difference between domestic supply and domestic demand.



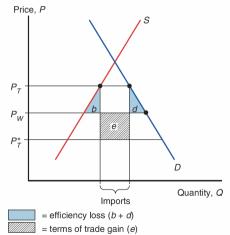


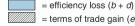
= consumer loss (a + b + c + d)

= producer gain (a)

= government revenue gain (c + e)

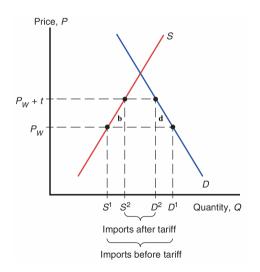
- This figure shows the net effect of the tariff.
- Efficiency losses: domestic producers produce "too much" and consumers consume "too little" with respect to the optimum.
- Terms of trade gains: gains due to the fact that the foreign producer partly pays the tax.





Basic Tariff Analysis: Small country case

- In small countries, all the tax is paid by domestic consumers.
- The tariff generates net losses because e = 0.



Tariff on an intermediate input.

- Current globalization is characterized by the importance of global value chains (GVCs).

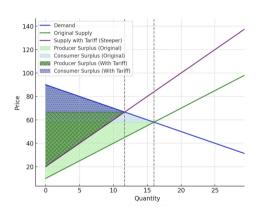
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- In this context, tariff is not anymore a tool for redistributing between producers and consumers, but also affects producers negatively.



- When tariffs hit intermediates goods, supply becomes steeper.
- For a given quantity, producers ask a higher price because costs are higher.
- In equilibrium there are less quantities traded by domestic suppliers (≠ tariff on consumption goods), at a higher price.
- The tariff generates net losses.



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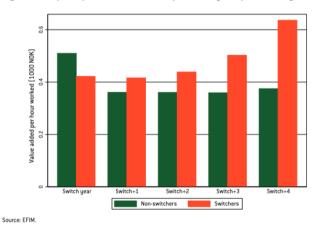
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 - Trade protection affects the costs of capital equipment and decreases the capital stock in the long-run.

Figure 7: Compared performance in labour productivity - Export (Norway)



Source: Mayer and Ottaviano, 2007

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 - Might trigger retaliatory responses a country does not take decisions in isolation: in a globalized world, it affects other countries' decisiosn and might have unintended consequences.

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- Free trade creates unemployment in absence of quick and costless relocation of workers across occupations and industries (e.g. NAFTA, the China shock, etc.).
 - There might be larger social benefits to protect an industry than costs.
 - **Second-best theory**: ideally free trade would be better, but because there is an imperfect reallocation, protection can increase welfare.

- As time goes, the gains from lowering trade barriers becomes relatively lower than the induced redistribution.
 - The distributional consequences of trade are more and more important compared to the "increasing size of the pie".
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- Compensation is hard to achieve.
- Large loss of tax revenues can affect countries' policies.
 - Tariffs are an important source of revenues in developing countries.
 - Cagé and Gadenne (2018): 40% of developing countries experience a fall in total tax revenues that last more than 10 years after trade liberalization. Same for expenditures → lower provision of public goods.