There it is shown that if countries cooperate and set zero tariffs against each other, then both countries are likely to benefit relative to setting optimal tariffs.

Any type of arrangement in which countries agree to coordinate their trade, fiscal, or monetary policies is referred to as **economic integration**.

Type of Economic Integration

Preferential Trade Agreement (PTA)

In PTA, a countries would offer tariff reductions, though perhaps not eliminations, to a set of partner countries in some product categories.

Example :- if a country's low tariff on Laptop imports, to 5 percent, then it must charge 5 percent on imports from all G-20 (21) members countries. The country is free to charge a higher tariff on imports from non-WTO members, however.

Free Trade Area

- A free trade area (FTA) occurs when a group of countries agrees to eliminate tariffs among themselves but maintain their own external tariff on imports from the rest of the world.
- The North American Free Trade Agreement (NAFTA) is an example of an FTA.
- When NAFTA is fully implemented, tariffs of automobile imports between the United States and Mexico will be zero. However, Mexico may continue to set a different tariff than the United States on automobile imports from non-NAFTA countries.

Customs Union

- A customs union occurs when a group of countries agrees to eliminate tariffs among themselves and set a common external tariff on imports from the rest of the world.

- The European Union (EU) represents such an arrangement.

- A customs union avoids the problem of developing complicated rules of origin but introduces the problem of policy coordination.

Common Market

- A common market establishes free trade in goods and services, sets common external tariffs among members, and also allows for the free mobility of capital and labor across countries.

- The EU was established as a common market by the Treaty of Rome in 1957, although it took a long time for the transition to take place.

- Today, EU citizens have a common passport, can work in any EU member country, and can invest throughout the union without restriction.

Economic Union

- An economic union typically will maintain free trade in goods and services, set common external tariffs among members, allow the free mobility of capital and labor, and also relegate some fiscal spending responsibilities to a supranational agency.
- The EU's Common Agriculture Policy (CAP) is an example of a type of fiscal coordination indicative of an economic union.

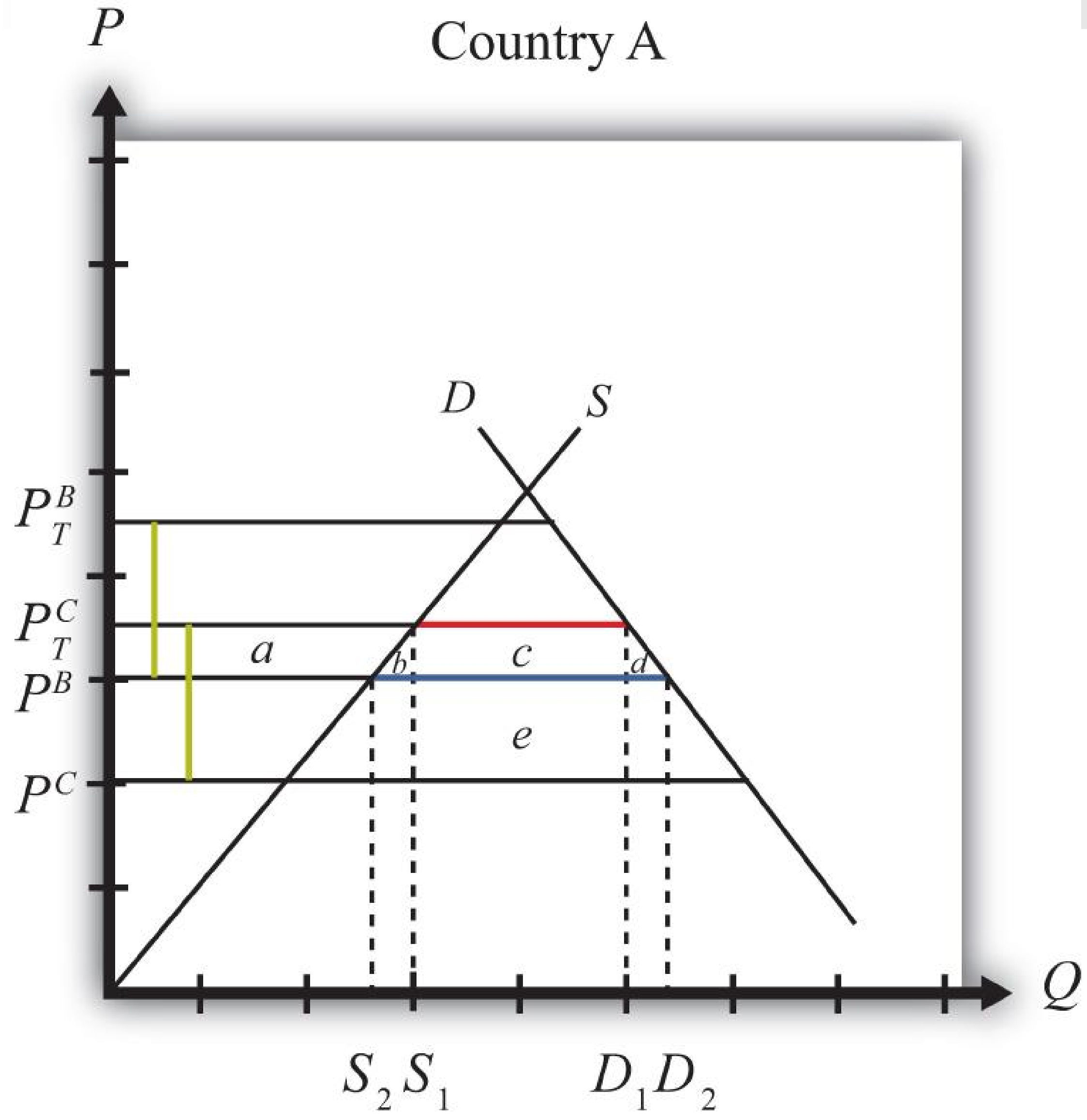
Monetary Union

- A monetary union establishes a common currency among a group of countries. This involves the formation of a central monetary authority that will determine monetary policy for the entire group.
- The Maastricht treaty, signed by EU members in 1992, proposed the implementation of a single European currency (the Euro) by 1999.

Trade Diversion

- A trade diversion means that a free trade area diverts trade away from a more-efficient supplier outside the FTA and toward a less-efficient supplier within the FTA.
- In some cases, trade diversion will reduce a country's national welfare, but in some cases national welfare could improve despite the trade diversion.
- We assume in each case that there are three countries in the world: Countries A, B, and C. Each country has supply and demand for a homogeneous good in the representative industry. Countries A and B will form a free trade area.

"Harmful Trade Diversion"



- The graph shows the supply and demand curves for Country A.
- *PB* and *PC* represent the free trade supply prices of the good from Countries B and C, respectively.
- Note that Country C is assumed to be capable of supplying the product at a lower price than Country B.

- We assume that A has a specific tariff $tB = tC = t^*$ set on imports from both Countries B and C.
- The tariff raises the domestic supply prices to PTB and PTC, respectively. The size of the tariff is denoted by the green dotted lines in Figure 9.10 "Harmful Trade Diversion", which show that $t^* = PTB - PB = PTC - PC$.
- Since, with the tariff, the product is cheaper from Country C, Country A will import the product from Country C and will not trade initially with Country B. Imports are given by the red line, or by the distance $D1 - S1$.
- Initial tariff revenue is given by the area (c + e), the tariff rate multiplied by the quantity imported.

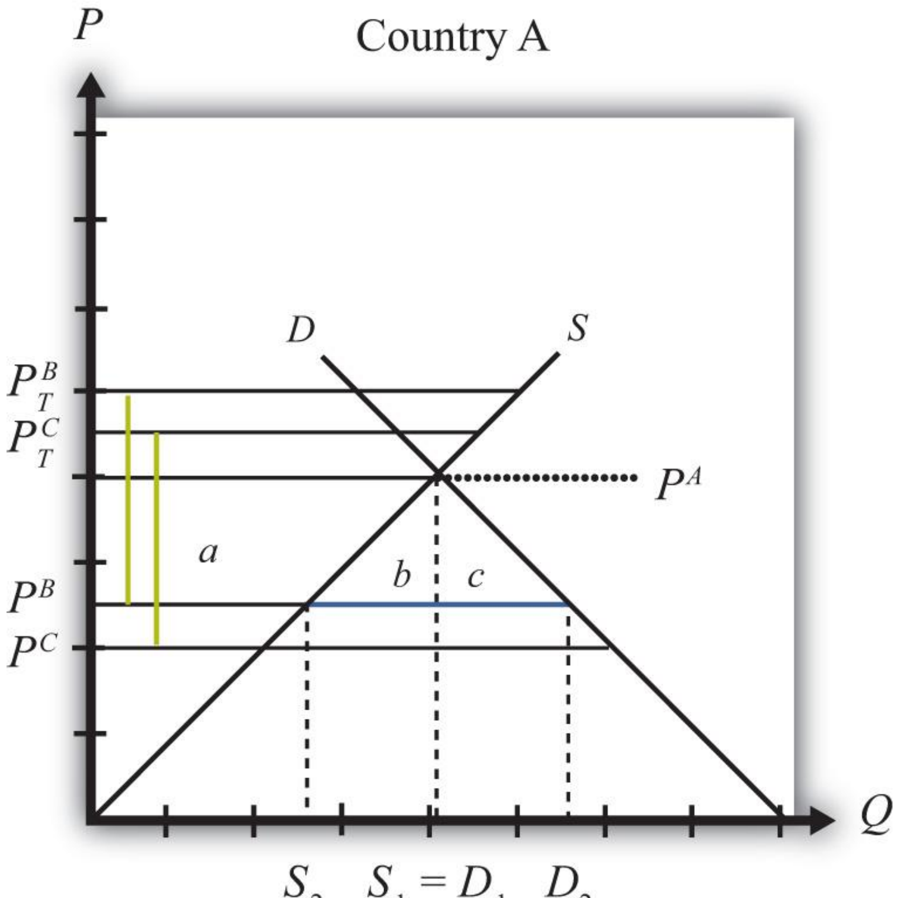
- Next, assume Countries A and B form an FTA and A eliminates the tariff on imports from Country B. Now, $t_B = 0$, but t_C remains at t^* .
- The domestic prices on goods from Countries B and C are now P_B and P_{TC}, respectively.
- Since $P_B < P_{TC}$, Country A would import all the product from Country B after the FTA and would import nothing from Country C.
- At the lower domestic price, P_B, imports would rise to $D_2 - S_2$, denoted by the blue line.
- Also, since the nondistorted (i.e., free trade) price in Country C is less than the price in Country B, trade is said to be diverted from a more-efficient supplier to a less-efficient supplier.

Welfare Effects of Free Trade Area

- Free trade area effects on Country A's consumers. Consumers of the product in the importing country benefit from the free trade area. The reduction in the domestic price of both the imported goods and the domestic substitutes raises consumer surplus in the market.
- Free trade area effects on Country A's producers. Producers in the importing country suffer losses as a result of the free trade area. The decrease in the price of their product on the domestic market reduces producer surplus in the industry.
- Free trade area effects on Country A's government. The government loses all the tariff revenue that had been collected on imports of the product.

Trade Creation

- Trade creation means that a free trade area creates trade that would not have existed otherwise. As a result, supply occurs from a more-efficient producer of the product.



- The graph shows the supply and demand curves for Country A.
- *PB* and *PC* represent the free trade supply prices of the good from Countries B and C, respectively.
- Note that Country C is assumed to be capable of supplying the product at a lower price than Country B.

- with the tariffs, the autarky price in Country A, labeled PA in Figure. "Trade Creation", is less than the tariff-ridden prices PTB and PTC, the product will not be imported. Instead, Country A will supply its own domestic demand at S1 = D1. In this case, the original tariffs are prohibitive.
- assume Countries A and B form an FTA and A eliminates the tariff on imports from Country B. Now tB = 0, but tC remains at t^* . The domestic prices on goods from Countries B and C are now PB and PTC, respectively. Since PB < PA, Country A.
- Assume Countries A and B form an FTA and A eliminates the tariff on imports from Country B. Now tB = 0, but tC remains at t^* . The domestic prices on goods from Countries B and C are now PB and PTC, respectively. Since PB < PA, Country A