

# TRADE CREATION AND TRADE DIVERSION IN THE EU PERIPHERY: THE CASE OF THE NORTH-EAST REGION OF ROMANIA

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**Abstract:**

*Romania's accession to EU in 2007 represented an important moment for the political and economic future of the country. While many received this act in high spirits, it's good and important to maintain a critical view on some aspects regarding the consequences of integration. This paper is concerned with the problems regarding trade (namely the phenomena called trade creation and trade diversion) that resulted after 2007 in one of the poorest and most peripheral region of both Romania and EU – the North-East region. Exploring in depth these phenomena, will help us assessing whether the 2007 accession of Romania was good or bad for this region, regarding its trade flows. The importance of this paper is given by the fact that it is the first one to tackle this issue for this region and by the fact that it signals the future candidates for EU membership (like Ukraine and Republic of Moldova) the problems that might occur because of their peripherality after accession.*

**Key words:** trade creation, trade diversion, North-East region of Romania, EU peripherality.

**JEL classification:** F14, F13

## 1. INTRODUCTION

In 1937, the economist Jacob Viner was hired to investigate some trade aspects regarding the Canadian Federation. He was there as a part of the consulting team that was to submit the case of the Manitoba province to the commission. This province had a predominantly agricultural economic output and its exports were also agricultural products. But an industrial equipment input for the agricultural output was necessary, which could only be imported from other industrial provinces. The main provinces that exported industrial equipment for Manitoba were the ones from the Canadian Federation, especially Ontario, even though the neighboring US provinces had a lower price of the same industrial outputs. The problem was that the Canadian federal tariff was driving the US lower-priced products out of the market, so that the goods were imported from the higher-priced Canadian provinces, and this in turn had negative effects on consumer's goods, on Manitoba's agricultural inputs and on government purchases (Oslington 2014, XXI).

In 1973 United Kingdom joined the then European Economic Community, alongside with two other states: Ireland and Denmark. Joining this community implied for UK also joining the customs union which was then in effect. This meant that UK was no longer entitled to impose its own tariffs for the goods that came from the other member states and had to impose a common European tariff for the goods imported from the rest of the world. In an article entitled *The economic impact of EU membership on the UK*, Thomson and Harari (2013) affirmed that UK had suffered from trade diversion as a consequence of the common European tariff.

The effect of UK accession were for the British trade two; on the one side the goods that came from the EEC member states were more cheaper on the UK market (increasing thus the demand for them), but on the other hand, the products that came from the non-member states had to suffer from the imposition of the common European external tariff, creating thus a situation of discrimination.

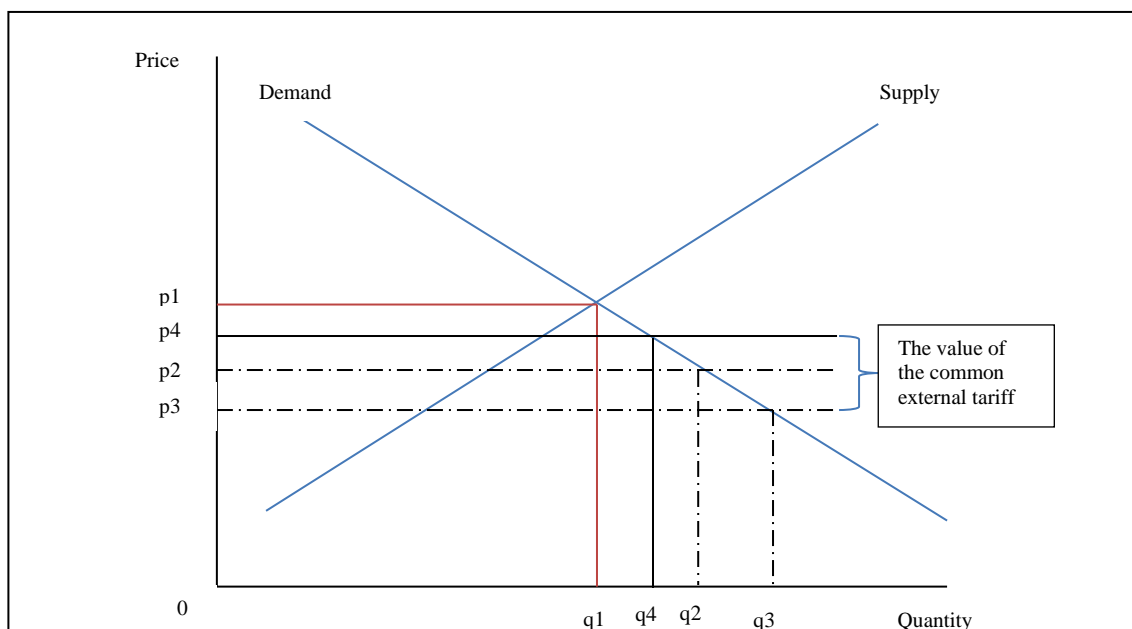
In a case where we would have perfect free trade, or an even tariff imposed to all of the exporters, these events would not occur; the Manitoba's farmers would not buy the higher-priced industrial inputs from Ontario and the British consumers would not buy the expensive French lambs – the products of the most efficient producer will have the biggest demand on the market. But, the

creation of a customs union (like Canadian Federation and the EEC) presents the possibility that the efficient producers from outside the union will have a lower demand on the market because of the higher prices which result from the imposition of the common external tariff.

The cases presented above represents only two of the many examples of trade creation and trade diversion. The second example, the one of UK, could raise a pertinent question for all the members and future members of the EU: does trade diversion and trade creation also occurred (or will occur) at the time of the country's accession? The focus of my research, though, was not on Romania, but only on a specific region, the North-East region; the reason for this is that the country as a whole could have benefited from joining the EU, but this region (a peripheral one both for Romania and EU) could have lost a great deal in terms of trade, as its commercial ties with extra-EU countries (like Ukraine and Russia) were very strong.

## 2. THE BASIC MODEL

The case of a trade diversion and trade creation situation can be represented graphically using the supply and demand model from economics, as in the Figure 1 below.



**Figure 1. A supply demand model representing the case of a trade diversion and trade creation**

Let's suppose that in the graph we have represented the supply and demand curves for lambs in the UK. At the intersection of the supply and demand there will be the equilibrium in the market, which means that for price  $p_1$  there will be sold a quantity  $q_1$ . This situation happens if UK does not import lambs from foreign producers. But let's suppose that the UK will promote an open free-trade policy regarding the lambs; in this case, the UK will import lambs from other countries like New Zealand because the lambs produced in UK are more expensive than the ones produced there and the new equilibrium in the market will be represented by price  $p_3$  and quantity sold  $q_3$ . Now, the accession of the UK to EEC happens in 1973 and the UK government has to impose the Common Customs Tariff (CCT) to the imports of lambs coming from third-party countries and to remove completely the tariff for lambs' imports from within the EEC, like the one from France for example. The price of the lambs produced in France (represented by  $p_2$ ) is still smaller than the price of the lambs from UK, and at the same time smaller than the price of the lambs imported from New Zealand, which is now artificially increased because of the imposition of the CCT (the price is represented by  $p_4$ ). Thus discriminating the producers according to their membership into the

customs union creates a non-optimum situation in trade, where a more efficient producer's goods are discriminated on the basis on their non-membership to the union.

### 3. LITERATURE REVIEW

The early economists have noticed the good and bad effect of customs unions or preferential trade agreements. For example, Adam Smith opposed the Methuen treaty (which stipulated that Britain will not impose taxes on Portuguese wines higher than at a certain ceiling and in return Portugal will not impose taxes on British textile) and the Scottish economist, John Ramsay McCulloch complained that because of it he had to buy the more expensive and low-qualitative Portuguese wine instead of better and cheaper French one. On the other side though, the 1860 Cobden-Chevalier Treaty was mostly regarded as good by the contemporaneous economist because of the benefits of liberalization of trade between France and Britain exceeded the diversions losses (Oslington 2014, XVII).

Still, the modern usage of the actual term was coined by the Canadian economist Jacob Viner, who in 1950 wrote the classical book *The issue of the customs union*. The vast experience he had in the assessment of different trade agreements (Oslington 2014, XVII-XXIV) led him to consider that an *a priori* answer to the question of whether a customs union or any sort of trade agreement with the same effect, it is good or not for a country's trade, cannot be given. The casuistic analysis of the situations is recommended, whereas in some cases the creation of a customs union can be beneficial or a step further in the direction of the creation of a freer trade, and in other cases not. Basically, the theory of Viner says that if the creation of a customs union will determine a country to import commodities of which production prices are higher than in other countries, then that customs union is inefficient.

Based on historical examples, Viner also argues that the political dimension is the most important factor for the creation of a customs union, out of which the last had more of a secondary role in the approach between different political communities. Examples for this case are many like the project for economic union proposed by bishop Roxas in 1665 (to unify politically Austria, Bavaria and Spain against France), like customs unification between Great Britain and Ireland (which began in 1801 with the unification of the Parliaments) or like Prussian led *Zollverein* from the beginning of the 19<sup>th</sup> century (Viner 2014, 115-122). This can also be the case of the contemporary UE, which started in 1951 as a functionalist project thought by Jean Monnet which, with economic means (the unification of the coal and steel industries of the 6 countries), had the objective of achieving an increasingly stronger political union. In these cases where economic union is just a mean of achieving political unions, it is to be expected that the eventual trade losses will be accepted as a negative side effect.

Another aspect explained by Viner is how these trade diversion losses which affect, at least in theory the consumers, are permitted and allowed and not so much taken into consideration by masses. The idea is that the governments (which have to satisfy the voters which are hostile to protectionism) and national businessmen (which have to satisfy their need for protectionist measures) have developed some ingenious mechanisms that under the mask of free-trade, hide the protectionism of the state. An example of wool industry is given: in a state a tariff is imposed on both the wool and wool clothing, but the state only produces wool clothing, without producing wool. The government decides to abolish the duty on wool, but not that on wool clothing. Thus the consumers cannot say anymore that their wool consumption will be costly because of the duty and the national producers of wool clothing are protected against the lower world price on wool clothing (Viner 2014, 59-60). A similar situation where producers and politicians have their interests satisfied at the expense of the consumers and voters, is happening in EU. There are many means through which EU won't allow cheaper imports from third countries to enter its member's states markets; the common external tariff, import quotas, anti-dumping measures (of which EU is the most frequent user, according to WTO) and voluntary exports restraints (where the exporters are pressured politically to reduce their quantities sold in EU) are just four of the main instruments used

to deter cheaper imports to EU (Hix 2005, 379-381). All of these protectionist measures are used under Article 206 (ex-Article 131) which states that (TFUE 2012):

*By establishing a customs union in accordance with Articles 28 to 32, the Union shall contribute, in the common interest, to the harmonious development of world trade, the progressive abolition of restrictions on international trade and on foreign direct investment, and the lowering of customs and other barriers.*

The ideas presented by Viner influenced in a great deal the rest of the studies made after on what concerns the customs unions. Shortly after, some studies focused on the effects that the newly formed European Economic Community had on trade of the member states.

A pioneering study in this matter is that of Balassa, who in 1967 argued empirically that while there are positive effects on European trade that can be attributed to the creation of the EEC (like specialization and subdivision of production process inside the community and increases in trade flows), the trade diversion effects are also present, through the means of imposing increasing discriminatory tariffs and through the CAP. In what concerns the discriminatory rates of internal duties, the empirical evidence suggested that the evolution of the income elasticity of demand decreased for the extra-EEC area goods, while the levels of tariffs between member countries have decreased; the elasticity fell from 2.7 in the period of 1959-1961 to 2.3 in the period 1961-1963 and to 1.4 in the period 1963-1965, while the levels of internal duties (the tariffs among members states) have also decreased (from 70% before 1961, to 60% in 1963 and to 30% in 1965) (Balassa 1967, 16). In other words, the more the members states have reduced the custom tariffs among them, the less the EEC consumers preferred the goods imported from extra EEC area.

In the recent period, most of the studies have approached the gravity pull method for considering the effect of integration on trade. These models take on the example of the Newtonian equation for the force of gravity and changes the terms of the equation, in order to compute the flow of trade between two countries (Baldwin and Taglioni 2006). The trade thus, is considered as a function of the partners' countries national incomes and distances, in their simplest forms (El-Agraa 2011, 142). Many researchers though, prefer to introduce other variables in the equation in order to improve their model. The idea is to develop an *anti-monde* where one can control some variables (like the value of a tariff) in order to check their impact on trade flows.

A study that uses the method of gravity pull is that of Egger and Pfaffermayr (2002), which tried to find out the effects of enlargements on EEC/EU member states. They made a division between core countries of EU (the 6 founder members) and the periphery (the countries that acceded in 1973, 1981, 1986 and 1995) and accounted for their effects on trade. The findings suggest that core-periphery and periphery-periphery trade had experienced stronger positive effects than core-core trade, demonstrating thus that enlargements enhance trade creation.

Wilhelmsson (2006), using again a gravity model, with data that covers the period between 1992 and 2002, have found that there has been significant trade creation between EU and CEECs (Central and Eastern European Countries) and between CEECs; trade diversion (referring to the trade between EU+CEECs and the rest of the world) has been limited and appeared to be mostly a consequence of the 1995 enlargement. The data though, do not cover the 2007 enlargement.

A comprehensive overview of the studies that tackle the problem of measuring the effects of integration on trade is made by El-Agraa (2011). This author considers the studies in this field, from the 60's until late 90's and divides them according to the approaches and methods used. He concludes that although they use very complex methods of trying to compute the trade creation and trade diversion effects, there are two main problems regarding this kind of studies; a problem related to the method, and the other related to the premises of the study (El-Agraa 2011, 142).

The methodological problem for these studies refers to the fact that, in order to measure the effects of accession, one must know what would have happened if integration had not occurred. This approach of developing an alternative world in which all events except one are identical is called *anti-monde*. For this case, the researchers should develop an alternative world where all the events would have been the same (*ceteris paribus*), but one, which is accession to EEC/EU. It is thus understandable why there are so many differences of opinion, given the complexity of this matter (El-Agraa 2011).

There is also a problem regarding the assumption of these studies; most of them assume that the formation of the EEC/EU or the accession to the common market has been the sole factors to influence the patterns of trade (El-Agraa 2011), whereas in the period of 1960's-1990's there were also other structural changes that affected the patterns of trade on global level. An example of this are the GATT rounds on reduction of tariffs among nations; four of these rounds took place in the period of time that spans from 60's to 90's – the Dillon Round (1960-1962), the Kennedy Round (1963-1967), Tokyo Round (1973-1979) and Uruguay Round (1986-1994).

## 5. METHODOLOGY

In the above section, besides the main findings of the authors that were concerned with trade creation and trade diversion effects, there are presented also the main problems encountered by them when tackling this issue; the methodological problem of building a fit model for an anti-monde and the problem of the assumption that the accession to EEC/EU was the only and the most important factors in shaping the trade flows of a certain country/region.

Apart from these general problems, my study faces another specific problem given by the fact that it is concerned with the trade patterns of a region within a country. The Romanian National Institute for Statistics has a certain amount of statistic data about the trade of the country and the 41 counties. The problem is that the trade referring to the component counties of the 8 development regions of Romania does not contain information about trade partners; the data only show the nominal value of imports and exports. Besides that, the only institution that could give full information about the trade of the 6 counties composing the North-East region (The General Directorate of Customs – *Direcția Generală a Vămilor*), refuses to do so on the basis of the fact that I don't have the right to receive this kind of information because I'm not a central institution (which, according to a certain national law, these are the only agents empowered to do so).

Still, I have thought of a way to avoid these three problems; the idea is to determine which are the most prominent trade partners of this region and then to check for their shares in the national imports and exports. Thus, these results corroborated, will show if the region of North-East have lost or gained following the gradual accession to EU. For the first step, I have used a simple derivate of the gravity pull equation (1), with the following form:

$$GPT = \frac{M_{NE}M_P}{d_{NEP}^2},$$

where GPT is the gravity pull for trade,  $M_{NE}$  and  $M_P$  are the “masses” of the NE region's and partner's respectively, which are their GDPs in \$billion, and  $d_{NEP}^2$  is the square distance between NE region and partner.

For the second step, I have checked Romania's trade flows with its main partners from 1996 to 2014 (the available data found on the National Institute for Statistics' database), to determine the weight of trade with each partner in the total value of trade/year and then to make a panel-data statistic, in order to see the evolution of each country's trade weight in the Romanian exports and imports (the absolute values of trade flows with partners are not good for my purpose because it could be misleading – e.g. an increase in absolute value could mean a decrease in weight). The statistics will help in determining which of the partners have lost in shares in Romanian trade, as a consequence of Romania's accession (showing a trade diversion effect for the non-EU countries), and which ones have gained (showing a trade creation effect for UE countries). A fact worth mentioning before presenting the main findings of the study – Romania has started the process of accession from 1994 and from 1997 it started the trade liberalization with EU, of course, by gradually diminishing the tariffs, so it is expected that the statistical effect on trade to be also gradual.

The problems named above about measuring the TC and TD effects will thus be avoided; I won't have to use a very complex anti-monde model to account for changes in trade patterns; I will assume that the North-East region is not a major trade block in the world system and thus all the

structural changes like the GATT rounds have only little influence on the region's trade patterns and that EU's accession is the most prominent factor influencing the trade of NE region (given the closeness); the specific problem about the non-existence of data on trade partners of the NE region is also solved, because indicators of the susceptibility to trade, will be provided by the gravity pull equation results.

## 6. FINDINGS

The results for the gravity pull equation are presented in Table 1 below. These suggest that the biggest trade partners for the North-East region should be Ukraine, with a score of 0.073, followed by Germany with 0.043, Russia, with 0.036, Poland with 0.033 and Italy with 0.021. Republic of Moldova, even though is neighboring the NE region, is ranked very low because of the small GDP it has (smaller than half of the NE region). The other countries taken into consideration have a smaller index than 0.02, spanning from 0.016 (Turkey) to 0.002 (Czech Republic).

**Table 1. GPT results**

Country	GDP (\$bln) 2014	Dist. to NE reg. (km)	GPT index	Country	GDP (\$bln) 2014	Dist. to NE reg. (km)	GPT index
UA	131	189	0.073346	AT	436	1051	0.007894
GE	3868	1339	0.043147	MD	7.9	151	0.00693
RU	1860	1015	0.036109	BG	56	411	0.00663
PL	544	567	0.033843	US	17419	8000	0.005443
IT	2141	1424	0.021117	GR	235	1002	0.004681
TR	774	972	0.016385	SP	1381	2633	0.003984
FR	2829	1940	0.015033	CZ	205	1135	0.003183
HU	138	526	0.009976	CH	10354	8500	0.002866
UK	2988	2527	0.009358	NE reg.	20	-	-

Source: own computations with data from World Bank and Distanta.ro website

The annual ratios of trade for different partners at national level have changed since 1996 – the year before Romania started liberalization with EU, until 2014. The main results are presented in Table 2 below.

**Table 2. The annual ratios of trade**

Exports (diff. 1996-2014)		Imports (diff. 1996-2014)	
Hungary	2.98%	Hungary	6.59%
Bulgaria	2.52%	Poland	4.93%
Czech Republic	2.03%	China	3.76%
Poland	1.86%	Bulgaria	2.81%
Spain	1.48%	Czech Republic	2.52%
France	1.08%	Spain	2.17%
United Kingdom	1.04%	Turkey	1.67%
Germany	0.87%	Germany	0.80%
Russia	0.73%	Austria	0.68%
Ukraine	0.37%	France	0.63%
Moldova	0.33%	India	0.06%
Austria	0.29%	Moldova	-0.13%
Switzerland	0.10%	Greece	-0.83%
China	-0.07%	United Kingdom	-0.98%
Turkey	-0.34%	Ukraine	-1.14%
USA	-0.52%	Switzerland	-1.22%
Greece	-0.79%	USA	-3.59%

India	-1.85%	Italy	-6.82%
Italy	-5.23%	Russia	-11.89%

Source: own computation based on INS Tempo database

In what concerns the natural trade partners of NE region, it can be noticed that there are either small increased in shares or even decreases (with the exception of Poland); the shares of annual exports to Ukraine has increased by 0.37% and the shares of annual imports have decreased by 1.14%. We have to keep in mind that this country is a neighbor to NE region – it can be seen thus the effect of EU border between two trade blocks. The same thing can be observed for the other neighbor, Moldova – only a slight increase in shares for imports, and a decrease in exports. For Germany, the shares in imports have increased by 0.87%, while those for exports increased by 0.87%. The trade with Russia though suffered tremendously, its share in Romanian imports decreasing by almost 12%, suggesting a great trade diversion effect. The trade with Italy also implied losses in imports (by almost 7%) and losses in exports by 5.23%, but these losses do not imply trade diversion (as Italy is a member of EU). The countries that benefited in terms of trade with Romania were Hungary, Bulgaria, China, Poland and Czech Republic, out of which, only one (Poland) is a prominent natural trade partners of the NE region. Thus, trade creation for NE region can be accounted as significant only in the case of trade with Poland (which since 2004 became a member of EU), but only with almost 5% in case of imports and almost 2% in the case of exports.

## 7. CONCLUSIONS

The downside of my study is that TC and TD effects were not measured as it was very difficult to do so in the absence of data available at regional level. Still, the existence or non-existence of these effects can be observed by corroborating the GPT index with the changes in shares in exports and imports of the natural partners of Romania. In a case where a trade block would impose indiscriminatory tariffs for goods traded with partners, it would be normal for neighbors to increase their trade shares while their economies and productivity increase. Keeping this in mind, we could ask ourselves how much would have increased the trade of the NE region in the absence of the EU peripherality factor (e.g. if Romania wouldn't have joined the EU or if its natural trade partners would have joined the same customs union as Romania); but for this, a very complex anti-monde model would have been required. The trade of the NE region suffered from a significant trade diversion effect in relation with its natural trade partners. The peripherality to EU is a great problem, in this perspective, of which media, policy-makers and citizens of EU and especially citizens of the candidate countries to EU membership should be aware of.

## ENDNOTES

- (1) The value of trade flows are regarded as direct proportional with the GDPs and inversely proportional with the costs imposed by distance. I have not developed a complex equation with numerous variables because the rationale of using this equation is just to give me a basic and simple index of the gravity pull for trade. I have used the squared values for distances because it is more fitted; the infrastructure of the NE region allows trade transports to be made mainly on roads, which is one the most expensive way of transport.

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