The background of the slide features a complex financial chart. It includes a candlestick chart with white outlines on a dark blue background, overlaid with several white and dotted trend lines. A small grey downward-pointing triangle is visible on one of the dotted lines. The overall aesthetic is professional and data-oriented.

International Economic Relations and Economic Diplomacy

Lecture 4

Thomas Moutos

Types of International Economic Integration

- About 90% of existing Regional Trade Agreements (RTAs) are Free Trade Areas
- The EU is the only one that comes close to being an Economic Union

Levels of economic integration	<i>Free Trade Area</i>	<i>Customs Union</i>	<i>Common Market</i>	<i>Economic Union</i>
Removal of trade restrictions between member states	✓	✓	✓	✓
Common external trade policy towards non-members		✓	✓	✓
Free movement of factors of production between member states			✓	✓
Harmonization of economic policies under supra-national control				✓

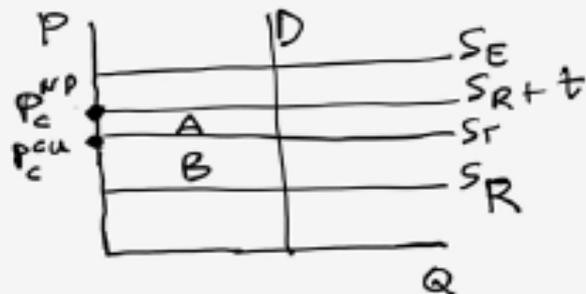
Major RTAs (other than the EU)

NAFTA (North American Free Trade Agreement)	Canada, Mexico, US	1994	Free trade area
EFTA (European Free Trade Association)	Iceland, Norway, Lichtenstein, Switzerland	1960	Free trade area
Mercosur (Southern Cone Common Market)	Argentina, Brazil, Paraguay, Uruguay, Venezuela (2006)	1991	Common market
ANCOM (Andean Common Market)	Bolivia, Colombia, Ecuador, Peru, Venezuela	1969 (revived 1990)	Customs union
CARICOM (Caribbean Community)	Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, Suriname, Trinidad & Tobago	1973	Common market
AFTA (ASEAN Free Trade Agreement)	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam	1967 (ASEAN) 1992 (AFTA)	Free trade area
China-ASEAN Free Trade Agreement	China, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam	2010	Free trade area

The Effects of Customs Unions

PERFECTLY ELASTIC SUPPLY CURVES,
 INELASTIC DEMAND CURVE.

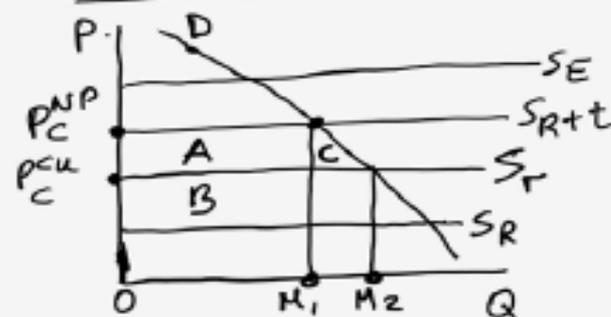
Greece (E) engages in a customs union (CU) with Germany (T). Rest of the world (R). Before the CU, under the non-preferential tariff rate (t), all imports come from R, and the



consumer price in Greece is P_c^{NP} . After the CU between E and T, all imports come from T, and the consumer price is P_c^{CU} . Rise of CS in Greece by (area) A, loss of tariff revenue (TR) by A+B. Net loss of social welfare (SW) = B.

The loss in SW is due to the fact that the country after the CU buys the good at a higher price. In other words, we have trade diversion.

PRICE-RESPONSIVE DEMAND



Before the CU, the consumer price in Greece is P_c^{NP} , and it drops to P_c^{CU} after the CU. Quantity imported rises from OM_1 to OM_2 , CS rises by A+C, TR drop by A+B, and the net effect on welfare is C-B.

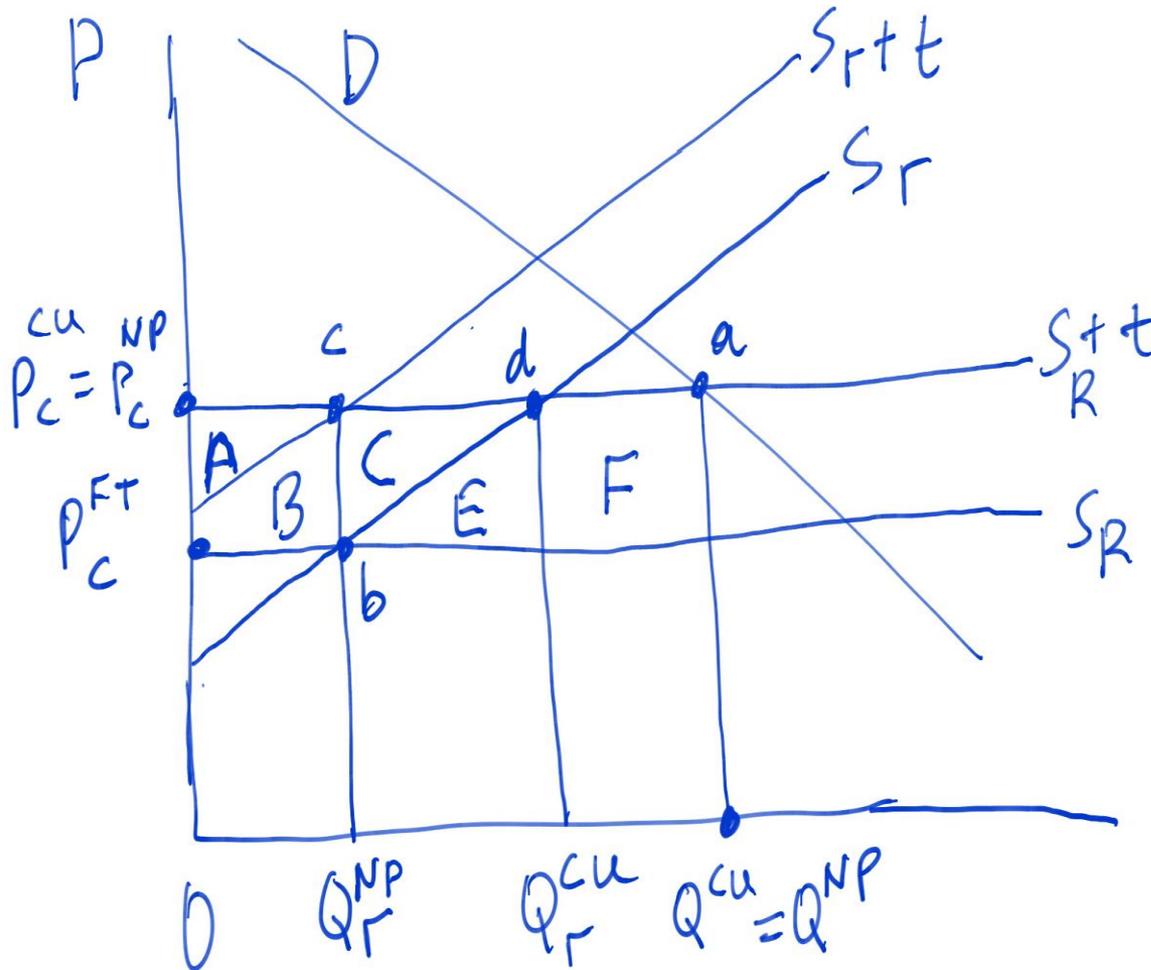
The presence of (area) C is due to the expansion of trade (i.e. imports). The fact that trade expands is called trade creation. So, in this case, with both trade diversion and trade creation being present, the net effect (C-B) on domestic welfare is ambiguous and depends, among other things, on the difference in costs between Γ and R , and the price elasticity of the demand curve.

- The previous two diagrams imply that both before, and after, the formation of the CU, the country (Greece) is importing from only one source (ROW, in the case of non-preferential trade; Germany, after the CU). Since this is unrealistic, in the next slide we present the case that the country is importing both before, and after, from both sources. To do that we assume that at least one of the exporting countries' supply curves is not perfectly elastic.

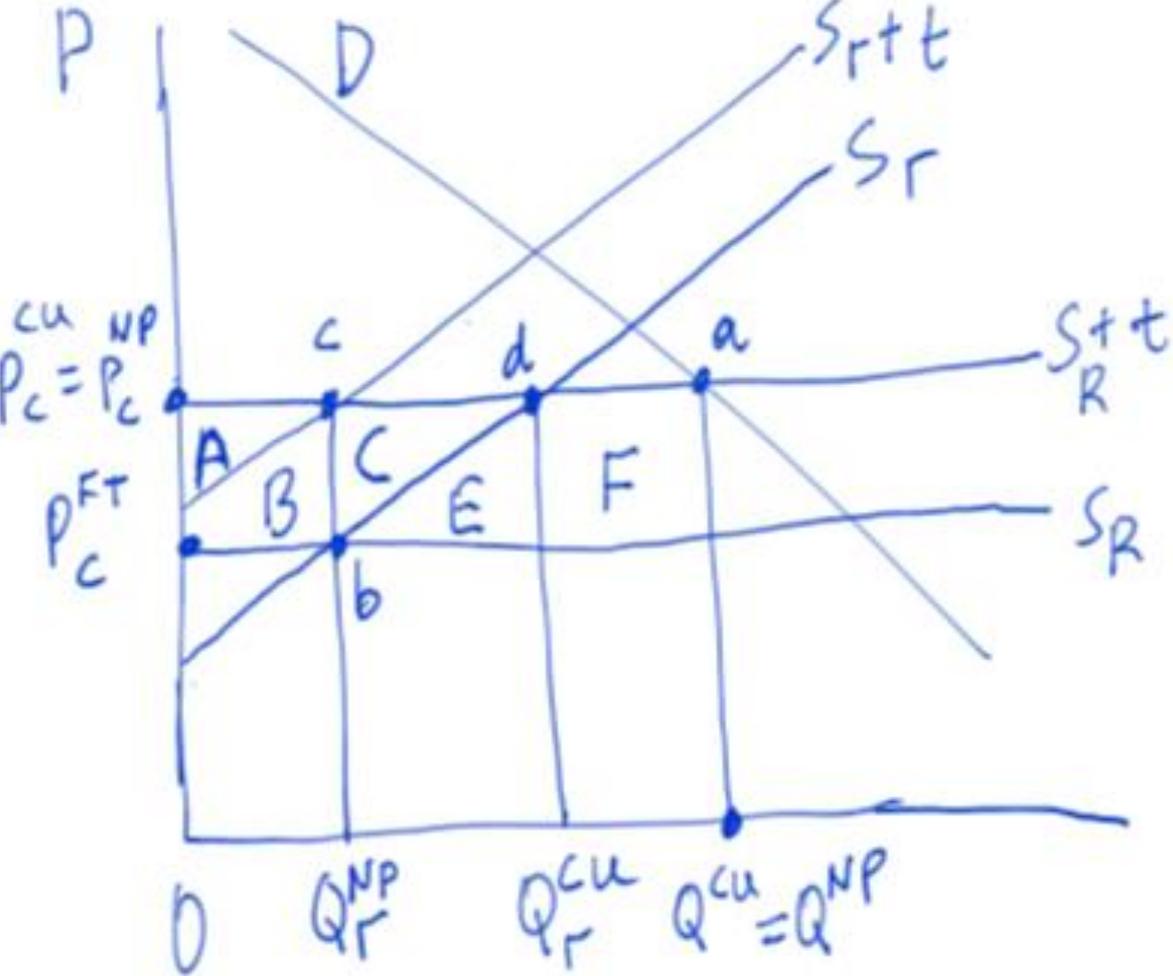
Effects of CU when Imports are Sourced from both Countries

Diagram shows the case of a country which sources its imports from two countries, Γ and R, and there is a non-preferential (NP) tariff, t , on imports from both countries. D is the country's (Greece) import demand curve. Initially, with the NP tariff in place, the price for domestic consumers is P^{NP}_C , and total imports are equal to Q^{NP} , of which

OQ_{Γ}^{NP} are sourced from Γ (Γ supplies up to point **c**), and the rest (**ca**) from R. If E and Γ form a CU, then Γ can supply up to point **d** at a lower cost than R, and thus Germany's exports increase by **cd**, while R's exports are reduced by the same amount. Note that since the price to the consumers remains the same, total imports remain the same as well. What are the effects on Greece's SW?



Since prices and total imports remain the same (point a), there is no change in either CS or PS. However, there is a change in tariff revenue. Before the CU, tariff revenue were equal to (areas) A+B+C+E+F (since tariffs were applied on imports on R **and** on Γ). After the CU, tariffs are applied only on imports sourced from R, and so tariff revenue are now equal to F. So Greece experience a drop in SW equal to A+B+C+E. This is because for imports up to point **d**, pays a higher price than before to import the good from Germany, i.e. before it was paying a price P_C^{FT} whereas after the CU pays P_C^{NP} . This is the so-called **Revenue Transfer Effect**. (As a result, Γ 's PS increases by A+B+C; this is also the increase in SW for Γ . Thus, as a whole the CU loses E, with Greece losing more than what Γ gains. Note that this is not the only possible outcome.

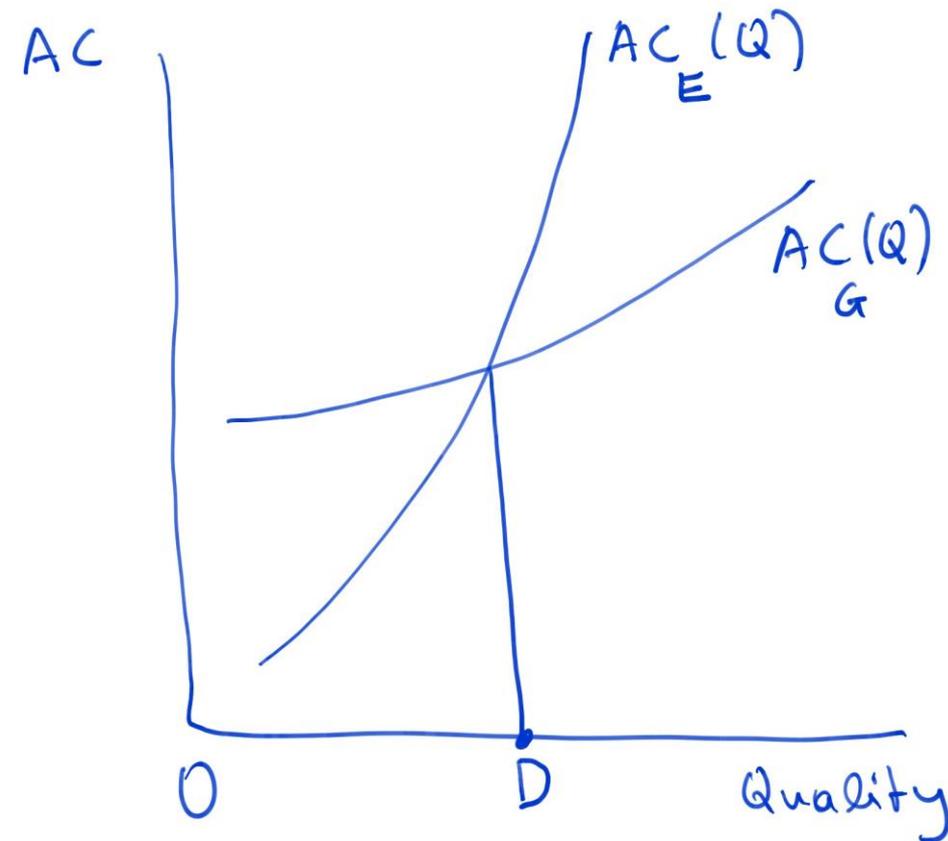


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Effects of CU's with Vertically Differentiated Products

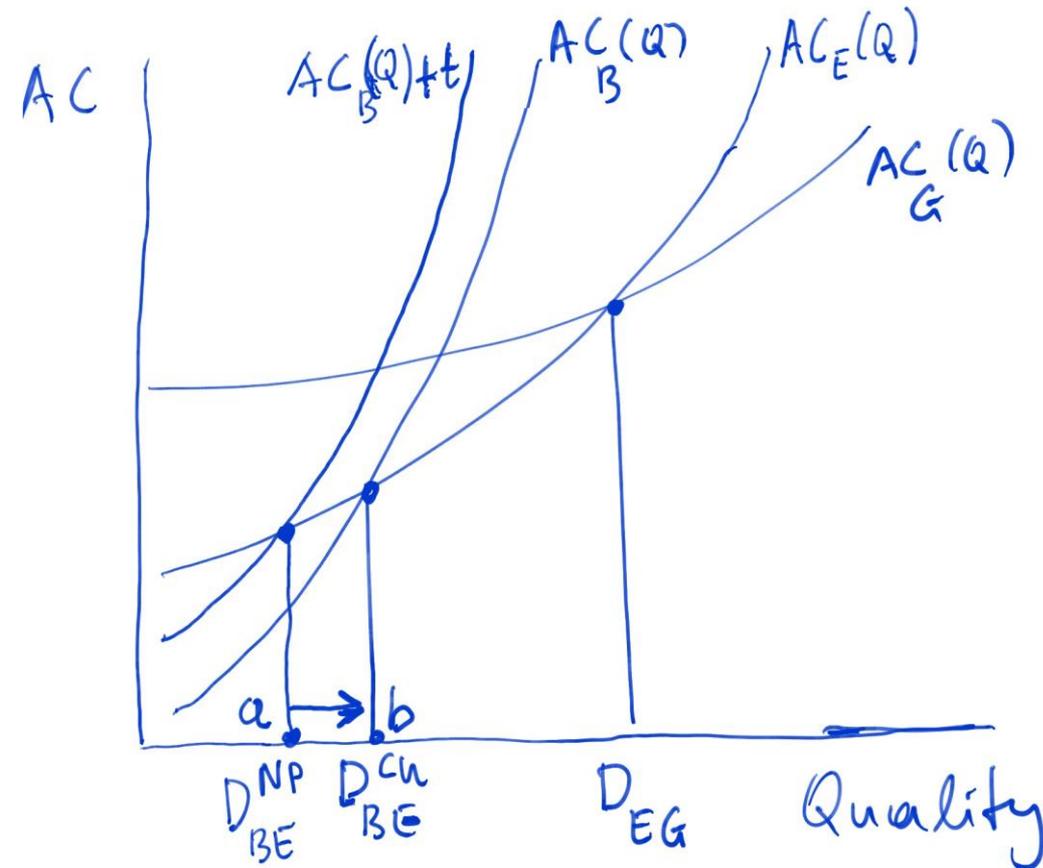
Vertically Differentiated Products (VDPs) are those for which there are significant quality differences among them, which are also reflected in price differences (e.g. German cars are higher quality than cars made in Eastern European countries).

Assume that to produce a car of higher quality requires higher cost, as shown in the diagram, where the $AC_E(Q)$ displays the relationship between average cost (i.e. cost per unit) as a function of the quality of the good in Greece, whereas $AC_G(Q)$ shows



the same relationship for Germany. We observe that for low quality levels, average costs are lower in Greece than in Germany, whereas after a certain quality level, costs are lower in Germany (this may be because when quality is low, lower wages in Greece make the difference, but when quality is high superior German know-how offsets any difference in wages). The diagram implies that low-quality varieties (up to D) will be produced in Greece, but high-quality varieties (above D) will be produced in Germany.

We now introduce a third country (call it Bulgaria, B), for which the relationship between quality (Q) and AC is given by the curve $AC_B(Q)$. Now B is the least cost producer for low quality varieties, E is the least cost producer for middle quality varieties, and G for high quality ones. The diagram shows the initial situation in which E and G belong to a CU, and there is a common external tariff on B; thus varieties with quality up to **a** will be supplied by B in the existing CU.



Consider now that the CU enlarges by including B in it. Thus, there will no longer be a tariff in E and G's market, and B will now be able to expand its supply E and G's market with qualities up to **b**. As a result the enlargement of CU, causes a decline in the range of varieties supplied by E, but no change in the range of varieties supplied by G. Regarding B's market, both E and G will be able to expand the range of varieties they offer. In conclusion, this type of enlargement is more likely to benefit G's producers than E's producers.