International Economics
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Lecture No. # 26

Good afternoon, today we are going to talk about the regional trade agreements and how do we evaluate the regional trade agreements. Now, these regional trade agreements are allowed under the article 24 of the WTO provision and the reason they allow it is they believe that regional trade organizations will be a stepping stone towards multi lateral liberalization. Now, what it means is that generally there is a belief that if a group of countries form an economic grouping they would have a free trade among themselves and in that manner they can discriminate against the non regional trading partners. So, from outside it looks that RTA's are discriminatory in nature, but the belief in w t o is according to article 24 is that it will be a stepping stone towards multi lateral liberalization. It will not discriminate against the non regional trading partners. So, the bone of contention is that article 24 of the WTO.

Now, you have seen that all these RTA's have sprouted all over, if you see India's if you go to ministry of commerce and look at India's participation in this regional trade agreements, you will see that India participates in many of these. India is trying to align with asean countries, the east Asian grouping of eleven trading partners. India is trying to align with the g c c the gulf cooperation council, which is the gulf countries. India is trying to align with Australia, it India is trying to align with Japan, South Korea, Shanghai corporation, the C I A's republics. India is going to, is eager to have a tie up with the South Africans, with the Brazilians, with the Russians, with the Chinese. So, a you have so many of these regional trade agreements coming in. Now, the problem comes is say for example, if Chinese decides to enter the Canadian market and Canada, U S and Mexico have a free trade agreement and yet the tariffs that they impose on non regional trading partners are different .

Now, if you have a free trade area among three of you and I know that Canada has the highest tariffs, U S is in middle and Mexico has the lowest tariffs then what I will do as a Chinese is that, I will put my product in Mexico and I will hope that because of this free trade area my product will flow in into into Canada. So, I will use that route to reach Canada. Otherwise, if I have to enter Canada I have, the tariffs which are imposed on my products are much higher than the entry via by mexico. So, these are some sort of discrimination discriminatory type of things which can happen. And so, all these rules of origin have come up where you need to decide on the products which are emanating out of one country. So, so then the rules of origin are very extensive and.

So, then in nafta the discussion is all about that if the Chinese products have entered the Mexican market, then it has to have a substantial American content to enter the Canadian market. So, the whole set of rules of origin is about changing the entire product, Chinese product and making it American, Americanized. So, that the products can easily flow in the other countries. So, you have a whole lot of issues regarding this. In India also you have a South Asian free trade area which has come up in 2006, but you have a free trade area among eight countries, but then each country maintains different tariff rates for the regional trading partners. So, if someone wants to provide vanaspati oil and its sees that the Indian markets are charging very high tariffs it will enter through Sri Lanka and because Sri Lanka India have a free trade area, it reaches India through that route. So, we are at loss because our producers are getting affected. We, had maintained certain tariffs Sri Lankans had another set of tariffs. So, then you move so.

So, you have this different levels of economic integration, you have a preferential trading agreement, you have a free trade area, then you have a customs union where you have a common external tariff for all the regional members. So, the first level is a preferential trading arrangement where if five partners comes together, then they will say we will provide some relief on products which are coming from the regional trading partners. Some tariff relief, some lower customs duties. Then you have free trade area where you have zero tariffs for all products originating in the block. Then, you have a customs union. Where, you have a common external tariff for all the regional, for all the non members. So, you have free, you have preferential trading, you have free trade, you have customs union, the different levels of economic integration, then you have a common market where there is free flow of goods, as well as services, as well as factors of production. So, it is not only free flow of goods and services, it is free flow of factors of production. So, say for an example mercosur the south American regional grouping is a customs union and its trying, the talks are going on to move it, from to move from customs union to the common market.

There is another grouping, small grouping called the andearn community. that is like a common market. Is not only free flow of goods and services, but you have free flow of factors of production and the highest form of integrations is what we have seen in Europe. It is called the economic union, where you not only have free flow of goods and services and factors of production, but one common policy for all aspects relating to economy, relating to society, relating to finance, relating to banks and then you have a common currency, you have one central bank, you have one parliament, can you believe it one parliament for the entire group. So, one political policy for all, one central bank, one common currency and besides free flow of goods and services and factors of production that is the highest form.

The South Asians are at that stage, SAFTA South Asian Free Trade Association. So, after this it is customs union, then its common market, then its economic.

So, then Jagdish Bhagwati, the Indian professor whose worked extensively on international trade, specially on trade policy issues he says that this is like a spaghetti bowl because you do not know the product which is which you are consuming is really from China or is it from some other country. Because there are so many these regional trade organizations which has sprouted all over. So, then the question is how to evaluate these regional trade agreements? Is it better for India to align with ASEAN or is it better for India to align with Europe. Now one would think or if you ask a common man he will say Europeans are richer probably it is better that we align with Europe, but things if you evaluate then you have to on certain parameters.

Now, given the things that we have learnt where we have seen that if you reduce tariffs or if you increase exports subsidies, it tends to have an impact on the terms of trade, it will have an impact on consumer surplus, producer surplus and then there will be a net welfare effect. So, then there to evaluate these regional agreements it was way back in 1950s, that professor Jacob Viner introduced two terms called trade creation and trade diversion.

Now, these two terms are used extensively for evaluating the regional trade agreements. So, a regional trade agreement is evaluated traditionally by working out the trade creation and the trade diversion. Trade creation is always welfare increasing. It will always lead to increase in welfare. Trade diversion, most of the time is welfare reducing, but in some cases it can increase welfare.

Now, I will explain the concept of trade creation and trade diversion by giving you an example. Now, trade creation is when the domestic production is substituted by imports from the regional trading partners. So, it substituted instead of producing the same product at home, it is now imported at a lower cost from the trading partners that is like trade creation. So, earlier you were producing at home at some cost, now because of the formation of a regional trading block you can import the same product from a member country at a lower cost. That is trade creation. What is trade diversion? If there was a diversion of trade from non member to member country, that is called trade diversion.

So, you have to evaluate a regional trade agreement by working out trade creation and trade diversion. So, I am going to the board and giving you an example.

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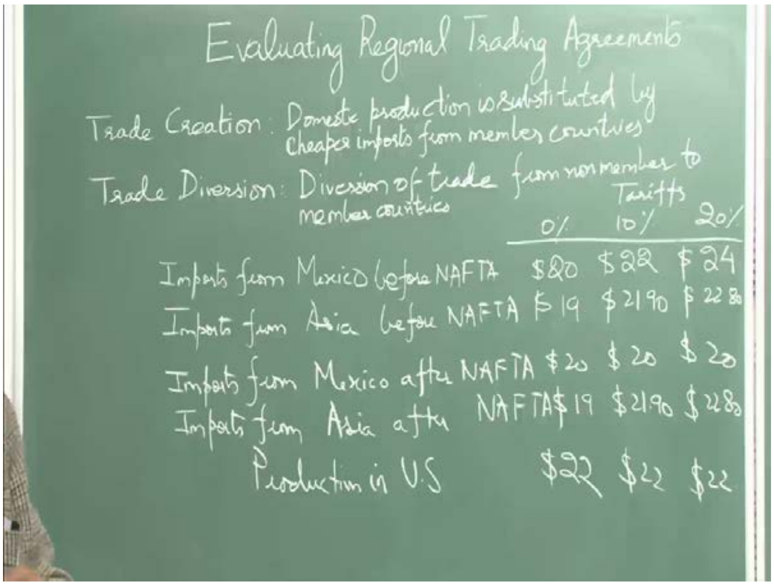

So, that you will be able, better able to understand. What is this concept of trade creation?

And trade diversion?

(No audio 12:45 to 15:55). So, this is a table where in the Mexicans and the Japanese are interested in providing cars to the U S market. And, we have a scenario. We have a scenario of such imports taking place before the formation of a North American free trade area that is before 1994 and post 1994 scenario. Asians are the most efficient producers. Japanese are the most efficient producers. May be now it is the Chinese for various reasons.

So, if the imports come from Asia before 1994 and there is a 0 percent tariff it costs dollar 19, 10 percent dollar 21.90, 20 percent dollar 22.80. If it is coming from Mexico 20 here, 22 and 24. And, if you produce the same cars in U S it will cost you dollar 22.

Now, start with the scenario where you impose 20 percent tariffs, you means the U S impose 20 percent tariff. So, you have to look at this column. Now, if you had imported the cars from Mexico and Asia it would have cost the U S dollar 24 and dollar 22.80, but the local production takes place at dollar 22. So, then before 1994 it is wise for the U S to produce the same car locally. Now, see what happens after 1994 post nafta. Then you form a free trade association Americans, the Canadians and the Mexicans. Now, you can import the same product at dollar 20 from Mexico.

So, then see what happens. The domestic production is now substituted by cheaper imports from the member countries. Now, you can import the same car from Mexico at dollar 20. So, who is gaining? The consumers are gaining here because now they can get the product at dollar 20, Mexicans are gaining because now they can provide they can come in and provide the cars to the U S market. Asians are not affected because in anyway earlier the cars were produced in U S they would not effected they were out of the market. So, after nafta the production instead of producing the same cars at home it is now imported from Mexico. So, consumers gain and the producers in Mexico gain because now they can provide the same product in the U S market. This is scenario, when you have a 20 percent tariff. Look at what happens if there is 10 percent tariff? If there is a 10 percent tariff, if you import from Mexico you are charged dollar 22, for the consumer will get a car at dollar 22, from Asia dollar 21.90 this is before nafta. So, before nafta this is the scenario.

Now, you can easily see that before nafta it is wise for the Americans to import the same car from the Asians. This is before nafta. What is interesting is what happens after the formation of nafta. After the formation of nafta because of the free trade area, now you can get the same car from Mexico at dollar 20. So, there is a diversion of trade from nonmember to member countries. Instead of importing it from Japan or China it is better to import it from Mexico. So, what is the gain? The gain is, one minute it is there will be a small change its 10 percent, it is 20.90sorry, 20.90 please correct this. 10 percent of 19 is 20.90. Please correct this, in any case this will not change the scenario dollar 20.90.

Now, see what happens now you can import the same car at dollar 20 from Mexico. So, the gain is gain for the consumers is 90 cents, but then the government the U S government loses 1.90 as tariff revenue. Why? Because, now it is a free trade area. There are no tariffs which are charged. So, the net effect is loss of 1.90, but a gain of 90 cents for the Americans. So net effect of a trade diversion is negative in this example \.

So, trade creation is always welfare improving, trade diversion most of the time is welfare reducing. So, you can see consumers gain 90 cents, but the U S government loses revenue of dollar 1.90. So, please you have to change this figure also, it is 20.90 please correct this. Scenario will remain the same, the idea is trade creation is welfare improving, trade diversion is welfare reducing. Now, I am going to go to a figure and put through the same idea and we will see the net effect of forming a regional trade agreement. So, I have the same I will go and draw the same diagram this will be U S. I will have a demand curve, I will have an export supply curve and I will consider two countries. Now I will consider Mexico, I will consider the Asians.

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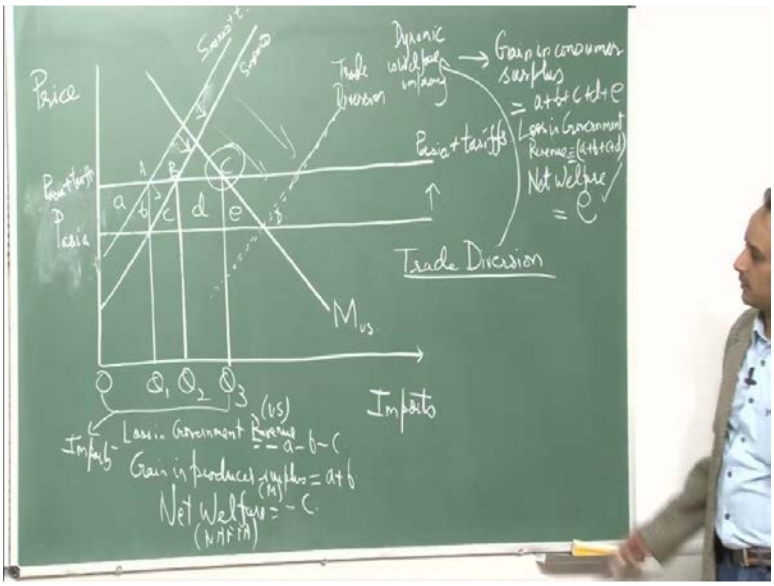

So, I will have imports here and I will have price. I have the demand curve, the import where the, demand curve of U S and I have an export supply curve which I called as P Asia I will have an export supply curve which will shift because of the tariffs. (no audio 24:06 to 25:40) Now, you need to understand this diagram. Again, I am talking of a country U S, which is small in context of the Asian producers providing these cars because there are Chinese, there are Japanese, there are other people who are providing these cars.

So, the supply curve that it faces is perfectly horizontal. Remember, if it was a small country the export supply curve that it faces is perfectly horizontal. Why? Because, if the foreigners try to increase the price nobody will buy it from them. Reason?. So, many of them who are providing these cars to the U S and because perfect competition prevails. So, this line is also the average revenue, the demand curve for each perfect competitive produced. Can you recall that particular thing that when you have it the small country, you had a demand curve and then you had this export supply curve which was which was horizontal and that was interpreted by producers as their demand curve because remember in perfect competition each one is a price taker. So, in context of Asia this is the supply curve, in context of Mexico it is a large country. So, it faces an upward sloping supply curve.

Now, think of a scenario when tariffs are imposed, when tariffs are imposed. So, remember what happens if tariffs are imposed, it is interpreted as a leftward shift of the supply curve or here in case an upward shift of the supply curve. So, the scenario is that when tariffs are imposed, the equilibrium is here at point c out of O Q 3 of imports, O Q 1 is provided by the Mexicans, the rest of the cars come from Asia. This is the scenario before the formation of a free trade area or a regional trade agreement.

Now, see what happens. Now, there is a free trade agreement. So, the supply curve shifts to the right because there are no tariffs now at least for the Mexicans, not for the Asians. For Asians the tariffs remain the same. So, then of the free trade area the Mexicans now provide more of cars from O Q 1 to O Q 2. .Asians provide less of it Q 2 Q 3 the gain in producer surplus is a plus b for the Mexicans. This is for the Mexicans the loss in government revenue because of the formation of a free trade area is a b and c because remember this was the tariffs for this much of imports, this is the loss in revenue, loss in government revenue for U S. So, the net welfare effect of the entire nafta agreement is minus c. Why, how do you interpret it? It is interpreted in the same way as those minus b plus d the dead weight loss, the efficiency loss and this is happening because now please concentrate here the most efficient producers are the Asians. Still, you are dispensing them out because you formed a free trade area and the production is diverted from the efficient producers to a member nation. And that is where you have this efficiency loss, that is captured by this minus c term.

So, trade diversion most of the time is welfare reducing. So, if you have to evaluate a SAARC or a SAFTA? You have to work out trade creation, you have to work out trade diversion. Now, for that you have econometric methodologies, you have a smart analysis, single market partial equilibrium analysis because remember when you are are working out trade creation it is domestic production which is substituted by cheaper imports from the member country. So, you need to have a some demand function and you need to work out the elasticities then only you will be able to work out trade creation. So, this is a need theoretical construct of the fact that trade diversion is most of the time welfare reducing.

Now, see what happens one exception is the case where trade diversion can be potentially welfare increasing. How? If the Mexicans become very excited about the fact that now they are doing business with the U S and they increase the production to that extend, that all the requirements of U S are now met by the Mexicans. So, their production increases from here to this level. Now, this is where whatever were their imports this is been provided by whatever was their demand. It is been met by the supply by the Mexicans.

Now, then what happens then? What is the net effect? The net effect is that the consumers gain because there is a gain in consumer surplus. This is in dynamic sense, trade diversion is welfare improving. So, the gain in consumer surplus a plus b plus c plus d plus e, loss in government revenue a plus b plus c plus d. So, the net welfare positive. So, there is a negative sign here, minus a please do not miss minus a minus b minus c minus d plus a plus b plus c plus d plus e. So, the net welfare for U S works out to be e. It is only in this case, that the U S can gain because the Mexicans are now providing the entire production under the free trade area. So, the net welfare effect is positive.

So, this is the theoretical construct of, this is the concept of trade creation and trade diversion. Now how do we? So, if it is a real data situation if say you want to evaluate whether India is better off by aligning with either the Asian or the Europeans or the Latin-Americans or the South Africans? Then you need to work out both trade creation and trade diversion .

So, we will talk about those models tomorrow. We will talk about the smart analysis, we will talk about the gravity analysis, how trade creation and trade diversion can be worked out. Some figures can come once the figures are there then you can evaluate whether regional trade agreements are beneficial for you or not. So, we will carry on this tomorrow.

Thank you.