THE MOBILITY OF THE PROCESSES OF REGIONAL INTRA-INDUSTRY SPECIALIZATION IN ROMANIA

Oana Ancuța **Stângaciu**
Vasile Alecsandri Universitaty of Bacău, România
anca_stangaciu@yahoo.com

Abstract: *In analyzing the mobility of the intra-industry specialization processes in Romania in the period of time 2000-2010 on regional level, we started from the assessment of the of the structural convergence of the specialization from the point of view of the econometric connections between the regional indexes Grubel and Lloyd and their dynamic. In order to emphasize the stability in time of the comparative advantages of the intra-industry specialization, we built regression equations in which we used the Lafay indices of specialization from 2000 and 2010, and in order create an integrated image on the mobility in the structure of the distribution of comparative advantages on regional level we used the probabilistic analysis using the Markov chains.*

Keywords: intra-industry specialization, sections in the Combined Register, Grubel and Lloyd specialization indices, Lafay indices, comparative advantages
JEL Classification: C32, F10, R19

INTRODUCTION

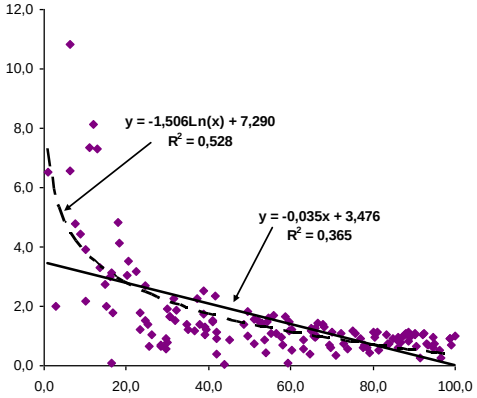
In Romania, the international specialization on regional level suffered extensive transformations, especially during the last years when the Romanian economy was, from all points of view, in full process of integration into the European economic space. One of the priorities of the process of adherence to and integration into the European Union has been the regional convergence; consequently, *an analysis of the dynamic of the regional intra-industry specialization processes from the point of view of the mobility of the distribution of comparative advantages would be really useful for those who have the decision making power in the economic and political environment*.

1. REGIONAL COVERGENCE OF THE PROCESSES OF INTRA-INDUSTRY SPECIALIZATION

Important clues concerning the process of ***regional convergence*** (Persson, 1994, p. 33) ***of the intra-industry specialization*** are offered by the ***econometric connection*** between the regional ***indices*** *Grubel and Lloyd*, calculated on sections included in the CR (Combined Register), for 2000 and their ***dynamic*** in 2010 compared to 2000. Such an analysis supposes building a regression

equation, a correlogram, in which the independent variable represents the ***values of the Grubel and Lloyd regional indices calculated on each section of the CR*** for 2000, and the dependent variable is the dynamic of these indices from 2010 compared to the ones in 2000 (2000 = 100%). The type of connection between the two indices dictates the shape of the regression equation.

Figure 1 - Correlogram of the Grubel and Lloyd regional indices on sections of the C R for 2000 and their dynamic in 2010 compared to 2000; The test report of the regression equation in SPSS



Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,604	,365	,361	1,279

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	132,808	1	132,808	81,190	,000
Residual	230,644	141	1,636		
Total	363,452	142			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	-,035	,004	-,604	-9,011	,000
(Constant)	3,476	,235		14,759	,000

Logarithmic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,726	,528	,524	1,103

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	191,800	1	191,800	157,550	,000
Residual	171,652	141	1,217		
Total	363,452	142			

The independent variable is an_2000.

Coefficients

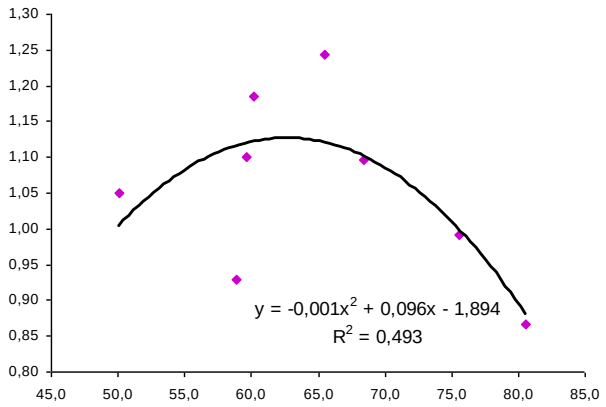
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
ln(an_2000)	-1,506	,120	-,726	-12,552	,000
(Constant)	7,290	,464		15,719	,000

Source: own processing of the data offered by the INS (National Institute of Statistics)

As we can see in figure 1, there is an interconnection between the two indices (Hallet, 2000, p. 7); the logarithmic connection is strong (*the degree of specialization determines its dynamic in proportion of 52,8%*), while the linear one is indirect and of medium intensity (the degree of specialization determines its dynamic in proportion of 36,5%). In other words, the lower the intra-industry specialization of the section in 2000, the higher its dynamic during the period of time subjected to the analysis (according to the linear regression equation, for a 10% lower degree of specialization, its dynamic is higher by 0,35%). Consequently, *on regional level, there is a strong logarithmic convergence of the intra-industry specialization for each section in the CR.*

In order to determine if this convergence on the level of the sections in the CR has also been conveyed on regional level, we made the same type of analysis, this time using the Grubel and Lloyd indices aggregated on regions. In the regression equation, the independent variable is represented by the ***values of the Grubel and Lloyd regional indices*** for 2000, and the dependent variable is the dynamic of these indices in 2010 compared to 2000 (2000 = 100%).

Figure 2 - Correlogram of the Grubel and Lloyd regional indices for 2000 and their dynamic in 2010 compared to 2000; the test report of the regression equation in SPSS



Quadratic

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,702	,493	,290	,106

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	,055	2	,028	2,427	,183
Residual	,057	5	,011		
Total	,112	7			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
an_2000	,097	,056	7,538	1,730	,144
an_2000 ** 2	,000	,000	-7,952	-1,825	,128
(Constant)	-1,901	1,820		-1,045	,344

Source: own processing of the data offered by the INS (National Institute of Statistics)

According to figure 2, there is an interconnection between the two indices, the parabolic connection being a strong one – we must mention the fact that this regression equation explains the connection between the indices *with a probability of only* approximately 80% - (*the degree of regional specialization determines its dynamic in proportion of 49,3%*). In other words, as the degree of intra-industry specialization for that specific region in 2000 increases, its dynamic during the period of time subjected to the analysis increases up to a certain value of specialization and decreases when the specialization becomes higher. Consequently, *on regional level, there is a convergence as well as a divergence of the degree of intra-industry specialization; the lower the degree of specialization, the higher the divergence of regional specialization, and the other way round – as the regional specialization becomes higher, the regions converge towards a certain degree of specialization.*

2. ASSESSMENT OF THE STABILITY IN TIME OF THE SPECIALIZATION PROCESSES

The assessment of the stability in time of the comparative advantages in the intra-industry specialization processes (Alessandrini and Enowbi, 2008, p. 9) requires a regression equation in which the independent variable is represented by the values of the Lafay index registered at the beginning of the period analyzed (2000), and the dependent variable is represented by the values of the same index at the end of the period of time subjected to the analysis (2010).

The regression equation is as follows:

$$LF_{2010} = \alpha + \beta\, LF_{2000} + \varepsilon$$

Where: LF_{2010} and LF_{2000} = the Lafay indices for 2010 and 2000 respectively

α and β = parameters of the linear regression equation

ε = residual error

The interpretation of the results of the regression analysis *according to the regression parameter* (β) can be done as follows (Zaghini, 2003, p. 16):

- if β *equals 1*, then the intra-industry specialization processes *have not suffered modifications* on regional level in the period of time subjected to the analysis;
- if β *is higher than 1* then, in that particular region, *the degree of intra-industry specialization has increased or decreased* respectively for those products *for which there was already an advantage or a disadvantage respectively*; consequently, there is *a process of regional divergence* of the specialization;
- if β *is between 0 and 1*, it means that *on average, the intra-industry specialization have remained the same,* as there were increases for the products with small indices and decreases for the products with high values, thus *a process of regional convergence* of specialization taking place;
- if β is *lower than zero* – the intra-industry specialization processes have reversed

The analysis of the regression parameter alone is not enough to establish exactly if the changes in the structure of the comparative advantages/disadvantages also determine the modification of the degree of intra-industry specialization. In fact, the regression parameter tells us

what happens on average, and does not offer us clear information concerning the modification taking place in the dispersion of the distribution of comparative advantages existing in the intra-industry trade.

In order to find out such information, we must take into consideration the following equation:

$$\frac{VAR(LF_{2010})}{VAR(LF_{2000})} = \frac{\beta^2}{R^2}$$

Where:

-$VAR(LF_{2010})$ and $VAR(LF_{2000})$ = the dispersion of the independent and the dependent variables

-R^2 = the coefficient of determination (the square of the correlation coefficient) of the regression

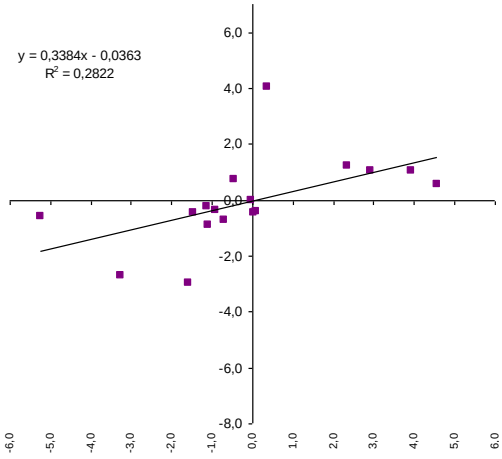
The interpretation of the results can be done from two points of view, as follows:

- From the point of view of the *correlation coefficient (R)* of the regression equation:
  - *If the values are high and tend to 1* – there has been no modification of the relative positions of the products
  - *If the values are low and tend to 0* – there have been important modifications in the structure of the distribution, so that the mobility of the structure is high
- From the point of view of thee *connection between the regression parameters (β) and the correlation coefficient (R)*:
  - If *they are equal* ($\beta=R$) – the dispersion of the distribution remains unchanged
  - If the *regression parameter is higher than the correlation coefficient* ($\beta>R$) – the dispersion increases, which means that the intra-industry specialization might be higher
  - If *the regression parameter is lower than the correlation coefficient* ($\beta<R$) – the dispersion decreases; consequently, the intra-industry specialization might be lower

„*The regression effect*" (given by β) and „*the mobility effect*" (given by *1-R*) give us information concerning the modifications in the distribution of the comparative advantage for the intra-industry trade during a certain period of time. Using these econometric tools for the Lafay indices calculated on national and regional level in 2000 and 2010, we achieved the graphical representations presented in figures 3 and 4.

On national level, *the intra-industry specialization processes remained the same on average* in the period of time 2000-2010, as the regression parameter is between 0 and 1 ($\beta=0,34$) [figure 3]. In addition, the value close to zero of the parameter of the regression equation and the average value of the correlation coefficient ($R=0,53$), indicate the fact that there were, *however, significant changes in the structure of the distribution of comparative advantages for the intra-industry trade.*

Figure 3 - Correlogram of the Lafay indices in Romania on each section of the Combined register in 2000 and 2010; the test report of the regression equation in SPSS



Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,531	,282	,234	1,374

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	11,133	1	11,133	5,898	,028
Residual	28,311	15	1,887		
Total	39,443	16			

The independent variable is an_2000.

Coefficients

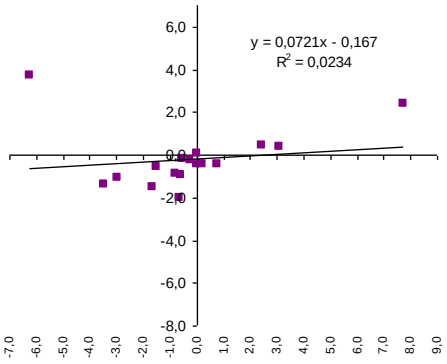
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,338	,139	,531	2,429	,028
(Constant)	-,036	,333		-,109	,915

Source: own processing of the data offered by the INS (National Institute of Statistics)

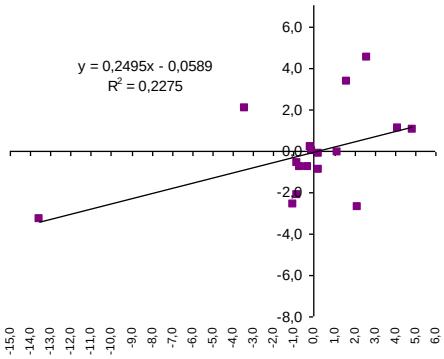
Due to the fact that the parameter of the regression equation is lower than the correlation coefficient, *we can state that* in Romania *there are significant changes in the structure of the distribution of the comparative advantages,* even though *on the whole there is only a slight decrease of the intra-industry specialization,* as *the effect of mobility of the structure compensates the effect of regression. It means that we registered an intra-industry specialization in the sectors in which initially there was a low specialization, while the specialization decreased in the sectors which were initially specialized.*

Figure 4 - Correlogram of the Lafay indices of regional specialization on sections in the C R for 2000 and 2010

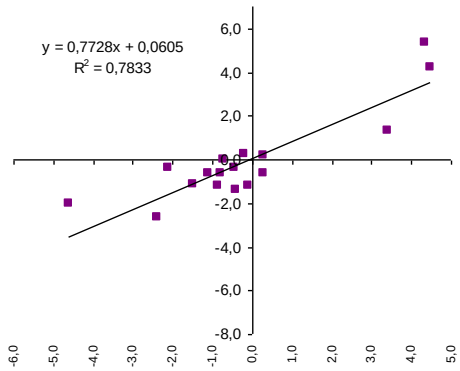
The North-West Region



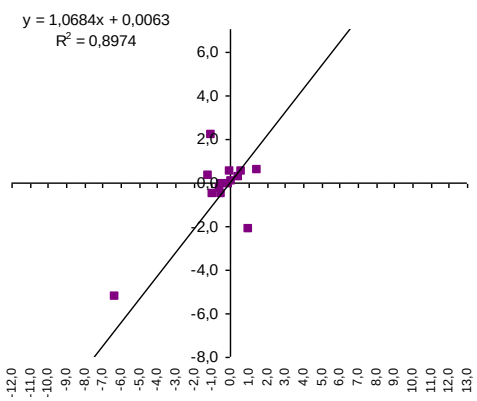
The Central Region



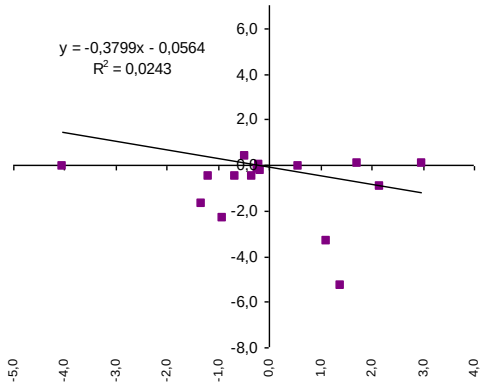
The North-East Region



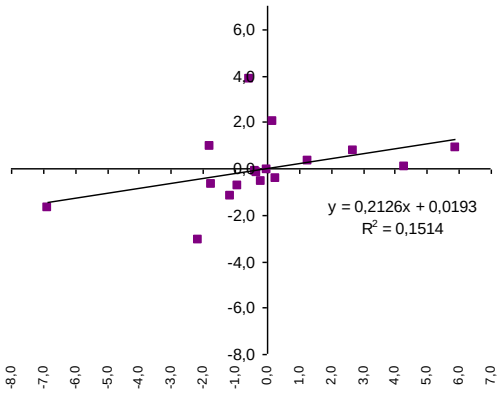
The South-East Region



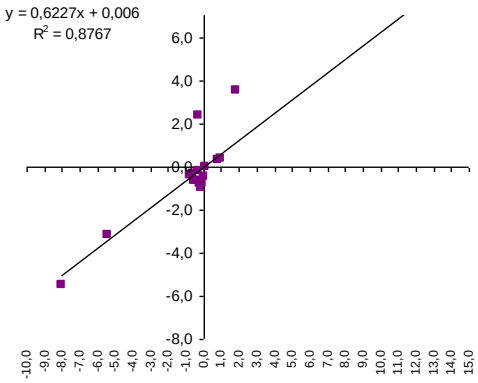
South Muntenia Region



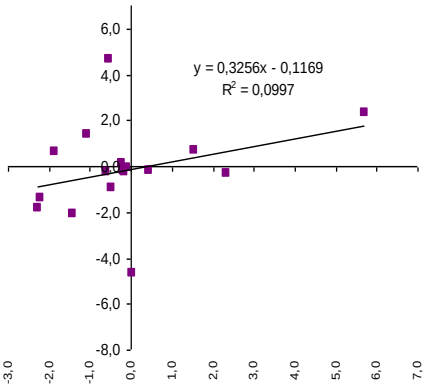
Bucharest- Ilfov Region



South – West Oltenia Region



The West Region



Source: own processing of the data offered by the INS (National Institute of Statistics)

Figure 5 - The report in SPSS for the testing of the regression equations in figure 4

The Nord – Vest Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,153	,023	-,042	1,427

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	,733	1	,733	,360	,557
Residual	30,536	15	2,036		
Total	31,270	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,072	,120	,153	,600	,557
(Constant)	-,167	,347		-,481	,638

The Central Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,477	,228	,176	1,892

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15,813	1	15,813	4,418	,053
Residual	53,687	15	3,579		
Total	69,500	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,250	,119	,477	2,102	,053
(Constant)	-,059	,460		-,128	,900

The North – East Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,885	,783	,769	,982

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	52,335	1	52,335	54,235	,000
Residual	14,475	15	,965		
Total	66,810	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,773	,105	,885	7,364	,000
(Constant)	,061	,239		,253	,803

The South – East Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,947	,897	,891	1,727

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	391,125	1	391,125	131,163	,000
Residual	44,730	15	2,982		
Total	435,854	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	1,068	,093	,947	11,453	,000
(Constant)	,006	,419		,015	,988

South Muntenia Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,156	,024	-,041	4,012

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	6,015	1	6,015	,374	,550
Residual	241,470	15	16,098		
Total	247,485	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	-,380	,621	-,156	-,611	,550
(Constant)	-,056	,973		-,058	,955

Bucharest – Ilfov Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,389	,151	,095	1,439

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	5,541	1	5,541	2,675	,123
Residual	31,067	15	2,071		
Total	36,608	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,213	,130	,389	1,636	,123
(Constant)	,019	,349		,055	,957

South – West Oltenia Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,936	,877	,868	1,005

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	107,633	1	107,633	106,641	,000
Residual	15,140	15	1,009		
Total	122,773	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,623	,060	,936	10,327	,000
(Constant)	,006	,244		,025	,981

The West Region

Linear

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
,316	,100	,040	1,926

The independent variable is an_2000.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	6,166	1	6,166	1,662	,217
Residual	55,654	15	3,710		
Total	61,819	16			

The independent variable is an_2000.

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
an_2000	,326	,253	,316	1,289	,217
(Constant)	-,117	,467		-,250	,806

Source: own processing of the data offered by the INS (National Institute of Statistics)

In most regions, *the intra-industry specialization processes remained mainly the same* in the period of time 2000-2010, as the regression parameter is between 0 and 1, registering an increase of the intra-industry specialization processes only in the South-East, and an inversion of them in South Muntenia [Figure 4].

The low values of the correlation coefficient in most regions also indicate the fact that there were, *however, significant changes in the structure of the distribution of comparative advantages for the intra-industry trade* (except for the North-East, South-East and South-West regions, where the correlation coefficient has high values and consequently, in these regions there were no significant modifications in the structure of distribution).

Since in most regions the parameters of the regression equation are lower than the correlation coefficient (except for the South-East, where they are high), *we can state that* in the regions of Romania *there were significant changes in the structure of the distribution of the comparative advantages although, on the whole, there is only a slight decrease of the intra-industry specialization.*

This means that the regional economy has specialized in intra-industry trade with products which were initially less specialized, and lost its specialization in the sectors which were initially highly specialized.

3. MOBILITY OF THE PROCESSES OF INTRA-INDUSTRY SPECIALIZATION

The statistic tools previously used (the linear regression between the Lafay indices for 2000 and 2010) are useful only in establishing certain coordinates for the modifications in the structure of specialization, since the main disadvantage of the regression is that it offers information on the average modifications in the structure of the distribution of comparative advantages in the intra-industry trade.

Consequently, ***the research*** was ***continued*** through the analysis by means of the **Markov chains**, which offers a comprehensive view on the mobility of the structure of intra-industry specialization on different products. The starting point is the *transition possibility matrix* (Quah, 1996, p. 8). It required, first of all, the classification of the sections in the C R *on 5 categories* (according to the values of the quintiles – the classification of the series into 5 equal parts - the Lafay indices calculated on each section), as follows:

- sections with a *low* degree of specialization (Lafay indices between minimum and Q1)
- sections with a *medium-low* degree of specialization (Lafay indices between Q1 – Q2)
- sections with a *medium* degree of specialization (Lafay indices between Q2– Q3)
- sections with a *medium-high* degree of specialization (Lafay indices between Q3– Q4)
- sections with a *high* degree of specialization (Lafay indices between Q4– Q5)

In order to observe as well as possible *the dynamic of the processes of specialization*, we preferred to build up two matrices – one to follow the evolution *between 2000 and 2005*, and another one which should include the 10 years of transition (*between 2000 and 2010*). After registering the three series of data (the values of the Lafay indices for the 19 sections from 2000, 2005 and 2010) into 5 intervals (the upper limit was included into the interval), the sections were classified so that *4 sections were included into each of the categories of low, medium-low, medium-high and high specialization and 3 sections in the medium specialization category*.

In the probability matrix, of 5 over 5, we registered in each box the probability for a section which was included into a certain category of intra-industry specialization in 2000, to make the transition towards another category of specialization in 2005 and 2010 respectively. For example, in the table included in figure 6, the values on the first line of the matrix indicate the fact that in Romania the probability for a section with a low degree of intra-industry specialization in 2000 to have the same degree of specialization in 2005 is of 75%, while the probability for the intra-industry specialization to increase thus moving the section into the medium-low category is of 25%.

In the same table is calculated the value of the ergodic (stationary) distribution, as well as the value towards which the process of intra-industry specialization tends in case the evolution stays the same.

Figure 6 - The transition probability matrix for the processes of intra-industry specialization in Romania for the period of time 2000-2005 and 2000-2010

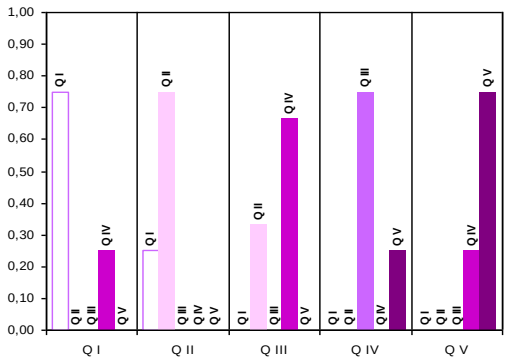
Romania – transition probability matrix

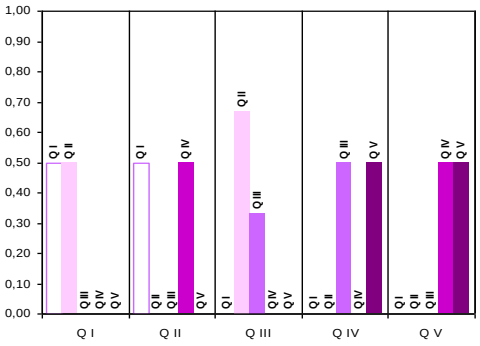
5 years - 2000 - 2005

	I Quintile	II Quintile	III Quintile	IV Quintile	V Quintile
	low	medium-low	medium	medium-high	high
(4)	0,75	0,25	0,00	0,00	0,00
(4)	0,00	0,75	0,33	0,00	0,00
(3)	0,00	0,00	0,00	0,75	0,00
(4)	0,25	0,00	0,67	0,00	0,25
(4)	0,00	0,00	0,00	0,25	0,75
Ergodic	*0,211*	*0,211*	*0,158*	*0,211*	*0,211*

10 years - 2000 - 2010

	I Quintile	II Quintile	III Quintile	IV Quintile	V Quintile
	low	medium-low	medium	medium-high	high
(4)	0,50	0,50	0,00	0,00	0,00
(4)	0,50	0,00	0,67	0,00	0,00
(3)	0,00	0,00	0,33	0,50	0,00
(4)	0,00	0,50	0,00	0,00	0,50
(4)	0,00	0,00	0,00	0,50	0,50
Ergodic	*0,211*	*0,211*	*0,158*	*0,211*	*0,211*





Source: own processing of the data offered by the INS (National Institute of Statistics)

On national level, as we can notice in figure 6, *in the period of time 2000-2005*, the highest values of probability are on the diagonal for the intra-industry specialization situated below the medium or high level, while for the medium and medium-high specialization the high values are under or over the diagonal of the matrix. *In other words, the processes of intra-industry specialization in Romania stayed approximately the same when the degree of intra-industry specialization is below medium or high (the probability of remaining on a low, medium-low or high specialization degree for certain sections is of 75%) while the products with medium and medium-high degree of intra-industry specialization suffered modifications.*

We should also notice that, for the products with medium degree of intra-industry specialization there is a probability of 67% for them to increase their degree of intra-industry

specialization, while the products with medium-high degree of specialization tend to decrease their degree of intra-industry specialization with a probability of 75%.

The situation is different *in the period of time 2000-2010*. Compared to 2000-2005, the highest values are no longer registered on the diagonal of the matrix; consequently, in the Romanian economy there is a high mobility of the distribution of the Lafay index on sections. Values of 50% can be seen under as well as over the diagonal, which means that, *during the last 10 years on national level, comparative advantages have been gained in the intra-industry trade with products in which we used to be less specialized while advantages have been lost for the products in which we used to be specialized.*

In order to make it easier to compare the mobility of the structure on regional level, we calculated ***two mobility indexes (M1 and M2)*** (Zaghini, 2003, p. 26) which quantify the degree of mobility for the whole Lafay distribution on sections. M1 shows the amplitude relative to the terms on the diagonal, the *trace* function of the matrix, while M2 refers to the index it determines. According to figure 7, there are slight differences in the classification of the regions between the mobility indexes M1 and M2 for the period of time 2000-2005. Thus, from the point of view of *M1*, *the most stable processes of intra-industry specialization* would be in the Central, Bucharest-Ilfov and the North-East regions (M1 has low values), while the regions with *the most dynamic economy would be*: North-West and South-Muntenia. As to the classification according to *M2, the lowest values* are in the North-West and North-East regions, while *the highest values* are in South-West Oltenia and in the West.

In *conclusion*, when regarding the evolution of the two mobility indices on the whole, we can state that *the most stable regional economy in the period of time 2000-2005, economy which mostly kept its intra-industry specialization pattern existing in 2000, is in North-West and North-East, while the most dynamic economy, where the specialization processes suffered significant modifications, was in South-West Oltenia and in the West*.

Figure 7 - The mobility indices (M1 şi M2) for the processes of intra-industry specialization during the period of time 2000-2005 and 2000-2010

5 years - 2000 - 2005			10 years - 2000 - 2010		
Regions	M1	M2	Regions	M1	M2
Romania	**0,688**	**0,777**	**Romania**	**0,917**	**0,938**
North-West	0,813	0,813	North-West	0,542	0,893
Center	0,417	0,990	Center	0,667	0,953
North-East	0,542	0,979	North-East	0,729	0,977
South-East	0,667	0,995	South-East	0,542	0,992
South-Muntenia	0,729	0,995	South-Muntenia	0,646	0,992
Bucharest-Ilfov	0,521	0,983	Bucharest-Ilfov	0,833	0,984
South-West Oltenia	0,625	1,000	South-West Oltenia	0,688	0,943
West	0,667	0,997	West	0,667	0,974

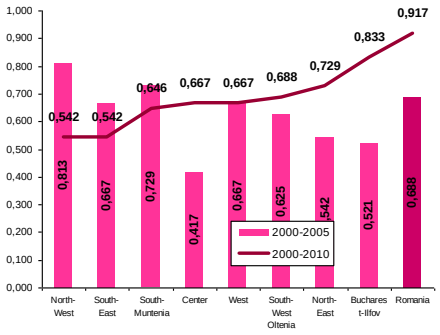
Source: personal processing of the data offered by the INS (National Institute of Statistics)

As to the evolution of mobility in the period of time 2000-2010, the results of the hierarchies are different. Thus, according to *M1, the most stable processes of specialization were found in* the North-West, South-East and South Muntenia regions (M1 has low values), while the regions with *the most dynamic economy* would be: Bucharest-Ilfov and the North-East. According to the hierarchy based on *M2*, *the lowest values* are recorded in the North-West and South-West Oltenia regions, while *the highest ones are in* Bucharest-Ilfov, the South-East and South Muntenia regions.

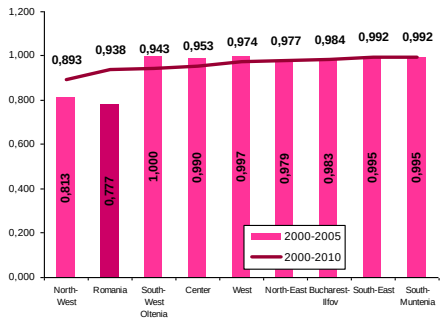
In *conclusion*, regarding the evolution of the two mobility indices on the whole, we can state that *the most stable regional economy in the period of time 2000-2010, economy which mostly kept the intra-industry specialization pattern existing in 2000, is in the North-West and the Central region, while the most dynamic economy, in which the specialization processes suffered significant modifications, was in the North-East and Bucharest-Ilfov regions*.

Figure 8 - The mobility indices (M1 şi M2) for the processes of intra-industry specialization during the period of time 2000-2005 and 2000-2010;

The mobility index M1



The mobility index M2



Source: personal processing of the data offered by the INS (National Institute of Statistics)

CONCLUSIONS

In most regions, on average, *the processes of intra-industry specialization did not change; however, the degree of specialization decreased slightly due to the high degree of despecialization in sectors in which the regions used to be specialized at the beginning of the period subjected to the analysis, decrease which could no longer be compensated by the increase of specialization in other sectors.* Consequently, in the period of time 2000-2010, *comparative advantages were gained in the case of products in which we were less specialized, while advantages were lost in the case of products in which we were specialized, the mobility in the structures of their distribution being very high.* The exception is the South-East region where the degree of specialization increased due to the increase of specialization for those products in which they were already specialized.

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