



THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
EUROPEAN INTEGRATION  
REALITIES AND PERSPECTIVES

**Performance and Risks in the European Economy**

**Regional Environment Disparities and Europe 2020 Strategy's Goals**

**Romeo-Victor Ionescu<sup>1</sup>**

**Abstract:** The paper deals with the analysis of the environmental goals' viability in Europe 2020 Strategy. The analysis takes into consideration four indicators: total greenhouse gas emissions, share of renewable energy in gross final energy consumption, primary energy consumption and final energy consumption. The analysis is built on three steps: a comparative analysis between the Member States during 2002-2014, followed by regression analysis and a forecast until 2020. The regression analysis and the forecasts are supported by SPSS19 software. All conclusions of the analysis are illustrated by the latest official statistic data, pertinent tables and diagrams. The main conclusions of the paper are: EU28 is far away of achieving the environment targets for 2020; there are great disparities between the Member States related to the environment policy.

**Keywords:** greenhouse gas emissions; renewable energy; energy consumption; regional environment disparities

**JEL Classification:** R10; R11; R19

## 1. General Approach

The global economy faces to a fabulous challenge: sustainable economic development. From this point of view, environment becomes essential and restrictive for the future economic activities. A developed country has to support better environment for the next generations. As a result, the global environment challenge asks for global solutions because the environment problems are complex. On the other hand, there are many stakeholders involved in both the causes and the solutions to environmental problems. Moreover, the solving of the global environment problems requires changes in consumption and pollution of the natural resources (Harris, 2012).

Other specialists consider that one of the most important concerns of modern life is environment. As a result, the environmental problems have to be solved using global solutions able to guide the national (individual) solutions, as well (Seitz & Hite, 2012).

One of the most balanced approach to environmental science instruction, with bias-free comparative diagrams throughout and a focus on prevention of and solutions to environmental problems was realised by George Tyler Miller (Miller, 2005). The global importance of the environment protection is recognized by EU28, as well. This is why the environment preservation and improvement represent main elements of the Europe 2020 Strategy (European Commission, 2010).

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## 2. Research Methodology

According to Europe 2020 Strategy, the analysis is focused on four environment indicators: total greenhouse gas emissions, share of renewable energy in gross final energy consumption, primary energy consumption and final energy consumption.

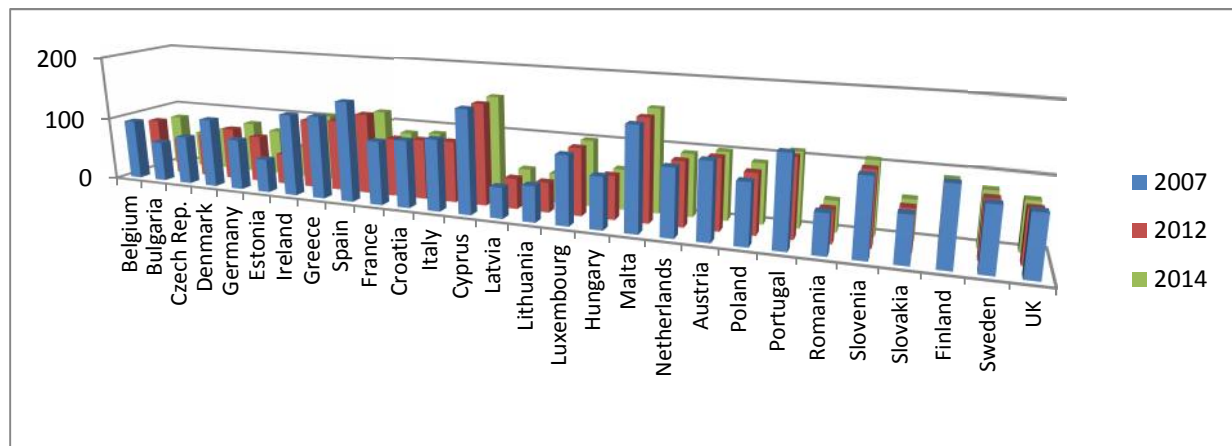
For the beginning, we used comparative analysis of these indicators during 2002-2014. The goal of the analysis is to present the environment disparities between the Member States, focusing of three moments in time: 2007 (last year before the impact of the global crisis), 2012 (year of the economic recovery process) and 2014. In order to do this, we used the latest official statistic data.

The second step of the analysis is the cluster analysis, which is realized to support the idea of grouping the Member States into different clusters. The paper uses two-step cluster analysis, where the distance measure is log-likelihood. The number of clusters is specified fixed: 3, while the clustering criterion is Schwarz's Bayesian Criterion (BIC). The paper operates with distinct clusters analysis for each indicator, in order to see if the cluster's quality is at least fair.

Finally, the analysis used a forecast of the four above indicators in order to understand if the Europe 2020 Strategy's environment goals are viable for 2020. In order to realise these forecasts, will use SPSS19 software, under ARIMA method, where the dependent variables are the above four indicators' rates and the independent variables are the years.

## 3. European Environment Policy's Effects during 2002-2014

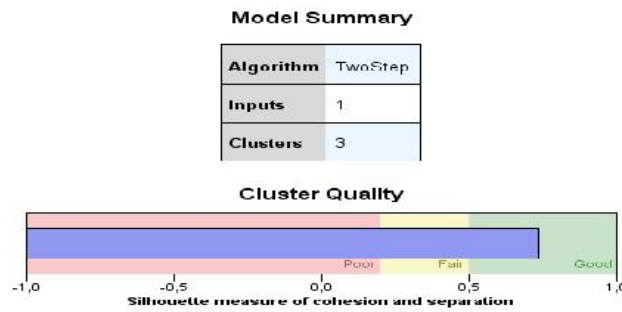
Europe 2020 Strategy stipulated that the greenhouse gas emissions should be reduced by 20% compared to 1990. The trend of this indicator is presented in Figure 1.



**Figure 1. Total greenhouse gas emissions (in CO<sub>2</sub> equivalent) indexed to 1990**

*Source: personal contribution using EEA 2014 data*

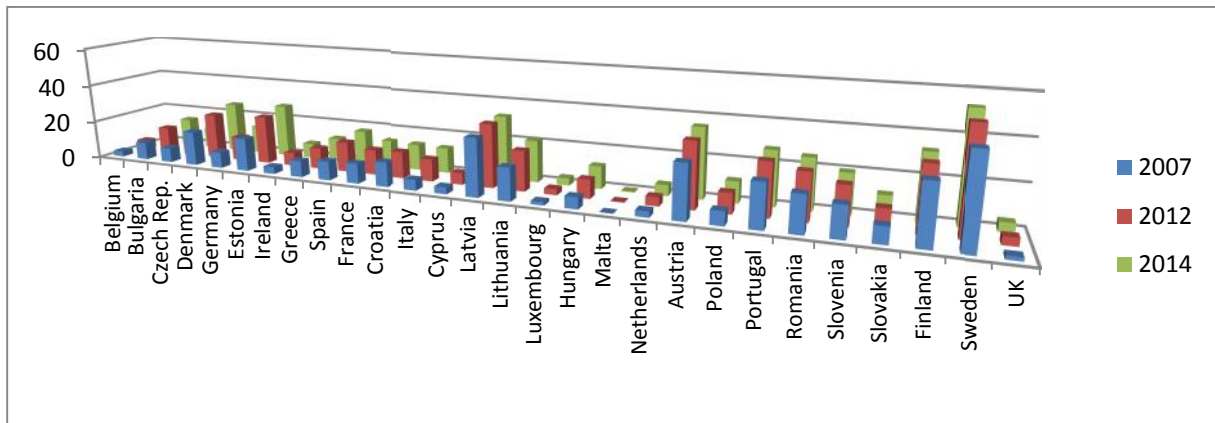
According to Figure 1, there are: 11 Member States which will achieve greenhouse gas emissions rates less than 80% (of the level in 1990) in 2014, 9 states with rates between 80% and 100% and 8 states with rates greater than 100%. These states can be grouped into three clusters. The viability of these clusters is made by Figure 2. Figure 2 supports the idea that the above cluster grouping is correct. The cluster quality is good.



**Figure. Total greenhouse gas emissions under cluster analysis in 2014**

*Source: personal contribution using EEA 2014 data*

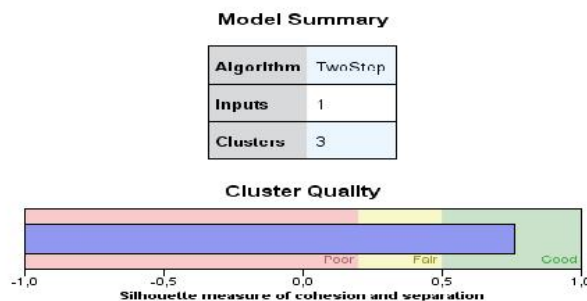
The same Europe 2020 Strategy talks about an increase of the energy from renewable sources to 20% in gross final energy consumption. Unfortunately, there are great disparities related to this indicator between the Member States (see Figure 3).



**Figure 3. Share of renewable energy in gross final energy consumption (%)**

*Source: personal contribution using EEA 10.2013 data*

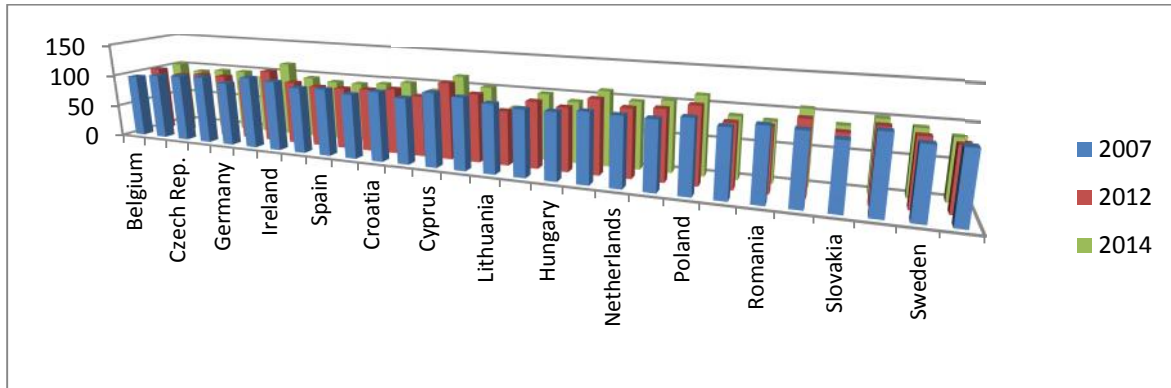
Figure 3 allows us to divide the Member States into three clusters in 2014: 7 states with renewable energy in gross final energy consumption less than 10%, 11 states with rates between 10% and 20% and 10 states with rates greater than 20%. The use of cluster grouping is supported by the result of the cluster analysis in Figure 4.



**Figure 4. Renewable energy in gross final energy consumption under cluster analysis in 2014**

*Source: personal contribution using EEA 10.2013 data*

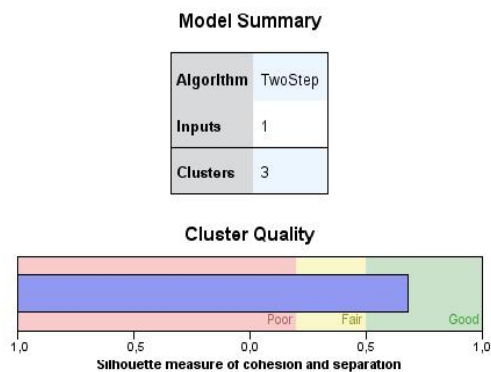
Another environmental indicator connected to the new Strategy is primary energy consumption, which has to decrease by 20% until 2020. The level of this indicator in the Member States is far away of the target (see Figure 5).



**Figure 5. Primary energy consumption (2005=100%)**

Source: personal contribution using EEA 09.2013 data

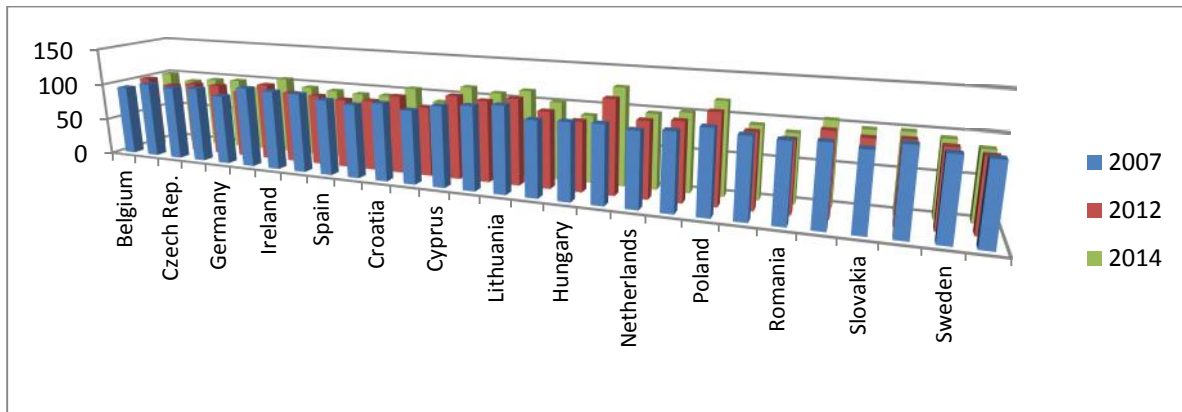
As a general point of view, almost all Member States are not able to achieve the Europe 2020 Strategy goal connected to this indicator. Moreover, the “classic” three clusters grouping can be used again at least for 2014 (see Figure 6). According to Figure 6, the clusters cover: 1 state with primary energy consumption rate less than 80%, 17 states with rates between 80% and 100% and 10 states with rates greater than 100%.



**Figure 6. Primary energy consumption under cluster analysis in 2014**

Source: personal contribution using EEA 09.2013 data

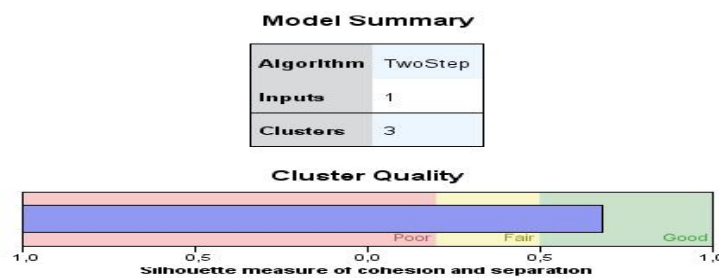
The last analysed indicator is final energy consumption, which would decrease by 20% in 2020 compared to 2005. Only three Member States will be able to achieve final energy consumption rates lower than 90% in 2014. No one will achieve the target of 80% in the same year (see Figure 7).



**Figure 7. Final energy consumption (2005=100%)**

Source: personal contribution using EEA 09.2013 data

Figure 7 supports the cluster grouping in 2014 as: 3 states with final energy consumption rates lower than 90%, 14 states with rates between 90% and 100% and 11 states with rates greater than 100%. The result of the cluster analysis is good (see Figure 8).



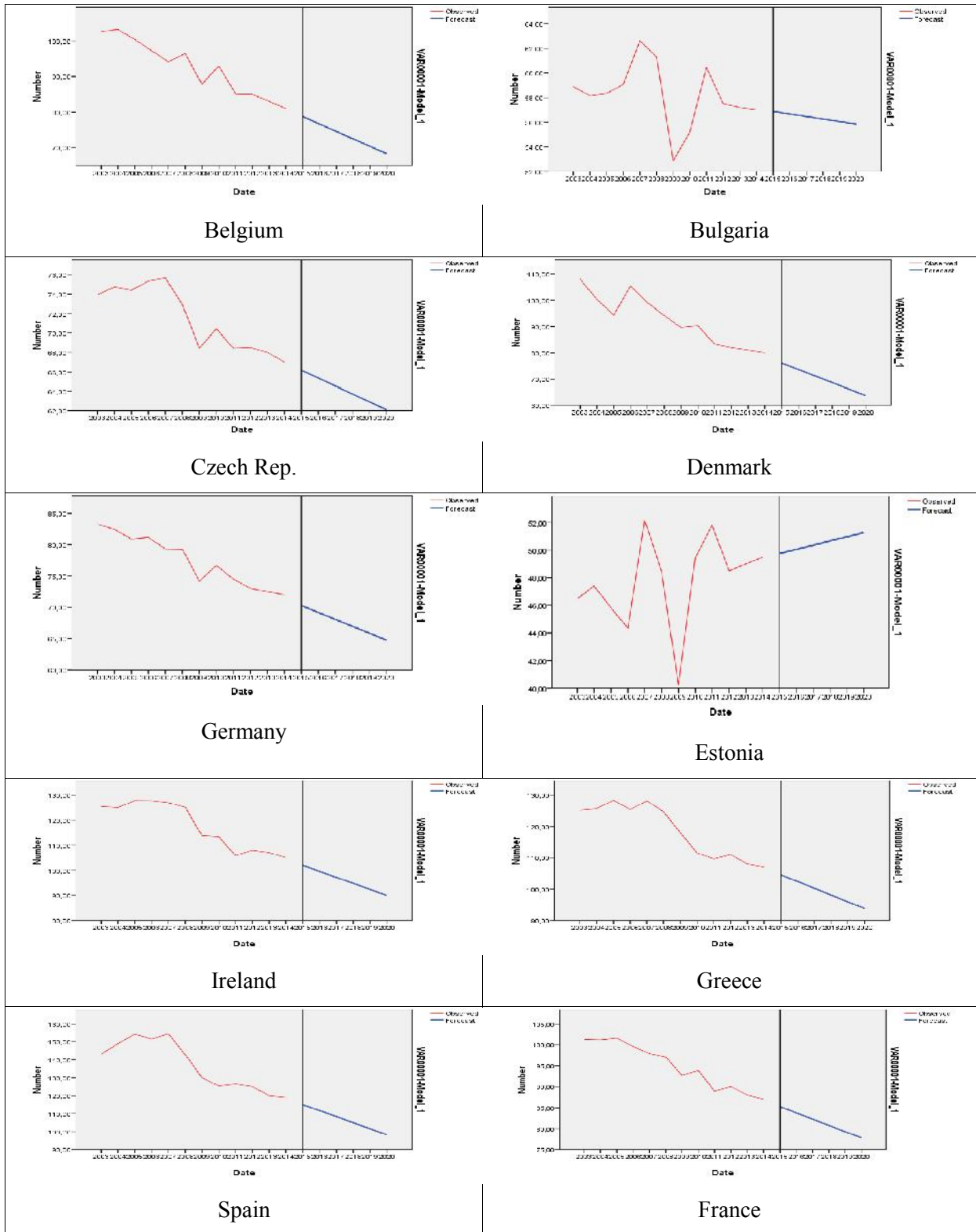
**Figure 8. Final energy consumption under cluster analysis in 2014**

Source: personal contribution using EEA 09.2013 data

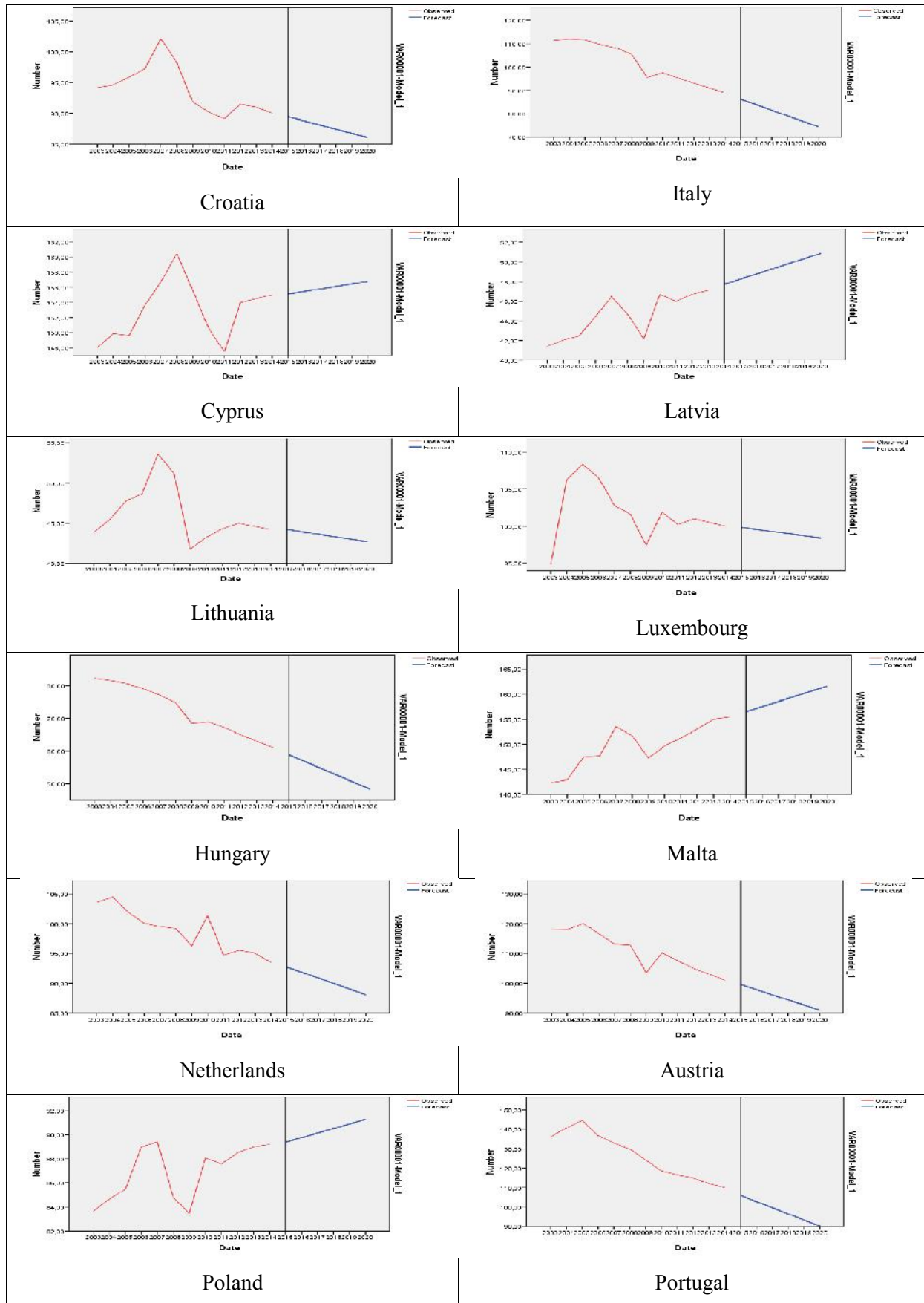
The first intermediate conclusion is that the environment targets for 2020 create great disparities between the Member States in 2014. These disparities allow the states' grouping into three clusters.

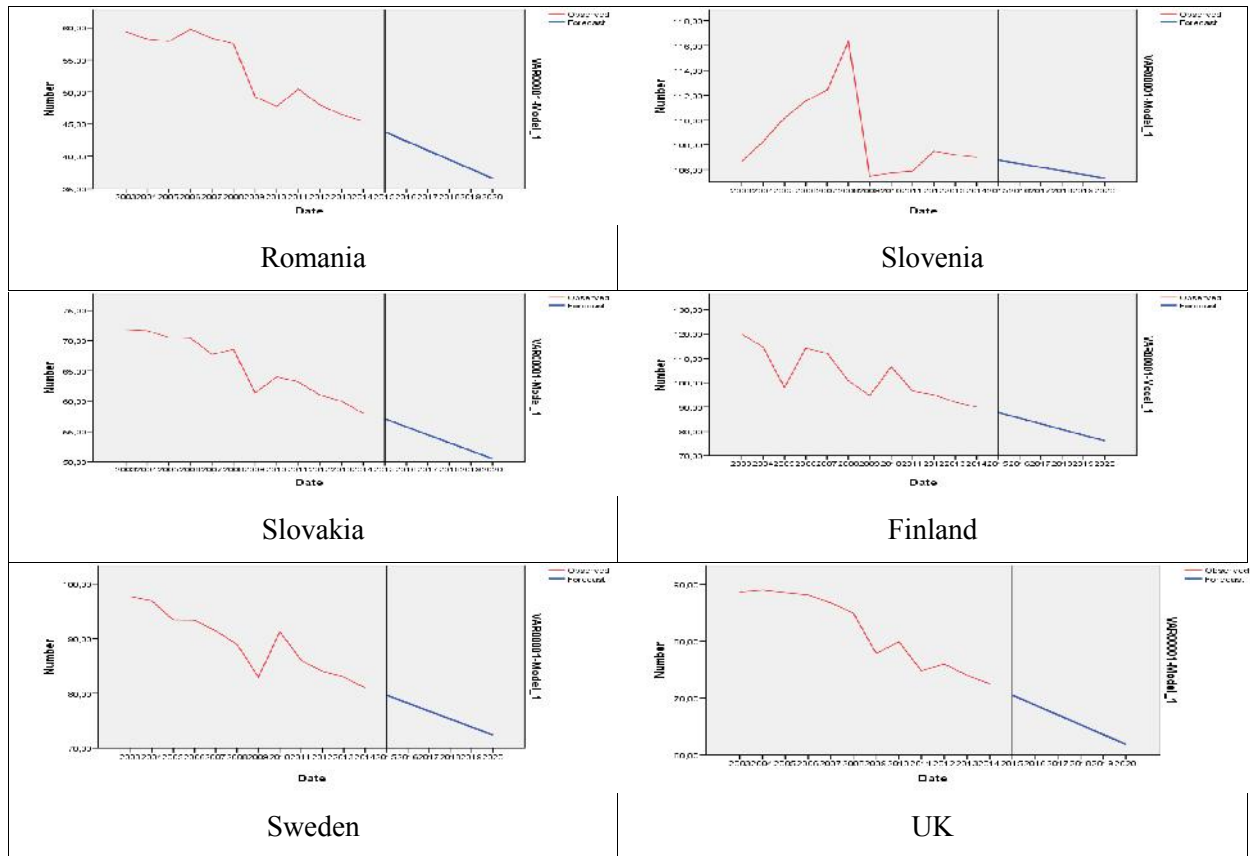
#### 4. Europe 2020 Strategy's Environmental Goals Viability

In order to demonstrate the viability of the new environmental strategy, the analysis marks the third step: a forecast of the above four environmental indicators until 2020. The forecasts are supported by SPSS software (see Figures 9-12).





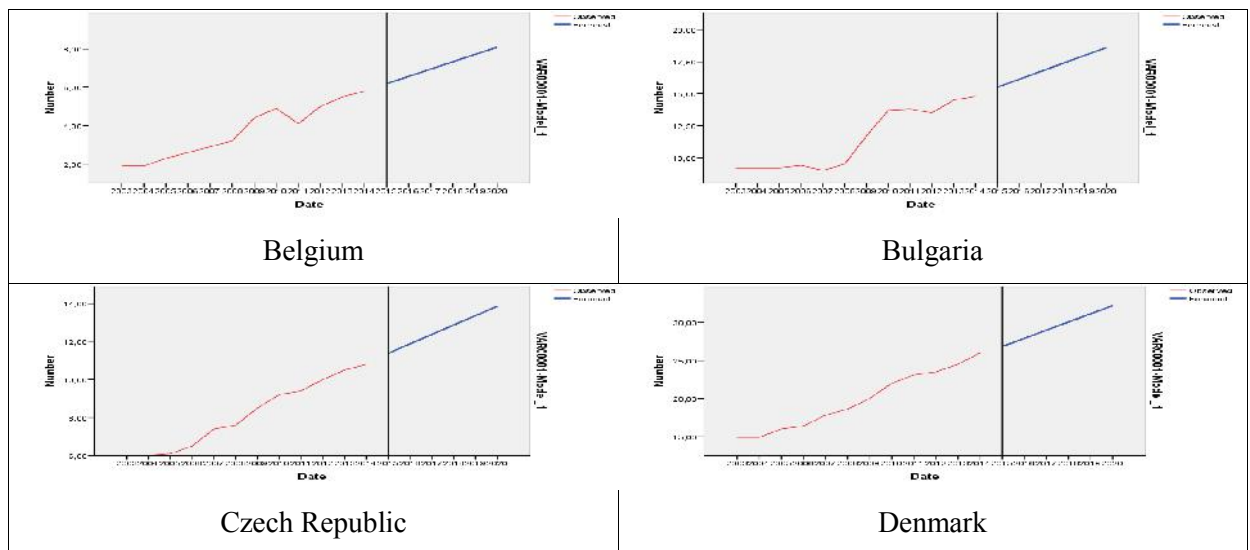




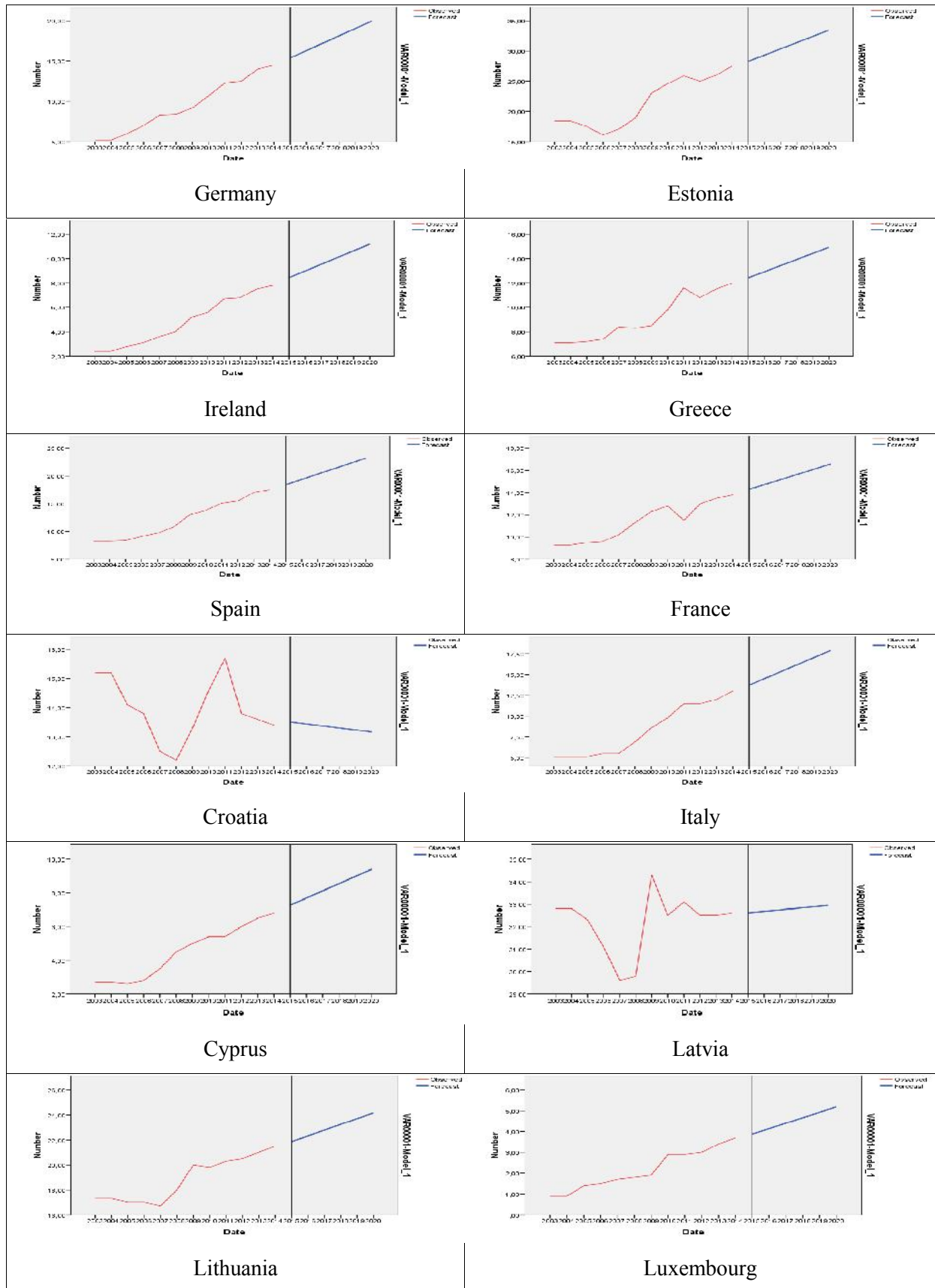
**Figure 9. Total greenhouse gas emissions forecast**

*Source: personal contribution using SSPS19*

According to Figure 9, the total greenhouse gas emissions situation will improve in 2020, when: 16 states will achieve emission rates less than 80%, 9 states with rates between 80% and 100% and only 3 states with rates greater than 100%. On the other hand, the initial cluster grouping from 2014 can be applied in 2020, as well. Moreover, 18 states (64.3%) will maintain their adhering to a specific cluster from 2014 in 2020. A different forecast was made in order to see the trend of the renewable energy in gross final energy consumption (see Figure 10).







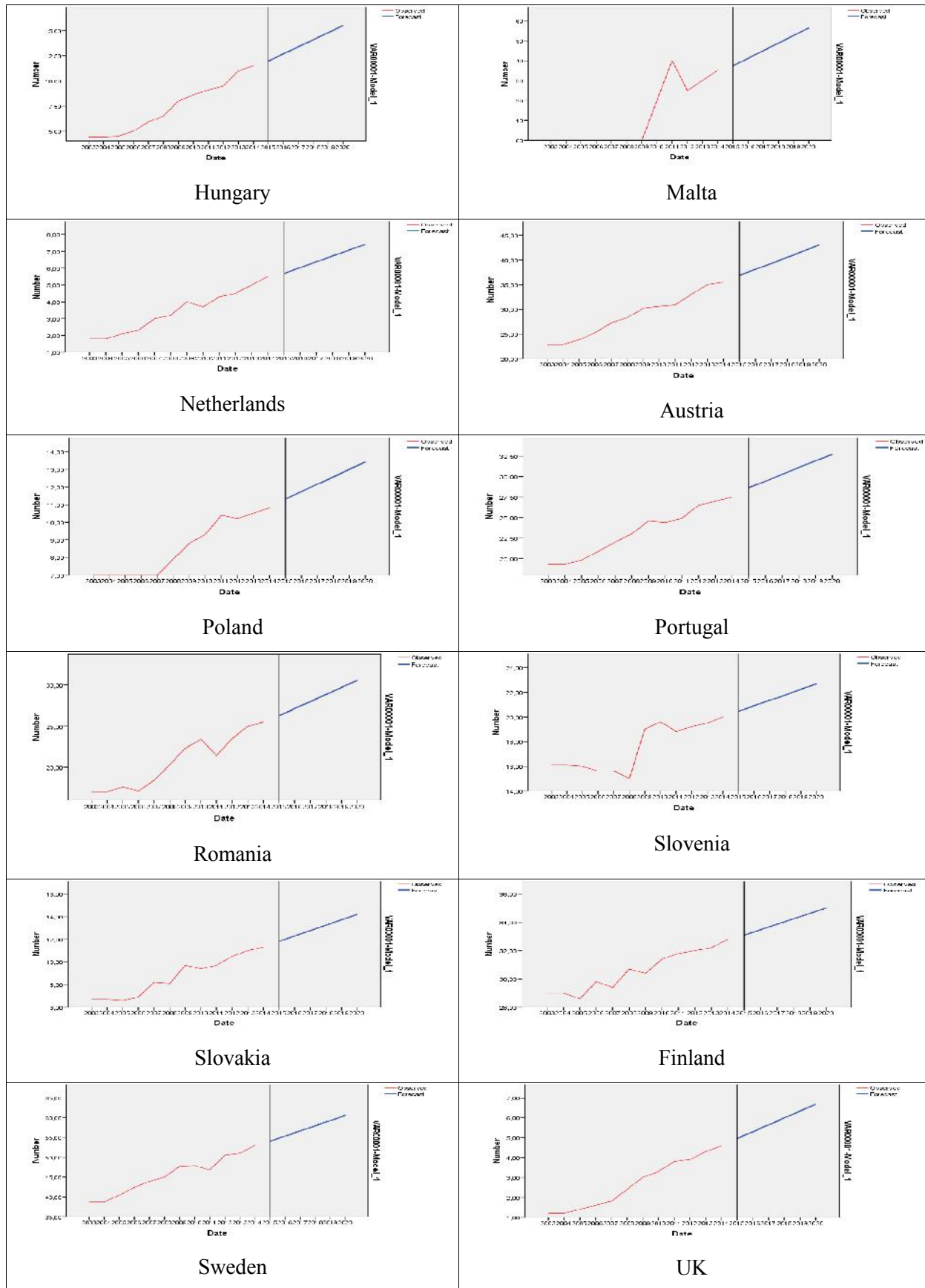
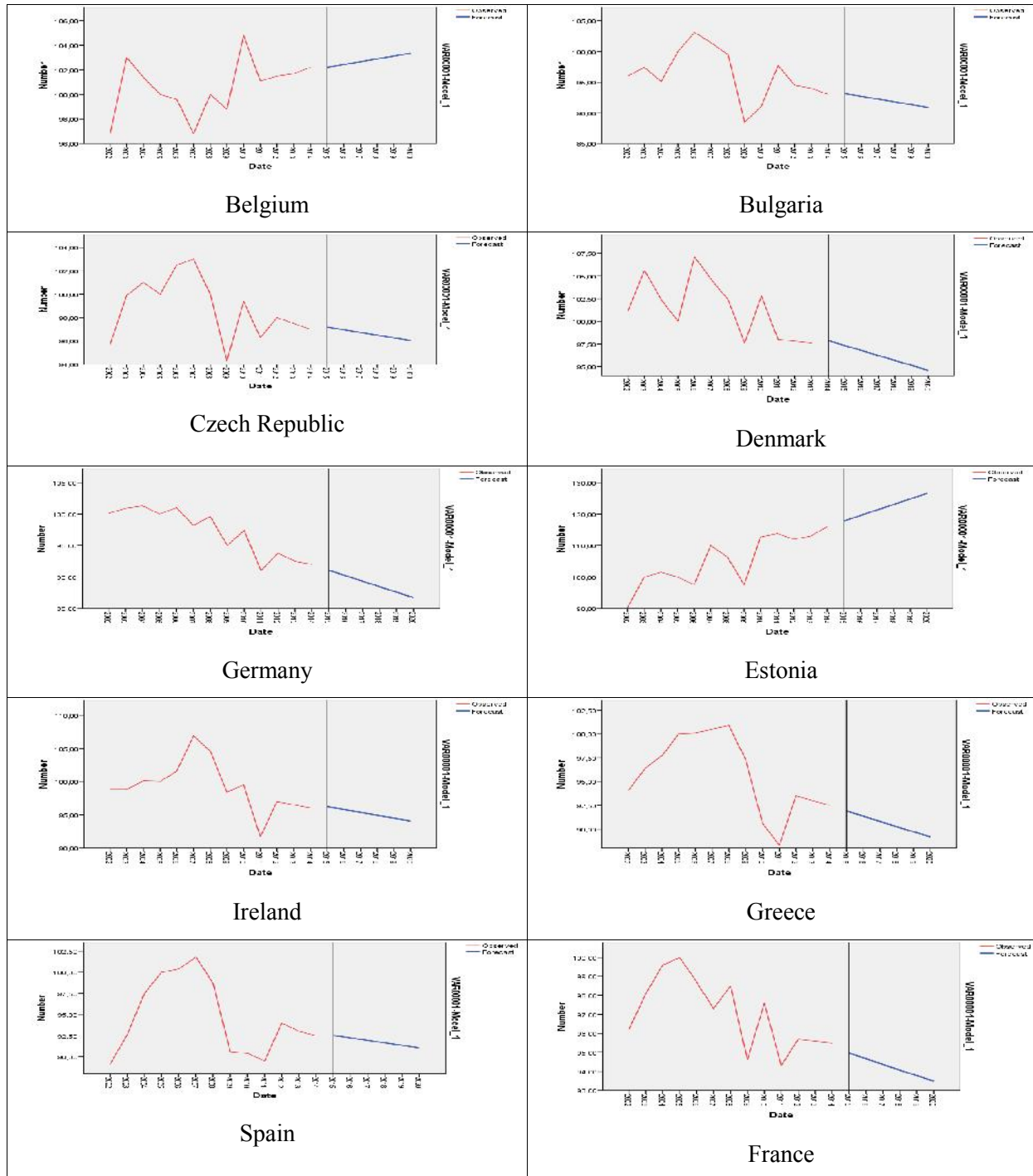


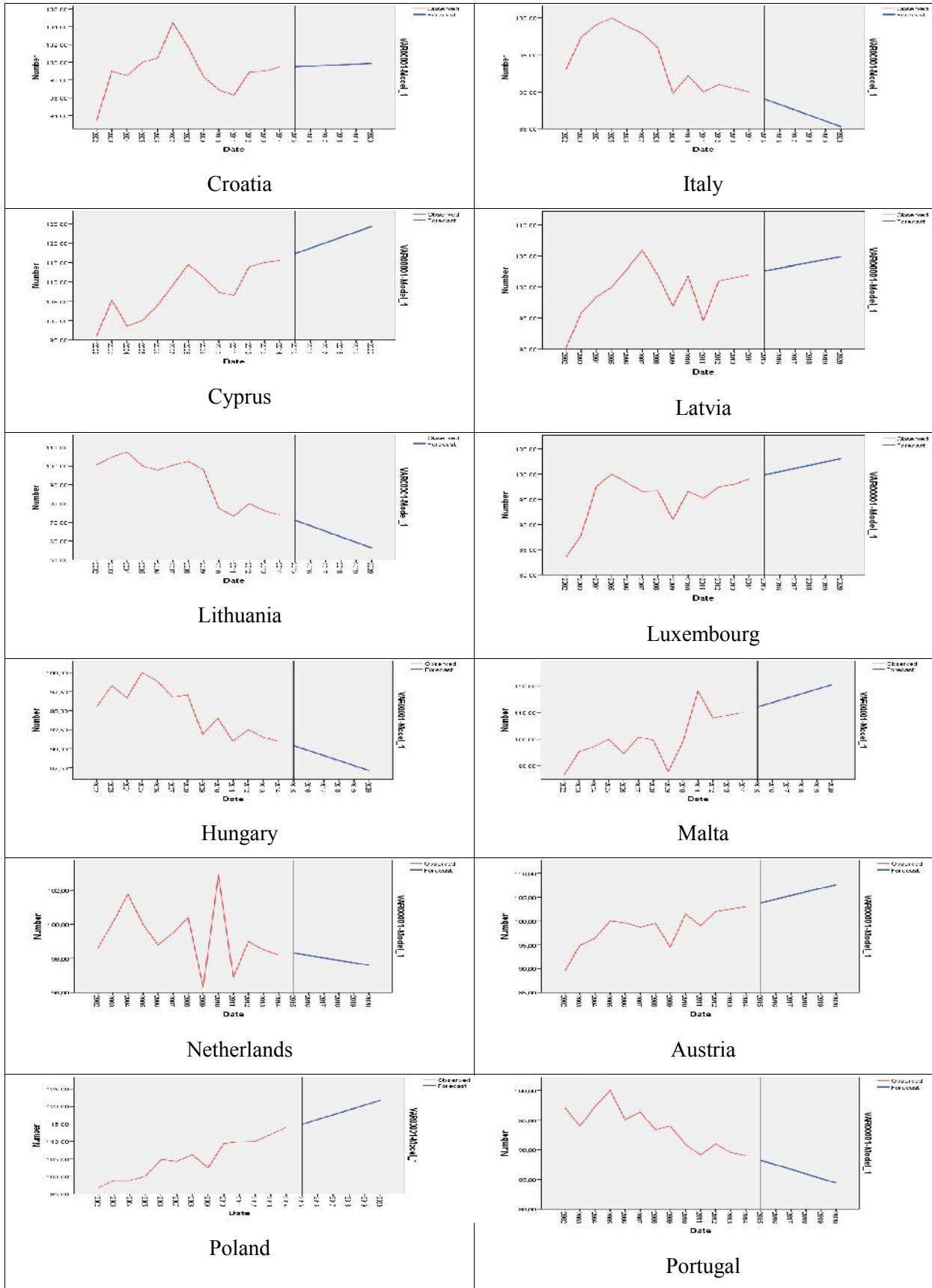
Figure 10. Share of renewable energy forecast  
 Source: personal contribution using SSPS19

An interesting observation can be made using Figure 10: 26 Member States (92.86%) will not change their cluster adhering as in 2014. In 2020, 6 states will face to renewable energy rates less than 10%, 11 states with rates between 10% and 20% and other 11 states will achieve rates greater than 20%.

The Europe 2020 Strategy stipulates a decrease of the primary energy consumption of at least 20% in comparison with 2005 level. Under this target, the forecast for 2020 is presented in Figure 11.



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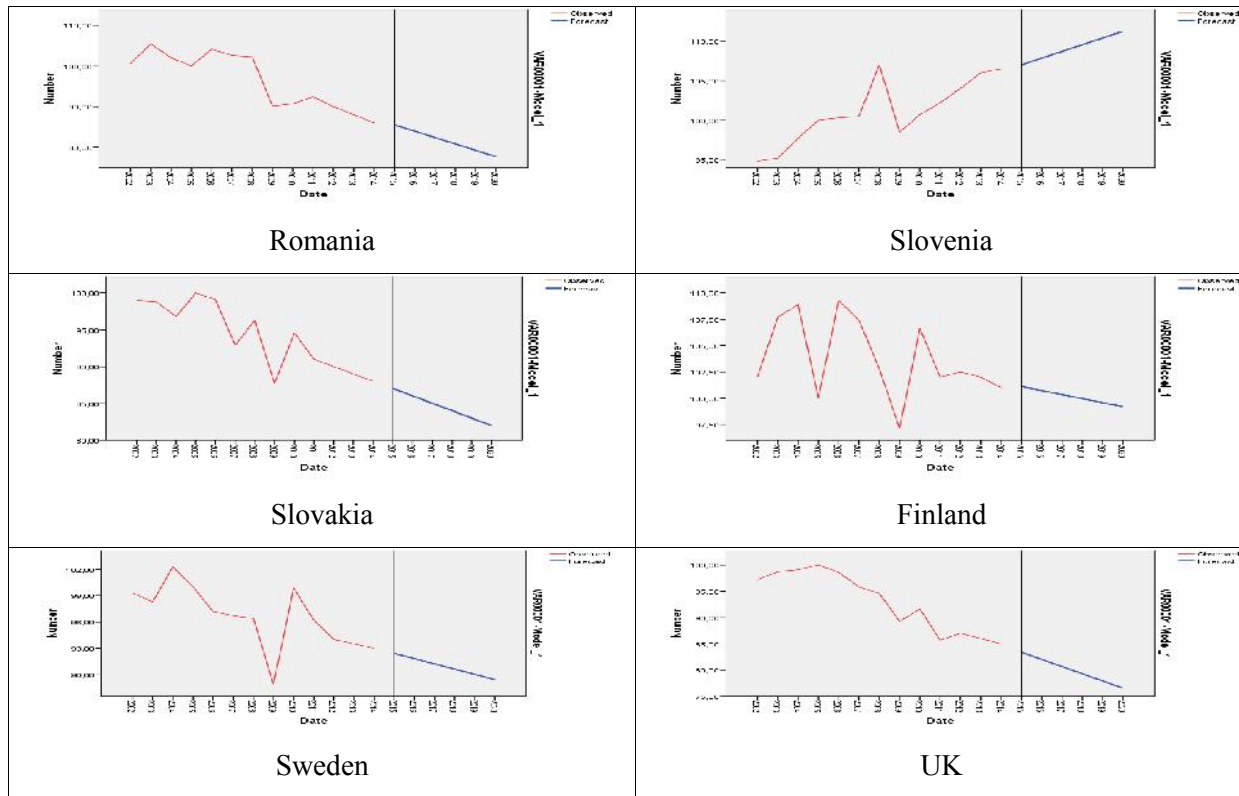
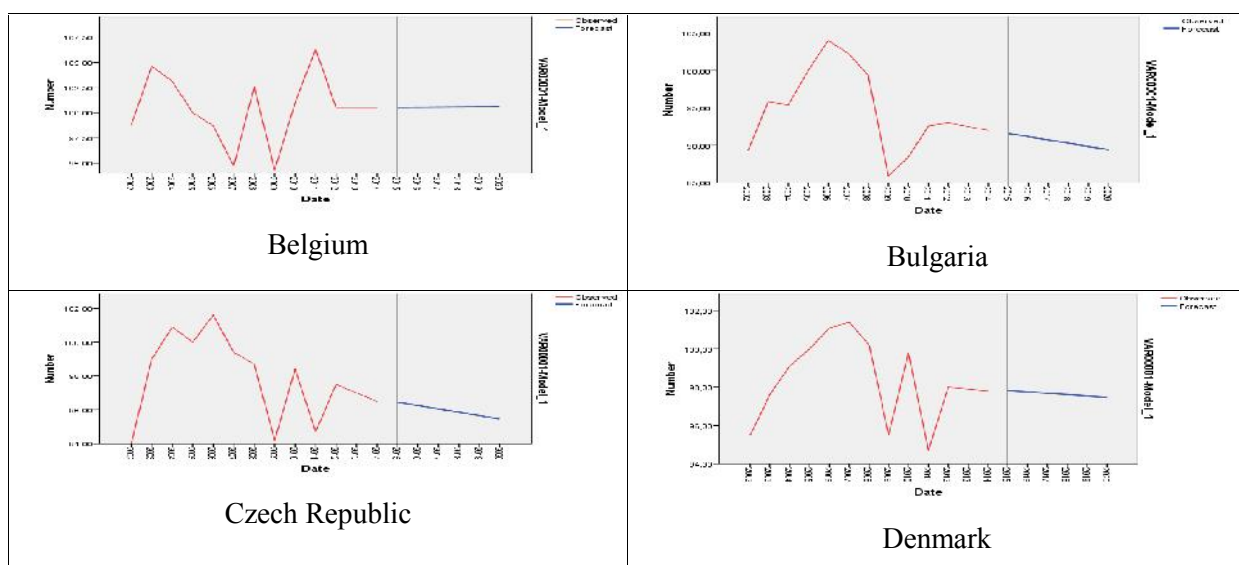


Figure 11. Primary energy consumption forecast (2005=100%)

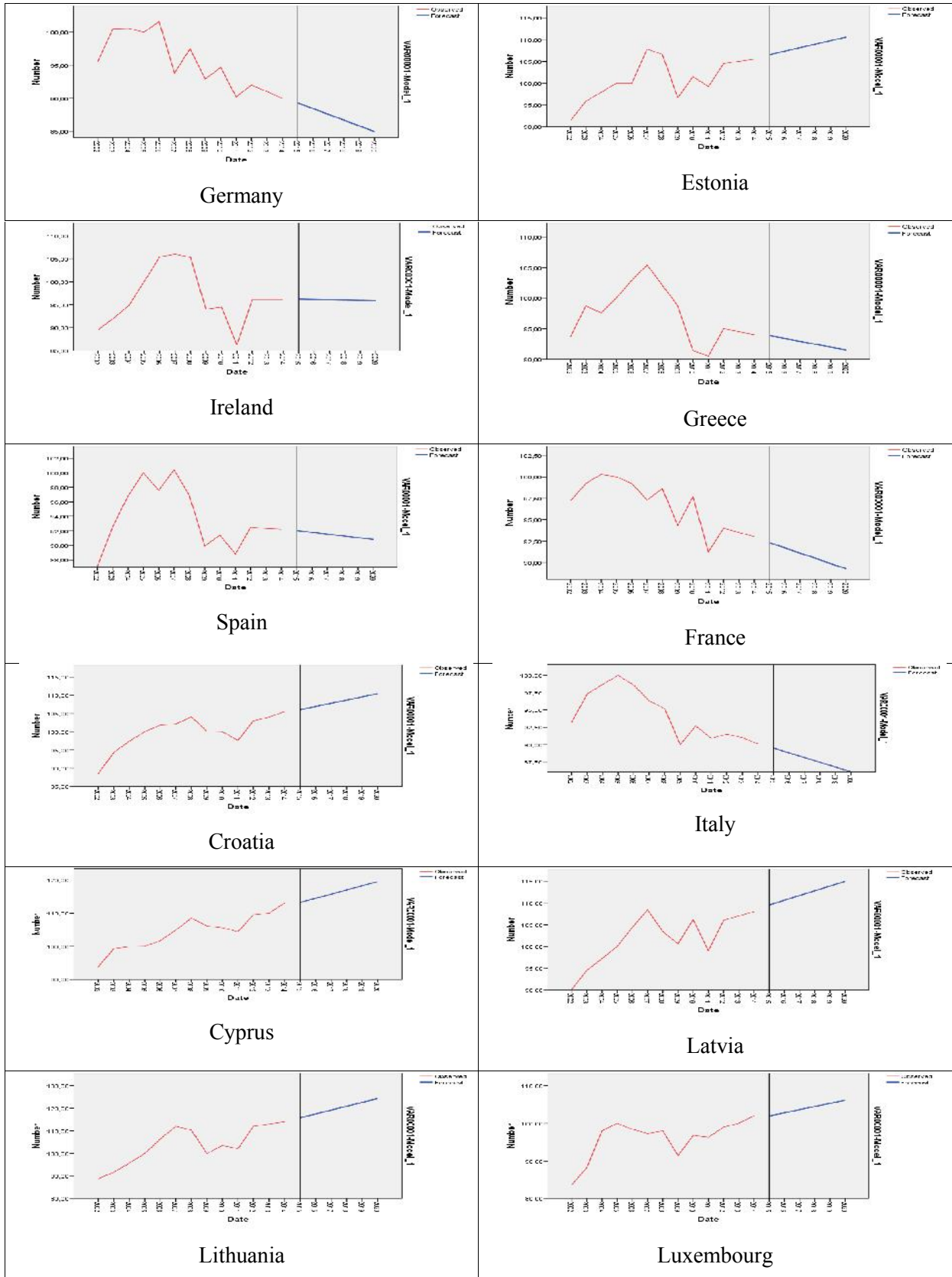
Source: personal contribution using SSPS19

In 2020, 3 Member States will achieve primary energy consumption rates less than 80% (2005 =100%), 16 states rates between 80% and 100% and 9 states rates greater than 100%. Moreover, 23 states (82.1%) will maintain their adhering to the same clusters as in 2014.

The last analysed environment indicator is final energy consumption (index 2005=100%). It would decrease by 20% until 2020. The future level of this indicator in the Member States is presented in Figure12.



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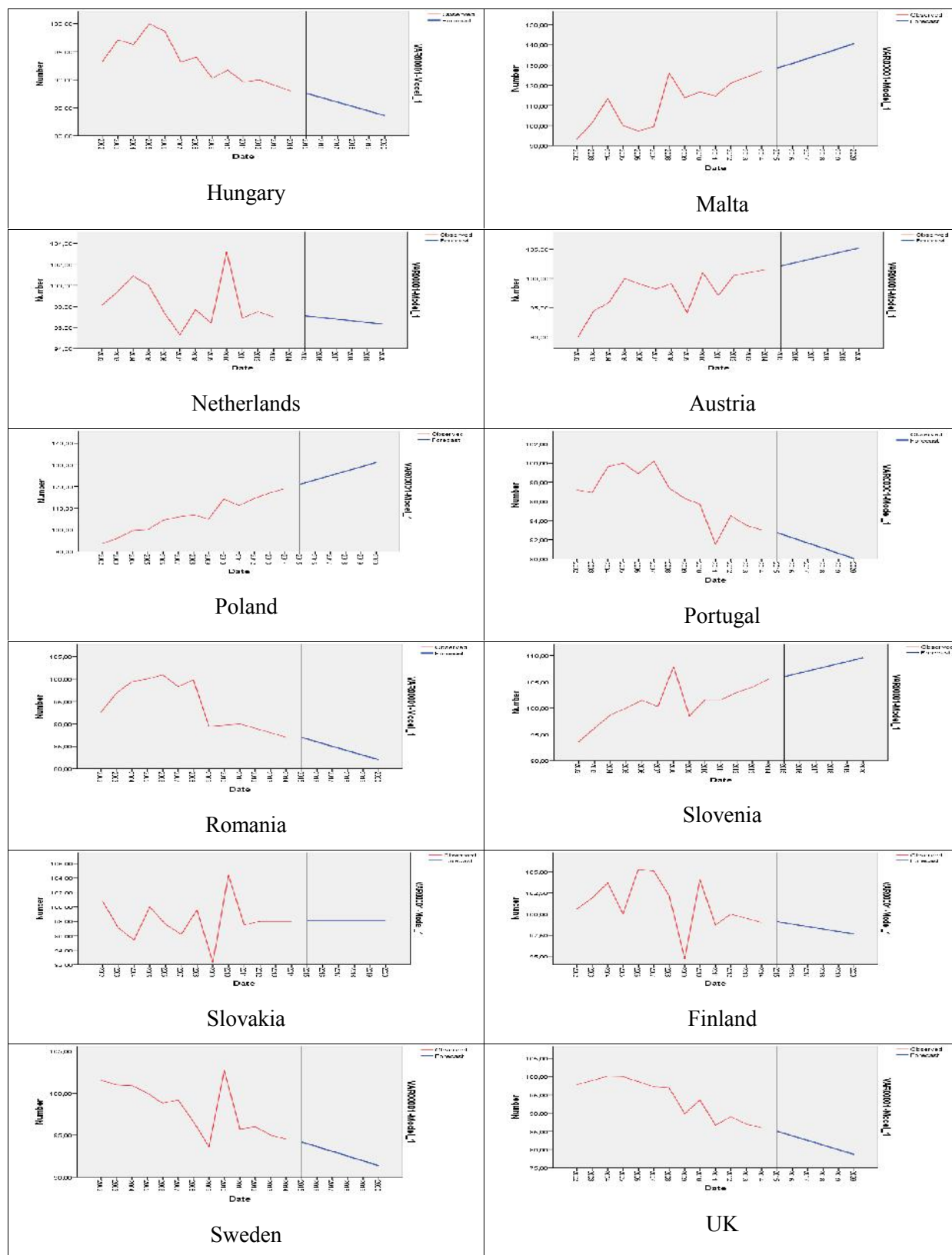


Figure 12 Final energy consumption forecast (2005=100%)

Source: personal contribution using SSPS19

The final energy consumption trend will improve in 2020, when 7 states will achieve rates less than 90%, 10 states between 90% and 100% and 11 states will face to rates greater than 100%. 24 Member States (85.7%) will maintain their positions into the clusters as in 2014.

## **5. Conclusions**

Europe 2020 Strategy is focused on high four goals connected to the environment protection. The analysis of these goals (indicators) presented great disparities between the Member States which led to the conclusion that it is possible to form three clusters in 2014.

Unfortunately, the forecasts for 2020 are not positive and the cluster grouping will be maintained as in 2014. Moreover, many Member States will be not able to achieve the goals of the new Strategy.

This fact will be a new argue that EU 28 is not able to decrease the economic and environment regional disparities. The future is not so good and a new more realistic approach of the European challenges is necessary.

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## Banking Union- Present Stage and its Perspectives

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**Abstract:** Banking Union is very important for financial stability of EU, for preventing any future crisis, for improving corporate governance in the banking sector, for completing the single market for financial services and for the strengthening of monetary union, for opening the way to fiscal union and to political union. There is not enough theoretical research in the field of banking union, but there are many recent contributions on behalf of foreign and Romanian experts and analysts, which refer mainly to the three components/pillars of EU banking union: a Single Supervision Mechanism (SSM), a Single Resolution Mechanism (SRM) and an harmonized system of deposit guarantee schemes. Some micro studies and surveys carried out by prestigious institutions, like Deutsche Bank, Brookings Institution, CEPS have been run over and analyzed together with the positions and opinions of different European officials, and also with the content of EU secondary legislation. An empirical research was made with the aim to identify all essential aspects relating to EU banking union, which may concern the academics, researchers and business community. The paper is based on a previous research study coordinated by author and contains his own conclusions focused on the main arguments in favour of banking union.

**Keywords:** bank; supervision; resolution; legislation; institutions

**JEL Classification:** G01, G18, G21

### 1. Introduction

EU Banking Union is a new and ambitious project based on a better European supervision and regulation framework established after the crisis and involves a legislative and institutional building up under the direct guidance of European Council. While Single Supervisory Mechanism is more advanced in materializing due to a new regulation adopted by EU Council and due to activity of Supervisory Board of ECB, European Commission and European Banking Authority, it will take some time to create and implement a Single Resolution Mechanism and it is not clear what will happen with the funding of Deposit Guarantee Schemes at European level. Romania and other non-euro Member States will participate to banking union in order to remove the structural vulnerabilities and fragmentation of banking sector, to improve its performance and contribution to economic growth.

### 2. Important Steps Recorded in the Formation of Banking Union

When in 1961 Bela Balassa defined the five stages of economic integration- free trade area, custom union, common market, economic and monetary union, total economic union- European integration process was in the first years after Rome Treaty, but in the second stage, that of creating a custom union for the six member states of European Community which was finally achieved in the mid 1968 together with a common market for agricultural products. The liberal vision of Rome Treaty, see the four fundamental freedoms, was in stark contrast with the national interventionism inspired by Keynes

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ideas and focused on achieving the welfare state, although the regulation activity at super-national (European) level was also a kind of new interventionism and involved a large transfer of sovereignty from national level (positive integration).

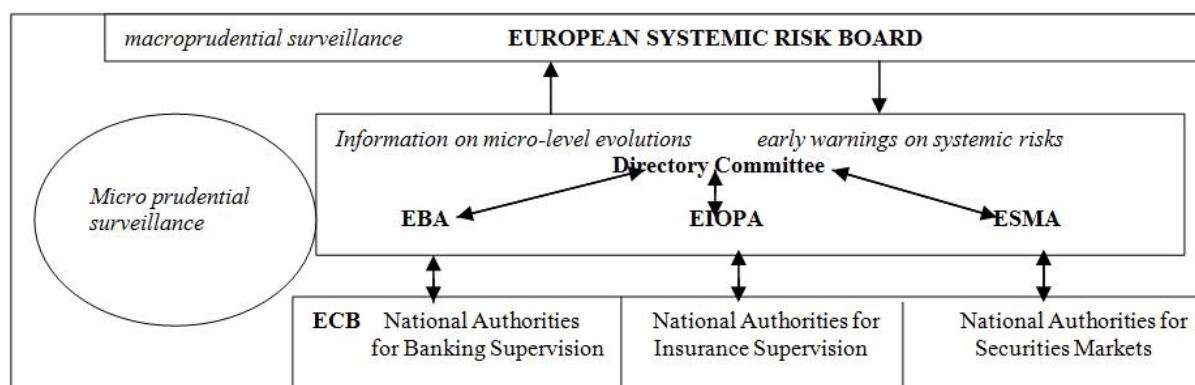
After more than half a century European Community was able to establish an economic union based mainly on a single market and also a monetary union based on a single currency, but the single market is not complete and the monetary union covers only 20 member states of European Union. Due to liberal economic policies implemented in the last decades and because the way the monetary union was made and consolidated, see the failures in implementing the Growth and Stability Pact, European Union proved extremely vulnerable to the effects of financial and economic crisis. But the main culprit of the recent crisis, and also of debt crisis in the Eurozone, was the banking sector that took full advantage of liberalization and deregulation and threw itself into reckless lending in the real estate sector, in doing huge and uninspired speculations with derivative products and in buying a lot of treasury bonds. The second culprit was the bad governance in the countries from Southern Europe, where the governments run into huge debts, bore with high macroeconomic deficits and imbalances and tolerated a damaging corruption and a large fiscal evasion. European Governments and Central Banks were forced to bail out the banking sector using a lot of public money and increasing to a large extent the public debt in order to avoid the repetition of the Great Depression (1929-1933) scenario when many banks had failed and when the crisis had badly hit most people in USA and Europe and it took almost two decades for starting a true economic recovery in Europe.

The response of EU to crisis effects was to undertake a large reform of European economic governance in order to consolidate the role played by the Stability and Growth Pact in coordinating and supervising the macroeconomic policies, especially the fiscal and budgetary policy of the Member States. The main instruments introduced are: European Stability Mechanism, European Semester, Six Package, Two Package, Treaty on Stability, Coordination and Governance (Fiscal Compact), the second and the third ones sustaining the Excessive Deficit Procedure (EDP) applied to Member States with public debt in excess of 60% of GDP and also the Macroeconomic Imbalance Procedure (MIP) based on Scoreboard Indicators (11) which broadens the EU economic governance framework to include the surveillance of macroeconomic trends.

Sovereign debt crisis and great difficulties faced by banks in Eurozone have revealed not only the major weaknesses of corporate governance in the banking sector but also demonstrated that financial stability cannot be insured at national level because of the vicious circle created between banks and governments (shocks transmitted from the banks to the government and from the government to the banks) and therefore the need to break it by establishing a banking union within EU. But there are two other important reasons for the creation of a banking union: the first one would be the completion of single market for financial services, that is the free movement of capital, the second one would be the strengthening of monetary union, especially the role of single currency. Both mentioned processes aim at a rapid transition to a fully economic union and a federal political union, the last stages of European integration.

Starting with 2010 a new institutional framework was created for a better supervision and regulation of financial sector: the European Systemic Risk Board (ESRB), in charge with macro-prudential surveillance under EU Regulation no.1092/2010, European Banking Authority (EBA), based on EU Regulation no.1093/2010, The European Insurance and Occupational Pensions Authority (EIOPA), established under EU Regulation 1094/2010 and The European Securities and Markets Authority (ESMA) established under EU Regulation 1095/2010 (see figure 1). All these authorities are in charge with macro-prudential supervision and especially with monitoring and preventing the

systemic risk at EU level and also with issuing of warnings and recommendations for financial sector from EU. It is also European Central Bank(ECB) involved in monetary policy and macro-prudential supervision of banking sector while at the national level there are specialized authorities in charge with micro-prudential supervision, but also with some macro-prudential functions (like Central Banks) which interact with European Authorities.



**Figure 1. The structure of European System of Financial Supervision**

*Source: Made by the author after some sources*

Based on this system banking union was defined as having three main pillars: a Single Supervision Mechanism (SSM), a Single Resolution Mechanism (SRM) and an harmonized system of deposit guarantee schemes. On 29 June 2012, European Council decided the creation of a banking union, focusing initially on the establishment of a single supervisory mechanism that involves European Central Bank on the basis of Article 127 (6) of the Treaty on the Functioning of the EU (TFEU). After Larosière Report, which underlay the financial supervision at European level, European Commission published the Communication “*Roadmap to banking union*” on 12 September 2012 which examined the issues of legislative and institutional framework of the banking union. This Communication was followed by Liikanen Report on 2 October 2012 that reviewed the banking sector, proposed some major reforms and recommended actions in 5 domains.

Starting with October 2012 European Council has reviewed the issues of banking union at every summit, ECOFIN and European Parliament adopted some legislative acts, European Commission submitted its proposals for the needed secondary legislation and strongly cooperated with ECB and EBA for establishing a functional banking union within EU.

### 3. Single Supervision Mechanism

When the idea of banking union took shape the establishment of a Single Supervisory Mechanism(SSM) has shown to be essential and European Commission proposal was based on the transfer at EU level from national level of specific surveillance tasks for large banks from eurozone. SSM, composed of the ECB and national supervision authorities, constitutes a consistent and effective supervision structure in the eurozone meant to insure financial stability in Europe and it is based on indisputable and strong authority of ECB and also on the specific and long expertise of national authorities which shall insure that banking sector supervision remains anchored in national/local conditions and traditions, at least for medium and small banks. At the same time European Commission proposed a mechanism for connecting to the Member States which have not adopted the

euro but wish to participate in SSM. This mechanism is based on a memorandum of understanding describing in general terms the cooperation framework.

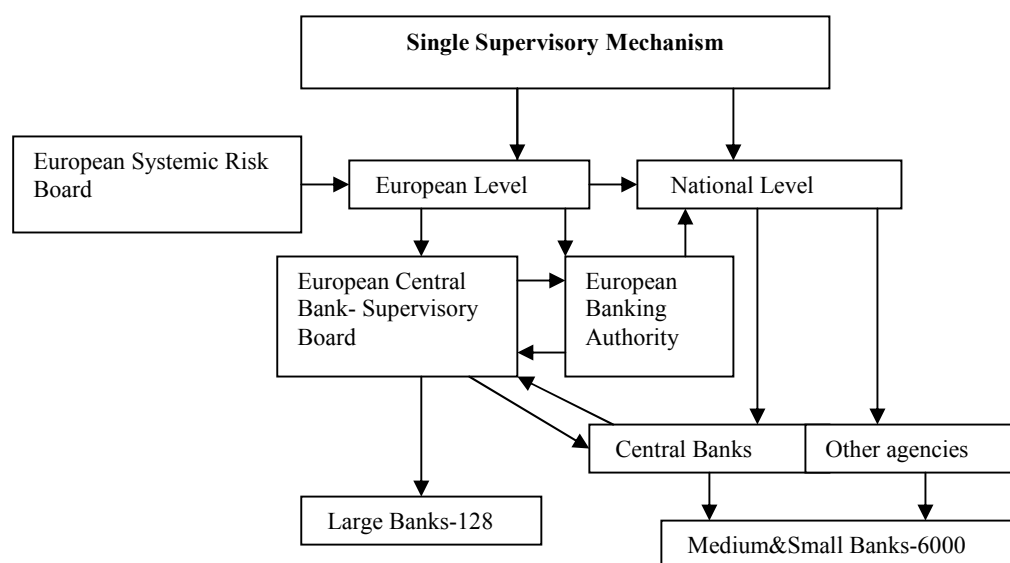
In 15 October 2013 ECOFIN Council adopted the Regulation no.1024/2013 conferring specific tasks on ECB concerning policies relating to the prudential supervision of credit institutions, having regard to the opinion of European Parliament and the opinion of ECB. The regulation makes several references to the banking union and its structure and clearly establishes the role of ECB in it. ECB should be able to exercise supervisory tasks in relation to all credit institutions authorized in, and branches established in, participating Member States and should take into account the diversity of credit institutions and their size and business models. Credit institutions must internalise all costs caused by their activities in order to avoid moral hazard and the excessive risk taking arising from it. The Supervisory Board will be an essential body in the exercise of supervisory tasks by the ECB, and will have a Chair, a Vice Chair and will include representatives from the ECB and from national competent authorities.

It is the ECB through the new institutional component –Supervisory Board- that will be involved in assessing through audits and stress tests the participation of 128 banks to SSM (see figure 2). Danièle Nouy, the appointed Board Chair, said that the banks should make reserves to cover sovereign assets that can not be regarded as risk-free assets and the banks failing the stress tests will not get any help and they have no future. The ECB had already begun in early 2014 checking the quality of assets resistance for the first 128 largest banks in the euro area, followed in September 2014 to set the final list, which is reviewed annually, with banks directly supervised (from November 2014), especially their line and acquisitions of assets. EBA supports activities ECB technically on line supervision, testing the resilience, mediation and establishing technical standards

ECB has already released the guidelines (a 285 page manual) for asset quality review (AQR) by which €3,700 billion worth of assets (out of 30,700 billion total assets) will be evaluated until August 2014. Sabine Lautenchlaeger, Board Vice Chair, pointed to the need for capital improving and there were estimates for banks ‘capital shortfall ranging from € 280 billion to €770 billion. Soon after performing AQR unprecedented stress/shock scenarios would be implemented having in mind that stress tests made in 2010 and 2011 and conducted by the EBA and its predecessors were useless: they didn’t properly assess banks’ ability to withstand sovereign defaults and to fully reveal banks’ macroeconomic vulnerabilities. Banks will have to reflect the results of AQR and stress test in their 2014 accounts.

Collateral in its diverse form will be correctly evaluated by external experts based mainly on independent market valuations because collateral valuations are an important source of uncertainty for banks in some countries (e.g. Italy). Besides loans, a broad group of assets difficult to value will be assessed (“level 3 assets”) for 29 banks with material exposures, including derivatives, real estate holdings, participation in private equity deals, special investment vehicles.





**Figure 2. The framework of banking macro and micro-prudential supervision in EU**

*Source: Made by the author*

Similar to Danièle Nouy, prestigious analysts, like Daniel Gros, CEPS director, think that banks' investments in government bonds is not risk free and as they have a huge debt exposure on sovereign debt it will be necessary to drastically reduce it (under the provisions of Large Exposure Directive banks should not hold government bonds over 25% of their own capital). European banks hold €1750 billion worth of assets in government bonds representing only 5.7% of total banking assets but a large part of their capital.

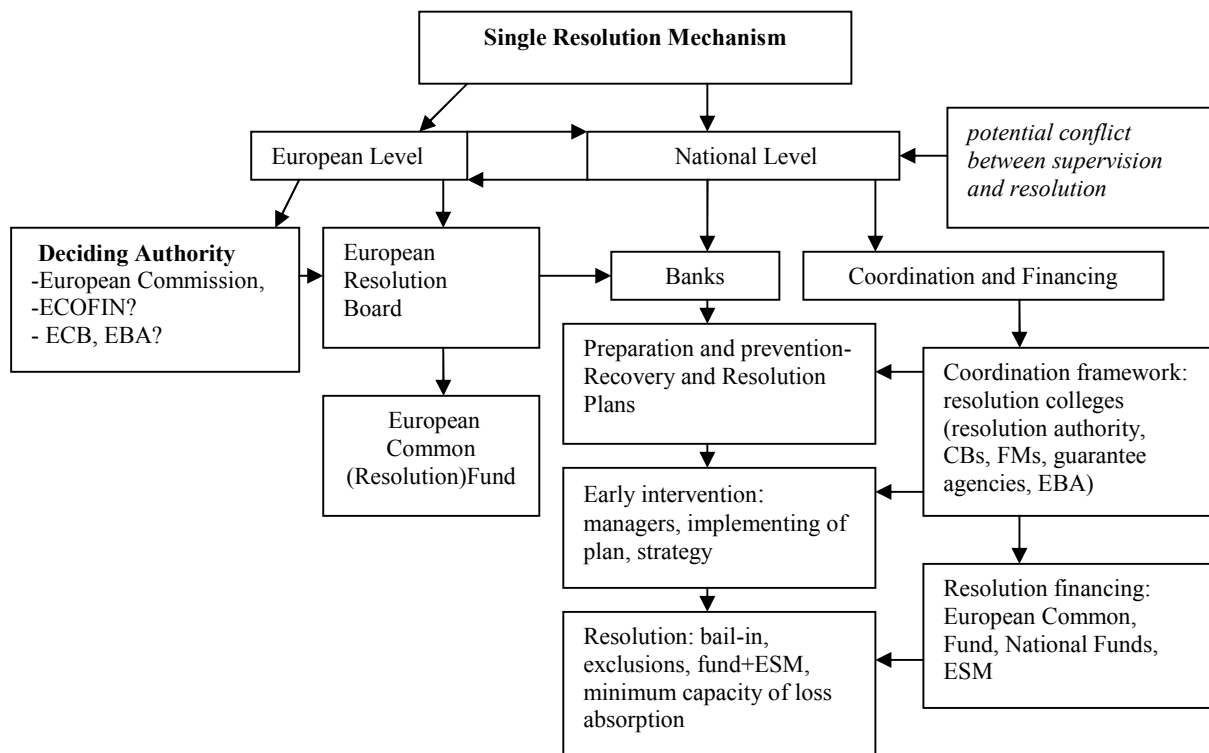
#### 4. Single Resolution Mechanism

The second major component of banking union is represented by the Single Resolution Mechanism (see figure 3) based on the provisions of the Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010. The aim of this directive is to create adequate instruments at EU level for dealing with unsound or failing credit institutions and to involve shareholders and creditors, rather than taxpayers, in bearing the banks losses. A harmonized resolution regime is necessary because Member States have different insolvency procedures applied to commercial banks. Each member state will have to create a national resolution authority responsible for banking resolution process. All the credit institutions and investment firms which are governed by the provisions of Capital Requirements Directive will enter under the rules of this directive and will prepare a full recovery plan offering valuable information for resolution authorities which may require proper self-imposed measures for restoring the financial soundness or for reorganizing bank's business. Resolution authorities will be in charge with resolution plans based on different scenarios including systemic instability, which will provide resolution instruments and ways for banks survival.

Resolution activity is strongly linked to banks supervision, as supervisors may intervene in the case of evident difficulties and may require the implementation of recovery plans and improvements in bank's management or even the replacement of managers by a special manager having all legal powers and

asking for capital increase, assets decrease, reorganization or a takeover by another bank. If the early intervention process is not successful and a bank is in danger of failing then the resolution authority may implement resolution actions based on its investigation related to capital requirements, assets, liabilities, financial position and prospects and aiming at promoting the public interest and avoiding the dissemination of systemic risks. The main resolution measures or tools would include: a) sale of some business; b) setting up a bridge institution (temporary transfer of banking assets to a public controlled entity); c) separation of assets (transfer of impaired assets to a vehicle asset management); d) bail-in measures (the imposition of losses, with an order of seniority, to the shareholders and non-insured creditors). Some liabilities, like insured deposits, may be excluded from bail-in.

Regulatory technical standards supporting Single Resolution Mechanism are going to be developed by the European Banking Authority and adopted by the European Commission. The date proposed for the implementation of this Directive is 1 January 2015, except for the bail-in tools, which may not be applied by Resolution authorities until 1 January 2018.



**Figure 3. The framework of Single Resolution Mechanism in EU**

*Source: Made by the author*

On 10 July 2013 European Commission has proposed the Single Resolution Mechanism (see figure 3), including the European Resolution Board (with a staff of 300 people) and in the second part of 2013 ECOFIN Council and European Parliament have debated on the Recovery and Resolution Directive. European Council, which is the supreme decision factor within EU, has asked during the last December Summit (2013) to EU legislative bodies to adopt SRM before the end of the current European legislature (May 2014). However some divergencies have persisted between ECOFIN Council and European Parliament on the final decision body in the resolution process.

The Single Resolution Mechanism will work as follows: the ECB, the supervisor of the most important banks (128) from the banking system, will indicate when a bank passes through severe financial difficulties and has to be resolved by the Single Resolution Board (SRB) supported by the ECB; European Commission and the relevant national authority will prepare the proper solution for its solving, SRB having powers to investigate and define the proper way of resolution, what tools will be used and how the European Resolution Fund will be involved; on the basis of the recommendation of the Single Resolution Board or on its initiative the European Commission will decide if and when will place a bank in a resolution position and will determine the framework for using the resolution tools and the implication of the European Resolution Fund; under the supervision of the Single Resolution Board national resolution authority will be in charge with the implementation of resolution plan; the Single Resolution Board will supervise the resolution, will monitor the implementation of the plan at the national level by the national authority and if such an authority does not conform to its decision it will be able to directly address executive orders to the banks. The European Commission's role is to trigger a bank resolution and a decision for its framework, ensuring consistency with the rules of the internal market and state aid, defending thus the independence and responsibility of the entire mechanism.

On 20 March 2014 ECOFIN Council and European Parliament have reached an agreement on SRM from the Banking Union project that, in 2016, will allow avoiding situations in which taxpayers bear the cost of banks liquidation, in the event of further crises. The setting-up period of an (Common) European Resolution Fund of €55 billion for banks facing serious difficulties has been reduced as a result of the negotiations from ten to eight years. The European Parliament would have wished that the European Fund should become fully operational within three years, but there was a fierce opposition on behalf of Germany. At the same time, there remains a sensitive issue to be solved, namely the method of calculating the banks' contributions to European Fund, which concern in particular France and Germany. European Central Bank will trigger the process that will determine whether a bank is failing and the European Resolution Board will coordinate the orderly liquidation or recovery of the bank concerned. All decisions on the resolution process must be validated by the European Commission.

## **5. Deposit-Insurance Schemes**

The third component of banking union will be the harmonization/improvement of national deposit insurance schemes. Directive 94/19/EC on Deposit Guarantee Schemes was firstly improved in 2008, when in 15 October 2008 the European Commission proposed a revision to EU rules on deposit guarantee schemes that put into action the commitments made by ECOFIN on 7 October 2008. The new rules were designed to improve depositor protection and to maintain the confidence of depositors in the financial safety net, the ceiling for a person deposit being increased from €20,000 to €50,000. In July 2010 European Commission made a new proposal for improving this directive aiming at simplification and harmonization, reduction of the time limit for paying out depositors and better access for DGS to information about banks, sound, credible and sufficiently financed DGSs, mutual borrowing between DGSs. Starting with 31 December 2010, Member States were supposed to ensure the coverage for the aggregate deposits of each depositor set at €100,000 in the event of deposits being unavailable.

After more than three years of stop-start negotiations, ECOFIN Council and the European Parliament agreed in 2013 on reforms to make available funds of up to 0.8 per cent of the banking sector's

insured deposits for payouts. The revision to the deposit guarantee scheme directive is one of reforms that EU was aiming to close until the end of 2013. In December 2013 preliminary approval was given to national rules on bank failure, which will require governments to impose fees on banks equivalent to 1 per cent of insured deposits, which will go towards the costs of resolving or rescuing banks. While the EU deposit guarantee of €100,000 will remain the same, the rules will coordinate better the way governments arrange for that insurance to be paid. At present many countries have poorly funded or unfunded deposit guarantee schemes, which may ask for industry contributions after a payout is made. The deadline for payouts will be gradually reduced from 20 to 7 working days by 2024 and at least 70 per cent of this payment must be made in cash, the remainder can be deferred for a year.

The capacity of the national deposit guarantee schemes (DGS) to cover the guaranteed deposits is under question. DGSs funded at the EU level or at euro area level may provide an external loss absorption mechanism, which may be considered independent on the solvency of the sovereign entities. Such an external loss absorption mechanism may be important, especially during a financial crisis. Banks bailing out or resolution during the financial crisis was made with taxpayers money (financed by governments and central banks) and practically saved all deposits (insured and non-insured), but the bail out will be replaced by bail in (shareholders and large creditors 'money). But an European Fund for covering the needs of national deposit guarantee schemes has not been accepted so far, also a Common European Fund for banks resolution and for deposit guarantee schemes, both financed through banks own contributions, due to financial constraints and losses recorded by banking sector. Firstly, banks will have to increase their capital due to the fact that Basel 3 agreement introduced the reserves requirements for macro-prudential risks and those for an increased liquidity, while increasing coverage level with capital of the risks, improving the quality of their own funds and returning to capping the banks deleveraging. Secondly, banks will have to contribute to European Resolution Fund and to national resolution funds. Thirdly, banks will have to supplement their contribution to national deposit guarantee funds.

## **6. Conclusions**

Daniel Dăianu, first Deputy Chairman of the Financial Supervisory Authority from Romania, observed the impact of financial integration, of the complexity and risks of financial operations/innovations, including the failure of the regulatory and supervisory systems, corporate governance deficiencies, manipulation of markets and chase after big profits but associated with high risks rapidly propagated into the system (Dăianu, 2013). He combats the great illusion that price stability (low inflation) would ensure financial stability on the basis of efficient markets hypothesis. For a healthy economic growth we need more robust financial systems, as in the last two decades their robustness and resilience dropped dramatically, they became more vulnerable to systemic shocks while the financial situation turned out more fragile and destabilising for the whole economy (Dăianu, 2014). Mugur Isărescu, the Governor of NBR, believes that mortgage loans and derivatives have boosted moral hazard in the banking sector, the banks should finance mainly the most dynamic economic sectors which draw economic growth, and this requires the review of the orientation of commercial bank policies to finance the productive activities (Isărescu,2013).

Mugur Isarescu, the Governor of NBR, recently said that the absence of fiscal union and of banking union has flawed the Monetary Union and imposed a high cost on financing the public debt due to market perceptions, noting a major paradigm shift, for ensuring the continuity of critical financial services through a combination of preventive actions with corrective solutions. He thinks that the

banking regulations, although they have an increasing macro-prudential orientation are not sufficient to prevent the build-up of systemic vulnerabilities, the other components of the mix of macro-economic policies should avoid ample variations in the demand for credit, particularly through the promotion of a non-cyclical policies of revenues (Isărescu, 2013).

The arguments in favor of banking union are much more solid, more logical and better theoretical grounded than the counter-arguments. It is ridiculous to talk about over-regulation and its costs in the case of a banking union when the deregulation and liberalisation of financial markets have led to the explosion of mortgage credit, financial derivatives and speculations, with the direct result of a severe financial crisis. Banking Union concept has been imposed to prevent systemic risks and resolve in an appropriate manner the delicate situation of the distressed banks, but also to ensure the protection of small depositors and to preclude a new financial crisis. Banking Union will combat the fragmentation of EU banking sector and facilitate lending/financing of the private sector, potentiating its investment capacity with beneficial effects on economic growth (Tolosa, 2014). Banks should promote a new business model, to pass from the transaction banking to relationship banking, that is to solutions tailored to customer needs (Dănilă, 2014).

Banking Union construction is meant to break the vicious circle between banks and sovereign entities, because banks will have to reduce their high exposure on the sovereign debts, which no longer can be considered without risk. Poor governance at national level may affect local banks, and on its turn a poor credit institution may affect the credibility of local government and may require financial support, with consequences on the level of public debt (Tolosa, 2014). That's why the Banking Union must be accompanied by a Fiscal Union to prevent moral hazard and to break the vicious circles, to strengthen public finances and budgetary discipline within EU, to create new instruments for intervention at EU level.

Banking Union issues may be integrated into the new economic governance framework (reformed) of EU, by imposing a tight fiscal discipline through Fiscal Compact and the Excessive Deficit Procedure based on Scoreboard Indicators(11), by implementing the provisions of Basel agreements and by creating a possible fiscal union.

Progresses on the implementation of the Banking Union are significant and have resulted in the adoption of an important regulation and the proposals for some directives, in evaluations and stress tests designed to be completed in the first part of the year 2014, in the political will displayed by the European Council to fulfill the objectives set in 2012, in the actions undertaken by legislators (ECOFIN and EP), and in the intense activity carried out by the European Commission, the ECB and EBA. One can say that there has been a rapid progress for establishing the Banking Union on behalf of European institutions, which have worked effectively and almost without breaks for the adoption of secondary legislation and also for the institutional bidding required to accomplish the three components of the Union: supervision, resolution and deposit guaranteeing. At the end of March 2014 there was in force the Regulation no.1024/2013 for SSM adopted by ECOFIN and also the Supervisory Board within ECB, The Directive for SRM was in the final stage of adoption, there was made an agreement between ECOFIN and EP on the revision of the Deposit Guarantee Scheme Directive, it has been started the assets evaluation for the banks supervised by Supervisory Board, and SSM would have become operational in November 2014, EBA has published final draft Technical Standards on liquidity requirements and final draft Technical Standards on additional collateral outflows, and also has announced the key components of the forthcoming 2014 EU-wide stress test that will be conducted on a wide sample of EU banks.

5) Romania will enter the Banking Union because banking sector in our country is overwhelming dominated by European banks from the euro area and because National Bank of Romania and Romanian Banking Association support this project useful for the financial stability of EU and for the consolidation of the single currency and monetary union. Romania does not have to wait for the adoption of the single currency to enter the Banking Union, instead adhering to this union is an advantage in getting ready the economy for its entry into the euro area. Of course, it may occur several important requirements for the banks related to the management of capital, liquidity, assets, risks, to their contributions to various new funds, but fears of banking capital flowing towards stock exchanges due to big investors panic and those relating to the restriction of lending, especially for SMEs, are not justified and may be tackled fairly easy.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
EUROPEAN INTEGRATION  
REALITIES AND PERSPECTIVES

## EU Funding for 2014-2020 – Upcoming Opportunities and Challenges

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**Abstract:** The new philosophy of community development under the aegis of *Europe 2020* strategy requires increased *coordination* and better *interconnection* between European financial instruments available for 2014-2020 programming period. The desire of the EU to be *cohesive* and *unitary* face a large spectrum of *complex* and *correlated* challenges such as: globalization; climate change; technological transformation; aging and demographic change and etcetera. These challenges together with the *polyvalence* of the integration process (deepening - widening - enlargement) determines the orientation of *European Structural and Investment* funds to *integrated, multi-sectorial and multi-dimensional solutions*. In this context, in order to increase the *effectiveness* and *efficiency* of European policies, the review, management and optimization of the European budget is crucial. This paper attempts to demonstrate the *appropriateness* structure of the EU budget and the extent to which this budget is a supporter and a guarantor of economic development of the EU as a whole, and of each individual Member State. This research examines how the EU budget manages to counter the financial crisis and analyses the aspects that can be improved and the prospects for the next period.

**Keywords:** EU budget review; economic growth; ESI funds; Europe 2020; multiannual financial framework

**JEL Classification:** F36; O52; F63; O40; E61

### 1. Introduction

The upcoming programming period 2014-2020 brings a lot of novelty in the EU funding “jungle”, and being acquainted with the “key rules of the game”, will enable the achievement of socio-economic development, contributing in this way to the increase of convergence among Member States. This paper is organized in 3 main directions, as follows:  *EU strategy for smart, sustainable and inclusive growth – Europe 2020*;  *Multiannual Financial Framework for 2014-2020* and  *European Structural and Investment* funds.

This practical research paper shows the harmonized pattern of upcoming funding, being addressed to all levels of public administrations in charge of or involved in the design, development and implementation of projects, subject to compliance with European funds. Also, it will be of particular interest to NGOs, associations, university departments and consultants that are planning to apply for EU calls for proposal.

### 2. EU Strategy for Smart, Sustainable and Inclusive Growth – Europe 2020

Europe 2020 is the European Union’s 10-year growth strategy. The main objectives of this Strategy refer to:  **employment** (ensuring 75% of the 20-64 year-olds to be employed);  **R&D** (getting 3%

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of the EU's GDP to be invested in R&D);  **climate change and energy sustainability** (limiting *greenhouse gas emissions by 20%* or even *30%*, compared to **1990** levels; creating *20% of energy from renewables* and increasing by *20% of our energy efficiency*);  **education** (reducing the rates of early school leaving below **10%** with at least **40% of 30-34-year-olds completing third level education**);  **fighting poverty and social exclusion** (ensuring **20 million fewer people are at risk of poverty and social exclusion**).

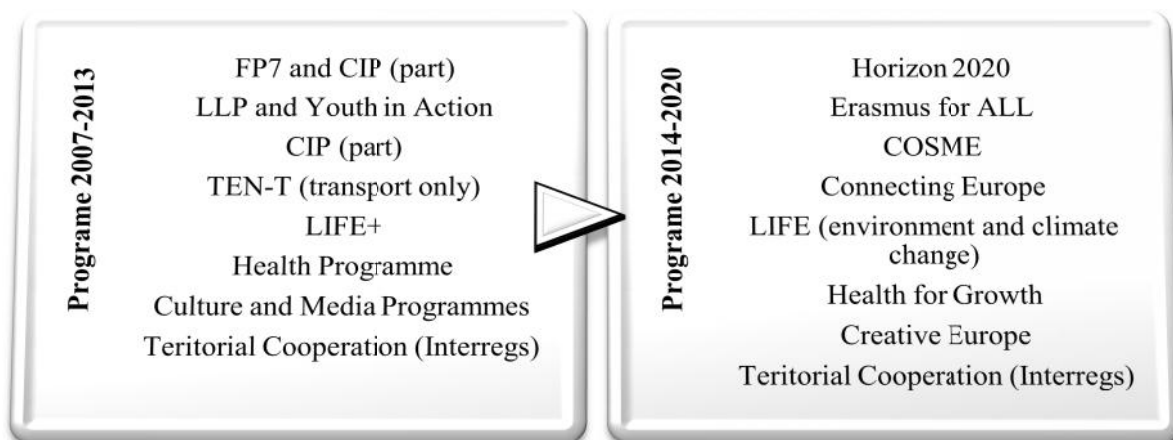
Each EU country has adopted its own national targets in each of these areas. Hence, Romania targets, in accordance with Europe 2020 Strategy are:  70% employment rate;  investing up to 2% of GDP in R&D;  reduction of CO<sub>2</sub> emission by 19%;  creating 24% of energy from renewables and reduction of energy consumption by 10%;  reducing the level of early school leaving below 11.3%;  at least **26.7% of 30-34-year-olds completing** tertiary education;  reduction of population at risk of poverty or social exclusion with 580000.

The main priorities of Europe 2020 strategy are:

- ✓ *smart growth*, which means the improvement of EU's performance in **education** (encouraging people to learn and upgrade their skills) **research & innovation** (development of new products and services that generate jobs in order to address social challenges) and **digital society** (stimulating people learn how to use information and communication technologies);
- ✓ *sustainable growth* refers to improve the use of resources in a more efficient and sustainable manner, developing **new green technologies** and new production methods that are more **eco-friendly** and also it involves to influence the consumer preferences, by raising their awareness on the importance of **preserving and protecting the environment** with the aim of making well-informed choices;
- ✓ *inclusive growth* concerns the **modernisation of labour markets and welfare systems**, by helping people of all ages to get employed, through investment in their education.

All these priorities are inter-correlated and are directly linked to the 5 targets described above. In order to respond to these priorities and to achieve the 6 strategic objectives of Europe 2020 strategy, a set of financial and technical instruments was designed both at communitarian and national level.

The equivalence between technical instruments available in for 2007-2013 and 2014-2020 programming period is outlined in the diagram below.



**Figure 1. The equivalence between EU programmes (2007-2013 vs. 2014-2020)**

Part of the EU financial support is reflected by the Multiannual Financial Framework for 2014-2020.

### 3. The Multiannual Financial Framework for 2014-2020

As an expression of European political priorities, the Multiannual Financial Framework (MFF) reflects the maximum annual amounts (ceilings) which the EU may spend in different political fields (headings) in the upcoming seven years: 2014 – 2020.

Hence, the MFF is just a *budgetary planning tool and not the EU budget for the next 7 years*. Its role is to provide a global image on EU spending over a long enough period of time, in order to have a good perspective on the EU investment in the framework of financial programming and budgetary discipline.

The MFF is divided into six categories of expenditure (*headings*) corresponding to different areas of EU activities (figure 2).



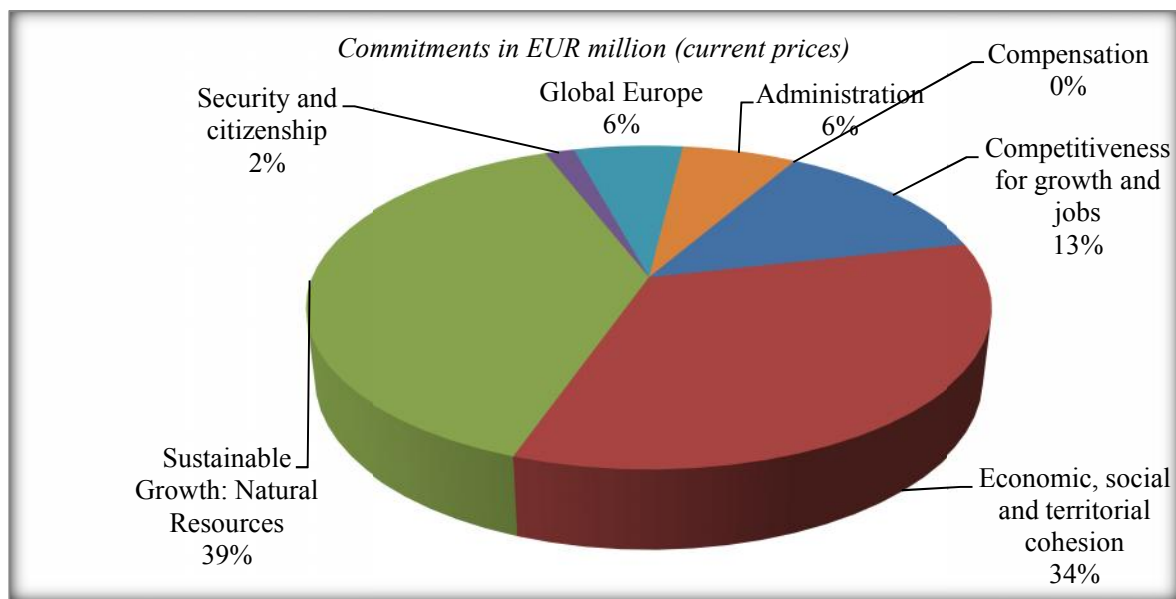
**Figure 2. The structure of 2014–2020 MFF**

Source: [http://europa.eu/rapid/press-release\\_MEMO-13-1004\\_en.htm](http://europa.eu/rapid/press-release_MEMO-13-1004_en.htm)

The MFF details the maximum annual amount that the EU can commit. The value of commitments in the MFF 2014-2020 is presented in table 1 and it is shown schematically in the diagram below.

**Table 1 Financial Framework 2014-2020**  
Commitments in EUR million (current prices)

Competitiveness for growth and jobs	142.130,0000
Economic, social and territorial cohesion	366.791,0000
Sustainable Growth: Natural Resources	420.034,0000
Security and citizenship	17.725,0000
Global Europe	66.262,0000
Administration	69.584,0000
Compensation	29,0000
<b>TOTAL</b>	<b>1.082.555,0000</b>



**Figure 3. Financial Framework 2014-2020**

As it may be observed, the most relevant headings are:

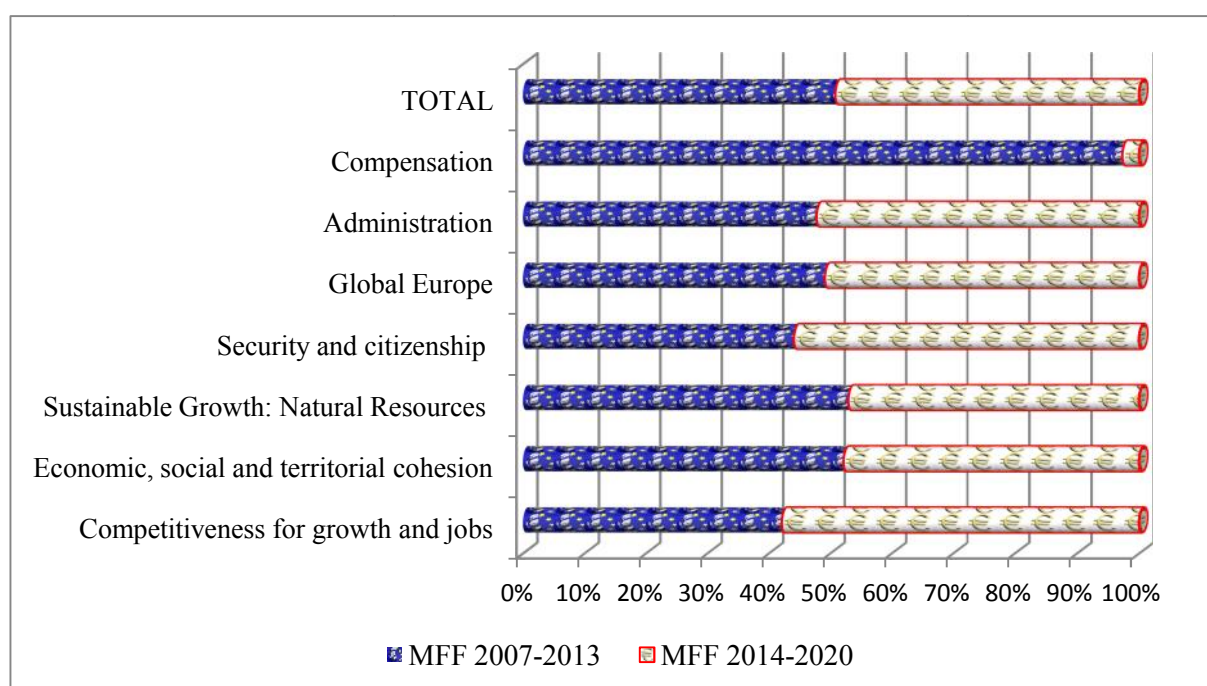
- ☑ *Smart and inclusive growth*, whose maximum commitments represent 47% of the total, includes **cohesion policies** which get three quarters of the amount. Areas in the other sub-heading include research & innovation, infrastructure, Erasmus, space and SMEs (Maftעי & Negruț, 2011).
- ☑ *Sustainable growth: natural resources* with total commitments up to 39% of the MFF, three quarters of which being devoted to market-related expenditure and direct payments in **agriculture**. Other policies include rural development as well as environment and climate action.

**Table 2. Financial Framework Comparisons 2007-2013 vs. 2014-2020**  
Commitments in EUR million (2011 prices)

Headings	MFF 2007-2013	MFF 2014-2020
<i>Competitiveness for growth and jobs</i>	91541	125614
<i>Economic, social and territorial cohesion</i>	355248	325149
<i>Sustainable Growth: Natural Resources</i>	420682	373179
<i>Security and citizenship</i>	12396	15686
<i>Global Europe</i>	56815	58704
<i>Administration</i>	56503	61629
<i>Compensation</i>	991	27
<b>TOTAL</b>	<b>994176</b>	<b>959988</b>

A comparative overview of MFF shows that the commitments for 2014-2020 programming period decreased, demonstrating that the current MFF was born in times of crisis and it is too early to talk about the crisis and its effects in the past tense. (Figure 4)

The MFF 2014-2020 was designed in line with the EU political priorities in order to cope with the crisis' effects but these are still reflected by the current situation in the EU, even if some signs of economic recovery are visible.



**Figure 4. Financial Framework Comparisons 2007-2013 vs. 2014-2020**

The novelty for MFF 2014-2020 consists in the *new flexibility measures* that have been introduced in addition to special instruments (such as: the Emergency Aid Reserve; the European Union Solidarity Fund; the Flexibility Instrument; the European Globalization Adjustment Fund) that ensures EU flexibility under certain conditions to deal with unforeseen events.

*Flexibility for payments*

- under certain conditions and within the overall ceilings set in the MFF, unused payment appropriations and margins can be carried over from one financial year to the next.
- The payment ceiling of the years in which the unused margins arise must be cut accordingly in order to leave the overall ceiling unchanged.

*Flexibility for commitments in growth and employment*

- commitment appropriations left unused in 2014-2017 will form a reserve for additional expenditure in 2016-2020 in the area of growth and employment (in particular for youth employment).

*Special flexibility for youth employment and research*

- in order to concentrate a maximum of funds where they are the most needed as early as possible, up to €2.1 billion can be brought forward to 2014-2015 for the Youth Employment Initiative and up to €400 million for research, Erasmus and SMEs.

*Flexibility for aid to the most deprived*

- on a voluntary basis, Member States can increase their allocation for the aid to the most deprived by €1 billion.

*Contingency Margin*

- this is a last resort instrument to react to unforeseen circumstances and amounts to 0.03 % of the EU's gross national income (GNI).

**Figure 5. The new flexibility measures in MFF 2014-2020**

Source: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:139:0001:0017:EN:PDF>

#### 4. The European Structural and Investment Funds

For 2014-2020 programming period, the European Structural and Investment Funds (also called ESI Funds) will ensure the growth of the entire Community in accordance to the EU specific political objectives in order to achieve the 10<sup>th</sup> year communitarian strategy – Europe 2020.

Therefore, the ESI funds will play an important role in the achievement of smart, sustainable and inclusive growth. For the 2014-2020 programming period, the pattern of ESI funds is designed as follows: the *European Regional Development Fund* (ERDF), the *European Social Fund* (ESF) and the *Cohesion Fund* will function under de aegis of **European Cohesion Policy**, the *European Agricultural Fund for Rural Development* (EAFRD) remain under the umbrella of **Common Agricultural Policy**, and the *European Maritime and Fisheries Fund* (EMFF) will offer the financial support for **EU Maritime and Fisheries Policy**. “The European Commission proposed new rules for the use of the financial instruments during 2014-2020. In contrast to the 2007-2013 programming period, the rules for the financial instruments are non-prescriptive in regards to sectors, beneficiaries, types of projects and activities that are to be supported. As a result, the Member States and the managing authorities may use financial instruments in relation to all thematic objectives covered by Operational Programmes and for all European Funds. The financial instruments may be combined with other forms of support, in particular with grants, in order to solve the particular problems of different regions.” (Ionescu, 2014, p. 76)



#### 4.1. Principles of ESI Funds

In order to have a clear perception of the rules that governs the use of EU financial instruments for the new programming period and how these address the challenges that have been faced in the current programming period, we need to comprehend the principles of European Union support for the ESI funds.

Hence, ESI funds must be used by all Member States *legally* and *consistently* and in accordance with the principle of *sound financial management*. In the context of the EU's effort to increase economic, territorial and social attention is given to the need to ensure *complementarity* and *consistency* of intervention by ESI funds and to respect the principles of *proportionality and equality* in all stages of implementation of ESI funds.

In order to *optimize* the contribution of ESI funds in the implementation of EU strategy for smart, sustainable and inclusive growth, but also in the achievement of the overall objective of economic, social and territorial concentration of these funds, it is required the *concentration on a limited number of thematic objectives*, common to all Member States. This task is particularly difficult in the context of economic, social, territorial, political, administrative, cultural diversification, which characterizes the European Union. For this reason, also for the programming period 2014-2020 was considered appropriate to establish a *Common Strategic Framework* designed to facilitate designing the strategic guiding principles in the programming process at national and regional level. This Common Strategic Framework shall ensure *coordination of sectorial and territorial* EU intervention through ESI funds, and coordination with other relevant EU policies and instruments in accordance with the goals and objectives of the Europe 2020 strategy and also to address the challenges of territorial diversity at EU level. Basically, it is necessary the *integrated use of ESI funds* in order to meet as closely as, the horizontal principles, as well as, the cross political objectives active at EU level.

Summarizing, the principles that governs the European Union support through ESI funds are:

- ✓ partnership and multi-level governance;
- ✓ compliance with union and national law;
- ✓ promotion of equality between men and women and non-discrimination;
- ✓ sustainable development.

#### 5. Conclusions

EU financial support (especially ESI funds) plays an important role in achieving the Europe 2020 strategy for smart, sustainable and inclusive growth and therefore requires an overview of financing needs to focus efforts and maximizing effectiveness.

Understanding the principles, procedures and practices in the use of funds ESI is fundamental to *policy makers* both in the design of strategies and directions for development and implementation phase of development policies. Basically, it is necessary to identify those correlation measures between the effectiveness of ESI funds with the good economic governance.

In the programming of ESI funds, there is the need to *coherence* between the *Common Strategic Framework* and the *Partnership Agreements*. On the other hand, the *coordination* of ESI funds in conjunction with other existing financial instruments and the contribution of the European Investment Bank funds management ensure *predictability* and *focus* them towards the achievement of Europe 2020 objectives.

Therefore, the *performance* of ESI funds and of others EU financial instruments is determined by the *quality* of the development and implementation of programs in each Member State and of the scale of the program in relation with the gross domestic product of the state. Thus, each Member State is responsible for channeling of ESI funds, ensuring that the *effectiveness* of expenditure is supported by *sound economic policies*.

ESI funds support takes many forms: grants, prizes, repayable assistance, financial instruments, or a combination thereof. Thus, each Member State has extended opportunities to choose the most appropriate form of support to meet identified needs.

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REALITIES AND PERSPECTIVES

**The Impact of External Public  
Audit on the Budget Deficit**

**Alexandra Vasile<sup>1</sup>, Cristina Batusaru<sup>2</sup>, Moldovan Iosif<sup>3</sup>, Ramona Ioana Vlada<sup>4</sup>**

**Abstract:** Objectives: Public imbalances can cause extensive problems both on public finances and economy. Regardless of the constitution and destination of funds it is absolutely necessary to verify their correct accounting, collection type and expense in accordance with applicable regulations, and if due attention is paid to obtain an optimal balance between resources and results. Therefore it is useful to study the role of public audit in the formation and use of public funds to indicate its impact on the budget balance. Prior Work: This paper presents the evolution of synthetic budgetary indicators during 2010 - 2013 and the impact that the external public audit had on the budget deficit. Approach: In order to highlight the importance and necessity of public audit activity it has been analyzed its influence in the formation and use of public funds and the extent of implementation of the recommendations made in the audit reports. Results: In the study conducted we have set out several conclusions regarding definite reality according to which financial resources materialize a large part of GDP, so that advocates for public performance of the audit. Implications: The need for public audit can be viewed through the prism of the three classes of economic and financial interests, namely: the interests of public entities, third party interests of consumers of public goods and services and state interests. Value: This paper highlights the importance and the impact of public external audit activity on public financial funds and invites the interested readers on the topic to get involved by providing feedback in order to improve this activity in Romania.

**Keywords:** public audit; consolidated general budget; public revenue; public expenses; deficit

**JEL classification:** M42; H72

## 1. Introduction

For the general needs of the societies it is necessary to establish a monetary fund available to public authorities. The funds are based on the value of the transfer of the power of buying from various individuals and companies to the state and local authorities. From these funds transfers of power purchasing are made towards various individuals and legal beneficiaries. Therefore, money resource flows take place both ways - to and from public funds.

*Money relations arising between the state and individuals on one hand and businesses on the other hand, in the distribution process of gross domestic product and national income, regarding formation, distribution and use of funds necessary to meet the economic needs of the state are the economic content of finances. (Dragoescu, 2006)*

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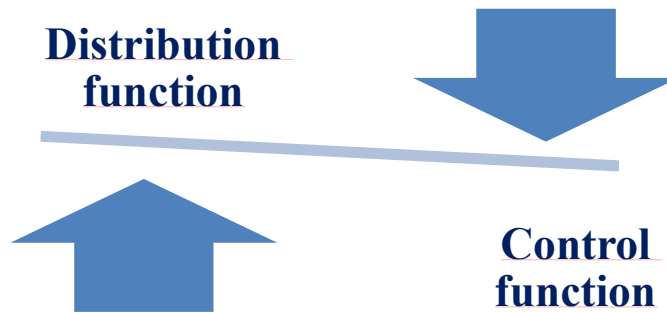
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To each structural component of the system of public finances in Romania, it corresponds usually more financial funds. Each of these has its own rules of formation and distribution, specific links with other funds and a specific reason to exist. (Ungureanu & collective, 2007)

Understanding the functions through which public finances fulfill their social mission is the starting point in determining the basic object of the audit activity. The vast majority of experts recognize two basic functions of public finance namely distribution function and control function.



**Figure 1. The functions of public finances**

Distribution function – knows two distinct, but interrelated organic fazes: formation (mobilization) of funds and distribution (allocation) of funds.

Formation of funds is a prerequisite for meeting the needed funds that are advertised by the fulfilment of functions and tasks of the state. This is achieved through the use of the second side of the distribution function of finances that is the fund distribution side formed in the constitution of funds. Allocation of financial resources is sizing the volume of public expenditure by purpose, namely: education, culture, health, social security and social protection, public order, national defense, etc.

Distribution itself preceded by an inventory of existing social needs during the period of reference, their quantification in monetary terms and their ranking by activity and their importance to each other.

Control function is necessary because the constituted funds of public financial resources available to state belong to the whole society. By achieving control function “*finances not only mean shooting facts at a time, but also mean an active intervention in the conduct of economic and financial processes.*” (Talpos, 1995)

Control function although it is closely related to distribution function, it targets, in addition to providing necessary financial resources to satisfy social needs and directing resources taking into account the priorities set by the authorities, as well as the use of financial resources with maximum efficiency and social effectiveness.

The fact that the public financial resources fund materializes a large part of PIB, is an argument that advocates for organizing a rigorous control upon the way of formation, distribution and use of public financial resources fund, on keeping integrity and good management of the property, on the accurate dimensioning and timely collection of receivables states.

## 2. Synthetic Budgetary Indicators

Public budget is the document that includes not only the collection of monetary resources, but also the distribution and use of them, by public spending.

*“Manifestation of processes and specific relations of mobilization and use of public funds and the existing common needs of the community members being determinant, it shapes the economic concept of the notion of public budget, which occurs under these conditions as a set of financial relationships by which the distribution of the gross domestic product is achieved (mobilization and allocation of financial resources), through public authority to meet the collective needs.”* (Mosteanu, 1997)

According to the principle of the budgetary balance, the budget must be balanced, that is equilibrated: public expenditures must be covered by public revenues. A deviation from this principle is that the budget deficiency is regarded by classical doctrine as a source of danger that may result in the decay of the state. In a simple way the budgetary deficiency is the amount by which budget expenditures are higher than budget revenues.

### 2.1. Analysis of State Budget Revenues in 2010-2013

Financial resources are fully funds needed for the achievement of economic and social objectives in a period of time (Vacarel & collective, 2002). The main categories of public financial resources, in terms of their economic content are: (Comanicu, 2003)

- levies binding: taxes, fees, contributions;
- cash resources;
- resources from public loans;
- financing coinage coverage.

Depending on the regularity of their collection to the budget, public financial resources form two categories, namely: current resources or ordinary and extraordinary resources, incidental or random. (Moldovan & Herciu, 2003) In line with the budgetary system in Romania, public financial resources are structured by criteria, and their evolution during the period 2010 - 2013 is presented in Table no.1.

**Table 1. The evolution of budget revenues in 2010-2013**

Budget Indicators	Million/lei				% GDP			
	2010	2011	2012	2013	2010	2011	2012	2013
GDP	511.581	547.829	585.200	625.617				
Total revenue	186.598,5	181.566,9	193.148,2	200.045,7	33	33,1	33	32
Current revenue	158.474,7	173.541,1	184.030,7	190.649,1	31	31,7	31,4	30,5
Tax revenue	93.060,1	104.687	114.044,6	119.190,7	18,2	19,1	19,5	19
Tax income	10.115,1	10.309,1	10.854,5	10.925,7	2	1,9	1,9	1,7
Income tax	17.956,8	19.076,4	20.956,7	22.735,9	3,5	3,5	3,6	3,6
Taxes on property	3.801,5	3.976,4	4.060,4	4.403,2	0,7	0,7	0,7	0,7
VAT	39.245	47.917,4	51.516	51.827	8,9	9,2	8,8	8,3
Excise	17.378,9	19.104,8	20.260,4	21.106	3,4	3,5	3,5	3,4
Customs duty	574	673,7	707,3	620	0,1	0,1	0,1	0,1
Insurance contributions	45.697,2	50.637,3	51.658,3	54.378,9	8,9	9,2	8,8	8,7
Non-tax revenues	19.717,4	18.216,9	18.327,8	17.160,5	3,9	3,3	3,1	2,7

Income from capital	682,8	766	652,7	649,7	0,1	0,1	0,1	0,1
Donations	4.054,1	765,6	442,8	200,6	0,8	0,1	0,1	0
EU accounts payments and prefinanced	5.394,1	6.108,8	7.979,1	8.911,5	1,1	1,1	1,4	1,4
Financial operations	14,3				0			
Amounts cashed single budget	-21,6	385	42,9	-365,3	0	0,1	0	-0,1

Source: Elaborated by author based on data provided by the Ministry of Public Finance  
<http://discutii.mfinante.ro/static/10/Mfp/buget/executii>

Budget revenues show an increasing trend from year to year, primarily due to the TVA increase in 2010 from 19% to 24%, and later due to improved revenue collection. Evolution of the general consolidated budget revenues for the period 2010 – 2013, by chart is as follows:

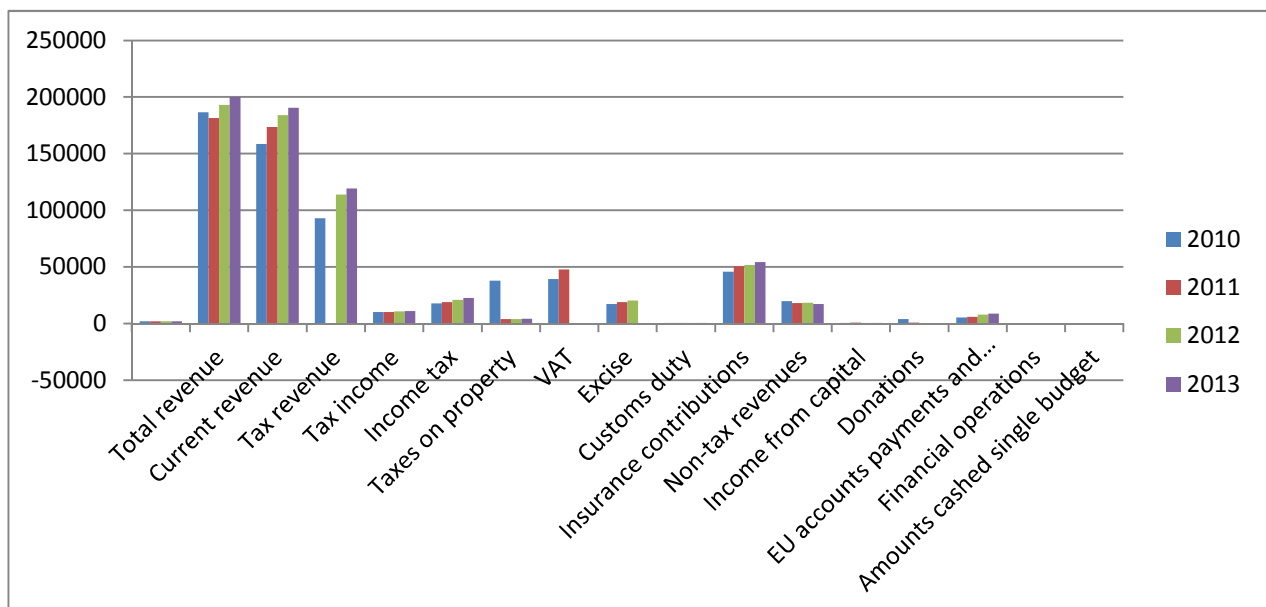


Figure 2. General consolidated budget revenues for the period 2010 – 2013

Source: Elaborated by author based on data provided by the Ministry of Public Finance

For the years 2010, 2011, 2012 and 2013 the consolidated general budget revenues are on the rise and represent about 33 % of GDP.

## 2.2. Analysis of Budgetary Spending in the Period 2010 – 2013

Actual use of public funds requires their spending to attain the goals contained in the government programs on social work, economic and otherwise, are reflected in public spending. As public spending illustrates how the state funds are directed towards specific targets, they are analyzed both in terms of structure and in terms of dynamics, based on various criteria (economic, operational, administrative, political, financial etc.). All these constitute the starting point and the exercise of public audit activity.

In conducting the audit of public funds use it is envisaged the economic classification of expenditures by the two grouping criteria: first, that the expenses are divided into current expenditures (operating) and capital expenditure (for investments), and second, that shares the expenditure in public services expenses or administrative and transfer expenses (redistribution). In the category of current expenses are included personal expenses, material costs, service costs, interest on loans contracted grants and subsidies. They represent the final consumption of gross domestic product. *Capital expenditures* are based on the needs of development and modernization of the institution and consider both ongoing investment which continue in the forecasting year and planned investments in accordance with the development strategy of the concerned government institution. Capital expenditures are reflected in the purchase of durable goods, destined for both the sphere of material production and immaterial sphere. They represent an advancement of gross domestic product. *Functional classification, according to 2014 state budget law* groups the expenses according to their destination to evaluate the allocation of public funding to activities or goals that define public needs: public authorities and external actions, other general public services, transactions on the public debt and loans, transfers with general character between different levels of government; payments made in previous years and recovered in the current year; defense; public order and national security; education; health; culture; recreation and religion; social insurance and assistance; housing, public services and development; environmental protection, general economic actions, commercial and labor; fuel and energy; transport; other economic activities. (Law 356/2013)

Calculation of state budget envisages the revenues they can collect and expenditures that must be made. The budget process includes consecutive stages of approval, execution, control and reporting of the budget that ends with the approval of the annual account of its implementation. (Law 263/2006)

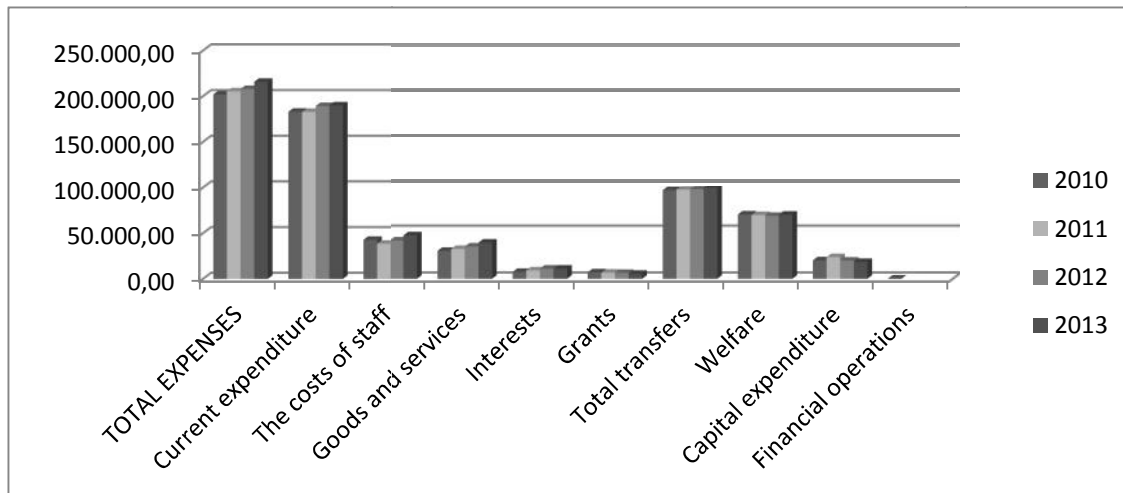
Budgetary expenditures evaluation in the period 2010 - 2013 is as follows:

**Table 2. Budgetary expenditures evaluation in the period 2010 – 2013**

Expenditure indicators	Milion lei				% GDP			
	2010	2011	2012	2013	2010	2011	2012	2013
<b>GDP</b>	511.581	547.829	585.200	625.617				
<b>TOTAL EXPENSES</b>	201903.63	205403.6	207922.1	215816.9	39.5	37.5	35.5	34.5
<b>Current expenditure</b>	182985.3	182835.4	189274.3	189963.4	35.8	33.4	32.3	31.8
<b>The costs of staff</b>	42806.5	38496.3	40798.8	46298.6	8.4	7	7	7.4
<b>Goods and services</b>	29801.2	31770.8	34443.9	38580	5.8	5.8	5.9	6.2
Interests	7274	8882.9	10710.8	10756.2	1.4	1.6	1.8	1.7
Grants	6734.6	6406.6	6121.7	5150.1	1.3	1.2	1	0.8
Total transfers	94574.9	95171.3	95585	97309.4	18.5	17.4	16.3	15.6
<b>Welfare</b>	68601.9	68007.5	67048.5	68378.0	13.4	12.4	11.5	10.9
<b>Capital expenditure</b>	19638.9	23055.9	19304.9	17855.2	3.8	4.2	3.3	2.9
<b>Financial operations</b>	193.4	-	-	-	0.000378	-	-	-

Source: Elaborated by author based on data provided by the Ministry of Public Finance  
<http://discutii.mfinante.ro/static/10/Mfp/buget/executii>.

Alike budget revenue also the budget expenditure registered a nominal increase without being directed towards productive activities. Staff costs presented in 2011 a nominal decrease significantly compared to 2010, from 8.4% of GDP, reaching 7% of GDP, while in 2012 and 2013 due to budget salaries recovery, staff costs registered an increase in nominal terms, but remained at 7% of GDP in 2012 and increased to 7.4% of GDP in 2013. To better distinguish the general consolidated budget expenditures for the years 2010 - 2013 and their evolution, by chart is presented:



**Figure 3. General consolidated budgetary expenditure for the period 2010 - 2013**

*Source: Elaborated by author based on data provided by the Ministry of Public Finance*

Consolidated general budgetary expenditures in 2011, 2012, 2013 presents significant nominal increase compared to 2010.

### **3. The External Public Audit Impact on General Consolidated Budget**

Consolidated general budget is a complete array of resources and expenditures, reflected in the income and expenditure of the component budgets. Budgetary execution is based on a set of principles and rules governing the collection of budget revenues and financing expenses approved by component budgets of the consolidated general budget. In this context, the mission of public external audit exercised by the Court of Auditors in Romania is to obtain reasonable assurance that this rules and principles and also the other incident legal provisions or those specific to each area are met and to provide Parliament and deliberative bodies of territorial- administrative units an opinion on this. Thus, in the following we will analyze the synthetic indicators of the consolidated budget through the external public audit findings made by the Court of Accounts. Statistical data on the development of synthetic budgetary indicators during 2010 - 2013 and the development budget deficiency and its share in GDP is as follows.

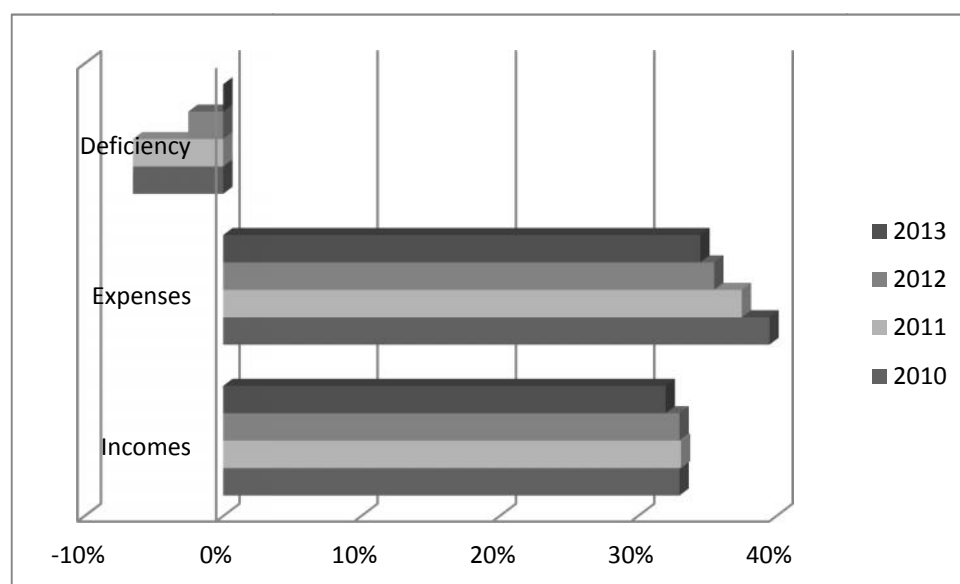


**Table 3. Evolution of synthetic budgetary indicators during 2010 - 2013**

INDICATORS	% GDP			
	2010	2011	2012	2013
Incomes	33%	33,1%	33%	32%
Expenses	39,5%	37,5%	35,5%	34,5%
Deficiency	6,51%	6,51%	2,52%	2,52%

Source: <http://www.mfinante.ro/execbug.html?pagina=domeni>

Because of the accelerate increase of spending compared with public revenues, Romania's budget ends with increasingly deficit.

**Figure 4. Evolution of synthetic budgetary indicators during 2010 – 2013**

Source: Elaborated by author based on data provided by the Ministry of Public Finance

As shown in the chart above spending have a tendency of decrease in the share of their GDP, and revenues remain relatively constant. If before 2010 budget deficiency had an increase, it has stagnated in 2010-2011 and later to record a significant decrease reaching threshold below 3% of GDP. Following verification actions realized by the Court during 2010 – 2013 there were identified breaches of legal regulations, observing misconduct that led either not setting, not seeking and non-collection of some budgetary revenues or at the occurrence of damage. All these have an impact on the budget deficiency, meaning that if budgets were reunited with estimated amounts as damages and income sized and properly collected, it can be said that the budget deficiency would have declined about 1 %.

**Table 4. The external public audit impact on the budget deficit**

Year	Number of verification actions	Recorded prejudices	Founded damages	Additional revenues	Total revenues	Deficit	Impact damage and additional revenues on the deficit	Weight (%)
2010 (for 2009)	3,085.00	727.20	1,748.40	156,624.90	193,025.40	-36,400.50	-33,924.90	0.93%
2011 (for 2010)	2,449.00	736.89	1,779.43	168,598.45	201,903.63	-33,305.18	-30,788.86	0.92%
2012 (for 2011)	2,317.00	1,173.00	1,913.20	181,566.90	205,403.60	-23,836.70	-20,750.50	0.87%
2013 (for 2012)	2,641.00	1,608.10	2,297.20	193,148.20	207,922.10	-14,773.90	-10,868.60	0.73%

Source: Elaborated by the author based on data provided by the Ministry of Public Finances and Public Reports of the Court of Accounts for 2010-2013

Although the number of verification actions has decreased in the years 2011, 2012, 2013 compared to 2009, both the loss value and the additional revenue have an upward trend. Damage observed in 2013 were higher by about 45 % to damage found in 2010 and additional revenues increased by approximately 76 % in 2013 compared to 2010.

But after checking the implementation of the measures taken due note aspects of verification missions carried out in 2013, most of them are not implemented by the managers of inspected entities because either they are in the process of resolving disputes, or due within the next period and will be verified during the year 2014. Implementation process proved cumbersome, compliance level entities being reduced, their inertia being evident.



**Figure 5. The degree of implementation of the measures taken during the period 2009 - 2013**

Source: [http://www.curteadeconturi.ro/sites/ccr/RO/Publicatii/Documente % 20publice/2014 /](http://www.curteadeconturi.ro/sites/ccr/RO/Publicatii/Documente%20publice/2014/)

We can conclude that public external audit missions play an important role in the formation and use of public funds by fulfilling the responsibility to provide objective reports on their use and management in accordance with the principles of legality, regularity, economy, efficiency and effectiveness, but the degree of implementation of ordered measures is obviously difficult, in 2013 from 18 630 ordered measures just 1,188 were implemented.

#### **4. Conclusions**

From the research carried out we can draw the following conclusions.

The public audit's results form the basis of assessing the quality of public finances and financial management, and also through the recommendations and measures taken, how to measure progress over time in this area on constant current. In our opinion, the basic object of public audit activity is the formation and use of public funds. Definite reality, according to which public resources materialize a large part of GDP is a basic reason for advocating the pursuit of public audit public upon financial resources, preserving the integrity and sound management of public funds.

From the research we have concluded that the public audit realized over the general budget has a real impact on the budget deficiency.

External public audit reports showed overall insufficient concern on the part of public entities to ensure the accuracy of data in the financial statements and upon the financial management governed by a good economic and financial administration. This confirms that the state public funds and assets are managed in a regime in which the performance of their use is not a priority criterion. Implementation process proved cumbersome, the compliance level of entities being reduced, and their inertia is obvious.

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REALITIES AND PERSPECTIVES

## **A Discussion Regarding the Armey Model Validity for Romania**

**Alina Cristina Nuță<sup>1</sup>, Florian Marcel Nuță<sup>2</sup>**

**Abstract:** In this paper we analyze whether the Romanian economic context confirms the Armey model, and present the relationship between public spending and economic growth that may offer a suitable basis for decision makers. The analysis is based on quarterly data regarding public spending and economic growth in Romania. The analytic results did not confirm the premises related to the Armey Curve for the Romanian context during 1990-2011. The time interval is marked by unpredictable phenomena such as the transition from the state economy to the market economy and the world financial crisis, both of which alter the results. The fact determines us to develop a new model that describes better the connections and the period characteristics.

**Keywords:** Armey curve; laffer curve; fiscal policy; Romania

### **1. Introduction**

Many researches on determinants of economic growth presents results demonstrating that a high level of public expenditure affects economic growth showing that between the level of public expenditure and growth develops a relationship of non-linear regression. This relationship is possible due to the fact that a high level of public expenditure over the considered optimal (and economic literature distinguishes several levels as being optimal, according to the countries that has done the analysis, depending on the period analyzed (giving even different levels for the same country, for analysis that took into account different periods of time), or depending on which indicators were calculated to determine the optimum point). For example, Barro (Barro, 1990) identified an optimum level of the public sector, when its marginal product equals 1 (the so-called rule of Barro) and, based on empirical data represented a U shape curve returned, which shows the relationship between growth rate and the level of public expenditure as a percentage in GDP.

Our work, building on previous research empirical studies published by other authors, has a new scientific path, analyzing the Armey model compatibility with Romanian economy, the economy of a country that over the period considered followed the course of the transition from an centralized economy to one of the market, and, after he has earned the status of market economy has had as its objective the integration in the European Union.

The specific conditions of the economic crisis that the country just went through it are not forgotten, because they can influence the results of the study. During this stage particular structural and level changes were imposed in terms of fiscal-budgetary indicators used in this study, changes that can inflict interpretations and uncertainty upon our analysis results. Another new element, in addition to the fact that no one ever assessed Romanian economy using the connection between these two models,

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is represented by dual analysis (quarterly and annual) of the Romanian economy, including the use of econometric techniques, according to the objectives of our research.

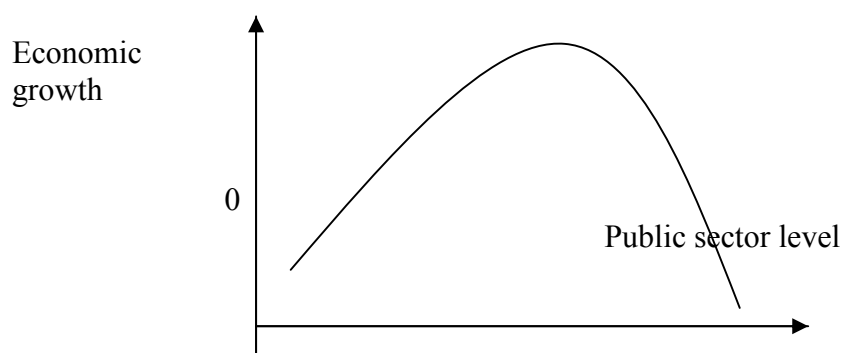
## **2. Literature Review**

The idea of a nonlinear relationship between public expenditure and economic growth was recast and popularized in several studies. For example Heitger (2001) was examined and demonstrated that if the level of public expenditure increases due to consumer spending, the effect on GDP is negative, while an increase in government spending on public investment growth has positive effects on economic growth. Heitger has shown that for the zero level in the public sector, the level of GDP is very low, since public goods are not supplied to the appropriate level.

The notion of “optimal level of public expenditure” was popularized by Armev (1995), who plotted the Armev curve. The author argued that the absence of Government generates anarchy and reduced level of GDP per capita, as there is no rule and ownership is not protected. Consequently, there is no motivation to save and invest because there is the threat of expropriation. Similarly, where all decisions are taken by the Government, the GDP per capita is also reduced. When there is a mix between public and private decisions on the allocation of capital, GDP should be higher. Thus, the expansion of public expenditure (from reduced levels) should be associated with the expansion of the outcomes. However, as public expenditure increase, additional projects financed by the Government are becoming less and less productive and the taxes and loans settled to finance government operations are becoming increasingly large. At a certain point, marginal benefit of increasing public expenditure becomes zero.

Generally, according to Chen and Lee (2005, p. 1053), there are two groups of economists who have shown the two types of relationships between public expenditure and economic growth. Thus, the first category has found a negative relationship between the level of public expenditure and economic growth. They believe that increasing the level of public expenditure will reach the useful results of the decline in public spending and the growth of public expenditure will cause a crowding out effect on private investments, in the context in which when a Government increase public expenditure needs an extra taxes to pay for additional growth of public expenditure, which has negative effects on the economy. The second group of economists has established a positive relationship between the size of public expenditure and economic growth, claiming that the increase of public expenditure will encourage private investment by improving the investment climate.

Armev has implemented Laffer curve to assess the relationship between the size of the public sector and economic growth, after which Vedder and Gallaway have demonstrated in 1998 based on an empirical analyses that the level of the public sector and economic growth are asymmetrical, indicating that this relationship is an asymmetrical Armev curve, showing that a reduced public sector aims to protect private property and to provide public goods. Increase over the extent of the public sector will result in excessive public investment that will create an effect of crowding out private investment, with higher taxes and succession duties and payments of interest, which will affect the economy. A reduced level of the public sector will have a positive impact for the promotion of economic growth. Vedder and Gallaway have plotted the relation between the level of the public sector and growth in the form of an inverted U, according to the figure below:



**Figure 1. Armeij Curve**

Due to the shape of inverted U can find the optimal level of public sector, which promotes the highest rates of economic growth. The above mentioned authors have found this maximum point at 17.45% for the US economy in the period 1947-1997. In addition, optimum level (Vedder & Gallaway, 1998) of the public sector, calculated as the ratio between the total public expenditure and growth was calculated also for Canada, during the period 1854-1988 (21.37%), Denmark between 1854-1988 (26.14), Italy between 1873-1988 (22.23% United Kingdom, between the years 1830-1988 (20.97%).

Another analysis (Pevcin, 2005) carried out to test the validity of the Armeij curve in 12 of the 27 countries of the European Union, for the period 1950-1996 has prove that it can be described only for the individual Armeij curves in Italy, France, Finland, Sweden, Germany, Ireland, Netherlands and Belgium, while for countries such as United Kingdom, Austria, Denmark, Norway has not been able to obtain it, the coefficients of regression not being relevant from a statistical viewpoint. For countries for which it could not achieve optimal level of the curve, public expenditure as a percentage in GDP can be viewed in the following table:

**Table 1. The optimal size of the public spending**

Country	<i>Size of government, % of GDP in 1996</i>	<i>Armeij Curve peak (% of GDP)</i>	<i>Percentage change (current to peak)</i>
Italy	44.90	37.09	-17.39
France	54.73	42.90	-21.62
Finland	58.74	38.98	-33.64
Sweden	65.02	45.96	-29.31
Germany	48.72	38.45	-21.08
Ireland	39.60	42.28	+6.77
<i>Netherlands</i>	51.97	44.86	-13.68
Belgium	52.97	41.91	-20.88

*Source: (Pevcin, 2005, p. 1297)*

In the meanwhile Davies (Davies, 2009) have analyzed the Armeij by expanding the economic growth variable to the human development index, trying by it to highlight the relationship in the form of inverted U between the level of public expenditure as a % of GDP and the human development index, because, while the GDP measure productivity in its aggregate, HDI (“index, generally accepted, the measurement of international comparative welfare” (Wallace, I., 2004) reflects the types of goods and services which make up the GDP.

### 3. Quarterly Model

#### 3.1. Data, Sources and Model Validation

Generally, most economists accept the validity of the curve in inversed U as a realistic description of the relationship between the evolution of public expenditure and economic growth. In essence, to validate this curve it takes an empirical analysis.

To test the existence of Armeey curve (the relationship between the level of total public expenditure and economic growth, in the form of an inverted U curve) on the Romanian economy conditions we initially used quarterly data (1st quarter 2000-2011 1st quarter).

The analysis was conducted using the econometric program EWViews. The first stage of the analysis was to determine the actual values of the variables analyzed (growth rate of GDP growth calculating quarterly values as differences compared to the same quarter the previous year and the second variable, the total public expenditure in GDP, %, calculated as of the quarterly values all by comparison with the same quarter in previous year) by reference to the HICP available in Eurostat's database with fixed basis in 2006. Because the quarterly data are affected by seasonality, have been subject to seasonal adjustment procedures. For this we use the ARIMA X 12 method.

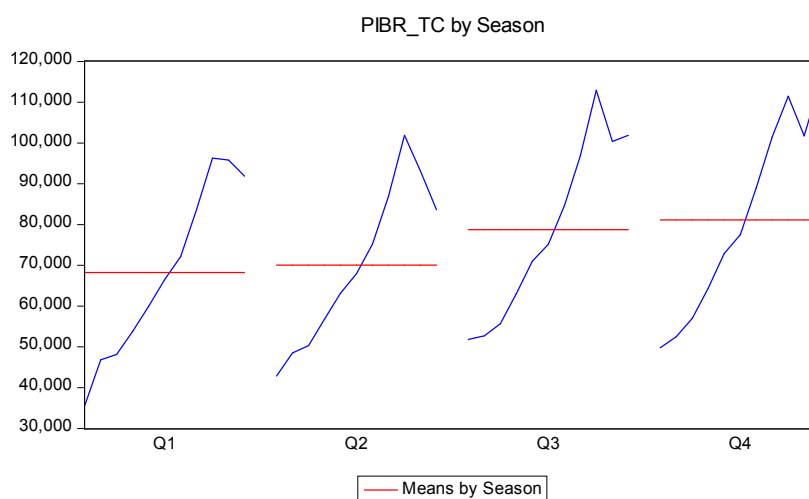
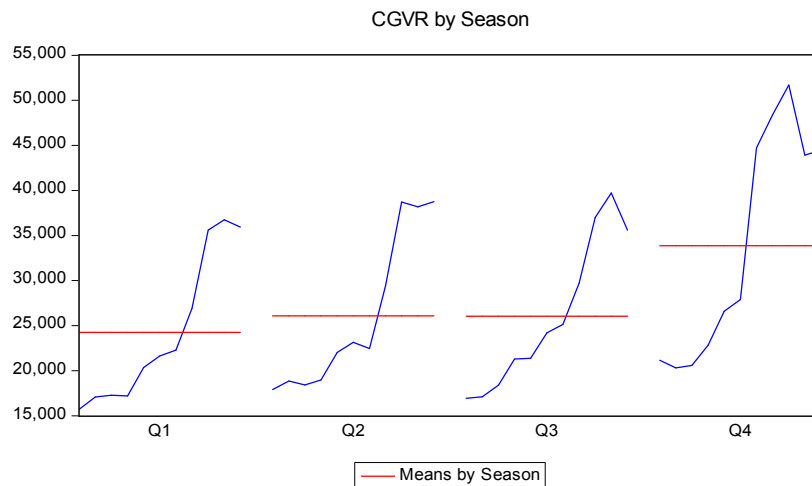


Figure 2. Economic growth evolution (seasonally)



**Figure 3. Public spending evolution (seasonally)**

Since neither of the two time series was not stationary (procedure checked by the Augmented Dickey-Fuller test) we proceeded to their idle time. Thus, the seasonally adjusted series above were differentiated by the order of 1.

Null Hypothesis: DCHPR\_SA has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.463847	0.0000
Test critical values: 1% level	-3.615588	
5% level	-2.941145	
10% level	-2.609066	

\*MacKinnon (1996) one-sided p-values.

*Source: own assessments*

Null Hypothesis: DPIBR\_SA has a unit root  
 Exogenous: Constant  
 Lag Length: 3 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.024291	0.0002
Test critical values: 1% level	-3.632900	
5% level	-2.948404	
10% level	-2.612874	

\*MacKinnon (1996) one-sided p-values.

*Source: own assessments*

The evolution chart of both quarterly variables stationaries and without season affect is as follows:



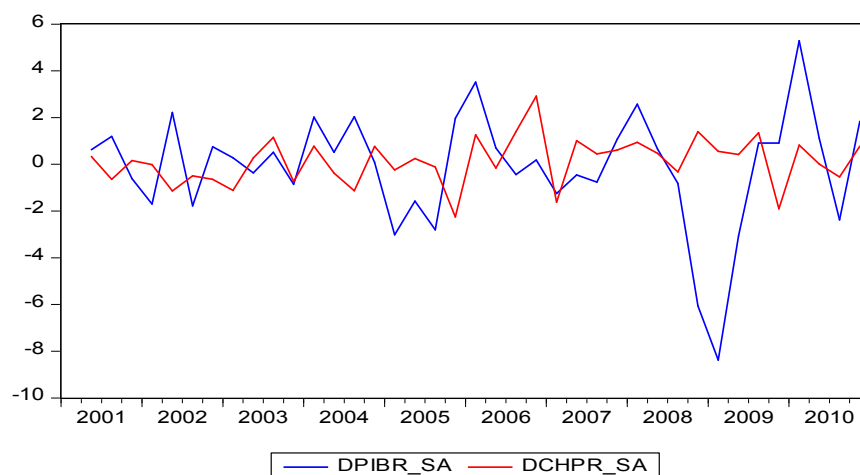


Figure 4. GDP and public spending evolution in România - 2001-2010 (quarterly)

### 3.2. Estimation of the Hyperbolic Regression Model

The next stage of analysis is the estimation of the hyperbolic regression model and possibly testing the estimated model.

Dependent Variable: DPIB  
 Method: Least Squares  
 Sample (adjusted): 2000Q2 2009Q4  
 Included observations: 39 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.500924	0.632001	-0.792600	<b>0.4332</b>
DChP	-0.095390	0.071722	-1.329997	<b>0.1919</b>
DChP <sup>2</sup>	0.008123	0.010801	0.752118	<b>0.4569</b>
R-squared	0.046835	Mean dependent var		-0.121538
Adjusted R-squared	-0.006119	S.D. dependent var		2.469228
S.E. of regression	2.476771	Akaike info criterion		4.725592
Sum squared resid	220.8382	Schwarz criterion		4.853558
Log likelihood	-89.14904	Hannan-Quinn criter.		4.771505
F-statistic	0.884446	Durbin-Watson stat		1.210796
Prob(F-statistic)	0.421724			

Estimated regression model parameters are not significantly different from zero and errors do not comply with the hypothesis of lack of autocorrelation. An important conclusion being that we cannot design a relation of the U form (Armey curve) between economic growth and the share of public expenditure in GDP on quarterly data.

Therefore we try to design the residual variable of this model previously estimated by Box and Jenkins methodology so as to achieve a regression model which meets all the assumptions.

The pattern obtained is of the form:

Dependent Variable: DPIB  
 Method: Least Squares  
 Sample (adjusted): 2001Q2 2009Q4  
 Included observations: 35 after adjustments  
 Convergence achieved after 5 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DChP	-0.080767	0.034964	-2.309973	<b>0.0273</b>
AR(4)	-0.644531	0.154090	-4.182829	<b>0.0002</b>
R-squared	0.349658	Mean dependent var		-0.121429
Adjusted R-squared	0.329951	S.D. dependent var		2.549080
S.E. of regression	2.086588	Akaike info criterion		4.364382
Sum squared resid	143.6770	Schwarz criterion		4.453259
Log likelihood	-74.37669	Hannan-Quinn criter.		4.395063
Durbin-Watson stat	1.285379			

The general pattern is:  $Y = \alpha + \beta X + \varepsilon$  (1) where: Y is the dependent variable,  $\alpha$  = term;  $\beta$  = the independent variable; X = the independent variable, and  $\varepsilon$ -residual variable.

The resulted model is:  $GDP = -0,080767 * P.exp + \varepsilon_t - 0,0644531 * \varepsilon_{t-1}$  (2) where: GDP = real growth, differentiation and without season affect of order 1, P.exp = actual total public expenditure level, without season affect and differentiated of order 1.

The regression model complies with all the normal assumptions for a regression model. Thus the link between economic growth and increased government expenditure (quarterly data) is linear and inverse. According to the interpretations of the econometric evidence which may be carried out for this case would be that when government expenditure increase, growth decreases. According to the pattern above (2), on average, real economic growth drops by 0.080767%, for an increase of one unit in the level of actual total public expenditure. From the economic point of view, however, that interpretation cannot be accepted as valid, because we cannot argue that any kind of public expenditure has negative impact on economic growth, even for the fact that this expenditure will be in demand for certain goods and services, besides the positive impact upon the public investments recognized by many authors (Stoian et. all, 2007).

According to the determination report, however, only 34,96% of the *public expenditures increase* variable variation may explain the reverse variation of economic growth the rest up to 100% being due to random or other factors that are not included in the model.

#### 4. Concluding Remarks

As specified above, the link between economic growth and the level of public expenditure as percentage of GDP can positive (if we are talking in particular about public investments) or negative (if we consider especially public expenditure and consumption-but not all of them). Detailed rules for the financing of such types of expenditure requires but a different analysis, though, and in this case you should comply with the principles of funding available, and at micro, namely long-term needs to be covered at the expense of resources in the long term, while short-term needs to cover short-term available resources). On the other hand, an increase in public expenditure increased the rate of the

marginal productivity of capital, which leads to the increase in the rate of economic growth. However, in the current economic situation, taking account of this period of crisis, it's hard to admit that he may leave at this level in the form of public budgets.

Regarding the results obtained using the econometric analysis of the curve for the particular case of Romania it should also be specified that we would need to know to what it is available. It would be interesting to assess if the approximate value of 30% can be taken into account not only at the theoretical level for designing the public budgets and if indeed the positive impact upon economic growth is similar to that resulting from the mathematical calculus.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
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REALITIES AND PERSPECTIVES

**The Transition and Integration  
of the Albanian Economy in the EU**

**Leontiev Çuçi<sup>1</sup>**

**Abstract:** The transition and integration of the Albanian economy in the EU constitutes a special valuable experience that would be relevant for the present and future development processes of economic market in general. Albania's experience in this regard carries two salient features in the path of Euro-Atlantic integration. First of all, the transition and economic integration in the EU began from scratch without inheriting any element or experience of the market economy and democratic culture; secondly, it began as a radical process conceived as “*shock therapy*”, which excludes a graduated process; thirdly, it started out as a political process driven by upward and will continue as such until its completion. The created elements of market economy and democratic culture are going on in parallel with the process of EU integration. But the lack of democratic culture has created more conflictual than consensual phenomenon that hinders and delays the time of wider economic integration. Not surprisingly, Albania as the most fanatical and dictatorial communist country in the past is the worst in the performance of the integration process. Despite the time and the problems we have “*skipped*” many stages of historical development of a democratic Western society and with optimism, we are having more and more realistic difficulties and efforts still need to be done to reach the standards of civilized Europe. Throughout this period precisely to achieve these standards we consider as a transition, which will end as an economic process but also as a socio-cultural one, when we become a member with full rights in the EU.

**Keywords:** Economic transition; Integration process; State property; Private property; The planned economy; Market economy; Privatization process; Administrative privatization; Privatization according to market strategy; “Shock therapy”; Gradualism; Goods and services market; Capital market; Labour market

## **1. Instead of Introduction**

The Albanian economy of socialist-communist period was an absolutely centralized and planned economy. The core of this economy system was constituted by state properties, which represented all the people's property or the highest level of its association. In the context of this property existed even the cooperative property as the property of a certain group of agricultural workers in village, who formally had the right to use a certain area of land from the state and were the only owners of the product produced, but the tools of agricultural production were owned by the state.

At the core of this structure property relations, each element of private property *was extremely inconsistent* and even *hostile* to it<sup>2</sup>. The absolute denial of privatization of property went up in denatured and denial of certain elements of property and of individual labor in all economic activities. The previous system prohibited and condemned not just any kind of small private property, but also any kind of individual labor activity for personal or family profit. This represents an extreme and typical feature of our economy on the eve of transition: a closed economy to the socialization and planned; a closed economy in its shell and led by the principle of wholly support in its forces; an

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<sup>2</sup> Annual Report of the IMF, since 1992.

isolated economy to national and international market relations system; an economy that did not recognize any experience of the functioning of internal and external market mechanisms. While in other former Eastern socialist-communist countries, the situation was much different about the market economy, we were at zero level<sup>1</sup>.

Our transition to a market economy had not any objective basis and starting point based on this basis. It was obvious that in these conditions *the transition had to start from the top*, from the interference of political regulation. And this interference, dictated by the pressure of the food crisis of the late 1980s, forced the former regime to take some micro-liberalization measures to allow the *right to exercise individual work for personal benefit purposes*. Some activities for personal gain as self-employment activities were created, for example fairly small social food, transportation and kiosks activities, which created the psychology and mentality of *private work*. The most important part of this whole process is that from it began *the pressure of the need for private property*. The political revolution of 1991-1992 was necessary to open the way to the restoration of this property and the market economy.

## 2. The Beginnings of the Transition Economy

The first elements of the foundations of a market economy started in the first half of 1991. Among the first laws of the pluralist parliament of that time was the privatization of agricultural land of cooperatives. About 430,000 ha of agricultural land was given in possession, without compensation, to the families that lived in village, associating this process even further with the privatization of livestock, fruit, olive groves and vineyards. This *new agrarian revolution* can be considered as the starting point of the fundamentals of *restauration* of a market economy. With this reform was created the small private property based on the work itself, were created little market private agricultural-livestock products. In national network of retail trade were privatized almost all shops, warehouses and stores by giving the ownership to their vendors and employees. While in transportation began the privatization of light vehicles, heavy ones of its assets, with the exception of railways. The criterion of privatization in these branches was to give the ownership to the employees who were using them. Meanwhile, by the end of 1992 and throughout 1993, were privatized all living rented apartments for all residents of urban areas.

These aforementioned privatization processes were accompanied by liberalizing government policies in the area of removing bureaucratic administrative barriers to the functioning of a free market. Thus, the period of 1991 was characterized by removing almost entirely, the customs and fiscal barriers; at the end of this year was liberalized the exchange rate of the Albanian Lek with foreign currencies; were removed administrative barriers to introducing any foreign investments and their prerogatives; was simulated with specific policies encouraging the opening of private foreign banks giving special priority to the liberalization of financial-banking market.

Regarding the privatization of industrial enterprises in this process began the distribution of securities for each employee hired, with the idea of making them co-owners of assets based on the value of these enterprises. This platform conceived by the IMF monitors, was an experimental model of privatization of the assets of industrial enterprises in Poland<sup>2</sup>. But in Poland there were stock markets, so the sale of securities, in terms of our economy was considered as that market would be created in parallel with the issuance of securities of privatization. This concept is practiced in our transition conditions and we did

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<sup>1</sup> Annual Report of the IMF, since 1993.

<sup>2</sup> Annual Report of the IMF, since 1994.

not have the expected outcome, but it rather distorted the privatization of industrial assets. These securities, in the absence of the institution of stock market, began to circulate in the informal market and had a drastic devaluation. Faced with this failure, *the privatization of industrial assets* and other branches of the economy was accomplished in manners and methods, which were more *administrative-bureaucratic* and *clientelist-party*, rather than based on the concepts of *supply and demand of the market*. Consequently, I can say that this performance was inefficient in the privatization of these assets, the privatization in these sectors had no meaning because it did not increase the effectiveness of the use and exploitation of state assets.

The period of the late '90s and early 2000s and beyond, continued with the privatization of strategic objects using methods based more on market supply and demand. The important thing is that the trend has been the orientation and selection of experienced and reputable investors, limiting political preferences. It is worth mentioning that the privatization process was carried out simultaneously with the design and implementation of legislation in the area of attracting foreign investment. Although these investments have been evident, they remained prominent in the level of small and medium businesses and large strategic investors are still one percent.

In the process of restoration of market economy, the Albanian economy quickly changed the physiognomy of its essence. In the mid-1990s *it had become a market economy* of production and exchange of goods; in an economy of free movement of capital inside and outside the country; in an economy of movement and free exchange of domestic currency to foreign currencies; in an open economy and ready to take any kind of formal investment<sup>1</sup>.

### **3. Some Key Features of the Transition of the Albanian Economy**

These traits, I am trying to sort according to their importance notwithstanding any particular criterion.

*The first feature* is the social and political “*surprise*” that raised the need of changing the existing system of relations in production. It is true that the collapse of the Berlin Wall gave a very significant signal for the future of this system, but in reality few Albanian believed that the change would come so quickly and so unexpectedly. We were totally unprepared in every respect. Even political class that emerged in the leadership of political and economic revolution had no social experience. We all entered into an unknown path without any legacy of the past. For us only *the inversion* mattered, but how the future will be built, we did not think at all. Consequently, he showed willingness to accept the advice of international institutions and neighboring European countries, as these countries were the most generous of giving aid and credit easing the transition process in general, and economic one in particular.

Seen in this context, we have to mention another aspect related to the international factor. IMF, World Bank, European Bank for reconstruction and Development and many institutions and developed countries *had no experience*<sup>2</sup> in the opposite direction movement. The historical succession movement had shown that the capitalist system was born in a certain stage of development of relationships of goods with money and had shaped himself when from the economic liberty, private equity was created as the inexhaustible form of internal energy that keeps the system alive.

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<sup>1</sup> Annual Bulletin of the Bank of Albania, 2000.

<sup>2</sup> Annual report of the World Bank, 1996.

Capitalism of the end of the twentieth century had reached its maturity undergoing many trials and emerged victorious in the race with the opposite system. The triumph of the market economy to planned and centralized economy was evident and irreversible, but lacked knowledge of the new road, the road to switch from the totalitarian economy and hardened within the planned, in a free market economy of Western type. Collecting the weak economy of East Germany within the strong economy of West Germany, was a unique case within a nation divided into two states and not an experience that can be emulated by others. All actors, eastern or western, entered into an *unfamiliar road*, but convinced they had no option other than to try and experiment with confidence to the future of the market and its potential, already confirmed.

*The second feature*, which is closely related to the first, is that the IMF and World Bank suggested and opted for Albania as transition path what is known as “*shock therapy*.” This term and concept, meant for IMF a transition process of *radical kind*, which I will try to determine as an *aggressive process*, fast and inclusive of the *privatization of state property* and its transformation into a real private property. IMF basically intended to transition, converting our planned economy to a market economy, *had to start* from “*ground zero*”<sup>1</sup>, eliminating many previously existing structures of the old economy and opening the path to elements and institutions of private economy. Obviously, this strategy was based on the fact that, unlike other countries, we do not inherit any element or system of market economy relations. Our reality was different from that of counterparts, which had implemented in the process of continual reform of their planned economies not only significant market elements, but had also accumulated significant experience in the operation of its structures and mechanisms.

*The third feature* has to do with the fact that our political transition from dictatorship and one-party system in a multiparties or pluralistic system had not inherited a culture as the western democracy. In our reality, pluriparties democratic culture was restored for the first time, without any basis inherited from the monarchy and feudal past and, further, the socialist-communist one. This situation of transition gave to the political war for power a character of conflict<sup>2</sup>. Two main political forces, the Democratic Party as the party of the right and the Socialist Party as a party of the left, originally having opposite philosophies to the process of economic transition conceived and built their positions in antagonism with each other. Such a spirit of conflict created mutual distrust between them to the point that laws adopted by one party, were abrogated with the coming to power of the other party.

This situation of instability and unprincipled political wrangling was reflected in *the volatility* of economic reforms. The two main political forces also failed to find common ground on major issues of strategic reforms in economy. Each thought its way was the best and did not tolerate the way suggested, or followed by another. Even today we do not have *a common strategy for economic transition*, at least for its crucial problems. This situation was complicated even more by what was known as the “*pyramid crisis*”, which besides the shock and socio-economic damages, worsened even more the trust relationships between political actors, increasing the conflicts between them.<sup>3</sup>

The only regulatory tool, generally-accepted by both political forces for economic transition, were the recommendations “*almost mandatory*” of the IMF, the World Bank and the European Commission.

*The fourth feature*, which is the result of three features above, has to do with the conclusion that the whole process of economic transition has begun and continues to walk in the way of direction “*from above*” of politics. In this point of view I include the recommendations of economic policies of

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<sup>1</sup> Annual Reports: IMF 1993; European Commission, 1994.

<sup>2</sup> Foreign Commission Report of the European Parliament, 1995.

<sup>3</sup> European Commission Report, 1998, 1999, 2001.



international institutions, which created the structures and mechanisms of restoration of the market economy. An established market economy ' "from above" obviously cannot be a natural way and as such carries even greater problems and more difficult to overcome (Gorbachev, 1997). These problems become even more complicated when it lacks a culture of dialogue and consensus, which become necessary, as unprepared is the country that has embarked on the path of economic transition (Gorbachev, 1997). This Albanian reality has made the transition *more difficult, more prolonged and more problematic than the other former socialist countries*.

*The fifth feature* has to do with *the speed* of the followed path in the privatization of state assets. Maybe we are the only country in the world that has privatized in a record time almost the majority of state assets and real property underground, and we are confident to privatize what is left of them. Such a *unique* experience, without having any prejudices, instills doubts about the future efficient operation of this type of market. Governments by giving up ownership of key strategic assets, are becoming institutions with quite limited ownership, which inevitably will lead to even limiting the means to pursue certain public policy, and social adjustment. The fact that we face in such an experience, the privatization of such magnitude, raises some questions. For example, Can the next government play with credit easing policy when there are only private commercial banks? Can it affect the public sector employment policies when this is becoming smaller? Why such an experience has not been followed by countries with a developed economy and generally stabilized in key parameters? Will the government be able to afford our next serious situation of economic crisis? Would the solution to these problems be based, and others like these, on only fiscal policy, and debt policy? These questions and others of that nature, I think that cannot get *accurate theoretical answer*. Their explanation theory remains hypothetical and much less realistic. However, I tend to leave the doubts raised to the time which will tell us more than what we know so far.

#### **4. Questions and Conclusions**

These features of transitions have the importance and the role in understanding whether the transition process of our economy towards a shaped market economy is completed or is continuing. In parenthesis I want to clarify what we mean *by the end* of this transition process? In economic literature currently available, the end of the process of economic transition, at least for the former Eastern socialist communist countries where we are part, is related to the period of their full membership in the EU. This event has alleged that, in relation with the specifications of each country, it has been achieved the standard of real and institutional parameters that characterize a shaped market economy, that with the accession the economies of the respective countries have fulfilled the needs of such reforms that have made them compatible with "*the standards and operating mechanisms*" to play in the market competition. Naturally, being a market economy in content and the outcome of the transition process or not, are two different matters.

Judged in this point of view, our economic transition quickly established *goods and services market*, which was followed further by the creation of a private banking system. We have currently a shaped and consolidated goods and services market that constitutes one of the crucial pillars of a market economy, supported from the banking and credit system. But while the Albanian market economy, also *misses* two other elements of a shaped and matured market economy of Western-type. Absent is also *the capital market* and the *labor market*. The capital market is related, primarily, to the creation of market securities and their derivatives, which are realized by *the institution of stock markets* and all institutions-monitoring and controlling their functions. The creation of this market is related to the

maturity of the system development of monetary financial institutions, which were created by the necessity and importance of real economic progress. (Krugman, apud Torres & Giavazzi, 1993)

The same thing I would say for the labor market. In our current economy there is, generally, only institutional service registration of unemployed and social assistance to them, but is almost nonexistent genuine labor market, *as market recognition and monitoring of supply and demand for different types of occupations*, or the people who work and offered to businesses seeking to employ them. It is exactly this “compatibility” of demand for labor supply, tasks and basic function of a shaped labor market, which lacks to our economy. (Bernanke, Laubach & Mishkin, 1999)

Given the above, I would say again that the Albanian transition to a market economy has not been completed. *Our economy continues to be in transition process*, not only it did not create the capital market and the labor market, but also for the creation of these two markets is required the appropriate network operation of their institutions, which requires a time, which is not connected only with prodding from the macroeconomic policies, but also it is related to the objective conditions that arise in the process of developing its content. (Buti & Sapir, 2002)

The acceleration of the European integration process, taking soon the full status of EU candidate country will progress, not only the completion of the transition process, but will also serve to achieve the levels and standards compatible with those of the large European market. In my conclusion: **Albanian economy transition will end when we become member with full rights in the EU.**

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## **Social Risk Management on German Labour Market**

**Raluca Mihălcioiu<sup>1</sup>**

**Abstract:** Terms such as social policy and labor market policies seem not be very current. Instead, we speak more and more about risk management. Social Risk Management is a concept developed by the World Bank. It is a tool to transfer management techniques from the operating or finance in the social and labor market policy, to support individuals, households and communities to better manage their risk. Due to poor incentive structures, inadequate insurance policies or control often remain under preventive, palliative and solidarity balancing risk management measures. This paper sets out to define the term of social risk management, describing the basic features from different perspectives and the main measures and strategies used in social risk management area. The essay considers the most discussed word of risk management as a moral opportunity to redefine the balance of responsibility and solidarity in the labor market.

**Keywords:** social policy; risk management; labor market; public finance

### **1. What is the Social Risk Management**

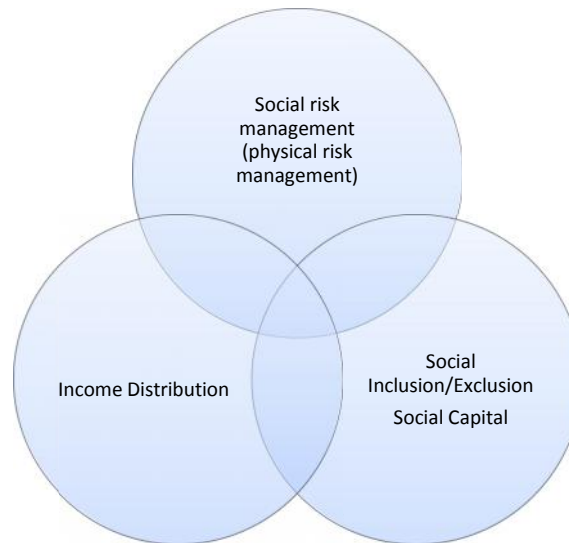
The World Bank developed in 2000 a new conceptual approach for social security policy. This concept puts focus on the analysis of human risks and is used to apply business methods of risk management, such as in banking or insurance. It extends the basic framework of social policy that consists of public interventions to assist individuals and communities better manage risk. It also includes support to the critically poor people.

When using the concept of risk management, we put the question who should be responsible in handling with risks and what rights and obligations may he has. That means no more and no less than how to split your work when dealing with risks between individual, family, company, association and the public administration in order to be able to solve a risk situation.

Risks affect both the individual behavior and the choice of solving a problem in the relation with institutions and relevant actors. This means the division of responsibility between individuals, families and communities, businesses and government.

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**Figure 1. Social risk management-basic features**

*Adapted from Holzmann/Jorgensen 2000*

The figure above depicts the basic features of social risk management: income distribution (as an intermediate goal to achieve social resilience) physical risk management (public measures to protect against natural disaster and illness).

Social risk management is also dealing both with physical risk management policies, such as public interventions to protect against natural disaster (earthquakes, epidemic illness, flooding) and man-made trouble (unemployment, environment protection, war, terror). It includes macroeconomic policies as well, for example to reduce the exposure to economic shocks like unpredictable exchange rates or sudden oil hikes.

## 2. Different Types of Risks

We refer to a risk when we take into account the result of a future event to which typical values can be assigned (in contrast to a situation of complete uncertainty). While in principle both positively and negatively result variations are possible, in human life risks we deal exclusively with damage risks whose occurrence could have threatening tangible and/or intangible consequences and whose structure is determined by cause, type and properties of the specific risk.

As we shortly stressed above, when we deal with risk management we have three main groups of risks:

- Natural risks such as earthworks and tsunamis, droughts, floods and hurricanes as well as pollution, land degradation, over-exploitation and climate change resulting from ecological environmental risks.
- Health risks are for example illness or accident resulting, but also risks that occur as a result of harmful lifestyle such as malnutrition. Other risks, such as maternity and childbirth, divorce, age dependency and death are connected to the human life cycle. Focus here is put on the people that are not yet able to work, so they are in the phase of childhood, youth, training. These are dependent on others' care, fact that makes them vulnerable to many risks.

- Economic risks are risks that indirect, such as climate change, or a direct result of economic, social or political activity of humans. These risks often arise in the (internal) related to direct employment by income or employment losses, but they are also caused by monetary, financial or commercial crises and recessions shocks. Usually poverty risks are associated with the economic risks.

To the social risks we consider disadvantages by discrimination and marginalization (social exclusion) as well as threats that result from violence, crime and terrorism. There are also political risks to mention as a form of governance (bad governance) and the appropriate social instability, but can also be manifested as corruption and nepotism.

### **3. Social Risk Management Strategies**

Usually a social risk management strategy describes whether and, if so, how companies jointly handle both in formal and in informal manner with certain human risks in order to protect its members either preventive (proactive social risk management) or reactive, unforeseen occurred risk consequences (reactive social risk management). This procedures are applied, both structurally, for example by institutions of social security, as well as procedurally by defining policy options for dealing with certain risks. At this point the content and functional design of social risk management strategies is primarily determined by the risk structure. This structure can be determined also in combination with the cause, type and characteristics of the associated human risk.

According to Holzmann and Jorgensen social risk management strategies can be group in three categories:

- Prevention strategies – these are public measures to reduce the probability of risk and they are employed before the risk occurs. Policies in macroeconomic, public health, the environment and education are included in strategies. For example in the labor market, preventive social risk management policies are introduced to improve the skills or the functioning of labor markets in order to reduce the risk of low wages and unemployment or underemployment.

- Mitigation strategies decrease the impact of a probable down-side risk and they are introduced before the risk occurs, like the prevention strategies. Typical mitigation strategies are portfolio diversification, insurance and hedging. Portfolio diversification requires the acquisition of different assets (for example a man can own land, the woman can acquire gold an jewels). Risk mitigation can be both formal and informal insurance. Formal insurance benefits of a large pool of participants (less correlated risks), informal insurance has a low information asymmetry (like reciprocity arrangements in families or communities). Hedging is based on risk exchange or payment of a risk price to somebody for assuming that risk.

- Coping strategies relieve the burden of risks once it has occurred. The main forms are: individual borrowing, migration, reduction of food intake and reliance of public or private transfers. The government plays here the main role in assisting people in coping: for example individuals have been poor their entire lifetime with no possibility to assets at all, so they are not able to handle with repeated or catastrophic risks.

#### **4. German Transitional Labour Market**

When we talk about “knowledge society” we bring the educational investments as a core problem of risk management: educational decisions still increasingly determine the future employment and income opportunities. I continue with pointing some facts from Germany (that can be met also in other EU countries).

The risk of unemployment and poverty among low-skilled workers in Germany is about three times higher as that of high school or college educated. The unemployment rate of the labor force without a professional degree was in 2009 of about 21,9 %<sup>1</sup>.

The poverty rate (defined as 60 percent of disposable income below the median value) of the people under 18 years old with primary school level without further education is at highest level since years and it was about 15.2 % in 2012<sup>2</sup>.

The educational opportunities and the continuing learning chances are unequally distributed. Of 100 young college-age only 22 have a father with High school diploma - 18 of them start studying; 45 young people have a father with secondary school; of these, only nine enroll at a university. The study rate of young people (19-24-year old) was about 54% in 2012. For the continuing learning process, the risk of non-participation in training is higher, the lower the education level or household income is.

However, it is now widely accepted that the socio-political challenge of the educational opportunities for youth, but also the training opportunities for adults should not be determined by the primary income of the parents or by the employment status in the course of employment as much as possible. This raises the question of how social risks can be better “managed” regarding to the choices and consequences of the investment in training (education).

The concept of transitional labor markets provides a means of this matter. Transitional labor markets manage the path between different employment relationships, between inactivity and employment or the combination of different employment relationships (for example independent activities, employment, gainful employment). The aim is to protect both the related income risks and to promote individual or business decisions to venture risky transitions or appropriate personnel management. Transitional labor markets can be seen as a bridge to help that occur during the course of acquiring critical events by institutional arrangements (financial, legal and organizational) for example during the transition between education and work, between employment and self employment between full - and part-time work, the balance between work and family life, between unemployment and employment, and between paid work and retirement. The demand for social protection of such transitions must be reconciled in order to achieve the balance between work and family life.

“Transitional labor markets” is a concept that respects entirely the principle of unemployment insurance to a work life by securing income and peoples ranking risks (someone’s status) not only for unemployment, but also it manage the switch between different employment or forms of activity.

Therefore, in terms of social risk management, such a path of reintegration from unemployed into employment is not only a bridge but also a form of risk prevention and risk mitigation, traditionally known as “preventive labor market policy.”

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<sup>1</sup> Source: Bundesinstitut für Berufsbildung 17/12, available on [www.bibb.de](http://www.bibb.de)

<sup>2</sup> Statistisches Bundesamt, available on [www.destatis.de](http://www.destatis.de), Pressemitteilung Nr.431/17.12.2013

## **5. Good Practice for the Transitional Labor Markets**

The apprentice systems are designed to meet almost ideally the principles of transitional markets because:

- financially, it meets a cost sharing responsibility between individuals, businesses and government;
- organizationally, by the combination of practical and theoretical learning;
- socially, through cooperative learning between employees, trainees, vocational schools and professional or industry-standard organized farms;
- legally, through the right to an apprenticeship.

Publicly sponsored educational or individual learning accounts can be interpreted as an instrument of periodic redistribution of resources in favor of the educationally disadvantaged people. They appear to be a promising new tool primarily to finance and promote lifelong learning.

## **6. Conclusions**

During the last years of economic crisis the concept of the social risk management was critically discussed from different points of view. Individuals and governments were not able to manage the economic shocks. These show that the instruments of the social risks management were barely taken into account. Sudden unemployment and a high level of debts brought many people to poverty, fact that exposed them to risks while they had limited access to appropriate management instruments. Excessive national debt made governments unable to act, to introduce the necessary measures in order to protect individuals, households and communities.

This paper considers the selection of appropriate social risk management instruments in order to reduce the vulnerability as an important device. This requires (in terms of Holzmann) to strike the balance between alternative social risk management arrangements (informal, market-based, public) and social risk management strategies (prevention, mitigation, coping) in order to match the appropriate social risk management instruments in terms of supply and demand.

In summary it can be stated that the way from labor market policies to social management of labor market risks has benefits for the scientific debate. It forces a holistic approach to a differentiated and prospective risk analyzes. It also puts into question the shared responsibility of between actors into question, including the rationalist behavioral assumptions of utility maximizing decision theory (rational choice).

However, the debate of social risk management instead of active or activating labor market policy is not uncritical. Risks such as unemployment, illness or loss of income in critical situations cannot be “manage” such as the risk of money investment. People and not material capital is the main part of this subject. It is not enough just to target opportunities and then leave the residual risks to the market forces. Not least because of new management technologies, the theory of social risk management shows that there is an unused room of risk management for individuals and private collective actors, without thereby sacrificing the same social objectives. However, the conditions of self-regulation or functioning markets are rarely given as accepted. In addition, the randomness of markets often produces gross inequalities that cannot be attributed to individuals. Therefore, regulatory intervention is required both to create the conditions of functioning markets and also to protect the individual from negative consequences.



Although mechanisms for avoiding risks exist for some time, the development of a systematic and comprehensive risk management only began about few years ago in response to stricter legal requirements, increased demands of the capital market and the fact that costly errors can be avoid by a systematic approach.

Much more should be done in terms of how individuals and communities understand and apply the instruments of social risk management. Moreover it must be research how governments can facilitate informal risk management arrangements, guidelines must be developed for better understanding the balance between risk prevention, mitigation and coping.

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## Diagnosis of the Viability of Industrial Companies with Treasury Sensitivity Coefficient

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**Abstract:** Generally, the firm viability can be defined as the ability to ensure a profitable activity in terms of financial equilibrium. Therefore, estimation of viability can be achieved by determining specific profitability and equilibrium indicators to determine the extent to which the economic surplus released by the company's activity, manages, depending on the particularities of the economic and financial structures set up, to turn into cash. This happens because profitability alone is not sufficient to ensure the financial soundness of the company.

**Key words:** cash flow; assets; elasticity; self-financing; equity

### 1. Introduction

The treasury sensitivity coefficient relevance for assessing the financial viability, is given by the fact that its main elements can be decomposed into rates of return, of financial structure, of leverage ratio and assets and liabilities rates, that, within the diagnosis, may provide clearly indices on the financial situation of the firm. The relationship between financial viability and value of the company can be highlighted by incorporating the treasury sensitivity coefficient in assessment calculations.

### 2. Body of Paper

A profitable company can encounter great difficulties in terms of liquidity and, generally, in the capacity of payment. However, any company that registers a positive variation of treasury (cash flow) is, at the same time, profitable. (Thauvron, 2007) The indicators of profitability and equilibrium allow only an overall estimation of viability, without shading the subtle effects of specific influence factors.

An more expressive indicator could be the **treasury sensitivity global coefficient** ( $sg_t$ ):

$$sg_t = \frac{\frac{\Delta NT}{NT}}{\frac{\Delta GOS}{GOS}} = \frac{\Delta NT}{\Delta GOS} \times \frac{GOS}{NT} = \frac{i\Delta NT}{i\Delta GOS}$$

where:  $i\Delta NT$  - net treasury growth index;

$i\Delta GOS$  - gross operating surplus growth index

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By the very logic of its construction  $sg_t$  is an elasticity, measuring the relative variation of the net treasury caused by the gross operating surplus variation.  $sg_t$  is based on the assumption that GOS as gross potential cash flow released by exploitation is the essential source of net treasury (Copeland, Koller, & Murrin, 2002). The coefficient shows to what extent the percentage decrease or increase of GOS, leads to the percentage decrease, respectively to the percentage increase of NT. The gaps between NT fluctuation and that of GOS, are explained by the evolution of exigibility -liquidity ratio, ie through the sense and the intensity of changes in the volume of cash "fixed" in the floating capital necessary (FCN). (Dumitraşcu, 2012, pp. 58-60)

$sg_t$  global coefficient can be decomposed into three partial elasticity coefficients:  $e_{SFC/GOS}$ ,  $e_{TC/SFC}$ ,  $e_{NT/TC}$ .

$$sg_t = \frac{\frac{\Delta NT}{NT}}{\frac{\Delta TC}{TC}} \times \frac{\frac{\Delta TC}{TC}}{\frac{\Delta SFC}{SFC}} \times \frac{\frac{\Delta SFC}{SFC}}{\frac{\Delta GOS}{GOS}} = \frac{\frac{\Delta NT}{NT}}{\frac{\Delta GOS}{GOS}}$$

$$e_{NT/TC} = \frac{\frac{\Delta NT}{NT}}{\frac{\Delta TC}{TC}} e_{TC/SFC} = \frac{\frac{\Delta TC}{TC}}{\frac{\Delta SFC}{SFC}} e_{SFC/GOS} = \frac{\frac{\Delta SFC}{SFC}}{\frac{\Delta GOS}{GOS}}$$

The coefficient  $e_{SFC/GOS}$  expresses the sensitivity of SFC in relation to the changes in the level of GOS which is the main source of self-financing:

$$e_{SFC/GOS} = \frac{\Delta SFC}{SFC} : \frac{\Delta GOS}{GOS} = \frac{\Delta SFC}{\Delta GOS} \times \frac{GOS}{SFC}$$

The report  $\frac{GOS}{SFC}$  represents the share of gross cash surplus generated by operations (GOS) in total own internal financing resources of the company (SFC). If we denote this ratio with % EA, the relationship for calculating  $e_{SFC/GOS}$  is:

$$e_{SFC/GOS} = \frac{\Delta SFC}{\Delta GOS} \times \%EA \quad (1)$$

The coefficient  $e_{TC/SFC}$  measures the variation of the entire capital engaged by the company (TC) related to the variation of SFC as major funding resource. The total capital engaged by the firm finances the gross economic asset (the total financing needs) (Amadiou, & Bessiere, 2007):

TC = Gross economic asset = Fixed assets + FCN + Liquidities.

So:

$$e_{TC/SFC} = \frac{\Delta TC}{TC} : \frac{\Delta SFC}{SFC} = \frac{\Delta TC}{\Delta SFC} \times \frac{SFC}{TC}$$

Or, the  $\frac{SFC}{TC}$  ratio is nothing else but the rate of self-financing of the gross economic asset, measuring the self-financed part of it.

Noting with RSF the  $\frac{SFC}{TC}$  ratio, we rewrite the relation for calculating  $e_{TC/SFC}$

$$e_{TC/SFC} = \frac{\Delta TC}{\Delta SFC} \times RSF \quad (2)$$

The coefficient  $e_{NT/TC}$  expresses treasury sensitivity in relation to relative changes of the total invested capital (TC):

$$e_{NT/TC} = \frac{\Delta NT}{NT} : \frac{\Delta TC}{TC} = \frac{\Delta NT}{\Delta TC} \times \frac{TC}{NT}$$

The  $\frac{TC}{NT}$  ratio is the reverse of  $\frac{NT}{TC}$  ratio which represents the share of the net treasury (liquidities) in the gross economic asset (GEA). If we denote ( $\frac{NT}{TC}$ ) by % GEANT its reverse becomes:

$$\frac{TC}{NT} = 1 / \frac{NT}{TC} = \frac{1}{\%GEANT}$$

We rewrite the expression for calculating  $e_{NT/TC}$  :

$$e_{NT/TC} = \frac{\Delta NT}{\Delta TC \times \%GEANT} \quad (3)$$

Integrating by multiplication operation, the relations (1), (2) and (3), we have:

$$sg_t = e_{SFC/GOS} \times e_{TC/SFC} \times e_{NT/TC} = \frac{\Delta SFC}{\Delta GOS} \times \frac{\Delta TC}{\Delta SFC} \times \frac{\Delta NT}{\Delta TC} \times \frac{\%EA \times R_{SF}}{\%GEANT}$$

And further,

$$sg_t = \frac{\Delta NT}{\Delta GOS} \times \frac{\%EA \times R_{SF}}{\%GEANT}$$

But changes in net treasury ( $\Delta NT$ ) is the cash-flow of the financial year (CF).

Therefore:

$$sg_t = \frac{CF}{\Delta GOS} \times \frac{\%EA \times R_{SF}}{\%GEANT}$$

% EA can be decomposed as follows:

$$\%EA = \frac{GOS}{SFC} = \frac{GOS}{TC} \times \frac{TC}{Total\ debts} \times \frac{Total\ debts}{SFC}$$

(a)  $= \frac{GOS}{TC}$  is the gross economic rate of return, measuring the ability of the total capital engaged by the firm (TC) for ensuring its renewal and payment in as short period.

(b)  $= \frac{TC}{Total\ debts}$  is the long-term solvency ratio ( $R_{LTS}$ ) or overall solvency ratio, expressing the degree to which firm face total debts.

(c)  $= \frac{Total\ debts}{SFC}$  is the rate of total debt refund capacity through internal financial resources (SFC).

The  $R_{SF}$  decomposition rates highlights the following explanatory rates:

$$R_{SF} = \frac{SFC}{TC} = \frac{SFC}{Turnover} \times \frac{Turnover}{Equity} \times \frac{Equity}{TC}$$

(d)  $= \frac{SFC}{Turnover}$  is the gross margin rate of self-financing, showing the extent to which turnover provides own resources needed for development and payment of shareholders.

(e)  $= \frac{Turnover}{Equity}$  expresses the rotation of equity through turnover.

$(f) = \frac{\text{Equity}}{TC}$  is the rate of global financial autonomy ( $R_{GFA}$ ), showing the extent to which the firm relies on equity to cover the total financing needs.

$\frac{1}{\%GEANT}$  is the reverse of (NT/TC) ratio, reflecting the weight of liquidities in the gross economic assets of the company. This rate can be decomposed into the following factors:

$$\frac{e_{NT}}{TC} = \frac{\text{Liquidities}}{\text{Debt due immediately}} \times \frac{\text{Debt due immediately}}{TC}$$

$(g) = \frac{\text{Liquidities}}{\text{Debt due immediately}}$  is nothing else but the Quick Ratio (RIL) or immediate payment capacity rate, characterizing the instantaneous debt repayment ability based on the existing cash.

$(h) = \frac{\text{Debt due immediately}}{TC}$  is a rate of liability structure, reflecting the share of debt due immediately in total liabilities and measures the pressure of immediate chargeability on the overall patrimonial structure of the company. (Caby, & Hirigoyen, 2005)

In case of financially viable firms, i.e. those which are profitable and at the same time balanced,  $sg_t$  has positive values. The following type-situations may be encountered, designating each a certain degree of financial viability:

- $0 < sg_t < 1$ , net treasury increases at a lower rate when GOS increases by 1%, meaning that the increase of profitability (GOS growth) is obtained by a growing level of disparities on stocks, claims and operation liabilities ( $\Delta FCN$ ). The company is financially viable, but this quality tends to depreciate. The management must be careful to reverse the trend.
- $sg_t = 1$ , net treasury increases in the same pace with GOS. Financial equilibrium reinforces at the same rate with the increasing profitability. It is the ideal situation of financial viability.
- $sg_t > 1$ , the treasury is growing faster than GOS. The gain in profitability is obtained in the conditions of relative FCN decline, which leads to improved liquidity - exigibility ratio and therefore at the rapid growth of cash.

Financial sustainability is very solid. The management should be concerned about the judicious placing of the increasing cash surplus. The more  $sg_t$  is greater than 1, the more the financial viability is stronger.

- If  $sg_t = 0$ , it means that the net treasury is totally insensitive to GOS variations. Whatever GOS growth, it is fully absorbed by FCN, the treasury remaining unchanged. Is the minimum point of financial viability, under which any positive development in profitability occurs under the growing financial imbalance. The more  $sg_t$  is closer to zero with such the company is in a more precarious situation in terms of viability.
- An  $sg_t < 0$  is specific to companies with serious imbalances, unsustainable financially, with very low profitability or even losses and inadequate financial and patrimonial structures.

Financial viability trends captured by the  $sg_t$  coefficient, appear as straight lines or as a theoretical curves beam (Figure No.1) where the company can be placed at a given time.

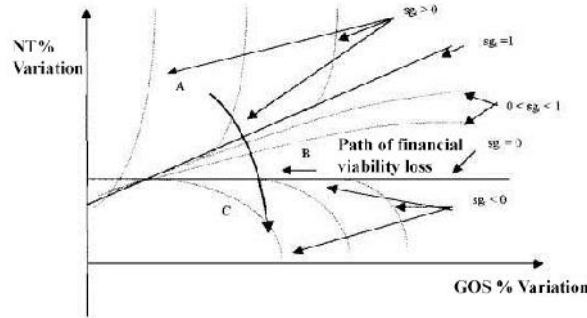


Figure 1. Financial viability appraisal based on sgt coefficient

Figure 1 defines three areas of financial viability. The area A, above the  $sg_t = 1$  straight line, designates all developments corresponding to solid financial and increasing viability. Zone B, between  $sg_t = 1$  and  $sg_t = 0$  lines, shows all developments suitable to a weaker financial viability.  $sg_t = 0$  straight line is the threshold between viable and non-financial viability. Under this line, in C area, are located only non-viable financial developments. The straight line  $sg_t = 1$ , although corresponding to a uniform increasing dynamic of viability is also a threshold - between increasing and decreasing financial viability. Downward curve that leaves the A zone, crossing B area towards C area, is the path of financial viability loss. Financial management decisions and actions are based on the company's position in one of these areas.

We will consider that firm value is determined by the update of a constantly reproducible on an indefinite period of time cash- flow.

$$FV_{UCF} = \frac{CF}{wacc} \text{ where wacc is the weighted average cost of capital}$$

From this relation it follows that:

$$CF = wacc \times FV_{UCF}$$

Introducing the last expression in the calculation formula of the  $sg_t$  coefficient:

$$sg_t = \frac{CF}{\Delta GOS} \times \frac{GOS}{NT}$$

and operating some transformations we get:

$$sg_t = \frac{sg_t \times NT \times i \Delta GOS}{wacc}$$

Noting with the letter  $\varepsilon$  the  $(sg_t / wacc)$  ratio, the above relationship becomes:

$$FV_{UCF} = \varepsilon \times NT \times i \Delta GOS$$

The last expression clearly suggests that between the firm size and value of  $\varepsilon$  coefficient there is a directly proportional relationship. If  $\varepsilon > 1$ , it means that the company releases a stream of liquidities in excess to the needs of wacc coverage. This excess flow remaining after the payment of capital providers (shareholders and creditors) through wacc, is fully assimilated by the firm, leading to the enriching of economic patrimony and enhancing further its value (Kim, & Kross, 2005, pp.753-780). The more greater is the value of  $\varepsilon$ , the more the consistency between treasury surpluses and wacc is higher, and the more the firm value  $FV_{UCF}$  is bigger. If  $\varepsilon < 1$ , it means that the firm is characterized by serious mismatch between the wacc and the processes of creating treasury. In these situations, the treasury is not sufficient any more to pay the capital providers through wacc, an erosion of investment in firm value taking place and /or a funds withdrawal, events that lead to a lower firm value.  $\varepsilon = 1$  has a neutral effect on the firm value.



The increase of economic patrimony (actually of asset value PV) is an important consequence of the company's financial viability. But to regard the financial viability as solid, is necessary that  $\Delta FV_{UCF} > \Delta PV$ : the growth of return value exceeds the growth of asset value of the firm. In other words, the  $(FV_{UCF}/PV)$  ratio must be higher than one and increasing.

Developments of  $\varepsilon$  coefficient and of  $(\Delta FV_{UCF}/PV)$  ratio are interrelated (Figure No. 2). The diagram shows some possible developments of the company's value according to the  $\varepsilon$  coefficient.

Evolution A: rapid growth of  $FV_{UCF}$  (higher) and also of the PV (less), are due to a strengthen financial viability ( $\varepsilon > 1$ ).

Evolution B: Company maintains its monetary viability ( $\varepsilon = 1$ ).  $FV_{UCF}$  and PV grow more slowly until a certain ceiling.

Evolution of C: Financial viability decreases ( $\varepsilon < 1$ ), but  $FV_{UCF}$  and PV may increase slowly up to a certain moment in virtue that company still manages to exploit previously acquired positions.

Evolution D: If the firm fails to stop its financial viability decline through appropriate restructuring of business,  $FV_{UCF}$  and PV collapse are imminent.

Evolution of E: Restructuring of business consisting mainly in cleaning the patrimonial structure of the company by selling some assets and launching energetic recovery actions on the market, lead, after a rebound, to regain financial viability. In the first phase, due to reduction of economic resources,  $FV_{UCF}$  and PV will decrease. The decline is stopped when  $\varepsilon = 1$ . In a following phase, the growth of coefficient  $\varepsilon$  value will determine more rapid growth of  $FV_{UCF}$  and PV.

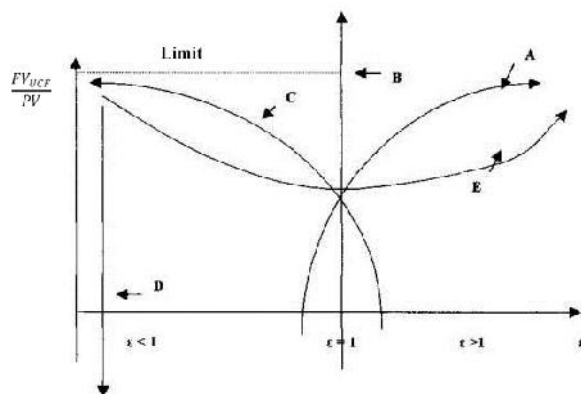


Figure 2. Type-developments of financial viability and company value

### 3. Conclusions

The complexity of the information provided by the rates in which  $sg_t$  decompose, the fact that they capture a variety of important aspects of the financial situation, primarily on profitability, equilibrium and solvency, entitles us to consider that  $sg_t$  is an relevant instrument for the analysis of financial viability.

The multiplying coefficient  $\varepsilon$  built on  $sg_t$ , indicates the degree of coherence between treasury variability in response to changes in relative profitability, exploitation operations and the weighted average cost of capital (wacc) level.

In fact,  $\varepsilon$  measures the company's ability to convert potential resources into actual money stock, to achieve on this basis investors payment at a minimum level required by them, that of the wacc, and to create over this minimum level surplus cash that will strengthen its patrimonial structure.

So,  $sg_t$  proves to be a very useful tool in the diagnosis of viability of industrial companies.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
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**Utilization of European Funds in the Public Administration.  
Study case - Galati County Council**

**Manuela Panaitescu<sup>1</sup>**

**Abstract:** The main objectives of this paper are to reveal some aspects regarding European funds' utilization, starting with the comprehension of EU philosophy regarding cohesion policy and emphasizing the important role played by Structural and Cohesion Funds for public administration, especially in times of economic downturn when the financial resources are difficult to access. **Prior Work:** this work continues prior research carried out for the "European Programs and Projects Management" MA thesis. **Approach:** The main methods employed for capturing the research evidence consists in management strategies analysis in the public administration, especially in studying the capacity of absorption of European funds in the case Galati County Council. The main results of this paper show that the risks of absorption capacity decrease of EU funds are linked to a number of factors, such as financial problems, poor information, lack of managerial experience, etc.

**Keywords:** economic integration; economic development; public administration

**JEL Classification:** F15; F36; O10; H83

## 1. Introduction

Following the integration into the European Union, the main financing source for development programs consists of European funds. Various instances of the national administration consider that such funds are one of the solutions to overcome the economic and financial crisis.

## 2. EU Cohesion Policy

The cohesion policy is defined through its objective, namely to support the process of reducing disparities between the more developed regions and Member States of the European Union and the less developed ones. The objective to strengthen economic and social cohesion is mentioned under the Treaty of Amsterdam, being a prime objective for the European Union. Cohesion is a prerequisite for EU's harmonious development, specifying the desire to "reduce disparities between the levels of development of the various regions."

The cohesion policy is a central pillar for achieving EU's sustainable development objectives. The benefits of this policy can be seen in the growth of the GDP per capita in some EU Member States, out of which Ireland is the most significant example.

The National Development Plan of Romania 2007-2013, document of strategic planning and multiannual financial programming, has been created in accordance to the European policy of economic and social cohesion. The overall objective of the Plan is to reduce disparities between Romania and the other EU Member States. In order to achieve this objective, Romania's development

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priorities for the period 2007-2013 have been established starting from the aspects identified during the economic-social analysis phase.

It must be taken into consideration the economic gaps between the developing regions of Romania. The Northeast is the poorest region of the country with a GPD (gross domestic product) per capita of 14,715 lei in 2010 compared to 58,922 lei in Bucharest Ilfov area for the same year. These gaps have an important socio-economic impact. For example, Bucharest and western regions of the country have become poles of attraction real economic and workforce. Most investments are focused in these regions. As impact, an increase in employment and household income occurs. Quality of social services is increasing. Meanwhile, poor regions do not attract so much work force and their main cities have experienced a much lower economic development. Their attractiveness is still reduced for powerful investors and the local population has a tendency for more powerful migration.

The “*Community Strategic Guidelines for Cohesion 2007-2013*”, document outlining the guidelines of the cohesion policy during the 2007-2013 period, specifies methods through which the cohesion policy dimension can be taken into account when elaborating operational programs financed through Structural Funds.

### **3. The European Funds from the Public Administration Perspective**

Structural and Cohesion Funds are the main budgetary instruments through which the European Union supports economic and social cohesion in its Member States. These funds contribute to reaching the EU Cohesion Policy objectives. The most important of these is the “Convergence” objective, aiming to hasten the economic development of lagging regions by investing human capital and basic infrastructure.

The public administration has one of the most important roles in attracting European funds in Romania, through the implementation of projects for priority areas with on the local development. The financial allocation for Romania was of 19.2 billion Euro during 2007-2013, while for 2014-2020 it is of 22.4 billion Euros. Although such allocations were not designed on activity sectors (public /private), but on Operational Programs, the local authorities are important vectors in the process of attracting European funding.

Although the amounts drawn in during the period 2007-2013 are significant, Romania still occupies the last place among European countries in what concerns the absorption degree. Among the factors that influence the absorption of European funds by local authorities, we list the following:

- the level of information on european funds;
- the experience in accessing european funds;
- the locality’s budgetary capacity;
- the political factor;
- the access to the communication means;
- the partnerships with other institutions etc.

European funds must fill the void left by the lack of own or governmental funds, especially in this recession period. They need to solve the main issues that the local/county authorities are facing:

- poor large infrastructure works (roads, bridges, dams, shore rebuilding);
- water, sewage and wastewater treatment networks (wastewater treatment plants);
- other networks (gas, electricity etc.);

- environmental and waste management issues;
- social-cultural issues: social assistance, schools, kindergartens, hospitals, clinics, integration of the romani population;
- cadastre issues, the restitution of agricultural lands;
- insufficient city hall staff.

However, the question arising here is why communities which have poor infrastructure and so many social issues (social assistance, integration of minorities, etc) have significantly invested in sports facilities. There are some hypotheses that can be formulated in this regard, as follows:

- the lower degree of complexity of such programs (it is easier to build a gym than to build large infrastructure or to manage on long-term social assistance or minorities' integration problems);
- the existence of funds from the state budget that are especially addressed to this type of investment;
- reduced bureaucracy;
- electoral purposes (a gym shows that the mayor has achieved something visible for his community).

The most significant reason for which city hall have not submitted projects in this recession period is the inability to ensure the co-financing or the lack of budgetary resources for projects with European funding. The main sources where the city halls get information on the European financing opportunities are the county institutions, respectively the County Council and the Prefecture and Regional Development Agencies.

The factors that influence the accessing of European funds can be grouped according to the institutions involved in this process:

1. At the level of the bodies coordinating the European funds:
  - ambiguities in formulating the Applicant's Guide, which contains insufficient information;
  - the bureaucracy influencing the process;
  - failure of the financiers to comply with the deadlines (at assessment, at the reimbursements settlement);
  - poor communication between the institutions managing EU funds;
  - lack of standard procedures applied to all bodies managing European funds;
  - frequently changed documentation, with the possibility to result in different interpretation;
  - selection criteria that leave room for interpretation;
  - inconsistency between the information coming from the regional and central institutions;
  - the necessary project permits are obtained very difficultly, are subject to expiration and require re-issuance;
  - the existence of a small number of officers who coordinate European funds, some of whom have deficiencies in training;
  - too shorter period between the launching of funding and the deadline for project submission.
2. At the level of the city halls potentially benefiting from European funds:
  - lack of staff trained in project management;

- the change of the mayor during the project implementation;
- lack of a department specialized in using European funds leads to overwhelmed staff.
- lack of interest for community funds.
- the small budget does not allow obtaining loans to cover the necessary expenses in accessing the funds;
- the need to have included in the budget an amount so as to pay for feasibility studies, permits, services provided by consulting companies;
- amounts necessary for co financing and for VAT payment;
- limited possibilities of (financial) motivation of public officials who get involved in writing and implementing projects with European funding;
- the difficulty of establishing partnerships, due the lack of cooperation between municipalities in submitting projects, often driven by political orientation.

3. At the County Council level:

- political influences which may intervene;
- lack of experts in project management and strategies.
- lack of support from other institutions.

Other issues that should in no way be disregarded are caused by the very complicated procurement procedures, the failure to comply with such procedures resulting in the community funds beneficiaries receiving from the control bodies financial corrections varying between 5-100% of the respective procurement contract.

#### 4. Study Case – Utilization of European Funds by Galati County Council

The structural funds financed projects (table no.1) of which Galati County Council is beneficiary have taken into account various fields such as road infrastructure, social, health, educational and environmental. Although during the programming period 2007-2013, a total of approx. 124 billion lei was drawn through these projects, though are still very many “areas”, in urgently need of investments.

**Table no. 1 Situation of the projects financed through structural funds implemented by Galati County Council**

<b>Financing program</b>	<b>Project name</b>	<b>Project budget</b>
Regional Operational Programme 2007-2013	Rehabilitation and modernization DJ 251 between the cities of Tecuci and Galati, sector km 24 + 000-53 + 350	59,717,655.36 lei
Regional Operational Programme 2007-2013	Bituminous clothing On DJ 253 km 18 +436 - km 29 +800, Cudalbi - Baleni, Galati	9,259,811.85 lei
Regional Operational Programme 2007-2013	Modernization and expansion Recovery and Rehabilitation Center for Adult Persons with Disabilities no. 1 (formerly Placement Center no. 1)	2,968,246.12 lei
Regional Operational Programme 2007-2013	Modernization, extension and endowment of “St. Andrew” Hospital from Galati specialized integrated outpatient	11,276,073.07 lei

<b>Financing program</b>	<b>Project name</b>	<b>Project budget</b>
Regional Operational Programme 2007–2013	Modernization, extension and endowment of Special School Emil Garleanu, Galati City, Galati County	8,131,621.47 lei
Regional Operational Programme 2007–2013	Lower Danube Multicultural Center, Royal Street no. 91 Galati, Galati County	6,886,964.16 lei
Regional Operational Programme 2007–2013	Museum tourism circuit in Galati	889,522.50 lei
Operational Programme Administrative Capacity Development	A new strategically approach of Galati county	429,780 lei
Sectoral Operational Programme Environment 2007 – 2013	SAVE protected area Gârboavele Forest	953,319 lei
Sectoral Operational Programme Environment 2007 – 2013	Biodiversity Conservation in Gârboavele Forest, Galati county	1,336,915.58 lei
Sectoral Operational Programme Increase of Economic Competitiveness	Electronic public services for an efficient administration in Galati county	6.732.177,00 lei
Sectoral Operational Programme Increase of Economic Competitiveness	Administration for citizens – efficient and quality services	6.668.317,00 lei
Sectoral Operational Programme Increase of Economic Competitiveness	E-galați, public services for citizens	6.686.693,80 lei
The Joint Operational Programme România - Ukraine – Republic of Moldova 2007-2013	Acting together for a cleaner environment – attitude and involvement	19,675 Euro
The Joint Operational Programme România - Ukraine – Republic of Moldova 2007-2013	Image - improving methods of ensuring growth and innovation in Northern Lower Danube Euroregion	142,000 Euro
The Joint Operational Programme România - Ukraine – Republic of Moldova 2007-2013	Business - promotion and sustainable development	165,000 Euro
European Commission	Europe Direct Centre 2012	38,600 euro
European Commission	Europe Direct Centre 2013	50,000 euro
European Commission	Europe Direct Centre 2014	41,600 euro

*Source: own processing after information from Galati County Council*

## **5. Conclusions**

The applicants to projects financed from European funds are responsible for their implementation. Besides the necessary training, they should benefit from technical assistance from the financiers.

This support does not exclude the fact that it is not enough to state your “interest” in accessing structural funds, as leader of a local public authority, but it is necessary to become actively involved in searching for information resources, professional training resources, partnership development or in finding new financial resources so as to ensure co-financing. Moreover, this type of financial assistance addresses, through its target projects, the development of the local communities, thus resulting all the more so in an even higher responsibility of the Mayors /County Council’s Presidents in accessing these funds for supporting the local communities, not for serving individual interest that may vary from one electoral campaign to another.

Central authorities must make available for everybody complete data and information on the steps to be undertaken so that a local public authority would consider itself prepared to absorb structural funds. In the same time, it is also essentially the task of the local public authorities to search for information on everything that the accessing of European funding projects entails and to use it by gaining experience in project writing, and, subsequently, in project management.

We would like to highlight the fact that, for the same purpose, it is required to internalize the resources necessary so as to consolidate the capacity to access structural funds – technical, logistic, human resources expertise.

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REALITIES AND PERSPECTIVES

**Paradoxes of Sustainable Development  
within European Integration**

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**Abstract:** In these days, more and more attention is being paid to environment and ecology protection. Political, social and economic actions are much better seen, when decisions are taken in harmony with the natural environment. People began to realize the importance of the environment, they began to appreciate the actions of those, who do care about, and condemn those who don't. Sustainable development is defined as "the right to meet the development aspirations of the present generation, without limiting the rights of future generations" (Smith & Rees, 1998, p. 23). So, the current economic development should not affect, adversely, the economic development of future generations. Environment destruction and, the endless and only sometimes, use of scarce natural resources, without any thoughts, by the present generation, may lead to a situation, in which these resources will not be enough for future generations. On the one hand, it can be assumed that it is about a process of development of individual countries and cities, on the other hand, the definition can be seen from the broader business, that definitely makes the synthesis of the needs of the present generation, with the ability to meet the needs of future generations. From my point of view, sustainable development is closely related with the natural resources, and taking care and reasonable use of those, will allow for further development. Not only in a world's scale, but also for every country or company. It will cause a development of new technologies, products, services, and finally, better life conditions for every single human being.

**Keywords:** sustainable development; European Union; integration; indicators; social life

## **1. Sustainable Development in a Nutshell**

Due to the increased interest in issues of sustainability, it takes a particular significance. It is a multi-layered phenomenon, encompassing such research plane as ecology, philosophy, culture, society, politics, technology and economics. The main goal of sustainable development is the introduction of an integrated governance, which pays special attention to corporate merger of environmental sustainability, socio-economic, spatial and institutional and political. This concept is realized by carrying out environmental, socio-economic and spatial category policy, with an emphasis on sustainable development in the political sense as well as in the field of management. (Brzeziński, Grabara & Pietrasieński, 2012)

The principles of sustainable development in the economy, concern including the organic matter, so far unprecedented in the economic history, in the area. This reorientation of the world economy, gives rise to questions concerning the major determinants of determining the possibility of developing the concept of philosophical and practical solutions, applied, for example, by the companies.

The main objective of sustainable development is to protect the natural capital as a few important rules. This concept is important to reproduction of renewable resources, the integrity of the natural

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environment, the greening of the economy and its development-environment cannot be in conflict with the interests of the economy. The last principle refers to the economization or policy in a way that minimizes the social cost. (Grabara & Starostka-Patyk, 2010)

Currently, we are dealing with two concepts of development. The first one is called the development of conventional thinking and is based on a scale of one generation, all actions are taken in order to achieve material success. In this concept, the prerequisite for the development of social and economic development, is a high rate of economic growth. The following issues, that are not covered by simple economics calculation, such as the ecological consequences of industrial expansion are associated with it. Sustainable development based on this concept, focused its attention primarily on environmental threats and then focused on the equally important social issues. In this case, the main assumptions of this approach, is to increase prosperity, seen through the lens of environmental conditions of life. The objective of sustainable development is to increase, not only the level, but also the quality of life. (Grabara, 2013)

Sustainable development refers to the process of human development, in which, resource use aims to meet human needs, and takes place at the same time, ensuring the stability of natural systems and the environment. This is done in such a way, that the requirements can be meet in present and in the future. Sustainable development focuses on both, use the resources of the natural environment in 100 percent on the one hand, and on the other hand, in a rational manner and as little as possible. (Grabara & Bajdor, 2012)

The concept of sustainable development is closely related to the eco-development. Analyzing the concept of sustainable development, it can be seen that sustainable development, in this case, is defined as a balance between wildlife issues, economics and culture. According to this concept, the economic development should not seriously impact on the environment in which man lives and lead to the degradation of the environment. Sustainable development is development which owned heritage environment is maintained in undisturbed state for a period of time, thus allowing future generations to enjoy these gifts of nature

## **2. Sustainability in Integrated Europe**

### **2.1. Green Jobs on the Rise – but are they Decent Jobs too?**

The ‘environmental goods and services sector’ (EGSS) includes production activities that generate products environmentally friendly. Environmental products have been produced for the purpose of resource management or due to environmental protection. From the years 2002 to 2011, employment in this sector increased by 37 %. In the year 2012, about 4.2 million people were employed in this sector, most of them in environmental protection, which includes prevention, reduction and elimination of pollution and any other environmental degradation. However, growth in resource management activities, has contributed most to the overall increase in employment in this sector. Between the years 2002 and 2011, employment in this area almost doubled<sup>1</sup>.

Many of the changes in the socioeconomic development have been influenced by the financial and economic crises from the year 2008 and the recession that followed it. The slowdown in economic activity not only directly restrained real gross domestic product (GDP) growth, but also led to lower level of investments, higher level of unemployment and to a lesser extent restrained household saving.

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<sup>1</sup> Labor Market Policy, Eurostat Statistical Books, 2014.



The employment trend has been also deteriorated, although it stabilized over the last two years. Overall expenditure on research and development remained more resilient, but it lacked the impetus to stay on-course to meet its targets by the year 2020<sup>1</sup>. There were also positive developments in: labor productivity increased and energy intensity declined. However, it is too early to interpret these trends as major turnarounds. They might reflect delayed economic adjustments or turbulence rather than actual long-term improvements.

## **2.2. Salaries in Poland – are we Going to Chase the West or Going Down to East?**

“Now the Polish employer does not give as much as Danish or Dutch, but chasing Europe. I think we catch them for 7-9 years. Then catch up with the European average” - Prime Minister Donald Tusk insisted in an interview for “Gazeta Wyborcza” (Molga, 2014). Announcements of the imminent arrival of well-being ruthlessly denies the EU Eurostat. Over the past five years, instead of chasing the EU average wages, venture out from her becoming one of the most poorly paid workers in the European Union.

Eurostat compiled labor costs (in simpler mainly remuneration received by employees per hour) in different European countries. Over the past five years (2008-2013) the EU average jumped from 21.5 to 23.7 euros per hour. In the case of the richer parts of Europe (EU 17) from 25.7 to 28.4 euros. Meanwhile in Poland are constantly 7.2 euros per hour. Since the EU average rose, in Poland are getting lower - Eurostat estimates that about 5 percent<sup>2</sup>.

- This is very bad news. On the other statistics we learn after we're most busy people, though, that increasing productivity. Where the hell is this so earned prosperity? I'm afraid that entrepreneurs are willing to pay less than staff deserve.

5 percent drop it like much, but it shows that instead of catching up with the rich, our wages are falling, as in the European bankrupts: Portugal, Spain and Greece. Except that they are falling off the high horse, still earn more than we do. In the UK, labor costs decreased by immigrants ready to work for less than the native islanders. While in 2008, hourly costs amounted to 35.3% of the EU average, it now amounts to only 32.1%. We are against the Union ever cheaper labor.

## **2.3. Attractive Means Cheap**

One side of the coin is that the low-cost Polish economy is an attractive place to invest foreign investment. On the other hand, big business well versed in our situation and knows how to take advantage of this fact by paying less and demanding government subsidies.

In Poland, creates a cheaper place of employment compared with Western European countries foreign investor usually forms in Poland only cheap jobs. It employs Poles for classes at assembly lines or counters. Professionals and managers working in the central headquarters located outside Polish borders. In this way, the average wage in those countries increases, decreases in Poland - Ryszard Florek says. (Molga, 2014)

Another reason is a small number of people producing GDP per all citizens. In Poland, for 38 million people, only 14 million working in the economy, which produces the GDP. What does it mean? It

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<sup>1</sup> Sustainable development in the European Union, Eurostat Statistical Books, 2014.

<sup>2</sup> Labor Market Policy, Eurostat Statistical Books, 2014.

follows that a worker employed in the economy earns three people. - In Germany, the economy employs 40 million people, or half of all citizens. There, one of Germany earns only two. Here too a lot of people working in institutions, offices and organizations, which in addition to being not produce GDP, the additive receive other opportunities - is scored entrepreneur.

It's the least we can blame on others, because some of the causes of stuck in our heads. In Poland, many people work in black, which is not included in the official salary or national average. The more people working legally, the higher the average salary. In countries where the share of the shadow economy is high, wages are lower, e.g. Romania, Bulgaria and Poland. By contrast, in countries where the share of the shadow economy is negligible, wages are higher.

#### **2.4. Measuring 'True' Resource Use**

Raw Material Consumption (RMC) provides the most accurate picture on resource use because it 'corrects' imports and exports levels of products with the equivalent amount of domestic extraction of raw materials that are needed to manufacture the respective traded good. In the year 2011, each EU citizen consumed 15.3 tons of raw materials. 46% of them were nonmetallic minerals, 23% were fossil energy resources, 22% biomass and 10% metal ores<sup>1</sup>. There has been a significant drop in raw material consumption since the slowdown of the economic crisis due to fewer construction and building activities, leading to a fall in the use of non-metallic minerals such as sand and gravel.

#### **2.5. Despite Emissions Falling, Air Pollution Still Affects European City Dwellers**

Air pollution damages human health, can cause minor respiratory irritation or cardiovascular diseases and premature death. It influences the environment though, and strongly affecting quality of life in the EU. Despite significant cuts in emissions of air pollutants over the past decades, particularly matter, ozone and reactive nitrogen substances, it still pose a significant threat. Urban areas, where most the European population live, have been affected most, by poor air quality. In 2011 about 33 % of the urban population in the EU was exposed to PM 10 far above the daily limit value. Between the years 2001 and 2011 the extent of exposure above the limit value varied between 20 % and 44 % without any apparent trend over this period. Exposure to above-limit levels was slightly lower in 2011, at about 14 %. However, the trend, since the year 2001, has been much more volatile, with the top of almost 65 % in the year 2003 and 50 % in the year 2006<sup>2</sup>. It is important to note that O<sub>3</sub> concentrations are not only determined by precursor emissions but also by meteorological conditions; episodes of elevated O<sub>3</sub> levels occur during periods of warm, sunny weather. About 5 % of the urban population in the EU was exposed to NO<sub>2</sub> above the EU annual limit value in 2011. But between the years 2001 and 2011 NO<sub>2</sub> exposure showed a decreasing trend.

#### **2.7. Social Exclusion and Deprivation do not Confine to Income Poverty**

Based on the index in 2011, Denmark, Germany, Austria and Sweden were the countries with the lowest level of perceived social exclusion. And the highest perceived social exclusion was reported in Cyprus, Bulgaria, the Czech Republic and Greece. Poverty and social exclusion seem to be closely linked to the lowest rank in terms of the objective measure of at risk of poverty and exclusion and vice

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<sup>1</sup> Government expenditure on environmental affairs, Eurostat, issue 9/2014.

<sup>2</sup> Sustainable Use of Natural Resources, Eurostat, <http://ec.europa.eu/>, access on 20.04.2014.

versa<sup>1</sup>. However, there are a number of unusual cases such as the Czech Republic, which, having the second lowest at risk of poverty rate in the EU, still ranks third in terms of high perceived social exclusion.

The economic crisis has influenced many of the indicators in the social inclusion theme. Trends have deteriorated in the short term, in particular after 2009, with an increasing number of people being affected by one or more forms of poverty as covered by the headline indicator 'risk of poverty or social exclusion', namely monetary poverty, severe material deprivation, and low work intensity. The same is true for long-term unemployment. In contrast, trends have been favorable for most of the education indicators, in particular early school leavers and tertiary education. However, trends in adult education, as monitored through participation in lifelong learning, are less encouraging.

## **2.8. Space is a Finite Resource — but not in all Countries**

The biggest space for their inhabitants is offered by Scandinavia and the Baltic countries. With less than 50 inhabitants per km<sup>2</sup>, these countries were much more scarcely populated than the EU as a whole. At the other end of the scale, the island of Malta was the most 'crowded' place to live in the EU, with more than 1 300 people having to share one km<sup>2</sup>. The Netherlands and Belgium followed at some distance, with population densities of 495 and 365 inhabitants per km<sup>2</sup> respectively. Despite their size, Germany and Italy also show population densities higher than in most other EU countries.

## **3. Our Planet Is Warming — and Europe Even More**

Recordings of the combined global land and marine surface temperature show a clear going up trend. The year 2012 was the ninth warmest year on record, and all years between 2001 and 2012 were among the top of 13 warmest. Warming is stronger over land and thus temperatures have risen more in the northern hemisphere than in the southern part of the world. For Europe, the average temperature in the last decade (2003-2012) was 1.3°C above the pre-industrial level, making it the warmest on record. As a result of this warming, extremes of cold have become less frequent, while the frequency of warm extremes has increased. According to simulations, temperatures in Europe will continue to increase by more than global average during the 21st century.

At first glance, the EU has made substantial progress towards achieving its energy and climate objectives. Greenhouse gas emissions and primary energy demand are constantly approaching the 2020 targets. However, an analysis of the driving forces behind these positive trends, leads to a more cautious assessment. A strong drop in energy consumption and GHG emissions between 2007 and 2011 was caused by low industrial production, transport volumes and energy demand during the economic crisis. A mild winter in 2010/2011 was another reason for further lower energy demand. The most recent reductions are thus at least in parts linked to low economic performance, rather than reflecting a thorough transformation of the EU energy sector (Ślusarczyk, Brzeziński & Kot, 2013, pp. 31-35). By contrast, the fast expansion of renewable energies is a clearly favorable trend, particularly in the electricity sector. (Kot & Ślusarczyk, 2013, pp. 206-212)

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<sup>1</sup> <http://epp.eurostat.ec.europa.eu>, access on 20.04.2014.

### **3.1. New Passenger Cars Are Becoming More and More ‘Carbon Efficient’**

Carbon dioxide (CO<sub>2</sub>) emissions of the average car sold in the EU fell by 16.7 % between the years 2007 and 2012, cutting the EU average to 132.2 grams of CO<sub>2</sub> per kilometer. This is close to the 130 gram which is a target for the average new car sold in the year 2015. According to the European Environment Agency, based on emission levels recorded in vehicle tests, all major car producers have met their targets for produced cars in 2012. However, most of them will need to sell increasingly efficient vehicles to meet targets in 2015 and beyond. Each producer has a different target, based on the average mass of their fleet, which is gradually phased in, meaning that in the year 2012 only 65% of each manufacturer’s vehicles needed to meet the target, increasing to 100 % of cars by the year 2015. By 2020, the average car sold in the EU must not emit more than 95 grams of CO<sub>2</sub> per km<sup>1</sup>.

Transport volumes as well as energy consumption and greenhouse gas emissions, are all strongly dependent on economic activity. Even now, after the economic and financial crisis, EU economies are still confronted with challenging conditions. This means the evaluation results of the transport indicators should be interpreted very carefully. The economic downturn has led to decreasing all transport volumes, and has also substantially reduced energy consumption and greenhouse gases, as a consequences. These tendencies have lowered the pressure of transport’s environmental impacts. Only time will show whether this is a temporary or long-term trend and whether economic recovery will affect transport’s performance.

### **3.2. More than 40 % of the EU is Covered By Woodland**

Land cover refers to the bio-physical coverage of land. 41.2 % of the total area of the EU in the year 2012 are forests and other wooded areas, 24,7% are cropland 19,5% are grassland, while built-up and other artificial areas, such as roads and railways, accounted for 4.6 % of the total area. Woodland is the prevailing land cover in northern parts of Europe and for a number of countries, whose typography is dominated by mountains and hilly areas. Woodland covered more than half of the total area in Sweden (75.6 %), Finland (71.8 %), Estonia (60.6 %), Slovenia (60.2 %) and Latvia (55.5 %). At the other end of the scale, forests and other wooded areas were most scarce in the United Kingdom (19.8 %), Denmark (18.3 %), Ireland (13.2 %), the Netherlands (12.6 %) and Malta (5.1 %)².

Despite some improvements, the EU’s natural resources are under continuously pressure. Ecosystems and their services, which are the backbone of biodiversity and human well-being and development, are increasingly threatened by land take for urban and infrastructure as well as intensification of agricultural production. Some progress can be observed in marine resources. However it should be interpreted cautiously because a reduction in the size of the EU fishing fleet, has not yet led to a meaningful recovery of fish stocks. Further reforms of and new concepts within agriculture, fish and water policies, as well as in transport and consumption and production, will be needed to put use of natural resources in the EU on a strong sustainable path.

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<sup>1</sup> The fall in rail freight transport performance slowed down towards the end of 2009, Eurostat, Issue number 11/2014.

<sup>2</sup> Land cover and land use diversity indicators, Eurostat, 2012.

### **3.3. Less Europeans Express Concerns with the Environmental Quality of their Residential Areas**

Living conditions and housing quality are important determinants of human well-being. However, housing quality does not only depend on the quality of the dwelling itself, but also on the wider residential area. In particular, problems such as noise, pollution and environmental degradation can have direct negative consequences on the perceived quality of a residential area. In recent years the reported overall exposure of the European population to pollution, grime or other environmental problems has seen a sizeable decline, from 17.6 % in the year 2005 to 14.1 % in the year 2012. The population in different parts of Europe is differently exposed to environmental issues. At one extreme, in 2011 over 40 % of the population in Malta perceived the area, in which they lived, as being affected by pollution, grime or other environmental problems. In contrast, the proportion of residents suffering from these problems was considerably smaller in Ireland (4.0 %), Sweden (6.9 %) and Croatia (7.0 %)¹.

### **3.4. Greening Taxation as a Means for Jobs Creation and Stimulating Innovation**

Environmental taxes can change behavior, encouraging consumers to redirect consumption towards less taxed commodities (Pușcă, Negruț, Andronic & Filip, 2011). Not only can this contribute to achieving environmental objectives, it can also help raise revenues. According to literature, environmental taxes also have a less negative effect on GDP compared to other taxes, such as direct taxes (for example income tax) or indirect taxes (for example value added tax). This feature of environmental taxes means countries could use them to support fiscal consolidation or to reduce other taxes. In addition, the incentives from environmental taxes are expected to create both low and highly skilled jobs, for example in the recycling and energy efficiency sectors.

Energy taxes are the major part of environmental taxes, accounting for almost three quarters of environmental taxes in 2011. The implicit tax rate on energy (ITR) is measured as ratio of energy tax revenues to final energy consumption and represents the effective tax burden on energy. In 2000, the ITR in the EU as a whole was EUR 186.8 per tonne of oil equivalent (TOE). Until the onset of the economic crisis the ITR fell to a low of EUR 168.7 per TOE in 2008, only to climb to EUR 183.8 per TOE by 2011. The increase over 2008 to 2011 occurred against the backdrop of strong falls in final energy consumption spurred by the impacts of the economic crisis. Across the EU, the ITR varied considerably in 2011, from more than EUR 300 per TOE in Denmark to less than EUR 50 per TOE in Slovakia².

The trends observed in the good governance theme since 2000 have been mixed. There have been favorable trends as regards new infringement and the transposition deficit of EU law with respect to Single Market rules. In addition, citizens increasingly interact with public authorities over the internet. Some unfavorable trends, however, persist. Voter turnout in national parliamentary elections continues to decline, and a general shift from labor to environmental taxes, as called for in the EU Sustainable Development Strategy and more recently in the Europe 2020 strategy, has not been achieved.

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¹ Sustainable development in the European Union, Eurostat Statistical Books, 2014.

² Handbook on quarterly national accounts, Eurostat Statistical Books, 2013.

#### **4. Conclusion - Buttered Cat and Empty Houses Paradoxes**

Let me finish the issue of sustainability with two examples of paradoxes, which can be related to sustainability. The first one is the buttered cat paradox, it is a common joke based on the tongue-in-cheek combination of two adages:

- cats always land on their feet.
- buttered toast always lands buttered side down.

The paradox arises when one considers what would happen if one attached a piece of buttered toast (butter side up) to the back of a cat, then dropped the cat from a large height. Some people jokingly maintain that the experiment will produce an anti-gravity effect. They propose that as the cat falls towards the ground, it will slow down and start to rotate, eventually reaching a steady state of hovering a short distance from the ground while rotating at high speed as both the buttered side of the toast and the cat's feet attempt to land on the ground. In June 2003, Kimberly Miner won a Student Academy Award for her film *Perpetual Motion*. Miner based her film on a paper written by a high-school friend that explored the potential implications of the cat and buttered toast idea.<sup>1</sup>

It is estimated that in all EU countries is more than 11 million empty houses, most of which, because of over 3.4 million in Spain, more than 2 million in France and the same in Italy, 1.8 million in Germany and 700,000 in the United UK. Hundreds of thousands of empty houses and flats are also in Greece, Portugal and Ireland and in other EU countries. The number of homeless people in all EU countries in 2013 amounted to 4.1 million. (Gwiazda, 2014)

Much of empty houses and apartments in Spain, Portugal, Greece and Italy are on housing built in recent years by the sea. They were created before the financial crisis ( in 2007-2008 ), and a significant part of which is yet uninhabited. Many of these apartments built quite wealthy people who do not intend to live in them, or even to spend the summer holidays. They were built to the wave of rising property prices to sell them at a profit or possibly rent. However, the bursting price bubble in real estate thwarted the plans of many investors, many of which suffered big losses. Some private developers even decided to demolish part of the set in unfinished houses and apartment buildings, hoping to maintain higher prices of homes built "turnkey". But it did not happen. The prices of houses and apartments in the vast majority of European Union countries declined until the second half of 2013. (Gwiazda, 2014)

It's a pretty bizarre situation in countries where in recent years built a lot of houses and flats, for which there is no effective demand from the people who have the financial resources to buy them or rent, while a growing number of poor people who cannot live under the conditions of non-market or "concessional", using subsidies of local authorities or central part of the new and old vacancy. Some representatives of charitable organizations define the non-use of the existing housing infrastructure "shocking waste" that is difficult to understand not only the homeless people.

Specific scourge of empty houses and apartments there is a good few years in Spain, where at the beginning of the current century construction boom intensified, resulting mainly from the demand for "holiday homes" from the Germans, British and Scandinavians. According to the latest data of the Spanish statistical office at the end of 2013 in Spain was 3.4 million empty houses - which accounted for 14 percent. all the houses in this country<sup>2</sup>. During the past decade, the number of empty houses in the country increased by 10 percent. According to some estimates, in the last few years, about 500,000

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<sup>1</sup> www.wikipedia.org, access on: 14.04.2014.

<sup>2</sup> Spain: *Financial Sector Reform: Final Progress Report*, International Monetary fund, 2/2014.

homes in the rough and housing starts and the apartment has been abandoned by developers, which strongly limited their investment activities.

Of course, many of these empty houses that are built on trust have been taken over by Spanish banks because their owners were not able to pay the installments on the loans. According to the representative of the Spanish Association of homeless people Provivienda, Mario Jose Aldanasa, Spain is now “a country of growing from year to year, the number of repossession of houses by banks and the increasing number of evictions, which are more and more people without a home and are more and more homes without people”.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
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REALITIES AND PERSPECTIVES

**Historical and Contemporary Aspects  
of the Market for the Cargo Traffic carried on the Romanian Ports**

**Florin-Dan Pușcaci<sup>1</sup>, Rose-Marie Pușcaci<sup>2</sup>, Mirela Mihalache<sup>3</sup>, Viorica Pușcaci<sup>4</sup>**

**Abstract:** We hereby try to approach some aspects about the port traffic, analyzing this activity from the marketing point of view, on the one side, and looking at the ports as entities which represented real emblems, symbols of economical and social development, cities like Galați, Brăila, Tulcea, being zones which were wholly identified with the port activity, on the other side. This analysis is necessary in the context of the favorable geographical placement of Romania, which benefits both of the Danube river road, and also the Black Sea. Despite of all these historical and geographic aspects, and also of some directions of developing the commercial Romanian fleet in the past period, the Danube ports are going on a regress stage. In order to catch the now on quantitative and qualitative changes over which are on this market, we consider necessary an incursion in the inter-war period, basing both on the tradition of these maritime and river ports, and on the assertion of Joseph Schumpeter as per which the economic aspects can be studied by history, theory and statistics. The conclusion of the study points to that the port activities estimated by the tonnage shipped in these sea-Danube ports regressed, and the Romanian fleet is now almost absent, non-existent. We firmly underline the necessity of a national strategy in this field.

**Keywords:** market; ports; port traffic; commercial fleet; foreign trade

## **1. Presentation**

The Adrianopole Peace of 1829 gives to the Romanian principalities a series of commercial liberties, which up to that moment were cornered the market by the Ottoman Empire. As result of this situation, the Danube ports Brăila and Galați gain the status of free-ports, with all the privileges issuing from this regime, that is the attracting of the cargo quantities from Romanian principalities, but also from other territories in order to be exported or imported on the market. Due to the historical and geographical conditions, these ports which allowed the access of the maritime at is Brăila focused on the cereals market, and Galați on wood and general cargoes. Furthermore, Brăila had the supremacy for the export tonnage, while Galați that of the imports. (Buse, 1976, p. 66)

Even if for many centuries Brăila had status of Turkish “vilayet”, scoring gaps in its development comparing with other cities, it succeeded not only to recover the differences in development, but also to become a real “pole” of development on the level of the principalities, it became a favorite zone, from a under-privileged one.

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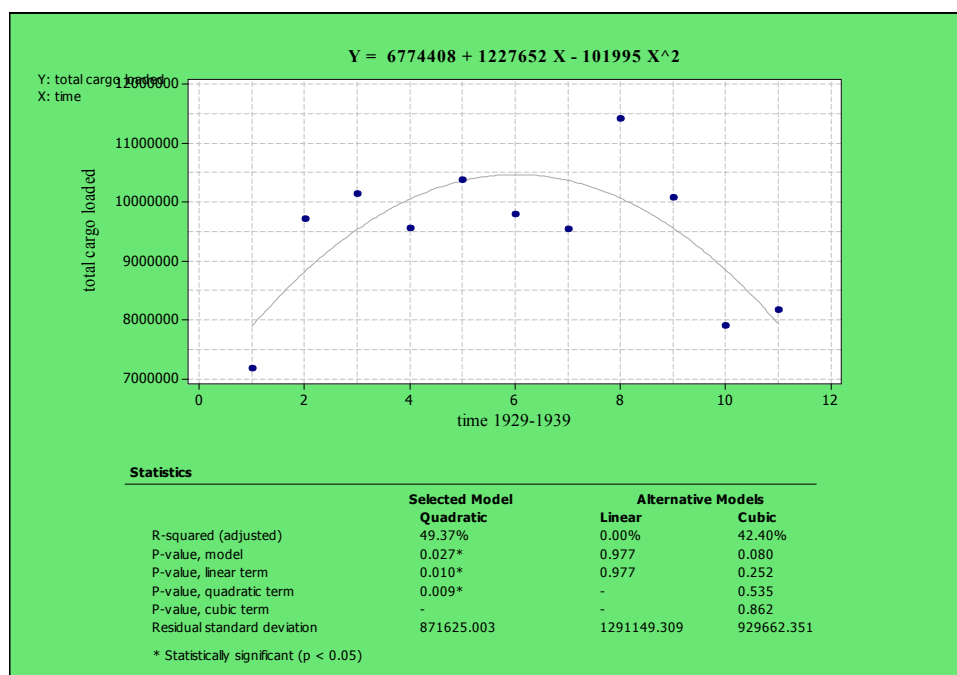


In this context of the development on the commercial market, due to the fluvial trade, a number of countries, especially Austro-Hungarian saw affected their interests in this geographic area. The regime of free-ports was expelled in 1883, from internal and external considerations. Despite of the future attempts of coming back to this favorable regime, this status was no more applied. (Jinga, 1975)

The end of the 19th century is linked to the construction works for the ports, a program which began in 1883, by Gh. Duca – an engineer which brought his contribution together with engineer Anghel Saligny, for getting to an end in the year 1891. It is due to mention that for the building up of the granaries in port, Anghel Saligny used the steel concrete for the first time in the world.

The beginning of the 20th century was budged by both of the consequences of the First World War, and also by the changes in the ratio internal consume–traded goods on the outside, as consequence of the achieving of the millenary desideratum of the Big Romania. Furthermore, as result of the industrialization sustained by the economists of that time, among which we mention Mihail Manoilescu, this tendency was also scored in the port activity, that is they began to be also traded manufactured products in the Romanian maritime and fluvial ports.

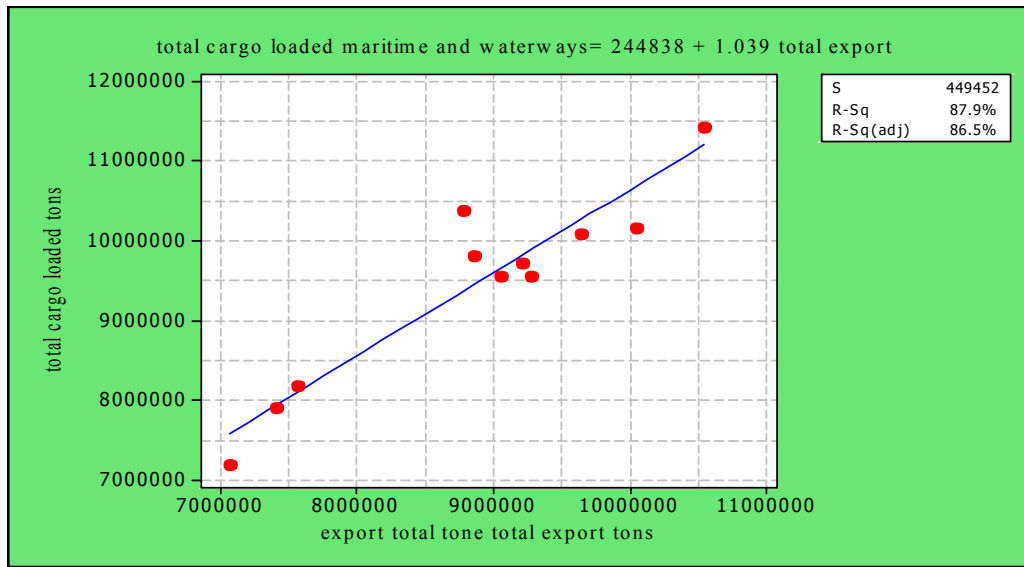
The cargoes traffic shipped in the maritime and river ports during 1929-1939 period developed as it can be seen in the graph no. 1. As it is presented, the traffic of shipped cargo scored an oscillatory tendency, taking also into account the market conditions of that period, scored initially by the economic crisis, and finally the instability generated by the great world conflagration which were foreshadowed. The dependency between the tonnage traded in the maritime and river ports of Romania and the time factor can be shaped by a second degree curve of the form: Total cargoes shipped = 6774408 + 1227652 \* time - 101995 \*time ^ 2 (1)



**Graph 1. Regression between shipped tonnage in the maritime and fluvial Romanian ports and time**



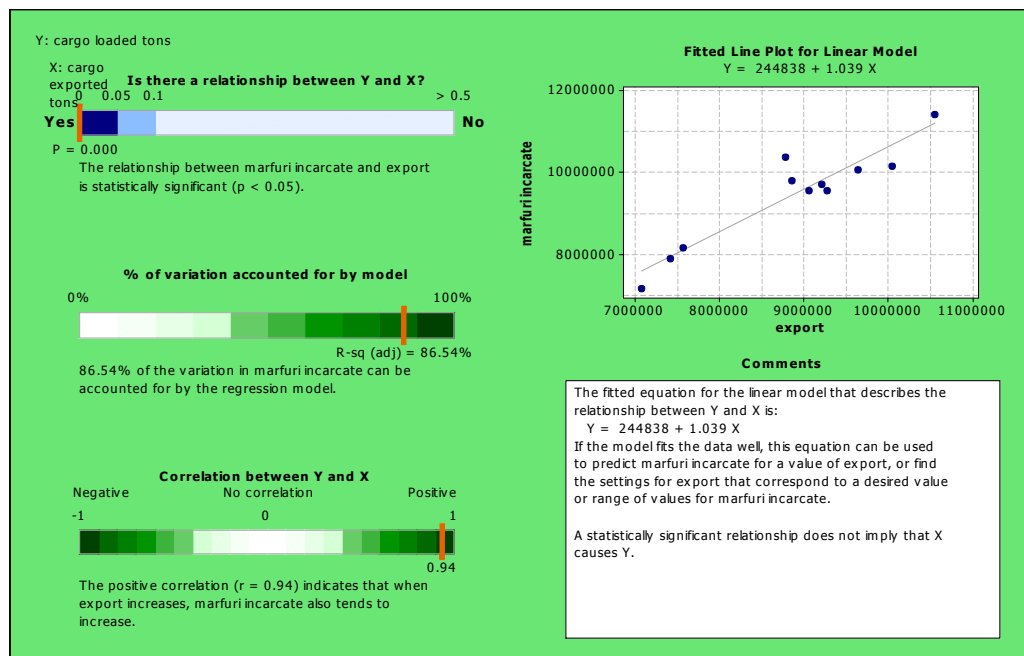
This dependency between the traffic of the shipped cargoes in the Romanian ports and the exports of the country is analyzed on the basis of a linear regression, as per graph no. 4:



**Graph 4. Dependence between the evolution of shipped tonnage and exports in 1929-1939**

The regression equation is total shipped cargoes = 244838 + 1.04 export

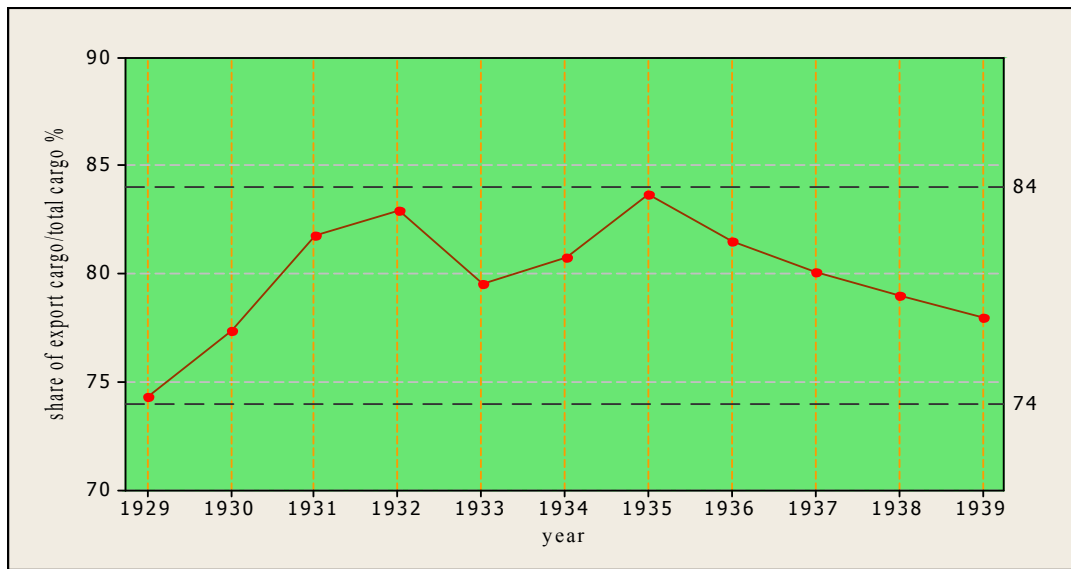
The regression expresses the fact that a rise with a tone of the cargoes export, the shipped tonnage in the maritime and fluvial Romanian ports growths with 1,039 tones and also the very high value of the correlation coefficient of 0,94 demonstrate that when the exports growth, the same tendency is scored also in the shipped tonnage on Romanian ports.



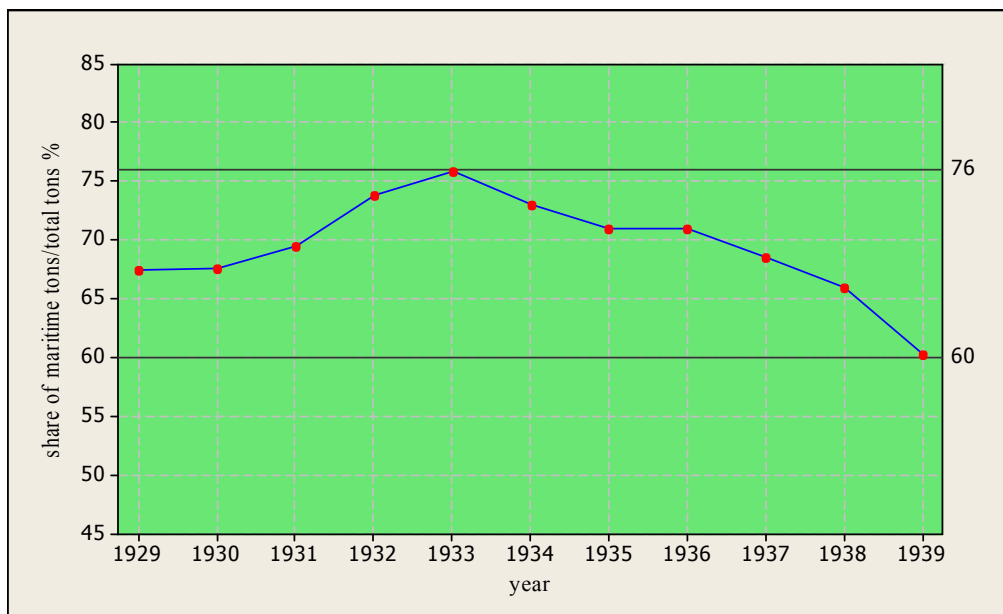
**Graph 5. Regression between shipped goods and exports**

In the years 1929-1939 the Romanian maritime and fluvial ports are characterized by the fact that the shipping activities scored a very big weight in the structure of the total tonnage, and the variation interval is pretty narrow, that is between 74 and 84%, as they can notice in the graph no. 6. This concentration is due to the structure of the goods carried on the Romanian ports, as well as the disequilibrium scored in the commercial balance in which the physical terms are about 10 times more than the export flows, comparing with those of import flows.

Another phenomenon of focusing the port traffic is expressed by the major weight carried on in the Romanian maritime ports reported to the tonnage carried on in all ports, as it shows the graph no.7 was between 60 and 76%. The explanation is the smaller dimension of the fluvial ships, comparing with that of the maritime ones, on one side, and the fact that maritime ships were used in the exports of cargoes on bigger distances and also bigger dimensions on the other part.

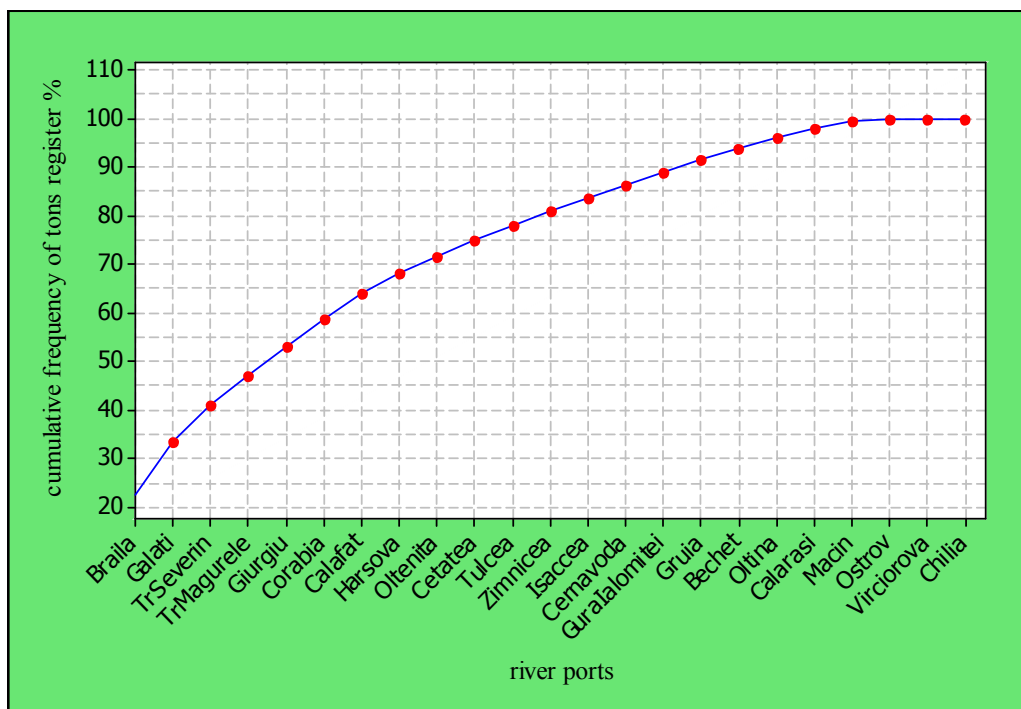


**Graph 6. Share of export cargo vs total cargo**

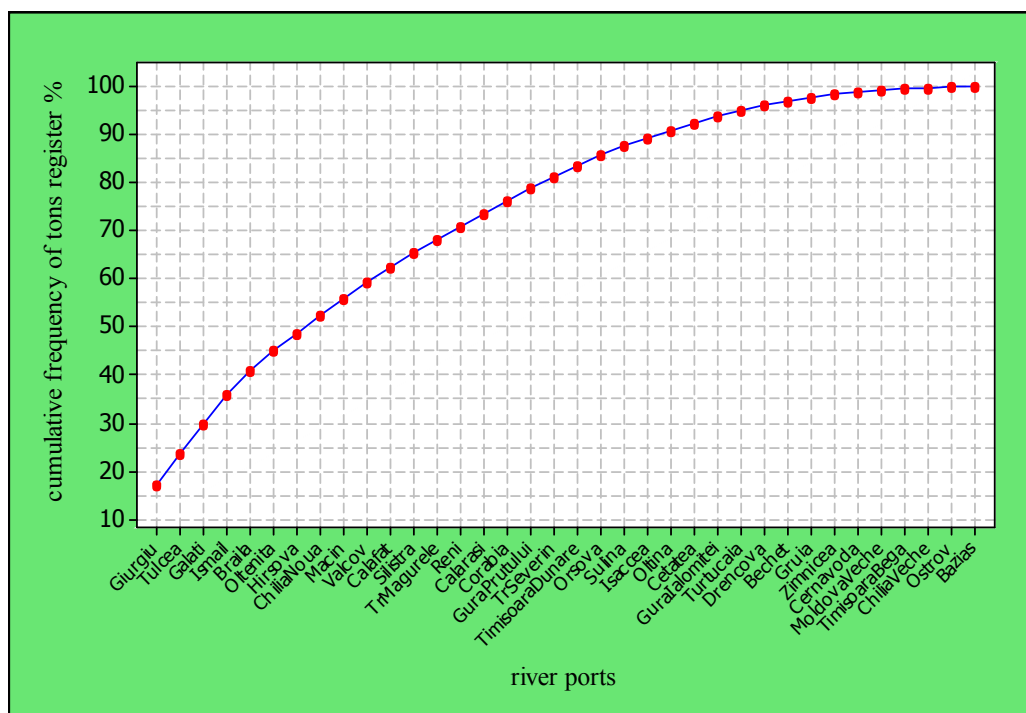


**Graph 7. Share tonnage loaded through seaports from tonnage carried by all ports**

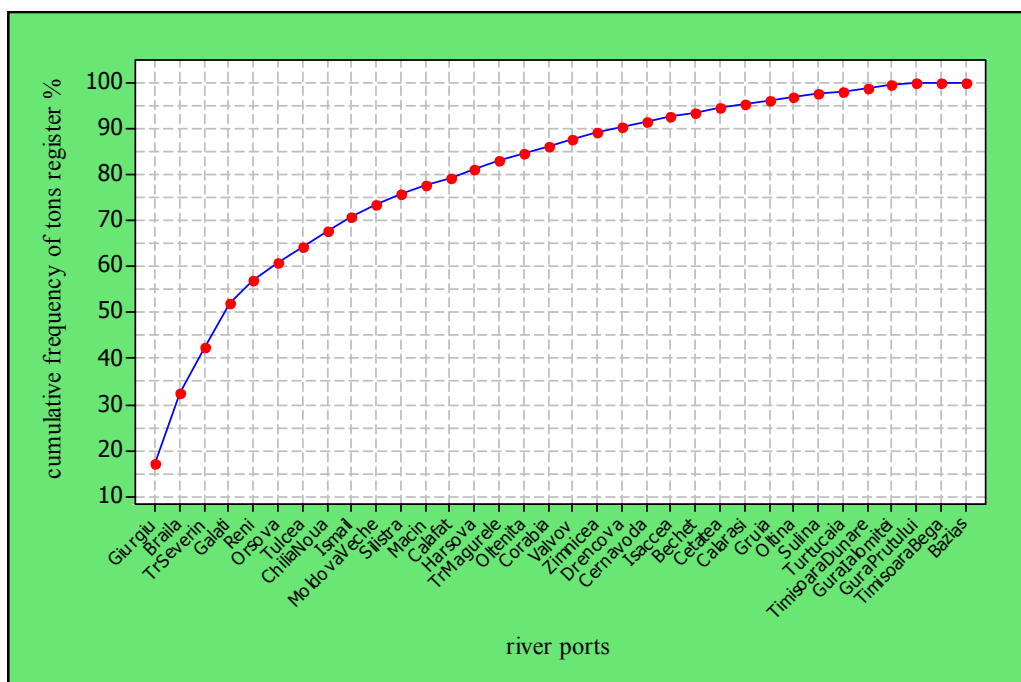
The graphics 8-11 reveal a series of notable modifications in the hierarchy and the level of concentration of the Romanian fluvial traffic. As one can notice, the two traditional ports Braila and Galati are losing their supremacy in fluvial traffic expressed by the tons register of the ships. This tendency is due to the fact that Giurgiu port was that which served the capital town of the country, and also as it could be seen, the oil products brought forward the traffic with cereals in which were specialized Brăila and Galați ports.



Graph 8. Concentration of Romanian river ports in 1910

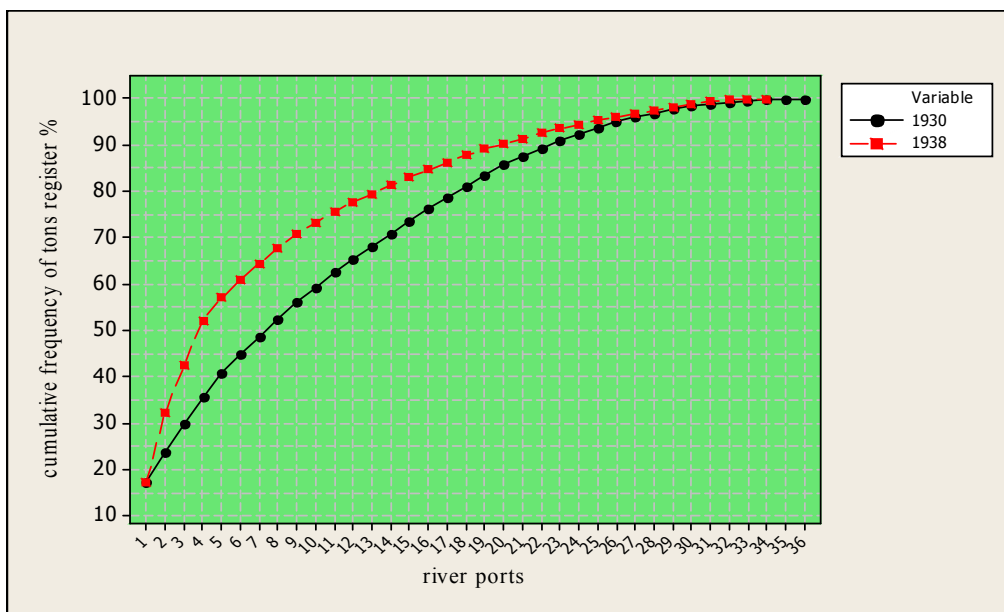


Graph 9. Concentration of Romanian river ports in 1930



Graph 10. Concentration of Romanian river ports in 1938

The graph no. 11 entitles us to assert that at the level of the Danube ports is emphasizing the phenomenon of focusing the register tonnage afferent to the fluvial ships.



Graph 11. Concentration of Romanian river ports in 1930 and 1938

## 2. Conclusions

It results from our intercession that the ports in Romania represented real poles of economic and social development if we refer at the porto-franco regime owned by Braila and Galați ports in the 19<sup>th</sup> century. As result of the transformations interceded in the structure of the foreign trade of Romania in

the inter-war period, first of all by trading the oil products, the two ports scored a decrease of their weight and of losing the supremacy in behalf of Giurgiu port.

Another reason is that mentioned above that it is that deserving the capital of the country. If in the above we have referring only at the fluvial traffic, we have to analyse the Romanian maritime traffic in another next approach. As axiomatic title one could assert that in this plan, the traditional ports Brăila and Galați score structural decreases in the competition with Constanța port.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
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REALITIES AND PERSPECTIVES

## **An Incursion in the Economic Theory of Location**

**Rose-Marie Pușcaci**<sup>1</sup>

**Abstract:** This work has as aim an incursion in the area of the spatial economy, a new branch of the economy, from the point of view of the approach. This was insufficiently explored at international level, and so, less few studied in our country economical literature. This field is strongly linked to the spatial theory, which represents itself an important element in the economical theory, that is necessary to be researched and evaluated. The interest of the research theme is shaded by the interdisciplinary character that implies knowledge in the fields of: economy, geography, econometrics, mathematics, sociology, and is based on a fundamental type of research, focusing the prevalent qualitative study of the area of interest literature, regarding the concept of space and spatial theory.

**Keywords:** space; spatial economy; regional economy

### **1. Introduction**

In the present economic theory there are often existing the tendency of a net separation between microeconomics and macroeconomics. The aspects linked to the individual consumers' behavior, or that of the firms' and together with their interaction on the market were often isolated treated by the behavior of the groups of economical agents reunited in homogeneous categories and by the functioning of the economy as a whole. Nevertheless, there are an important range of problems situated between these two extremes that ask for an integrated vision of the two poles: the problems of the regions, inclusively of the locality, in other words, the analysis of a spatial scale of the economy. Thus, there it took shape the investigation sphere for the regional economy, as a fundamental discipline inside the regional science.

### **2. Presentation**

The history of the regional science began at the beginning of the XX century with exponents of the German school of the spatial economy - von Thunen, Weber, Christaller, Losch. Especially in the post-war ages, some important regionalists were added, they belonging to the American, Holland, French, German, Russian, and others schools. The contour as a science in the 1950's years, and its ascension inside the international contemporary scientific community is partly due to the "International Society for the Systems Sciences", founded in 1954, with the declared aim to promote the exchange of ideas, and also points of view linked to the broad area of this branch.

The creating of the regional science as a distinct domain was based on the conscription of some concepts and methods, from a spatial perspective. These are belonging to the economy, geography, econometrics, mathematics, sociology, political science, and others, thus giving a strong

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interdisciplinary character, consciously assumed. At the same time it happens a continue broadening of the investigation for the regional science. There appeared and developed inside it, a series of disciplines that design the complex profile of this science: it is about the regional planning, regional forecasting, urban economy, urban planning, rural economy, planning the usage of the fields, infrastructure economy, spatial sustainable development, etc.

As it is known, the spatial economy has as object the presenting from an economical perspective some topics as: the location of some economical objectives, spatial equilibrium the regional economic rising, the spatial mobility of the production factors, efficiency of the spatial structures, spatial substituting of the factors, using the economical-mathematical methods and techniques for analysis and decisions in order to conscript the spatial aspects in the traditional economical theories, founding the regional strategies and policies, etc.

The way of analyzing and interpreting these problems comes from the theories, methods and techniques initially issued for the understanding of the behavior of the national economies. Such a procedure could be considered acceptable, as the economy of the regions resemble in many ways with the national economies. For example it is possible, as the economies of the regions to be treated as the national economies in the terms of the analysis of the results for the economical activity, for the incomes, for the employment, etc.

It is also due to mention that the spatial economy follows both the interregional ratios, and those interregional ones, existing between the local economies. And thus it results the necessity of making a distinction between the regional economy, focused on the region as a clear cut entity, taking into consideration the above mentioned ratios, and the economy of the localities, so as it results even from its definition. It is regarding to the problem of the social-economic development of the localities by the prism of the elements which are composing the locality as a system, and of its specific functions.

Looking from a conceptual point of view, some specialists associate, the notion of “fitting of the territory”, to the regional politics, on a plan of the action. In some countries, this term also gets an economic content, meanwhile in other countries there are corresponding terms as: “spatial organizing”, “physical planning”, “organizing territory”, which are terms with an exclusive spatial connotation. It is for this reason as in the international official texts referring to the regional policy, for avoiding the equivoque it is used the general term of “regional development”. This is appreciated that it broadly represents the regional coordinates. It is often assumed that the fundamental problem of each economy consists in the answers to the following questions: what to produce? How much to produce? Whom to produce to? Certainly that together with the dynamic of the economy, there are other questions that could be asked, but these are strictly referring to the problem of the location: where to produce? Studying the components of the economical aggregates at a regional scale, the regional economy proposes to find the answers to the questions like that: which factors are determining the results of the economic activities and the grade of the employment of a region? Why the level of living is higher in some regions, than in others? Why some regions scores bigger rising rhythms of economical growth than other regions? Which are the factors that determines the inter-regions migrations? Why are abiding, higher rates of unemployment in some regions, comparing to the others? It is a probability of trying to answer to such of these questions, a number of the theoreticians of the location economy, some of them being presented further.

The first theoretician - that is unanimously accepted as the “father of the localization theory” is Heinrich von Thunen, whose work -”The isolated state”, appeared in 1826 year. Von Thunen’s model proposes to find an optimum location for the agricultural cultures, depending on the distance between

the place of production and the markets for displaying the products. This model is based on the following considerations: the land of culture is an uniform plan, a “*homogeneous field, without any characteristics, with an equal fertility, without any roads, or navigable rivers, and limited to the use of the carriages as means of transportation, having a single town as a center producing all the industrialized goods and which is supplied with all agricultural products by the farmers from the field part; it is isolated by the external world, being surrounded from all the parts by a impenetrable savage area*”. (Von Thunen, 1910)

As the transportation facilities are similar to those of all directions, it results the inexistence of the transportation costs in the production process, these ones existing only in the distribution process. Founding his analysis, von Thunen starts from the findings made on his field from Tellow, closer to Rostock city, and focusing on the manner the exchange economy influences the agricultural cultures. Accordingly to his model, around the town there are established concentric zones on which they are placed different agricultural cultures, from which they are obtained different annuities from. Thus, von Thunen considers that the town is a point, and each agricultural product has an unique price on the urban market. Taking into account the component of the transportation expenses, then the price of the products will be different from a field to another. There will be placed those cultures which could cover a bigger annuity, in the proximity of the town, and similarly in the most out-of-the-way zone there will be placed those culture with a reduced annuity. The delimitation factor of the zones is represented by the transportation expenses, which are supposed to be a linear function of distance. Von Thunen complicates the scheme of the location of the agricultural cultures, by an approach to the real world, that is: more towns, the existence of the transportation ways, taxation, the fertility of the soil, etc.

Pursuant to these extensions, there is producing a modifying of the concentric structure of the cultures, the circles are extending or are restraining, depending on the influence of these elements. Under many aspects, von Thunen’s contribution, seen by the real world, it could be criticized because of the inexistence of a real state, isolated like that one imagined by him, by not including in the analysis the industrial locating, which he concentrated only in the town, etc. With all these gaps, von Thunen’s contribution could not be neglected, as he gave a new direction to the analysis of space.

Von Thunen’s theory was assumed and enriched by Wilhelm Launhardt, that was considered the author of the first handbook, in the area of mathematical economics. Unlike von Thunen, which focused his attention towards the annuity in association with the valuable characteristics of the alternative crops, the location being an important variable, but which do not are themselves the center of his analysis, Launhardt firstly focused on the theme of optimal locations of the industrial enterprises. In this intercession, Launhardt follows the “problem of the three points”, that is he presents the optimum locating of a plant that produces a single good, with constant costs, which it displays on a given market, and two locations where they are extracting raw material; the extracting and displaying points are considered fixed. The results consists in the minimizing the total transportation expenses on the unit of product. The initial presumes are then generalized to the four or more fixed points, as outlets on multiple markets, and sources of raw materials. Launhardt’s contribution is considerable on the field of the locating, and could be synthetized as follows: it is the first representation in the area of locating, afferent to the more reduce cost of the industrial plant, relative to a fixed market; the first explicit presentation of the different economical forces which influence the locating with the smallest price; discovering some solving methods of the problem in three points; the first solution of the simple, but classical problem of the method of transportation in the ways economics. What could be reproached to Launhardt is the fact that all his solutions are based

on the linear functions of transportation, and also that he did not totally approach the aspect of locating the plant in the situation in which both the consumers, and the suppliers of raw materials are dispersed in space, and not concentrated in a single point.

Alfred Weber is another illustrious theoretician of this area, being concerned by the spatial aspects from the perspective of the industrial locating. Weber takes over a series of presumes from von Thunen's model, but therewith he brings a series of improvements, thus determining a greater on-coming to the real world. Thus, Weber, as von Thunen imagines an uniform field, with uniform transportation rates per mile-tone in the entire zone, but as a difference to his forerunner, he supposes that there are some known points of consume, and also some known sources of energy and raw materials. The labor is considered unlimited, with a constant salary in some given places. The transportation costs are appreciated as a linear function of weight and distance. The industrial objectives succeed a single product, corresponding to a technology with constant yields of scale. The raw materials used in the processing are classified due to the place where they are found, in the following categories: omnipresent ones - those raw materials which could be found in any place; located ones - are those which are in specific locations, from the point of view of the consumer in the process of production; pure ones - are those which are supposed that the whole weight enters in the finite product; and brute ones - those materials which are wholly or partly losing their weight in the production process.

In his demarche Weber is using two technical coefficients, that is: the material indicator that represents the ratio between the weight of the located materials and the weight of the finite product, and the other one is the locational weight, ie the total weight, that has to be transported between the given locational points, expressed on tone of finite product, and which has the value 1, plus the material indicator. If the process of production determines a gain in weight, then the material indicator is smaller than the unit, meanwhile the locational weight is bigger than the unit, so that the industrial location is directed to the points of consume. If the production process determines to gain weight, then the material indicator is smaller than the unit, meanwhile the locational weight is bigger than the unit, so that the industrial location is focused to the points of consumption. Mutually, if the productive process leads to the loss of weight, then the material indicator will be bigger than two, thus resulting that the plant is located to the resources (Blaug, 1985). Weber considered that labour is a spatial variable with a major influence, and in his opinion its placement differs depending on the level of the market and of its efficiency. He sustained that the variations of the cost due to the labour especially refer to some urban habitations. In his intercession, labour is appreciated as being transistor in a spatial plan and immobile. This aspect determined him to analyze the advantageous locations for the labour factor, he comparatively analyzing the economies that were achieved in different locations, to that obtained at the point in which the price of transportation is the lowest, this point being determined on the basis of that foregoing, already presented. But in his research, Weber ignored a series of factors, which are specific to the location, such as: the rate of interest, taxes, ability of the entrepreneurs which is particular to certain locations, and also the general factors, like as clime and topography. It is obviously that Weber has taken into account an economy characterized by a perfect competition and a behavior exclusively base on maximizing the profit, as a result of minimizing the transportation costs. His contribution in this area is not lacking some lacunae, among which they could be reminded: ignoring the demand, the lack of dispersing the producers and the consumers on the entire economic space, the excessively technique approaching for the problem of productive location, and sometimes to the injury of that economic and not only this one (Constantin, 1988, pp. 66-67). Despite all these considerations, Weber's contribution is notable both by his intercession in the problem of the industrial location, but also by opening a waste area of researching for his forerunners. Even Weber

himself admits that his study is not enough for explaining everything and he asserts that: “it is expected that this book to be a beginning, not an end” (Constantin, 1998, pp. 72-73). The history of economy determines us to assert that Weber’s message was subsequently fulfilled, taking into account the numerous debates that he caused.

Starting from a lacuna in Weber’s model, that is the ignoring of the competition, as he based on the assumption that each producer considers that the locations of competitors are fixed, or in other words that the respective producer benefits of a monopoly position on the market that he acts on, Harold Hotelling approaches a spatial competition. Hotelling analyzed a model of locating for two sellers of a homogeneous product, under the conditions in which the buyers of each product are uniform distributed on a limited linear market. He also supposed that each buyer will get a unit of product, so obeying also the transportation costs. Another assumption of the Hotelling’s modes suppose that relocation of the production is instantly achieved and does not imply any cost (Constantin, 1998, pp. 72-73). There is a duopoly in Hotelling’s model, and this model is based on the hypothesis as per that none of the two competitors infer the other’s reactions to a change in his location.

Walter Christaller is another worthy theoretician of this field, that focused on determination of the size, number and distribution of the towns in a certain zone, starting from a series of elementary assumption linked to the consumers’ behavior. In his work named “Central Places in Southern Germany” (Constantin, 1998, pp. 72-73), Christaller restructured the space on the basis of the marginal yield, and of the urban crowding which he developed in a concept assumed from Launhardt, that is of the nestled hexagons, a geometrical form, that he considers to be characteristic for the market.

The German economist - August Losch, another outstanding figure on the area of the spatial economy generated a whole school around his theory, taking into account both the contributions that he brought to this branch, and the inciting due to other theoreticians. In Losch’s analysis there are taken into account the following assumptions: the locating of a producer has to be as advantageous possible, so that to maximize the profit; the locations have to be as numerous as to entirely cover the space; in all the activities achieved by any entrepreneur the anonymous profits have to disappear; the surfaces for supplying, production and displaying the goods have to be as small as possible; the consumers living at the limits of the economical zones have to be indifferent to which neighbor locations they belong to (Constantin, 2000). The existence of a great number of producers in a certain economical zone determines the mitigation of the cost for transportation. The rising of the number of producers also determines the annihilation of the supernormal profit, and thus the firms obtaining only normal profits. Losch reach the conclusion that the optimum area of action for a producer ensures a minim cost of transportation, and will have a hexagonal display, this geometrical form contributing to a complete covering of the space. As for the size of these hexagons - which for a certain zone is under the form of a comb is determined both of the conditions of the demand, and also of those of production; this supposes that the hexagons have different sizes. The superposition of these hexagons networks, having a common center and a maximum number of intersections with other center of production has the aim of making minim the total costs of transportation; thus generates a certain hierarchy of the centers for production. Thus, Losch succeeds to fulfill certain “hierarchies of the industrial centers”, which he names “central places” (Losch, 1978). Losch determined by his intercession that the theoreticians of this area to recognize the necessity of taking into account both the cost, and also the demand for independent factors in locating the firms, even from the middle of the ‘50<sup>th</sup> years of the twenty century.

We appreciate that the best trial of clarifying these independent factors was achieved by Melvin Greenhut in his work "Plant location in theory and practices" (Greenhut, 1956). Based on a pragmatic research, he also developed the theoretical aspects. Greenhut identifies three classes of factors for locating, that is factors of the demands, the cost of factors and the factors of personal interest which are dividing in a series of subdivisions at their turn. This segmentation of the factors which influences the location in Greenhut's conception has taking into account a better getting closer to the real world; this is differing him from his forerunners, as Weber, that intensify the role of services for transportation in the locating of the economical activities. The getting closer has in view the extension of the number of factors, as well as the different share of these ones, in the decision of maximizing the profit. In this line, Greenhut together with G. Norman (1987) study the possibility for a producer to achieve profitable activities under some conditions which are modifying in space, even if in the situation of some locating with high costs. Based on this demarche, Greenhut gets the conclusion that the locations at high costs tend to be occupied by the small firms and therewith, that the industrial structures are characterized by a small number of big firms, and by a great number of small firms. The distance and the costs for transportation offer a grade of protection, even if to those producers which score high production costs. (Constantin, 2000, p. 79).

A moment of reference in the progress of this area is the applying of the input-output analysis in the regional context, that is a contribution achieved by the laureate of Nobel prize for economy - Wassily Leontief. We refer to the work "Multi-regional Input-Output Analysis", that has as co-author Alain Strout, and was published in 1963 (Leontief & Strout 1963, pp. 57-223). In this multiregional area, the Leontief's instrumental is used not only from the point of view of the interdependences between branches, but also of more regions which are correlated. The specific theoretical problems in a multiregional context has in view the fact that the identical goods can be produced and consumed in different regions. Leontief achieves a group of producers from a certain surface in an unique regional found of supplying, and the benefiteres situated in a given zone are associated by him in a regional common found of the demand. The inter-regional movements achieved by the transportation activity can be seen as a displacement from the regional found of supplying to that regional found of the demand (Leontief, 1970). By his contribution, Wassily Leontief could be considered an blazer the path for the input-output analysis in the regional area, as he generated a current through his disciples - as Richardson, Hewings, Jansen, Lewis, Mc. Nicoli and others - explored and brought improvements.

Nicholas Georgescu-Roegen, the scientist of Romanian origin, describes the territory of the village and its optimum dimension in an economic-social manner, making appeal to appeal also to historical incursions at the same time. So, in the village, the houses are compactly set, in a place which represents the hearth of the village, where the peasants located their houses, based on an basic instinct of proximity. But this instinct is manifested also inside a nomad horde, which are not particularized neither by a clear individualization of the village group, nor by its cohesion. Georgescu-Roegen appeals to specific physics and biology approaches, and thus he proposes himself to establish a series of factors which have determined the community of the village to cohabit in a certain dimension, and thus inducing the idea that the first inhabitants of the village built their house grouped, one near the other, thus due to the primary instinct of surviving; but this dimension has not to exceed some limits that could imperil its cohesion. The eminent economist assigned an important role to transportation in the decision of the location, thus ascertains that: "as to the end of the last century (of course he referred to the 19<sup>th</sup> century) the transportation was not an easy thing to do, so the different resources ought to be conveniently located around the place that was fitted to the arrangement of the hearth of the village. All these conditions very much limit the possibilities of choosing the means which permit the ruling of the economical activity determines a human concentration in a single economical and

social entity, so as it could be ensured a good satisfaction of the vital needs of the inhabitants. (Georgescu-Roegen, 1997, p. 245)

The matter of the location come back into present in the economical literature of the last years. The developments gained in the modeling of the market structure and of the transportation costs, combined to the advanced exploiting of the computers lead to the development of the mechanisms which control the overcrowding. Thus, the economical geography enters in another sphere named the New Economical Geography, that are based on a series of prior contributions, such as: the modeling of the monopolistic competition of Dixit-Stiglitz type (1977, pp. 297-308), that certainly opened new perspectives in the economical research; the modeling of the transportation costs of "iceberg" type, belonging to Samuelson's (1952, pp. 278-304); the researches referring to the imperfect markets and to the origins of international trade, resuming only to the mentioning of Helpman's and Krugman's contributions. (1985)

Among the researchers now on interested in this area, we can remember Masahisa Fujita, Paul Krugman and Anthony Venables, that by the work "The Spatial Economy - Cities, Regions and International Trade" (Fujita, Krugman & Venables, 1999) present - in a curdled form, the main theoretical concepts and the sectors for applying the spatial bench marks. The amplitude of the researches - taking into account the hypothetical extensions and the empirical researches applied on different economical spaces, both determined the issue of a new journal in 2001, the "Journal of Economic Geography".

The nucleus of the research has as starting point the heterogeneous distribution of the economical activity. In the majority of the countries, the firms and the clients of a world level are grouped in big metropolitan zones. This tendency of the economical activity - that of being crowded - is not new, and it was already studied at the beginning of the 19<sup>th</sup> century by von Thunen, so as we have already presented.

Now coming to the contemporary economy, the eminent American economist, Paul Robin Krugman, professor of economy and international relations winns the Nobel Prize in economical sciences just for his contributions brought to the new economical geography and to the new commercial theory. Beginning with 1990 year, Paul Krugman's researches oriented to the economical geography, and especially to the location problems, his contribution being the cornerstone of the direction which the new economical geography has today. He ascertained that one of the tasks of the economy is that of understanding why the economical activities appear and develop in a place, rather than in another one.

Krugman proposes the idea accordingly to that a region could become more competitive than another, by a cumulative effect, starting from a starting almost arbitrary, due to the growth yields allowed by the spatial focusing of the activities.

The works of economical geography issued by the geographers in this period are very numerous, they being dedicated to the international markets, industrial localization, services activities, telecommunications, regional and national economies, their merit being that of surpassing the descriptive character. This is a remarkable qualitative hitch that are placing the economical geography among the indispensable sciences for noticing and analyzing the contemporary reality. Thus, the complexity of the approaching rises, the economical aspects begin to be followed in a broader context, the individuals' perception upon the economic processes and phenomenon become more sensitive, and the territory gives indispensable aspects for researching the space.

### 3. Conclusions

The location theory surprises two essential coordinates of the economical life: the distance and the territory. The role of the distance is pointed out by the influence of the transportation expenses, both on the prices of the market, and also on the favorable location of the production. The role of the territory determined in the 18th century, classical sounding names were feeling around the spatial economy area, but the location theory has not enjoyed of abounding researches, or of touchable results; so, around the 1950's year, the economical analysis did not include a spatial dimension.

Reading von Thunen's and Krugman's spatial economical models, which could be considered as extreme models - from the point of view of the chronology - it is considered that they could offer only a structure of the economical theory from the perspective of space, their imperfections favoring the issuing of the extensions, of the exceptions, and of the peculiar cases.

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
EUROPEAN INTEGRATION  
REALITIES AND PERSPECTIVES

## **Tax Evasion, an Integral Part of Corruption**

**Carmen Elena Coca<sup>1</sup>, Galina Ulian<sup>2</sup>, Rodica Elena Faida<sup>3</sup>**

**Abstract:** State budget is considered to be the instrument of achieving social and economic objectives, with the ability to mediate its subsidies and tax incentives. Lack of funds, which are part of budget income, leads to incapacity of achieving the state duties, and this is the result of taxpayers avoiding to pay taxes. The need for delimitation between unlawful and lawful tax avoidance makes it useful to estimate the size of the phenomenon on its two forms of expression and raise awareness among political and administrative decision makers, in order to search and determine appropriate methods to limit and combat the phenomenon.

**Keywords:** tax evasion; tax law; corruption

**JEL Classification:** E26; K42

### **1. Introduction**

The most frequently used definition of tax evasion is “*the art of avoiding to fall into the attraction field of tax law*” (Hoanta, 1997, p. 218). From this interpretation, tax evasion is, in most cases, compared to fraud. Because of this interpretation, the state loses its blameworthy characteristic, enabling its taxpayers to escape paying taxes.

### **2. Fraud and Tax Evasion**

Fraud and tax evasion are considered to be means to dodge in front of excessive fiscal pressure. Among the main forms of evasion used in various countries we can include: benefits in kind (company car, generous allowances) that are provided by employers to their employees to reduce their tax bases and implicit taxes. Tax fraud is the fraudulent various processes that can reduce income or benefits. Tax evasion is largely linked to countries with favorable tax and social legislation. It also encouraged the creation of free zones. Free zones are territorial enclaves which have extraterritoriality customs as benefit and escape totally or partially, by national laws.

Tax evasion covers all categories of economic agents: firms, public or private administrations, and refers to a very broad range of issues, covering both general issues and specific components. Due to the existence of tax evasion, there will be a direct and necessary decrease of state revenues. As a consequence of reduction in state revenues, there will be a lower state budget, which can not cover the demand for state financial funds necessary to fulfill its basic functions. As a result of these

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shortcomings, the state should take immediate efficient measures, which leads to increased tax rates on existing taxes, and the creation of new taxes and fees. But the introduction of a new tax or increasing the rate of an existing new tax can only reduce the affordability of tax duties, traders escaping the main objective under the new fiscal constraints they are subject of, obviously through methods more or less ingenious, legal or moral).

### **3. Techniques of Tax Evasion**

Numerous techniques of tax evasion are related to the taxpayer's rich imagination, using financial engineering and a series of artful and subtle combinations. Due to the absence of a clear and accurate tax legislation, is it difficult for taxpayers to circumvent the state, leading to tax evasion. After frequent changes in laws, taxpayers seek permissive facilities, even for a short period to circumvent the rule, resorting to unorthodox practices. A form of fraud, with a relevant incidence within economic crime refers to deficiency in civic taxpayers, and the excess of the tax organizations, which are sometimes prone to violation of rights of taxpayers. This form of fraud, with relevant implications in economic crimes will be shown below, both the notion of trying to tackle tax evasion with its imperfections and framework and its forms in our country and internationally. Budget revenues recorded increases, with increasing taxes, but the subsequent increase over the optimal level of taxation may produce adverse effects, characterized by increased levels of taxation, became burdensome and disincentives and increase the tax effect is canceled by restricting the tax base, reflected in lower revenues. Direct expenses shall be made in budgetary resources, as well as some way of renunciation state budget revenues due to it under the laws in force. Grants are awarded by the state to certain economic and social categories, which are considered to be disadvantaged, but need these financial "helpers". By giving tax breaks a number of measures designed to stimulate certain economic activities, foster regional shares or interest, or to benefit certain individuals. The measures take the form of tax benefits - exemptions, reductions and deferrals of direct taxes, the public authority shall pursue for certain government or local programs (Cretoiu, Cornescu & Bucur, 2001, p. 223). These subsidies and tax exemptions are granted only if sufficient funds from the state budget provide the money for those social categories to be able to give up some revenue budget granting tax exemptions and reductions). Due to the large share of tax evasion, which is the main cause of low income from the state budget, as the performance of the national economy is very low, the state budget shrinks considerably, these government programs cannot be carried out and, consequently, those social groups who need the financial support of the state and should receive it, may not receive these financial funds at all. As a consequence of these decisions, negative social effects can be observed, namely the standard of living of certain social categories decreases, these people being deprived of state aid. Oversized tax avoidance can occur in three ways:

- the law provides tax evasion itself through the tax system favors;
- failure to achieve business taxpayer, taxable transaction or act, this action is common in case of excessive taxation because marginal tax rate becomes very high and the taxpayer prefers to refrain from providing an additional unit of labor;
- use the tax system gaps.

Corruption of public officials control is another important factor favoring evasion.

Bribery of staff with the finding of evasion, receiving a portion of the proceeds benefiting the taxpayer by avoiding the payment of tax obligations by the state are frequently used methods.

The possibility of state intervention in certain areas is another favouring cause of tax evasion. Supporting and maintaining subsidies for some products over a long period of time, has given the possibility that some businesses focus their work in the fields where the state offers subsidies.

Illegal activities of companies had as a starting point to set up companies in disadvantaged areas aimed at entitling them to benefit from these facilities. Businesses balk at tax obligations because in reality, economic activities are not performed in the disadvantaged areas.<sup>1</sup>

#### **4. Forms of Tax Evasion**

By the way it is committed, tax evasion may know two forms of expression:

- legal evasion (sheltered by law);
- fraudulent evasion (illegal).

In order to define this practice, the question of delimiting the law avoidance is arising, where avoidance is permitted by law, and fraudulent evasion is not. In these circumstances, the boundaries are not always clear and there is a grey area of absconding. There are some arguments which claim that certain types of (lawful) taxation avoidance are as wrong as fraudulent evasion and therefore they should be treated similarly. (Cristus, 2011, p. 2)

But in practice, it is quite difficult to distinguish lawful from the fraudulent tax evasion, since between legal and illegal, there is not a break, but rather a continuity, successive attempts to exploit loopholes in the law resulting from the legal taxpayer to the illegal.

Tax evasion is facilitated by:

- granting of tax incentives in the form of exemptions, partial exemptions, rebates, deductions and so on;
- granting temporary exemptions delineated, establishment of new companies;
- removed from the scope of the related income tax deposits and those from investments in bonds issued by the state;
- the failure to overheads of companies, which create temptation of overvaluing by their unjustified economically raising;
- imposing income of certain categories of individuals on the basis of average income rules, for taxpayers who earn incomes higher than average, not to pay tax on the difference;
- conditions for taxpayers deriving income higher than average, do not pay tax on the difference;
- exploiting loopholes in the law etc.

In practice, acts of tax evasion based on favorable interpretation of the law (legal tax evasion) are varied and many, depending on the ingenuity of taxpayers and the confusing nature of the law.

Fraudulent evasion takes the following forms:

a) traditional evasion (by concealment), which consists of partially or entirely removing the payment of the tax, or by completing and submitting incorrect documents, or by failure to produce documents required by law.

This form of fraudulent evasion involves a series of processes, including:

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<sup>1</sup> Documentary Fund MPF-NAFA *Note summary on European tax fraud*, 2004.

- failure to produce tax declarations or fake their preparation;
- purposeful reduce of revenue in order to diminish the VAT and profit tax, the cash receipts and sales receipts with no invoice;
- willful growth of expenditures to diminish the taxable profit;
- production and marketing of goods and services clandestinely;
- professional activities clandestinely rewarded (black);
- reducing the value of inheritances received and transactions with real estate etc.

b) legal evasion, which is to hide the true nature of an organism or a contract (for example, when a contract of association is secretly converted in a contract of employment for its beneficiary to obtain certain advantages as an employee, or vice versa) to get rid of certain tax consequences;

c) accounts evasion, difficult to identify in practice, which creates the impression of a correct accounts, using false documents in order to increase spending, reduce revenue, reduce taxable income and therefore the tax liability owed to the state;

d) evasion through evaluation, which consists in the reduction of inventories, overestimation of amortization and provisions, in order to drive profits in the future.

Based on the overall evolution economic-financial crime, the promotion of a new law to prevent and combat more effectively these types of offenses was imposed by necessity.<sup>1</sup>

The alarming increase in crime on the financial-fiscal, economic, banking, customs and accounting resulted in the development and adoption of new regulations on the prevention and combating this phenomenon, which represents a high degree of social danger (Pocora & Pocora, 2014). In terms of economy, forms of tax evasion influences competition, meaning its distortion. Companies that commit fraud can penetrate market segments by charging lower prices than those who fulfill their tax obligations. Capital accumulation in the same effort has faster growth, ensuring financial capital that can be placed effectively by domestic or international financial requirements or used for expanding the production and marketing. (Hen, 2007, p. 196 and the next)

The most important role of fiscal policy is to eliminate factors that favor the development of economy, causing “slipping” business firms towards the so-called “gray zone” of the economy. (Hoanta, 1997, p. 292)

The means used to find the most suitable solutions, economically and socially speaking, in terms of its financing are very different and sometimes aims for connotations related to political will: reduce tax evasion. The relationship between fraud and peddling influence is close, due to which legal practice finds difficulties of boundary (Pocora, 2013, p. 149). In these circumstances tax evasion is an important driver of social inequity and distrust in the government payers. Because of social, economic, political factors, tax evasion causes a pronounced distrust of taxpayers in political powers, especially those that are responsible for that government.

## 5. Conclusion

In this respect, *“specialists in the field of taxation reached the unanimous conclusion that tax evasion is even more fearsome as the tax is higher. That is why for any state to achieve its revenue, it is necessary to scale and distribute public tasks in such a way so that any taxpayer should be able to pay their taxes in full and on time.*

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<sup>1</sup> Law no. 241/2005 (Official Gazette. No. 672 of 27 July 2005.

*Disregard of such viewpoint makes the tax system inefficient. Thus, regardless of the inspector's training, or the size of sanctions, it is likely that the state fail to collect the required taxes from its taxpayer. Any payer would, in these circumstances, all he/she can to get rid of such unbearable hardship and one of the means is just tax fraud.*" (Munteanu, 2003, pp. 336-337)

At national level, because of these problems, serious imbalances in the state budget appear, imbalances arising between the actual level of budget revenues and the expenditures that have been set on a wrong basis.

Tax evasion may be countered if the law included at least two things: a code of inspection conduct, in order to avoid discretionary behaviors –situations when inspectors take bribes or behave abusively, and secondly, it has been stated that controls must be based only on existing regulations and published in the Official Gazette.

In conclusion, as long as there are orders and recommendations of the Ministry of Finance to carry out checks on various subjects, a transparent relationship between firms and the ministry cannot exist.

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**World Economy and World Seaborne Trade  
in the 2005-2013 Period**

**Romeo Bosneagu<sup>1</sup>, Carmen Elena Coca<sup>2</sup>, Florin Sorescu<sup>3</sup>**

**Abstract:** In the period 1990-2013 the world economy has evolved increasing and decreasing with good and weak years, with mini crisis, and with a recent strong crisis, which apparently has not yet passed. World seaborne trade, inextricably linked to the global economy followed the upward and the downward trend of the global economy, but with much higher amplitudes. Comparative analysis of the evolution of the global economy and world seaborne trade during the period 2005-2013 shows a decrease in world seaborne trade in tandem with the global economy.

**Keywords:** crisis; developed countries, transition countries

**JEL Classification:** E21; E22; E23

## 1. World Economic Growth in the 1990-2013 Period

Evolution of world seaborne trade in recent years has been directly influenced by the world economy and therefore a synthetic analysis of the latter must be done. For analysis we chose three groups of countries: developed countries, transition countries, developing countries<sup>4</sup>, and China, compared to the world economy.

World seaborne trade is inextricably linked to the world economy, the development of the current production areas and outlets, as well as new ones, with differences from one region to another; world economy growth in 2012 was less than 0.6 % compared to 2011, as confirmed by the estimated value for 2013. In 2012, world economy growth was 2.2 % compared to 2.8% in 2011, and for 2013 the increase (under validation) was 2.1 %<sup>5</sup>. This trend is confirmed by the economic situation of developed economies, transition economies and China<sup>6</sup>, except the developing economies that have experienced an increase of 4.6% in 2012, from 5.9 % in 2011 and a growth estimate of 4.7 % in 2013.

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<sup>4</sup> Countries belonging to these categories of economic development is according to UNCTAD.

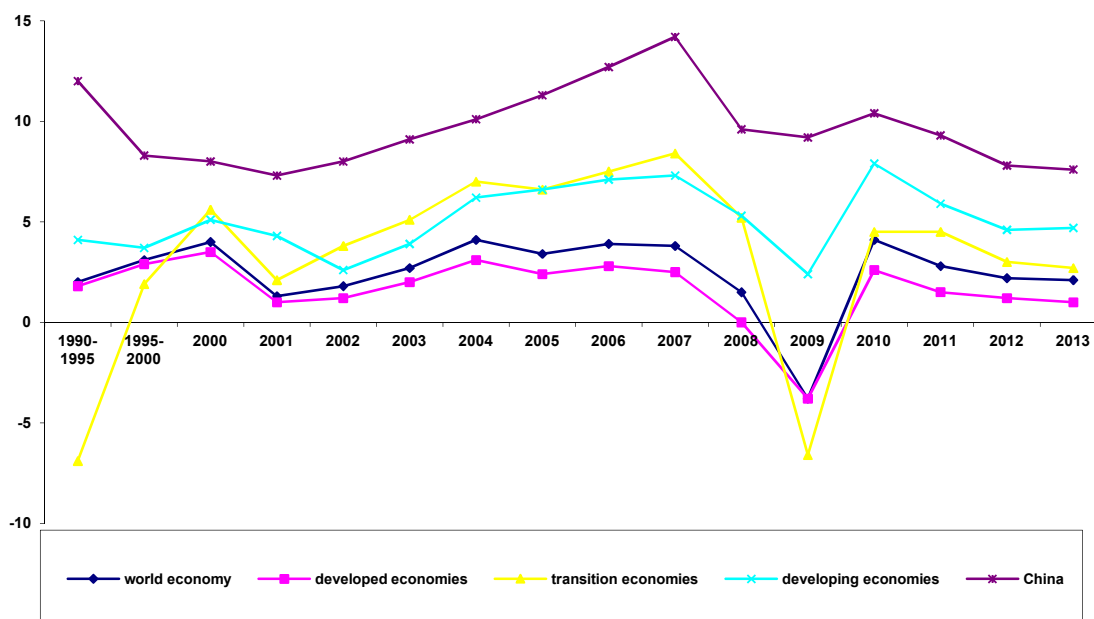
<sup>5</sup> Review of Maritime Transport 2013, United Nations Conference on Trade and Development -UNCTAD, United Nations, New York and Geneva, 2013.

<sup>6</sup> *Ibidem*.

The Analysis of official bibliographic sources (UNCTAD, World Bank, IMF<sup>1</sup>), although they show slightly different information on the world economy in the period 1990-2013, shows as (table 1 and graph.1):

**Table 1. Evolution of the world economy during 1990 to 2013 [in percent]**

Period	World economy	Developed economies	Transition economies	Developing economies	China
1990-1995	2,0	1,8	-6,9	4,1	12,0
1995-2000	3,1	2,9	1,9	3,7	8,3
2000	4,0	3,5	5,6	5,1	8,0
2001	1,3	1,0	2,1	4,3	7,3
2002	1,8	1,2	3,8	2,6	8,0
2003	2,7	2,0	5,1	3,9	9,1
2004	4,1	3,1	7,0	6,2	10,1
2005	3,4	2,4	6,6	6,6	11,3
2006	3,9	2,8	7,5	7,1	12,7
2007	3,8	2,5	8,4	7,3	14,2
2008	1,5	0,0	5,2	5,3	9,6
2009	-2,2	-3,8	-6,6	2,4	9,2
2010	4,1	2,6	4,5	7,9	10,4
2011	2,8	1,5	4,5	5,9	9,3
2012	2,2	1,2	3,0	4,6	7,8
2013	2,1	1,0	2,7	4,7	7,6
average	2,53	1,48	3,4	5,1	9,68



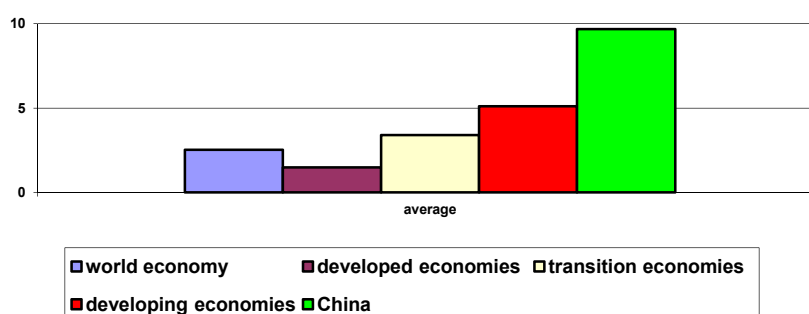
**Graph 1. Annual evolution of the world economy and by UNCTAD economies categories in the period 1990-2013 [in percent]**

- the worst years in terms of economic growth was 2009, (with negative growth for the world economy, developed economies and transition economies), 2008 and 2001 (though with positive growth);

- the best years in terms of economic growth have been 2004, 2006, 2008 and 2010;

<sup>1</sup> www.unctad.org; www.worldbank.org; www.imf.org.

- the last decade of the twentieth century registered an increasing trend of economic growth, ended with a peak of 4% in 2000;
- for the period 2000-2004 there was a decrease of more than two percent and a return to growth of 4.1% in 2004;
- in the next four years 2004-2007 the growth of the world economy remains (a slight decrease) around one in 2004, and because of the emergence of the global crisis, in 2008 and 2009 there was a drastic reductions in the world economy growth (from 3.8% in 2007 to -2.2% in 2009);
- it was following a strong recovery of the world economy in 2010, by 6.3 percent, from -2.2% (2009) to 4.1% (2010);
- in the last four years (2010-2013), world economy decreases steadily to a value similar in growth with the '90s (estimated growth of 2.1% for 2013);
- average world economic growth, developed economies, transition economies, developing economies and China in the period 1990-2013 shows as (table 2 and graph.2):
  - an increase of growth of the developed economies with a lower value compared to the growth of world economy ( 1.48 % vs. 2.53 % );
  - a higher rate of growth of developing economies compared to the world economic growth (5.1%), countries which, after 2000, experienced only positive growth, even during the current global economic crisis;
  - a higher rate of growth of transition economies compared to the world economic growth ( 3.4% ), countries, after the crisis they went through during the years 1990 - 1995 (-6.9 % ) experienced positive growth, however, were affected by the global crisis (2009 with negative growth - 6.6% );
  - a high growth rate of the Chinese economy (9.68 %), almost four times higher than the world economy in the same period), with peaks in 2006 and 2007 (14.2% ), but with a slowdown growth, below the average in the last three years (2013, 7.6 % estimated growth).



**Graph 2. Mean world economic growth and by types of economies in the 1990-2013 period**

## 2. World Seaborne Trade Evolution during 2005-2012 Period

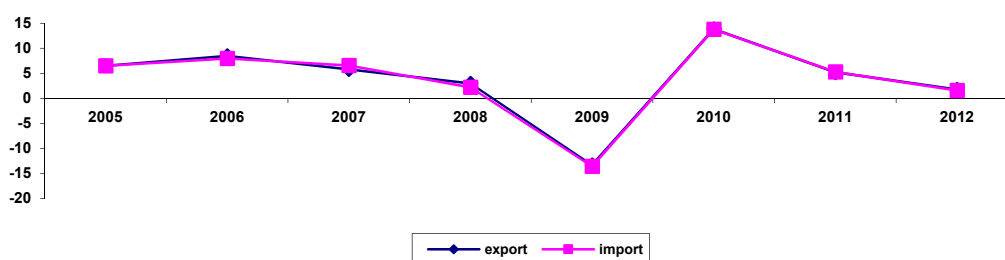
The analysis of the world seaborne trade was based on the annual reports published by UNCTAD, World Bank, IMF, etc.. These official information relates to changes (in percent) of exports and imports of goods by sea, the world economy, developed economies, transition economies, developing economies and China in the period 2005-2012 (table 2):

**Table 2. Annual evolution of world seaborne trade in the 2005-2012 period [in percent]**

Period	Annual percentage	World economy	Developed economies	Transition economies	Developing economies	China
2005	export	6,5				25,0
	import	6,5				11,5
2006	export	8,5				22,0
	import	8,0				16,5
2007	export	5,8	3,9	8,6	8,7	21,8
	import	6,6	3,7	26,1	10,6	14,1
2008	export	3,0	2,8	0,8	4,2	10,5
	import	2,2	0,0	16,0	5,3	2,4
2009	export	-13,3	-15,5	-14,4	-7,4	-14,1
	import	-13,6	-14,6	-28,2	-17,9	-1,1
2010	export	13,9	13,0	11,3	8,3	29,1
	import	13,8	10,8	15,9	22,5	25,4
2011	export	5,2	4,9	4,2	4,6	13,0
	import	5,3	3,4	15,7	10,8	10,3
2012	export	1,8	0,4	1,0	2,2	7,2
	import	1,6	-0,5	3,9	2,5	5,9
Average 2007-2012	export	3,0	1,59	8,2	3,41	12,2
	import	2,6	0,47	1,9	6,61	9,5
Average 2007-2012		2,8	1,08	5,0	5,02	10,85

This analysis looks like this:

- the worst years of the world seaborne trade were: 2008, 2009 (-13.3% export, -13.6% import) and 2012;
- the best year for the world seaborne trade was 2010 (13.9% export, 13.8% import);
- the global crisis has affected the world seaborne trade particularly strong, in 2008, 2009, 2011 and 2012;
- percentage values of the evolution of exports and imports in the world seaborne trade are very close (graph.3);
- the last two years (2011, 2012) the world seaborne trade was decreasing at a smallest value before the current global crisis (graph.3):



**Graph 3. Annual evolution of world seaborne trade in the 2005-2012 period [in percent]**



- the development of the world seaborne trade of developed economies was similar to world seaborne trade (graph.4), but with smaller amplitudes:



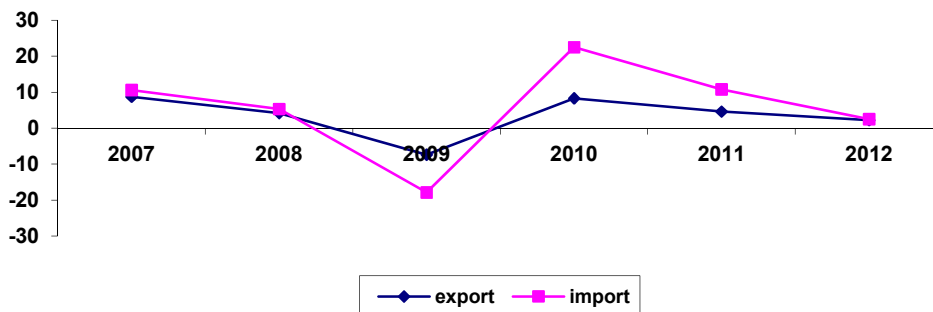
**Graph 4. Annual evolution of world seaborne trade of the developed economies in the 2007-2012 period [in percent]**

- the development of the world seaborne trade of the transition economies, for the same period (2007-2012), was similar to the evolution of world seaborne trade of the developed economies, with its specificity given by the lower value of exports and higher imports and lower decrease of the exports/imports in the most difficult year of the global crisis-2009 (graph5):



**Graph 5. Annual evolution of the world seaborne trade of the transition economies in 2007-2012 period [in percent]**

- and the development of the world seaborne trade of developing economies experienced the same trend with the world seaborne trade of developed economies, with its specificity gave by the lower values of exports and imports, and the value of imports generally higher than exports except year 2009, when the import was significantly lower than export (graph.6):



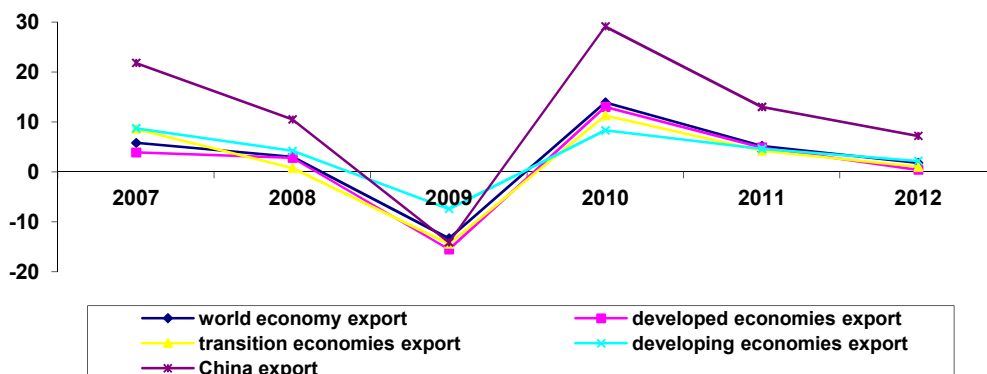
**Graph 6. Annual evolution of the world seaborne trade of the developing economies in the 2007-2012 period [in percent]**

- and the evolution of China's seaborne trade followed the trend of world seaborne trade, the difference made by a percentage of export and import values much higher (graph.7) export maritime trade was higher than import, except during the global crisis (2009); and for China last two years (2011 and 2012) have meant sharp decline in exports and imports, less than half the value recorded in 2010 (graph.7):



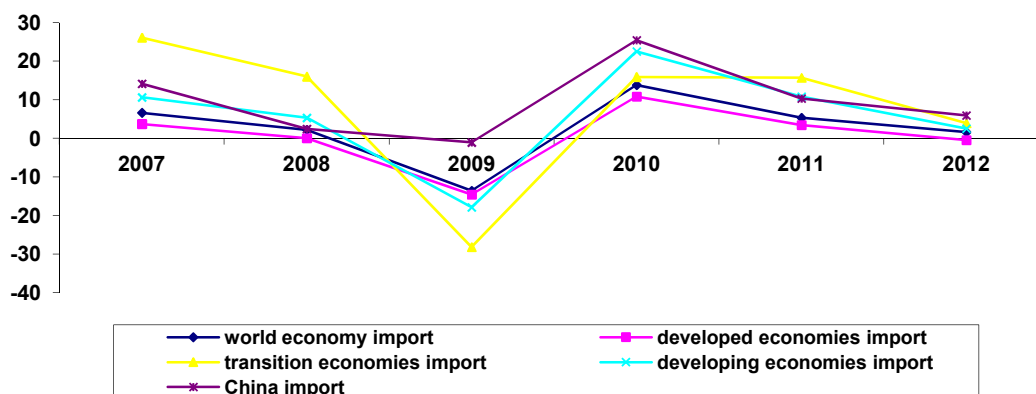
**Graph 7. Evolution of China's annual seaborne trade in the 2007-2012 period [in percent]**

- the export of the world seaborne trade had the same trend for the world economy and for groups of countries chosen for the study, except China, which had a higher export value about four times and developing economies, which had a much smaller decrease in seaborne trade export in 2009 (graph.8):



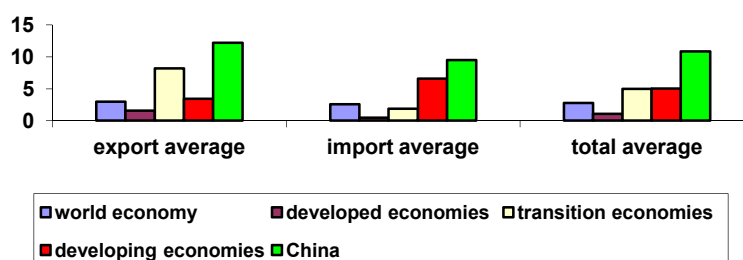
**Graph 8. Annual evolution of exports in the world seaborne trade in the 2007-2012 period [in percent]**

- the import of the world seaborne trade had the same trend for the world economy and for groups of countries chosen for the study, except China, which had a higher import value about twice in 2009-2010 and transition economies, which had a higher value in 2007-2008 and 2011, and the largest decrease in 2009 (graph.9):



**Graph 9. Annual evolution of imports in the world seaborne trade in 2007-2012 period [in percent]**

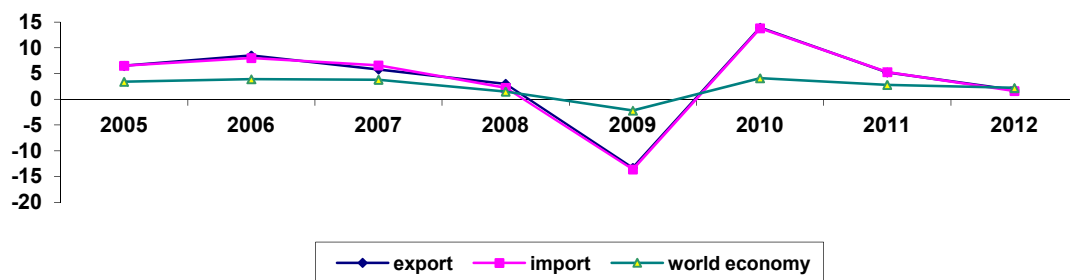
- concerning the average development of the world seaborne trade and the seaborne trade of the groups of countries chosen for the study, there can be noticed China's high rate of seaborne trade export and the same for the transition economies, with a higher value exports; developed economies had a smaller development of the import than the export, instead the developing economies have increased their import more than the export (graph10):



**Graph10. World seaborne trade average (export, import and export and import average) and by type of economies in the 2007-2012 period**

### 3. Conclusions:

- in the last 23 years the world economy has fared cyclical rise and fall, rise in periods 1990-2000, 2003-2007, 2010, decrease in 2000-2002, sharp drop during the global crisis 2007-2009 and 2011-2013;
- during 1990-2008 years the world economy evolved within relatively close limits (1.3% to 4.1%), exceptions being registered in the worst years: 2001 (1.3%), 2008 (1.5%) 2009 (-2.2%);
- global crisis has led to a negative evolution of the world economy, which currently has not found his previous trend, that before the crisis; this is true for the world economy, but less for developing economies and China (which had a significant decrease growth, but with significant positive values);
- world seaborne trade is closely linked to the world economy (graph11):



**Graph 11. Comparative annual evolution of the world economy and the world seaborne global trade during the years 2005 to 2012 [in percent]**

- it can be seen very well on graphics that the world seaborne trade growth with increasing global economy (with a yearly growth rate about three times higher in 2005-2006 and in 2010, a rate nearly five times higher); in terms of decelerating the world economy growth it can be seen as the maximum period of crisis (2009), the world's seaborne trade dropped more seriously, nearly four times the world economy; after the peak growth in 2010, the world seaborne trade has dropped dramatically, following the trend of declining world economy, because in 2012 the growth rate is lower than the world economy;
- although the amount of goods transported by sea was higher in 2013 than in 2012 (9.568 billion tons to 9.165 billion tons loaded), the annual percentage increase is very small, directly related to the demand of the world market;
- if the declining current trend of the world economy will continue in the coming years, following the evolution of comparative global seaborne trade and the world economy in recent years, it is assumed that the trend of the world seaborne trade developments is in sharp decline.

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\*\*\* [www.imf.org](http://www.imf.org).

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THE 9TH EDITION OF THE INTERNATIONAL CONFERENCE  
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REALITIES AND PERSPECTIVES

**Economic Development of the Black Sea Riparian  
Countries during 2004-2012**

**Romeo Bosneagu<sup>1</sup>, Florin Sorescu<sup>2</sup>, Rodica Elena Faida<sup>3</sup>**

**Abstract:** The Black Sea is politically divided between the European Union, countries aspiring to join the EU and the Russian Federation. From an economic perspective, the area has a huge potential for development and is “claimed” by the same political actors. In 1992, BSEC (Black Sea Economic Cooperation) was formed and it includes, along with the six riparian countries, eight countries in order to meet their economic power in order to achieve regional development. In the period 2004-2012 the economy Black Sea countries experienced strongly fluctuated, which was strongly connected to the global economy, the inflow of capital in the region and the influence of the global economic crisis.

**Keywords:** crisis; riparian countries; population

**JEL Classification:** E21; E22; E23;

## 1. Economic Power of the Black Sea Countries

For the Black Sea riparian countries, the past decade has meant a special period politically, socially, and economically difficult, characterized by a prolonged transition needed to adapt to the new standards imposed by the Euro-Atlantic integration of Romania and Bulgaria – NATO states since 2004, and European Union members since 2007), and Turkey (NATO member with European integration aspirations), Ukraine and Georgia who were going through a long process of development and modernization to ensure conditions for the entry into NATO and the EU. Also, the Russian Federation was going through a lengthy process of development and adapt to the market economy laws. The economic power of the countries bordering the Black Sea states, in summary, as follows<sup>4</sup>:

- a) population (Table 1 and graph.1);
- b) GDP (Table 1 and graph.2);
- c) GNI per capita- Atlas Method (Table 1 and graph. 3);

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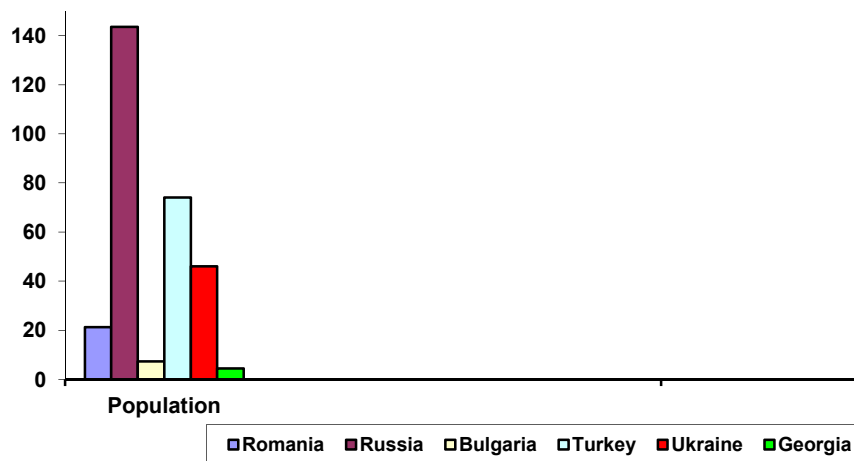
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<sup>4</sup> www.data.worldbank.org.

Table 1. Population, GDP and GNI for the Black Sea riparian countries in 2012

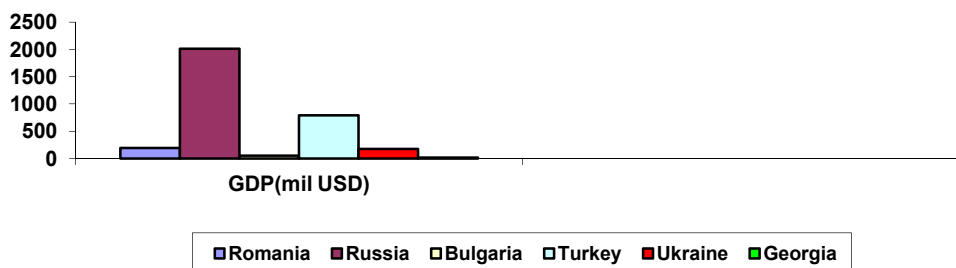
Country	Population (mil.)	GDP (current mil. USD)	GNI per capita – Atlas Method (current USD)
Romania	21,3	192,70	8820
Russia	143,5	2015,00	12700
Bulgaria	7,3	50,97	6840
Turkey	74,0	789,20	10830
Ukraine	46,0	176,30	3500
Georgia	4,5	15,75	3270
Total/average	224,6	3249,92	7650

- compared to the European Union, which has a GDP of about 17 800 million USD for a population of about 507 million<sup>1</sup>, Black Sea riparian countries have a GDP of only 18.4%, a population that represents 44% of the EU population, which shows a difference concerning the need of considerable economic development for the Black Sea;



Graph 1. Black Sea countries population in 2012 (million inhabitants)

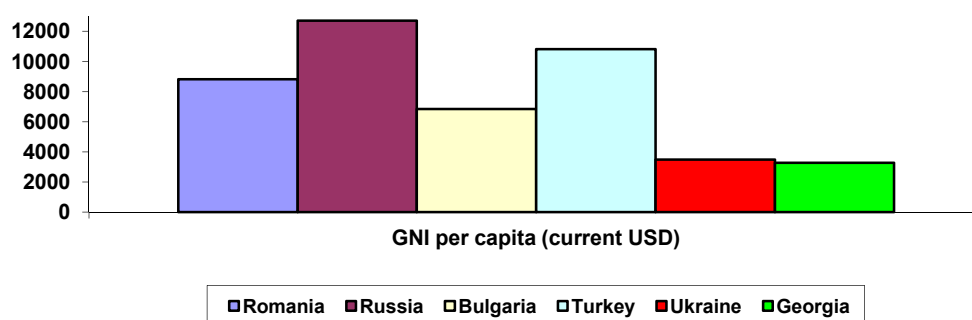
- Black Sea riparian countries are divided into: large countries (Russia), medium countries (Ukraine and Romania) and small countries (Bulgaria and Georgia);



Graph 2. GDP Black Sea riparian countries in 2012 (million USD)

- GDP ranges from minimum (Georgia, 15,75 billion USD) to the maximum (Russia, 2,015 billion USD), with a total of 3,249.92 billion USD;

<sup>1</sup> www.europa.eu



Graph 3. GNI Black Sea riparian countries in 2012 (Atlas Method – million USD)

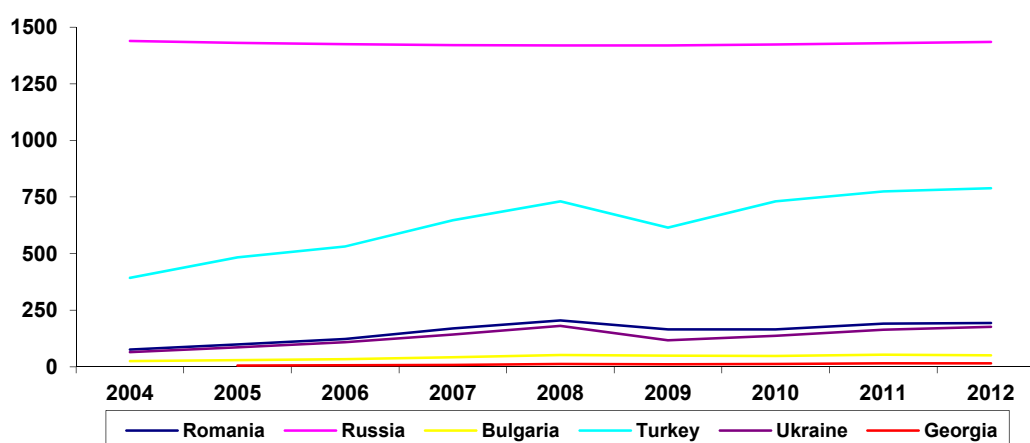
- GNI per capita ranges from minimum (Georgia 3270 USD per capita), to the maximum (Russia 12700 USD per capita).

## 2. Economic Development of the Black Sea Riparian Countries during 2004-2012

Black Sea GDP of the riparian countries was generally dictated by the evolving of the global economy<sup>1</sup> before and during the current global crisis (Table 2 and graph.4); it can be observed the decrease in the value of GDP from 2009 to 2010:

Table 2. GDP of the Black Sea riparian countries in the period 2004-2012 (U.S.\$ million)

Country Year	Romania	Russia	Bulgaria	Turkey	Ukraine	Georgia
2004	75,5	1439	25,3	392,1	64,9	5,1
2005	98,9	1431	28,9	482,9	86,1	6,4
2006	122,6	1425	33,2	530,9	107,7	7,7
2007	169,3	1421	42,1	647,2	142,7	10,1
2008	204,3	1419	51,8	730,4	179,9	12,7
2009	164,3	1419	48,6	614,5	117,3	10,7
2010	164,4	1424	47,7	731,1	136,4	11,6
2011	189,7	1429	53,5	774,7	163,4	14,4
2012	192,7	1435	50,9	789,3	176,3	15,7



Graph 4. GDP Black Sea riparian countries during 2004-2012 (U.S.\$ mil.)

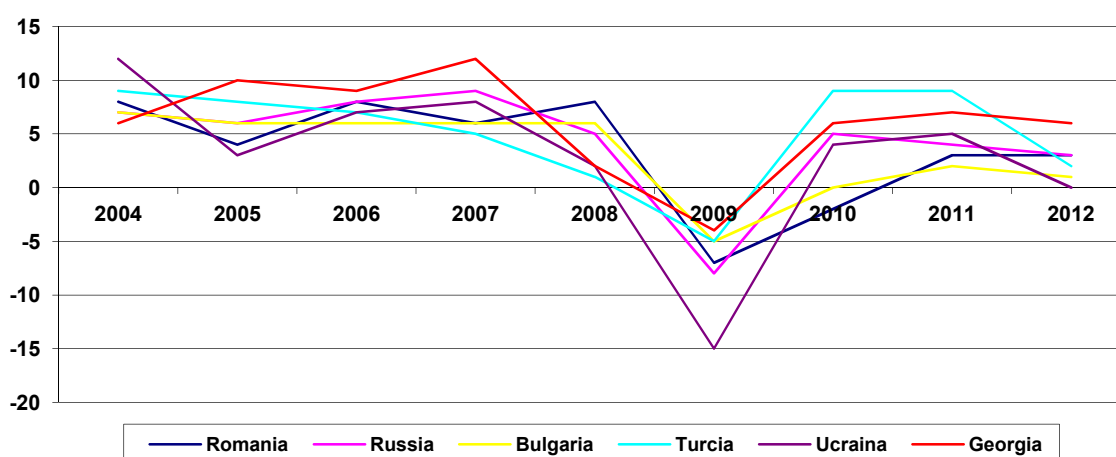
<sup>1</sup> www.worldbank.org

Statistical analysis of the evolution of the Black Sea economies listed below (Table 3 and graph.5) has some issues, as follows<sup>1</sup>:

**Table 3. GDP of the Black Sea riparian countries during 2004-2012 [in percent]**

Country Year	Romania	Russia	Bulgaria	Turkey	Ukraine	Georgia
2004	8	7	7	9	12	6
2005	4	6	6	8	3	10
2006	8	8	6	7	7	9
2007	6	9	6	5	8	12
2008	8	5	6	1	2	2
2009	-7	-8	-5	-5	-15	-4
2010	-2	5	0	9	4	6
2011	3	4	2	9	5	7
2012	3	3	1	2	0	6

- the best economically years were 2004, 2006, 2007;
- the worst economically years were 2009 and 2010;
- the year 2012 was weaker than the previous year;
- the development trend of GDP is declining in the past two years that have been analyzed.



**Graph 5. GDP evolution of the Black Sea riparian countries during 2004-2012**

### 3. GNI per capita in the Black Sea Riparian Countries

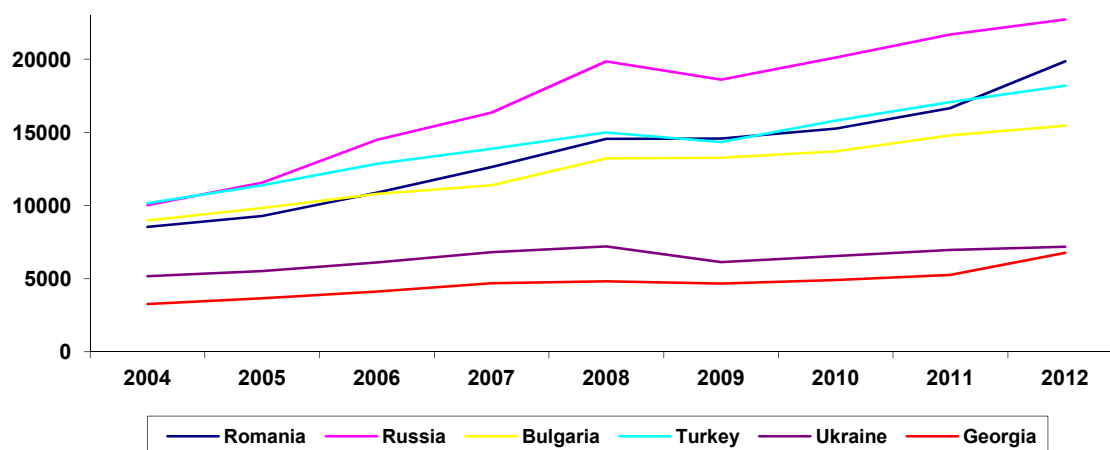
GNI per capita, PPP (Purchasing Power Parities - the current international USD) shows a steady increase in the analyzed period for the Black Sea riparian countries, with a decreasing period, between 2009-2010, as a result of the global economic crisis (Table 4 and graph.6).

**Table 4. GNI per capita in the Black Sea riparian countries during 2004-2012**

Country Year	Romania	Russia	Bulgaria	Turkey	Ukraine	Georgia
2004	8540	10030	8970	10150	5160	3270
2005	9280	11560	9840	11390	5520	3650
2006	10890	14500	10800	12860	6120	4120
2007	12640	16350	11390	13880	6820	4680
2008	14550	19850	13230	15000	7200	4830
2009	14580	18600	13270	14340	6130	4660
2010	15260	20110	13700	15810	6540	4910
2011	16660	21700	14790	17070	6970	5260
2012	16860	22720	15450	18190	7180	6770

<sup>1</sup> Ibidem.





Graph 6. GNI per capita evolution in the Black Sea riparian countries during 2004-2012

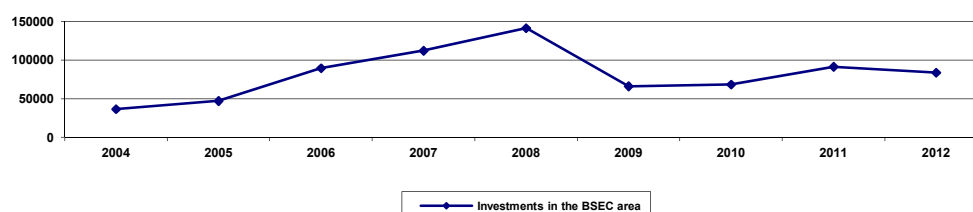
#### 4. Foreign Investment in the Black Sea Area

Since the domestic capital needed for investment and development is insufficient, the economic development of the Black Sea riparian countries is closely linked to the level of foreign investment. The UNCTAD statistics show the evolution of the capital who fluctuated in and out (table 5 and graph.7), from 36,562 million USD (2004) to 83,881 million USD (2012), dictated by the current global economic crisis.

Table 4. Foreign investments in adjacent areas of the Black Sea (U.S.\$ million) during 2004-2012

Area	BSEC (Black Sea Economic Cooperation) [US\$ mil.]
2004	36562
2005	47200
2006	89533
2007	112256
2008	141410
2009	66142
2010	68502
2011	91447
2012	83881

Thus, it is obvious that the level of FDI in the economy of the Black Sea adjacent and riparian countries, BSEC states, followed the global economy after strong growth in 2004-2008, nearly four times (from 36,462 million USD in 2004, to 141,420 million USD, in 2008), the collapse in 2009 (66,142 million USD) and then a slow growth, and a decline in 2012 (83,881 mill, compared to 91,447 million USD in 2011).



Graph 7. Foreign investments in the Black Sea adjacent area during 2004-2012

## **5. Conclusions**

The Black Sea is a region between Europe and Asia whose geopolitical and economic importance is strongly emphasized by the recent political, military and economic actions in the area.

The Black Sea basin has six riparian states, which share the influence of political, economic and military power according to their economic and political affiliation to the strong political and military organization (EU, NATO, CIS), and other Black Sea “adjacent” countries, that wish to make their presence and influence visible here.

In the period 2004-2012, GDP of the Black Sea riparian countries grew, as it follows: GDP of Romania and Bulgaria increased approximately 2.3 times, GDP of Russia has remained almost constant, Turkey has doubled its GDP and Georgia tripled, with a total regional of about 3,950 billion in 2012, though the growth trend (percentage), GDP in the region has been declining in 2011-2012.

GNI per capita in the Black Sea riparian countries was increased overall during the period 2004-2012, however, the reductions imposed by the global economic crisis in 2009-2010, so in Romania, Russia and Georgia doubled, in Bulgaria and Turkey almost doubled, while in Ukraine it increased 1.4 times.

Although the population of the Black Sea countries, representing 44% of the EU population, compared to the amount of their GDP, is only 18.4 % of EU GDP, which demonstrates the need for many future strong investment programs, and the great opportunities for development that this area has ( during 2011-2012, the trend of foreign investment in the region is declining).

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