

Comparative Study on the Sustainable Economic Growth of European Union Countries

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Abstract: This article expose statistical lawfulness which is formed between gross domestic product growth based on the value of tangible assets (fixed) and the number of persons employed in the economy for 10 countries in Western and Central European Community. To achieve this knowledge we used econometric analysis methodology, identifies form and check equation model based on sustainability criteria aimed intensity correlation significance and residual variable parameter estimators. The study is customized for a number of 9 values which covers the period 2006-2014 and underlying multifactorial development of econometric models for each of the 10 individual states. The research also highlights the importance of gross domestic product

as synthetic macroeconomic indicator dynamics registered in the time interval of two exogenous variables and influence the dynamics that shape distinctly for each state a certain tendency of growth.

Keywords: gross domestic product, tangible assets (fixed), employment, econometric model.

JEL Classification: E24, F22

1. Introduction

Economic growth and development are two goals for the struggling economies of all Member States generating competition sequential ensuring continuity of production of goods and services, by providing major changes in organizations and the business environment but also in the insurance management competitive macroeconomic [1].

Economic theories show that transforming economies is reflected by the nature of relations between states, the thinking of competition policy [2] the change in the quality of life thus creating an environment conducive to adapt to the demands of productive States [3].

Some authors consider that the growth in the economy is determined [4], by putting into use of factors of production in full compliance with primary factors leading to global capital to innovative scientific accumulation; the investment triggers higher advances by imports of competitive technologies [5].

Others, calling into question the lack of technological moments, believe that analysis of the development of each country is a fact that is driven by a complex network of factors that do nothing but demonstrate the differences between nations [6], and show the effects this increase social welfare at the individual level.

According to Nobel laureate Ian Tinbergen, who believes that there are only two ways to increase, we only have two vectors of development [7], one that we can identify in growth under load gross and another called growth through intelligence. Economist lose sight of that growth can be identified and other dynamic indicators as gross domestic product, the value of tangible assets (fixed) number of persons employed and analyzed at country level.

Balance growth, according to economist Leon Walras theory [7] is secured by the lack of unemployment, falling inflation by ensuring price stability by ensuring a

balanced budget, balance of payments by providing a social balance, the stability of a GDP [8], by increasing people employed and the fairness of national income. European nations are convinced that the process of sustainable economic growth [9], is in fact a central element of which goes to ensure a high standard of living [10], but as other economists believe that the process is long lasting, and nations have set a target of this goal.

According to some economists [11], the increase is only a high standard of living that can be assessed in addition to the axis indefinitely without oscillations conditional on GDP, labor market employment, lower unemployment and overall economic diversity [12].

Researchers reveal the dynamics of growth and development by providing ascendancy GDP [13], a country over a longer period of time depending on the value of tangible assets (fixed) and the number of persons employed in the economy, leading so that sizes are not random, leading to quantitative and structural changes at the macroeconomic level that actually can sustain performance and development [14].

In the European Union this growth, much trumpeted globally, has been damaged by the end of 2011. It appears that this economic setback was particularly high especially taken by the influence of lack of confidence, the debt crisis but each member country of the Union and global influence [15].

In 2012, it found a stabilization of financial markets and due to the adoption of measures by European countries, debt consolidation and a slight increase not only in Europe but also worldwide.

Worldwide economic policies [16] will focus on GDP growth to 4% growth in exports and imports, thus increasing the quality of life and social well-being of each individual [17].

The level and growth of economic potential of a state have a synthetic form by measuring gross domestic product. Size and dynamics of gross domestic product [18], are directly influenced by the amount and quality of use, both tangible (fixed) of the country's economy and the people employed in the economy [19]. In the context of this economic logic states that: tangible (fixed) in the economy are a measure of technical equipment, the implementation of investment programs for securing and developing the necessary technological potential economic process development and influencing the defining achievement and GDP growth;

contribution of people employed by its economic efficiency contribute to the economic outturn dimensioned as gross domestic product [20].

In this context of interdependent variables defining system dynamics analysis presents gross domestic product according to the dynamics value tangible assets (fixed) in the economy and that the dynamics of employed people by applying a rigorous econometric modeling methodologies.

Reasons set can provide econometric study support the opportunity to obtain the information necessary to enable the foundation of macroeconomic decisions to promote a real economic progress, sustainable and strengthened.

2. Materials and Methods

To show the size of European economic growth and development, economists have handled various econometric models, which do nothing but demonstrate that the development of macro top rank of states has in trying to increase the quality of life and social welfare [21]. Sizing by econometric language does nothing to demonstrate tokens sustainable economic growth trends highlighting the intensity and used model.

The statistics are used to develop multifactor model of the dynamics of gross domestic product by dynamic value of tangible assets (fixed) in the economy and employment refers to the period 2006-2014 for 10 European countries: Belgium, Czech Republic, Denmark, France, Italy, Luxembourg, Netherlands, Austria, Finland and United Kingdom.

To define mathematical econometric model form of gross domestic product proceeds to analyze the correlation between variables system under study. How it is distributed point cloud offers suggestive and useful information on the form interdependence of system variables (Andrew T., 2003). In these circumstances opting for a general expression of multifactor model to estimate the dependent variable (GDP - y) depending on exogenous variables (total fixed assets x_1 - and total employment x_2), the regression equation $y = a + bx_1 + cx_2 + u$, u is the residual variable, for each of the 10 European countries.

Econometric models relating to the 10 European countries are defined by multifactor regression equations using linear least squares and are listed in Table 1 and Table 2 respectively.

Table 1

Synoptic table for econometric comparison

Econometric indicators	Belgium	Czech Republic	Denmark	France	Italy
Econometric model – regression equation	Multifactorial linear $\hat{y} = a + bx_1 + cx_2$	Multifactorial linear $\hat{y} = a + bx_1 + cx_2$	Multifactorial linear $\hat{y} = a + bx_1 + cx_2$	Multifactorial linear $\hat{y} = a + bx_1 + cx_2$	Multifactorial linear $\hat{y} = a + bx_1 + cx_2$
Model estimators					
“a”	291310.7	-205207.8	115306.3	-3113304	209640.8
Probability	0.2995	0.0138	0.0240	0.0086	0.7375
“b”	0.332499	0.188032	0.295117	0.109588	0.076498
Probability	0.0032	0.0000	0.0000	0.0001	0.0239
“c”	-62.37233	46.75503	-37.42095	160.9899	40.25271
Probability	0.4225	0.0097	0.0130	0.0024	0.0913
Correlation: $R = \sqrt{R^2}$	0.98896	0.99407	0.99362	0.99458	0.77632
R-squared %	97.8037	98.8186	98.7287	98.9191	60.2678
Durbin-Watson stat	1.903087	1.670448	1.916534	2.225745	2.300135
Theil Inequality Coefficient	0.4746%	0.4374%	0.2598%	0.2251%	0.5165%
S.E. of regression – absolute expression	4269.912	1628.224	1547.597	11117.81	20308.45
S.E. of regression – relative expression	1.1648%	1.0748%	0.6369%	0.5519%	1.2652%
Jarque-Bera Probability	0,855536 65.1963%	1.227254 54.1384%	0.256085 87.9816%	1.981320 37.1331%	0.721894 69.7016%
F-statistic	133.5955	250.9420	232.9795	274.5584	4.550559
Ftable: $F_{P=0.9 ; f_1=k ; f_2=n-k}$ k = 3; n = 9	5.14	5.14	5.14	5.14	5.14
Prob (F-statistic)	0.000011	0.000002	0.000002	0.000001	0.062723
Akaike info criterion	19.81778	17.88957	17.78800	21.73169	22.93666

Schwarz criterion	19.88352	17.95531	17.85374	21.79743	23.00241
Heteroskedasticity Test: White	Homoskedasticity	Homoskedasticity	Homoskedasticity	Homoskedasticity	Homoskedasticity
Sample: 2006-2014	Included observations: 9	Included observations: 9	Included observations: 9	Included observations: 9	Included observations: 9

Source: author’s calculus

Methodology to elaborate econometric models offered by the software Eviews, made it possible to present the system of indicators in Table 1 and Table 2. These results show an analytical form expression of the regression equation econometric model for each of the 10 European states are associated indicators that provide the basis for assessing the degree of viability required information of each model.

Table 2

Synoptic table for econometric comparison

Econometric indicators	Luxembourg	Netherlands	Austria	Finland	United Kingdom
Econometric model – regression equation	Multifactorial linear $\hat{y} = a + b x_1 + c x_2$	Multifactorial linear $\hat{y} = a + b x_1 + c x_2$	Multifactorial linear $\hat{y} = a + b x_1 + c x_2$	Multifactorial linear $\hat{y} = a + b x_1 + c x_2$	Multifactorial linear $\hat{y} = a + b x_1 + c x_2$
Model estimators “a”	-156738.5	-82998.01	-467759.3	-52019.20	524663.0
Probability “b”	0.1408	0.8741	0.0916	0.7154	0.4701
Probability “c”	-0.796226	0.175691	0.038245	0.188577	0.540776
Probability	0.2830	0.0163	0.5161	0.0023	0.0000
Probability	1211.112	43.12866	176.7379	52.14417	-37.40115
	0.1279	0.5192	0.0501	0.4066	0.2139
Correlation: $R = \sqrt{R^2}$	0.98191	0.86658	0.98980	0.9375	0.9914
R-squared %	96.4162	75.0966	97.9718	87.8926	98.2969
Durbin-Watson stat	2.074450	1.256851	0.992242	2.017553	1.645490

Theil Inequality Coefficient	1.1218%	0.9299%	0.4650%	0.9189%	0.5688%
S.E. of regression – absolute expression	1121.685	14390.45	3423.480	4321.133	27719.50
S.E. of regression – relative expression	2.7668%	2.2792%	1.1414%	2.2536%	1.3985%
Jarque-Bera Probability	0.046638 97.6951%	0.164412 90.7369%	0.904613 63.6159%	3.931137 14.0076%	0.950643 62.1685%
F-statistic	80.71090	9.046527	144.9108	21.77832	173.1535
Ftabelar: $F_{P=0.9 ; f_1=k ; f_2=n-k}$ k = 3; n = 9	5.14	5.14	5.14	5.4	5.14
Prob (F-statistic)	0.000046	0.015445	0.000008	0.001775	0.000005
Akaike info criterion	17.14425	22.24772	19.37590	19.84162	23.55886
Schwarz criterion	17.20999	22.31346	19.44165	19.90737	23.62460
Heteroskedasticity Test: White	Homoskedasticity	Homoskedasticity	Homoskedasticity	Homoskedasticity	Homoskedasticity
Sample: 2006-2014	Included observations: 9	Included observations: 9	Included observations: 9	Included observations: 9	Included observations: 9

Source: author’s calculus

Econometric models are defined by estimators parameters each regression equations and provides clear and reliable, in statistical terms, to assess the rate of change of GDP by dynamically changing the value of fixed assets and equipment (fixed assets) and those of the number of people employed in economy [23].

For parameter estimators “b” parameter estimators respectively for “c” expose the statistical distribution in Table 3.

In model pertaining to the 10 member states that the estimator parameter “b” expresses the change in the dynamic of gross domestic product (million euro) when the value of tangible assets (fixed assets) increased by one (1 million euro), while maintaining a constant level of other variables in the model level (Total employment). Also identified by each model, size estimator of parameter “c” change the dynamics of gross domestic product (million euro) when the number of people employed increased by one (1 Thousand persons) provided maintenance at a constant value of fixed assets (fixed) [24].

Table 3
Values for estimators “b” and “c” for 10 econometric models for countries

Country	Estimator “b”	Estimator “c”
1. Belgian	0.332499	-62.37233
2. Czech Republic	0.188032	46.75503
3. Denmark	0.295117	-37.42095
4. France	0.109588	160.9899
5. Italy	0.076498	40.25271
6. Luxembourg	-0.796226	1211.112
7. Netherlands	0.175691	43.12866
8. Austria	0.038245	176.7379
9. Finland	0.188577	52.14417
10. United Kingdom	0.540776	-37.40115

Source: author’s calculus

Series distribution of estimator parameter “b” with three groups of values is shown in Table 4. It notes the existence of a State (Luxembourg) which recorded an average fall in GDP by 0.796226 million euro when the value of tangible fixed assets (fixed) shall be increased by 1 million.

The econometric model of the gross domestic product for Luxembourg identifies the major influence of the variable number of persons employed in the economy. Tangible assets (fixed) registered a value of 67.963 million in 2006 and rose to 104,312.10 million euros in 2014, a relative increase of 53.48%, while gross domestic product registered a relative increase of 46.36%. Under these conditions, the efficiency of use of tangible assets (fixed) calculated as gross domestic product

per 1000 euro tangible assets (fixed) shows a decrease from 491.58 euro in 2006 to 468.76 euro in 2014.

The other nine European countries included in the survey recorded a positive contribution the increase in the value of tangible assets (fixed) to the gross domestic product by size between 0 and 0.5 million euros for eight European countries (Belgium, Czech Republic, Denmark, France, Italy, Netherlands, Austria and Finland) and one country (United Kingdom) which identifies an average annual increase of over 0.5 million euro (EUR 0.540776 million euro).

Table 4

Statistic distribution for parameter “b”

Tabulation of series: Estimator of “b”				
Sample: 1 - 10				
Included observations: 10				
Number of categories: 3				
			Cumulative	Cumulative
Value	Count	Percent	Count	Percent
[-1, -0.5)	1	10.00	1	10.00
[0, 0.5)	8	80.00	9	90.00
[0.5, 1)	1	10.00	10	100.00
Total	10	100.00	10	100.00

Source: author’s calculus

Parameter estimator “c” defines and dimensioned gross domestic product changes following the change in the number of people employed (Total employment) in the structure of the econometric model of the 10 European countries, is presented in Table 5 typical three groups.

The first group included three countries, Belgium, Denmark and the United Kingdom where it is recorded average decline in GDP by increasing the number of persons engaged in economic activity. This situation is liable to show a process of sustained growth of the GDP to the rise in value of tangible assets (fixed). It is noted that in these countries the gross domestic product increased in 2014 compared to 2006, thus: Belgium: + 22.648%, with an average annual growth rate

of + 2.585%; Denmark: +15.510, with an average annual growth rate of + 1.819%; United Kingdom: + 9.256%, with an average annual growth rate of + 1.113%.

The second group includes six states (Czech Republic, France, Italy, Netherlands, Austria and Finland), in terms of size estimator of parameter “c”, which recorded average growth of gross domestic product by value entered in the range of 0 - 500 million euros due to increase by 1000 the number of persons employed. The group presented in Table 5 identifies a European state, Luxembourg, which recorded average growth of gross domestic product by 1211.112 million euros, if the number of employed persons increased by 1000 people.

Table 5

Statistic distribution for parameter “c”

Tabulation of series: Estimator of “c”				
Sample: 1 - 10				
Included observations: 10				
Number of categories: 3				
			Cumulative	Cumulative
Value	Count	Percent	Count	Percent
[-500, 0)	3	30.00	3	30.00
[0, 500)	6	60.00	9	90.00
[1000, 1500)	1	10.00	10	100.00
Total	10	100.00	10	100.00

Source: author’s calculus

Bringing forward the increase in the number of people employed GDP growth shows a positive dynamics of social productivity of labor [25], and at the same time if social productivity of labor ahead of number of persons employed in the economy, the proportion of gross domestic product account social productivity of labor is greater than 50%. In these states, the national economy is characterized by a growth process intensive type, through the use of labor, ensuring sustainable development and performance in terms of profitability social, and those of raising the level of living of the population [26].

Also, when efficiency of tangible assets (fixed), calculated as the ratio between gross domestic product and the value of tangible assets, ahead of the value of tangible assets (fixed) and GDP has a positive dynamics is estimated that

mainstream economy is intensive in the use tangible terms. In these countries the national economy has conditions to achieve sustainable economic growth by increasing profitability and with increased national income.

Table 6

Inequality system for activity type

Country		Economic growth type
1. Belgium	RGDP > REAF < RAF +2.585% > -0.6135% < +3.215%	Extensive growth through use of fixed assets
	RGDP > RW > RE +2.585% > +1.8771% > +0.694%	Intensive growth through use of employment
2. Czech Republic	RGDP > REAF < RAF +2.834% > +0.2828% < +2.545%	Extensive growth through use of fixed assets
	RGDP > RW > RE +2.834% > +2.3787% > +0.444%	Intensive growth through use of employment
3. Denmark	RGDP > REAF < RAF +1.819% > +0.0720% < +1.745%	Extensive growth through use of fixed assets
	RGDP > RW > RE +1.819% < +2.0956% > -0.271%	Intensive growth through use of employment
4. France	RGDP > REAF < RAF +1.769% > -1.4356% < +3.250%	Extensive growth through use of fixed assets
	RGDP > RW > RE +1.769% > +1.4516% > +0.313%	Intensive growth through use of employment
5. Italy	RGDP > REAF < RAF +0.513% > -2.1169% < +2.690%	Extensive growth through use of fixed assets
	RGDP > RW > RE +0.513% < +1.0922% > -4.496%	Intensive growth through use of employment
6. Luxembourg	RGDP > REAF < RAF +4.876% > -0.5919% < +5.501%	Extensive growth through use of fixed assets
	RGDP > RW > RE +4.876% > +2.7012% > +2.118%	Intensive growth through use of employment
7. Netherlands	RGDP > REAF < RAF +1.699% > -0.2444% < +1.944%	Extensive growth through use of fixed assets
	RGDP > RW > RE +1.699% > +1.4606% > +0.235%	Intensive growth through use of employment

8. Austria	RGDP > REAF < RAF +2.681% > -1.2527% < +3.985%	Extensive growth through use of fixed assets
	RGDP > RW > RE +2.681% > +1.7806% > +0.664%	Intensive growth through use of employment
9. Finland	RGDP > REAF < RAF +2.184% > +0.9901% < +3.207%	Extensive growth through use of fixed assets
	RGDP > RW > RE +2.184% > +1.9574% > +0.222%	Intensive growth through use of employment
10. United Kingdom	RGDP > REAF < RAF +1.113% > -0.0819% < +1.196%	Extensive growth through use of fixed assets
	RGDP > RW < RE +1.113% > +0.4468% < +0.663%	Extensive growth through use of employment

Source: author's calculus

Note. Table notifications:

RGDP = Average annual increase/decrease of GDP

REAF = Average annual increase/decrease of fixed assets efficiency

RAF = Average annual increase/decrease of fixed assets value

RW = Average annual increase/decrease of social productivity

RE = Average annual increase/decrease of employment

Average annual increase/decrease is calculated as geometric average.

The results presented in Table 6 reveals an unquestionable truth namely that 9 of the 10 European Union countries have registered growth between 2006 and 2014 intensive type [27], through the use of labor, technical equipment and technologies submitted on line technical progress, business process management and organization favored social labor productivity growth in a dynamic influencing the dynamics of the number of persons employed [28].

There is an exception to this general statement, the United Kingdom, where the average rate of annual productivity growth social work (RW = + 0.4468%) is ahead of the average pace of annual growth in the number of people employed (RE = + 0.663 %) and the conclusion of extensive economic growth is through the use of labor which can induce a state of vulnerability to the future results [29].

3. Results

Interpretation of results included in the overview of comparative econometric indicators (Table 1 and Table 2) on the 10 European countries, provide statistical support and highlight the viability of the econometric model multifactorial, as an expression of lawfulness growth for the period of the research, 2006-2014.

The results of calculations provides support information to make comparisons between states and concerned to identify both aspects that differentiate them and aspects of similarity between countries with respect to economic growth, sustainability and enhanced state of the economy, the prospects for sustainable development.

The conclusion offered by the results listed in Table 1 and Table 2, econometric models converge towards sustainability assessment form linear regression equations multifactorial and recognition as secure information is based on econometric methodology rigorously substantiated.

The main considerations supporting the fulfillment of the objective of knowledge proposed by this study are: strength of the correlation between the model's variables (growth of gross domestic product by value of fixed assets and number of employees) expressed as the ratio of the correlation is proven statistically to be significantly different zero and very strong 9 out of 10 European countries. The exception is Italy, where appropriate econometric model of the gross domestic product is assigned a ratio of correlation which has a size of 0.77632 and not confirmed statistically significantly different from zero, based on the "Criterion F" because threshold is 6.2723% and exceeds the agreed limit of acceptance of 5%. The coefficient of determination (R-squared) expresses how much of modifying endogenous variable is determined by two exogenous variables change, the value of intangible assets (fixed) and the number of people employed in the economy. 9 of the 10 European countries it is found that during the years 2006-2014 this figure exceeds 75%, the difference up to a 100% is the influence of other variables included in the model or size of the residual variable. Italy coefficient of determination (R-squared) has a size of 60.3%, and the influence of other variables is likely to explain almost 40% of gross domestic product dynamics. Durbin-Watson statistic coefficient by its size, refute or confirm the status of the autocorrelation of the residual variable levels. To assess the levels of the error

term is not necessary auto correlated Durbin-Watson stat to have a size which is positioned in the range $d_2 < DW < 4-d_2$, $1.699 < DW < 4-1.699=2.301$.

Acceptance range of waste non-auto correlation hypothesis is stated based on the distribution Durbin - Watson for materiality, $q = 5\%$, the number of exogenous variables, $k = 2$ and the number of observations, $n = 9$.

Following this examination statistical results: in case of 8 European countries (Belgium, Czech Republic, Denmark, France, Italy, Luxembourg, Finland and the United Kingdom) econometric model is certified as sustainable through the Durbin-Watson criterion; 2 States, Netherlands and Austria, multifactor model Linear has no need for sustainability, variants term residual auto correlates which can affect the correct interpretation of the following statistical indicators: estimate the standard deviation of the equation is less than the actual and implicit coefficient determination and correlation ratio that are oversized Accordingly intensity interdependence of system variables is greater than in reality; “The criterion t” used to test the significance of the estimates of the parameters of the regression equation is not fully conclusive in this case t-statistic values are overstated, which would confirm a significantly better parameters.

Expression relative to estimate the standard error of regression equation provides

$$\left(\hat{V}_{y.\hat{y}} = \frac{\text{S.E. of regression}}{\text{Mean dependent var}} \cdot 100 \right) \begin{array}{l} \text{information that relates to the viability} \\ \text{of the model (equation) for an estimate} \\ \text{of foresight, if it has a size that does not} \end{array}$$

exceed the acceptance regarded more very restrictive than 5%. Econometric models relating to the 10 European states are certified as sustainable in terms of this criterion which gives them an added safety statistics to estimate the lawfulness GDP dynamics according to the variables considered, the value of fixed assets (fixed) and the number of people employed in the economy.

A statistical significance similar to that which presents the estimate of the relative standard error of the regression equation is obtained by calculating and interpreting “irregularity coefficient (inequality) of Theil”. This coefficient can take a value between zero and one (100%). and it is considered as a very good size for assessing the viability of the model when Th does not exceed 5%. Econometric models relating to all 10 European countries included in the survey are statistically proven as safe viable quantities “irregularity coefficient (inequality) of Theil” are very low, the highest being 1.12% for the Luxembourg state.

“Coefficient statistically Jarque-Bera” and the probability associated coefficient JB under the law Distribution Hi-Square 2 degrees of freedom, underlying acceptance or rejection of the hypothesis of disposition values term residual according to the law of normal distribution (test for normality of distribution residual variable).

In 7 European countries (Belgium, Denmark, Italy, Luxembourg, Netherlands, Austria and the United Kingdom) size “Coefficient statistically Jarque-Bera” and the likelihood that attested assimilation distribution of the residual variable with distribution theoretical normal-rated is the theme statistic acceptance of this hypothesis, because the probability factor associated JB critical limit is greater than 60%.

Econometric models developed for the other three countries, Czech Republic, France and Finland are not confirmed statistically viable through the criterion of the distribution asymptotically normal waste at normal distribution-rated because the probability associated with “Coefficient statistically Jarque-Bera” have sizes below the threshold of 60 % (54.1384% 37.1331% and 14.0076%).

It states that where not confirm the hypothesis of normality of the distribution of the residual period, the quality parameters of the equation to be of maximum verisimilitude and the calculation of confidence intervals may be subject to an assessment of mistrust.

The test there is the heteroscedasticity waste; “White Heteroskedasticity Test” confirms property homoscedasticity of all 10 models of the gross domestic product, based on two statistical criteria applied, “Criterion F” and “ c^2 criterion” on the auxiliary regression equation the squared residual levels depending on exogenous variables.

In these conditions can be formulated following assessments of statistical nature: waste dispersion is constant; application “Criterion t” for the significance of regression equation parameters is fully conclusive; econometric model attaches importance indiscriminate any comments irrespective of the size of the residual variable.

According to the software Eviews, are exposed in Table 1 and Table 2, two specific indicators of statistical information: “The criterion information Akaike” and “statistical criteria Schwarz” having practical utility where it is to take a decision on the mathematical model the correlation typology and number of exogenous

variables, according to the development of several model variants that are subject to optional decision. The two indicators have sizes close and confirm the right decision, better for lower values [30].

A summary conclusion about the reliability of models multifactorial GDP dynamics based on the value of fixed assets (fixed) and the number of people employed in economy, 10 countries in western and central Europe, can be formulated with complete safety. The models are retained as a source of practical information to base decisions on economic policy and sustained statistically proven effect in terms of sustainable economic growth and prosperity.

4. Conclusions

After analysis, it appears that whatever the degree of development of a country, particular emphasis in determining an ideal position for growth is placed on macroeconomic policy objectives which should ensure a high stability as a direct consequence of economic growth.

The 10 European countries analyzed to have sustained economic growth, should develop economic development strategies over a period of 9 or 10 years, during viable to be subjected to a pertinent analysis after which to highlight the clarity of economic development. Thus, states have registered an increase in the period analyzed using labor involved, leading to the use of business process management who competed in an increase in social productivity of labor in a dynamic growth exceeding the number of people employed.

At the same time finding identifies a statistical calculations proving a course of economic growth through the use of extensive fixed assets in all 10 states. Increasing the value of tangible assets (fixed) brings forward increase efficiency in these conditions economic growth is characterized as the extensive nature with limited possibilities to foster economic progress consolidated, efficient and sustainable.

The period under review is marked clearly by economic dysfunctions caused by the financial and economic crisis with a general plan manifestation of international trade relations and productive investment and domestic yields, which covered 2008-2011 and which was felt by intensities relatively different in each EU state.

Research carried out demonstrates the need for national governments to establish a consummate clarity and prioritization of objectives of macroeconomic policy objectives are clear strategic and tactical directly influenced by Central Bank and other international bodies. It requires country-level coordination of macroeconomic policies so that decisions should not be discordant with possible optimization of indicators showing gross domestic product growth based on the value of tangible assets (fixed) and the number of persons employed in the economy. Indicators used in research have given us on the one hand relevant information about the current economic situation of the 10 countries analyzed, information that can be used at management of macroeconomic policies but also in the management of an organization to achieve high performance at country level.

The aim is that the European Union to develop policies that increase the national economies of the countries analyzed by ensuring fairness clear development through protectionism, industrialization, finance industries own sustainable investments, clarity markets but also by determining new industries and protection against existing and providing new jobs.

Research suggests that in the future, not only the state to be involved in economic growth but also private companies who can support themselves thus providing new jobs by increasing the number of people employed in the economy.

The viability of this research lies by concerns of Member States analyzed to attract foreign investment by engaging in liberalization of capital markets, thereby increasing local economic efficiency and protect property rights and competition.

The authors of this research want to show the need for competitiveness and innovation in the EU member states, seen as an economic capacity that may lead to a raising of living standards and the employment rate by increasing productivity through interactions between economic policies and agencies economic and institutional framework to determine a suitable human skills increase.

This section is not mandatory, but can be added to the manuscript if the discussion is unusually long or complex.

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