

# International Trade: Theory and Policy

**Lecture 10**

November, 2016

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# **Topic 7. International trade under increasing returns to scale and imperfect competition on the markets.**

## **Lecture 9**

7.1. New approaches to the analysis of international trade under increasing returns to scale and imperfect competition.

General equilibrium in closed economy under increasing returns to scale and imperfect competition on the markets.

7.2. International trade under increasing returns to scale:

- **external economies to scale;**

- internal economies to scale.**

7.3. A model with **external economies to scale.**

## **Lecture 10**

7.4. **Monopolistic competition**, returns to scale and international trade.

7.5. Models with **heterogeneous firms** (including the model by Marc Melitz (2003); models of choice between export and foreign direct investment).

7.6. Dumping. The structure and normative effects of international trade in ‘large’ economy under imperfect competition on the markets: the case of **international oligopoly.**

## (7.4.) Monopolistic competition, returns to scale and international trade

### Monopolistic competition

**Krugman P. (1979)** Increasing returns, monopolistic competition, and international trade, *Journal of International Economics* 9, 469-79.

*Based on:*

**Dixit, A. and J.E.Stiglitz (1977)** Monopolistic competition and optimum product diversity. *American Economic Review*, 67(3), 297-308

- general equilibrium model
- not based on the comparative advantages
- reason for trade: internal returns to scale \*
- imperfect competition: monopolistic competition (Chamberlin, 1962; Robinson, 1933), version of the model by Dixit and Stiglitz (1977)
- differentiated products
  - => a firm is a monopolist on the market of the variety of the product that it produces
- intra-industry trade
- no strategic interaction between firms
  - i.e. firms ignore their impact on their rivals' prices

\* Why do we need the assumption of imperfect competition here?

## **(7.4.) Monopolistic competition, returns to scale and international trade**

### **Example**

**The model explains why countries exchange the same goods, for example, automobiles or computers.**

If there is product differentiation and monopolistic competition, trade arises between Germany and Japan, because it is beneficial both for producers and for consumers.

Producers – Volkswagen in Germany and Honda in Japan will be able to expand production and this way to lower average costs, using internal returns (IRS).

Consumers in both countries will have more varieties of a product; in this case they will be able to choose, what kind of car to drive.

## (7.4.) Monopolistic competition, returns to scale and international trade

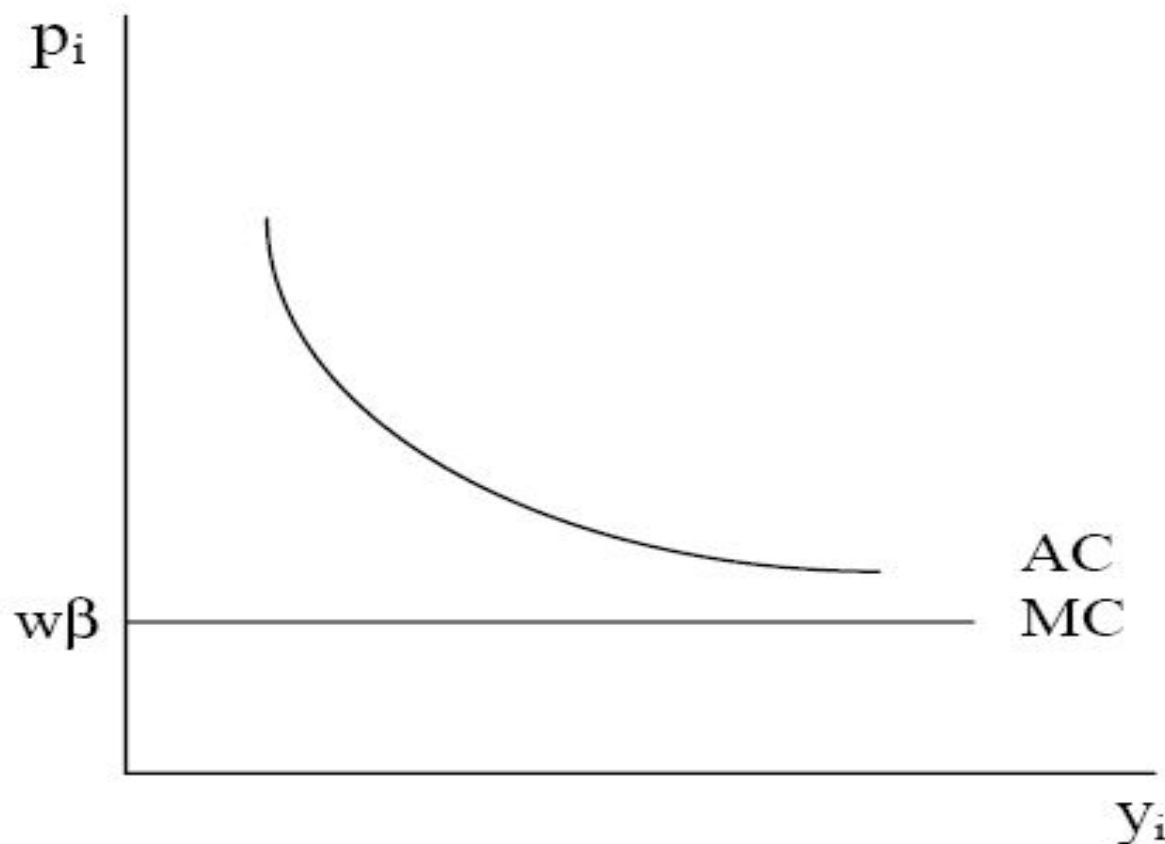
*Returns to scale: relation of input to output in hypothetical industry*

| Output    | Total labor input | Average labor input |
|-----------|-------------------|---------------------|
| <u>5</u>  | 10                | <u>2</u>            |
| 10        | 15                | 1.5                 |
| 15        | 20                | 1.333               |
| 20        | 25                | 1.25                |
| 25        | 30                | 1.2                 |
| <u>30</u> | 35                | <u>1.166</u>        |

*Source:* Krugman (2008), p. 115

## (7.4.) Monopolistic competition, returns to scale and international trade

### Marginal and average costs



*Source:* Feenstra, R. (2004) Advanced international trade: theory and evidence. Princeton: Princeton University Press. Ch. 5, p. 139.

## **(7.4.) Monopolistic competition, returns to scale and international trade.**

### **The world economy**

- 2 countries (h, f)
- Final good is tradable
- Production factor is immobile between the countries

### ***Structure of Dixit-Stiglitz model***

#### **Production**

- One production factor: labor
- The final good (a manufactured good ) is differentiated
- There is a set of potential *varieties* of the differentiated good that can be produced
- Any number of the *varieties* belonging to this set can be produced
- In fact varieties 1 to N are produced, where N is a large number, but smaller than the potentially possible one

#### **Consumption**

- Tastes are identical and homogeneous among the households and the countries
- Love of variety

#### **Market structure**

- Monopolistic competition on the market of manufactured good
- Perfect competition on the production factor market

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Krugman, P., Obstfeld, M. and M. Melitz (2011) International Economics: theory and policy – Ch. 8  
– pp. 159-169; Determining marginal revenue: p. 191)

## **(7.4.) Monopolistic competition, returns to scale and international trade.**

### **Formulation of the model**

#### ***Assumptions***

#### **Demand for a firm's product:**

$$Q = S \left[ \frac{1}{N} - b(P - \bar{P}) \right] \quad (5)$$

*where*

Q – the firm's sales

S – the total sales of the industry

N – the number of firms in the industry

b – a constant term representing the responsiveness of a firm's sales to its price

P – the price charged by the firm itself

$\bar{P}$  - the average price charged by its competitors

## (7.4.) Monopolistic competition, returns to scale and international trade.

### Formulation of the model

#### *Assumptions*

#### **Production:**

$$C = F + cQ \quad (3)$$

*where*

C – total costs

F – fixed costs (the source of economies to scale)

c – marginal costs

Q – output

$$AC = \frac{C}{Q} = \frac{F}{Q} + c \quad (4)$$

*where*

AC – average costs

What happens to average costs when the output increases? Why?

## (7.4.) Monopolistic competition, returns to scale and international trade.

### Formulation of the model

#### *Market equilibrium*

All firms in the industry are symmetric – the demand function and cost function are identical for all firms.

We need to find interrelation between  $N$  and  $\bar{P}$ . The question is: how will they be affected by international trade?

#### (1) $N$ and $AC$

$$AC = \frac{F}{Q} + c = N \frac{F}{S} + c \quad (6)$$

where  $Q = S/N$ , because  $P = \bar{P}$  in (5) as firms are symmetric.

**=> With increase in  $N$ , average costs increase (as  $Q$  decreases) => upward-sloping CC.**

## (7.4.) Monopolistic competition, returns to scale and international trade.

(2) N and P

$$Q = A - BP \quad (1)$$

$$MR = p - \frac{Q}{B} \quad (2)$$

**Home task:** derive MR (see Krugman, Obstfeld, Melitz (2012), Appendix to Ch. 8, p. 191)

From (5):

$$Q = S \left[ \frac{1}{N} - b(P - \bar{P}) \right] \Rightarrow Q = \frac{S}{N} - SbP + Sb\bar{P}$$
$$Q = \left( \frac{S}{N} + sb\bar{P} \right) - SbP \quad (7)$$

where  $\frac{S}{N} + sb\bar{P} = A$  and  $Sb = B$  (see equation 1).

Plug this result into (2):  $MR = p - \frac{Q}{Sb} \quad (8)$

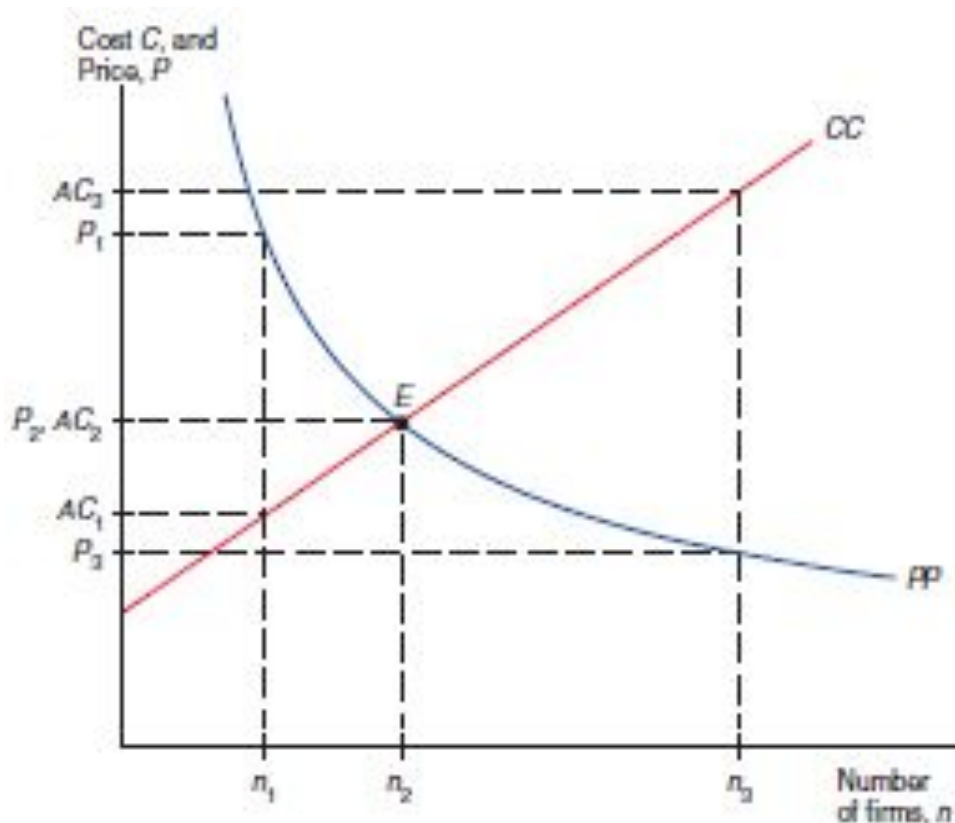
Profit maximization:  $MR = MC \Rightarrow p - \frac{Q}{Sb} = c \Rightarrow p = c + \frac{Q}{Sb} \quad (9)$

$Q = S/N \Rightarrow$  from (9) we receive:  $p = c + \frac{1}{bN} \quad (10)$

$\Rightarrow$  **With increase in N, the price charged by each firm decreases**  $\Rightarrow$  down-sloping  $PP_{11}$

## (7.4.) Monopolistic competition, returns to scale and international trade.

### Graphical illustration.



**PP:** the more firms there are the more intensively they compete  $\Rightarrow$  the lower is the industry price (see equation 10)

**CC:** the more firms there are the less each firm sells  $\Rightarrow$  the higher its  $AC$  (see equation 6)

Source: Krugman, Obstfeld, Melitz (2011), Ch. 8, p. 162

## (7.4.) Monopolistic competition, returns to scale and international trade.

### International trade in monopolistic competition model. Economic growth.

Within the model of a monopolistically competitive industry developed here we can determine the equilibrium number of firms and the average price the firms charge.

This model can be used to derive conclusions about the role of economies of scale in international trade.

Suppose that two countries of identical size and identical characteristics\* start trading.

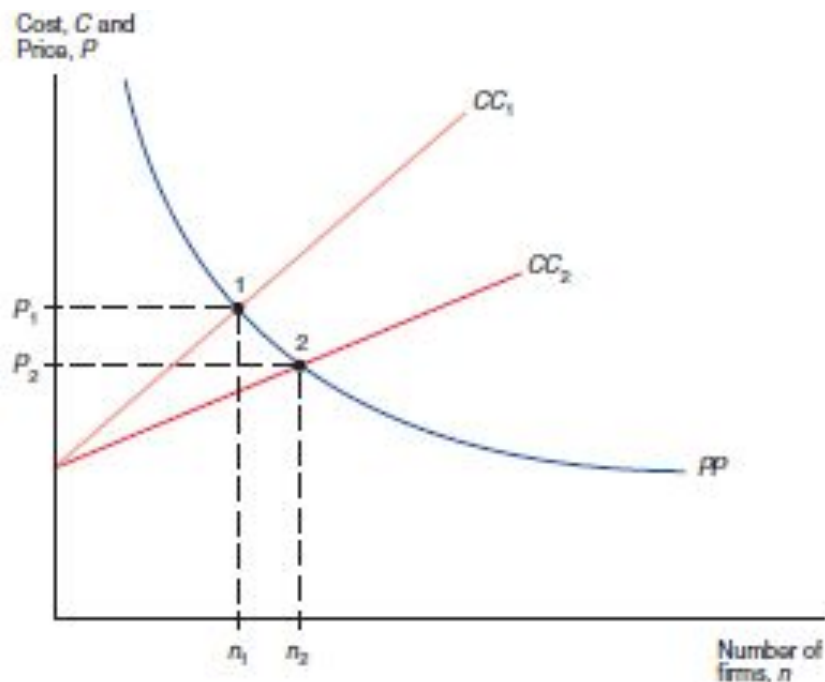
The reason behind trade in monopolistic competition model: an opportunity to export a differentiated good and to benefit from Increasing returns to scale.

Openness to trade results into **increase of the market size** (here: population  $L$  increases 2 times)

\* Would there be reasons for trade within the Smith model? The Ricardian model? The H-O-S model?

## (7.4.) Monopolistic competition, returns to scale and international trade.

### International trade in monopolistic competition model. Economic growth.



The line **CC** shifts down. The market grows  $\Rightarrow$  total sales of the industry ( $S$ ) increase, with  $N - \text{const.} \Rightarrow Q$  grows  $\Rightarrow$  AC decrease (see equation 6)

The line **PP** does not shift; the total sales of the industry,  $S$ , do not enter into equation 10.

Each country will *produce a narrow range of varieties* and *consume all varieties*.

- **Price** of each variety **decreases** (I);
- The number of firms serving each country's market increases  $\Rightarrow$  **the number of varieties** available to each consumer **increases** (II).

(I), (II)  $\Rightarrow$  **consumers gain from trade**.

Source: Krugman, Obstfeld, Melitz (2011), Ch. 8, p. 165

## (7.4.) Monopolistic competition, returns to scale and international trade. Conclusions.

- **Interrelation of monopolistic competition and international trade:**

- Broad opportunities for specialization of firms in different countries on different varieties of a differentiated product  $\Rightarrow$  incentives for international trade;
- Because of broader demand on the world market compared to the national market, more product varieties can be produced  $\Rightarrow$  under the assumption of love for variety utility of households increases;
- Under the assumption of Increasing returns to scale (IRS), the increase in sales of a product variety on the world market compared to the national market leads to benefits from specialization as average production costs decrease.

Trade leads to mutual gains even if countries do not differ in resources and technologies. Monopolistic competition model shows how trade can improve the trade-off between *scale* and *variety* that individual nations face.

International trade: the same effect as growth of a market within a single economy.

## (7.4.) Monopolistic competition, returns to scale and international trade.

### Specific features and limitations of the monopolistic competition model:

- A highly differentiated product;
- A large number of homogeneous sellers;
- Captures key elements of markets where there are economies of scale and thus imperfect competition,  
*but*
- Few markets are described by monopolistic competition. The most common market structure is one of small-group oligopoly  
=> interdependence of firms leading to *collusive behavior* (*explicit agreements and tacit coordination strategies*) and to *strategic behavior*.  
Those are complex models; monopolistic competition is simpler. Besides, it reflects the role of economies of scale in international trade.  
(Krugman, Obstfeld, Melitz (2011), Ch. 8).

### To summarize limitations,

- The concept of 'entry' does not fully reflect economic reality.
- Absence of strategic interaction.
- A static model.
- Firms are symmetric.

## Questions

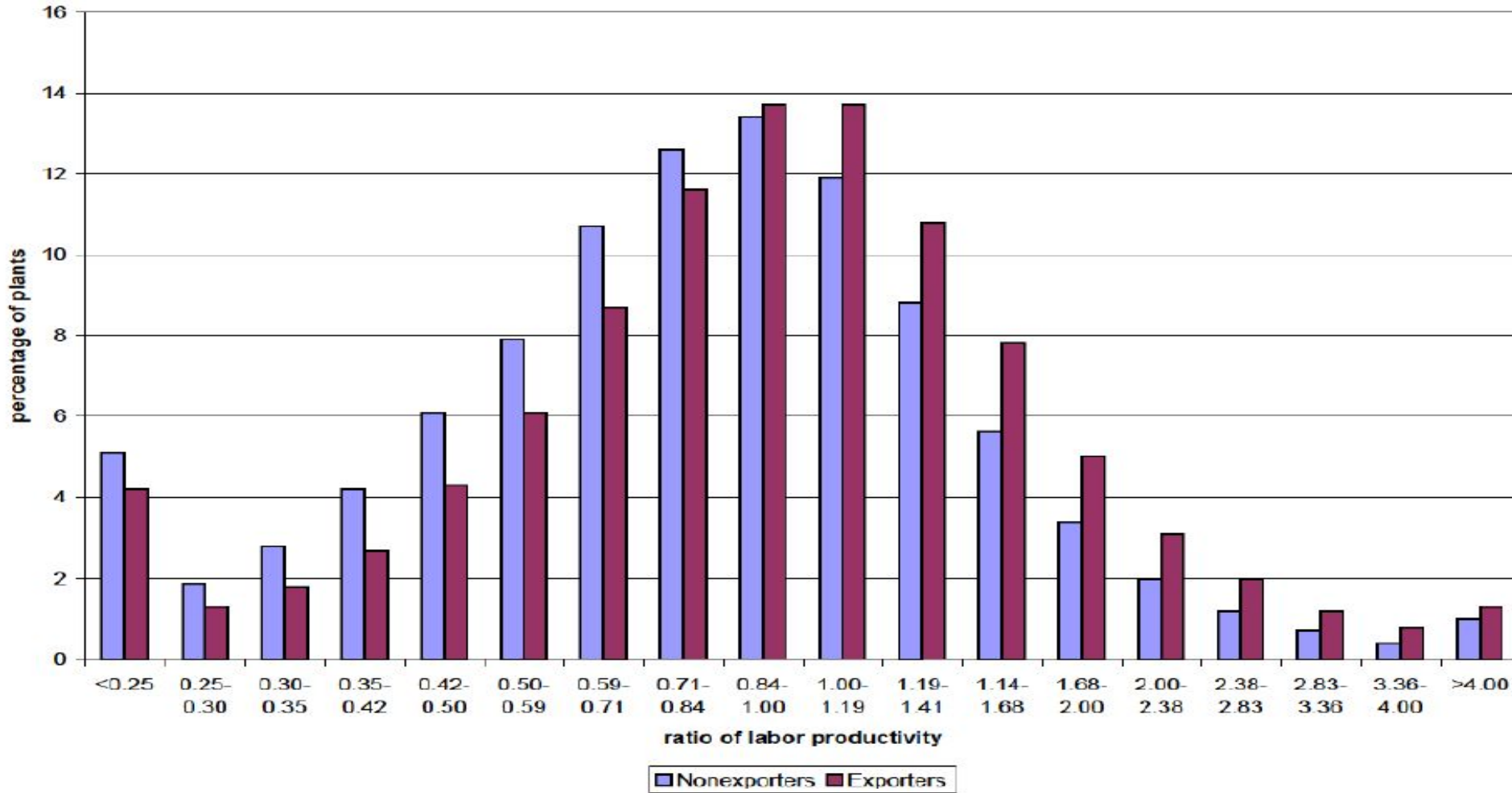
- a. Explain the sources of *internal* returns to scale - Increasing returns to scale (IRS).
- b. Explain microeconomic sources of *external* returns to scale (connected to the labour market, common suppliers etc.)
- c. Which type of returns to scale is present in Krugman's (1979) model? Which market structure is assumed in this model? Why?

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*Krugman, P., Obstfeld, M. and M. Melitz (2011) International Economics: theory and policy (9th edition). – Pearson. – Ch. 7-8 – pp. 158-159, 137-143*

## (7.5.) Models with heterogeneous firms

Heterogeneity of firms inside a sector: exporters and non-exporters



*Source: Lectures by Natalia Volchkova (New Economic School, Moscow, 2009)*

**Scale of heterogeneity of firms / plants: why is it important?**

Is it the best option to analyze an average firm / plant in industry?

Comparative advantage of a country: can it be changed?

## (7.5.) Models with heterogeneous firms

**TABLE 8-3** Proportion of U.S. Firms Reporting Export Sales by Industry, 2002

|                                     |     |
|-------------------------------------|-----|
| Printing                            | 5%  |
| Furniture                           | 7%  |
| Apparel                             | 8%  |
| Wood Products                       | 8%  |
| Fabricated Metals                   | 14% |
| Petroleum and Coal                  | 18% |
| Transportation Equipment            | 28% |
| Machinery                           | 33% |
| Chemicals                           | 36% |
| Computer and Electronics            | 38% |
| Electrical Equipment and Appliances | 38% |

**Source:** A. B. Bernard, J. B. Jensen, S. J. Redding, and P. K. Schott, "Firms in International Trade," *Journal of Economic Perspectives* 21 (Summer 2007), pp. 105–130.

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*Krugman, P., Obstfeld, M. and M. Melitz (2011) International Economics: theory and policy (9th edition). – Pearson. – Ch. 8, p. 177.*

## (7.5.) Models with heterogeneous firms

The following facts are taken into account in models with firms' heterogeneity:

- **enterprise productivity** within the same industry often substantially differs
- more productive firms tend to be more involved into **international trade and investments** than less productive ones

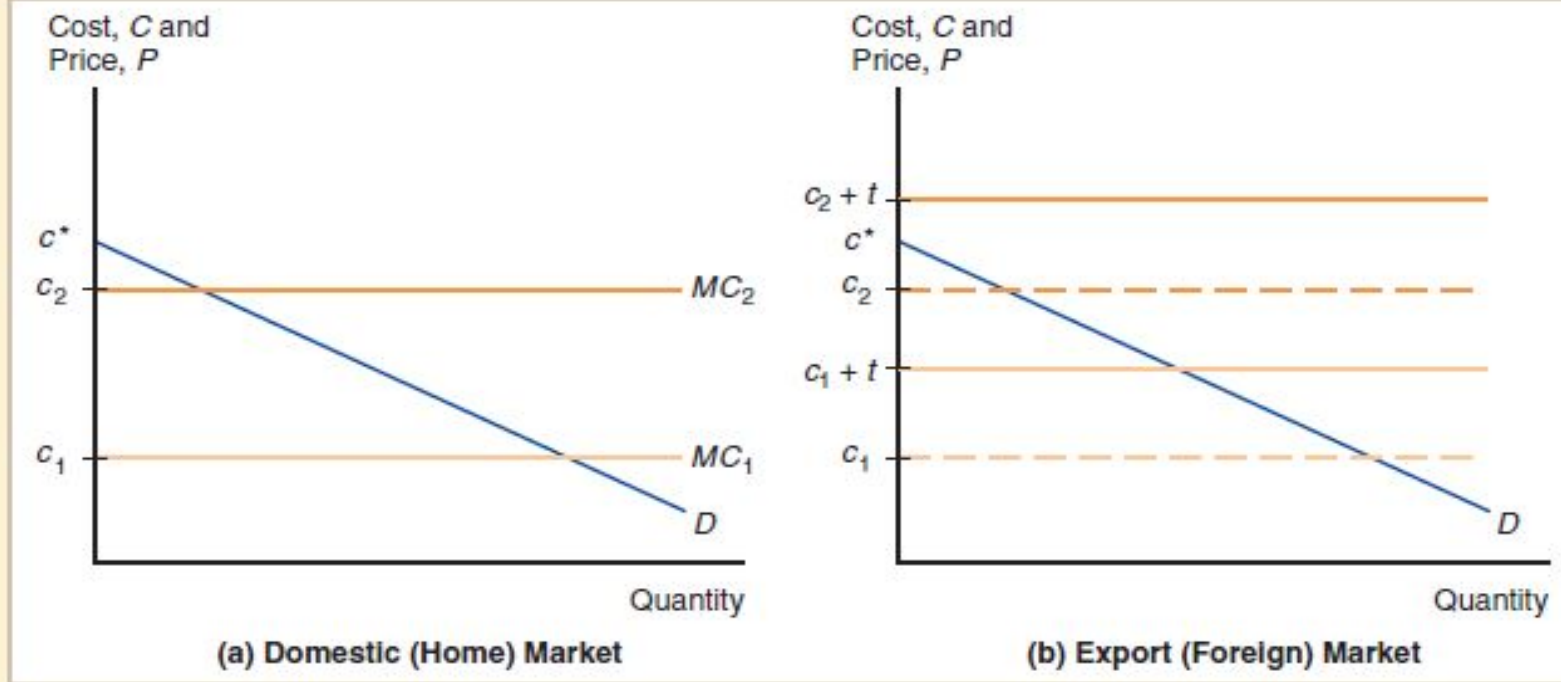
Some conclusions of the models with firms' heterogeneity:

- **trade liberalization** leads to redistribution of market shares between the firms in the industry, more productive firms gaining larger shares
- Melitz (2003): along with **long term benefits** of market shares redistribution, there are **short term costs** of this process
- these changes in production shares in the industry lead to growth of the firms' **average productivity** in this industry even if each firm's productivity remains constant as it is the case in the model by Melitz (2003); welfare of consumers grows

**Melitz (2003):** at the origin of research that takes into account firm heterogeneity

Helpman (2005), Drapkin (2010), Kireev (2011) provide detailed review of international trade models with heterogeneous firms

## (7.5.) Models with heterogeneous firms



**Figure 8-8**

### Export Decisions with Trade Costs

(a) Firms 1 and 2 both operate in their domestic (Home) market. (b) Only firm 1 chooses to export to the Foreign market. It is not profitable for firm 2 to export given the trade cost  $t$ .

*Krugman, P., Obstfeld, M. and M. Melitz (2011) International Economics: theory and policy (9th edition). – Pearson. – Ch. 8, p. 177.*

## (7.5.) Models with heterogeneous firms

The results of the models with heterogeneous firms developed by Bernard et al. (2003) and Yeaple (2002), in line with the results of Melitz (2003):

- only the most productive firms working on the domestic market become involved in **exporting**
- domestic **exporting firms are larger** than the firms not involved in exporting
- as a result of transition from autarky to open economy, **industry level productivity increases** as more productive firms extend their activities while less productive ones cannot compete with foreign importers and leave the market

<sup>16</sup>See A. B. Bernard, J. B. Jensen, S. J. Redding, and P. K. Schott, “Firms in International Trade,” *Journal of Economic Perspectives* 21 (Summer 2007), pp. 105–130; and Thierry Mayer and Gianmarco I. P. Ottaviano, “The Happy Few: The Internationalisation of European Firms: New Facts Based on Firm-Level Evidence,” *Intereconomics* 43 (May/June 2008), pp. 135–148.

## (7.5.) Models with heterogeneous firms

The firm's choice between **exporting and FDI** is associated with proximity-concentration trade off (*выбор между близостью к потребителю и концентрацией*): trade costs vs. expenses to maintain several production capacities.

Specific feature of exporting is lower fixed costs, while that of FDI is lower variable costs (exporting is associated with trade costs, which are variable costs).

The model by Helpman et al. (2004):

- firms with high enough productivity enter domestic market
- only the most productive firms serve the foreign market (In line with the results of Melitz (2003))
- then if a firm's productivity is sufficiently high, it can export, and firms whose productivity is the highest, can implement FDI
  
- the industries with higher firm heterogeneity carry out more FDI sales relative to export
- theoretical findings are confirmed with the US data, mainly for 1994

## (7.6.) Dumping (Демпинг)

Monopolistic competition models:

- recognize that imperfect competition is a necessary consequence of economies of scale, but
- do not focus on the possible consequences of imperfect competition for international trade.

However, the most striking consequence:

firms can charge **different prices in different countries.**

## (7.6.) Dumping

- The practice of charging different customers different prices is called **price discrimination**.
- The most common form of price discrimination in international trade is **dumping**, a pricing practice in which a firm charges a lower price for exported goods than it does for the same goods sold domestically.
- Dumping is a controversial phenomenon, subject to rules and penalties. For example, in the US dumping is prohibited; tariffs are imposed when dumping is discovered.

**Example:** Krugman et al. (2012) p. 179. Case study ‘Antidumping and protectionism’

- Dumping can occur only if two conditions are met:
  1. The industry must be **imperfectly competitive**, so that firms set prices rather than taking market price as given;
  2. Markets must be **segmented**, so that domestic residents cannot easily purchase goods intended for export.

## (7.6.) Dumping

### The reason for dumping:

The difference in *the responsiveness of sales to price* in the export and domestic markets. Firms will *price discriminate* when sales are more price-responsive in one market than in another.

The formal condition for **price discrimination** is that firms will charge lower prices in markets in which they face a higher elasticity of demand, where the elasticity is the percentage decrease in sales that results from a 1 percent increase in price.

Firms will dump if they perceive **a higher elasticity** on export sales than on domestic sales.

The analysis of dumping suggests that price discrimination can actually give rise to **international trade**.

## (7.6.) Reciprocal dumping (взаимный демпинг)

- Two monopolies producing the same good in country F and H
- Same marginal costs
- Transport costs => if firms charge the same price on both markets, there will be no trade (why?)
- If there is possibility of dumping, trade will emerge
- Each firm
  - Limits the quantity sold on the home market to keep the price at a certain level
  - Sells a few units on the foreign market at a price that (net of transportation costs) is lower than the home market price but still above marginal cost
- The situation in which dumping leads to two-way trade in the same product is known as **reciprocal dumping**
- **Social consequences** are ambiguous:
  - It is **wasteful** to ship the same goods, or close substitutes, as transportation is costly
  - The emergence of reciprocal dumping eliminates what were initially pure monopolies, leading to some competition [**benefits** for society]

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The possibility of reciprocal dumping was first noted by James Brander, “Intraindustry Trade in Identical Commodities”, *Journal of International Economics*, 11 (1981), pp. 1–14.  
(reference in Krugman and Obstfeld (2009), p. 139.)

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The model on the next slides can be used to analyze reciprocal dumping (source: Markusen et al., pp. 165-167.)

## **(7.6.) Structure of the international trade model under imperfect competition: the case of international oligopoly**

- **Structure of the world economy :**
  - 2 countries (h, f);
  - All final goods are tradable
  - Production factors are immobile between the countries.
- **Structure of the production sector :**
  - 2 industries that produce 2 final homogeneous goods (X, Y);
  - 2 homogeneous non-specific production factors (K, L), mobile between industries;
  - Countries do not differ in absolute factor endowment;
  - Specific features of the production technology:
    - CRS;
    - Technologies differ among the industries, but not among the countries.
- **Structure of the household sector:**
  - Tastes are identical and homogeneous among the households and the countries.
- **Market structure:**
  - Perfect competition on the markets of production factors in both countries;
  - Perfect competition on the market of good Y in both countries;
  - Monopoly on the market of good X in both countries;
  - On the world market of good X – non-price Cournot competition.

## (7.6.) Exogenous parameters of the international trade model under imperfect competition: the case of international oligopoly

### (1) Exogenous parameters of the model:

□ Production technology - production functions :

$$\begin{aligned} \blacksquare X_h &= f_{xh}(K_{xh}, L_{xh}) = AK_{xh}^\alpha L_{xh}^{(1-\alpha)}; Y_h = f_{yh}(K_{yh}, L_{yh}) = BK_{xh}^\beta L_{xh}^{(1-\beta)}; \\ \blacksquare X_f &= f_{xf}(K_{xf}, L_{xf}) = AK_{xf}^\alpha L_{xf}^{(1-\alpha)}; Y_f = f_{yf}(K_{yf}, L_{yf}) = BK_{xf}^\beta L_{xf}^{(1-\beta)}; \\ &\text{where } A \neq B, \alpha \neq \beta. \end{aligned}$$

□ Resource endowment in each economy :  $K_h, K_f, L_h, L_f$ ;

□ Preferences of representative household in each of the economies – utility functions:

$$\blacksquare U_i = U_i(X_i, Y_i); i = h, f;$$

□ Perfect competition on the markets of production factors in both countries;

□ Perfect competition on the market of good Y in country f;

□ Monopoly on the market of good X in countries h and f.

□ Perfect competition on the market of good Y in country h.

## **(7.6.) Endogenous parameters of the international trade model under imperfect competition: the case of international oligopoly**

### **(2) Endogenous parameters:**

- Equilibrium production and consumption of final goods in closed economies –  $X_h^a, Y_h^a, X_f^a, Y_f^a$ ;
- Equilibrium price ratios for final goods in closed economies –  $P_{xh}^a/P_{yh}^a, P_{xf}^a/P_{yf}^a$ ;
- Equilibrium production and consumption of final goods in the open economy –  $X_{ph}^*, Y_{ph}^*, X_{pf}^*, Y_{pf}^*, X_{ch}^*, Y_{ch}^*, X_{cf}^*, Y_{cf}^*$ ;
- Equilibrium export and import volumes of good X in each country:  
( $X_{ph}^* - X_{ph}^*$ ) – equilibrium export volume from country h, ( $X_{ch}^* - X_{ph}^*$ ) – equilibrium import volume into country h, ( $X_{pf}^* - X_{pf}^*$ ) – equilibrium export volume from country f, ( $X_{cf}^* - X_{pf}^*$ ) – equilibrium import volume into country f;
- Equilibrium world price ratio for final goods –  $P_x^*/P_y^*$ .

## (7.6.) Specific features of general equilibrium in the model of international trade in imperfect competition: the case of international oligopoly

- **Specific features of general equilibrium in closed economy (graphical illustration):**

- In both countries – the same conditions of general equilibrium:

- Equilibrium conditions in production sector:

$$MRT_h^a = [P_{xh}^a(1-1/E)]/P_{yh}^a < P_{xh}^a/P_{yh}^a$$

$$MRT_f^a = [P_{xf}^a(1-1/E)]/P_{yf}^a < P_{xf}^a/P_{yf}^a$$

- Equilibrium conditions in household sector

$$MRS_h^a = P_{xh}^a/P_{yh}^a, MRS_f^a = P_{xf}^a/P_{yf}^a$$

- Market clearing conditions:

$$X_{ch}^a = X_{ph}^a, Y_{ch}^a = Y_{ph}^a, X_{cf}^a = X_{pf}^a, Y_{cf}^a = Y_{pf}^a$$

- There is no difference in autarky equilibrium prices between countries (no comparative advantage):

$$P_{xf}^a/P_{yf}^a = P_{xh}^a/P_{yh}^a.$$

## (7.6.) Specific features of general equilibrium in the model of international trade in imperfect competition: the case of international oligopoly

- Specific features of general equilibrium in the open economy:  
Graphical illustration using the diagram of general economic equilibrium

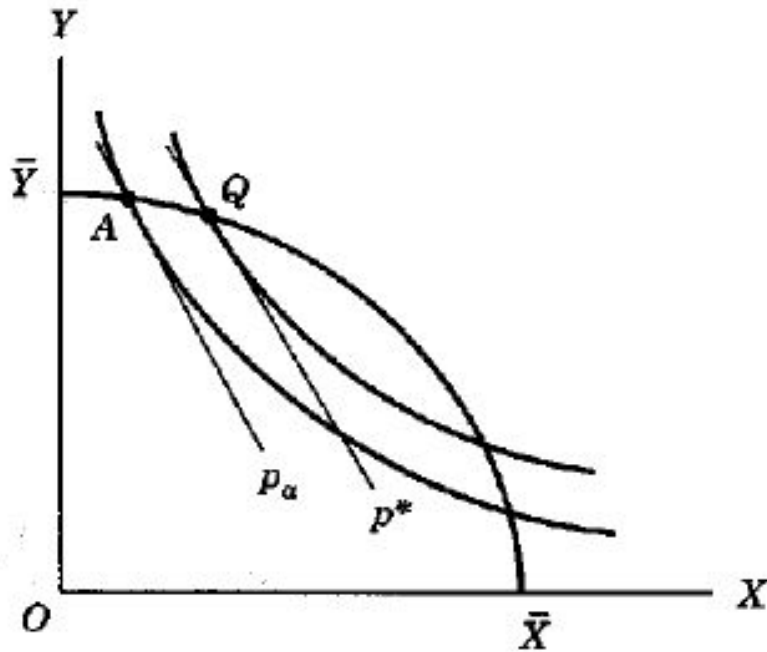


Figure 1. Cournot competition. Pro-competitive gains for two identical countries.

*Source:* Markusen et al. (1995), Ch. 11, p. 165.

Explain the graph. What are pro-competitive gains in general and in this case? (see Markusen et al., pp. 165-167.)

Task: Illustrate this Cournot-Nash behaviour using the diagram of partial economic equilibrium.

## (7.6.) Specific features of general equilibrium in the model of international trade in imperfect competition: the case of international oligopoly

- **Specific features of general equilibrium in the open economy:**

- The same equilibrium conditions in both economies:

$$MRT_h^* = [P_x^* (1 - S_h/E)] / P_y^* < P_x^* / P_y^* = MRS_h^*,$$

$$MRT_f^* = [P_x^* (1 - S_f/E)] / P_y^* < P_x^* / P_y^* = MRS_f^*;$$

the same time

$$[MRT_h^* - (P_x^* / P_y^*)] = [MRT_f^* - (P_x^* / P_y^*)] <$$

$$[MRT_h^a - (P_{xh}^a / P_{yh}^a)] = [MRT_f^a - (P_{xf}^a / P_{yf}^a)],$$

as  $S_h = S_f < 1$ , where  $S_h, S_f$  – the shares of monopolists (international oligopolists) from countries  $h$  and  $f$  on their internal market of good  $X$  in situation of international trade

- Trade balance conditions for both economies (only for product  $X$ ):

- $(P_x^* / P_y^*) (X_{cf}^* - X_{pff}^*) = (P_x^* / P_y^*) (X_{ph}^* - X_{phh}^*);$

- $(P_x^* / P_y^*) (X_{ch}^* - X_{phh}^*) = (P_x^* / P_y^*) (X_{pf}^* - X_{pff}^*).$

- Market clearing:

- $X_{cf}^* + X_{ch}^* = X_{pf}^* + X_{ph}^*; Y_{pf}^* = Y_{cf}^*, Y_{ph}^* = Y_{ch}^*.$

## **(7.6.) The main results in the model of international trade under imperfect competition**

- **Structure of international trade in the model**
  - Absence of comparative advantages in the countries, i.e., absence of difference between countries in equilibrium price ratios in autarky.
  - There is intra-industry trade – each country exports and imports the same good – good X; there is no inter-industry trade, as there is no trade in good Y.
  - The reason behind trade (export) for an oligopolist – to enter a foreign market in order to increase profit.
- **The main results of the model (normative results)**
  - In both countries:
    - Pro-competitive gains from international trade (growth in consumption volumes and decrease in price of good X in each country).

# Homework

(1) Exercise sessions 6 and 7.

(2) Think about topics for reports during exercise sessions; work on presentation of the paper.

Office hours: Friday 13:50 – 14:30, room 216.

E-mail: [natalya.davidson@gmail.com](mailto:natalya.davidson@gmail.com) (Наталья Борисовна Давидсон)

## **The next lecture:**

Topic 8. Normative analysis of tariff and non-tariff instruments of international trade policy.