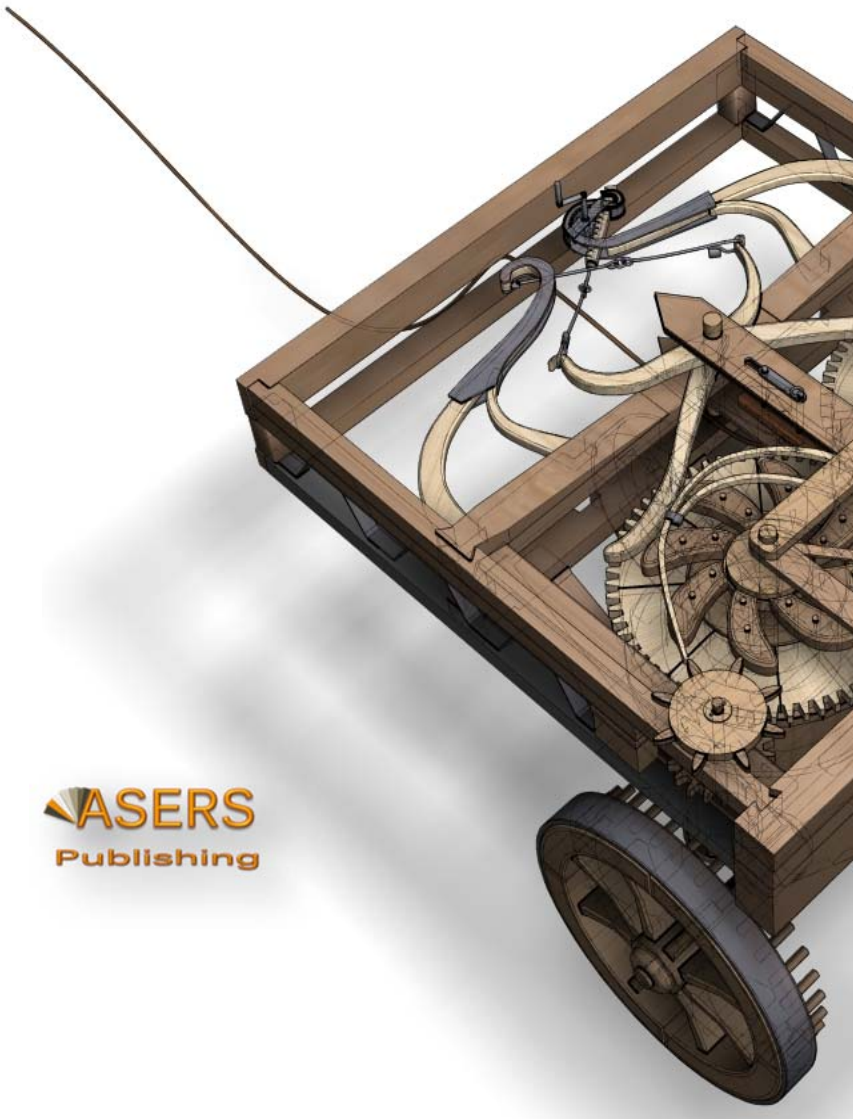
Theoretical and Practical Research in Economic Fields



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Theoretical and Practical Research in Economic Fields

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THE IMPLICATIONS OF REGIONAL COMPETITIVENESS ON REGIONAL DEVELOPMENT POLICY AND ECONOMIC COHESION

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Abstract:

Starting from the calculation pattern of the regional competitiveness in Romania, proposed by GEA in 2007, we proposed to draft a hard matrix where we could draft a comparative analysis of the evolution of the competitiveness of the regions in Romania regarding the values registers in 2017 as opposed to 2007. The research presented takes into consideration the available regional indicators on the level of Romania as well as: the GDP per capita, the growth rate of the gross added value, the share of the gross GDP, the employment rate, the index of the life expectancy, the population with the risk of poverty or social exclusion, research-development expenses in GSP, employees in research-development from the total employed population, tertiary education in research-development, innovative enterprises in total enterprises and so on. We also selected a linear pattern based on 3 factors according to which the regional competitiveness will be analysed that is the economic factors, the social factor and the technologic factor. The data used were collected from the existing database on the level of the national Statistics Institute and on the international Eurostat level.

Keywords: competitiveness, economic cohesion, regionalisation, regional indicators.

JEL Classification: R11; R58; C43.

Introduction

In order to investigate the competitive position of the regions in Romania we start from the methodology proposed by the Group of Applied Economics in two studies carried out by them, the first elaborated in 2007 entitles *Manual for the Evaluation of Regional Competitiveness*, and the second study published in 2010 entitled *Reindustrialisation of Romania*: Policies and Strategies, study proposed by the Ministry of Economics, Commerce and Business Environment.

Starting from this methodology we built an indicator which we consider more adapted to the development particularities of the regions in Romania. We built this indicator selecting criteria which could allow the relevance of the information based on the available date in the national and European statistics. In order to build this multi-criteria indicator of the economic development of the region in Romania, we went through the following steps:

- 1st stage. We selected the researched period so that the result of the analysis should reflect the level of the existing disparities before joining the European Union (respectively in 2007) and might show the evolution of the development regions up to the present, respectively in 2017, pointing out the impact of the regional policies and of the regional governance brought by the EU accession;

- 2nd stage. Although the theoretical and the empirical studies carried out a series of indices appreciating competitiveness of a region, we also must identify the answer to a series of questions, as follows:

- Which are the determiners of regional development?
- Which are the optimum indicators in order to identify the level of regional development?
- To what extent the existence of the data makes pertinent the regional analysis in comparable terms?

Starting from this research hypothesis we chose the economic, social and technologic indicators making the object of this research where we could point out the size of the disparities among the regions and we will generate a hierarchy territorial unit. For the beginning we identified the significant indicators from the perspective of the more complex characterisation of the regional disparities. Our option for the chosen indicators was based on the desire to surprise varied faces of the degree of economic, social and technologic development, but it was limited by the available date on a regional level in the official statistics. Therefore, we decided to use 13 indicators selected based on the relevance and the availability of the official data, avoiding the redundancies at the same time.

- 3th stage. We will carry out a hard matrix based on the three pillars that is: economic, social and technologic. The assessment patters determined us to select a set of indicators for the three pillars, which are: economic, social and technological. The evaluation model determined us to select a set of indicators for the three pillars, by calculating an average share, in an index of regional competitiveness in order to capture a clearer image of the immediate reality in a realistic way.

1. Construction of the Regional Indicator of Competitiveness

The proposed indicators for the analysis we selected based on the high relevance for the regional development and for the growth of the economic competitiveness as we presented it in Table no.1.

The economic aggregate index has a share of 40% from the Indicator of Regional Competitiveness, and the share of each component (according to table no.5.18) are: *GDP per capita, -20%, the rate of growth of the gross added value, - 10% of the labour productivity, -30% of the gross fixed capital formation (% from GDP), -20% respectively the income of the households – 20%.*

Table 1. Construction of the pattern of the three factors forming the Regional Indicator of Competitiveness (IRC)

Index		Share
Economic index (Ei)		**40%from IRC**
	E_1 GDP/capita	20%
	E_2 Rate of growth of the gross added value	10%
	E_3 Labour productivity	30%
	E_4 Gross fixed capital formation (% from GDP)	20%
	E_5 Household income	20%
Economic Index = 20%* E_1+10%* E_2+30% *E_3+20%* E_4+20%* E_5		
Social index (Si)		**30%from ICR**
	S_1 Employment rate (total)	40%
	S_2 Employment rate (women)	20%
	S_3 Index of the average life expectancy	20%
	S_4 Population under risk of poverty and social exclusion	20%
Social index = 40%*S_1+20%* S_2+20%* S_3+20%* S_4		
Technologic index (Ti)		**30%from ICR**
	T1 C&D expenses (percentage from GDP)	40%
	T_2 Employees in research development from total employed	20%
	T_3 Tertiary education specialised in advanced research	20%
	T_4 Innovative enterprises in total enterprises	20%
Technology index - 40%* T_1+20%* T_2 +20%* T_3+20%* T_4		
Regional competitiveness strategy = 40%*Ei+30%*Si+30%*Ti		

Source: built by the author based on the methodology proposed by GEA, 2007

The social aggregate index represents 30% of the Regional Competitiveness Index while the shares of the four sub-indicators taken into consideration are: 40% *for the employment rate*, 10% *for the feminine employment rate*, 20% *for the average life expectancy*. Similarly, with the economic index, and as in the case of the social index we notice the lack of a sub-indicator among those proposed by the GEA model, that is the dispersion of the regional employment rates. At the same time, we noticed relevant the insertion of the indicator regarding the *population under the risk of poverty or social exclusions*, in order to prove the disparities between regions.

The social aggregate index represents 30% from the Regional Competitiveness Indicator, while the shares of the four sub-indicators which were taken into consideration are: 40% for the employment rate, 10% for the feminine employment rate, 20% for the average living standard. Similar

As for the technology index, this represents 30% of the Regional Competitiveness Index, and the distribution

of the shares among its components are: *C & D (percentage from GDP)* represents 40%, *the employees in research* development from total employed population as well as the higher specialised education in advanced research have a share of 20% each, adding to this an indicator which we thought it was relevant, respectively innovative enterprises *as a share in the total enterprises*.

- Stage 4. In what follows we will calculate each index, by normalising the regional statistics in relation to their national average. Therefore, the national average shall be 1.00 (100%), and the regional indices will vary around this value (if it registers an over unity value it means that it is higher than the national average while a sub-unitary value means that it is below the national average).
- Stage 5. At the end, each index will be aggregated by sharing the composite sub-indicator with the presented shares under table 1.
- Stage 6. Determining the regional competitiveness indicators in Romania in 2007 and 2017 and drafting a final classification of the regions.

2. Comparative Analysis of the Economic, Social and Technologic Indicators of the Regional Competitiveness in Romania

The aggregate economic index (Ei), is calculated considering the shares within the research methodology and offers a classification of the regions from the point of view of the economic performance. This criterion cannot be exclusive because there are situations where a region should be placed on a higher position, but its position can be prejudiced by the lack of correlation with the social and the technological indices.

The aggregate economic index calculated point out the classification of the regions in Romania regarding the economic factors which are relevant:

- *GDP per capita* – because reporting GDP to the number of inhabitants shows the living standard in a certain region. This indicator is easy to calculate facilitating the comparison between the living standard from various regions.
- *The growth rate of the gross added value* – the gross added value expresses the excess of goods and services above the value of goods and services for production pointing out the newly created value in the production process.
- *Labour productivity*– measures the efficiency of the human capital in obtaining the regional GDP. Based on this indicator we assess the competitiveness of a region as compared to other regions by appreciating the efficiency of the human resources in reaching the regional GDP. Due to the (statistical) disparities in Romania (and not only), in measuring the number of worked hours allowing a comparison among regions, the calculation of work productivity was carried out by reporting the regional GDP to the total number of employees in a region. The (available) data used are for the years 2008 and 2016.
- *Gross capital formation* (% from GDP) – the higher the ration between fixed gross capital formation and GDP, the more attractive is that region for investments. A higher level of investments leads, on a long and medium term, to a growth of the regional economy and subsequently of the living standard. The outcomes of this indicator as compared to those on the regional level should be interpreted carefully because the economic activity in various regions can be specialised on various sectors of economics, with various degrees of using the fixed capital in the productive process. Therefore, the services sector, generally has a lower rate of the fixed capital formation in GDP as compared to the sector of industrial production.
- *Household income* - includes: money income on sources of origin (salaries, incomes from activities, sales, unemployment aids, pensions, child allowances, scholarships and other social protection benefits, incomes from properties etc.); counterpart for the consumption of food and non-food products (production, stock etc.), determined based on average monthly prices of those products.

Table 2. Economic aggregate index – regional comparison on the level of the years 2007 and 2017

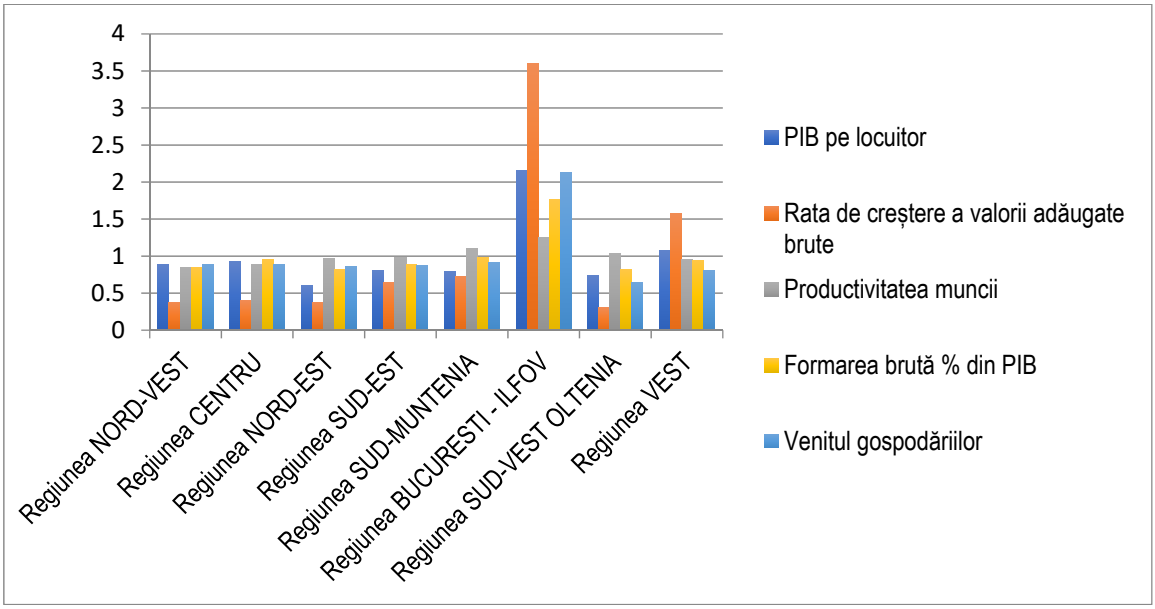
Region	2007	Place	2017	Place	Variation
Region NORTH-WEST	0,817979269	6	1,056051752	2	1,291049532
Region CENTER	0,861560169	5	1,003572402	4	1,164831475
Region NORTH-EAST	0,78302364	7	0,69232205	7	0,884164941
Region SOUTH-EAST	0,871495945	4	0,808258689	5	0,927438267
Region SOUTH-MUNTENIA	0,942059797	3	0,852288102	6	0,90470701
Region BUCHAREST - ILFOV	1,947096491	1	1,906248913	1	0,979021287
Region SOUTH WEST OLTENIA	0,778939952	8	0,657862287	8	0,844560977
Region WEST	1,006755372	2	1,034518785	3	1,02757712

Source: Calculated based on the data INSSE Tempo Online and Eurostat: nama_10r_2gvagr, nama_10r_2gdp, nama_10r_2gfcf, nama_10r_2hhinc

According to these calculated indices, the region Bucharest-Ilfov is situated on the first place, even after summing up the economic indicators. This is, because the region Bucharest-Ilfov is the region with the capital city. It can also be noticed for Romania and for the other EU Member States, the cental-periphery effect, that is the regions including the capital or around the capital are more developed and more competitive than the others.

The region Bucharest-Ilfov is followed by a contingent of seven other relatively homogenous regions, where the economic competitiveness disparities are not that high. The Center Region which was on the second place in the regional classification for many years reaches the 5th place in 2007 and the 4th place in 2017 while the Region North West experiences a special revival with the highest positive variation in the analysed period that is 1,29%. Although it registers a similar GDP per capita in the analysed period, it is the second region in 2017, registering significant labour productivity growth (from 0,84 normal value to 0,95 in 2017) and of the rate of growth of the gross added value (from 0,38 to 1,84 in 2017).

Figure 1. Aggregate economic index – regional comparison on the level of the year 2007



Source: Calculated based on the data INSSE Tempo Online and Eurostat: nama_10r_2gvagr, nama_10r_2gdp, nama_10r_2gfcf, nama_10r_2hhinc

In the entire Southern region (three regions), the regions register a lower regional economic competitiveness index, and the region South West registers the lowest level of the regional economic competitiveness. As compared to the year 2007, in 2017 we notice an improvement of the situation not only in the regions North West and Center but also the other positions remain unchanged. Even if the classification did not change a lot, we notice that there are three regions where an important variation was noticed in the analysed period that is the region North West with 29%, the region Center with 16% and the region West with 2,7%.

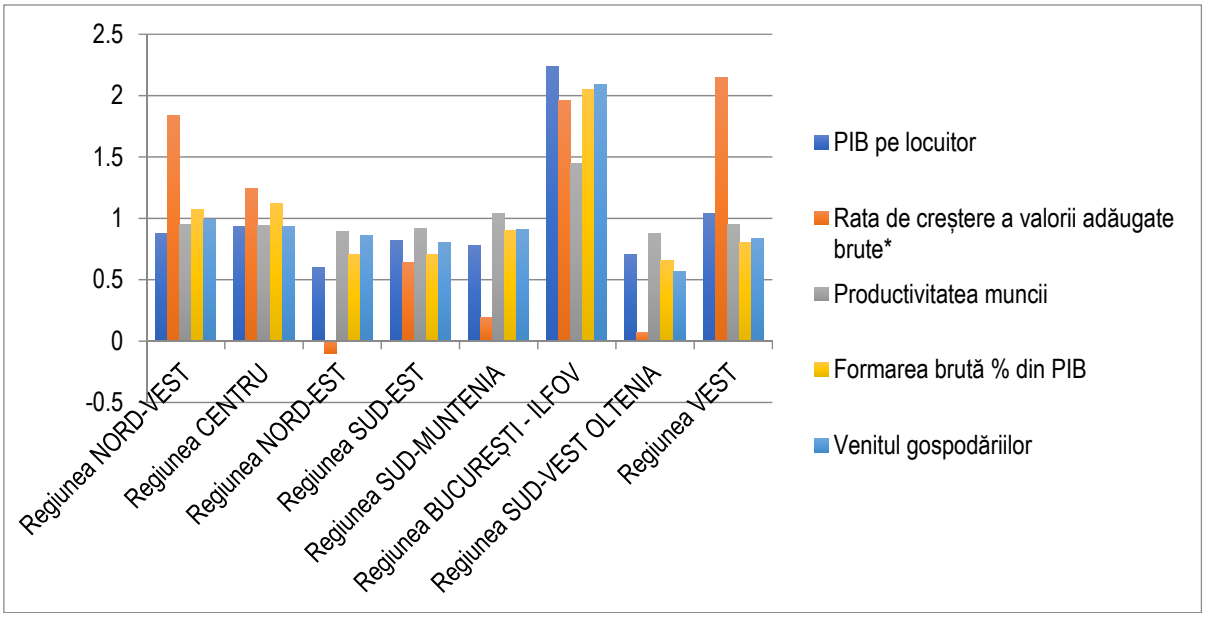
We might conclude that while the disparities between the region with the capital of Romania, that is Bucharest-Ilfov and the other regions with dynamic urban centres, that are North West and West seem to alleviate, the other regions don't have a similar evolution. The disparities in terms of economic competitiveness between the West and the East are still high, because the regions from the South and the East of the country go down in terms of competitiveness while the Western regions (except for the South-Western region) go up. On a national level, comparing the evolution in the period between 2007-2017 we notice the fact that we are confronting with a trend of regional economic convergence.

A second set of indicators which we took into consideration in appreciating the regional competitiveness are *the social indicators (Si).* These maintain a balanced approach regarding the existing situation on the field which might be disproportionate when the economic indicators are analysed.

The calculated social indicator points out the classification of the regions in Romania regarding the social factors appreciated by us as being relevant:

- *Occupation rate* – representing the employed and the unemployed population aged 15-64 years, being expressed in percentages. The employed population includes all people of 15 and above carrying out an economic activity producing goods and services for at least one hour in the analysed period, in order to make income under the form of a salary, payment in nature or other benefits. Increasing the employment rate represents in any conditions a positive evolution. The economic activity is enhanced by a better use of the production factor "labour".

Figure 2. Aggregate economic index – regional comparison on the level of year 2017



Source: Calculated based on the data INSSE Tempo Online și Eurostat: nama_10r_2gvagr, nama_10r_2gdp, nama_10r_2gfcf, nama_10r_2hhinc

- *The feminine employment rate* – The macroeconomic analysis points out that the reform process or the economic growth process has different effects on the various social categories, so that some groups – for example ethnic minorities, mono-parental families, unemployed, pensioners – are negatively affected more than others. From the total of the employed population, the feminine workforce is distinctly analysed due to the significance it has in the productive process: on one hand, it is about the capacity of women to contribute under equal conditions to create value; on the other hand it is about the capacity of women to contribute under equal conditions to create value; on the other hand the labour market has a series of deficiencies (as for example: discriminative attitudes, reduced diversification of the employment, traditions, social assistance) which do not favour using on a wide scale the feminine contingent within the economic activities. For these reasons, a growth of the feminine employment rate represents a more favourable evolution.
- *The index of the average life expenctancy* – shows the relative performance of a region as for the life expectancy at birth. It is reported to the maximum and minimum levels registered in the (national) reference environment. The life expectancy represents an indicator of the life quality. We cannot appreciate a region as being competitive in the situation where people have a low living standard. We cannot asses a region as being competitive if people have a low living standard. The human resource is essential in providing the competitiveness of a company and by extrapolating a region. The life expectancy synthesizes the quality of the environment, the quality of the social services, the level and the influence of the stress factors (GEA, 2007).
- *The population under risk of poverty or social exclusion* - indicator appreciating both the distribution of incomes, the rate of relative poverty and (i) the access to basic goods and services, by the rate of high material deprivation and (ii) the access to income on the labor market, by means of the indicator regarding the very low labour intensity (time for labour from the total available time of the active people from the household). For this indicator pointing out a better situation with low values (as this one is) we used a different normalisation formula:

$$I_n^m = \frac{X_{\max}^m - X_n^m}{X_{\max}^m - X_{\min}^m} \quad (1)$$

where: X_n^m is the value of the m indicator for the region, and $X_{\min}^m$ și $X_{\max}^m$ represents the minimum value, respectively the maximum value of the m indicator.

We thought that these changes of the initial values are necessary in order to be able to make a unitary assessment which should not rely on the nature of the partial indicators or on their different measurement units. By means of this normalisation the region wit the highest territorial performance for a certain indicator will register the value 1, while the region with the lowest performance will have the standardised value 0.

The four investigated indicators refer to the employment both on a global level, to the feminine employment, to the average of the living standard and the population under risk of poverty or social exclusions as indicators of the living standard. In this way it was created the Social aggregate index, detailed in table no.3 where we carried out a classification of the development regions in Romania between 2007 and 2017.

As it was pointed out in Table no.3, although it was placed on the last place from an economic point of view, the region South West tries to compensate, being placed on the sixth place from a social point of view. The last place in this classification is held by the North Eastern Region which maintains the indicators constant during the analysed period, without registering any improvement.

Table 3. Social aggregate index – regional comparison on the level of the years 2007 and 2014

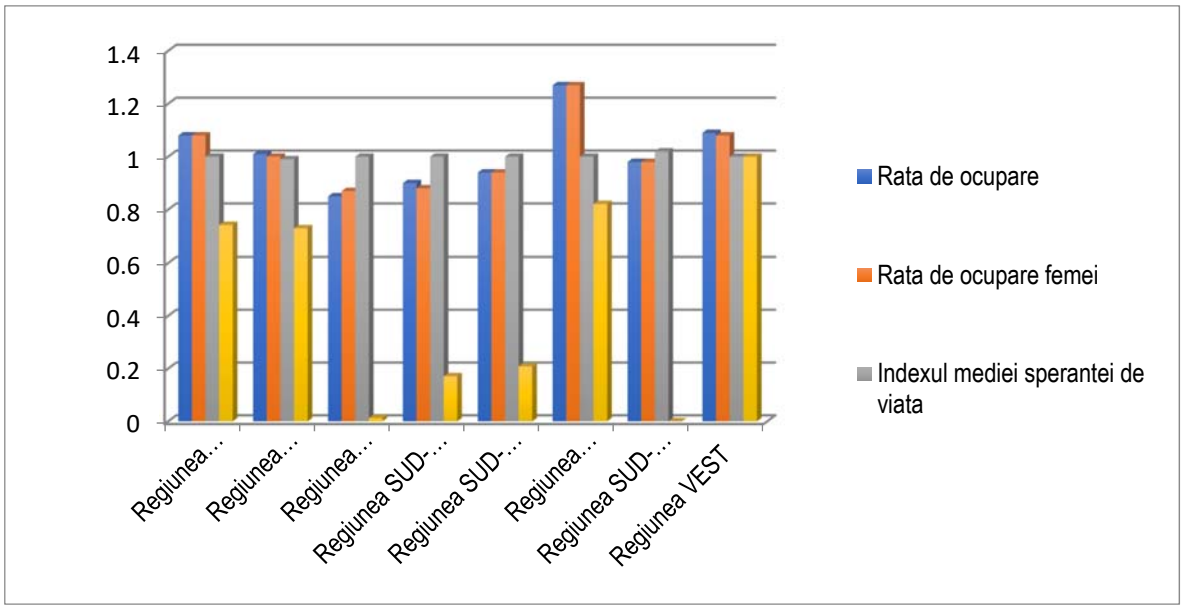
Region	2007	Place	2017	Place	Variation
Region NORTH-WEST	0,99681948	3	1,019355456	2	1,022607881
Region CENTER	0,946625158	4	1,01557622	3	1,072838822
Region NORTH EAST	0,717532848	8	0,720646903	8	1,004339947
Region SOUTH EAST	0,772022679	7	0,782841266	5	1,014013303
Region SOUTH MUNTENIA	0,804513681	5	0,773243919	6	0,961132095
Region BUCHAREST-ILFOV	1,124623316	1	1,19414469	1	1,061817475
Region SOUTH WEST OLTENIA	0,792744969	6	0,76124027	7	0,960258721
Region WEST	1,052224685	2	0,955478385	4	0,908055475

Source: Calculated based on the data INSSE Tempo Online și Eurostat: lfst_r_lfe2emprt, demo_r_mlifexp, ilc_li41

The region Bucharest-Ilfov is placed again on the first place while the region west lost competitiveness. The progress indicator is balanced in the eight development regions, so that in three of the regions, they improved their position in 2017 as opposed to 2007 (North-West, Centre and South East), three registered a decrease of social competitiveness (South-West, West and South Muntenia) and two maintain their place (the first, Bucharest Ilfov and the last North East).

As for the social factor, we cannot notice the same pattern centre-periphery, as in the case of the economic factor. The index reveals a paradox, that is the less developed regions are placed on the last places from the point of view of the social welfare. We notice that the risk of poverty or social exclusion considerably decreased in all regions, more in the North-Western Regions by 32% in 2017 as opposed to 2007 and Centre with 34%. Based on the migration, the employment rate and the feminine employment rate decreased in South West and South Muntenia.

Figure 3. Social aggregate index – regional comparison on the level of the year 2007

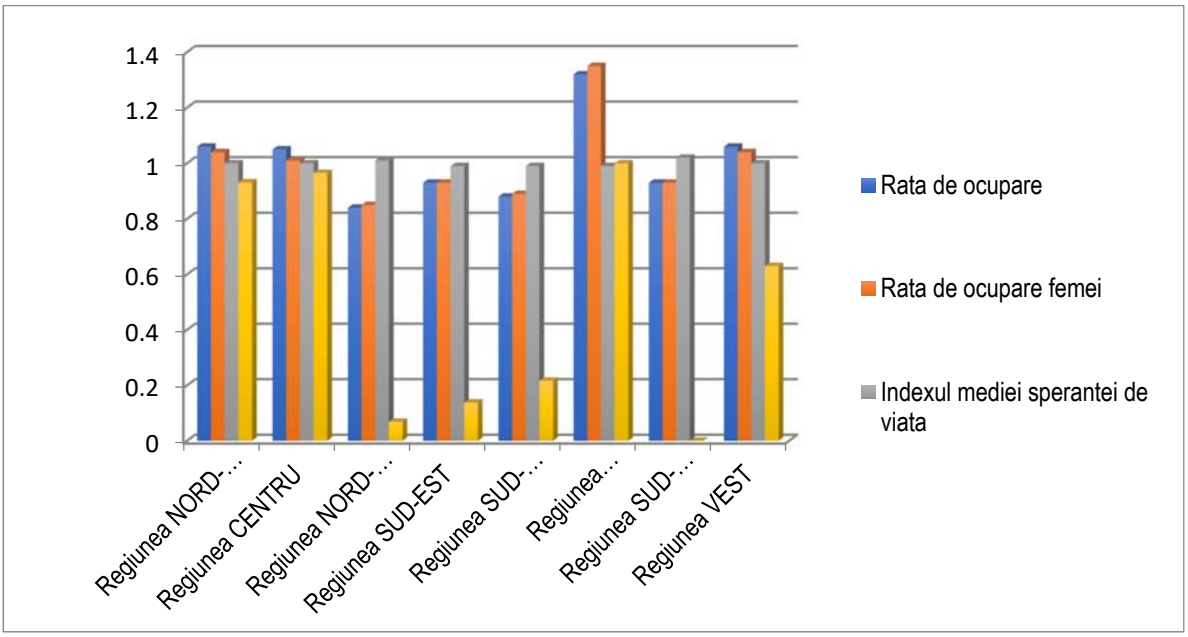


Source: Tempo Online și Eurostat: lfst_r_lfe2emprt, demo_r_mlifexp, ilc_li41

The South West region is on the last place regarding the economic performance and on the seventh place regarding social welfare. At the same time, the North-Eastern region is on the next to last place regarding economic performance and on the last place regarding the social welfare. This phenomenon shows us that these are the main regions which should benefit from support through the regional EU policy and the macroeconomic policy in

Romania, their situation being very weak along the analysed period.

Figure 4. Social aggregate index – regional comparison on the level of the year 2017



Source: Calculated based on the data INSSE Tempo Online și Eurostat: lfst_r_lfe2emprt, demo_r_mlifexp, ilc_li41

The last set of indicators is the one of high technologies and innovation (Ti) as a form of evaluation of the competitive development potential in the analysed regions. In this sense, the evolution is modelled in 2007 as compared to 2017 on a regional level taking into account aspects as financial involvement in the field of research and development (expenses for this field, as a percentage from the GDP of the region), the number of employees in fields related to research and development-innovation and graduates in the tertiary education in this field.

The technology index will take into consideration:

- R & D (percentage from GDP) – The Research and development expenses consist of expenses made by the central and public administration, by the private environment and by the academic environment, with the research and development, the creative work accomplished on a systematic base with the purpose of increasing the knowledge stock and to use this knowledge in order to develop new applications. It shows the development potential of the knowledge-based economy. Moreover, the discrepancy among regions in Romania is higher than this indicator. We chose this indicator because it expresses the context for research-development. For example, the public expenses, even if they are high, they can be very inefficient, and they cannot express a competitive potential.
- The research-development employees from the total employed population – point out the intensity of an economy in creating technology; this indicator related the labour market to competitiveness. The indicator points out both the capacity of an economy to produce high quality goods and services but also the capacity to offer jobs in these sectors. It is calculated as a percentage in the employed population. The higher the percentage, the higher the competitiveness.
- The higher education specialised in advanced research – It is an indicator of tertiary education adequate for the research-development objective. It is an education indicator but also a technological one. The existence of the qualified human capital represents an important aspect of competitiveness. It is calculated as a share of the students with high specialisation in research from the total number of students.
- Innovative enterprises as a share in total enterprises – are the enterprises launching new products or significantly improved products. The concept covers product innovators, process as well as enterprises with unfinalized innovations and refer to active enterprises.

The aggregate situation presented in Table 4 reveals the regions with the highest growth potential of competitiveness from a technological point of view. We also notice the fact that the difference between Bucharest-Ilfov and the other regions is even higher.

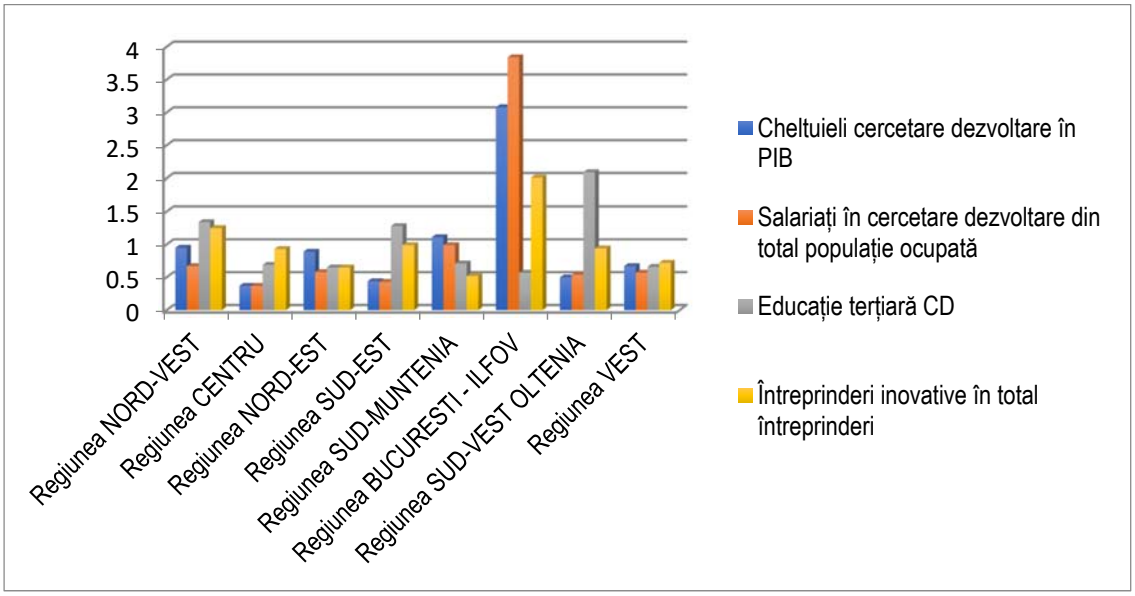
The second region from the point of view of the regional technological competitiveness index is the West region registering a significant growth in the analysed period from the 7th place to the second place but even so it registers a value of the index of less than a half from the index registered in the region which was on the 1st place, Bucharest.

Table 4. Aggregate technology index – regional comparison on the level of the years 2007 and 2017

Region	2007	Place	2017	Place	Variation
Region NORTH-WEST	1,033298626	2	0,955752664	3	0,924953001
Region CENTER	0,546468767	8	0,717082943	6	1,312212126
Region NORTH EAST	0,735127187	5	0,526475804	8	0,716169682
Region SOUTH EAST	0,71654206	6	0,652390948	7	0,910471254
Region SOUTH MUNTENIA	0,8862258	4	0,755387312	5	0,852364388
Region BUCHAREST-ILFOV	2,51468776	1	2,566156251	1	1,02046715
Region SOUTH WEST OLTENIA	0,914514524	3	0,879380367	4	0,961581631
Region WEST	0,657202915	7	0,955301729	2	1,453587176

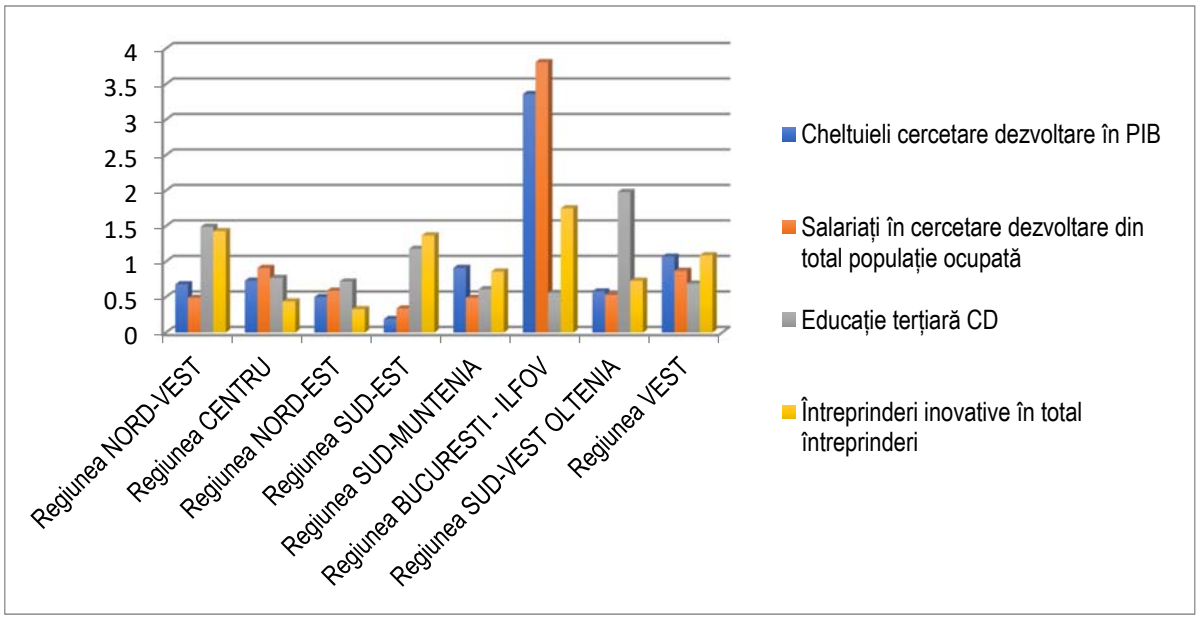
Source: Calculated based on the data INSSE Tempo Online and Eurostat: htec_emp_reg2, hrst_st_rcat

Figure 5. Aggregate technology index – regional comparison on the level of year 2017



Source: Calculated based on the data INSSE Tempo Online și Eurostat: htec_emp_reg2, hrst_st_rcat

Figure 6. Technology aggregate index – regional comparison on the level of the year 2007



Source: Calculated based on the data INSSE Tempo Online and Eurostat: htec_emp_reg2, hrst_st_rcat

The third region regarding the technologic development is the North West region followed on the fourth place by the South West region. Although the region Bucharest Ilfov is in front of the other regions regarding the expenses

with research-development, for the employees from this field and the innovative enterprises, the number of students from this sector decreases being behind region South West Oltenia.

This aspect explains the internal migration of the specialists towards richer regions, after they graduate their studies in poor regions. The highest number of higher education students are in the regions South-West, North-West and South-East. If in the last two ones there was also an increase in the innovative enterprises in the total of enterprises between 2007 and 2017 in the region South Oltenia, the share of innovative enterprises went down.

The regions situated in the Eastern part of the country are less developed from a technological point of view, occupying the last places in the classification as follows: region North East on the eighth place, region South East on the seventh place and region Centre on the sixth place.

The regions experiencing a growth of the Technology Index in the analysed years are the region Center, West and Bucharest-Ilfov. The highest growth was registered in the region west while the highest decrease of the technology index was registered by the region North East.

3. Classification of the Development Regions in Romania According to the Regional Competitiveness Index

As we mentioned previously, an analysis reuniting the 3 balanced indices brings a holistic approach, a better understanding of the factors influencing regional competitiveness. The competitiveness index secures a classification of the competitiveness of the regions from all three points of view. The distribution index is represented in Tables 5 and 6.

As we expected, the region Bucharest-Ilfov is the most competitive one in 2007, but also in 2017, and it is expected to maintain its position in the next years especially due to the labour productivity contact and sustained investments in research and development. In spite of these, the general tendency is to lose the advance towards the competitiveness in front of the other regions which are way behind and which are hardly trying to recover the disparities towards the region Bucharest-Ilfov. Therefore, from an economic point of view, in the analysed period the disparities between the region North West and Centre were solved and from a technologic point of view the disparity between West and Centre.

Table 5. The index of regional competitiveness in Romania in 2007

Region	IEC 2007	Balance coefficient	ISC	Balance coefficient	ITC	Balance coefficient	Competitiveness index	Place
Region NORD-VEST	0,82	0,4	0,88	0,3	1,03	0,3	0,90	2
Region CENTRU	0,86		0,83		0,55		0,76	7
Region NORD-EST	0,78		0,67		0,74		0,73	8
Region SUD-EST	0,87		0,71		0,72		0,78	6
Region SUD-MUNTENIA	0,94		0,74		0,89		0,86	4
Region BUCURESTI – ILFOV	1,95		1,00		2,51		1,83	1
Region SUD-VEST OLTENIA	0,78		0,74		0,91		0,81	5
Region VEST	1,01		0,91		0,66		0,87	3

Source: calculated by the author based on the indices from Tables 2, 3 end 4

Table 6. The index of regional competitiveness in Romania in 2017

Region	IEC 2017	Balance coefficient	ISC	Balance coefficient	ITC	Balance coefficient	Competitiveness index	Place
Region NORD-VEST	1,06	0,4	0,88	0,3	0,96	0,3	0,97	2
Region CENTRU	1,00		0,88		0,72		0,88	4
Region NORD-EST	0,69		0,66		0,53		0,63	8
Region SUD-EST	0,81		0,71		0,65		0,73	7
Region SUD-MUNTENIA	0,85		0,70		0,76		0,78	5
Region BUCURESTI – ILFOV	1,91		1,05		2,57		1,85	1
Region SUD-VEST OLTENIA	0,66		0,70		0,88		0,74	6
Region VEST	1,03		0,85		0,96		0,95	3

Source: calculated by the author based on Tables 2, 3 and 4

In 2007, as well as in 2017, the second region from the point of view of the competitiveness is the region North West benefiting from urban poles with a fast growth. There are some regions which managed to register a higher competitiveness index and to overcome other regions in the analysed years or which kept their place in the classification. It is also the case of the Centre region which managed to migrate from the 7th place in 2007 up to the 4th place in 2017 while the regions Bucharest Ilfov, North West and West maintain their places in the top of the classification for the whole period. The other regions of Romania lost their positions in the analysed period.

In spite of these, we consider that in order to lower the disparity among regions, there are measures which can be taken by regional authorities in order to facilitate and to encourage the regional development: the growth of research and development investments and the stimulation of localising foreign companies in the province regions by offering tax reductions, the possibility to lease land for lower prices etc. We also notice the fact that the North-Eastern region is the most deficitary region in terms of competitiveness that is why we must take measures in order to grow competitiveness on a long term. The Southern part of the country is affected by the economic-social and technological change due to the transformation of the structure of the economic sectors from the agricultural industry to the knowledge-based economy.

Conclusion

The comparative analysis of the position of the regions and the evolution of the regional competitiveness from Romania, taking into consideration the economic indicator and the regional competitiveness indicator, we notice two aspects: in both cases the region Bucharest Ilfov is on the first place, but the difference between the two approaches is economic and the second containing both social and technological indicators, appearing when the region of the capital separates from the other seven regions. The reason for which the region Bucharest Ilfov is situated on the first place due to the fact that being the region with capital it manages easier to draw foreign direct investments, because the capital has all the embassies and the consulates, transforming the region in the most attractive location for the foreign investors. At the same time, it benefits from fast access to the best-known international airport in Romania, the Otopeni Airport, and the distance to the port Constanta is very little.

The transition process proves to be extremely difficult taking into account that on one hand, the opening market and on the other hand the labour force have the tendency to move to the capital, because it provides a higher level of welfare both from an economic point of view but also from a technologic point of view. Despite these, the population in this area does not benefit from a high level of social welfare, so that we identify the risk of migration of the population towards the capital and more probably towards other EU member states.

Another identified trend within the elaborated study is the fact that the regional competitiveness index registers higher values from the Western part of the country, especially regarding indicators as for example employment, industrial production, incomes and revenues, while in the Eastern part of the country the regional competitiveness level is lower. We also identify a pattern of the type centre-periphery of the regional competitiveness, the central regions being more competitive than the regions from the periphery. We can conclude that the regional structure centre-periphery is the most obvious one and the acceleration of the growth and of the economic development from West to East, phenomenon which was accentuated after the accession of Romania to the EU.

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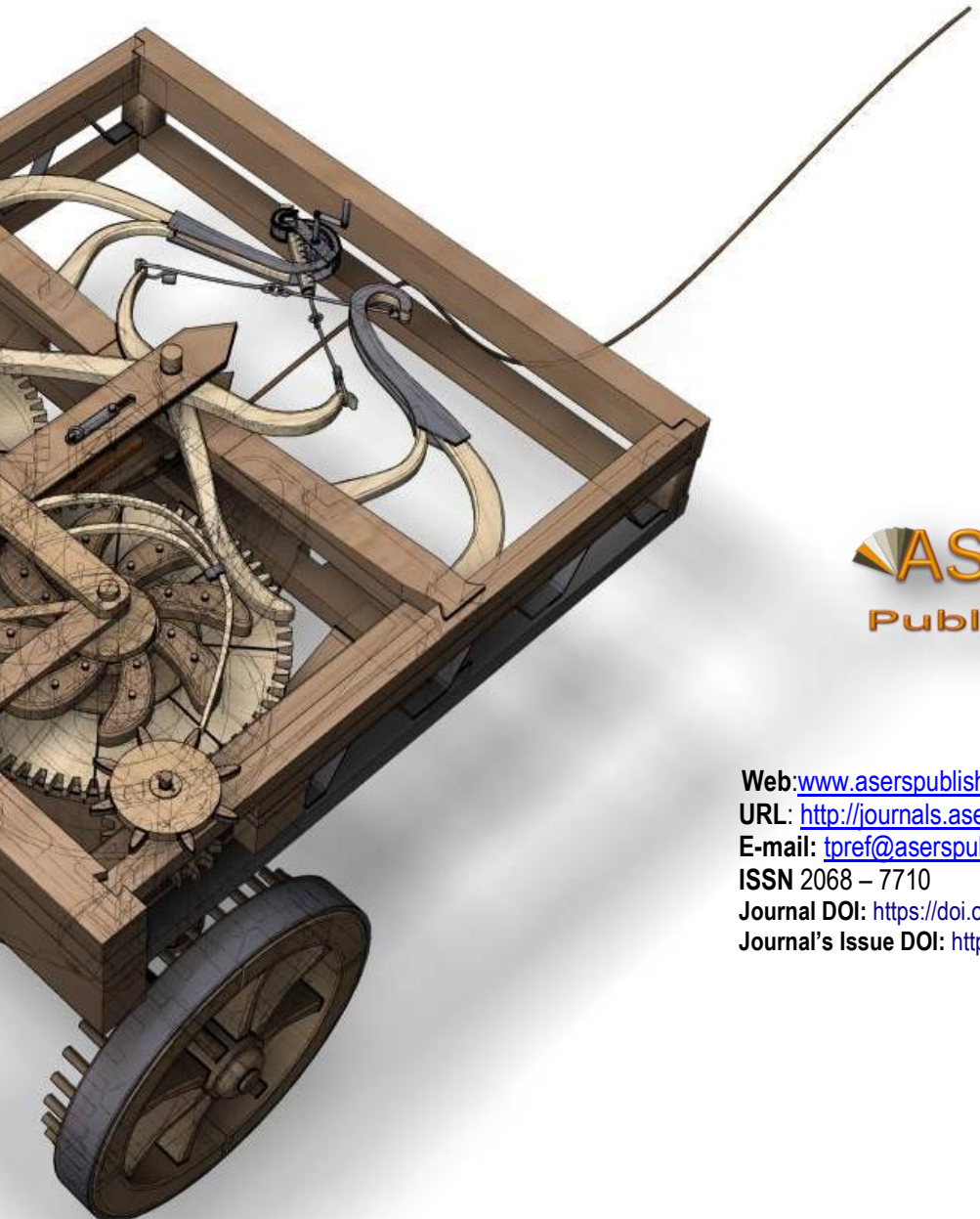

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