



**International MBA**

**Economic Policy and Economic Integration**

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Class 2

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## Goal of this class

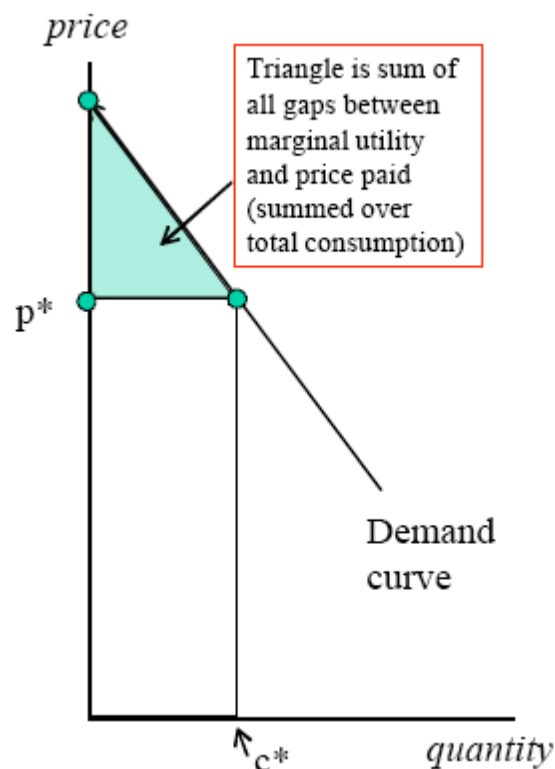
- **How to analyse the impact of economic integration?**
  1. Social Surplus and Competition
  2. Situation with and without tariff
  3. Custom union and trade diversion
  4. Trade and gains from specialisation
  5. Competition and size of the market
  6. Trade and war!
- **The Economic argument of Regional Integration: increasing exchange and welfare through competition**



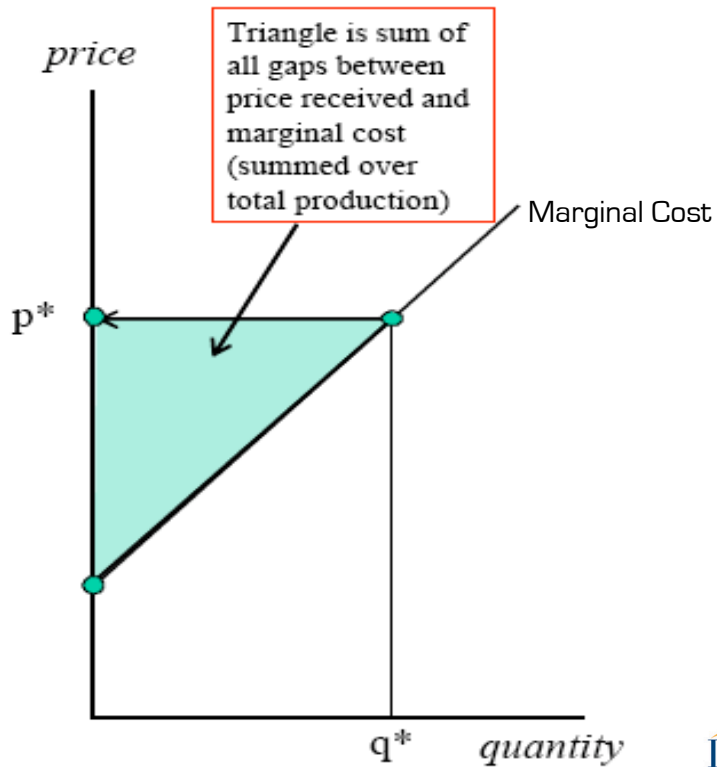
# 1. What is social surplus? How to measure it?

- An economic point of view will appreciate different situations depending on the social surplus they create
- Social surplus (consumer surplus, producer surplus, State surplus mainly) evolves through consumption and exchange
- The consumers' surplus is the difference between marginal utility and price paid per each unit.
- The producer surplus is the difference between marginal cost and price received per each unit.

## Consumers' Surplus

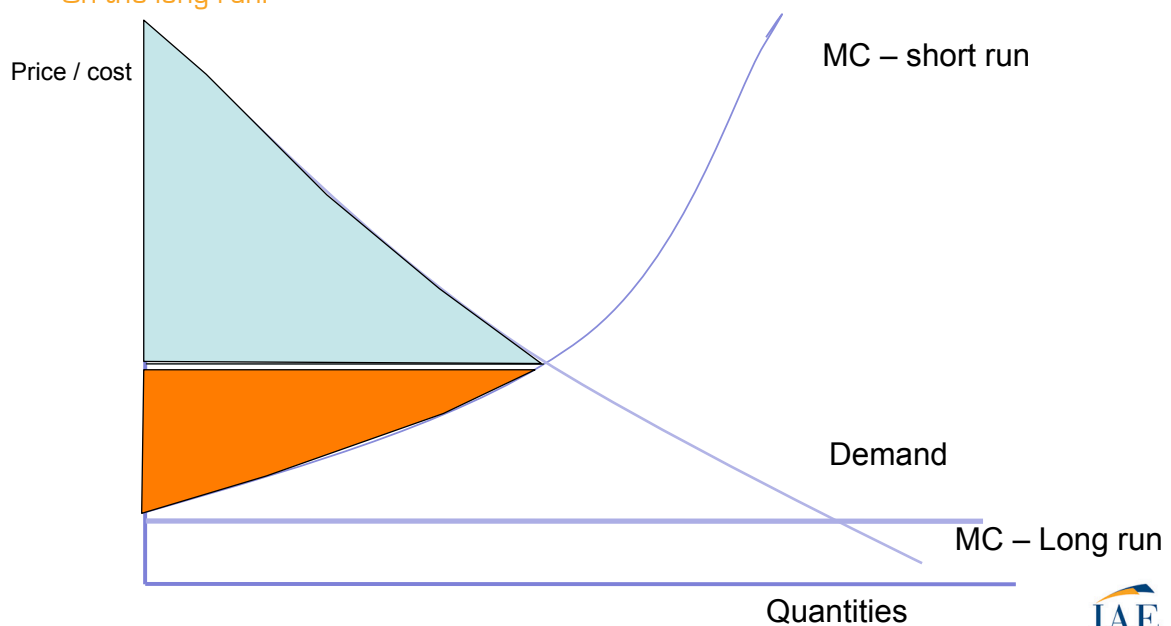


## Producers' Surplus



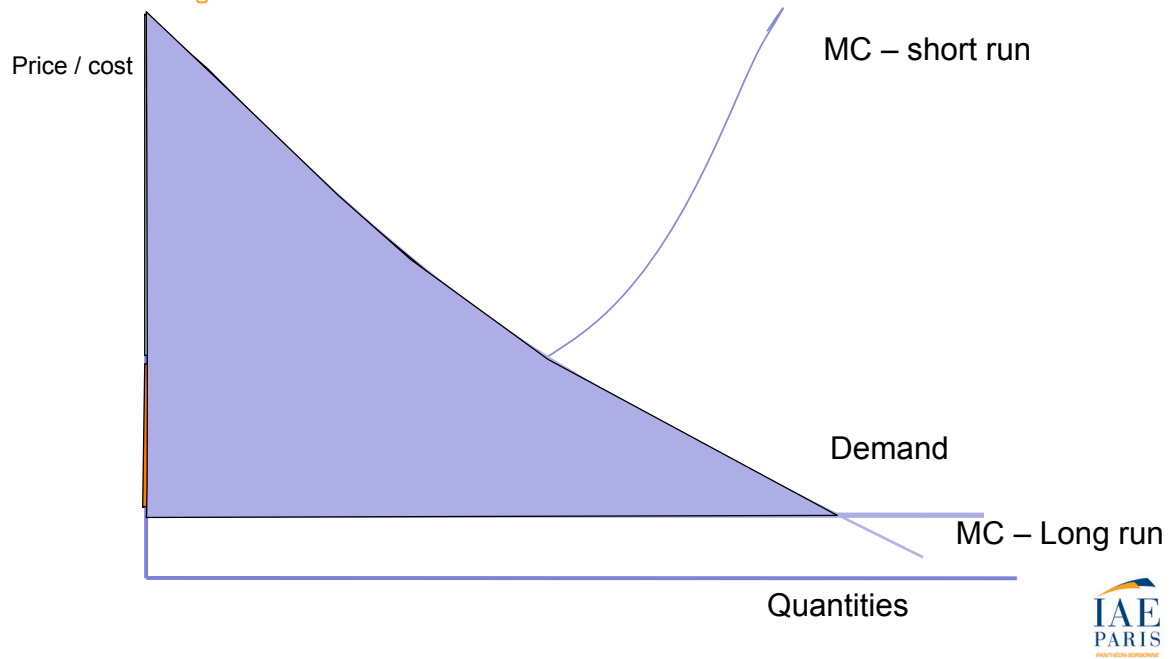
## Competition increases social surplus

- On the long run:



## Competition increases social surplus

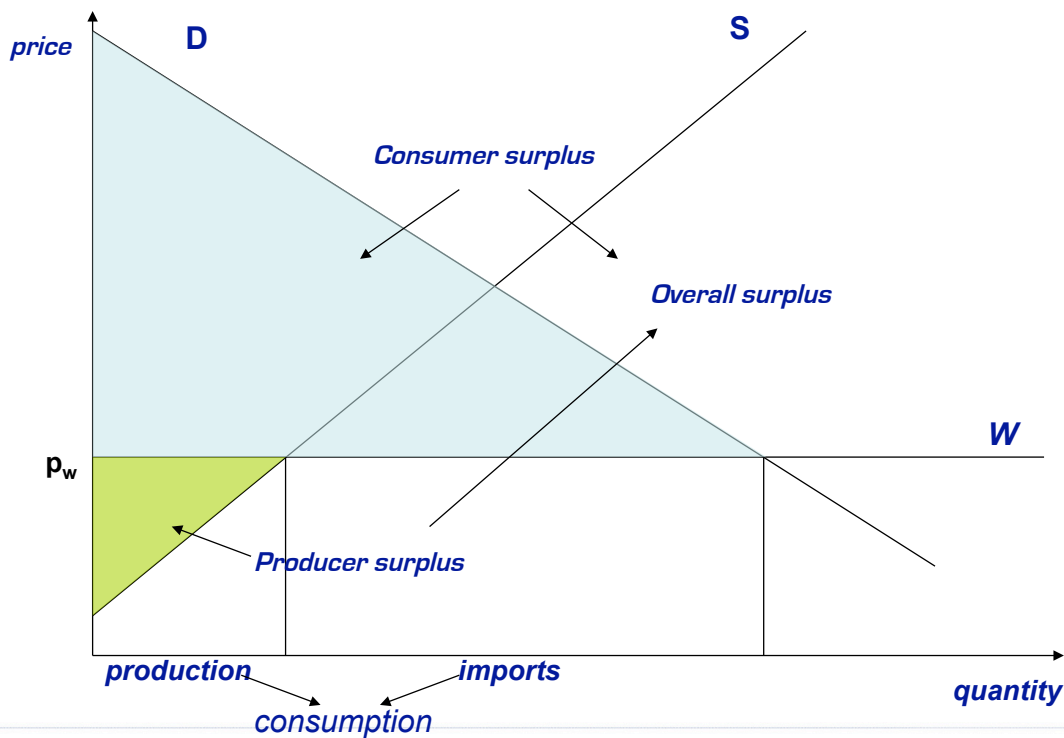
- On the long run:



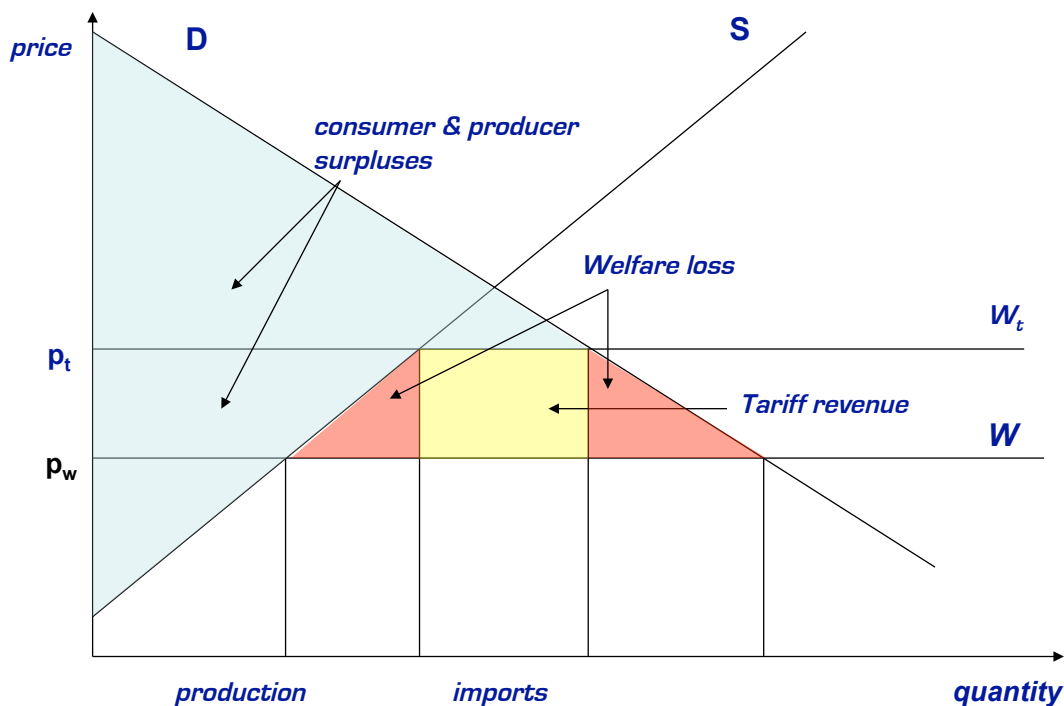
## 2. Situation with and without any tariff

- A situation without any tariff on trade between countries will increase social surplus
- All the other situations (tariff, custom unions) will be less efficient

## Situation without any tariff



## Tariffs and welfare reduction



## Tariffs and welfare reduction

- Tariffs have several impacts
  - They reduce social welfare
  - There are some losers and some winners
    - Consumers see their welfare decreasing; producers increase their surplus; foreign producers see their surplus reduced
  - The State now wins directly something from trade
  - The country loses a part of “potential” social surplus that would have been available without any tariff
- No tariff in Europe / only a common tariff with countries outside of the Economic Union

## 3. Custom Union as a second best

- Viner (1950) « *The Custom Union Issue* »
- Custom Union reduces welfare less than tariffs
- Custom Union
  - Zero or low Tariff between members ↔
  - Common Tariff between members and non members ←



## Static effects of Regional integration

### Trade creation (+)

*Before:* Tariff protection allowed domestic firms to supply market

*After:* Imports from efficient producers from regional integration area replace less efficient domestic producers

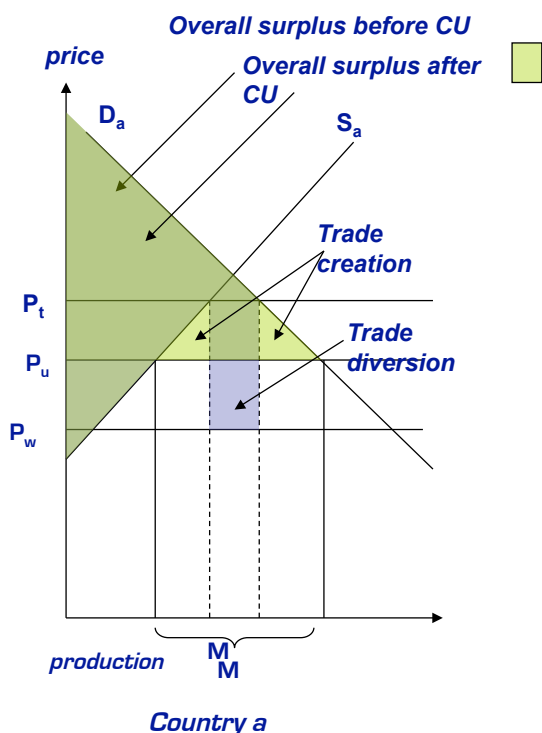
### Trade diversion (-)

*Before:* Efficient foreign producers supplied market in spite of tariffs

*After:* Relief from tariffs allows less efficient firms from regional integration area to take over market shares from other more efficient foreigners



## Second best solution - Trade creation and trade diversion in case of a custom union (ctnd)



$$\text{Tariff} = P_u - P_w$$

- The final net effect of custom union depend on the magnitude of trade diversion vs. trade creation
- This magnitude is depending on the efficiency of partners in the custom union compared to partners outside the custom union.



## 4. Trade and Gains From Specialization

- « Imports from China might reduce to death the activity of many European workers » (J. Chirac, 2005)
- Should we reduce those imports? Through protectionism ?
- Such imports affect some sectors : textile for example. But what is the effect for the whole economy?



- This is not a new question.
- David Ricardo (1772 – 1823)

## The Economic source of integration: Absolute vs. Comparative Advantage

- A country has an *absolute* advantage when it can produce a good more efficiently than other countries.
- HOWEVER, even when one country has an absolute advantage in the production of *all* goods, it can still benefit from international trade.

## Comparative advantage

- Let's suppose that in the EU:
  - The Economic Union produces 10 millions units of shirts
  - Resources used in this production would permit otherwise to produce 10 000 cars.
- Let's suppose that in China:
  - Resources used in order to produce 10 millions units of shirts would permit to produce 3 000 units of cars.
- If China and EU decide to produce only what they are efficient at, then:

	Skirts (Millions)	Cars (Thousands)
European Union	-10	+10
China	+10	-3
Total	0	+7



## Comparative advantage

- If China and EU decide to produce only what they are efficient at, then:
  - World production is increased
- Gains can be splitted in two parts:
  - 1.Specialization :
  - 2.Trade :
    - Social surplus is increased.



## Comparative advantage

- Example: Number of units produced per month per worker

	Shirts	Cars
France	60	15
Tunisia	30	5

- France has an absolute advantage in the production of *both* shirts and Cars
  - Is there any room for exchange ? Should those countries be specialized in the production of one good ? Will it increase social surplus ?
    - YES !



## Comparative advantage

- The opportunity costs (exchange rate) to produce cars instead of shirts
  - France:  $60/15 = 4$
  - Tunisia:  $30/5 = 6$

	Shirts	Cars
France	1/4	4
Tunisia	1/6	6

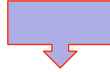
- This means that
  - It is less costly to increase the production of cars in France compared to Tunisia ( $4 < 6$ ): France has a comparative advantage in producing cars
  - It is less costly to increase the production of shirts in Tunisia compared to France ( $1/6 < 1/4$ ): Tunisia has a comparative advantage in producing shirts



## Comparative advantage

- Let's suppose there is 10 workers available in each country
  - Before specialization workers available are split in both products

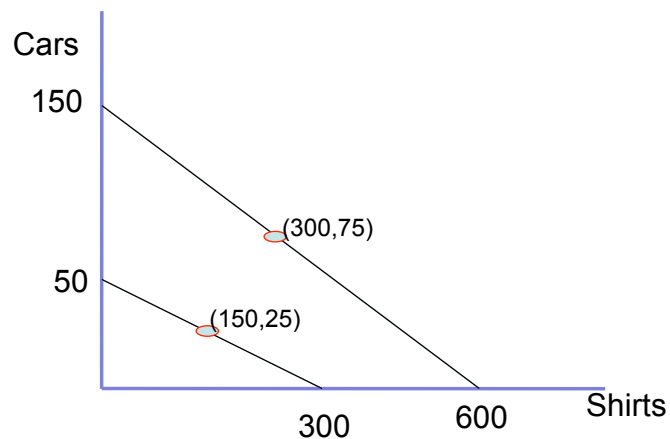
	Shirts	Cars
France	60	15
Tunisia	30	5



	Shirts	Cars
France	300	75
Tunisia	150	25
<b>Total (before specialization)</b>	<b>450</b>	<b>100</b>
France	0	150
Tunisia	300	0
<b>Total (after specialization)</b>	<b>300</b>	<b>150</b>

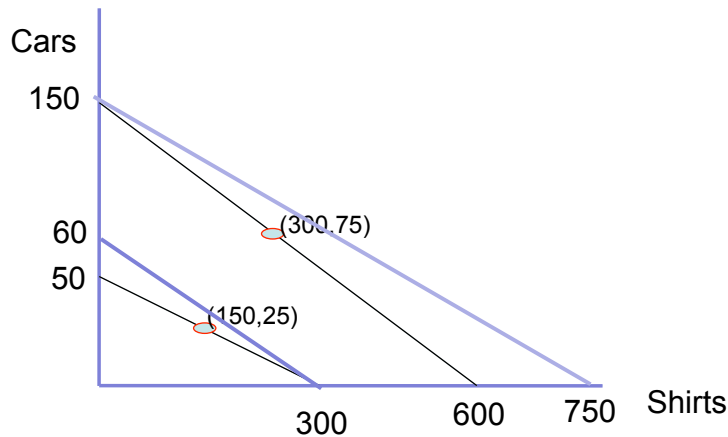
## Comparative advantage

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## Comparative advantage

Let's introduce trade, and let's suppose that price is such that 1 car = 5 shirts



## Gains from Trade

- Several ideas underlie the gains from trade

How could a country that is the most (least) efficient producer of everything gain from trade?

- *Countries can use their resources to produce what they are most productive at, then trade those products for goods and services that they want to consume.*
- *Countries can specialize in production, while consuming many goods and services through trade.*
- This is the strength of markets and exchange. You can increase welfare through exchange

## 5. Market Size Matters

- European leaders always viewed integration as compensating small size of European nations.

- Implicit assumption: market size good for economic performance.

« The countries of Europe are too small to give their peoples the prosperity that is now attainable and therefore necessary. They need wider markets »

Jean Monnet 1943

« By its size – the biggest in the world – the single market without frontiers is an invaluable asset to revitalize our businesses and make them more competitive. It is one of the main engines of the European Union » J. Delors 1987

### Point of departure: The fundamental trade-off

- Firm-level scale economies imply an unavoidable trade-off.
  - If the market is small, few firms can survive.
  - To survive, they must charge high prices, i.e. be uncompetitive.
  - With few competitors, they can get away with high prices.
- Bigger market allows firms to have larger scale & face more competition.

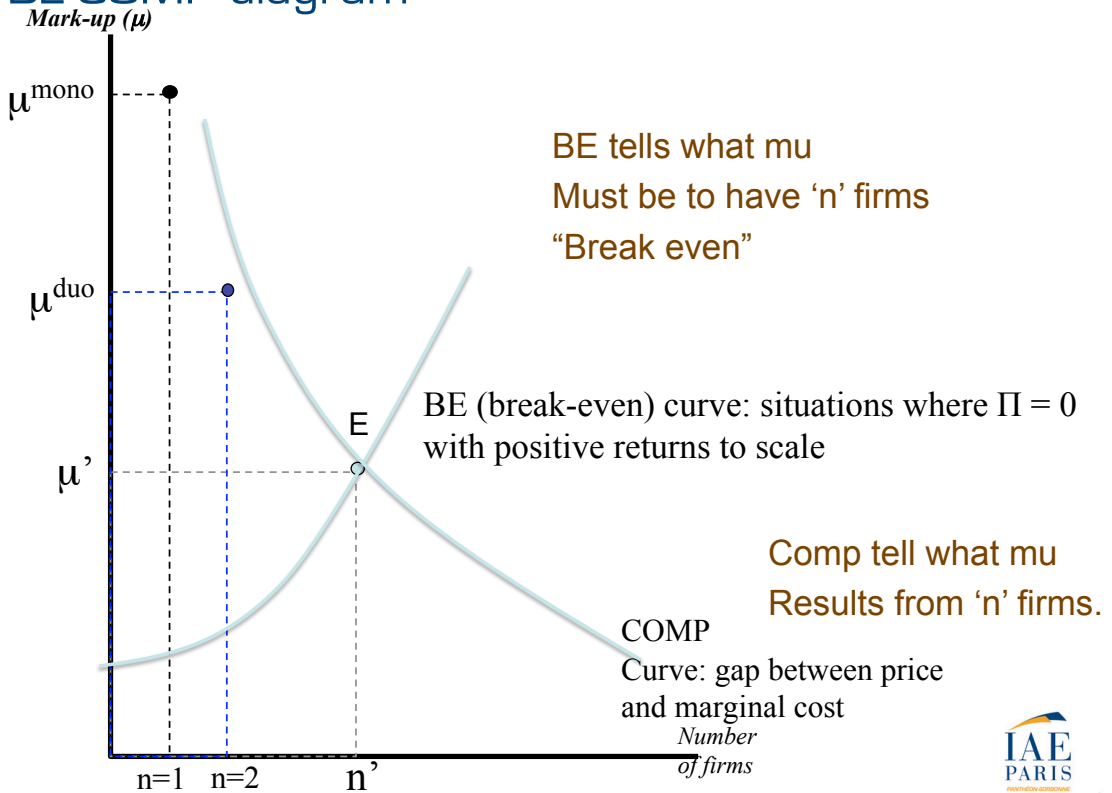


## Economic Logic Verbally

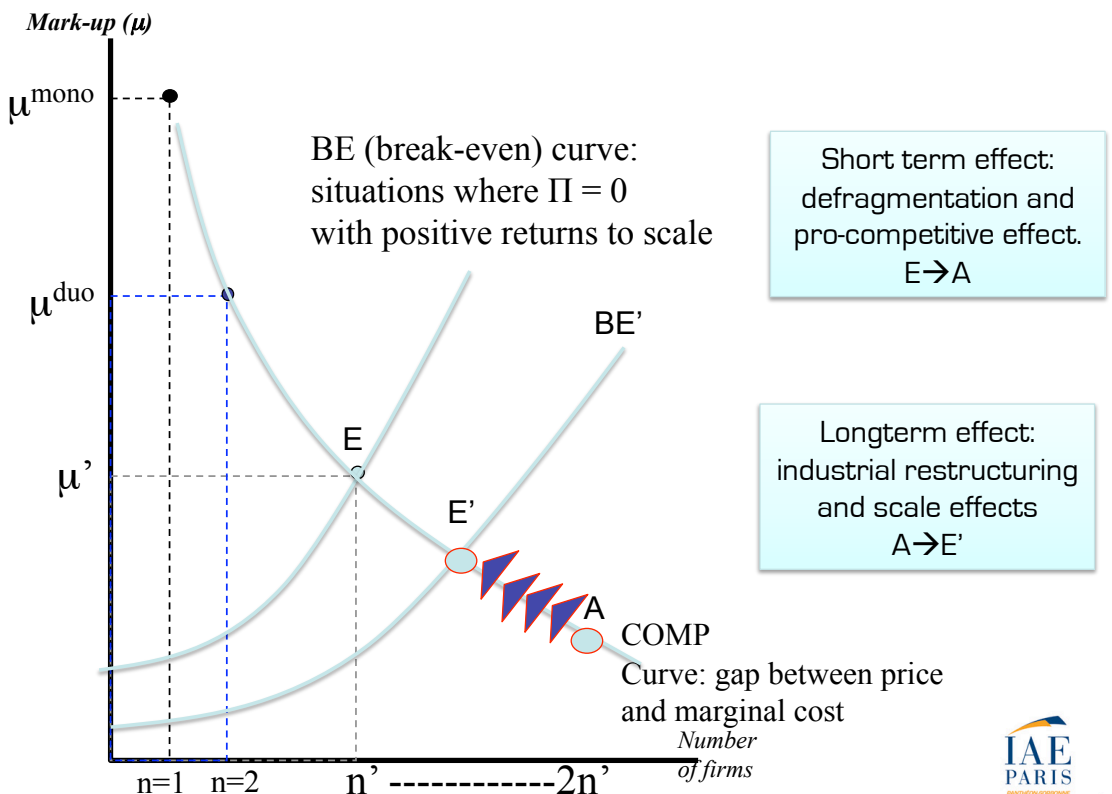
- liberalisation → de-fragmentation → pro-competitive effect → industrial restructuring (M&A, etc.)
- RESULT: fewer, bigger, more efficient firms facing more effective competition from each other.



# BE-COMP diagram



# BE-COMP diagram: the impact of free trade liberalization



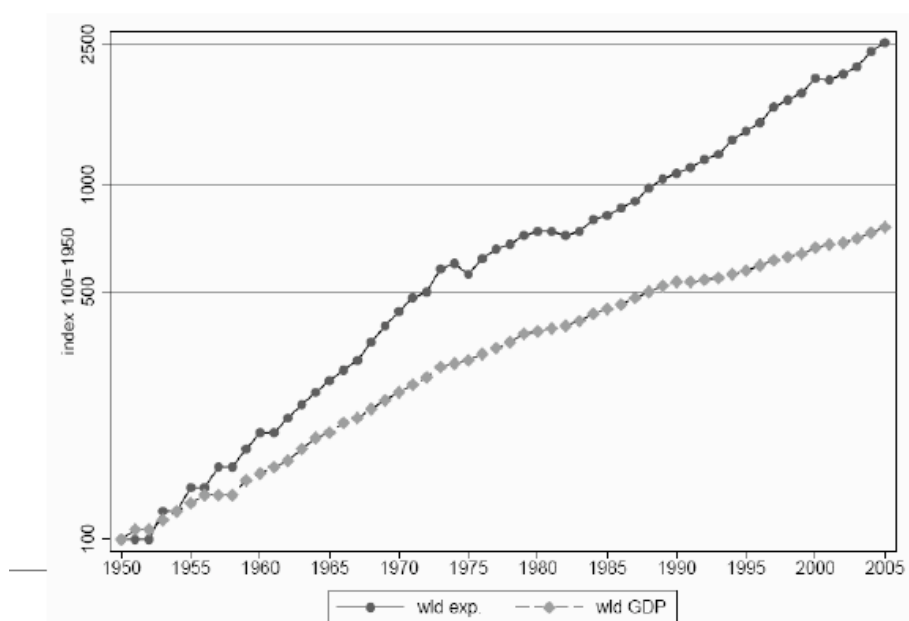
## BE-COMP diagram: the impact of free trade liberalization

- **Result:**
  - bigger, fewer, more efficient firms facing more effective competition
- **Welfare gains**
- **2 immediate questions**
  - “As the number of firms falls, isn’t there a tendency for the remaining firms to collude in order to keep prices high?”
  - “Since industrial restructuring can be politically painful, isn’t there a danger that governments will try to keep money-losing firms in business via subsidies and other policies?”
- **The answer to both questions is “Yes”.**



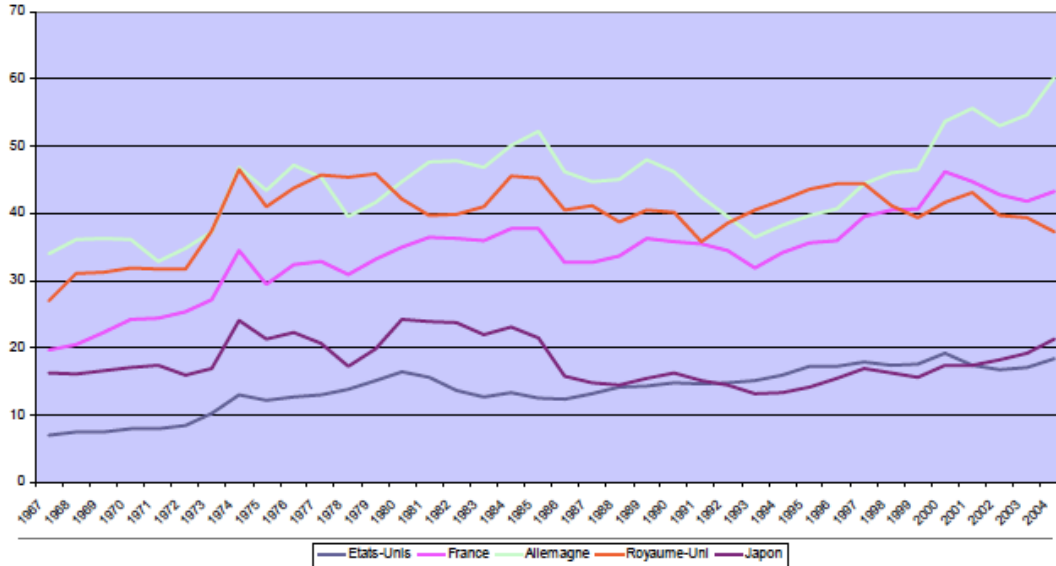
## 6. Facts

- **Growth and Trade**

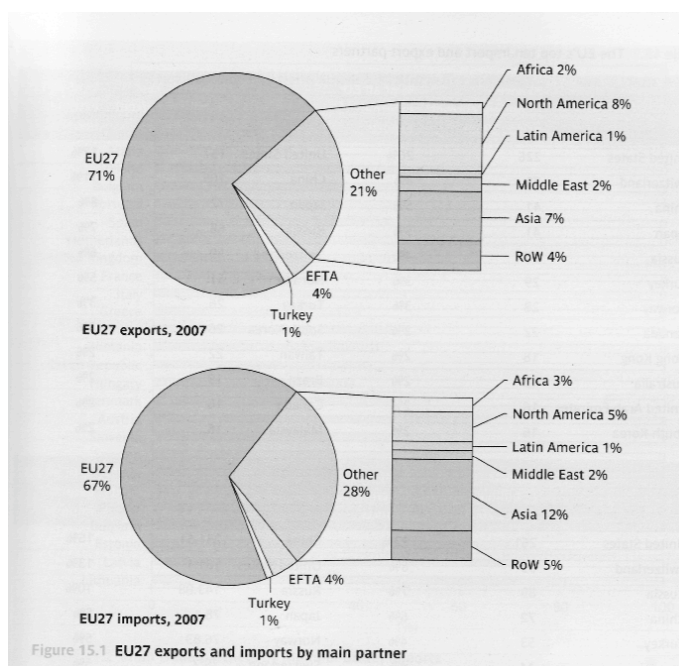


# How open are economies?

Open rate:  $(\text{exports} + \text{imports}) / \text{GNP}$



# EU exports and imports



Baldwin & Wyplosz 2009  
Data : 2007



# What efficiency of EU?

- “Europe has used some of the increase in productivity to increase leisure rather than income, while the U.S. has done the opposite. A deep and wide ranging reform process is taking place [...] driven by reforms in financial and product markets [...] in turn putting pressure for reform in the labor market. Reform in the labor market will eventually take place, but not overnight and not without political tensions. These tensions [...] will continue to dominate the news; but they are a symptom of change, not a reflection of immobility.” Olivier Blanchard, *The Economic Future of Europe*, February 2004



## The case of the EU

Exhibit 9 Flexibility of labor market regulations, 2004, selected countries

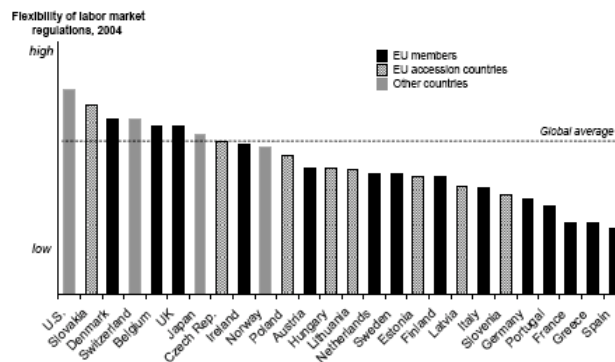


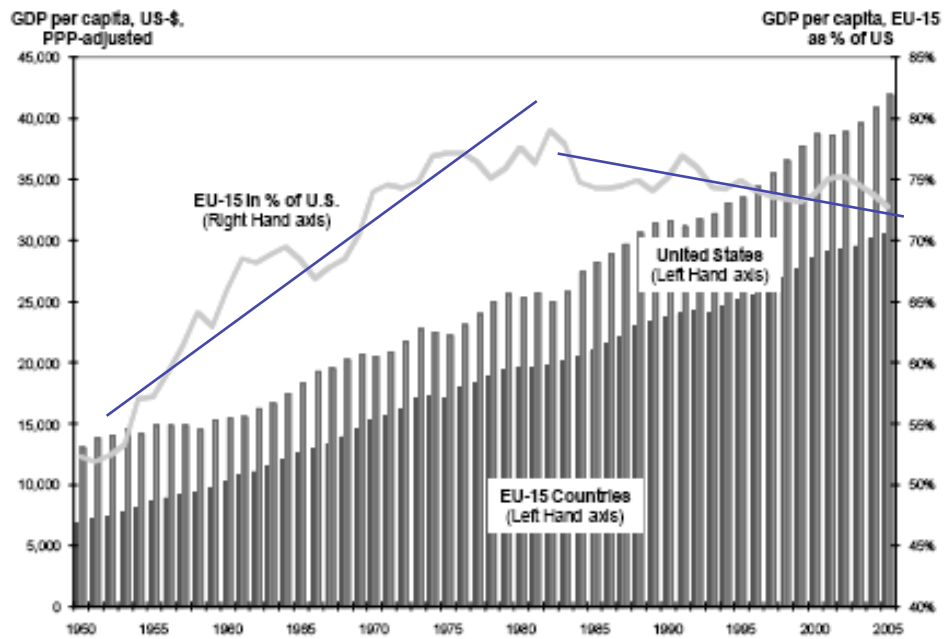
Exhibit 10 Labor, market indicators, 2004, selected countries

	Age Group 15 - 64 in % of total Population	Employment Rate, age group 15 - 64	Employment Rate, age group 55 - 64	Unemployment Rate, age group 15 - 64	Unemployment Rate, age group 15 - 25
EU-15	63.1%	64.7%	42.5%	8.0%	16.8%
Austria	63.9%	68.5%	27.2%	3.9%	5.6%
Belgium	61.4%	55.7%	22.5%	9.7%	22.0%
Denmark	62.1%	72.3%	50.9%	6.7%	9.6%
Finland	62.9%	60.3%	33.2%	15.4%	29.7%
France	60.8%	59.1%	29.6%	11.1%	27.0%
Germany	62.8%	64.7%	36.6%	8.0%	14.0%
Greece	64.2%	54.2%	40.1%	9.2%	28.5%
Ireland	65.4%	53.0%	38.8%	12.3%	19.5%
Italy	61.7%	51.4%	29.3%	11.2%	30.3%
Luxembourg	63.9%	59.9%	23.5%	2.9%	7.2%
Netherlands	64.1%	64.0%	29.1%	6.6%	11.4%
Portugal	63.7%	64.1%	46.8%	7.3%	16.5%
Spain	64.4%	46.1%	32.6%	18.4%	39.7%
Sweden	59.8%	70.2%	62.0%	8.8%	19.1%
United Kingdom	61.5%	67.9%	47.4%	8.5%	15.3%
United States	66.2%	71.5%	59.9%	5.5%	4.7%
Japan	66.6%	69.3%	63.0%	4.7%	4.2%



# The case of the EU

Exhibit 8 European and U.S. prosperity over time

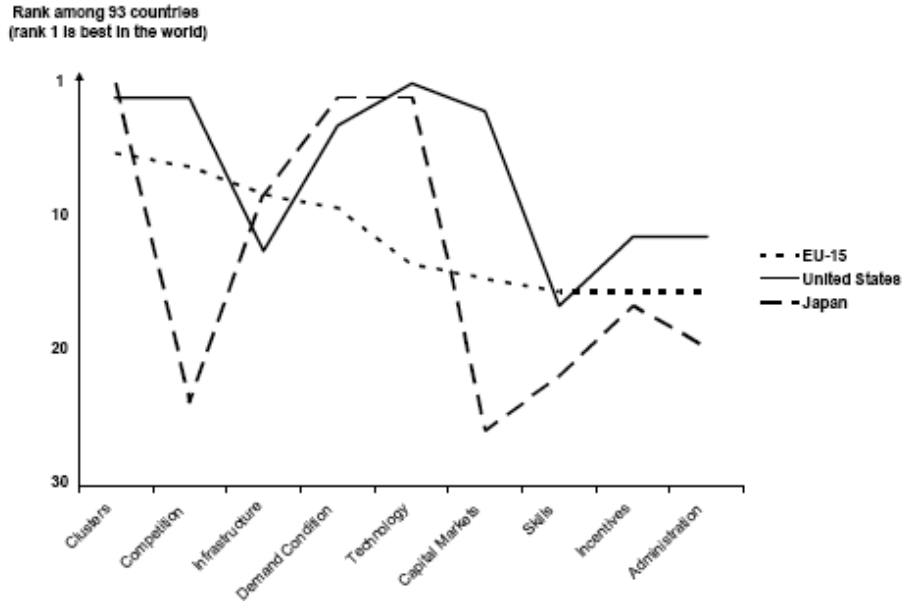


# The case of the EU

	Business Competitiveness Index	Business Environment Quality	Company Sophistication
<b>EU-15</b>			
Finland	2	1	7
Germany	3	5	1
Sweden	4	6	5
United Kingdom	6	4	8
Denmark	7	3	9
Netherlands	9	9	6
France	12	16	10
Belgium	14	19	11
Austria	16	17	14
Ireland	22	22	22
Spain	26	26	25
Portugal	32	30	41
Italy	33	41	26
Greece	39	40	39
<b>NMS-10</b>			
Estonia	27	24	33
Slovenia	30	32	27
Czech Republic	34	35	31
Lithuania	35	33	36
Slovak Republic	38	37	40
Hungary	40	36	47
Cyprus	43	39	56
Latvia	47	46	50
Malta	48	47	57
Poland	55	62	46
<b>Top global peers</b>			
United States	1	2	2
Switzerland	5	7	4
Japan	8	11	3
Singapore	10	8	13
Hong Kong SAR	11	10	15
Australia	13	12	19
Canada	15	13	16
Taiwan	17	20	12
New Zealand	18	15	20
Iceland	19	18	17
Norway	20	14	23

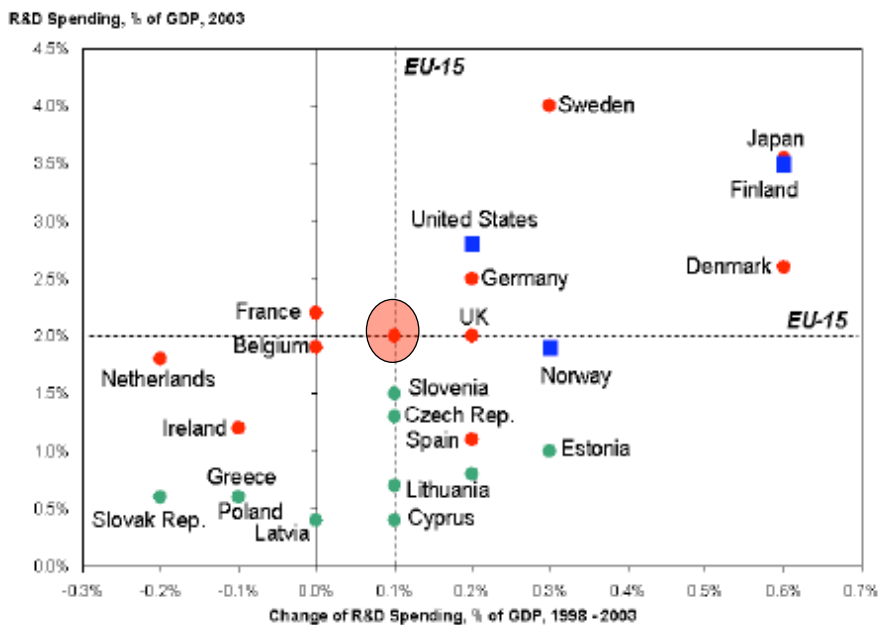
# The case of the EU

Exhibit 4 Strengths and weakness of the business environment: Europe, the U.S., and Japan, 2004



# The case of the EU

Exhibit 5 R&D Spending over time in selected countries



## Small gains from EU?

- « *The single market has also been the source of sizable benefits for the EU economy as a whole: over the period 1992-2006, the estimated gains of the single market amount to 2.2 percent of the EU GDP and 2.75 million extra jobs* » (Interim report to the 2007 Spring European Council)



## And what effect on war probability?

- Sweet Trade?
  - “*L'effet naturel du commerce est de porter à la paix. Deux nations qui négocient ensemble se rendent réciproquement dépendantes : si l'une a intérêt d'acheter, l'autre a intérêt de vendre*”; De L'esprit des Lois, 1758
  - Statistic analysis is possible! (Martin, Mayer, Thoenig 2008).
    - Bilateral trade between countries (% GNP) reduces the probability of war between two countries
      - Cost of war = end of trade
    - Whole trade (multilateral trade) of two countries with the rest of the world (% GNP) increases the probability of war between the two countries
      - Multilateral trade = insurance against (local) war
- To learn more, see:
  - In French: <http://econ.sciences-po.fr/sites/default/files/martinp/Le-Monde.pdf>
  - In English: MARTIN, P., T. MAYER, AND M. THOENIG, 2008, “Make Trade not War?”, Review of Economic Studies, 75(3): 865-900.



## Next Class

- Economic Integration leads to:
  - bigger, fewer, more efficient firms facing more effective competition
- Main objective: Welfare gains
- One question
  - “As the number of firms falls, isn’t there a tendency for the remaining firms to collude in order to keep prices high?”
- Let’s see what economics has to say about that...

