



TOPIC 2

TRADE AND THE SINGLE MARKET

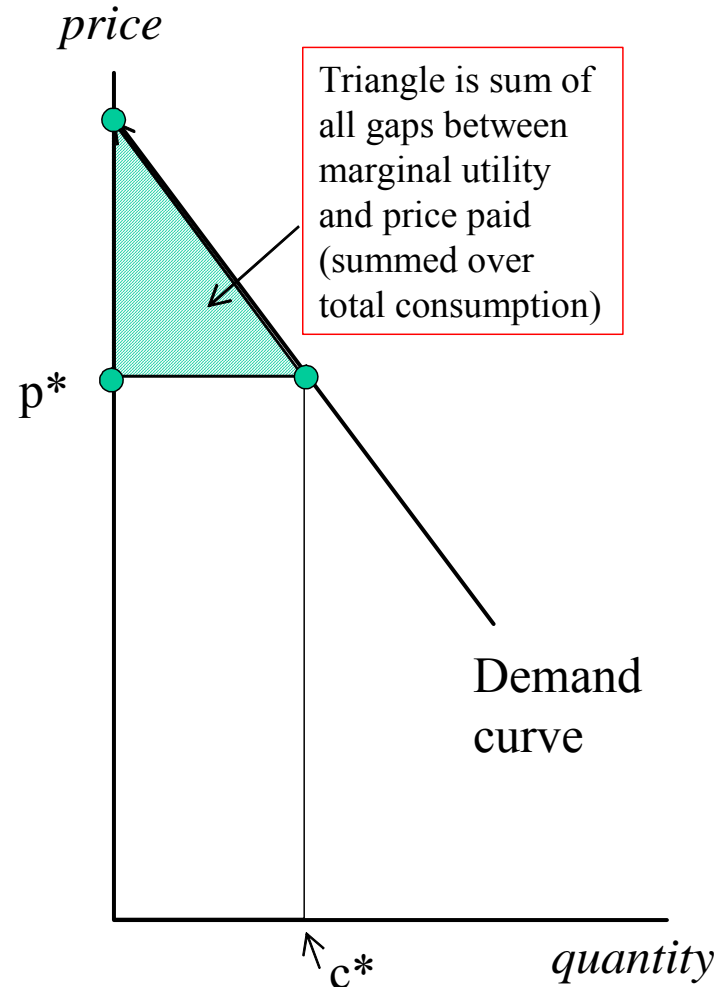
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I. The economics of preferential liberalization.

Preliminaries. Welfare analysis: consumer surplus

- Since demand curve based on marginal utility, it can be used to show how consumers' well-being (welfare) is affected by changes in the price.
- Gap between marginal utility of a unit and price paid shows 'surplus' from being able to buy c^* at p^* .

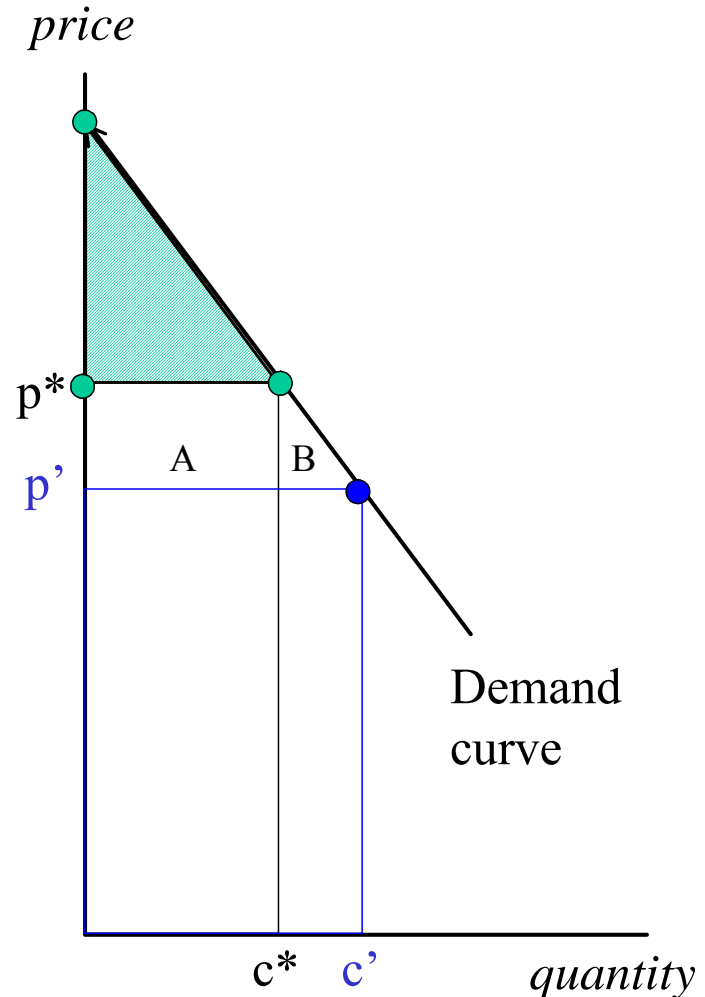




I. The economics of preferential liberalization.

Preliminaries. Welfare analysis: consumer surplus

- Consumer surplus rise, 2 parts:
 - Pay less for units consumed at old price; measure of this = area A.
 - $A = \text{Price drop times old consumption.}$
 - Gain surplus on the new units consumed (those from c^* to c'); measure of this = area B.
 - $B = \text{sum of all new gaps between marginal utility and price}$

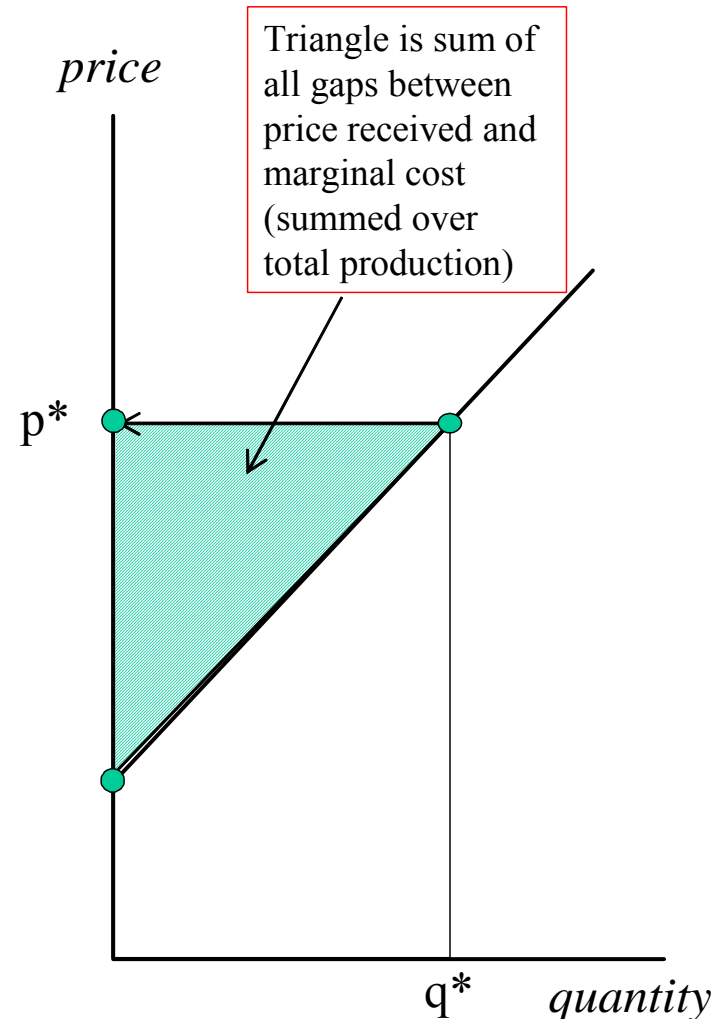




I. The economics of preferential liberalization.

Preliminaries. Welfare analysis: producer surplus

- Since supply curve based on marginal cost, it can be used to show how producers' well-being (welfare) is affected by changes in the price.
- Gap between marginal cost of a unit and price received shows 'surplus' from being able to sell q^* at p^* .

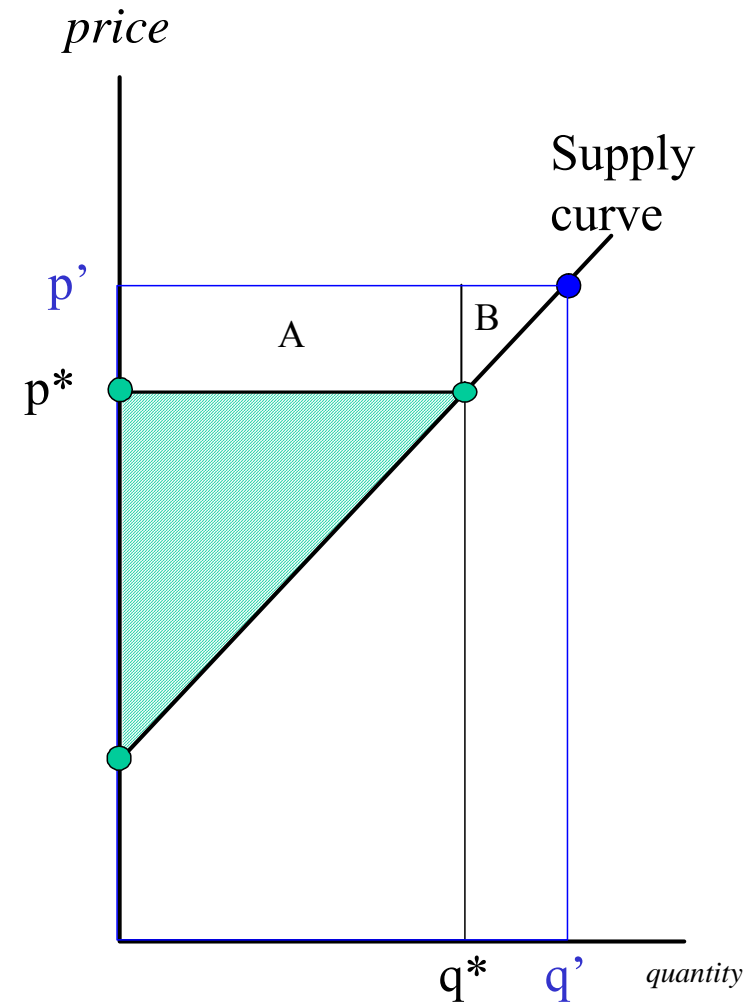




I. The economics of preferential liberalization.

Preliminaries. Welfare analysis: producer surplus

- producer surplus rise, 2 parts:
 - Get more for units sold at old price; measure of this = area A.
 - $A = \text{Price rise times old production.}$
 - Gain surplus on the new units sold (those from q^* to q').
 - measure of this = area B.
 - $B = \text{sum of all new gaps between marginal cost and price.}$



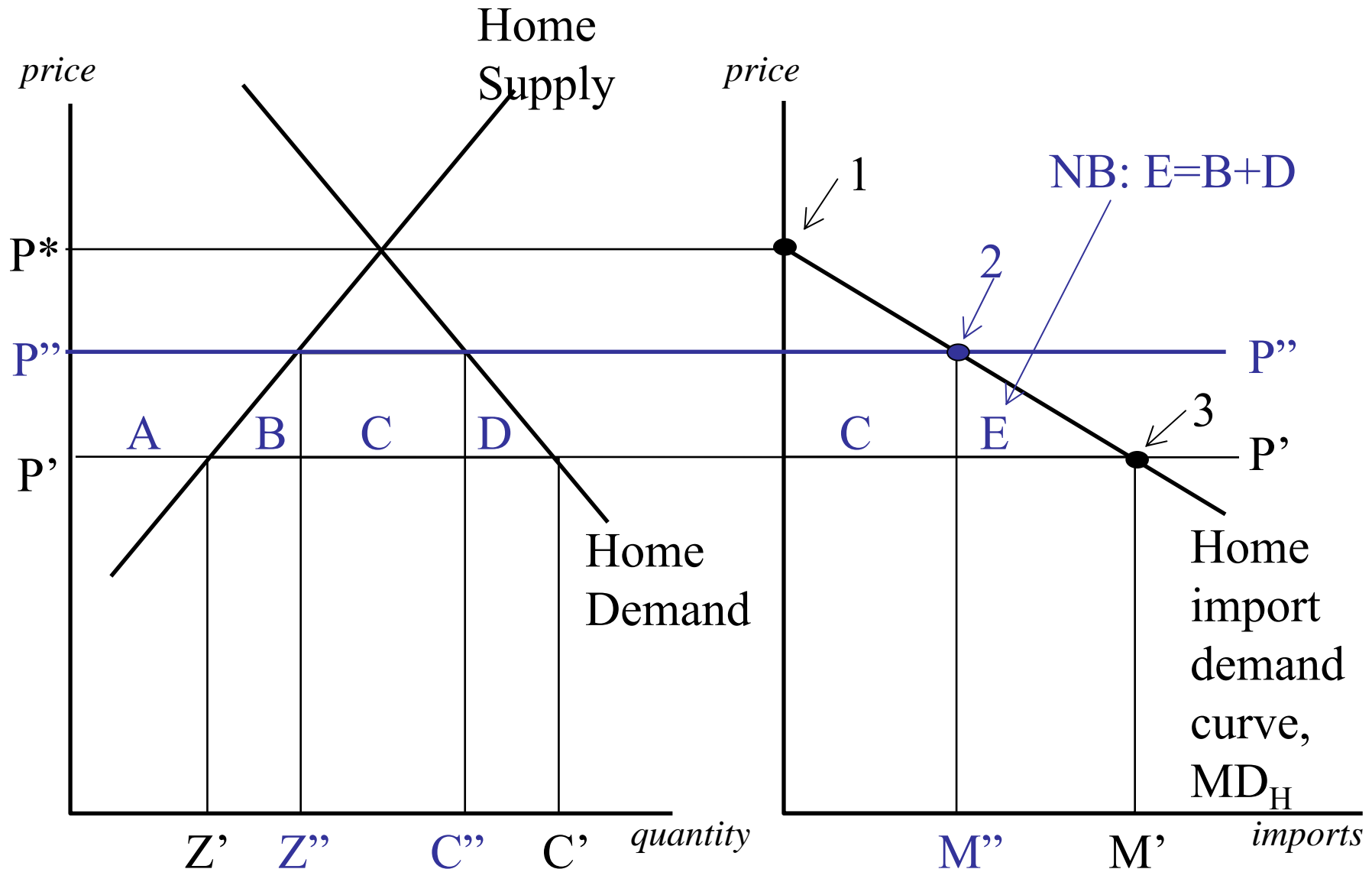


I. The economics of preferential liberalization. Open Economy Supply & Demand Analysis.

- Start with Import Demand Curve.
 - This tells us how much a nation would import for any given domestic price.
 - Presumes imports and domestic production are perfect substitutes.
 - Imports equal gap between domestic consumption and domestic production.

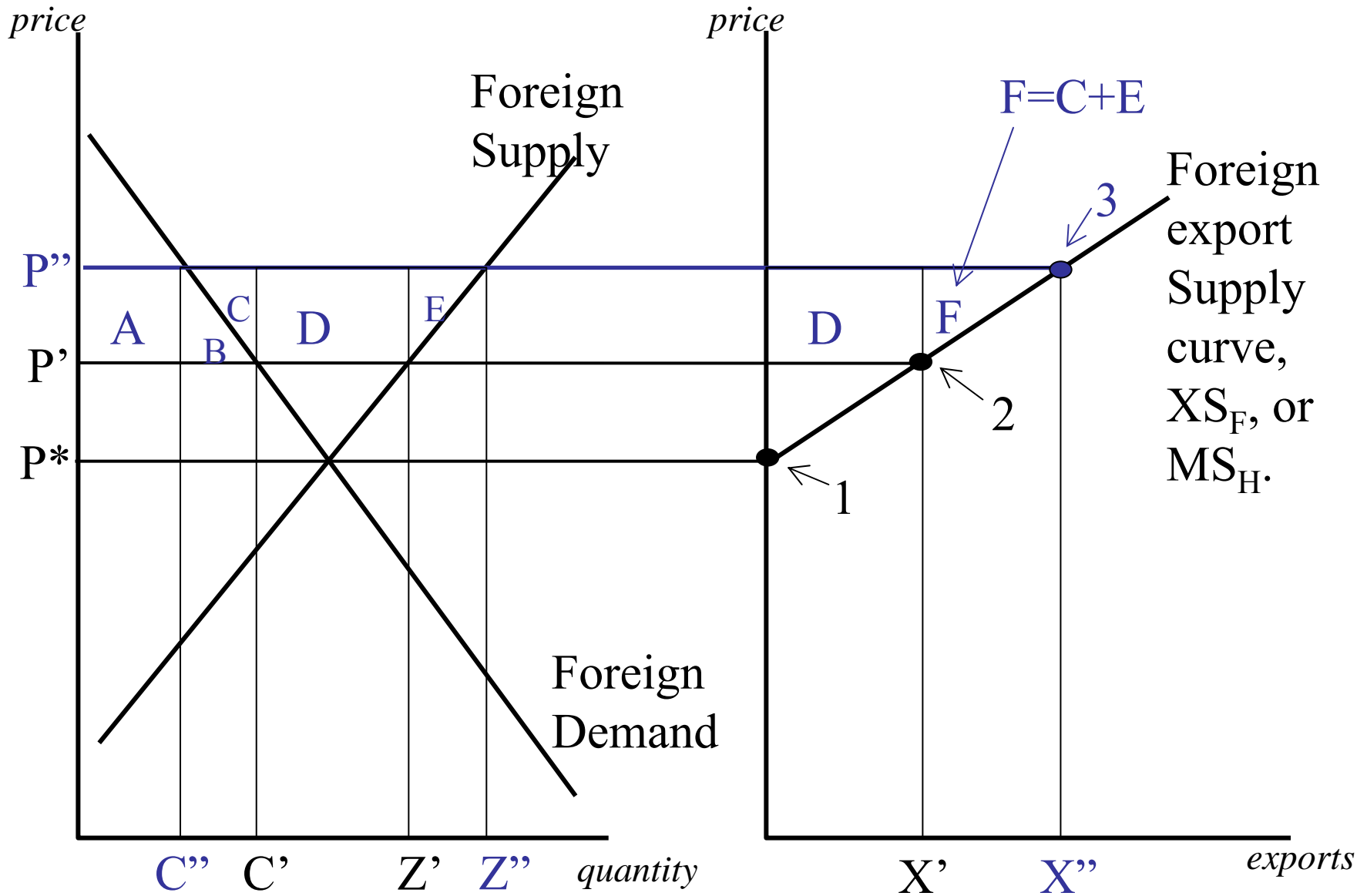


I. The economics of preferential liberalization. Welfare & Import demand curve





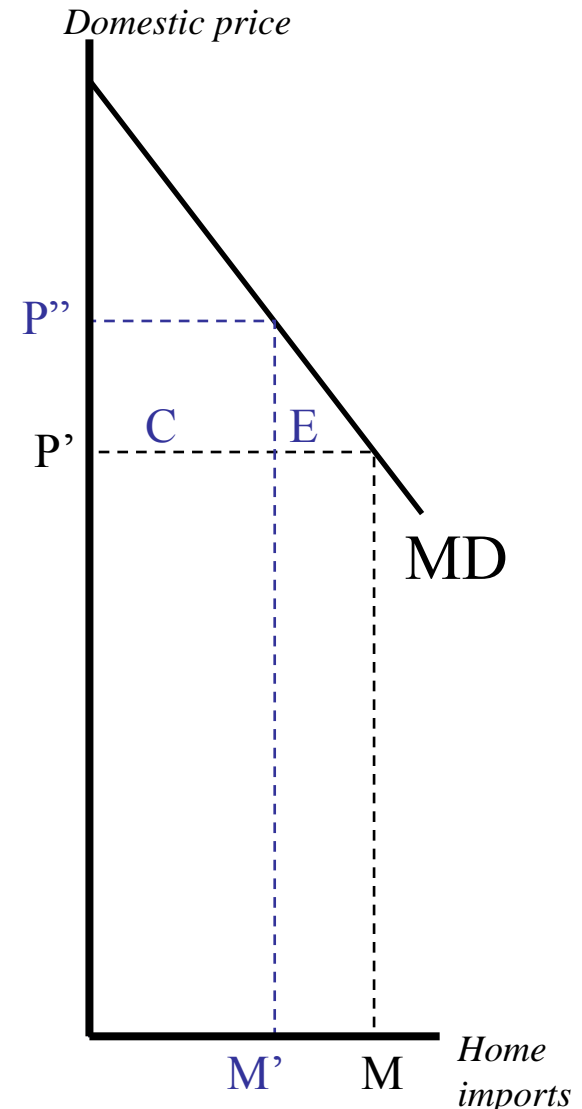
I. The economics of preferential liberalization. Welfare & Import demand curve





I. The economics of preferential liberalization. Trade volume effect & border price effect

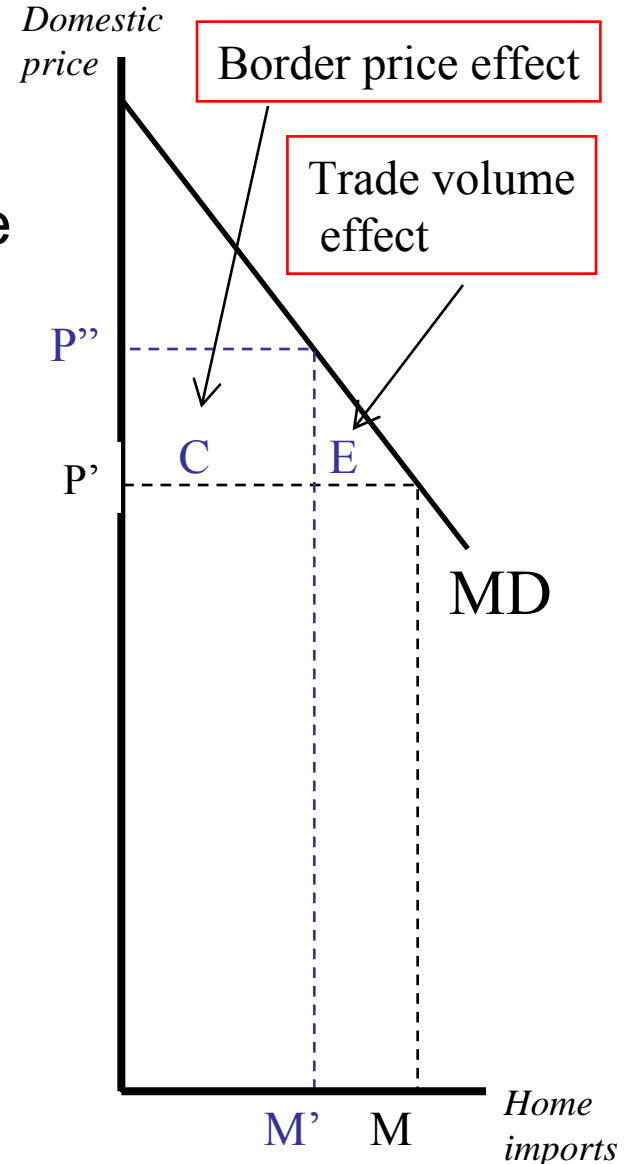
- Decomposing Home loss from price rise, P' to P'' .
 - Area C: Home pays more for units imported at the old price.
 - Area E: Home loses from importing less at P'' .





I. The economics of preferential liberalization. Trade volume effect & border price effect

- Systematic net welfare analysis using the price and quantity effects:
- “border price effect” (area C), and the “import volume effect” (area E).





I. The economics of preferential liberalization. MFN Tariff Analysis

1st step: determine how tariff changes prices and quantities.

- suppose tariff imposed equals T euros per unit.
- Small country 'fiction'.

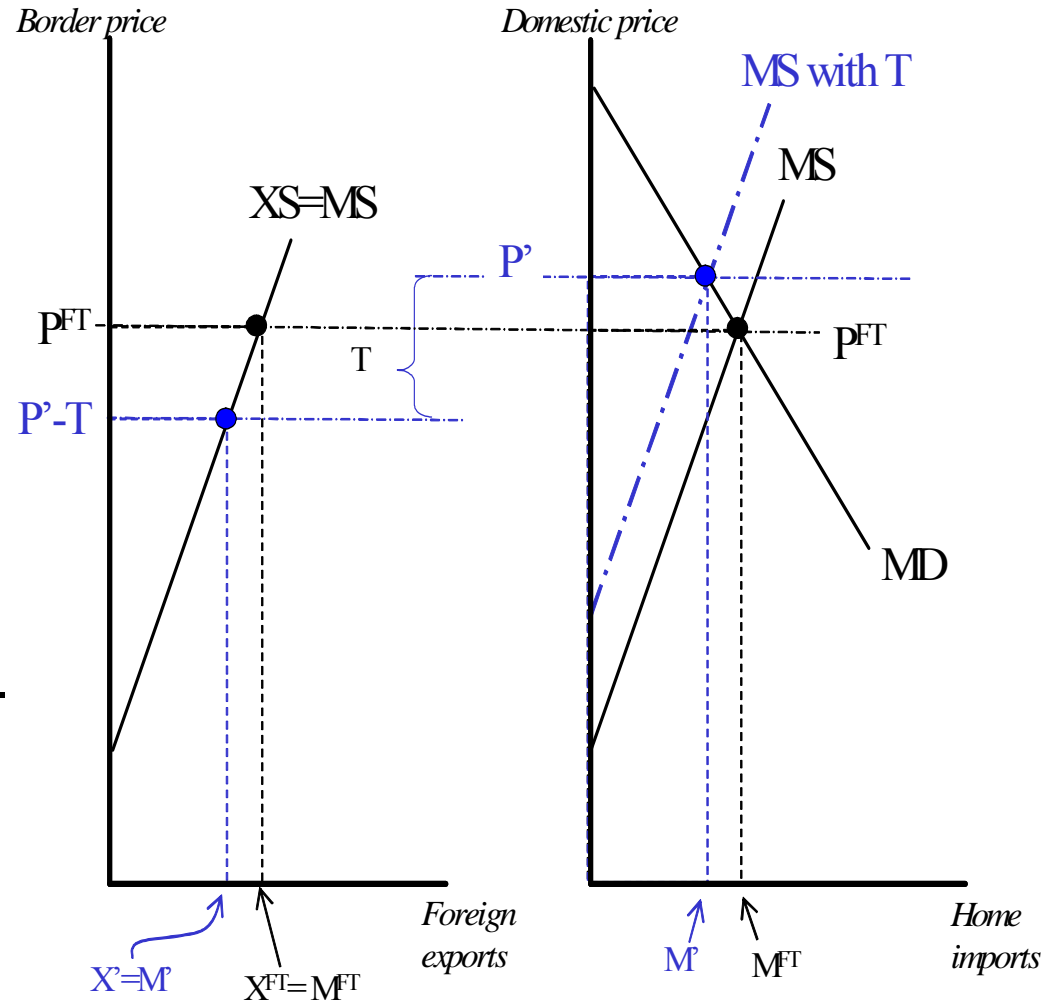
Tariff shifts MS curve up by T .

- Exporters would need a domestic price that is T higher to offer the same exports. Because they earn the domestic price minus T .



I. The economics of preferential liberalization. MFN Tariff Analysis: Imposing a tariff

- Domestic price rises.
- Border price falls.
- Imports fall.
- Can't see in diagram:
 - Domestic consumption falls.
 - domestic production rises.
 - Foreign consumption rises.
 - Foreign production falls.

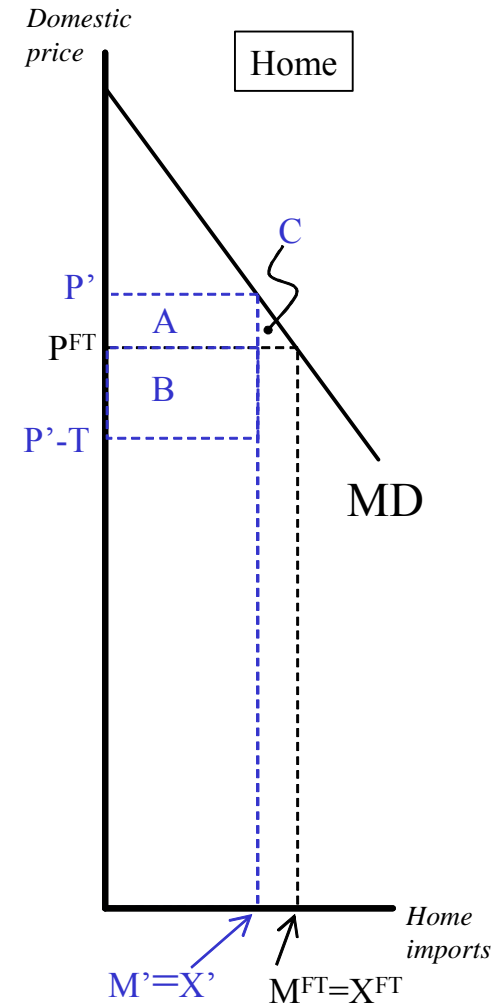




I. The economics of preferential liberalization.

MFN Tariff Analysis: Home Welfare Effects

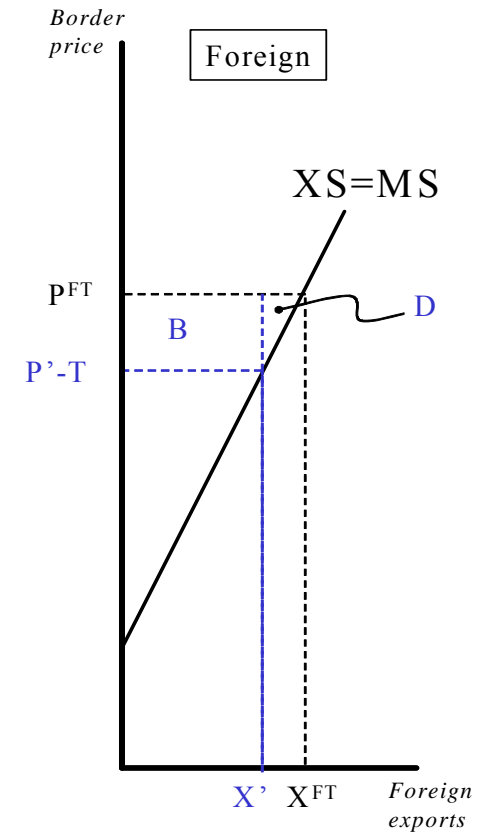
- Drop in imports creates loss equal area C. (Trade volume effect).
- Drop in border price creates gain equal to area B. (Border price effect, i.e. ToT effect).
- Net effect on Home = $-C+B$.





I. The economics of preferential liberalization. MFN Tariff Analysis: Foreign Welfare Effects

- Drop in exports creates loss equal area D
 - (Trade volume effect).
- Drop in border price creates loss equal to area B.
- Net effect on Foreign = $-D-B$.





I. The economics of preferential liberalization.

MFN Tariff Analysis: World Welfare Effects

- if Home gains ($-C+B>0$) it is because it exploits foreigners by 'making' them to pay part of the tariff (i.e. area B).
- Conclusions:
 - Home net welfare change is $-C+B$.
 - Foreign net welfare change is $-D-B$.
 - World welfare change is $-D-C$.

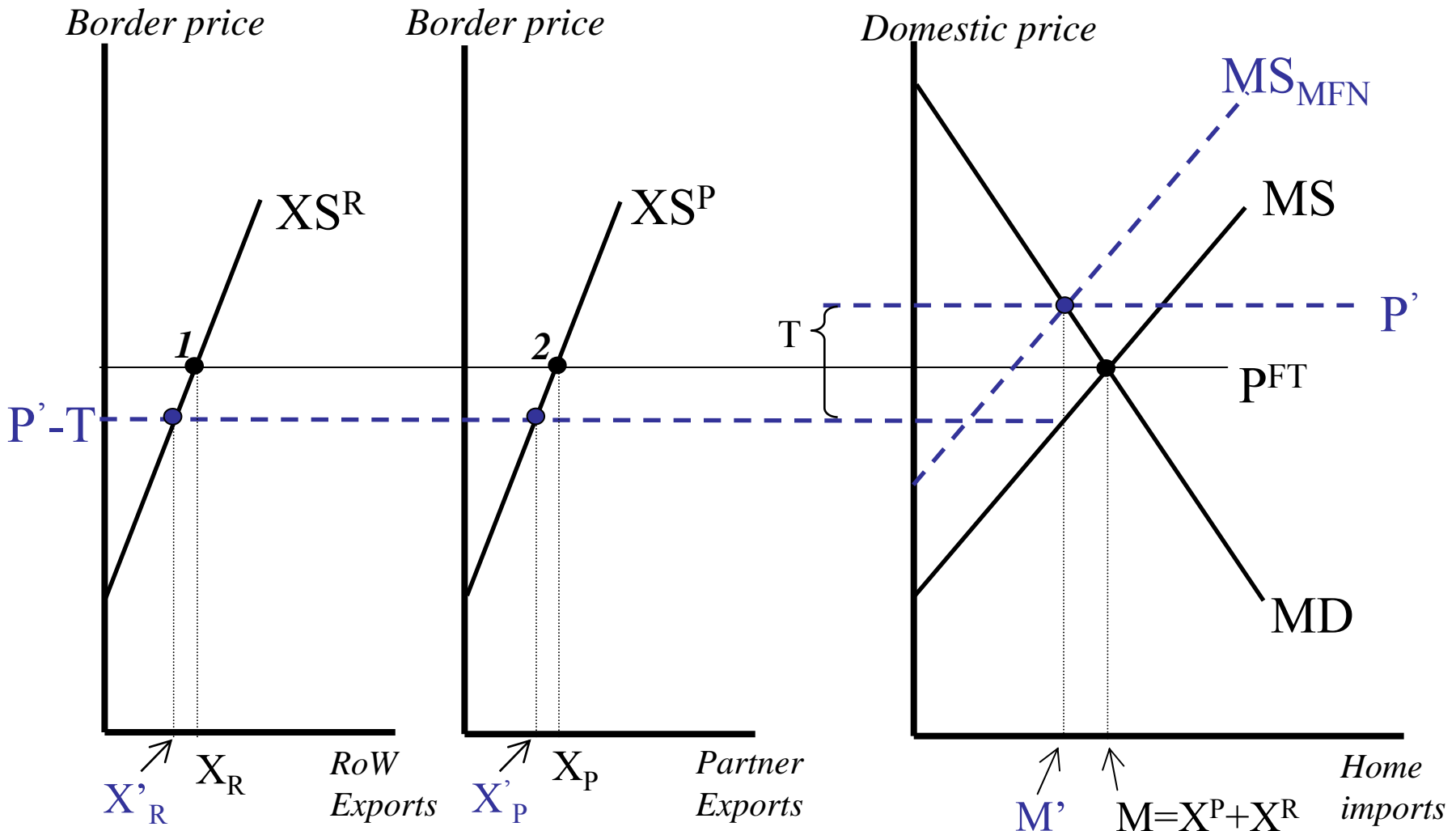


I. The economics of preferential liberalization.
The PTA Diagram: Free trade

RoW

Partner

Home





I. The economics of preferential liberalization. Discriminatory, unilateral liberalization

To build up to analysis of real-world policy changes (e.g. customs union):

-Consider Home removes T on imports only from Partner.

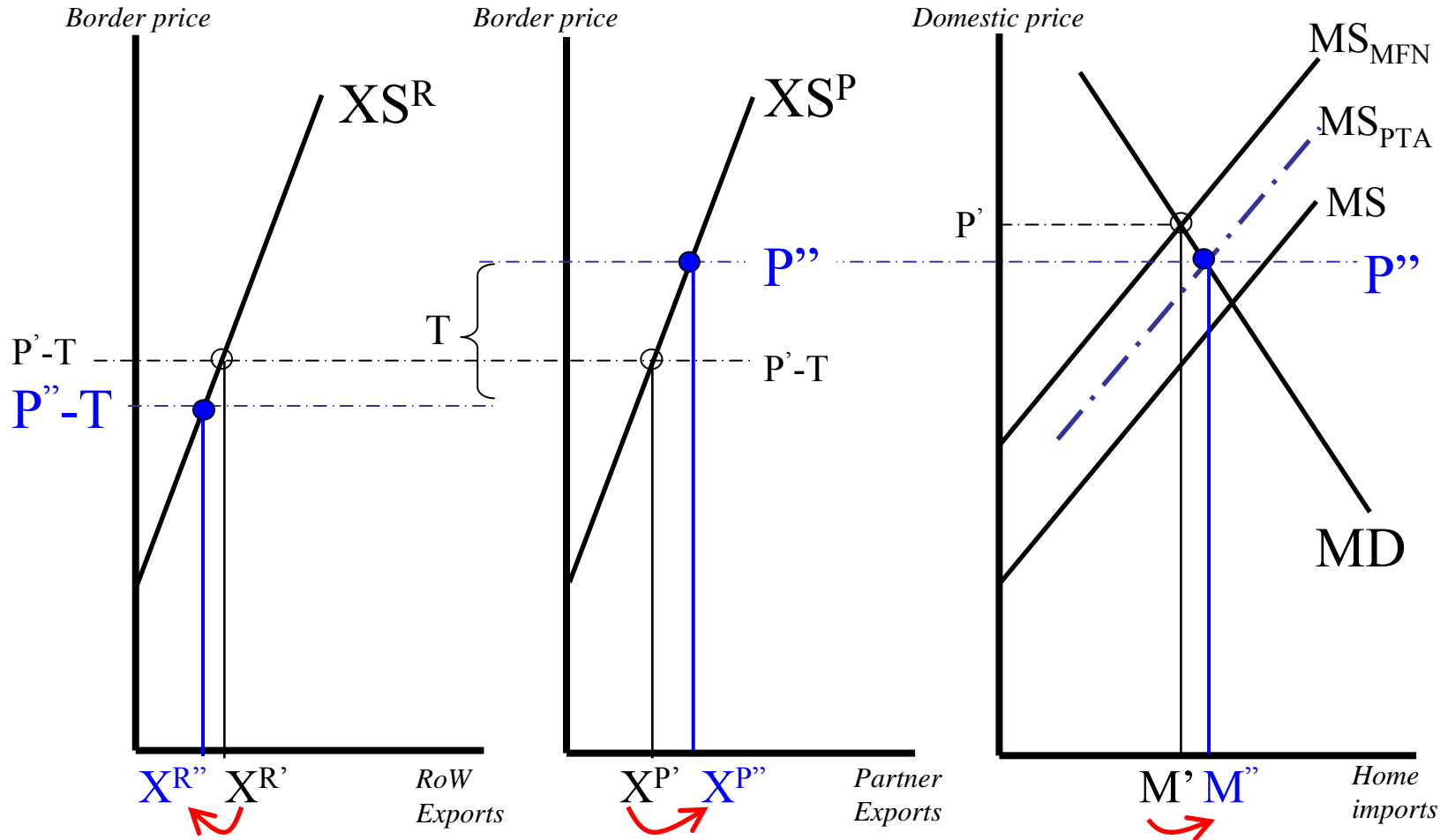
1st step is to construct the new MS curve.

-The liberalisation shifts up MS (as with MFN liberalisation) but not as far since only on half of imports.

and -Shifts up MS to half way between MS (free trade) and MS (MFN T),



I. The economics of preferential liberalization. Discriminatory, unilateral liberalization





I. The economics of preferential liberalization. Discriminatory, unilateral liberalization

Prices:

Domestic price falls to P' from P'' .

Partner-based firms see border price rise, $P'-T$ to P'' .

RoW firms see border price fall from $P'-T$ to $P''-T$.

Quantities:

RoW exports fall.

Partner exports rise more than RoW exports fall,

Domestic imports rise.

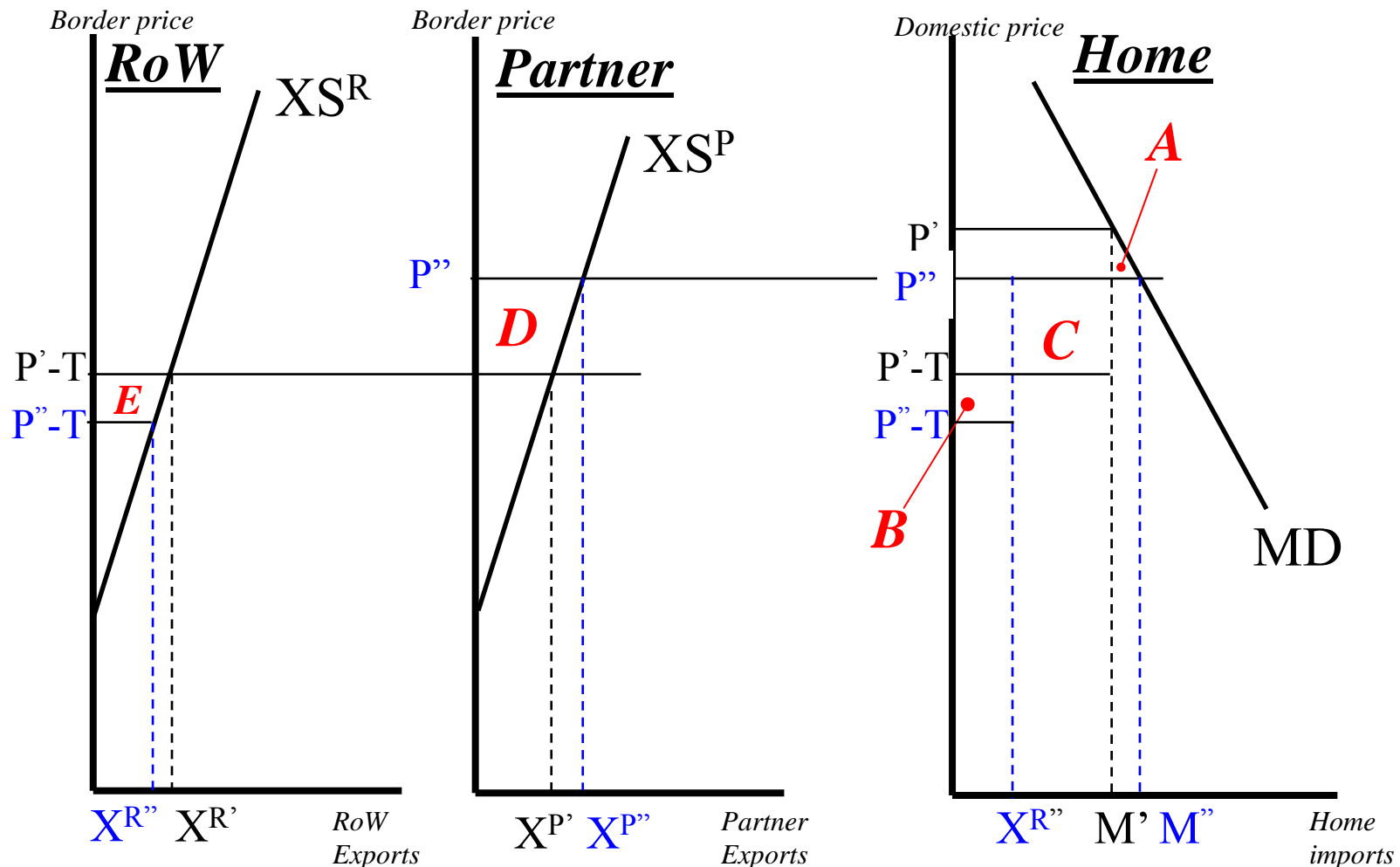


I. The economics of preferential liberalization. Welfare effects

Home's net change = $A+B-C$.

Partner's net change = $+D$.

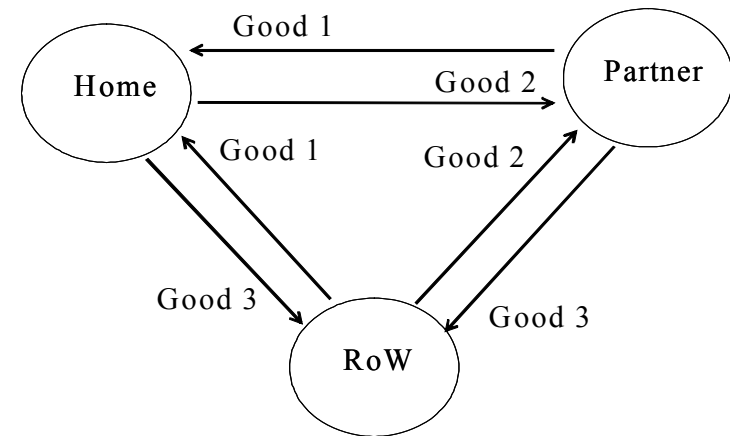
RoW's net change = $-E$.





I. The economics of preferential liberalization. Analysis of a Customs Union

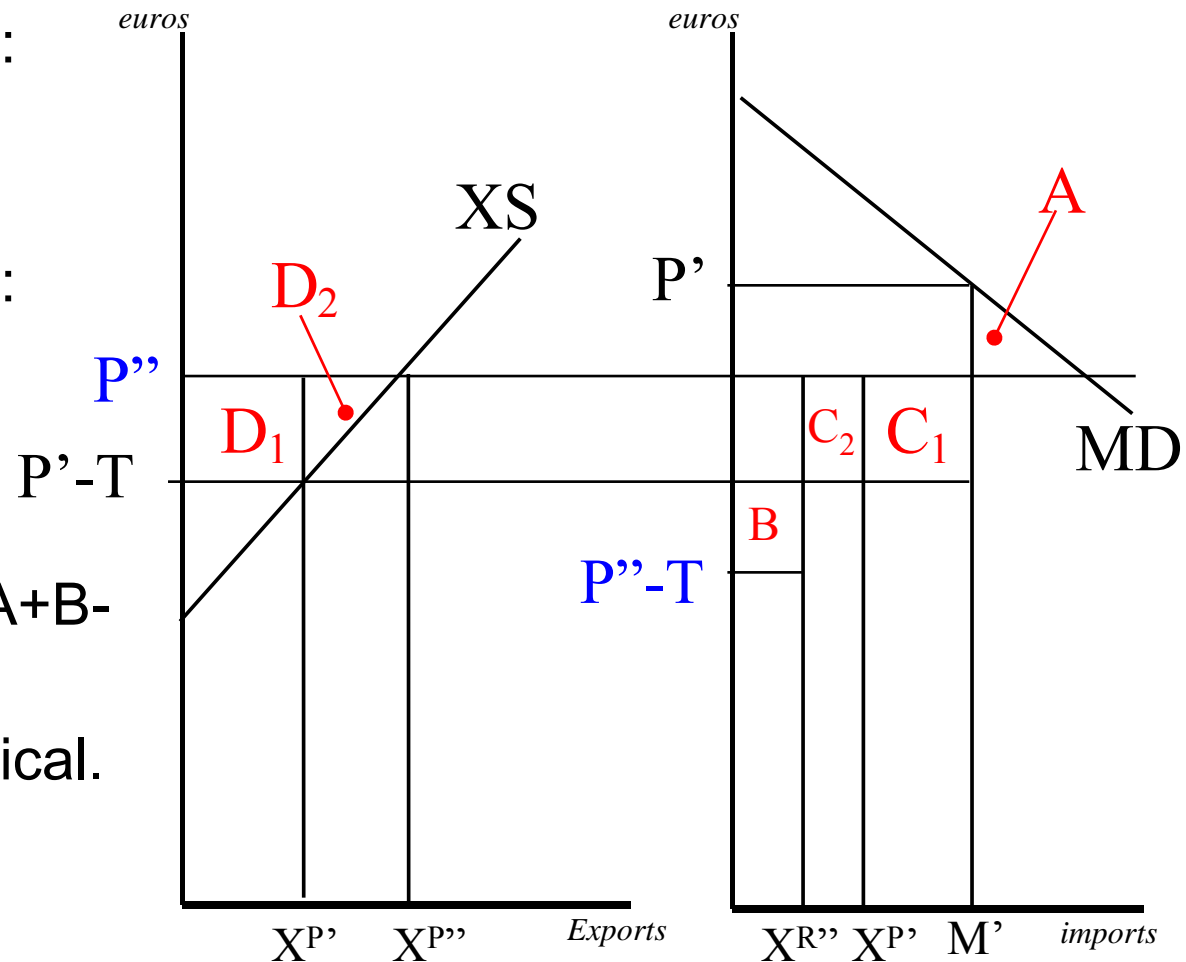
- European integration involved a sequence preferential liberalisations but all of these were reciprocal.
 - In example, both Home & Partner drop T on each other's exports.
- Need to address the 3-nation trade pattern.





I. The economics of preferential liberalization. Welfare effects of a Customs Union

- In market for good 1:
 - Home change = $A+B-C_1-C_2$.
- In market for good 2:
 - Home change = $+D_1+D_2$.
- NB: $D_1=C_1$.
- Net Home impact = $A+B-C_2+D_2$.
- Partner impact identical.
- RoW loses.





I. The economics of preferential liberalization.

Customs Union versus Free Trade agreement

- FTA like CU but no Common External Tariff.
 - Opens door to ‘tariff cheats’,
 - goods from RoW destined for Home market enter via Partner if Partner has lower external tariff, called ‘trade deflection’.
 - Solution is ‘rules of origin’ meant to establish where a good was made.
 - Problems: Difficult and expensive to administer, especially as world get more integrated.
 - Rules often become vehicle for disguised protection.
- Despite the origin-problem in FTAs, almost all preferential trade arrangements in world are FTAs.
 - CU’s require some political integration.
 - Must agree on CET and how to change it, including anti-dumping duties, etc.



I. The economics of preferential liberalization. WTO Rules

- A basic principle of the WTO/GATT is non-discrimination in application of tariffs.
- FTAs and CUs violate this principle.
- Article 24 permits FTAs and CUs subject to conditions:
 - Substantially all trade must be covered .
 - Cannot pick and choose products.
 - Intra-bloc tariffs must go to zero within reasonable period.
 - If CU, the CET must not on average be higher than the external tariffs of the CU members were before.
 - In EEC's CU this meant France and Italy lowered their tariffs, Benelux nations raised theirs (German tariffs were about at the average anyway).



II. Market Size and Scale Effects

Market Size Matters

- European leaders always viewed integration as compensating small size of European nations.
 - Implicit assumption: market size good for economic performance.
- Facts: integration associated with mergers, acquisitions, etc.
 - In Europe and more generally, ‘globalisation.’



II. Market Size and Scale Effects Facts

- M&A activity is high in EU.
- much M&A is mergers within member state.
 - about 55% ‘domestic.’
 - Remaining 45% split between:
 - one is non-EU firm (24%),
 - one firm was located in another EU nation (15%),
 - counterparty’s nationality was not identified (6%).



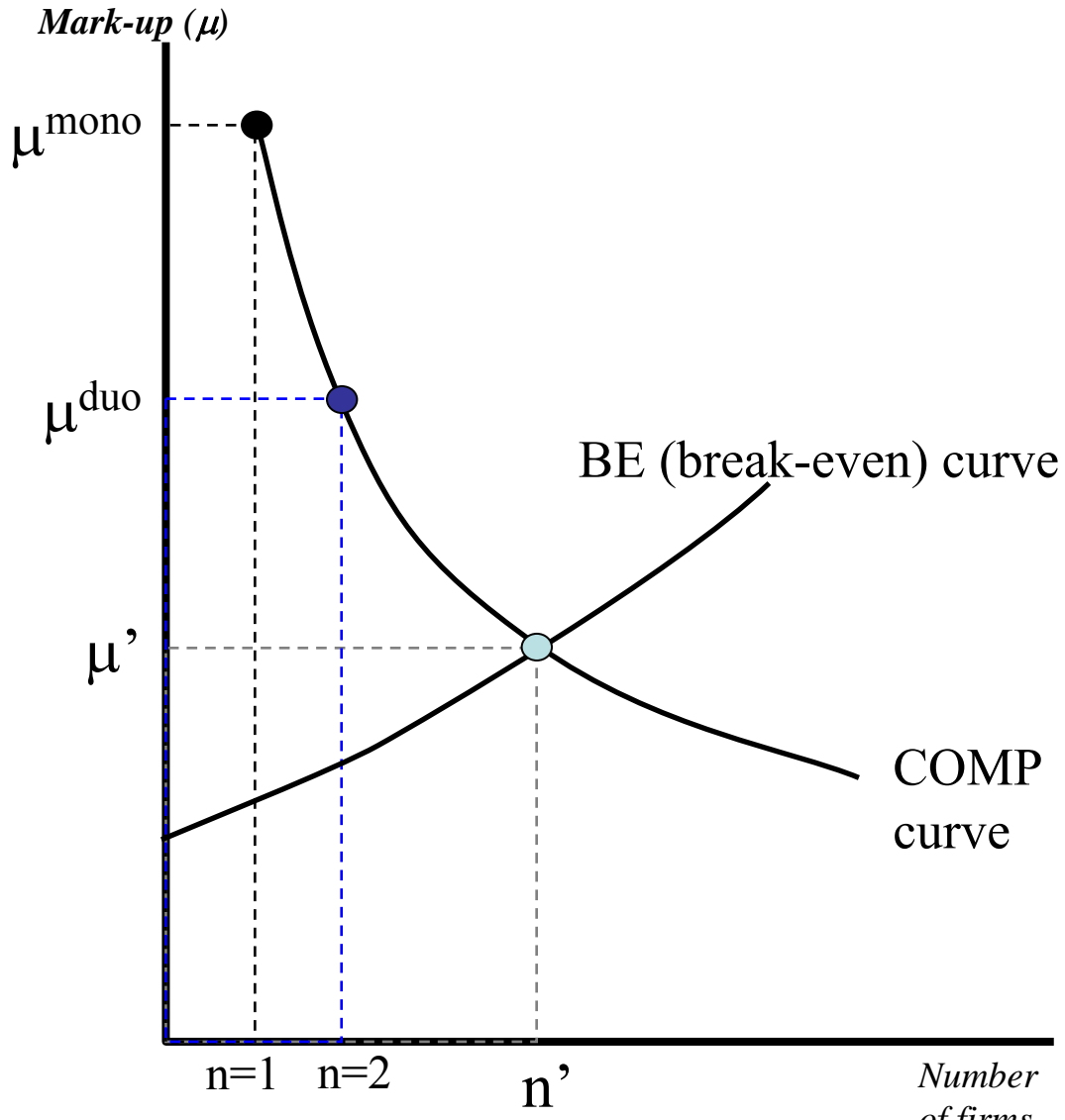
II. Market Size and Scale Effects

Economic Logic

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

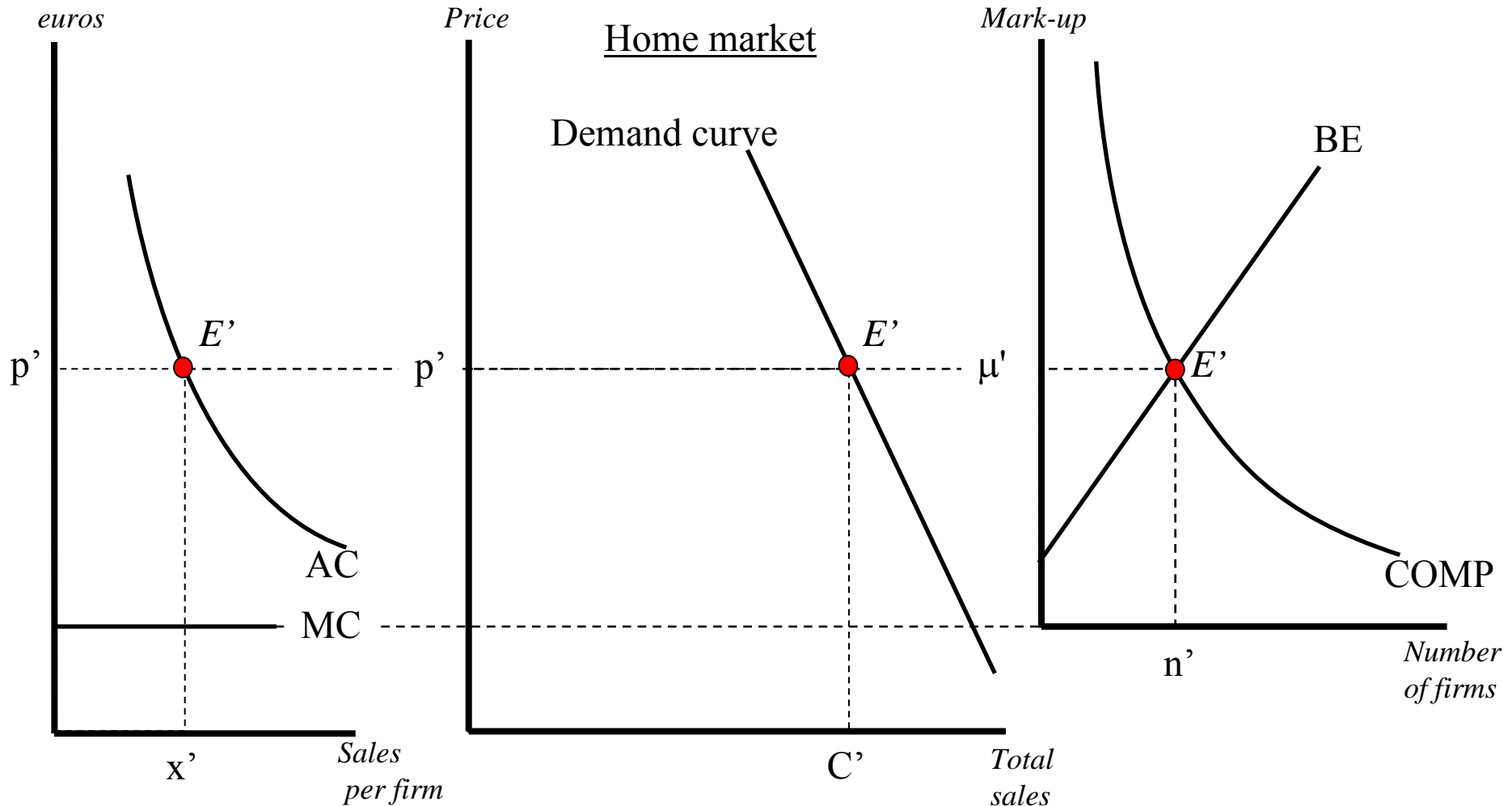


II. Market Size and Scale Effects BE-COMP Diagram





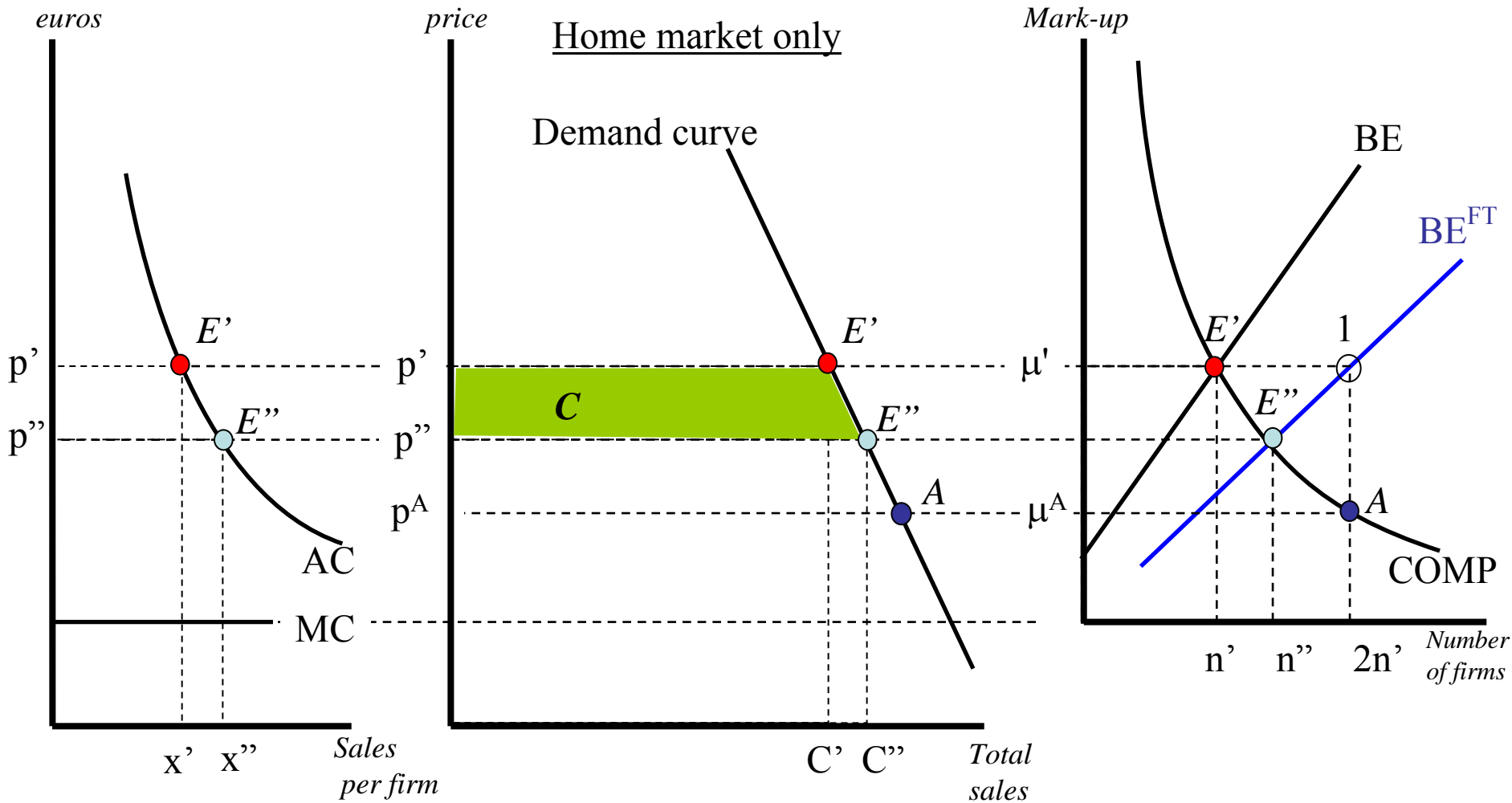
II. Market Size and Scale Effects Equilibrium in BE-COMP diagram





II. Market Size and Scale Effects

No-trade-to-free-trade integration





II. Market Size and Scale Effects Economic Logic

- Integration: no-trade-to-free-trade: BE curve shifts out
- Defragmentation:
 - PRE typical firm has 100% sales at home, 0% abroad; POST: 50-50
- Pro-competitive effect:
 - Equilibrium moves from E' to A : Firms losing money (below BE).
 - Pro-competitive effect = markup falls.
- Industrial Restructuring:
 - A to E'' , number of firms, $2n'$ to n'' .
 - firms enlarge market shares and output,
 - More efficient firms, AC falls from p' to p'' ,
 - mark-up rises, profitability is restored.
- Result: bigger, fewer, more efficient firms facing more effective competition.
- Welfare: gain is "C".



II. Market Size and Scale Effects

Competition & Subsidies

- 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 is “Yes”.



III. Growth Effects & Factor Market Integration

Growth effects

- European integration (or any other policy) → allocation effect → improved efficiency → better investment climate → more investment in machines, skills and/or technology → higher output per person.
 1. Medium run effects eventually fade out.
 - Growth returns to its long-run rate.
 2. Long run effects raise long-run rate forever.



III. Growth Effects & Factor Market Integration

Some facts

GDP per capita & Rankings, 1950 and 1973 (1990 international dollars).

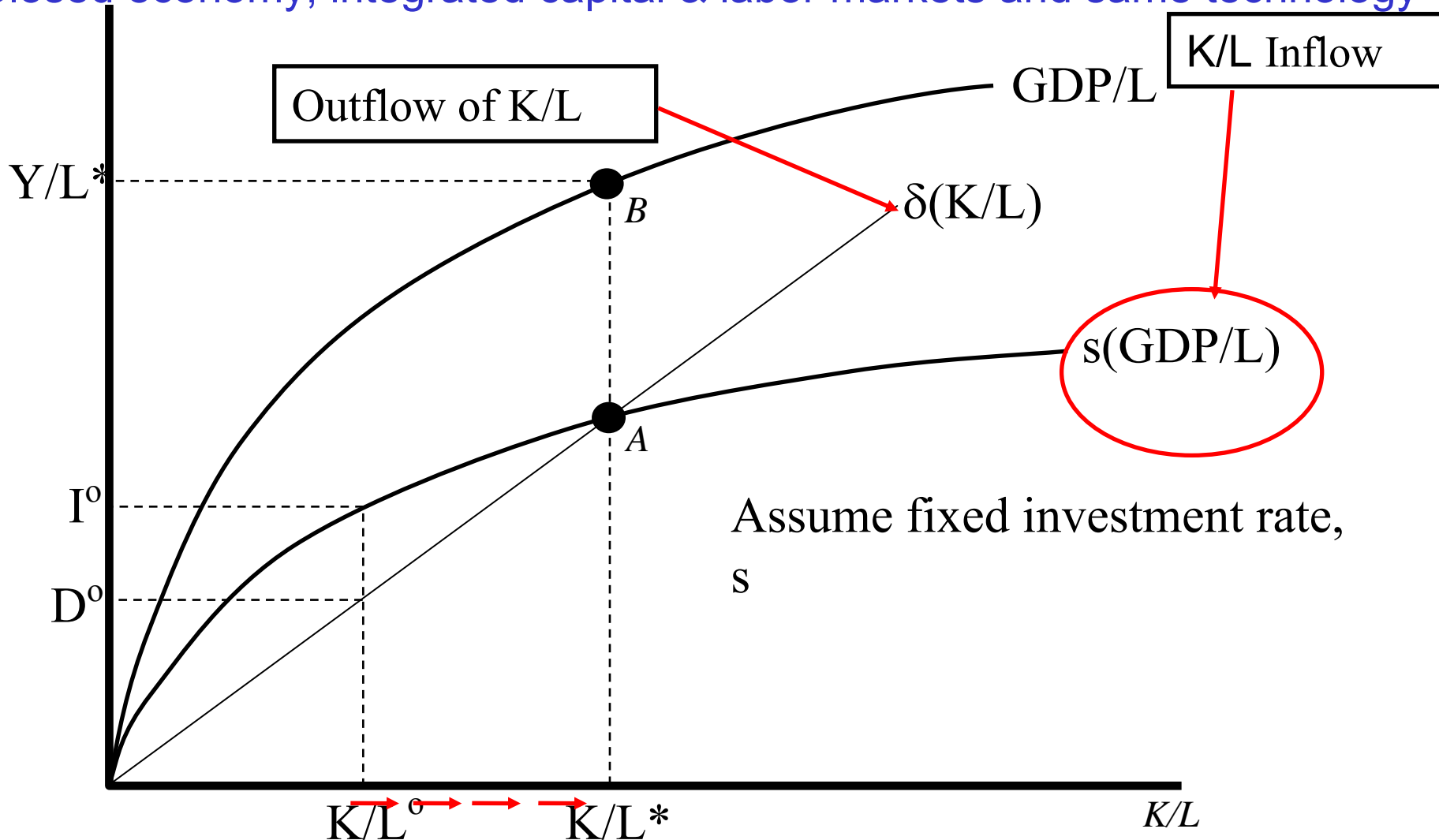
	1950 GDP (1990 \$)	European Rank 1950	Change in Rank 1950- 1973	GDP Growth Rate
EEC average	4,825	8.0	+ 1.2	4.2
EFTA average	6,835	3.6	-1.4	3.0
France	5,221	7	+ 2	4.0
Germany	4,281	9	+ 5	5.0
Italy	3,425	13	+ 2	4.9
UK	6,847	2	-5	2.4



III. Growth Effects & Factor Market Integration

Solow diagram

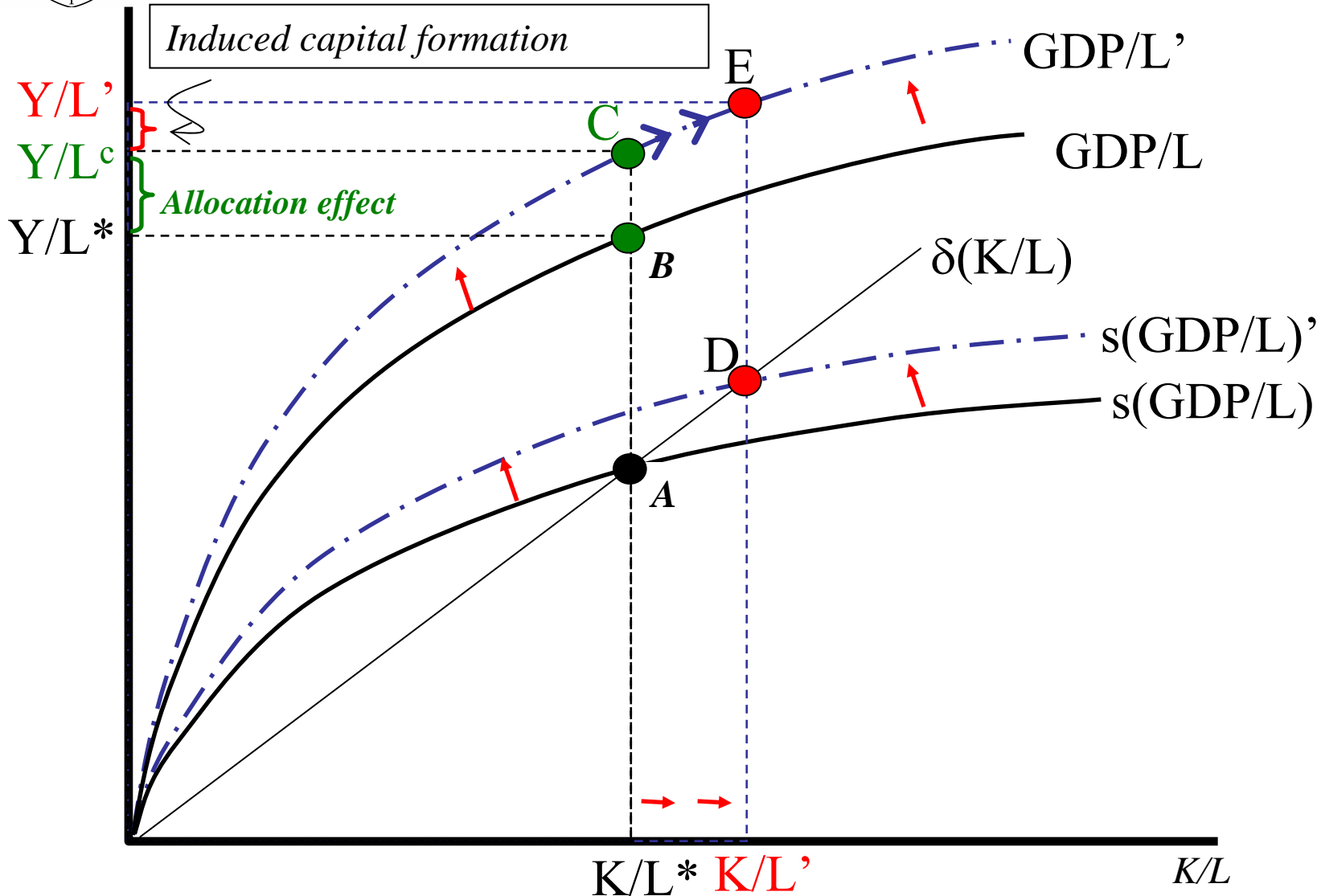
• Closed economy, integrated capital & labor markets and same technology





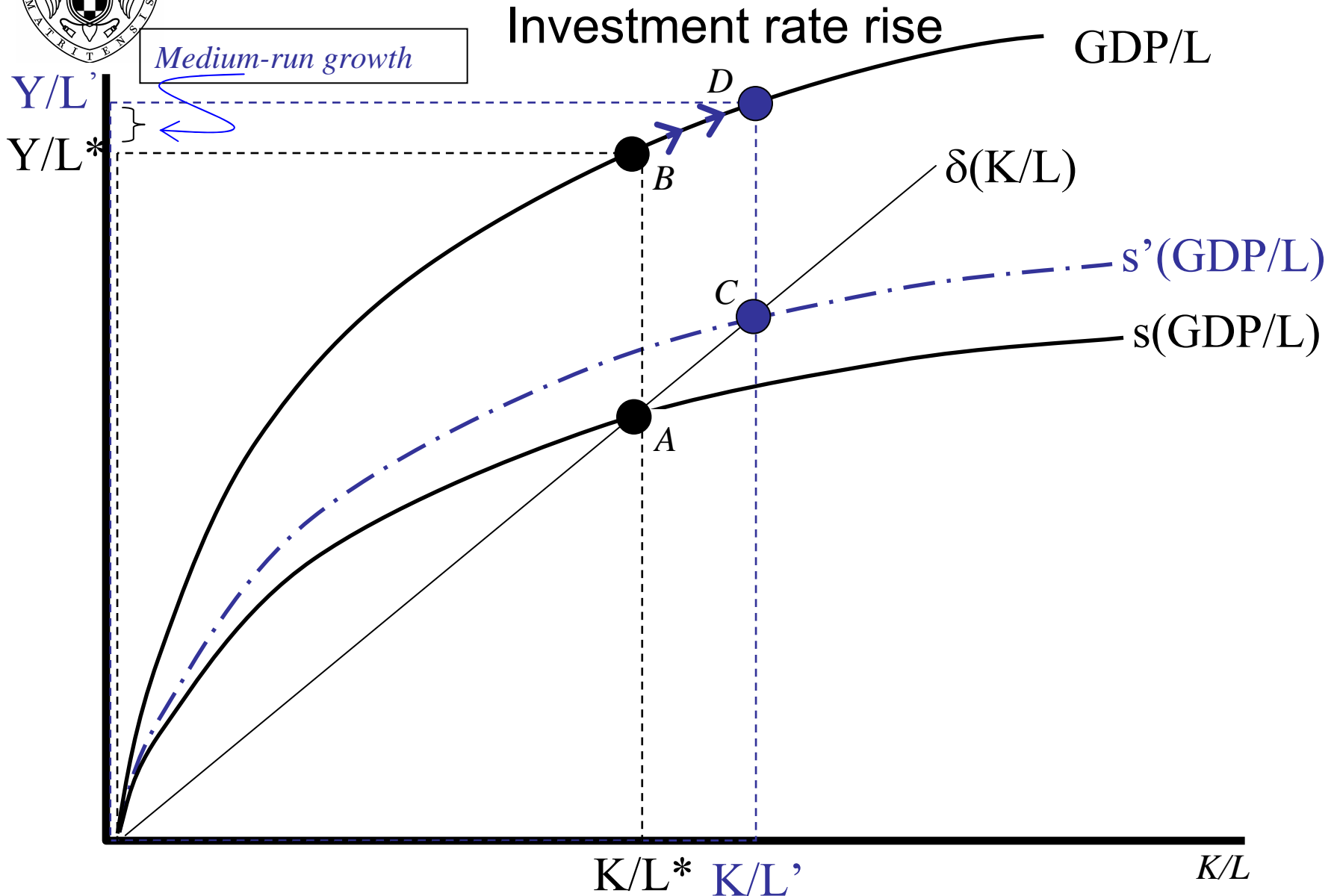
III. Growth Effects & Factor Market Integration

Induced capital formation



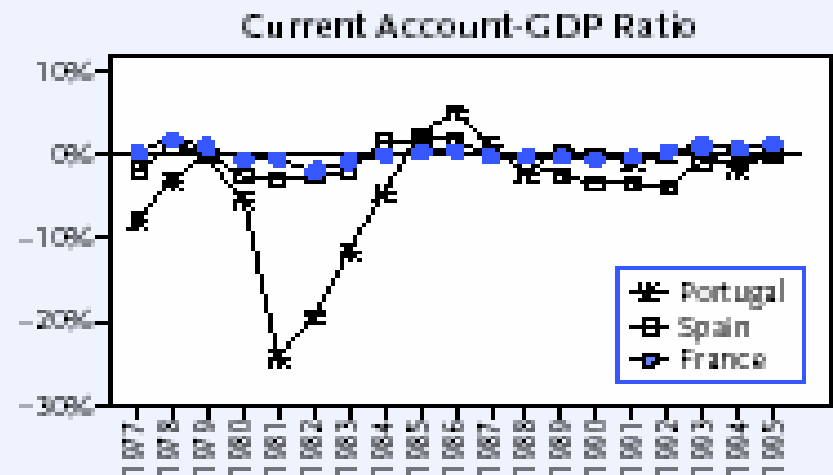
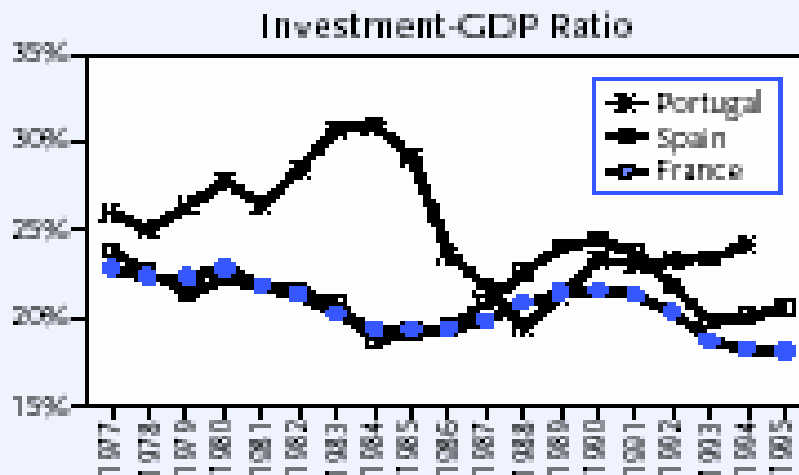
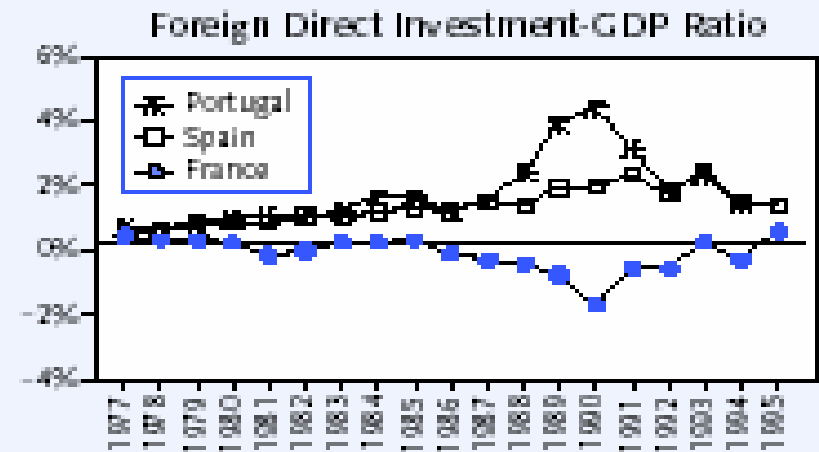
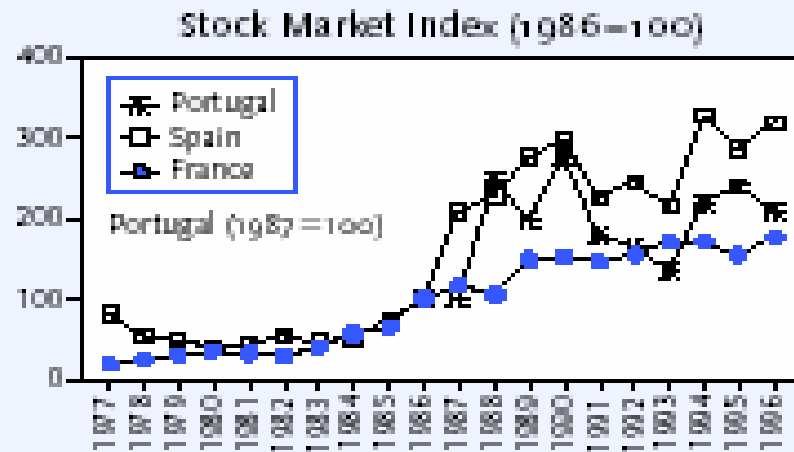


III. Growth Effects & Factor Market Integration





III. Growth Effects & Factor Market Integration Experience of Spain and Portugal



SOURCE: Baldwin and Seghezza (1998).



III. Growth Effects & Factor Market Integration

Long-term growth impact

Integration improves efficiency → improves investment climate → higher investment rate (s rises to s') → faster growth (knowledge capital accumulates more rapidly)

