

PLACE AND IMPORTANCE OF SUCEAVA DISTRICT FOREIGN TRADE IN THE NATIONAL ECONOMY OF ROMANIA

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Abstract:

In the paper „Place and importance of Suceava district foreign trade in the national economy of Romania”, starting from the high degree of foreign trade activity variation on the regional level in Romania, we have analysed which are the place and the importance of this activity in Suceava district. The analysis is performed on data from official statistics, published in the Statistical Yearbook of Romania and Statistical Yearbook of Suceava district in 2009 and the development perspective for the next two years. The indicators used in the analysis refer to exports, imports, balance and degree of coverage in the analysed period.

Key words: *international economic relations, export, import, degree of coverage, evolution tendency.*

JEL classification: C100, C220, R110.

INTRODUCTION

In the globalization process, in this period, the foreign trade of a country is a very important macroeconomic indicator for the internal development of the country, but also for the assessing the place which it occupies in the global economy. In the same time, by interpreting the data on foreign trade of a country we find that there are significant differences at regional and national levels. In this paper we proposed to analyze the contribution of foreign trade from Suceava district to the volume and the dynamics of foreign trade of Romania. We will know some of the most frequently used statistical methods in the analysis of international commerce, beginning with the absolute and relative indicators, the structure and intensity indicators, dynamics and territorial indices a.s.o. which in statistics have the role to highlight the quantitative and qualitative dimension of this activity, the methods and the models for determining the level, the tendency in the evolution of indicators, the dimension of factors influence and the establishing of those with important influence, which can determined the economic decisions at regional and national levels. The statistical analyzed data are such as to give us an image of the weight of international commerce flows of Suceava district in the national, concerning the evolution of these indicators, statistical modeled by trend functions which also allowed the estimation of evolution for the next two years.

METHODS USED IN THE STATISTICAL ANALYSIS OF INTERNATIONAL COMMERCE

The statistical analysis of international commerce uses the basic statistical methodology which includes: the calculation and the analysis of relative indicators (especially the structure and intensity indicators), the methods of calculation, analysis and forecasting of the time series, the analysis methods of the relationship among variables, the factorial analysis (the index number method, the analysis of variation) a.s.o. These methods can be used for the study of indicators at the national or regional levels (by regions of development, by districts a.s.o.).

The structure by flows of the international commerce contains *the export* and *the import* activities. From here results also the first aspect of statistical analysis of international commerce which is the analysis of export and import transactions which at their turn can be structured by

countries and by groups of countries, by categories of economic goods and by markets a.s.o. The calculated indicators are: the volume of foreign trade, the volume of export, the volume of import. The difference between the values of the two indicators is *the sold of trade balance*, in surplus or deficit, as the difference is positive or negative and with an influence on the balance of payments bigger or smaller, according to the report of the commercial operations and the other operations of exchange of a country. To find the answer at a key-question of an open economy which is: "which is the relative importance of the commercial deficit in report with the national production?" it is determined *the degree of coverage the import by export*, as a percentage ratio between the value of exports and the value of imports. By reporting the exports value at the total national sold production or the imports value at the total uses of the same production into a certain period (as a rule, an economical and financial year) we obtain *the degree of openness of a country to the outside*.

Besides the presented indicators, in the statistical analysis of foreign trade of a country also we study the weight of foreign trade in the gross domestic (national) product, the sold of the international commerce operations in GDP, the coefficient of variation of sold in report with the variation of gross domestic product, the weight of export/import in GDP, the coefficient of variation of export/import to the variation of GDP, the volume of foreign trade per capita (calculated at a given moment or in dynamics), the capacity of export/import of the market, the average inclination to export/import, the marginal inclination to export/import, the report between the credits volume and the exports/imports volume, the coefficient of variation of credits volume to the exports/imports variation, the ratio between the credit volume and the foreign trade volume (export and import), the coefficient of variation of the credits volume to the variation of foreign trade volume a.s.o. A significant indicator in the general analysis of the foreign trade, which shows us the measure in which the export was burdened by the payments associated annual to the service of extern debt is *the ratio between the service of extern debt and the export of goods and services*. In the category of structural indicators we include *the rate of structural deviation*, calculated as a percentage ratio between the share of exported goods group in the total export, expressed in percentage and the share of this group of products in the realization of GDP, expressed in percentage. A subunit rate of the structural deviation can be attributed to the non-competitiveness of the group of goods on the foreign market and a higher than one rate corresponds to a group of competitive goods.

Statistics analyses distinct the indicators of international commerce with goods and those of international commerce with services. In this context, we include in the category of international commerce indicators with goods at the macroeconomic level, which give quantitative information on this activity: *the export per capita*, which highlights the extern performance of a national economy, in the sense that as the value of the indicator is higher the economy of the reference country is stronger involved in the goods trade with foreign countries; *the weight of export in GDP*, which highlights the capacity of a country to sell on an increasing competitive international market, but also the relative level of the dependence on external sales markets; *the weight of the export of a country in the world exports*, which has the cognitive valences of the previous indicator, but the perspective of approach is that of world economy; *the rate of completing of GDP by the imports of goods*, calculated as a percentage ratio between the imports and GDP and expressing the economic dependence of a country to the supply foreign markets; *the weight of a country in the world imports*, calculated as an expression of the relative measure of a national market for a potential operator on this market; *the absolute dimension of the sold and the relative significance of the sold of trade balance of a country in report with its own GDP or in report with the total foreign trade*, which estimates the risks of payment in the future transactions with the commercial partners from that country. For the qualitative analysis of the goods international commerce operations it is studies *the share of each group of products in the total of exports and imports* of analysed country, aim in which are used various nomenclatures, such as: The Harmonized Commodity Description and Coding System, Standard International Trade Classification (SITC), National Classification of Economic Activities (CNAE) a.s.o.; *the degree of concentration or diversification of export and import flows*, highlights the weight of different groups of goods in the aim to identify the international specialization and it is calculated as a sum of the shares of the groups with the bigger

weight; *the coefficients of concentration by commodities of exports or imports of a country (the indices of commodities science concentration)*; *the territorial concentration coefficients*, which highlight the weight of each partner country in the total exports respectively imports of the analysed country and *the intensity index of trade between two countries*, used to observe if the value of bilateral commercial changes is bigger or smaller than the expected value, estimated on the base of relative importance of the two countries in world trade, both being used in the research of the geographical distribution of exports/imports of a country; *the degree of diversification of a national economy export*, characterized by the number of exported goods categories; *the coefficient (the index) of diversification*, which expresses the absolute deviation of the export structure of a country from the structure of world export a.s.o.

With the aim to highlight the quality of international commerce, some instruments of analysis combine the exports structure with that of imports. So, it is calculated and analysed *the index of intra-industrial exchanges*, constructed on the assumption that the preponderance of intra-industrial trade in a branch of economic activity expresses the competitive capacity of that industry on the international market, while the preponderance of the inter-industrial changes highlights the more or less narrow specialization of the economy; *the comparative advantage index*, revealed by an economy engaged in the international trade, starting from the premise that a country with competitive economy specializes in the production and international trade of some goods only if it possesses the superiority in their production a.s.o.

A particular aspect of the statistical structural analysis of the international commerce refers to the characterization of the export with services, branch with important weight in GDP formation and the labor force employment, to this activity. Given the heterogeneity of this sector, the elaboration of a unitary system of indicators is difficult, but they were developed indicators by categories of services. So, the statistical indicators used in the international transport services are: *the capacity of transport*, expressed by the length and the density of the transport network, the park of transport a.s.o., *the volume of activity*, expressed by the number of transported passengers, the amount of transported freight, the number of driven kilometers a.s.o. The international market of insurances and reinsurances is statistical characterized by indicators of volume (the number of signed contracts, the volume of insurance premiums, the number of companies on the market a.s.o.), *qualitative and profitability indicators* (the structure of insurance effective demand, the weight reinsurance, ceded risk share, the report between received premiums/claims paid a.s.o.), the potential of insurance market, characterized by the weight the total insurance costs in the total income of each category of insurants a.s.o. In the international tourism statistics, the World Tourism Organization (WTO) has elaborated a coherent system of statistical indicators on domestic and international tourist flows, which complete the brief image offered by the current account of balance of payments, by the indicators revenues/payments resulting from international tourism, respectively the sold of tourism balance. WTO recommends the following criteria to structure the international tourist flows: *the purpose of travel*, criterion by which the tourists are grouped into categories namely: leisure, recreation, vacation; visiting friends or family members; professional interest, including business; health; religion-pilgrimage; other purposes; *the length of travel*, criterion which allows the division in trippers and tourists, *the country of origin/destination*, *the used means of transport*, *the travel expenses* a.s.o.

In the category of relative indicators of intensity used in the analysis of international commerce we include also *the term of gross change (the rate of coverage)*, which shows what amounts of goods must exports a country to import the same amount, calculated as percentage ratio between the export and the import of the country of reference and *the term of net exchange*, determined as ratio between the index of export prices and the index of import price.

Such indicators allow the characterization of the country economic development level (it is considered that a county is even more developed as its trade flows are more intense and efficient), the setting of dimension and structure of domestic market (as the domestic market is more developed, with so its sales possibilities are larger) a.s.o.

In the statistical analysis of foreign trade also we use *the methods of calculation, analysis and forecasting of time series*. So, the statistics elaborates the time series of export, import, sold, degree of coverage a.s.o., which are studied by *graphic representation*, for the identification of general tendency (increase, decrease), the form (linear, parabolic, hyperbolic, exponential a.s.o.), by *the calculation and the interpretation of system of indicators* (absolute, relative and averages), which show the level, the absolute and relative modifications to a base or previous period, the average level of international commerce average indicators, the average absolute and relative modification in a certain time period, by *the identification of time series components* (trend, periodical component: cyclical or seasonal, residual component) and their models of combination, by *the forecasting* of international commerce indicators on the base of extrapolation calculations.

The methods of analysis of the relationship between variables are use in the statistical analysis of the international commerce for the study of stochastic dependence between export and import and for the study of dependence between the indicators of international commerce and other macroeconomic result indicators such as: gross/net domestic/national product, the global product (income), the total volume of transactions (export and import), the population, the surface a.s.o. The sold of trade balance or the sold of foreign payments balance can be analysed in connection with the gross domestic product or the total volume of transactions a.s.o. Besides the specific indicators of correlation analysis (covariance, coefficient of correlation, ratio of correlation) in the analysis of relationship among the variables of foreign trade we compute and analysis indicators such as: *the average ratio of dependence (the coefficient of dependence)*, establishes as a ratio between export/import or sometimes the volume of international commerce and gross domestic product, *the ratio of contribution to the variation of the foreign trade flows*, establishes as a ratio between the variation of export/import and the variation of international commerce.

The index method is much used in the statistical studies of international commerce, in dynamic and territorial. *The dynamic analysis of foreign trade* involves the calculation of a system if indices for each flow of goods (export/import): the value index, the quantitative index (physical volume) and prices index (the unit value index). The three indices being into a relationship of system, the dynamics of value volume is explained on the base of influence of the two determinants. In concrete terms, the indices of unit value for the export and import are calculated on the base of unit values (averages) expressed in Euro, after a Paasche's type formula. Also it is appears the problem of establishing of the measure in which the indices have a *degree of coverage* (the quality of indices to be stable and full expressive, depending on the accuracy of data and the degree of coverage) high enough. In the case of individual and group indices of export and import, in any period, the absolute data must have specified all the elements of identification for each good/consignment of good and especially the structure of registered prices and in these conditions we can estimate that the used indices have a high coverage of the registered reality in the activity of foreign trade. In *the territorial analysis of foreign trade* are used the territorial indices, which importance derives from the fact that highlights the report in which a country exports or imports in certain geographical (territorial) zones or countries, also being the base for calculation the costs of imports, in principal, the measure in which they can be concentrated into a perspective of reorientation or reorganization of foreign trade activity and not least they give information in relationship with the degree of effectiveness of a market for the country which make the exports or the imports. As a territorial index is calculated and analysed also *the territorial index of exchange ratio*, used for the bilateral analysis or for the comparison of a good with average value to the same good that exists on the world market.

Besides with the index method, as a method of foreign trade factorial analysis is used also *the analysis of variance (ANOVA)*, to highlight the measure in which one or more factors (or a combination of them) have an essential influence on a variable of foreign trade (export/import). In concrete it can be analysed, for example, if the good/consignment of goods, the territorial location (regions, districts), the producers form of property a.s.o. influence the export/import level.

In addition to mentioned indicators, the statistics studies also other aspects connected with the international commerce such as: the highlighting in the macroeconomic accounts of the foreign

trade operations, the using of relationships among branches balance in the foreign trade activity, the elaboration of the indices of international prices, the study of supply and demand elasticity, the study of efficiency and profitability in foreign trade a.s.o. Also in the analysis of international commerce are used other statistical methods, depending on the available data, on their mode of organization by types of series (distributions of frequencies, time series, territorial series), accordingly choosing the methods and models for analysis. Also we highlight that in the same time with the intensification of international economic relations, the international commerce flows and the increasing of the complexity of the regional, national and world economy, they have developed the statistical methods and models which capture as much of the quantitative and qualitative dimension of the international commerce indicators.

ANALYSIS OF FOREIGN TRADE IN SUCEAVA DISTRICT AND IN ROMANIA

In the order to analysis the foreign trade we selected for comparison the main indicators of foreign trade which are: the import value, the export value and the degree of coverage. In the same time, we consider that the period 2002-2008 can be used in this sense. In parallel, we will analyse first the dynamics of exports and imports to the year 2002 and the regularity with which the dynamics of the two indicators has produced annual in the respective period (Table 1).

Table 1. Value and dynamics of foreign trade in Suceava district, in the period 2002-2008

Year	Export (thousand euro)	Import (thousand euro)	Degree of coverage (%)	Dynamics of exports to previous year (%)	Dynamics of imports to previous year (%)	Dynamics of exports to the year 2002 (%)	Dynamics of imports to the year 2002 (%)
2002	220348	179699	122,62	-	-	100,00	100,00
2003	223712	178128	125,59	101,53	99,13	101,53	99,13
2004	217862	205861	105,83	97,39	115,57	98,87	114,56
2005	170018	207868	81,79	78,04	100,97	77,16	115,68
2006	157051	244989	64,11	92,37	117,86	71,27	136,33
2007	182998	236720	77,31	116,52	96,62	83,05	131,73
2008	135513	237765	56,99	74,05	100,44	61,50	132,31
Total	1307502	1491030	-	92,22	104,78	-	-

Source: *Anuarul statistic al judetului Suceava*, DJS Suceava, 2009, p. 166-167

From the data of Table 1 result that the two indicators presents, generally, a great degree of variation, both for exports and imports. in the first three years, the degree of coverage is higher than one, with values ranging between 105,83% in the year 2004 and 125,59% in 2003;

- beginning the year 2005, the degree of coverage becomes subunit and in 2008 is registered the smaller value, only slightly more than half of the value of imports is covered by exports (56,99%);

- at the dynamics of exports reveals a decrease tendency compared to the year 2002, being registered the largest decrease in 2008 (61,5%);

- on the opposite side are situated the indices of imports with fixed base which year after year registered systematic and significant increases so that in the year 2008 is reached at 132,31%.

To establish the contribution of Suceava district in the foreign trade in Romania we have calculated these indicators for the national economy, too starting from the values of exports and imports at country level (Table 2).

Table 2. Value and dynamics of foreign trade in Romania, in the period 2002-2008

Year	Export (millions euro)	Import (millions euro)	Degree of coverage (%)	Dynamics of exports to the previous year (%)	Dynamics of imports to the previous year (%)	Dynamics of exports to the year 2002 (%)	Dynamics of imports to the year 2002 (%)
2002	14675	18881	77,72	-	-	100,00	100,00
2003	15614	21201	73,65	106,40	112,29	106,40	112,29
2004	18935	26281	72,05	121,27	123,96	129,03	139,19
2005	22255	32568	68,33	117,53	123,92	151,65	172,49
2006	25850	40746	63,44	116,15	125,11	176,15	215,80
2007	29549	51322	57,58	114,31	125,96	201,36	271,82
2008	33725	57240	58,92	114,13	111,53	229,81	303,16
Total	160603	248239	-	114,88	120,30	-	-

Source: *Anuarul de Comerț Internațional al României*, INS Bucharest, 2009, p. 27

Analysing the data at country level on the same period we can formulate some conclusions such as:

- on the entire period, the values of exports and imports have increased year by year, which means that both the indices with fixed base and those with base in the chain are in all the cases higher than one;

- for export, compared to the year 2002, the dynamics with fixed base shows a general tendency of increase between 106,4% in the year 2003 and 229,81% in the year 2008, year by year registering a ratio of increasing between 6,4% in the year 2003 and 21,27% in 2004. So, we can consider that exist relatively small deviations between the values which shows the annul regularity of exports in Romania in the analysed period.

- in terms of imports, we can ascertain that on the entire analysed period they exceed the corresponding exports values taken independently. Also, in this period the imports have increased significantly from 112,29% in the year 2003 to over three times in 2008 compared with 2002. With the exception of year 2008 when was registered the smaller ratio of increase to the previous year (11,53%), in the most cases the regularity of growth of imports is around 25%.

- consequential, the degree of coverage of imports by exports, in the all years is subunit decreasing from 77,72% in the year 2002 to 58,92% in 2008.

Comparing the situation of Suceava district with that of the entire country we ascertain significant differences in the evolution of the two indicators (the export and the import) (Figure 1 and Figure 2).

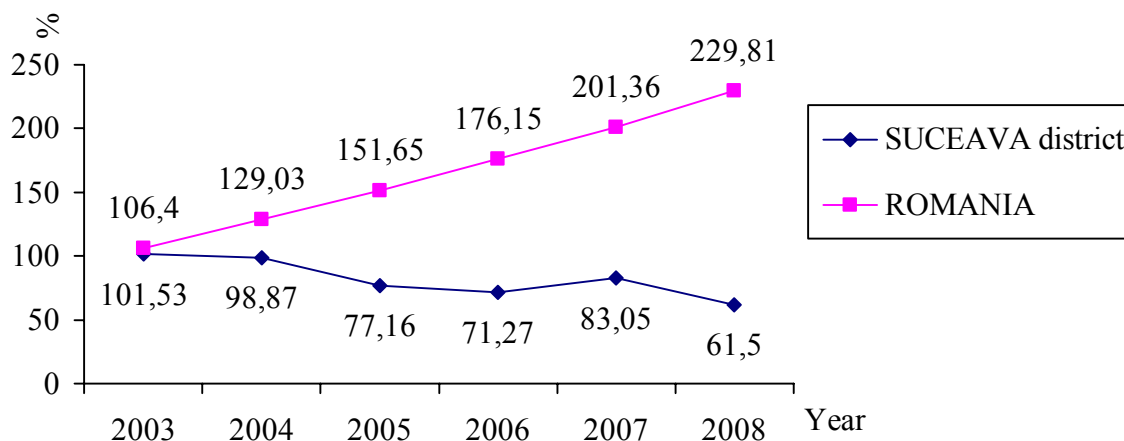


Figure 1. Dynamics of exports compared to the year 2002 (2002=100%)

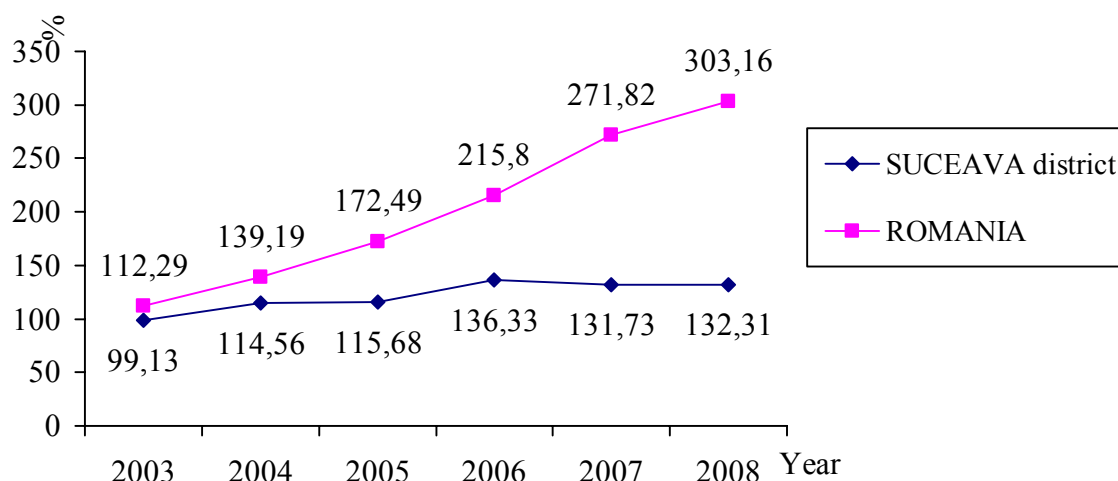


Figure 2. Dynamics of imports compared to the year 2002 (2002=100%)

In Suceava district, as a result of the evolution of the two indicators, in the subperiod 2002-2004, the degree of coverage is higher than one, beginning with the year 2005 the degree of coverage becoming subunit and in the year 2008 it takes the smaller value (56,99%). On the entire period, the degree of coverage starts from 77,72% in the year 2002 and it reaches to 58,92% in the year 2008. It is interesting that in 2008 the degree of coverage in Suceava district (56,99%) is closed to the degree of coverage on the entire country (58,92%).

This parallel suggests us the necessity to correct the values of exports and imports realized in the Suceava district in the period 2002-2008 with the corresponding indices on the entire country and on the their base to compute the differences and the reports between the real and corrected values (tables 3 and 4).

Table 3. Value of exports in Suceava district estimated according to the indices of dynamics on country, in the period 2002-2008

Year	Real values	Corrected values	Difference between the real values and the corrected values	Report between the real values and the corrected values
2002	220348	220348	0	1,0000
2003	223712	234447,3	-10735,3	0,9542
2004	217862	284312,7	-66450,7	0,7663
2005	170018	334163,2	-164145	0,5088
2006	157051	388142,8	-231092	0,4046
2007	182998	443684	-260686	0,4125
2008	135513	506387,5	-370874	0,2676

Table 4. Value of imports in Suceava district estimated according to the indices of dynamics on country, in the period 2002-2008

Year	Real values	Corrected values	Difference between the real values and the corrected values	Report between the real values and the corrected values
2002	179699	179699	0	1,0000
2003	178128	201779,5	-23651,5	0,8828
2004	205861	250128,1	-44267,1	0,8230
2005	207868	309964,4	-102096	0,6706

2006	244989	387798,1	-142809	0,6317
2007	236720	488454,6	-251735	0,4846
2008	237765	544778,9	-307014	0,4364

Analyzing the data from the Table 3 and considering the corrected values for Suceava district as being the exports values which will be realized if they consider the indices of dynamics on the entire country as being representative at territorial level, too we calculated the differences between the real and corrected values and respectively the reports between them. As a result it ascertains that the corrected values of exports are generally bigger than the real values and especially for the years 2005, 2006 and 2008. The reports between the real and the corrected values are subunit on the entire period decreasing from 0,95 in the year 2003 to 0,27 in 2008. At local level it means that the units with activity of export should improve the level and the structure of exports so that they ensure at least the levels of years 2002 and 2003.

Regarding the imports (Table 4) it is found a similar tendency as for exports. So, the corrected values of the imports are higher than the real values. In the Table 5 we calculated what would be the degree of coverage of imports by exports if the Suceava district would be registered the same dynamics at the two indicators that the total country.

By comparing the corrected values for the two components of the foreign trade we ascertain a different degree of coverage from that calculated on the base of real values. In this case, if they would be realized in Suceava district the exports and the imports corrected with the country indices, than it would be registered until the year 2006 a degree of coverage higher than one and beginning with 2007 it would be taken place a decreasing of this at 90,83%. In almost all cases the degree of coverage calculated on the base of corrected values is higher than that calculated on the base of real values. Concrete, in the year 2008, on the base of real data only 56,99% from imports were covered by exports compared with 92,95%, how it would be estimated on the base of corrected values.

Table 5. Degree of coverage of imports by exports on the base of corrected values with the indices on total, in the period 2002-2008

Year	Corrected values for		Degree of coverage of exports by imports (%)
	export	Import	
2002	220348	179699	122,62
2003	234447,3	201779,5	116,19
2004	284312,7	250128,1	113,67
2005	334163,2	309964,4	107,81
2006	388142,8	387798,1	100,09
2007	443684	488454,6	90,83
2008	506387,5	544778,9	92,95

To appreciate the place that it occupies Suceava district in the foreign trade of Romania we have calculated the weight of annul exports and imports (Table 6) and on the base of establishing the annul ranks for the two datasets we found that for the most years the two datasets of ranks are perfect associated.

Table 6. Weight of Suceava district to the total of country, according to the annual exports and imports, in the period 2002-2008

Year	% export Suceava to the total	% import Suceva to the total	Ranks for	
			% export	% import
2002	1,50	0,95	1	1
2003	1,43	0,84	2	2
2004	1,15	0,78	3	3
2005	0,76	0,64	4	4
2006	0,61	0,60	6	5
2007	0,62	0,46	5	6
2008	0,40	0,42	7	7

The table shows that the weight of exports was bigger than the weight of imports until the year 2008, when the weights were almost equal. Also, both the weight of exports and imports declined from one year to another, the decrease being more accelerated to exports.

In conclusion, we can see that is necessary, both on total country and in the Suceava district, to intensify the exports so that to increase the degree of coverage of imports by exports, which in the last years has registered a decline.

FORECASTING FOREIGN TRADE (IMPORT, EXPORT) IN THE SUCEAVA DISTRICT AND IN ROMANIA IN THE YEARS 2000-2008

The importance of commercial exchanges with the exterior is proven both at the economic agents level which have activity of international commerce and at the regional or national level, synthetically and analytically, by the determination of macroeconomic, efficiency and performance indicators of this activity. In this context, it is interest the knowledge of the evolution of international commerce indicators, their tendency during the previous period and considering that in the future they will evolve in the same conditions, the forecasting of their values in the future period. In the figures 3 and 4 are presented the indicators of foreign trade (export, import) in Romania and in Suceava district. We observe that, at the country level, both the export and the import have an increased tendency, linear in the case of export and possible parabolic in the case of import and in Suceava district the tendency is possible linear or parabolic, decreasing in the case of export and increasing in the case of import.

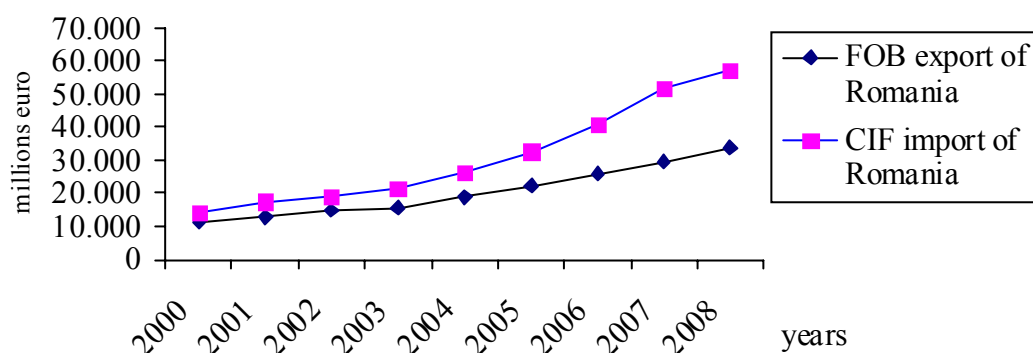


Figure 3. Evolution of international commerce indicators of Romania in the years 2000-2008

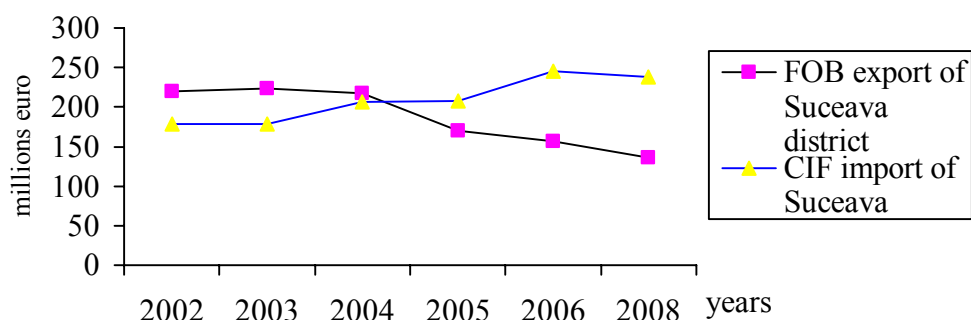


Figure 4. Evolution of international commerce indicators of Romania in the years 2000-2008

In the case of Suceava district, they were used the time series for the years 2002-2008 and at the national level the time series for the years 2000-2008.

Table 7. Forecasting the international commerce indicators in Suceava district and in Romania in the years 2009 and 2010

- millions euro -				
Years	FOB export of Suceava district*	CIF import of Suceava district*	FOB export of Romania	CIF import of Romania
2000	x	x	11.336	14.879
2001	x	x	12.575	16.077
2002	227	172	14.266	18.499
2003	215	189	16.409	22.145
2004	202	205	19.004	27.015
2005	188	218	22.051	33.109
2006	174	229	25.550	40.427
2007	159	237	29.501	48.969
2008	143	243	33.904	58.735
2009	127	247	38.759	69.725
2010	111	248	44.066	81.939
Adjustment functions				
for the FOB export of Suceava district		$\hat{y}_t = a + bt + ct^2 = 188 - 14t - 0,3t^2$		
for the CIF import of Suceava district		$\hat{y}_t = 218 + 12t - 1,19t^2$		
for the FOB export of Romania		$\hat{y} = 19.004 + 2.821t + 226t^2$		
for the CIF import of Romania		$\hat{y}_t = 27.015 + 5.482t + 612t^2$		

* In *Anuarul statistic al judetului Suceava*, the indicators FOB export and CIF import for the years 2000 and 2001 are expressed in millions \$.

The terms were adjusted by the mobile average method, the method of average spore, the method of average index, by linear and parabolic functions. They were used two criteria for assessing the adjustment quality which are: the sum of real terms to be equal with the sum of adjusted terms and the sum of squares of the adjusted values from the real values to be the minimum. The results of the application of these methods are presented in Table 7. In this table we observe that the FOB export adjusted values by the parabola of second degree have a decreased

tendency in Suceava district, which is followed in the forecasting years, 2009 and 2010, too. The CIF import of Suceava district has an increased tendency, which is maintained in the years 2009 and 2010, too. The FOB export of Romania has an increased tendency, which is maintained during the forecasting period, 2009 and 2010, too. The CIF import of Romania has an increased tendency, which is maintained during the forecasting period, 2009 and 2010, too.

Consequently, we observe that in the international commerce of Romania, the export has a positive evolution, but also the import is increasing more accentuated, which shows us that there are still some problems related to the ensuring of efficiency of this activity. In Suceava district the export is decreasing and the import is increasing, so the ensuring of efficiency of this activity must be based on measures of more accentuated increase of exports than imports, both from the part of economic agents engaged in international commerce and from the part of authorities state.

CONCLUSIONS

Statistical analysis of the international commerce is based on the elaboration of a system of absolute and relative indicators as well as the basic statistical methodology applied to specific indicators. From the analysis realised in this paper we have observed important conclusions about the evolution of export and import regularity in Romania and in Suceava district, we have identified the tendency of evolution of these indicators using the analysis and forecasting methods of time series, we have determined the weight of export and import of Suceava district in the country total of the indicators and we have followed the almost perfect correlation of the ranks for the years 2002-2008.

BIBLIOGRAPHY

1. Anghelache, C., *Statistica. Teorie si aplicatii*, Editura Economica, Bucharest, 1998.
 2. Biji, E.M., Lilea, E., Rosca, R.E., Vatui, M., *Statistica aplicata in economie*, Editura Universal Dalsi, Bucharest, 2000.
 3. Biji, E.M., Lilea, E., Rosca, R.E., Vatui, M., *Statistica pentru economisti*, Editura Economica, Bucharest, 2010.
 4. Biji, M., Biji, E.M., Lilea, E., Anghelache, C., *Tratat de statistica*, Editura Economica, Bucharest, 2002.
 5. Cristureanu, C., *Economia imaterialului: tranzactiile internationale cu servicii*, Editura ALL BECK, Bucharest, 1999.
 6. Isaic-Maniu, Al., Mitrut, C-tin, Voineagu, V., *Statistica pentru managementul afacerilor*, Editura Economica, Bucharest, 1999.
 7. Jaba, E., *Statistia*, Editura Economica, Bucharest, 1998.
 8. Korka, M., Begu, L.S., Tusa, E., Manole, C., *Bazele statisticii pentru economisti*, Editura Tribuna Economica, Bucharest, 2005.
 9. Korka, M., Tusa, E., *Statistica pentru afaceri internationale/International Business Statistics*, Second Edition, Editura ASE Bucharest, 2004.
 10. Rosca, R.E., *Caracterizarea relatiilor economice internationale pe baza balantei de plati externe*, in the volume „Romania - Uniunea Europeana de la aderare la integrare”, Editura Pro Universitaria, Bucharest, 2008, p. 677.
- *** *Anuarul de comert international al Romaniei*, INS Bucharest, 2009.
- *** *Anuarul statistic al judetului Suceava*, DJS Suceava, editions 2003, 2009.
- *** *Anuarul statistic al Romaniei*, INS Bucharest, editions 2003, 2009.
- *** <http://www.insse.ro>.