ECONOMIC AND FISCAL IMPLICATIONS IN THE POST-CRISIS PERIOD

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Abstract: *The post-crisis period was defined by an acute imbalance in the socio-economic environment of the countries. The fiscal policies applied at that time, designed to relieve the detrimental changes in the national economic structure, have been identified as being ineffective. They have not succeeded to generate positive effects, whether it is about short-term or long-term effects. This paper aims to identify some causes that have contributed to the financial crisis, as well as its effects by analysing some indicators from five emerging countries (Romania, Poland, Slovakia, Estonia and Lithuania) and five developed countries (Germany, the Netherlands, Italy, Sweden and Denmark) for a period of nine years, more exactly, from 2008 to 2016. The outcome of the analysis reveals that the imbalance in the economy, especially in emerging countries, has led to a major increase in the population exodus, all of which are closely linked to the development inability of the business environment. Moreover, there has been analysed the influence of investments (GFCF) and real labour productivity (LP) on gross domestic product (GDP) by applying the prospective Forward method in the SPSS statistical program, demonstrating that the business environment is a factor of influence in the economic growth of a country.*

Keywords: *fiscal policy; real labour productivity; financial crisis; emigration; tax burden; business environment.*

JEL Classification: *E62; E24; G01; F22; H20; M20.*

1. Introduction

The financial crisis, which had its origin in the United States of America, began in Europe in the last quarter of 2007. This had a clear impact on both social life and the entire economic environment. The lack of political initiative and the ineffectiveness of anti-crisis fiscal policies have generated an unfavourable situation for an immediate recovery, thus affecting the economy of countries for a long time. The post-crisis period is defined by the emigration of a large population number towards countries that were recognized as protective social centres, but also by the demobilizing impact on the business environment. These economic and social aspects will be analysed in the present paper. It will be considered to study the interdependence between the emigration of the population, the economic growth and the business environment, starting from the hypothesis that there is a circuit generated by the financial crisis. The diminishing of the gross domestic product determines the emigration of the population, and this, in turn, has an impact on the business environment. This circuit will also close by affecting the gross domestic product. Consideration will be given to identify the effects of the financial crisis and

how they have governed fiscal policies for economic recovery by submitting a detailed analysis of a sample of five developed countries and five emerging countries. The real gross domestic product will be a benchmark in this paper because it presides over the evolution of economic growth. The emigration and the spending on social security contributions will provide clues about the incidence of the financial crisis on the social environment. The investments (gross fixed capital formation) and the real labour productivity will be studied as the main factors of influence on the gross domestic product, macroeconomic indicators that will serve to investigate the evolution of the business environment in the post-crisis period. Thus, the evolving framework of the economic environment of a country will prove to be in constant dependence with different aspects of social life.
To better capture the economic and fiscal implications in the post-crisis period, this article is structured as follows: Section 2 Literature Review, Section 3 The social and fiscal effects in the post-crisis period, Section 4 The impact of the financial crisis on the private business environment, Section 5 Conclusions, followed by References and Bio-note.

2. Literature review

The impact of the crisis on the social life aspects, as well as on the economy has generated a wide range of polemics about identifying the main determining causes and recovery levers through the implementation of favourable fiscal policies. Analysing the impact of emigration on the economic growth in Eastern Europe, Atoyan et al. (2016) demonstrated that “net emigration has been associated with higher social spending in Baltics and SEE countries in relation to GDP”. Farris (2015) studied the association between the slowdown in the economic growth and the negative impact of the emigrant labour in the low-skilled jobs. Cordero and Simón (2015) analysed the impact of the economic crisis on democracy, also taking into account the implications of the democratic institutions, pointing out that “perceptions of the state of the economy have an impact both on satisfaction with and support for democracy, and, secondly, that citizens’ support for democracy is greater in bailed-out countries”. As politics plays an important role in the implementation of the decisions of national interest, Rohrschneider and Whitefield (2016) examined the reaction of the political parties, particularly the mainstream ones, to the growth in public European Union-scepticism since the financial crisis and concluded that mainstream parties respond fairly little over time, leaving a representative opening for extreme parties. Thus, the economic development of a state is also influenced by the political environment due to the decision makers. The effects of the financial crisis in 2008 also had repercussions on the private business environment, so Lins et al. (2017) performed an analysis of the performance of the enterprises taking into account the assessment of their share capital. An analysis on the largest corporations in the Forbes 2000 Global List, based in Europe, was carried out by Raźniak and Winiarczyk-Raźniak (2015), surprising the changes in their financial performance following the financial crisis from 2008.

3. The social and fiscal effects in the post-crisis period

The financial crisis that diverted on European countries in the last quarter of 2007 also had repercussions on individuals. The unfavourable economic environment favoured the exodus of the population to the developed countries, which offered financial stability up to meeting of the personal needs. The inefficiency of the educational system, the lack of involvement of specialized institutions in the different aspects of social life, and the inability of the individual to have access to decent living are among the determining factors of emigration. The emerging countries, including Romania, tended to focus on the effects of the crisis and not on the causes. In this situation, an important role was played by the fiscal policy that hoped to rebalance the economy, having as the main instrument, the taxation. The tendency of the countries, especially the emerging ones, was to increase the percentage of the compulsory taxes in order to cover the existing deficit without taking into account the long-term effects. These decisions that changed the fiscal policy also affected the individual, who was unable to integrate financially into the society. Thus, emigration can be identified as a result generated, not mainly by the economic crisis, but the decisions that underlying the change in fiscal policies. *Table 1* summarizes the number of emigrants in 10 developed and emerging European countries from 2008 to 2016. At European Union level, in 2008 the largest population exodus was present in Romania, namely 300.465 people, followed at a significant difference by Germany with 174.759 persons and Poland with 67.329 persons. The large number of emigrants is visible until the end of the analysed years in these three countries. Within the nine years under review, the exodus of the population of Poland reached values close to those of Romania, with a difference of only 10.414 people, becoming the second country at the level of the European Union in terms of the increased number of people which leaved the origin country. Romania has reached the threshold of almost two million emigrants, followed by Poland and Germany by analysing the total population that emigrated from the residence country.

Table 1: Number of emigrants by country

Year	Number of emigrants by country									
	Romania	Poland	Slovakia	Estonia	Lithuania	Germany	Netherlands	Italy	Sweden	Denmark
2008	300.465	67.329	1.547	3.860	21.793	174.759	59.364	53.924	26.052	15.730
2009	245.127	178.915	1.432	3.972	33.522	120.374	52.817	48.327	20.883	14.379
2010	196.550	169.527	1.512	4.665	79.315	112.303	51.872	45.954	26.792	14.661
2011	194.090	214.758	1.703	5.608	51.505	112.049	57.155	50.057	27.506	15.031
2012	169.200	206.693	1.923	5.968	38.479	101.384	56.181	67.998	25.116	14.753
2013	154.374	226.969	2.732	6.414	35.492	104.245	57.090	82.095	26.112	13.572
2014	171.967	199.696	3.575	4.314	33.115	113.884	57.924	88.859	24.861	13.999
2015	186.129	169.375	3.835	8.957	36.976	106.682	58.369	102.259	24.497	14.020
2016	206.798	196.384	3.674	9.141	46.070	225.337	53.450	114.512	22.425	15.273
Total	**1.824.700**	**1.629.646**	**21.933**	**52.899**	**376.267**	**1.171.017**	**504.222**	**653.985**	**224.244**	**131.418**

Source: Eurostat data and own calculations

The opposite was Slovakia, where the number of emigrants was 1.547 in 2008, doubling until 2016, followed by Estonia and Denmark. A determinant aspect for Denmark, Sweden and the Netherlands is the constant number of emigrants. This

feature is specific to developed countries, characterized by the efficiency of the fiscal policies that are geared towards a sustainable development of the economy and, implicitly, of the socio-economic life of individuals.
Exodus of the population should have had a negative and significant influence on gross domestic product, but in reality it turned out that there is a distorted economic growth. A contribution to the economic growth is brought by the social security contributions. Graph 1 presents the increase in real gross domestic product in the five emerging countries under the study. Poland experienced the strongest boom after the economic crisis which overrun the Europe in early 2008, so its real GDP grew by 27% in 2016 compared to 2008. The situation was different for Romania, Slovakia, Estonia and Lithuania. The economic crisis could also be identified in terms of the real GDP growth rate in these countries, as it had low values until 2013-2014, when both national and foreign factors contributed to the recovery of the economy. The real GDP of Romania grew by only 11% in 2016 compared to 2008, unlike Poland.

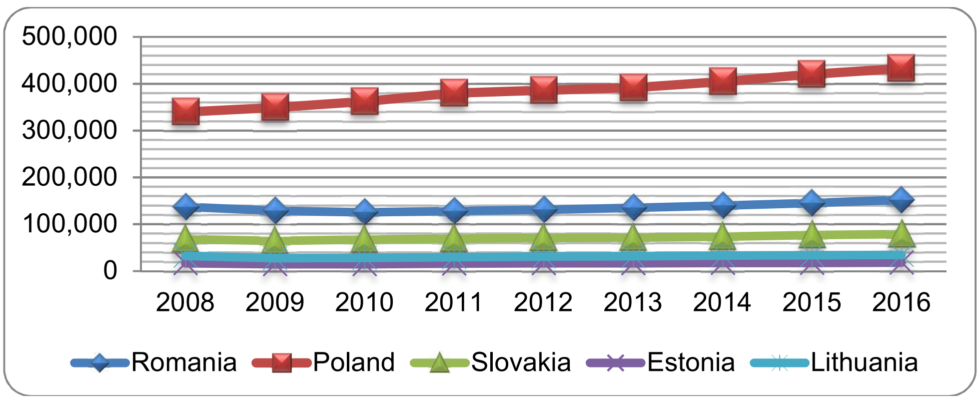

Chart 1: Real GDP in emergent countries
Source: Own editing based on Eurostat data

Chart 2 shows the growth of gross domestic product in the developed countries, the economic crisis having an impact on them as well. The real gross domestic product of Germany grew by 9% in 2016 compared to 2008. A special situation has been identified in Italy, where real GDP fell by 5,9% in 2016 compared to 2008, which is also highlighted in the chart of representation. The lack of economic recovery in this country may be due to the applied tax policies that have failed to balance the crisis situation, taking into account other economic, political and social conjectural factors. Lagravinese (2015) stated that this “crisis has exacerbated the strong imbalances between the North and South making rebalancing policies necessary to place the country on a sustainable growth path”. Sweden, the Netherlands and Denmark, although affected by the crisis, experienced an economic recovery as in the case of the emerging countries in the years 2013-2014.

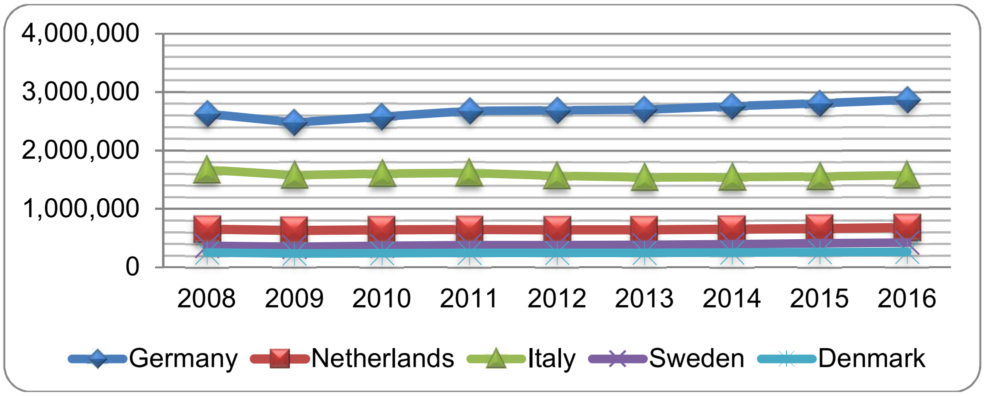

Chart 2: Real GDP in developed countries
Source: Own editing based on Eurostat data

The increase in the tax burden specific to the social security contributions was essentially a substitution for the existing deficit, defined by a distorted gross domestic product growth in the years after the economic crisis. Emigration has led to an increase in the share of elderly in the population in countries of origin, which entails a suppression of the future generations that will have to bear the increasing burden of the social security contributions. The share of the social security contributions in GDP in the years after the economic crisis is presented in *Table 2*, which has increased significantly since 2009 in each analysed country. Thus, there is a correlation between the large number of emigrants presented in *Table 1* and the increase in the share of social security contributions in GDP. In Romania, the exodus of the population, in the first year after the crisis, led to an increase in social security contributions of 9% in 2009 compared to 7.3% in 2008. This may also be due to the large number of hiring of the native population in the host countries and which contributed to the payment of this type of compulsory contributions.

Table 2: Expenditure on pensions (% of GDP)

Year	Romania	Poland	Slovakia	Estonia	Lithuania	Germany	Nether-lands	Italy	Sweden	Denmark
2008	7,3	11,5	7,0	6,9	7,3	12,0	11,2	14,3	11,3	11,7
2009	9,0	12,2	8,3	8,9	9,5	12,8	12,1	15,5	12,4	13,0
2010	9,3	11,8	8,2	8,7	8,4	12,4	12,2	15,5	11,6	12,6
2011	9,1	11,3	8,1	7,8	7,6	11,9	12,5	15,5	11,4	12,7
2012	8,7	11,5	8,3	7,6	7,6	11,9	12,9	16,1	11,8	12,7
2013	8,3	11,9	8,4	7,6	7,2	11,9	13,1	16,5	12,1	13,4
2014	8,2	11,8	8,7	7,5	7,0	11,7	13,2	16,5	11,7	14,0
2015	8,1	11,6	8,6	8,0	6,8	11,8	13,0	16,5	11,4	13,5
2016	8,1	11,4	8,7	8,0	6,8	11,8	13,1	16,2	11,3	14,0

Source: Own editing based on Eurostat data

These economic and social events contributed, to a certain extent, to the distorted growth of the economy, respectively to the real gross domestic product. The exodus of the active population generated an increase in the share of the social security contributions in GDP, as its move to the host countries did not necessarily represent a process concluded by establishing the residence abroad.

4. The impact of the financial crisis on the private business environment

The prosperity of the private business environment is not entirely due to the managerial decisions, the competitive market or the customer register, a determinant factor being also the fiscal policies applied. These determine the evolving business environment in most cases because a defective fiscal policy can destabilize the entire business environment of a country. Moreover, an unfavourable macroeconomic impulse can affect the national financial equilibrium more than an impulse from the inside, as it was in the case of the crisis from 2008. Both the economy of Romania and the other European countries were destabilized, affecting all sectors of activity, whether it was about the primary or secondary sectors. All this made the relations between the state and the business environment vulnerable. European Union Membership for Romania in 2007 preceded the financial crisis of 2008. These stages in the economic development of this country stirred up suspicion from entrepreneurs who felt unable to manage the activity of their corporations until economic maturity, many of these closing their activity in the early years. Thus, Euroscepticism was to transpose from ideology into a way for businesses to act in the context of an economy that no longer had the prerequisites of sustaining the sustainable development of the business environment. Mistrust in the European economic environment for entrepreneurial development was initiated on the very background of the financial crisis that had its origin outside of this space. However, the fiscal policies should have been in the process of creating strategies both in the short and long term, to relaunch the entire economic activity. Many countries, especially emerging countries, have seen this economic recovery late, as the fiscal policies applied have not been able to generate positive effects. In order to identify the effects of the financial crisis on economic growth, and more specifically, on the development of the business environment, as an extension to the effects of the crisis on social life, the prospective – Forward procedure was applied. The chosen model is multifactorial, using three variables: gross domestic product (GDP), investments (GFCF) and labour productivity (LP). Both gross domestic product and investments were deflated using GDP deflator with base in 2010 and expressed in real terms. Real labour productivity was expressed in real terms using Eurostat database. The variables that best explain the model chosen on the basis of the F sequential test were chosen for each country. In determining the influence of the economic crisis on the macroeconomic indicators, the nature of the link between the dependent variable, gross domestic product (GDP) and independent variables, investments (GFCF) and real labour productivity (LP) will be verified. The determination coefficient R^2 will provide information about the degree of influence of the independent variables on the dependent variable. The basic condition for a model to be retained in the analysis is that Sig $<\alpha$ (0.05). Table 3 shows the sig. value of the model for each country, as follows:

Table 3: Sig. value of the model by country

<table>
<tr><th rowspan="2">Dependent variable (GDP)</th><th colspan="2">Independent variables
Sig.</th></tr>
<tr><th>GFCF</th><th>LP</th></tr>
<tr><td>Romania</td><td colspan="2">0.000</td></tr>
<tr><td>Poland</td><td></td><td>0.000</td></tr>
<tr><td>Slovakia</td><td></td><td>0.000</td></tr>
<tr><td>Estonia</td><td colspan="2">0.003</td></tr>
<tr><td>Lithuania</td><td colspan="2">0.000</td></tr>
<tr><td>Germany</td><td>0.000</td><td></td></tr>
<tr><td>Netherlands</td><td></td><td>0.000</td></tr>
<tr><td>Italy</td><td colspan="2">0.000</td></tr>
<tr><td>Sweden</td><td></td><td>0.000</td></tr>
<tr><td>Denmark</td><td colspan="2">0.000</td></tr>
</table>

Source: Own calculation in SPSS software

The model did not exclude any variables for Romania and Lithuania, being accepted at a sig. value of 0.000. The situation is the same in Estonia, where the sig. value is 0.003. The model rejected the independent variable GFCF, accepting only the LP variable at a sig. value of 0.000, in the case of Poland and Slovakia. Regarding the developed countries, Italy and Denmark, the model accepted both variables, GFGF and LP at a sig. value of 0.000. The model proposed for the Netherlands and Sweden rejected the GFCF variable, accepting only the LP variable, as shown in *Table 3*. Germany is an exception among the developed countries. The LP variable was rejected and only the GFCF variable was accepted at a sig. value of 0.000. These results can be transposed by a mutual influence between the studied variables. The financial crisis that affected the entire economic activity had an impact both on investments and on the real labour productivity. There was a decrease in the value of investments and implicitly in productivity from 2008 up to 2013-2014, also influencing the real gross domestic product. In countries such as Slovakia, the Netherlands and Sweden, the determination of the model based on the GDP dependent variable and the LP independent variable reveals a possible link with the lowest value of the population exodus. Thus, a small number of emigrants represent, in fact, a growing active population in the origin country involved in the economic sectors of the state. Since the results identified in Germany only indicated the model comprised from the GDP and GFCF variables, it can be argued that the technology led to an increase in investments, thus explaining the variation of gross domestic product and the exclusion of real labour productivity from the analysis.

5. Conclusions

Analysing the economic and fiscal implications in the post-crisis period, a significant influence was brought about by the individuals of the society. The aspects of the social life will permanently govern the economic development of a country. Migration has had a significant impact on the economic growth, being identified a distorted increase in the gross domestic product. This increase was mainly due to the social security contributions resulting from the exodus of active population in the origin country, so the income came from the host country. In countries with a large number of emigrants, the highest real GDP growth was seen in 2016 compared to 2008. In Poland, the real GDP grew by 27% in 2008 compared to 2016 and in Romania by 11%. Moreover, the exodus of the active population generated an increase in the share of social security contributions in GDP. In Romania, a major increase in social security contributions was identified from 7.3% in 2008 to 9% in 2009 and in Lithuania from 7.3% to 9.5%. The situation is identical in the other developed countries as well as in the emerging countries under analysis.
The business environment was another component of the economy affected by the financial crisis. The use of the macroeconomic indicators in analysing the effects of the shock which origin was outside the European space, contributed to the creation of an overall view. More specifically, it was concluded that each country surveyed, regardless of the degree of economic development, was affected by the financial crisis. This may be due to defective fiscal policies that were not able to rebalance the economic activity in the short term, nor in the long run. In this context, the business environment, an important generator of revenues to the general consolidated budget, was affected both by the effects of the external financial crisis and by the entire national decision-making apparatus. It was possible to determine the influence of independent variables, GFCF and LP on the resulting variable, GDP by using the prospective – Forward method. A positive correlation between the variables of the model was identified for all analysed countries. The growth of the investments and the labour productivity will produce the gross domestic product growth. Thus, a sustainable development of the business environment will have a positive effect on gross domestic product, recognized as an important indicator of economic growth.

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Bio-note
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