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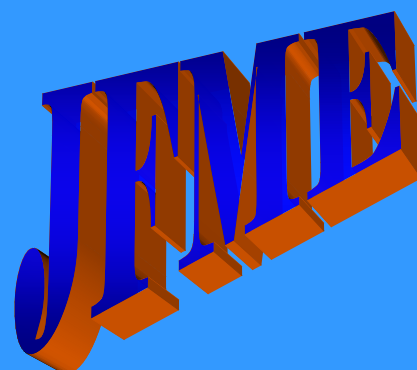
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Research published scientific research aimed both economic development and clarification of the current economic phenomena and processes. As a result, conclusions and proposals offered by the authors address both academia - scientists, teachers, students - as well as decision makers. We emphasize the importance of scientific contributions, together with the clarity of concepts, methodologies and conclusions offered.

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FISCALITY, PUBLIC BUDGET, AND REAL ECONOMY

INTERNATIONAL POST-CRISIS COORDINATES THAT MAY AFFECT THE CONDUCT OF MONETARY POLICY

PhD Alina Georgeta Ailincă¹

Abstract:

Generally, the macroeconomic policies, the monetary policy included, are considered to have structural elements which offer them resistance and functionality, irrespective of the internal and international context or coordinates. However, these coordinates may play a basic role in the manner of designing and directing the macroeconomic policies. This article aims to identify the main international coordinates that may facilitate understanding the future directions and challenges of the monetary policy, particularly of the Romanian monetary policy. During the 2007-2014/2015 period of crisis, the risks inflamed or loosened, and they are now considered manageable in terms of financial stability.

Key words: international conjuncture, monetary policy, financial stability

JEL classification codes: E44, E58, F01

Introduction

The integration of the world financial markets and the possibility of contagion, as well as the world and regional economic conditions, often bring into discussion the way in which the international financial and monetary system is organised. The literature and the public discourse also deal with the manner in which the authorities should implement their actions so as, on the one hand, the interests for the international coordination and cooperation, in matter of monetary policies included, don't endanger the interests of a particular country or region of the world and, on the other hand, the local, punctual interests don't affect the mechanism and the benefits of the system of international cooperation. However, beyond the manner of designing a plan for international cooperation, the manner in which the international realities or coordinates influence the decisions of the conduct of monetary policy, must also be taken into consideration.

Description of the problem

Although it is believed that the macroeconomic policies, the monetary policies particularly, are properly shaped and calibrated to fit the domestic and international economic context and the possible asymmetric macroeconomic shocks, the fast or sudden changes in the local and international context may challenge them seriously.

If we refer to the monetary policies, they too can feel the possible adverse effects of the external coordinates such as: the geopolitical situation from the Middle East and the terrorist attacks within the heart of Europe, which can seriously endanger the economic structure of the Euro zone, the still difficult situation of Greece, as well as the existence of a possible risk of contagion from the Greek banking system, the uncertain world economic growth, the break of the bubble from the Chinese stock market and the slow-down of the Chinese economic growth, the state of the world financial system, the lack of synchronization of the European Central Bank and Fed monetary policies, the local and international conduct of the investors, the possible adverse effects of the Brexit and the structural and conjectural flaws of some European economies (particularly of the southern EU member states).

Methodology and data sources

The article uses the comparative and integrative method relying on IMF, BNR and World Bank reports and studies covering the 2000-2015 period, to provide accurate and complete analyses.

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The article is part of the 2015 subject "Directions of, and challenges for the Romanian monetary policy under the post-crisis domestic and international conditions" (coordinated by Milea, C.), of the "Victor Slăvescu" Centre for Financial and Monetary Research.

Results obtained

The international economic and financial conditions degraded in terms of higher incertitude about the future evolutions in Greece and China, but the effects on the Romanian economy and on the Romanian banking system seem difficult to identify and quantify, seeming to be somehow mixed. The army conflict from Ukraine added tension to the international context, which is already difficult.

At the same time, the crisis of Middle East immigrants is not something to be cast aside, particularly because it adds pressure to the economic, social and politic system from the most powerful states of the Euro zone and European Union. On the one hand, the labour market will probably feel a pressure by increasing unemployment rates, particularly among the immigrants, and because of the unused local, young labour force, which cannot be absorbed on the labour market despite the increasingly integrated EU social policies. On the other hand, the unceasing wave of immigrants from Eastern countries has and will certainly have a considerable impact on the budget. The budget deficits and the public debts will increase, which will probably determine the governments to increase the taxation rates throughout the entire EU. Furthermore, with the purpose of counteracting the budgetary-fiscal imbalances, despite the necessities imposed by the economic growth, the monetary policies will gradually become more restrictive. We must equally not neglect the recent terrorist threats, in the most important and powerful countries of the Euro zone which, beyond the human, social, political, geo-strategic and cultural consequences, inflict losses and raise restrictions in terms of businesses and public policies configuration, the monetary policy included. Because the budgets for security will be increased, the public budgets will probably increase, which will add pressure on the monetary policy from the Euro zone, towards slowing down the phenomenon of quantitative easing.

Because of this reason, the monetary policies, rather heterogeneous and even diverging, of the main world central banks, are no reasons for relaxation in terms of the capacity for a synergic response to the challenges to the international and regional financial stability, particularly in the Euro zone. Hence, the problem of the financial stability either monitored or not by the monetary authorities, is increasingly incorporated within the objectives of the world central banks. According to the BNR 2015 Report of the financial stability, the "European Central Bank (ECB) continued in 2014 to expand the set of instruments aiming to stimulate credits to the real sector, while decreasing the monetary policy interest rates at historical low rates through: (i) Targeted Long Term Refinancing Operations, (TLTRO) and through (ii) the inclusion of new assets within the program of assets purchasing (total value estimated to 1,140 billion Euro, by the end of 2016). ECB and Fed decision of monetary relaxation relied on the concerns of maintaining a too low level of the inflation rate for too long. ECB aimed mainly to reduce the real interest rates, the debt burden of the population, companies and governments and to cut the financing costs of the banking institutions". There is, however, the possibility that the Fed still keep the reference interest rate for a little while in an accommodative range, subsequently increasing it as the US labour market revives.

The monetary policies of Sweden, Denmark and Switzerland, and of the Euro zone, which have recently pushed the interest rates to very low, even negative rates, contributed to the loss of bond yield, thus aiming to support more their economies. Overall, maximizing the quality of the debts, the financial-banking system was and will continue to have vulnerable structure of its balance, the economic consequence being the incapacity of the commercial banks to grant loans to the real economy, thus bringing again the world economies within a new boom and bust cycle (BIS, 2015, 85th Annual Report). At the same time, driven by ECB announcement on the possible expansion of the quantitative easing (QE) within the Euro zone, the central banks of the Northern countries mentioned above (notably, Sweden), also announced boosted programs of governmental bonds purchase. This phenomenon seems to be the perfect recipe for a future disaster, particularly because the danger of speculative side slip on the markets of real estate, and of other financial and non-financial assets, is again ignored, as it was with the recent world crisis. The indebtedness seems to be the most agreed mechanism of blocking the economic growth regionally and

internationally, while driving inflation towards parameters that are stimulating the economy, despite the disastrous effects shown by the crisis and even post-crisis period (after 2012).

Up until now, the world central banks cannot bring clear justifications in favour of the measures of quantitative easing, the effects being rather inverse than the expectations. A proper solution might be to monitor the structural difficulties of absorbing the liquidity; therefore, the possible decisions must understand deeply the mechanisms of monetary impulse transmission (given the phenomenon of liquidity illusion – when liquidity is injected massively, on the market of the bonds included, and they seem to “evaporate” fast in the periods of tension on this market, thus failing to meet their purpose) and clearing the “vents” so as the liquidities circulate towards the real economy.

An extremely low rate of the monetary policy has several advantages, but after crossing the zero lower bound, it may reduce the efficiency of the monetary policy impulse transmission and may rapidly and strongly reverse the interest rates on the market, thus increasing the volatility and yielding important risks within the system.

Generally, an extremely low interest rate may be a weapon that might fire back. On the one hand, it may motivate the population, the companies and the government to get loans, creating an illusion of cheap loans on the medium or long-term, minimizing the credit risk and stressing on the stock of debt, which may make paying back more difficult; on the other hand, it may help increasing the investments in high yielding assets which are, however, highly vulnerable in terms of risks and liquidity. The possible shocks of the interest rate might make it very difficult to pay back the loans, particularly for the population, the SMEs and the medium-size companies; even the state might incur severe losses if the public debt stock increases.

The low profitability of the European banking groups and the need to recover the losses and to clean the balance sheets, therefore to cut down the nonperforming loans (NPLs), put a lot of pressure on the economic and financial conditions from the European monetary market and, thus, from the Romanian monetary market, which resulted in a lower rate of increase of the banking credits. Furthermore, despite an increasingly better solvability and liquidity, the international banking sector, notably the European one, is confronted with a low level of the interest rates and with an international environment which is still dominated by the lack of trust. The lower interest rates, already almost imperceptible, cannot redress the financial state of the international banking system; the only solution is a deep reorganisation, analysing the strengths and the weaknesses of the system, and the removal of the “malignant bumps” which caused this state of facts. In search of increasing profits or trying to cover the losses, the international banking system seeks, and often manages to duck the legislative strategies of the world central banks which aim to establish an institutional structure and a framework supporting the policies of financial stability.

Regarding the situation of Greece, at the end of June, beginning of July 2015, the pressures of the Greek budgetary context imprinted their mark on the financial markets. Within this atmosphere, the yields of the long-term state bonds from the Euro zone decreased, phenomenon also fuelled by the evolution of the Chinese stock market starting with the second half of August 2015, and the exchange rate of the Euro appreciated considerably during this period on the background of the fragile emergent markets and of risk aversion (BCE, Economic Bulletin Nr. 6/2015).

According to BNR 2015 Report on the financial stability, the impact of the Greek sovereign debt crisis on the Romanian economy is limited. Because the banks with Greek capital can't put serious problems to the Romanian banking system; the commercial exchanges with Greece being rather modest, and the companies with Greek capital have a modest number of employees in Romania and have an all too modest contribution to the gross added value within the Romanian economy. In Romania there are just four banks with Greek capital, which hold a low proportion of assets within the total Romanian banking system. Their prudential indicators are improving, and their credit portfolio has a proper quality.

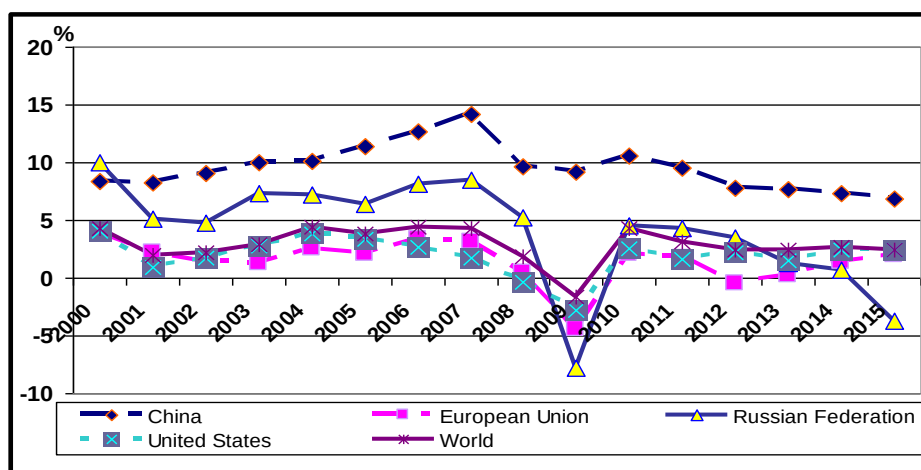
According to IMF, in *World Economic Outlook: Adjusting to Lower Commodity Prices*, from October 2015, the world economy is undergoing changes, the forecast for world economic growth decreasing to 3.1% in 2015, with a modest increase up to 3.6% predicted for 2016, which is insufficient to reduce world poverty and decrease the unemployment rate, the important inequalities between world regions and countries lingering. According to IMF report, the developed countries will catch up slightly the rate of economic growth, while the developing countries or the

emergent economies will probably slow their rate of growth on the background of lower prices for raw materials, of lower inflows of foreign capitals, of the pressure on the exchange rates and of the volatility of the financial markets.

If we consider GDP growth worldwide (Figure 1), according to World Bank data, we may notice that the Chinese economy grows at a lower rate and that, despite this seemingly unfavourable aspect, the Chinese economy displays a growth trend increasingly closer to those recorded in the US, EU and the world average.

The emerging economies, the Chinese one particularly, also send numerous signals of worryment by flaming up a set of macroeconomic problems such as slowing economic activity, dramatic decrease of the stock exchange value, redirection of the investors towards particular classes of assets, deterioration of credit portfolio quality, etc. these vulnerabilities and imbalances of the Chinese economy are transmitted through the channel of commercial exchanges towards the partner countries worldwide, such as the industrialized countries from the Euro zone, affecting adversely the economies of these countries, in the near future. Indirectly, this effect may reach Romania too. Hence, to support the Romanian economy, it would be useful to review the support of the economic growth at several levels (particularly through investments), the trade level being extremely volatile and vulnerable because of the current international and regional context.

Figure 1 – Annual rate of GDP increase in some countries worldwide, in 2000 - 2015



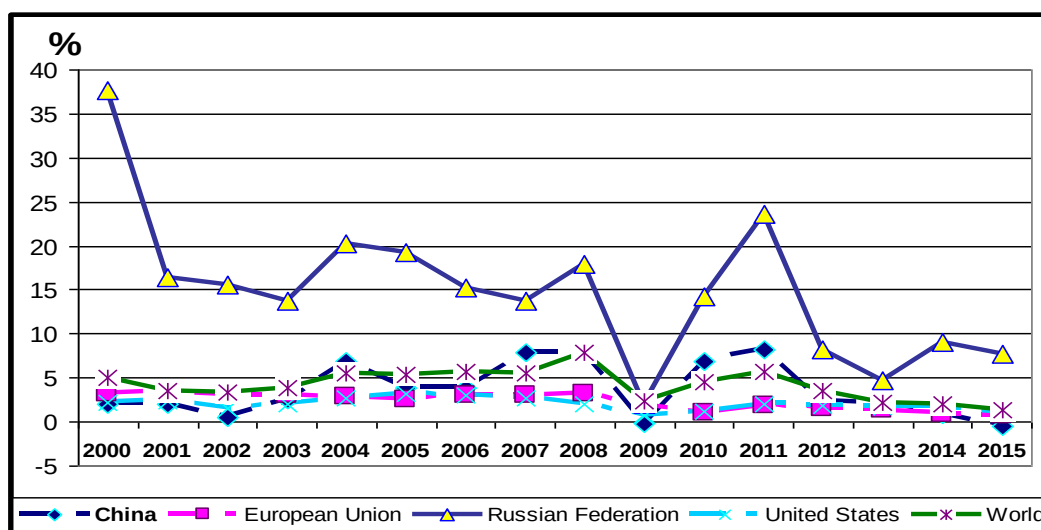
Source: World Bank, World Development Indicators, data updated on 10/08/2016

According to World Bank data, the GDP per capita, expressed in US dollars, shows the polarization of world's wealth. Thus the developed regions such as the European Union and the United States exceed the threshold of 30,000 USD per capita, while the average world level oscillates and even converges around the value of 10,000 USD per capita. China rushes towards this threshold, which it will certainly exceed soon enough, reaching the EU level by 2020-2025.

Analysing the world *inflation* situation, according to World Bank data, we may notice three types of evolutions: the European Union is within a process of accelerated decrease of inflation, with a danger of deflation for all European countries, situation also noticed in China; the world and the United States are within a process of stabilization at a reasonable 1-2% rate of inflation, while Russia displays a divergent trend, the inflation rate increasing significantly, even since 2012, towards the level of 8%. Part of this inflation is justified by the trade embargo imposed on Russia after the Russian-Ukrainian conflict, by the exchange rate evolution and by the investment climate, tensed by to the regional perspectives (Figure 2).

Regarding the *labour market*, according to World Bank data for 2000-2014, the unemployment expressed as proportion of the total labour force, maintained worldwide around 6%, with two types of trends: a high unemployment rate in the European Union, with some spikes and a decreasing unemployment rate in countries such as Russia and the United States, where these trends were supported by the concerted actions of the public authorities, implicitly the Fed, the unemployment rate decreasing considerably starting with 2010.

Figure 2 – Annual inflation expressed in consumer prices in some countries and worldwide, in 2000 – 2015 (%)



Source: World Bank, World Development Indicators, data updated on 10/08/2016

The public and private debt increased during the recent years. The stock of debt and the possibility that the financing from banks is substituted by financing from the capital market can generate international, regional and local risks, particularly in the case of a poorly developed financial infrastructure. The public and private debt have direct or indirect impact on the financial-banking system, the interdependence between the public sector and the banking system potentially rising serious contagion risks.

Conclusions

Within the context of globalization, the international post-crisis coordinates can stress their influence and impact on the macroeconomic policies, particularly on the monetary policies. Thus, despite their rather inflexible character of their objectives, the world monetary policies must increasingly take into account the surrounding realities and include these into their strategies. Thus, monetary policies should now take into account the tensed situation from the Middle East, as well as the terrorist attacks from the heart of Europe, the still difficult fiscal-budgetary situation of Greece, and the possible risk of contagion on the financial-banking market. They must also take into account the uncertain world economic growth and the state of the global financial system, of the burst of speculative bubbles and of the slowing Chinese economic growth. Furthermore, the possible adverse effects of the Brexit are yet to be noticed, while the structural and conjectural feebleness of southern European economies (particularly the south EU member states such as Portugal) are expected to emerge. Beyond the evolution of the international coordinates, the behaviour of the national and, particularly, international institutions plays an important role, and their credibility may influence for the better or for the worse the future international evolutions.

In the countries of continental size, the problem of institution credibility is linked to their capacity to manage labour force employment and the fulfilment of several social parameters (such as those pertaining to welfare, education, health, culture, etc.). The small size countries generally calibrate their main objectives in the area of financial-monetary stability and mainly pursue price stability and the fulfilment of the fiscal-budgetary parameters. This confirms the high unemployment rate in the European Union, which imposes a poor integration of the labour force employment strategies of the member states. To the extent in which the European Union will make similar efforts with the large countries of the world, towards a possible Social Union (similar to the Banking Union or to the Pact of Stability and Growth), only then part of labour market problems, as well as other related issues, will find solutions.

The fiscal consolidation is expected to temper down in the advanced world economies, while some fiscal-budgetary expansion is expected in the emerging countries, which to compensate for the slowing economic growth. At the same time, the world economies with fiscal space and with large production gaps or those which have a strong foreign demand for their products, may loosen the

fiscal-budgetary pressure and increase the investments in infrastructure, while other countries, which cannot support the investments, may reduce the budgetary expenditure and implement structural reforms in order to increase production, labour productivity and the competitiveness of their national products.

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DISCORDANCES BETWEEN FISCAL POLICY AND MONETARY POLICY – MAJOR ISSUE FOR THE EMERGENT COUNTRIES

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PhD(c) Denis Malendra³*

Abstract:

This is a topic on which there is an abundance of literature. Books are filled with information on the topic of the interaction between monetary and fiscal policies, which is one of the key, but also one of the more complex, relationships in economic theory. With the role of the central bank lawyer in mind, the discussion below will address the issue from one specific angle, namely the relevance of fiscal policy for central bankers.

In the last few years' papers have begun to analyze optimal monetary and fiscal policy in models incorporating nominal rigidities where social welfare is derived from the utility of agents. This article examines whether this analysis provides support for the consensus assignment, where monetary policy controls demand and inflation and fiscal policy controls government debt.

In this article, we review positive and normative issues in the interaction between monetary and fiscal policy, with an emphasis on how views on policy coordination have changed over the last years. On the positive side, no cooperative games between a government and its central bank have given way to an examination of the requirements on monetary and fiscal policy to provide a stable nominal anchor. On the normative side, cooperative solutions have given way to emergency loans allocations. The central theme throughout is on the optimal degree of price stability and on the coordination of monetary and fiscal policy that is necessary to achieve it.

Key words: Monetary policy, fiscal policy, public debt management, Central Bank

JEL classification codes: E52, E58, H30, H63

Introduction

The financial crises through which the economy of the Republic of Moldova is passing by is resulted after admitted 1 billion US dollars' bank theft, requires fiscal and monetary commitments in fiscal and monetary policy, being realized with success separately they shall be correlated with dexterity. However, it is pretty hard to realize this correlation due to coverage of bank theft was secured by issuing of net monetary mass guaranteed by the Government, therefore this lead to liquidity excess with a high pressure upon inflation, requiring restrictive actions of monetary policy.

A sever monetary policy lead to increasing of credit price, decreasing of absorbance liquidity capacity by real sector and reducing of economic growth, which reduced the budget revenues. The lack of transparency in policies is reducing foreign capital inflows from foreign financial institutions and foreign investors as well. This events drove to necessity to access internal public debt, which even worse affected the monetary policy – plenty of states securities versus a low demand caused an increase in rates higher than loans rates. On the background of expansive actions of monetary authorities, fiscal authorities are powerless.

We are sure that in general lines the financial situation of The Republic of Moldova is a specific one, but we consider that all countries with emerging economy are placed in situation in correlation between monetary and fiscal policy. In basis of stated above, this paper aims to follow the way the emerging countries take in order to obtain a sustainable economic growth and to correlate monetary with fiscal policy.

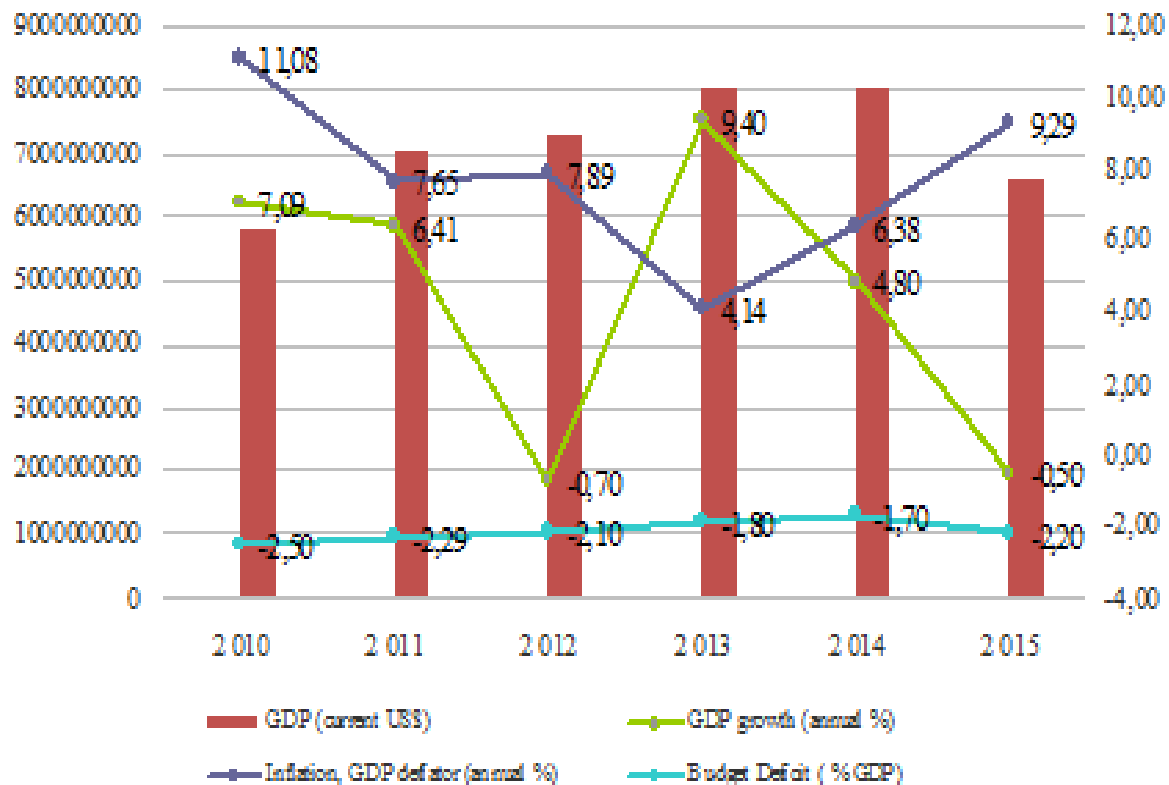
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Efficiency assessment of monetary and fiscal policy correlation

In research ways of correlation between monetary and fiscal policy it is used the function of public losses, which is formed from the sum of squares deviation from its main values. This function includes the following indicators: GDP, inflation, exchange rate and budget deficit. Mainly in the dynamics of these indicators the society is interested in, in the same time includes the monetary and fiscal component. Accordingly, the most effective model of correlation is characterized by the minimum public losses. The figure below shows us the evolution of basic parameters taking into account for efficient estimation to its statistic values.

Figure 1 - The evolution of GDP, GDP deflator, GDP growth and Budget deficit for 2010 – 2015 years in The Republic of Moldova



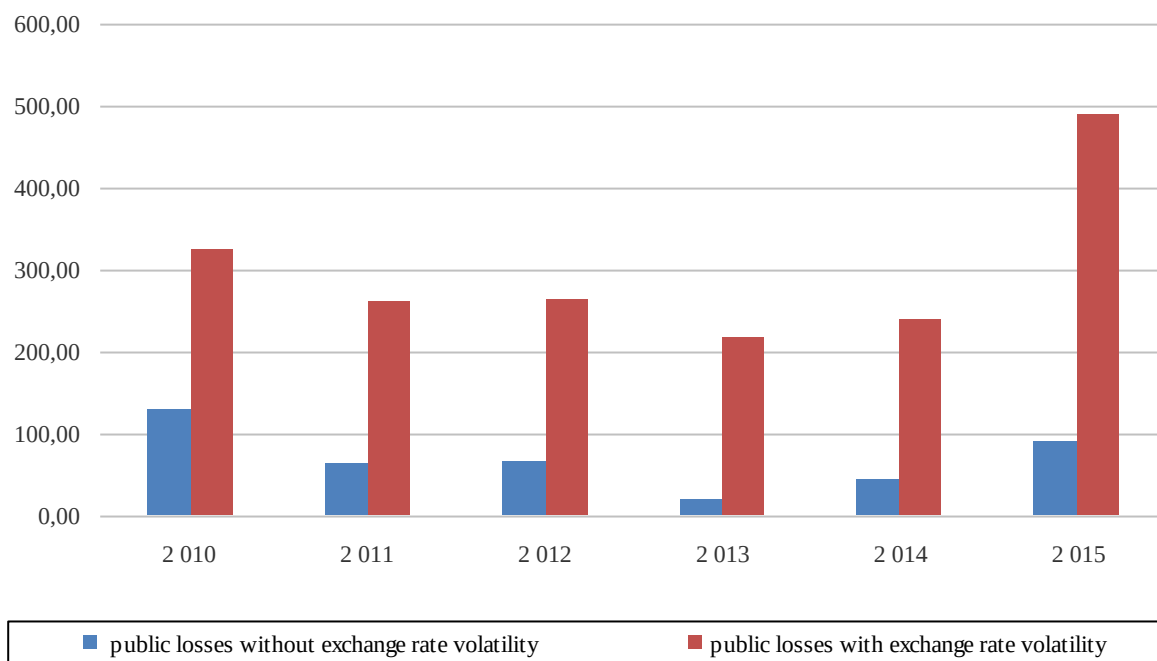
Source: World Development Indicators. Available at: <http://databank.worldbank.org>

Thus, the budget deficit is not so disastrous from the numeric point of view, we can see the lack of sustainability for it, because of negative GDP rhythm of growth for last two years, assisted with inflationary pressure over established limits of 5%. There is no volatility of exchange rate of national currency towards US dollars' reference currency, which have been depreciated by 30% in last year.

Theoretical for the stable and developing economy the inflation and budget balance shall be equal to zero, which determines the goal value in our research. At the zero inflation the exchange rate is stable, which is caused by purchasing power parity. We take the average exchange rate during a year in our calculus. We take GDP and monetary mass as main values during a year, which are stated in official acts. Due to this fact the public losses will include also losses from unreal forecast. Taking into consideration that in calculus we use only percentage, then the results are just coefficients. Respectively, the higher is the coefficient the bigger public losses are.

In the context of actual financial situation, we will try to estimate the efficiency of correlation between monetary and fiscal policy in The Republic of Moldova. In the context of social losses, as square deviation from equilibrium values (figure 2), we can see that in year 2013 is was the lowest deviation from macroeconomic expectations, social losses were the lowest.

Figure 2 - Social losses from non correlation between monetary and fiscal policy in The Republic of Moldova for 2010 -2015 years.



Source: Elaborated by the authors

In the same time, we can mention that a major contribution to social losses of national currency volatility towards reference currency can be explained as that our economy depends from imports and a low level of openness as well.

Type identification of correlation between monetary and fiscal policy

For fiscal and monetary policy, it is inheriting a different, in some cases even opposite character of influence upon economic dynamic.

In this case there are two scenarios displaying the consequences of correlation between monetary and fiscal policy:

- Violation of macroeconomic equilibrium as a result of aggravation influence upon economics;
- Financial stability achievement due to effective government financial policy.

Obviously, that the first scenario does not include specific features of each policy separately, in the same time, the second scenario is based on synergic effect given that fiscal and monetary instruments are used by complementary principle.

Correlation between monetary and fiscal policy especially were actual in academic researches during crises and post crises periods. Although, being actual and for stability period and for countries with developed economy this subject remains to be very sensible mainly for countries with emerging economy, because they bring in discussion all the structured discordances.

From recent researches of mechanism of correlation between monetary and fiscal policy (Davig T. Leeper E. M, 2011, Aktas Z., Kaya N., Ozlale U., 2010) at the first stage of setting an effective correlation it is necessary to define a form of this correlation.

Since the Ministry of Finance (further MoF) and The Central Bank are the subject of realization of monetary and fiscal policy, it is appropriate to apply the existing correlating models in case of duopoly on oligopoly market. Respectively underlying the existing models:

- Independence and equality by Kurno
- Correlation by Shtakelberg
- Coordination.

The Kurno model assumes that MoF and The Central Bank are taking decisions independently and in the same time. In Shtakelberg model the agents are choosing one of available options of behavior: leader or follower.

The follower reacts on leader's actions, adjusting its volume of production to an existing volume of a leader. Namely the leader actions are creating the conditions for follower actions. Moreover, the follower thinks that the leader does not react to its actions. However, leader continues the opposite position.

This way, in taking of its decisions it considers the follower's actions, understanding its influence on expectations and mainly the reaction of the last one. In Shtakelberg correlation model it is necessary to consider two options:

- MoF – leader, The Central bank the follower,
- The Central Bank the leader – MoF the follower.

It is necessary to mention, that different approaches of correlations research show that among the researchers there is no a common point of view in this question. In the same time some of researchers even doubt the effectiveness of different forms correlation between government and the central bank in case if they have different goals and different ways of its achieving.

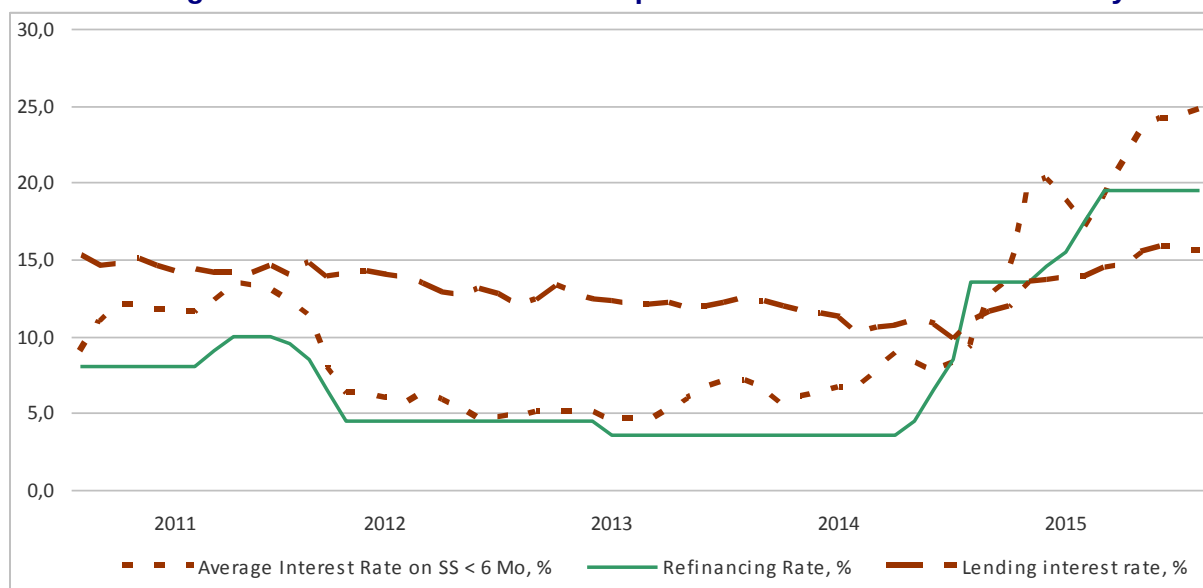
To notice the results of foreign scientific researches the correlation of government and The Central bank on Kurno model is less effective, which is defined by a significant deviation output from target level, by possible high inflationary indicators and as a result big public losses.

In opinion of some scientists an effective Shtakelberg model is possible with government leader and in case of coordination as well.

Talking about The Republic of Moldova, we can see a non-correlation actions of The National Bank of Moldova and Ministry of Finance, the fact which can be underlined from non-equilibrate decisions. The effects of restrictive monetary policy in year 2015 lead to an increase in securities interest rates and public debt services as well. In the same time, bank loans interest rates are lower than then reference rate of monetary policy.

From this point of view, we can affirm that in The Republic of Moldova the Kurno model is applied, which is the less effective and leads to a significant public loss.

Figure 3 - The evolution of interest rate on state securities, banking loans and basis rate in The Republic of Moldova for 2010 – 2015 years.



Source: Elaborated by the authors in basis of presented data on Ministry of Finance and The National Bank of Moldova official web pages.

Building of monetary and fiscal correlation

Establishing an effective cooperation between The Ministry of Finance and The Central Bank is impossible without a clear defining of its goals and a fiscal policy in particular. To notice, that during all economic periods the role of goal vectors were to achieve a sustainable development and a low level of unemployment.

However, at the modern stage of financial stability it is necessary to select the key goals of monetary and fiscal policy for short run.

The economist, laureate of Nobel premium Paul Krugman in counterweight with rigid economy believes, that for financial stability in post crises conditions it is necessary to stimulate the aggregate demand.

He proves his point of view with Keynes postulate: “savings should be done during the economic rise, but not during the recession” (Krugman,2013). Thus, the economist shows, “in the period when the majority of borrowers try to pay de debts, it is very important, somebody to do the opposite, to take the loans”. It is crystal clear that this “somebody” should be the government. The research results of International Monetary Fund experts show that rigid budget restrictions suppress, but do not stimulate the economy, prove this point of view.

The aggregate demand can lead to an economic growth, but another object of a correlated monetary and fiscal policy shall be the investments. To notice that the both indicators are in the field of monetary and fiscal effects.

Concerning aggregate demand – the effect of fiscal policy is seen in the moment of fiscal instrument applying (e.x. subsidiaries) and its multiplied till the end of a year. The monetary instruments (e.x. interest rate, bank liquidity maintenance tenders) also influence as well upon consumers' demand in the moment of its realization, but without its continuing in the following periods.

To notice that in the following periods, upon growing aggregate demand the monetary policy influences with a restrictive method. This feature is very important, because it is establishing an equilibrium tool between monetary and fiscal expansion (Bhattarai Saroj 2012, Davig Troy,2011).

In case of investments the fiscal policy acts similarly like upon demand, but after some time the key factor is privatization. The list of monetary instruments influence upon investments changes somehow (e.x. overnight credits, REPO), but their importance as tools is seen in the moment of applying.

In the achieving of strategic goals, the fiscal policy realizes its influence upon economic processes in three directions: budget, fiscal and debt. Respectively we can suppose of different monetary instrument correlations from one side, and these three groups of fiscal instrument on the another side. The list of monetary and budget instruments is presented in the Table 1.

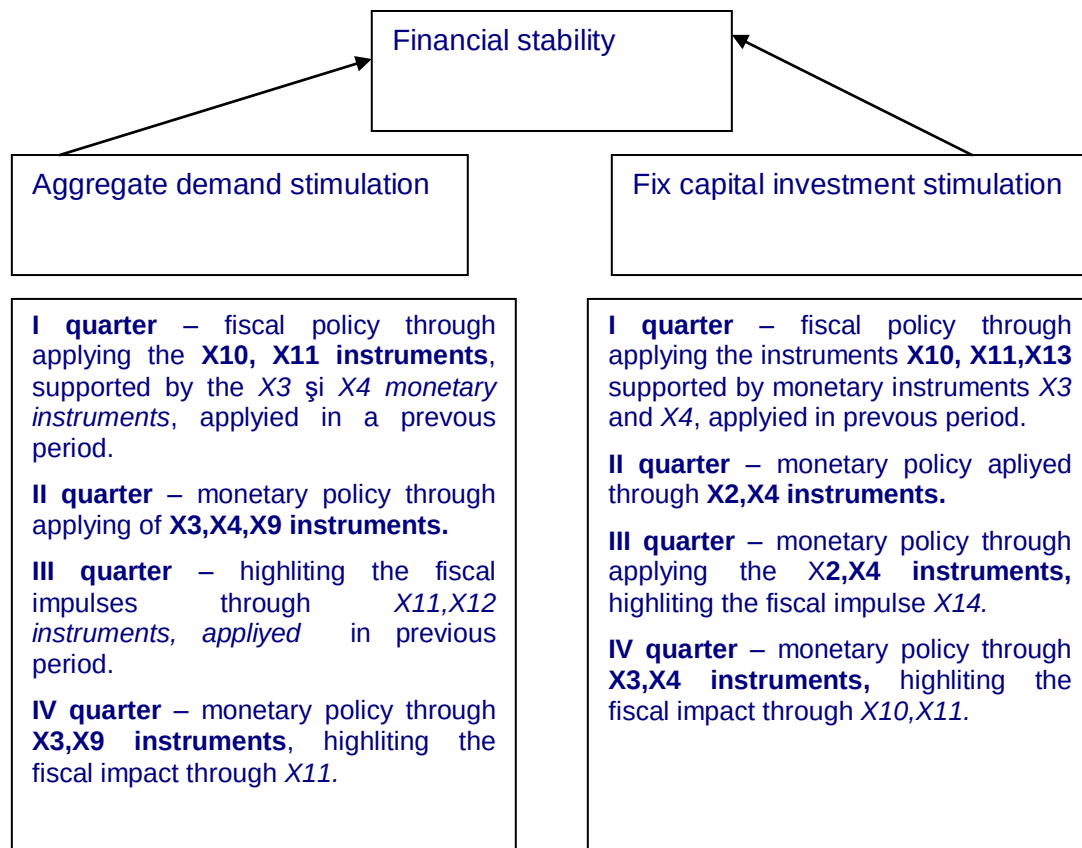
Table 1

The list of monetary and fiscal instruments

Monetary group instruments	
X1	Aggregate volume of monetary mass (turnover for the period)
X2	Refinancing available money (overnight credits)
X3	Bank maintenance liquidity tender
X4	REPO operations
X5	The volume of monetary mass mobilization (turnover for period)
X6	REPO operations, revers
X7	Foreign investment balance
X8	Open market securities operations by The Central Bank
X9	The central Bank discount rate
Budget group instruments	
X10	Subsidiaries (transfers)
X11	State procurements
X12	Lending
X13	Science financing
X14	Incomes from public privatizations

Let us model the correlation between monetary and fiscal policy in one-year frame. Taking into account that state budget is executed during a year, for fiscal policy it is related one-year imperfectness. However, for monetary policy we can choose the imperfectness in any period of time. The model of one-year correlation is presented in picture 1.

Figure 4 - Proposal of usage of monetary and fiscal policy in the context of its correlation



It is necessary to mention, that highlighted bold represent its realization. Italic highlighted indicate about its influence in previous periods. We consider that in this case, correlation between fiscal and monetary policy will achieve its final goal – financial stability and economic sustainable growth with social minimal adverse effects.

Conclusions

This way, at the begging of financial year (in the first quarter) for aggregate demand stimulation the fiscal policy applies subsidiaries and state procurements, its influence will maximize direct REPO operations and bank maintenance liquidity tender (the last operations shall be done at the end of previous year). In the second quarter it is desirable to run the monetary expansion through direct REPO operations and decreasing of interest rate.

Choosing the bank liquidity tender and interest rate is explained by a closed relationship between the goal variable (aggregate demand). Considering direct REPO operations correlation between budget instruments, are used for a synergic effect with fiscal policy.

Applying agreement of these monetary instruments will maximize the state procurements and lending in third quarter.

In the fourth quarter we can see the display of fiscal instruments influence (state procurements), realized at the beginning of the year. Thus, for multiplying the effect from procurements we can apply the rate policy and to run the maintenance bank liquidity tender.

In case of investments fiscal instruments are important directly in the period of its application with the following display in the fourth quarter. In turn, the monetary policy instruments are displayed in the moment of its realization and without continuing in time.

Therefore, for investment stimulation it is advisable to implement this model of fiscal and monetary coordination.

Respectively the effect of fiscal expense applying through state procurements, subsidiaries and science financing in the first quarter it is advisable to highlight with direct REPO operations and bank liquidity maintenance tender in the previous quarter. In the second and third quarter a positive impact upon investment dynamics can be ensured by overnight credits and direct REPO operations.

To mention, that this list of monetary instruments is characterized by a closed relation with fiscal instruments, which in final ensures a synergic effect of correlation between fiscal and monetary policy.

The problem of correlation between fiscal and monetary policy always had a special place in domestic and foreign researchers. The financial crises gave the more weight to this question, and the importance of achieving a financial sustainability and post crises recovery as well caused

creation of new approaches in determine new vectors, as well as choosing goal instruments.

Taking into account its opposite influence character upon economic indicators, there is the necessity to design a new and more effective model of fiscal and monetary correlation.

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THE EVOLUTION OF FISCAL GOVERNANCE IN THE EUROPEAN UNION

PhD Ionel Leonida⁴

Abstract:

The fiscal governance is a fiscal framework consisting of those rules, regulations and procedures affecting premeditated manner in which fiscal policy is planned, approved, managed and monitored at European Union level. Through this fiscal framework the tax authorities strengthen the fiscal and budgetary positions and support the adherent member states' structural reforms on the medium and long term. In this paper we present an evolution of successive revisions occurred on the fiscal framework and their impact on recorded tax results, based on the evolution of fiscal and budgetary indicators, the structural deficit and conventional accounting deficit.

Key words: governance, taxation, consolidation, evolution

JEL classification codes: H1, H6, H7

Introduction

The fiscal governance is a fiscal framework consisting of those rules, regulations and procedures affecting the manner in which fiscal policy is planned, approved, managed and monitored at European Union (EU) level. In other words, fiscal governance is an „up to down” complex process implemented from the EU tax authorities levels to the national levels of member countries, guided by rules, regulations and procedures, taken into the national legislation, which aims to strengthen fiscal and budgetary positions and to support the acceding member countries structural reforms on medium and long term.

The fiscal governance objectives are to: achieve some strong budgetary positions by removing the tendency to adopt unsustainable fiscal policies that lead to increased deficits and public debt; reduce pro-cyclicality of implemented fiscal policies; improving the efficiency of public spending and increase the transparency of fiscal policy.

The fiscal governance process is forwarded and implemented using three operational instruments, namely:

- *numerical fiscal rules* promote, in particular, compliance of reference values of the deficit and public debt, established under the Treaty and adopt a multiannual fiscal planning horizon respecting the medium-term budgetary objectives;
- *independent fiscal institutions* represent an important tool to support fiscal governance, with independent character against the national budgetary authorities, which have as main objective the prevention and limitation of risks associated with fiscal policy actions rather different from country to country, but targeting common issues that consist in providing: independent analysis on the promoted fiscal policy; independent forecasts on the trajectory of fiscal policy and some relevant indicators; assessments and recommendations on legislative initiatives in the taxation and budgetary field; recommendations on multiannual fiscal and budgetary strategy;
- *medium term budgetary frameworks* are fiscal mechanisms that allow tax authorities to expand the horizon of fiscal policy beyond the annual budgetary calendar, respecting the following conditions:
 - annual budget remains a key stage in which important decisions are taken on budget policy, but some fiscal measures have budgetary implications that go beyond the usual annual budget cycle;
 - a budgetary objective over the medium term included in such a budgetary framework does not incorporate binding targets, but are weaker commitments, which can help ensure fiscal discipline by assessing the impact of current fiscal policies on the government

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balance in the coming years by providing reference points in relation to which budgetary developments can be measured over time;

- one budgetary framework must be developed properly reflecting the impact of previous budgetary commitments and future costs of new fiscal policy measures.

Based on these theoretical and methodological aspects, we present further the legislative evolution and issues covered by its successive revisions and development results achieved during 2010 - 2016, based on two fiscal - budgetary indicators: conventional accounting deficit and the structural deficit.

The legislative evolution

The fiscal regulations on tax policy coordination at EU level occurred with the advent of the euro zone being introduced explicitly criteria for public finances.

The European fiscal framework that provides the normative - regulatory support of the fiscal governance consists of:

- The Treaty of Maastricht (1992)** - establishes rules for Economic and Monetary Union (EMU) and limits for the main fiscal indicators - deficit and public debt;
- Stability and Growth Pact (SGP)** - adopted in 1997, in force since 1999, aims to secure sound public finances, supporting the implementation of the provisions of the Maastricht Treaty, through the implementation of preventive and coercive elements to achieve and maintain fiscal criteria. SGP originally was reformed in two stages, namely:
 - a reform of SGP in 2005 aimed at replacing the public deficit indicator with the budgetary structural deficit, which excludes certain temporary influences of the economic cycle, but also a certain flexibility of the Medium-Term Objective (MTO) to economic extraordinary financial events. These changes have made the SGP more adaptable to the specific characteristics of each country and they were a prerequisite for improving the fiscal criteria fulfillment;
 - a reform of the SGP in 2011 (generated by the financial and economic crisis on fiscal and budgetary indicators) - aimed at implementing a package (six pack) to strengthen macroeconomic governance and budgetary surveillance in the EU by:
 - launch the European Semester (ES), which synchronizes oversight processes in several stages of budgetary and economic policies of the Member States before their development and approval;
 - providing increased attention to public debt indicator, the excessive deficit procedure being possible to be triggered if this criterion is violated;
 - structural balance requirement, convergent with MTO is more flexible and supplemented by explicit quantitative criteria regarding the dynamics of government spending and reduce public debt, for situations when it exceeds 60% of the Gross Domestic Product (GDP).
- Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG) – Fiscal compact** - adopted in March 2012, entered into force in January 2013, has in centre the Fiscal compact - a mechanism that aims to strengthen the supervision and coordination of acceding countries fiscal policies (all EU countries except the Czech Republic and the United Kingdom) in order to strengthen fiscal discipline. Constraining elements of the Fiscal compact covers:
 - a budgetary position must be balanced or in surplus. This rule shall be deemed to be met if the annual structural deficit complies with the medium term budgetary objective with a lower limit of the structural deficit of 0.5% of GDP;
 - a structural deficit may have a higher value than the one specified above, up to maximum 1% of GDP if the public debt is significantly below 60% of GDP and the risks for long-term public finances sustainability are low;
 - establishment of a correction mechanism to be triggered automatically in case of significant deviation from the medium-term objective or the adjustment strategy;
 - a fiscal rule to be introduced (within one year after the entrance into force of the Treaty) by national provisions with binding legal force and permanent character,

- preferably constitutionally, or, respectively, through another level that ensures entirely compliance within the budgetary national process;
- the countries with a debt level exceeding 60% of GDP will need to reduce the difference between the recorded debt and the reference value at an average rate of 1/20 per year.

Overall, the successive revisions of the European fiscal legislative framework pursued several objectives, namely:

- *provide stronger economic base to fiscal framework* - tax regulations have often focused on the tax actions and less on tax results, the latter being affected by economic conditions that were not in a strict control of government authorities (crises, cyclical fluctuations). In this context, tax results assessment methodology, namely of some indicators, has been improved by introducing elements that eliminate the effects of specified economic conditions;
- *increasing the attention to public debt indicator* – compared to the original version of the SGP, which focuses more on the budgetary deficit, without capturing enough the dynamics of public debt within the deficit target - in the current version, the public debt indicator is seen as an important source of vulnerability and being assigned prerogatives to establish the structural deficit level and trigger the excessive deficit procedure;
- *strengthening the mechanisms for implementing the fiscal framework* by: transposition of some European tax framework rules into the national legislation and better integration of budgetary European surveillance with national budgetary calendars, which ensures greater incorporation of Commission's recommendations in the national budgets and policies; early introduction of penalties for budgetary slippages, except the terms of exceptionality, and their levels to eliminate the characteristics of non-credibility and non-productivity generated by the previous system of sanctions; creation of independent fiscal institutions (such as fiscal councils), entrusted with monitoring frameworks / national tax regulations according to the European fiscal framework;
- *implementing more flexible fiscal regulations* - experience has shown that regulations with rigid character, which do not provide procedures applicable in exceptional economic circumstances, are frequently challenged and suspended. To mitigate this risk, it has been brought some flexibility to the fiscal framework by expanding the scope and allowing deviations from the objectives, in conditions in which are adopted structural reforms that entail budgetary costs on the short term and multiplication effects on long term;
- *clarification of provisions / tax regulations* - tax regulations characterized by ambiguity are difficult to implement (this was a major criticism of the initial public debt criterion, which did not provide a measure / threshold to assess the sufficiency of debt reduction).

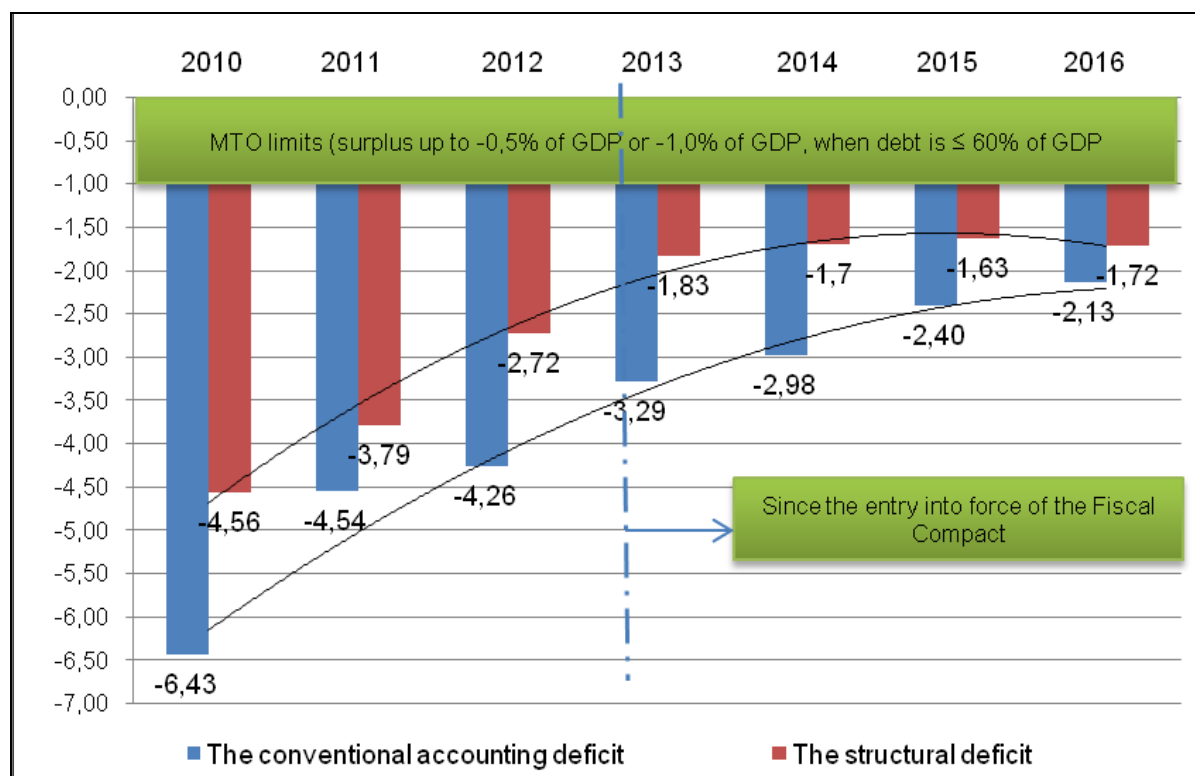
The successive reforms have improved measurability and specificity of such tax laws, including defining MTO, quantifying annual fiscal effort and the pace of debt reduction. It was also recognized and have implemented certain tax regulations specific to each country, to reflect the importance and national concerns on the sustainability of public debt, MTO has become country-specific, methodology taking into account the level of debt and the prospective costs on population ageing for each country.

Results of the implementation of new regulations on the fiscal governance

We appreciate the concrete results of the implementation of the Fiscal compact by the dynamics of indicators: conventional accounting deficit and structural deficit, relative to the MTO, the EU average, the EMU and Romania during 2010-2016.

The graphical representation of Fig. no. 1 indicates that implementation of the Fiscal compact at the EU average level caused a structural deficit moving from its original position (4.56% of GDP in 2010) to a higher position (1.64% of GDP in 2015). This development is the result of subordinating minimum limits of the structural deficit to the objective on the medium term, taking into national laws of those limits, which increased responsibility, but also of strengthening preventive and compulsory measures of the SGP and monitoring of budgetary policies, in correlation with economic policies by ES.

Figure 1 - Evolution of conventional accounting deficit and the structural deficit in relation to the MTO at EU level during 2010-2016

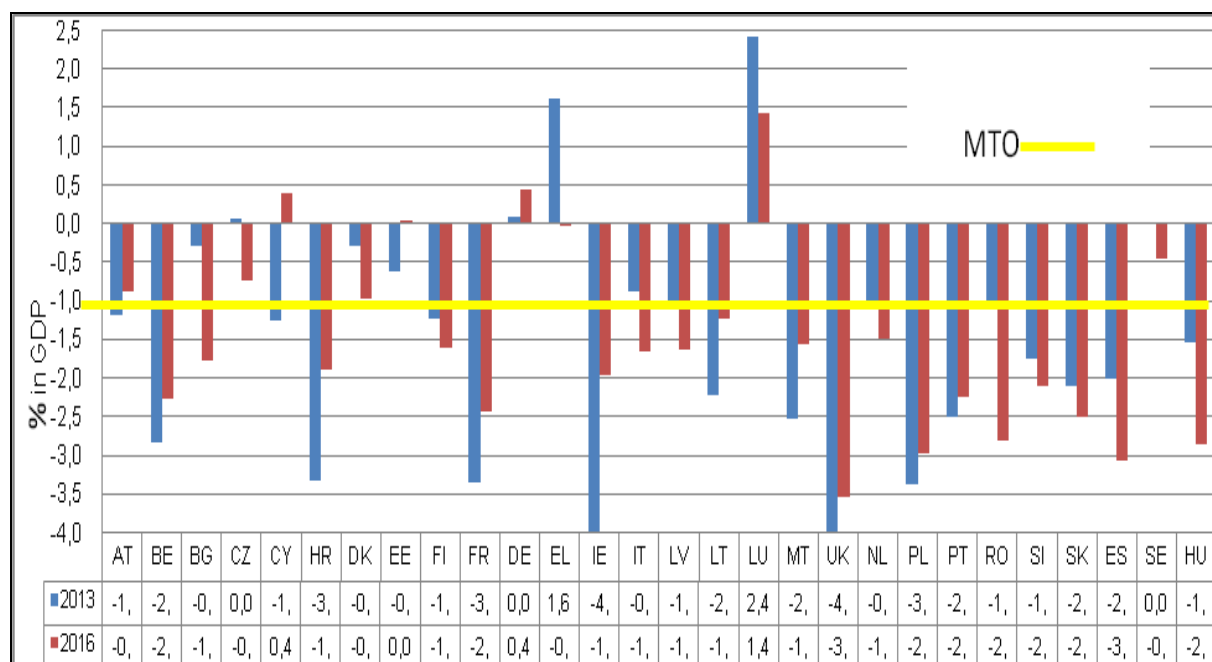


Source: made by the author based on Ameco database, available at http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

Note: Data for 2016 are forecast

However, we note that the average level of structural deficit at EU level in the period 2010 - 2016, has not reached the lower exceptional limit of 1% of GDP. In the structure of the EU countries in 2013, as shown in Fig. no. 2, 16 of them recorded exceedings of their exceptional lower limit of 1% of GDP, a situation which was perpetuated in 2016, reaching a total of 19 countries.

Figure 2 - Evolution of the structural deficit in EU Member States in 2013 and 2016

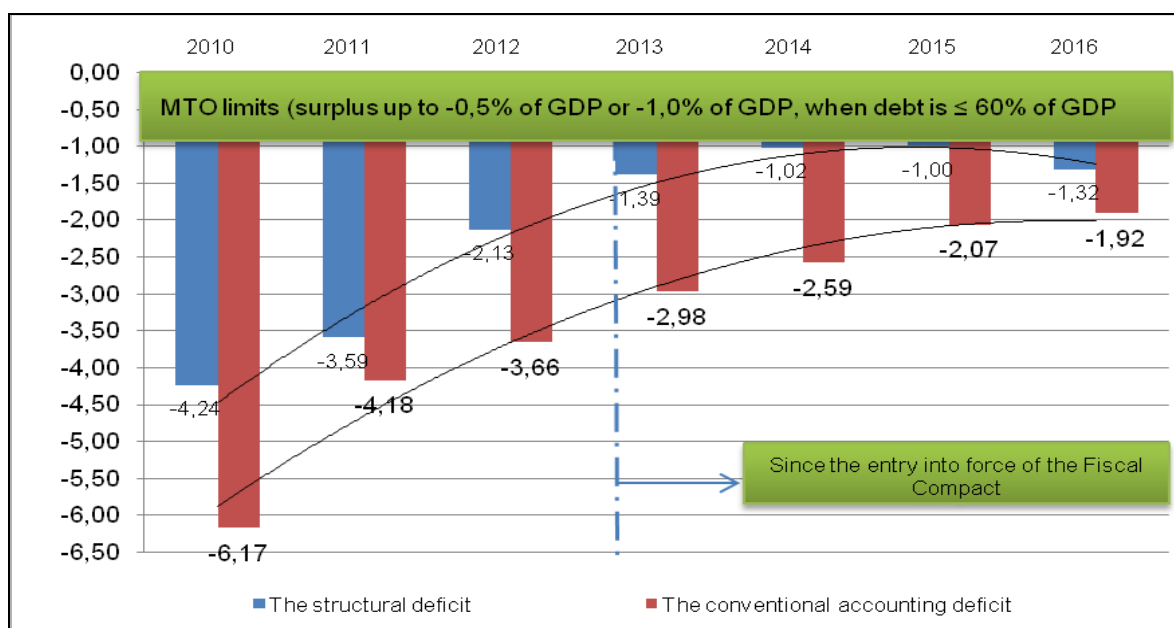


Source: made by the author based on data Ameco database, available at http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

Note: Data for 2016 are forecast

The fiscal constraints led to a wider movement of the structural deficit in the Eurozone, compared to the EU from its original position (4.24% of GDP in 2010) to a higher position (1.00% of GDP in 2015), as shown in Fig. no. 3.

Figure 3 - The evolution of conventional accounting deficit and the structural deficit in relation to the MTO in the Eurozone during 2010-2016



Source: made by the author based on data Ameco database, available at http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

Note: Data for 2016 are forecast

Even based on the positive evolution of structural deficit in the Eurozone, twelve countries were monitored in 2015, the preventive component of the SGP, being in different stages of progress, namely:

- five countries (Germany, Estonia, Luxembourg, the Netherlands and Slovakia) were found to comply with the requirements for 2016, within SGP;
- four countries (Belgium, Latvia, Malta and Finland) have proven to be largely in line with requirements for 2016 the SGP, with the possibility of deviations from fiscal adjustment routes towards achieving the medium-term budgetary objective of each country;
- three countries (Italy, Lithuania and Austria) presented a risk of non-compliance for 2016 in the SGP, which may result in a significant departure from the ways of adjustment towards the medium term objective.

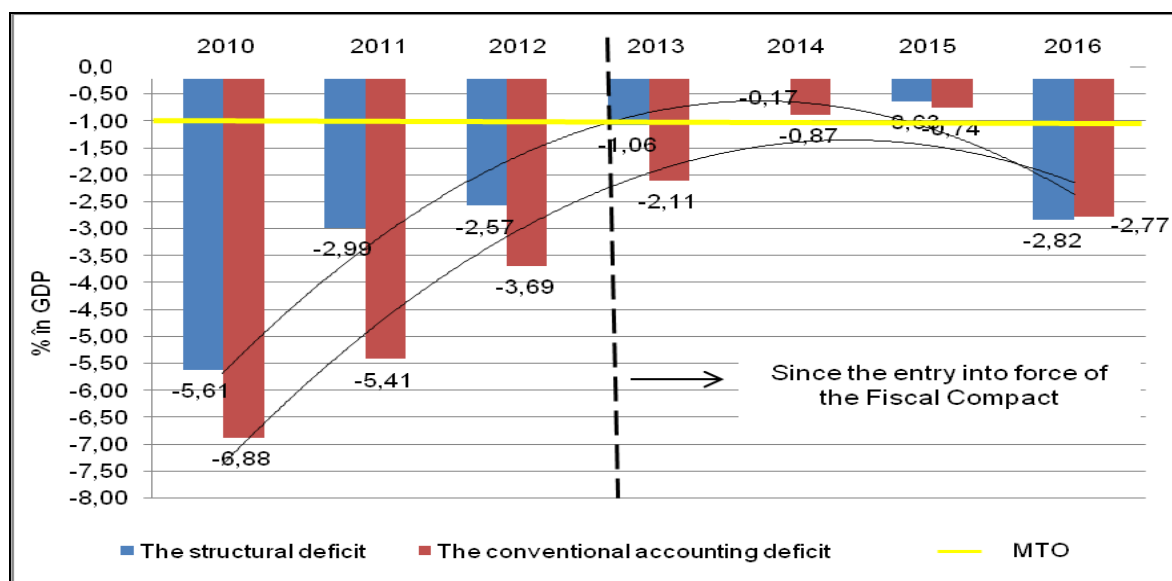
Five others were monitored in the same period in the corrective part of the SGP (excessive deficit procedure), being in different stages of progress, namely:

- three countries (France, Ireland and Slovenia) have shown that largely comply with the requirements for 2016 in the SGP, for Ireland and Slovenia being real possibilities of crossing to the preventive component in 2016;
- Spain and Portugal have been presenting risks of failure of budgetary requirements for the year 2016, within the SGP, estimating that necessary fiscal measures to bring the deficit within the SGP will not be implemented.

Analysis of the evolution of the two types of fiscal and budgetary deficits in Romania indicates that there has been significant progress in the first three years after joining the TSCG – Fiscal compact, the conventional accounting deficit entering the SGP target of 3% of GDP in 2013 and structural deficit reached the MTO target faster than planning, target within it maintained in the years 2014 and 2015.

This development, shown graphically in Fig. no. 4, has been sustained by the economic growth recorded during this period (approx. 3% in 2014 and 4% in 2015), the increasing tax collection and reduction of public investment expenditure, especially in years 2013 and 2014.

Figure 4 - The evolution of conventional accounting deficit and the structural deficit in relation to the MTO in Romania during 2010-2016



Source: made by the author based on data Ameco database, available at http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

Note: Data for 2016 are forecast

Meanwhile, on the economic growth mentioned above, some expectations regarding the expansion of tax base and potential tax multiplication effects, government authorities have implemented measures of fiscal relaxation (the reduction of the SSC, VAT rate) and growth of budgetary expenditures (wage growth in the public domain), measures that will lead them out of the MTO target in 2016.

Some conclusions

EU can be seen as an institution that seeks to address issues of mutual interdependence between national and EU levels, allowing in the same time, a high degree of decentralized public policies. The Fiscal compact can be viewed as an additional tool which seeks modeling these two objectives (interdependence and decentralization) with nuances apparently opposable.

The Fiscal compact is in this context, an addition to an existing tax legislation and treaties, strengthening the two arms, prevention and correction, and having structural balance as the operational objectives through which it should be limited the probability of being broken the provisions of fiscal framework agreed.

Results of the analysis suggest that the implementation of tax provisions of the EU and their successive revisions generated, to some extent, progress on fiscal discipline and obvious positive trajectory of both types of deficits, symmetry between the three entities analyzed, reflecting an uniform implementation of regulations resulting from the monitoring of both the Commission and of the independent national fiscal institutions.

There are also delays in the implementation of regulations and/or significant results/progress generated by:

- delayed adoption of reforms aimed at transposing the new settings and fiscal governance requirements into national legislation;
- inconsistency of effective functioning newly created or upgraded fiscal frameworks so that they can ensure full role in pursuing the objectives;
- noncompliance with the internal fiscal policy objectives with the budgetary commitments resulting from the Fiscal compact;
- complex methodology, the difficulties and the frequent changes and a lack of transparency in the calculation of fiscal indicators in the Member States, leading to uncertainties, revisions and estimates that may affect the consistency of fiscal measures adopted.

Based on statistics recorded at the end of 2015 (which may be subject to revision) based on forecasted data for 2016, shaping a firm conclusions about the effect of the Fiscal compact implementation in 2013 on the fiscal stance can be tenuous. A preliminary appreciation leads to a modest assessment of progress, not existing sufficient evidence indicating improved and sustainable fiscal policies (forecasts for 2016 and 2017 are unfavorable).

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TAX MORALE AS A SOCIAL NORM

PhD(c) Ada Marinescu⁵

Abstract:

We will show in this paper that social norms have an influence on shaping tax morality. The classical models of tax behavior explain tax evasion based on a rational utility model. This theory does not account the high rate of tax compliance. Individuals also pay taxes due to a sense of moral duty. Homo oeconomicus, the individual concerned with his utility maximization is replaced with homo sociologicus, who lives in society and is influenced by the other participants to the social process. An individual usually imitates the behavior of others from the group. There are social preferences, social identities, social groups and social norms. According to experiments, people are actually conditional cooperators, not free riders. People cooperate as long as the other people from the group are also cooperating.

Tax morale is influenced by several variables such as the perception of tax-payers on the degree of fiscal evasion, age, religiosity, employability, education, social class, trust in the government, trust in the legal system, national pride, pro-democratic attitude, financial satisfaction, personal income, church attendance, direct democracy. If we refer to tax morale as a social norm, individuals can be persuaded to pay taxes due to social pressure. We will refer to the importance of the social dimension when it comes to tax compliance. In accordance with experimental results, we propose the idea that individuals are actually conditional cooperators, they will pay taxes as long as other members of the social group do the same.

Key words: tax morale, tax evasion, social norm, conditional cooperation

JEL classification codes: A13, D01, H26

Introduction

We will analyze in this paper the deviant fiscal behavior from the perspective of tax morale. Tax mentality or tax morality defines the attitude towards taxation. We will analyze in this paper how attitudes of people, attitudes related to social norms, affect the shaping of tax mentality and tax morality. As people are social beings, the influence of the social norms in determining the attitude towards paying taxes cannot be left aside. People tend to be influenced by the society where they live – if the society treats people with respect and not as potential cheaters, then the individuals will tend to act in the same manner, manifesting tax-compliant attitudes. But if people live in a society which treats them as potential tax-evaders, then they will respond accordingly. There are many other factors that shape tax morale – tax authority, the tax system, perception and experiences with deterrence factors, awareness of tax issues and trust in government. The influence of social norms in the formation of tax morale becomes manifest when individuals change behavior due to the changes in the group behavior.

We want to outline in this paper that tax compliance seems to be dependent on tax morale. The attitude of an individual towards tax evasion is also a function of social norms. Cultural or social norms have an important effect on tax compliance and the goal of this paper is to outline the role played by social norms.

Classical models of tax compliance usually take into account only deterrence and explain compliance based on a rational utility model. Yet, it seems that the high rate of tax compliance is inconsistent with the utility maximization model. So, other factors should be taken into account to explain compliance, because compliance is actually much bigger than traditional utility models would predict. Sociological research shows that the notion of utility cannot be reduced to self-interest, but includes as well ethical values and concern for social duty.

The theory of rational choice cannot account for tax evasion, because its consequences would be much more tax evasion than it really happens. According to the classical model of tax evasion, the

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individual is considered to act as maximizing automata, which is always choosing more for less and applying the principle of cost-benefit analysis in his choices.

The economic actor is seen as acting in applying the postulate of rationality, and he is performing optimization analyses - utility maximization or the minimization of cost. According to the rational choice theory, the individual will choose in every situation what best satisfies his interests.

From the prospect of the rational choice theory, ethics or morality is not important. If from the result of the calculus the conclusion is that it is more profitable for the individual to choose to involve in illicit activities, he will evade taxes. By comparing the action, that is the adopting of a deviant behavior and the result – the risk of being sanctioned or fined, the actor will choose that action with the best possible result cost-benefit. This calculus is merely an automatic action, in which prime not ethical considerations, but maximal benefits.

Deterrence is related to the expected utility model, which shows that individuals pay taxes due to the coercion from the state – tax audits and fine. According to this model, individuals pay their taxes to the limit that they satisfy the utility as compared to the fine they might get as a result of noncompliance. But this expected utility model is unable to explain the high rate of tax compliance. This compliance might be explained by tax morale. Individuals pay taxes due to a sense of moral duty, a feeling which cannot be integrally accounted by the model of utility maximization.

Homo oeconomicus or homo sociologicus

Homo oeconomicus is the perfect rational being, he acts on a market with perfect competition and he has access to all possible information. His action is motivated by the maximization of personal utility and he will try in every possible situation to get maximum gain with minimum efforts, and he is capable of performing extremely sophisticated calculus, like a robot.

If for homo oeconomicus the society has practically no importance, for homo sociologicus the society with its norms and rules is very important. The behavior of an individual is influenced by the norms which dominate in society.

In our case the fiscal behavior is influenced by the internalization of norms within a process of socialization. In this situation the individual finds himself between the restriction of social norms and his desires – a low tax level and a better standard of living. He is caught between social norms and his desires.

There is a distinction between external norms, represented by traditions, customs and values which are particular to a certain society and internal norms, which have been internalized by the individual and form his moral system.

In every society there are certain moral and cultural standards and norms and the individual internalizes these norms, which become the pattern of correct behavior.

Some authors (Kirkhler, 2013, p. 79) claim there is a specific category of taxpayers, social taxpayers, whose behavior is influenced by social norms. These social taxpayers are motivated by the group where they act. If many individuals from the social group do not comply with tax regulations and find out ways to evade, these tax payers will act accordingly. If the majority of the group does not approve with illicit and fraud behavior, then the individual will follow the pattern behavior expressed by the group. For these social taxpayers the role of social norms is decisive.

At the individual level, rules define standards of behavior which have been internalized. At the level of society, rules express the behavior of a social group based on standards which are shared in common. These kinds of rules a society has in common become cultural norms and they are expressed in the legislation of the country. Tax morality and the consciousness of duty and of respecting norms are shaped in a process of adopting these cultural norms which define and are prevalent in a certain society.

The institution of society and also the norms prevailing in society are important in the process of cooperation and abiding by the norms. Once these norms are accepted by the individual and they are internalized, then the cooperation of the individual is easier to be obtained. Acceptance of a fiscal morale is thus due to the process of compliance and internalization of norms created in a society. The establishment of trust and cooperation is a long and difficult process, but in the long run it is worth that the state tries to gain the acceptance from citizens.

If individuals are satisfied with the actual social order, then they will comply voluntarily and a correct and fair social and fiscal behavior will benefit all individuals, society and the individual in case. But for this it is important to create appropriate social norms and institutions capable of shaping civic consciousness and responsibility.

Compliance actually means cooperation, a permanent review of the relationship citizens, government, institutions, in order to reduce social distance and establishment of trust between citizen and political administration (Bergman, 2002, p. 290).

Social thinking and social norms

Usually people use mental shortcuts and mental models in order to filter and interpret information and are often influenced in how they think or act by other people, and this is usually called thinking socially.

Recent research in the economic science is showing that people make decisions based on social expectations. In the process of decision-making insights from behavioral science and psychology show that people do not take decisions based on a perfect calculus of costs and benefits. People form preferences and this process is influenced by social institutions which shape the manner in which the individual perceives reality.

Man is a social being, whose behavior is influenced by the others in the social group. We can talk in this respect about social preferences, social identities, social groups and social norms. Usually the individual imitates the behavior of the others from the group and we are interested in what the others individuals think and say about us.

Many people dispose social preferences for fairness and reciprocity and possess also a cooperative spirit. But these characteristics can be exploited both in a positive and negative manner, because there are different types of societies – societies which display correct behaviors and societies where corruption is the dominant.

Experiments show that people behave like conditional cooperators that are willing to cooperate as long as other people are cooperating. The results of different public goods games show that majority of people adopted the pattern of behavior of cooperation, not that of free riders. The much bigger proportion of cooperators proves that the standard economy theory is misleading when it is depicting people like selfish beings choosing the behavior of free-riders whether it is convenient for them, and not caring about morality.

The principle of thinking socially has several implications for policy. Human sociality is a major factor influencing behavior, and institutions and interventions can be designed to support cooperative behavior. A key consequence of sociality for development is that groups and even entire societies can get stuck in collective patterns of behavior such as corruption.

Are we free riders or conditional cooperators?

A very important assumption in the neoclassical theory is that people are naturally free riders and they prefer to take advantage of public goods, but not pay for them. In this case, the assurance of public goods is problematic and is a difficult task. But experimental economics shows that people are not actually free riders, but conditional cooperators. As long as other people cooperate, people will tend to do the same and not to choose the selfish behavior.

Experiments demonstrate that people have the tendency to reward others who cooperate and to punish people who do not cooperate. These kinds of behaviors are explained by two different reasons, one is related to instrumental reciprocity and the other is intrinsic reciprocity.

Instrumental reciprocity means to respond to an attitude of kindness with kindness with the purpose of maintaining a relationship.

For the study of intrinsic reciprocity, economists have used the ultimatum game. In this game two players are given a certain amount of money, for example the sum of 10 dollars. The proposer is instructed to offer a certain amount of money (from 1 to 10 dollars) to the other player. If the responder accepts the offer, then the money is shared in accordance with the offer. But if the responder refuses this offer, then each player gets nothing. The norm of self-interest suggests that

the most rational offer for the proposer would be to offer 1 dollar and remain with the rest, and the second player should accept, because 1 dollar is still better than getting nothing.

In experiments only a minority of people behave in this manner. On average the offers from the proposers are often between one-third to one-half from the total amount, while low offers are usually rejected by respondents. These findings apply irrespective of the amount at stake.

Another experimental game used is called the public goods game. This game begins with each player having to choose with how much from his endowment to contribute to a public fund. Contributions are then multiplied so that the public good payoff is maximized when players contribute their entire endowments. The game was first established so that it was no way for players to be able to punish low contributors. In the first round of this game, half of the participants contributed to the public fund. But in time as an effect of not all people contributing to the public fund, cooperation stopped. After 10 periods, the result was a very low level of cooperation. Things changed only when researchers introduced opportunities for players to award punishment points, which is the laboratory equivalent of being able to eliminate a free rider from the group.

These experiments show that people are actually conditional cooperators who prefer to cooperate only insofar as other people are also cooperating.

A study about behavior has been conducted with subjects from eight countries, with the subjects implied in the public goods game (Martinsson, Pham-Khanh and Villegas-Palacio, 2013, p.150). The results of the study contradict the assumption from standard economics according to which everyone is a free rider, showing the actual distribution of free riders towards conditional cooperators.

It is true that the proportion of cooperators differs according to the country, but in no country free riders represent a dominant share of the population. The final conclusion is that the traditional model of behavior exhibited in neoclassical theories is not supported in any real society (Henrich and others, 2005).

As shown by these experiments, cooperation depends a lot on the expectation of the individual about the cooperation of others. If people have the chance to choose, they would choose an environment where cooperation dominates and they would punish people who are free riding and exclude them from the group (Fehr and Williams, 2014).

The main conclusion drawn from experiments is that most people prefer conditional cooperation not free-riding. In a public goods game experiment when people do not have the possibility to punish free riding the cooperation reaches quickly a low level. But when the behaviors of cooperation are again rewarded and especially the introduction of punishment will quickly increase cooperation.

Relation between social norms and fiscal morality

Intrinsic motivations may depend on social interactions, which create a role for norms in tax compliance. The importance of norms is highlighted, for example, in Posner (2000) when he notes that:

“A widespread view among tax scholars holds that law enforcement does not explain why people pay taxes. The penalty for ordinary tax convictions is small; the probability of detection is trivial; so the expected sanction is small. Yet large numbers of Americans pay their taxes. This pattern contradicts the standard economic model of law enforcement, which holds that people violate a law if the benefit exceeds the expected sanction. Some scholars therefore conclude that the explanation for the tendency to pay taxes must be that people are obeying a norm — presumably a norm of tax payment or a more general norm of law-abiding behavior.” (Posner Eric, 2000, page 1782).

Is there any fiscal morality? Research shows that there are significant differences among countries when it comes to fiscal evasion and tax morale. For instance, studies about tax compliance in the United States and Spain show that people in US have a much higher compliance to norms and bigger tax morale. So our question would be whether we can measure tax morale.

As stated in the literature, individuals pay taxes for two reasons. One reason is the deterrence and the reaction of individuals is described by the expected utility model. The second reason is the sense of obligation of the individual towards the state, which is embodied in the tax morale. (Frei, Bruno, 2003, p. 392).

We will start with a definition of tax morale. Tax morale was defined as the intrinsic motivation to pay taxes, the willingness to pay taxes by the individuals. Contrary to tax evasion, tax morale does not measure individual's behavior, but individuals' attitude. It can be seen as the moral obligation to pay taxes, the belief in contributing to the society by paying taxes. On the other hand, it also catches the moral regret or guilt over cheating on taxes (Torgler, Benno, 2003, p. 2).

Generally, fiscal morality is related to the attitude towards the issues of complying with fiscal regulations. Some authors refer to tax morality as internalized obligation to pay tax liabilities or as intrinsic motivation of an individual to pay tax obligations and others connect with the concept of civic duty in the sense that people are not motivated only to maximize their own welfare, but also by feelings of responsibility and solidarity to the state and nation.

The results of comparative studies show that tax morale differences can be explained by differences in the system of tax administration, and also by the attitudes of governments in the countries. According to cultural studies, we can measure the cultural traits of a certain country. There are databases which present measures of the values across a certain country and how these different values are shaping and affecting tax morale.

There are many econometric models which study the relation between fiscal evasion and several exogenous variables: the level of taxes and taxation from a country, morality of tax-payers, degree of development of that country. Other econometric models show the relation between fiscal evasion and fiscal morale and analyze several variables responsible for shaping tax morality: the perception of tax-payers on the degree of fiscal evasion, age, religiosity, employability, education, social class, trust in the government, trust in the legal system, national pride, pro-democratic attitude, financial satisfaction, personal income, church attendance, direct democracy.

The conclusions of these studies show that: tax morale increases with age; tax morale is lower in case of self-employed and unemployed; tax morale is lower for upper-class individuals; financial satisfaction leads to increase of tax morale; trust in government and legal system increase tax morale; national pride increases tax morale; a pro-democratic attitude leads to higher tax morale; education increases tax morale; religiosity increases tax morale.

Frey and Torgler find using data for Western and Eastern European countries that taxpayers are strongly influenced by their perceptions of the behavior of other taxpayers. If taxpayers believe tax evasion to be common, tax morale decreases. Alternatively, if they believe others to be honest, tax morale increases. We would hypothesize that the higher the percentage of taxpayers someone perceives to cheat on taxes, the lower his/her tax morale will be (Frey, B. S. and B. Torgler, 2007, p. 136).

In a study performed by Strumpel (Strümpel, B., 1969, p. 13-32), he analyzed the tax morale of European tax payers. In the study he performed a comparison between different systems of taxation and also the level of tax morale in European countries. The findings of the study were that tax morale in Germany was lower than in UK. Strumpel explained these differences from the point of view of the government attitude towards citizens. In UK the government tended to treat tax payers with more respect, while the German system was based on excessive control and coercion, treating people as potential tax-cheaters and evaders.

There are many factors to identify which influence tax morale. Tax morale refers to the principles or values that people have in respect of their taxes. Econometric studies have shown that tax morale is very likely to be influenced by a wide range of individual and social variables, such as trust in the government, the nature of the fiscal exchange, perceptions of fairness, trust in the institutions of government, the nature of the fiscal exchange between taxpayers and government, and a range of individual characteristics (age, gender, married, employment) (Alm, James, Torgler, Benno, 2006, p. 228).

We will study how tax compliance is influenced by ethical considerations and also by social interactions and relations. According to this kind of theories, individuals can be convinced to be tax compliant due to social pressure. All studies, either econometric or experimental, tend to prove that there is an important social dimension when it comes to tax compliance.

It is worth to study the decision of fiscal evasion or tax incompliance from the prospect of being a social norm. How can we model tax-compliance as a social norm, imposed by the social group to which the individual belongs? Are there countries or societies which are more prone to fiscal evasion than others?

This “social norm” of tax compliance can be distinguished by the feature that it is process-oriented, unlike the outcome-orientation of individual rationality (Alm, James, Torgler, Benno, 2011, p. 636).

For example, Bosco and Mittone (1997) take altruistic approaches, stressing that taxpayers are not only interested in their own welfare but are also concerned about the general welfare, so that their decision to evade is constrained by the knowledge that their evasion will reduce the amount of resources available for social welfare.

Polinsky and Shavell, who present a survey of the economic theory of public enforcement of law, draw attention to the issue of social norms. Social norms are seen as an alternative to law enforcement when modeling the behavior of individuals. The effects of non-compliance with social norms has both internal effects as sanctions (such as feeling of guilt or remorse) as well as external sanctions, exclusions from the group and gossip (Polinsky, Mitchell, Shavell, Steven, 2000, pp. 45-76).

A social norm therefore represents a pattern of behavior that is judged in a similar way by others and that therefore is sustained in part by social approval or disapproval. Consequently, if others behave according to some socially accepted mode of behavior, then the individual will behave appropriately; if others do not so behave, then the individual will respond in kind (Frey and Torgler, 2007).

Erard and Feinstein (1994) incorporate shame and guilt directly into the taxpayer's utility, by hypothesizing that a taxpayer feels guilty when he underreports and escapes detection yet conversely also feels ashamed when he underreports and gets caught. (Erard, B. and J. S. Feinstein: 1994, p. 70–89).

In this section we want to analyze how the decision whether or not to evade is affected by the tax parameters and opportunities to evade and how their impact changes when tax compliance assumes the characteristics of a social norm. Tax compliance can be seen as a code of behavior in the community of taxpayers, although it is difficult to picture how it may emerge and remain as a norm. There are many factors to be taken into account when studying the emergence of tax compliance as a social norm. Taxpayers care about how many other individuals evade tax, and for this there could be many reasons, because they care about their reputation within the community or because they are concerned that each member in the community pays a fair contribution to tax revenues.

Conclusion

Tax morale is influenced by many variables and one of the most important influences comes from the social group. Social norms represent the traits of a certain social group which define attitudes and beliefs. As experimental studies show, people behave in most cases like conditional cooperators, not as free-riders. Individuals will comply with fiscal regulations as long as other people from the group pay taxes. The fiscal morale is strongly influenced by the perception people have about the others' attitude.

Frey and Torgler (2004) provide the most direct evidence on the relevance of conditional cooperation for tax morale. They use data from the European Values Survey and conduct a multivariate analysis across 30 countries (with at least 1000 individuals per country). In their study they find a positive correlation between people's tax morale (measured by a question whether cheating on tax is justified if you have the chance) and people's perception how many others cheat on taxes.

People behave like conditional tax-payers, they pay their taxes insofar they perceive the other tax-payers as being honest and paying taxes.

According to these studies, people are influenced in the decision to evade by the perception of the others' attitude. For this reason we consider it is important to study tax morale as a social norm. The process of implementing tax morality within a social group depends on preferences displayed by the group, but in principle people behave like conditional cooperators and exclusion of free-riders serves to improve cooperation in the group. In case clear regulations for excluding free-riding function, it is more likely to implement a large-scale cooperation on tax compliance. At the same time, tax morale is influenced by a wide range of factors, and all these factors should be taken into account in the process. Therefore, human nature has a social side which makes that the influence of the others is very important, tax morale becoming thus a social norm.

The social group plays an important role when it comes to define what it is right and wrong from the social and moral point of view. The process of shaping fair moral and fiscal norms is an ongoing process, and in this process the abidance by the laws is influenced by the ability to ensure a fair environment for people to act. People are social beings and social norms play an important role in the process of tax compliance.

Traditional economic theories tend to consider individuals as innate free-riders, who will choose in every situation the behavior which is most convenient for them, not including in their calculus any moral standards. Experimental results show that people are actually conditional cooperators, that is they will cooperate and abide by moral and fiscal regulations only as long as other people from social group behave in the same manner. The importance of social norms and also the importance of influence from the other people from the group should be taken into account when trying to change and influence the level of tax morale from within a certain social group.

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FISCALITY IN THE WAGE POLICIES OF SOME EU MEMBER STATES

PhD Elena Pădurean⁶

Abstract:

Presently, there is no fully integrated fiscal system within the European Union. This bears on the manner in which the same fiscal policy decision is employed in each EU member state. The fiscal reforms were different, in most member states, both in terms of coverage and in terms of depth. These fiscal reforms meant either the implementation own fiscal policies of the individual EU member states, by increasing or reducing the fiscal burden, or the implementation of elements of European fiscal policy, in agreement with EU constraints or recommendations. This aspect has also been noticed in the fiscality of the wage policies, even though they still are the appanage of each member state.

Key words: fiscality, wage policy, fiscal system, integrated fiscal system

JEL classification codes: E62, J58,

Introduction

In a market economy, the taxation system is one of the most important instruments of fiscal policy which the state uses in its social and economic activities (Ioneci M., Marcu N., 2007). These measures have multiple implications, both for the taxpayers, and for the public decision-makers. The first efforts of fiscal harmonization aimed the indirect taxes, with the purpose to remove the obstacles to the free circulation of the goods, services and capitals, as well as to remove the border checks and to limit the unlawful fiscal competition between countries.

Fiscal harmonization was slower in the field of direct taxation, the main aim was not to interfere with the free competition on the market, to minimise the possibilities evasion and to avoid double taxation, on the basis of bilateral agreements between the member states, and particularly to avoid the transfer of the taxation basis through the phenomenon of business migration in search of the most favourable taxation regime.

The accomplishment of the objectives in the field of direct taxation harmonization was hindered by two obstacles: on the one hand, it was the rule of unanimity, which presumes that all EU member states must agree a community decision in matters of taxation (taxation basis or rate); on the other hand, because of a lack of convergent views on the limits of this action (structure of the taxation basis or maximal/minimal limits of the taxation rates).

The first proposals for the harmonization of the taxation rates have been formulated in the reports of "Neumark" (1963) and "Van den Tempel" (1971) committees, but they didn't materialize.

It is known that significant differences of fiscal philosophy exist within the EU in matters of the structure of taxes within the total fiscal revenues. While the developed states have fiscal systems focused on direct taxes, the less developed states, particularly the new member states, use fiscal systems focused on indirect taxes and on high social contributions.

A study on the process of fiscal harmonization within the EU, shows that although there is a fiscal strategy with common objectives, the accomplishment of these objectives differs, the member states still using their prerogatives of fiscal sovereignty.

Our study aimed to make an analysis, based on indicators, on selected EU member countries, of the manner in which the wages and the incomes, in general, for the natural persons, are levied.

With this purpose, we decided, based on the relevance of indicators, to use the following data: human development index (HDI), unemployment rate and the GDP, which to picture the level of economic development, thus allowing us to select countries based on this point of view.

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By comparing the used indicators, mainly the HDI (complex indicator which covers not just quantitative, but also qualitative aspects of the economic development), we made a classification according to the two levels that are also used by the calculation methodology of the HDI:

Member states with highly developed economy: Germany, France, United Kingdom, Netherlands, Denmark

Member states with developed economy (states with transition economy, former socialist states): Hungary, Bulgaria, Romania.

These are the EU member states surveyed, in our study, regarding their fiscal policy.

Conclusions

Income taxation, in the very developed countries, is done with progressive rates.

- On the top positions, in terms of the marginal rates, are **Denmark (8 to 56.4)** followed by the **Netherlands (8 to 52)**, **France (0 to 49.58)**, **United Kingdom** and **Germany (0 to 45)**.
- As a general rule, we can notice that all three former communist countries, use flat rate taxation, with the lowest taxation rate in **Bulgaria (10%)**, followed by **Romania** and **Hungary**, with the same taxation rate **(16%)**.
- In the European Union, the lowest taxation rate is in Bulgaria (10%), while the highest taxation rate is in Sweden and Denmark (55%).

Significant differences also occur in the **social contributions**.

- In **Germany**, they are generally paid about half by the employer and half by the employee, up to a particular level (**employer, 23.657%; employee, 20.72%**). Besides this, the employees pay an additional contribution for health social insurance (0.9%), while the employees with no children pay an additional 0.25% for healthcare insurance.
- In **France**, the social insurance contribution of the **employers** are rather high, ranging between **39.62% and 52.62%** (in particular situations), while the contribution of the **employees** range from **18.55% to 25.15%**. There also is an additional 14% (applied to the minimal wage, for the SMEs with less than 20 employees).
- As we have seen, the **United Kingdom** has very low social insurance contributions, **13.8% for the employer** and **12% for the employee**.
- The fiscal policy of **Bulgaria** shows, besides the lowest taxation rate in EU, 10%, the lowest social insurance contributions (**12.9% for the employee, and 17.9% for the employer**).
- In **Romania**, these contributions are rather burdensome, both for the **employee (16.5%)**, and for the **employer (22.6%** under normal working conditions, and **32.6%**, for the special working conditions).
- **Hungary** is one of the countries with well-set contributions both for the **employer, 28.5%**, and for the **employee, 18.5%**.

The analysis of the percentages and of the differences between countries shows that for a refined evaluation we need to take into account several aspects: existence of the progressive taxation rates in some countries, or of the flat rate in other countries, the eligibility criteria for fiscal deductions, exemption and other benefits, which are rather different between the particular countries, etc..

After seeing all this, we may wonder: is it better to have progressive taxation rates, and why?

- A possible answer might be that the progressive taxation works as an automatic fiscal stabilizer, bringing revenues to the budget, for any increase of the incomes, without any other intervention, discretionary or not.
- Relaxation of work taxation is called for, which would cause the taxation bases to migrate from the non-fiscal area to the fiscal area.
- The major interest, in setting any taxation pattern, is to define the expectations. Do we settle for a higher taxation, which brings important revenues to the state budget, which are subsequently redistributed to finance the services that will return to the taxpayers (education, healthcare, culture, etc.), or do we settle for fiscal relaxation, which leaves more money to the taxpayer, so that he/she can manage its own needs. The option is for a

taxation pattern which secures revenues for the state, so as the state can render as many as possible free or heavily subsidized services.

- Too high fiscal pressure must be, generally, avoided, because it may result in tax evasion, by migration of the taxation bases towards the non-fiscal area.

Finally, no matter what type of fiscal pattern we may have, if the levying and collection mechanisms don't work, the fiscal policy targets will not be accomplished.

- Urgent measures have to be taken to remove the fiscal barriers. Taxation of the enterprises and of the natural persons is the attribute of the member states; however, an important issue of the present moment is that, in accordance with the European norms, no state should raise barriers hindering mobility in Europe.
- The persons settling in a different EU member state, or the societies investing abroad, might have to pay taxes at least in two different countries, or might be confronted with complicated administrative procedures. This situation is often encountered, and the European norms didn't clarify these issues definitely.
- Most EU member states concluded treaties to avoid double taxation, but these cannot cover all cross-border taxes or situations. The European Commission acts in several ways to solve these problems.

The important changes of the fiscal environment in the Central and Eastern Europe, in 2013-2016, display a persistent trend of slight decrease of the direct taxation in this region.

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STRUCTURE AND DYNAMICS RESEARCH AND DEVELOPMENT EXPENSES IN ROMANIA

PhD Cornelia Tomescu-Dumitrescu⁷

Abstract:

Scientific research is a systematic and creative activity aimed to increase the volume of knowledge, including knowledge of man, culture and use this knowledge for new applications.

The concept of research is known and used today under the name of research and development. Engine development for any country, whether economic or social, is the research, development and innovation. The common concern of all countries for science and scientific research appears in recognition of their role in ensuring the welfare and human civilization.

Research and development in Romania over the last 20 years could be considered a true „Cinderella” of the national economy because either they have been allocated insufficient funds or when receiving a larger amount of funds, budgetary rectifications were taken large sums of money from the research budget.

1. Introduction

In Romania there are priority three systems research, development and innovation:

- The academic system (Romanian Academy and academies branch);
- The system of public institutions (subordinate / coordination of ministries);
- University system.

Also, in the current national system of research, development and innovation are other structures with research, development and innovation, such as:

- State-owned companies, institutes from former branch;
- Companies with private capital;
- Foundations and private associations.

Total research and development expenses consist of: current expenditure and capital expenditure. Current expenditures include all payments made during a period when the units toward the cost of labor, materials and other current expenditure. Capital expenditures (investments) include payments made during a period for carrying out construction works, purchase of equipment, tools, machinery and equipment and other expenses of this nature, designed to contribute to the volume of assets of the unit.

2. The structure of research and development expenditure in 2015 in Romania

Research and development in 2015 was conducted in 65 units, including 40 institutes and research centers, higher education institutions 15 10 - other units. Of the total units with research and development, 51 units or 78% belong to the public sector. On 31 December 2015, establishments with research and development activating 5033, of which 51.8% are women. Of the total number of employees, 70% worked full time. After the vocational training of all employees, 3990 persons had higher education (79.3%), 392 people - specialized secondary education (7.8%), and 651 persons - another level of education (12.9%) . Of employees in this area the largest share is held by scientists (66.9%), followed by support staff (13.9%), employees who perform tasks related institution's work constitutes 13.7% and 5.5% technicians . Compared with 2014, the total number of employees remained virtually the same, although the occupational categories there were differences, with more than 53 people where 57 researchers and people less if personnel.

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Table 1

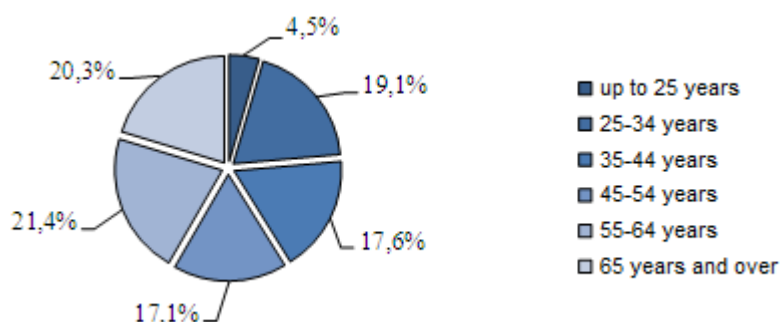
Employees from research and development by type of occupation, 2014-2015

	Persons				Structure - % -			
	2014		2015		2014		2015	
	Total	including women	Total	including women	Total	including women	Total	including women
Employees total	5038	2588	5033	2607	100,0	100,0	100,0	100,0
researchers	3315	1586	3368	1655	65,8	61,3	66,9	63,5
technicians	282	205	275	183	5,6	7,9	5,5	7,0
support staff	758	402	701	403	15,0	15,5	13,9	15,5
other categories	683	395	689	366	13,6	15,3	13,7	14,0

In 2015, research and development, the researchers came back 97 100 men women researchers, representing a 5% increase compared to last year.

Structure of researchers by age shows that the researchers aged 55-64 years (21.4%) and those over the age of 64 years (20.3%).

Figure 1. Structure of researchers by age group, 2015



Distribution of researchers by scientific areas reveals a predominance of natural sciences (34.6% of total researchers), followed by that of engineering and technological sciences with 16.4%. Women are underrepresented in the sciences researchers of natural and engineering and technological respectively as a share of 49.2% and 29.0%, while 61.4% were in the social sciences.

Table 2

Researchers scientific fields, 2014-2015

	Persons				Structure - % -			
	2014		2015		2014		2015	
	Total	including women	Total	including women	Total	including women	Total	including women
Researchers - total	3315	1586	3368	1655	100,0	100,0	100,0	100,0
natural sciences	1196	564	1165	573	36,1	35,6	34,6	34,6
engineering and technological sciences	443	125	552	160	13,4	7,9	16,4	9,7
medical sciences	453	244	442	242	13,7	15,4	13,1	14,6
agricultural sciences	411	183	411	212	12,4	11,5	12,2	12,8
social sciences	496	308	472	290	15,0	19,4	14,0	17,5
humanities	316	162	326	178	9,5	10,2	9,7	10,8

Compared to 2014, the share of researchers in the natural sciences was reduced by 1.5 percentage points, while those in engineering and technological sciences was increased by 2.0 p.p. Every second researcher holds doctorates (PhD and PhD). Also in medical sciences and humanities than 60% of researchers are scientific degree, while in engineering sciences and technological only 26%.

Table 3

Researchers with doctorates in scientific fields, 2014-2015

	2014				2015			
	PhD Hab.		PhD		PhD Hab.		PhD	
	Total	including women	Total	including women	Total	including women	Total	including women
Researchers - total	384	73	1314	614	387	78	1327	645
natural sciences	143	24	509	226	133	22	514	244
engineering and technological sciences	22	–	91	13	31	1	114	27
medical sciences	77	20	193	103	86	23	185	102
agricultural sciences	32	2	133	39	36	2	133	44
social sciences	58	14	230	144	55	18	220	139
humanities	52	13	158	89	46	12	161	89
Structure -% -	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
natural sciences	37,2	32,9	38,7	36,8	34,4	28,2	38,7	37,8
engineering and technological sciences	5,7	–	6,9	2,1	8,0	1,3	8,6	4,2
medical sciences	20,1	27,4	14,7	16,8	22,2	29,5	13,9	15,8
agricultural sciences	8,3	2,7	10,1	6,4	9,3	2,6	10,0	6,8
social sciences	15,1	19,2	17,5	23,4	14,2	23,1	16,6	21,6
humanities	13,5	17,8	12,0	14,5	11,9	15,4	12,1	13,8

In 2015, the number of researchers with PhDs was up 1.0% overall, while for women the increase was 5.0%. The gender distribution of researchers with PhDs, reflecting a slight imbalance between the share of women - and men 48.6% - 51.4%.

At the same time, the number of researchers with scientific degree PhD women represent 20%. In 2015 expenses for research and development activities carried out by units in this area totaled 451.0 million lei, of which 424.3 million lei, or 94.1% is 26.7 million lei expenses and costs capital (5.9%). About 85% of the total units were made in the form of state property. Compared to 2014 were spent on research and development by 8.6% more.

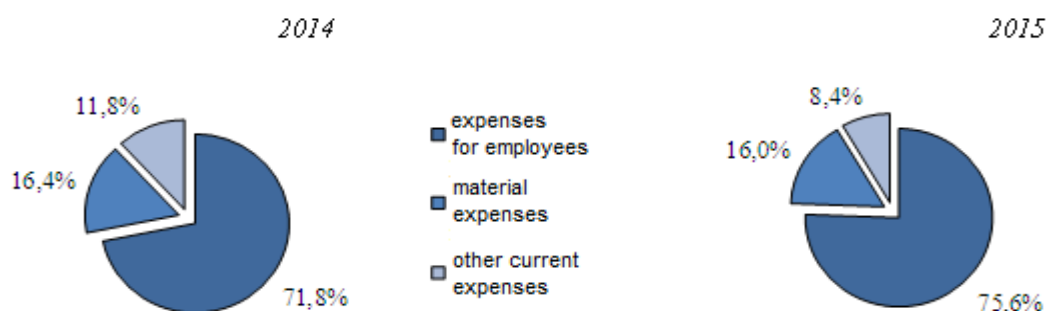
Table 4

Expenses for research and development, 2014-2015 (mil.lei)

	2014	2015	2014	2015
	Total	including state units	Total	including state units
Research and Development expenses	415,2	370,0	451,0	381,4
current expenditure	388,3	344,5	424,3	355,5
capital expenditures	26,9	25,5	26,7	25,9

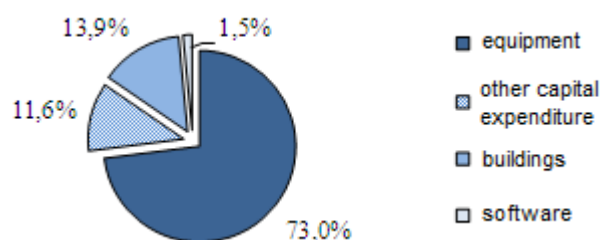
Total current expenditure predominates in staff costs - 320.6 million lei (41.8 million or 15% compared with 2014). Also, material costs totaled 4.3 million and amounted to more than 68.0 million. Other current expenditure amounted to 35.8 million lei or 10.0 million less than in 2014.

Figure 2. Structure of current expenditure component, 2014-2015



In 2015, expenditures for equipping units / institutions which conducted research and development amounted to 19.5 million lei (73.0%), expenditures for capital repairs of buildings were 3.7 million lei (13, 9%), the category other capital expenditures - 3.1 million lei (11.6%) and 0.4 million (1.5%) representing the costs for a new category 'software procurement '.

Figure 3. Structure component of capital expenditures in 2015



Of the total current expenditure on R & D activity, 52.0% were intended for research applicative (4.2 percentage points less than in 2014), 27.5% of basic research (+1.1 pp) and 20 6% were destined technological development (+3.2 pp).

Table 5

Current expenditure on scientific, 2015 (mil.lei)

		inclusiv:					
		natural sciences	engineering and technological sciences	medical sciences	agricultural sciences	social sciences	humanities
Current expenditure	424,3	144,2	108,0	42,4	63,2	37,3	29,2
including:							
fundamental research	116,6	59,5	13,7	5,1	2,3	13,7	22,3
applied research	220,5	76,5	16,9	37,4	59,4	23,4	7,0
technological development	87,3	8,2	77,4	–	1,5	0,2	–

Depending on the scientific structure of current expenditure is as follows: natural sciences - 34.0%, engineering and technological - 25.5%, agriculture - 14.9%, health - 10.0%, social - 8.8% and humanities - 6.9%.

3. Funding research and development in Romania

The first system of financing research projects and not institutions, was not introduced until 1997 and was named National Plan for Research, Development and Innovation. There was then „ program Horizon 2000 ", extended until 2002.

National Plan for R & D and innovation included 14 complex programs, 4 of which occurred at the beginning of the plan and 10 occurred in 2001, grouped in two major goals of development: one economic support through research and a development of new technologies, biotechnology and information society. The National Plan is the main instrument for the implementation of the National Strategy.

It was approved by Government Decision no. 475/2007, law setting out rules and principles of implementation, the component programs, model and investment budget - 15 billion. Lei 2007-2013, the procedure for monitoring and evaluation and impact indicators. With the launch of this program for funding research terminology „ R & D "(CD) will be replaced with the terminology „ research, development and innovation" (CDI) as funding programs will be included and innovation.

National Plan for Research, Development and Innovation for 2007-2013, hereinafter - the National Plan II - NP II is the main instrument through which the National Authority for Scientific Research (NASR) is implementing the National Strategy for Research, Development and Innovation. (Www. ancs.ro)

Sectoral Plan for Research and Development is a tool through which central and local government bodies and the branch academies policy of the research that he coordinates. Funding for these programs is provided by sources from the state budget for scientific research funds sectoral plans are accessible only establishments or institutions that are part of the sector. It is important to note that the award of projects in the sectoral plans is via auction and on "expression of interest" that may be submitted by a single participant or a grouping (consortium participants associates, natural or legal persons who are considered as partners the project) and in case of legal persons, participation should fall within the categories of establishments or institutions accredited for this purpose.

On 30 November 2011 the European Commission presented a package of measures to stimulate research innovation and competitiveness in Europe. Thus was launched the Horizon 2020 program for investment in research and innovation, with a budget of over 80 billion euros.

Funding of research and development is provided under the Structural Funds Programme for Increasing Economic Competitiveness (SOP IEC), Priority Axis 2, and financing of lesser value were made through Priority Axes 1 and 3.

Absorption of structural funds registered an upward slope from a value of 3.52% in late 2008 to a value of 17.5% at the end of 2013. Even if the increase is more than 5 times, it still Romania the second worst among EU countries in the extent of absorption of funds. The amount allocated to Romania for the period 2007-2013 was 19.213 million Euro¹ but all efforts will be submitted by the end of 2015 to access these funds absorption will get somewhere between 60% -70%, which is less if we refer to Poland, which has accessed these structural funds, so managing an absorption rate of 100%.

4. Conclusions

In 2015, research and development, the researchers came back 97 100 men women researchers, representing a 5% increase YoY. Distribution of researchers by scientific areas reveals a predominance of natural sciences (34.6% of total researchers), followed by that of engineering and technological sciences with 16.4%. Compared to 2014, the share of researchers in the natural sciences was reduced by 1.5 percentage points, while those in engineering and technological sciences was increased by 2.0 p.p. In 2015 expenses for research and development activities carried out by units in this area totaled 451.0 million lei, of which 424.3 million lei, or 94.1% is 26.7 million lei expenses and costs capital (5.9%). About 85% of the total units were made in the form of state property. Compared to 2014 were spent on research and development by 8.6% more. In 2015, expenditures for equipping units / institutions which conducted research and development amounted to 19.5 million lei (73.0%), expenditures for capital repairs of buildings were 3.7 million lei (13, 9%), the category other capital expenditures - 3.1 million lei (11.6%) and 0.4 million (1.5%) representing the costs for a new category 'software procurement'.

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CURRENCY, FINANCIAL INSTITUTIONS, AND NOMINAL ECONOMY

THE IMPACT OF STATE SECURITIES PROFITABILITY ON THE EFFECTIVENESS OF MONETARY POLICY IN MOLDOVA

*PhD Victoria Cociug⁸,
PhD Olga Timofei⁹*

Abstract:

The recent decision of the Central Bank of Japan, regarding the adoption of a monetary policy aimed to control interest rates on government securities issued in the long term, which involves reducing the profitability of these values and increase their maturity to 24 years, determined our interest for state securities profitability impact on the effectiveness of monetary policy in the Republic of Moldova. Due to the fact that NBM has recently provided state securities with an interest that is very attractive to banks, which on the one hand, keeps the banks on the money market, on the other hand, this leads not only to lower bank interest for lending economy but even to counter this activity, which has adverse effects on the efficiency of provided monetary policy.

Key words: state securities, state securities profitability, open-market policy, monetary policy, Taylor function, the interest rate on the state securities

JEL classification codes: E42, E43, E52, E58

Introduction

The present topic discusses one of the most acute problems of the monetary policy in Republic of Moldova and has always been a topic of great interest for both scientific researchers and monetary authorities as well, who are interested in developing the efficient ways of the monetary policy promoted by local authorities. The article deals with both, the objectives of this policy, as well as the mechanisms and instruments to achieve these objectives. Although there is a lot of literature that offers different researches and studies in this field, proposing various solutions to achieve the objectives of monetary policy depending on the type and size of the economy, after the international financial crisis, a major disagreement could be seen between the objectives of monetary policy promoted by authorities and the effect on the real economy as a whole.

Experiences have shown that the most viable way to annihilate the shock is the pursuit of price stability by macro policy and thus the monetary policy. (FISCHER, S., SAHAY, R., 2000; WALSH, C., 2001). This in turn requires a more flexible approach to monetary authorities to fight inflationary pressures, "going even so far as to establish a numerical inflation target that should be achieved over a specific time period" (BORIO, Claudio E.V., 1997). But the final target of monetary policy can be achieved only by pursuing some precise intermediate targets of monetary policy, implementation of which is able to highlight the effectiveness of the measures. There are several monetary variables that can be taken into consideration as intermediate targets of monetary policy: the exchange rate; market interest rates; monetary aggregates; the price of credit in the economy or other financial assets.

Whatever the pursued objective is, the major instruments of the central bank through its monetary policy should be grouped into two categories: direct, which usually are likely regulatory (rules, regulations); and indirect, for which we must underline and substantiate their orientation on the market mechanism of transmitting monetary impulse.

To achieve its objectives, the central bank has at its disposal a set of monetary policy instruments: open market operations, standing facilities and minimum reserves. Taking into consideration the latest events in the world, I noticed that at the moment a special attention is paid to market operations: for example, in September 2016 the Central Bank of Japan's decision on the adoption of a monetary policy to control interest rates on government securities issued in the long term, reducing their profitability and increasing their maturity to 24 years. This decision increased our

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interest in the impact profitability of state securities on the effectiveness of monetary policy in the Republic of Moldova especially now, on the background of events, where the central bank provides banks with state securities at a very attractive interest rate for a short-term.

Literature review and empirical evidence

The approach to the monetary policy in terms of its effectiveness involves identifying the possibilities for evaluation of the transmission mechanism on economic activity: it means the way in which monetary policy decisions influences, through various channels, the behaviour of partners on markets, economic activity and the general price level.

The main transmission channels of monetary policy are well known, these being: the interest rate channel, exchange rate channel, the credit channel, channel wealth and balance sheet effects, channel operators inflation expectations. At the same time, the focus on the evaluation is done on certain specific channels depending on how the transmission mechanism from one country to another works.

Traditionally, the first transmission channel of monetary policy is the **interest rate channel**. This channel reflects the impact on the economy through central bank interest rate change. Interest rate changes, determined by the action of the monetary authorities, has as main effects on the economy the following: the substitution effect, the effect of income and wealth effect (BAILLY, J. L. and other. 2000).

The classical schemes of the interest rate channel are:

$$\checkmark M \uparrow \rightarrow i \downarrow \rightarrow I \uparrow \rightarrow Y \uparrow$$

Where: M - money supply, and - the interest rate, I - investment, Y - production;

$$\checkmark M \uparrow \rightarrow i \downarrow \rightarrow S \downarrow \rightarrow P \uparrow \rightarrow Y \uparrow$$

Where: S - savings, P - consumption;

$$\checkmark M \downarrow \rightarrow i \uparrow \rightarrow C \uparrow \rightarrow D \uparrow \rightarrow Y \uparrow$$

Where: C - loans population D - income population.

The mechanism of the interest rate channel enables its use in removing systemic risk, which led central banks in developed countries to use this tool actively to overcome the liquidity crisis in the banking system. However, in 2009, lowering the reference rate to zero, has drastically limited the possibilities of monetary authorities to influence on the economy through traditional measures. This fact ultimately led to the need for adoption of unconventional monetary policy measures by the central banks of the euro area countries, the US, the UK and Japan. *In this case the interest rate channel can be revived by substituting interest rates on primary operations of the central bank on monetary market by rates of return of government securities.*

On one hand, due to the specific mechanism of channel interest rate, the lowering of policy rates can lead to economic growth, but on the other hand, on the contrary, it can increase the risk aversion of commercial banks and can trigger the risk of adverse economic developments in the future. In this case, the interest rate channel, will act more like a multiplier of systemic risk. For this reason, primary decrease in interest rates on the money market, where banks have access to resources, increase their appetite for risk, so in this case more would be recommended orientation profitability of state securities.

If we refer to the case of Republic of Moldova, for one reason or another, there is no a transmission channel that can operate efficiently at the moment, which is also true and for the interest rate channel.

The main preconditions for effective functioning of the interest rate channel, reported to VMS profitability, include:

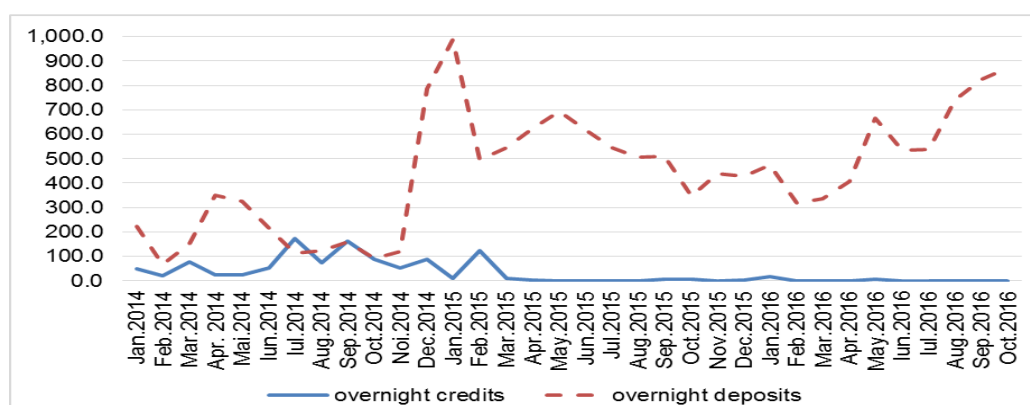
- *for the substitution effect*: the widespread development of consumer credit in the economy, credit cards and other retail financial services;
- *the effect of hoarding*: a fixed minimum level of inflation, as any change in interest rates would immediately have an impact on consumer credits;
- *the income effect*: the existence of a well-developed financial market and a high share of foreign direct investments (ISKHAKOV, P.J., 2011).

At present, Republic of Moldova does not combine any of these preconditions. The rate of inflation for the previous year considerably exceeded its target fluctuation corridor of the central bank and the trend of decrease in the current year is so sudden that, it is too early to talk about stability in this sense. In addition, there is a total lack of a functional money market as well as a foreign financing. This state of affairs is due largely to the high cost of bank loans on the background of a weak economic growth. Since the price of credits exceeds in most cases business profitability, the credit role in supporting investment in fixed assets is essentially reduced.

The cost of credit resources has negative effects on the competitiveness of domestic companies on foreign market. Therefore, it is necessary to find measures that will reduce the cost of loans and ensure the functioning of the interest rate channel.

The interest rate channel operation depends on the implementation of the refinancing mechanism. In current conditions, the share of resources provided by the NBM to credit institutions in the country is very low, which proves on one hand, a limited access to credit, and on the other hand, the incapacity of the central bank to use this monetary policy tool effectively (See Figure 1). In this respect, controlling the growth of broad money - by changing the refinancing rate, will not have any significant influence on the amount of cash or the level of interest rates.

Figure 1 - Standing facilities extended to banks by NBM, average daily balance (mil. mdl)



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

Accordingly, this transmission channel has already a limited role in promoting the monetary policy decisions for a long period of time. In the current conditions of the Moldovan economy, neither the volume of money nor the monetary base, affects the value of the average interest rate on long-term loans given to non-financial organizations. We cannot also say that the refinancing rate in turn affects long-term interest rate policy of commercial banks. However, the value of interest rates on short-term loans proved to be more sensitive to monetary policy decisions.

Thus, the interest rate channel in the RM in its classic sense is not working. Its real action being modified ($M \uparrow \rightarrow i_1 \downarrow \rightarrow i_2 \downarrow \rightarrow I \uparrow \rightarrow Y \uparrow$, where i_1 and i_2 represent interest rates in the short and long term loans of non-financial), reflecting its complex impact on the economy as a result of separation in the chain mechanism of interest rates on short and long term.

The identified channel is less fixed and less effective than a classic one. Transformation of the interest rate channel, in its classic form, is associated with underdevelopment of the financial market in Republic of Moldova.

This creates a premise for selecting a more effective channel, which will reflect an interest rate appropriate to the investment decisions of banks as well as of those of the real sector. Because an interest rate that reflects the cost of the financial resources available, such as the current refinancing rate, determines banks to select less "costly" investments and that effort to stay on the financial market, to multiply the money supply through loans. In order to make the channel more efficient, it is required to switch to a refinancing interest rate that is close to VMS, which actually represents the profitability of bank assets. Thus, this rate is perceived as minimal rate of bank investments income, correlated to risk, similar to the β coefficient on the financial assets market. In this case, when banks choose to return their investments, they will compare the rate of "active" interest, it means the equivalent of investments with minimal risk and not at a rate liabilities, which

is now the refinancing rate, because that rate interest on liabilities is compared to the rate at which you can buy resources, and those resources are not necessarily invested later in loans, but they often remain on the market of risky financial assets. As a conclusion it can be said that the small refinancing rate is harmful for the banking system because it increases the risk of banking activities. At the same time this interest does not promote the direct monetary policy.

Open market operations in Republic of Moldova

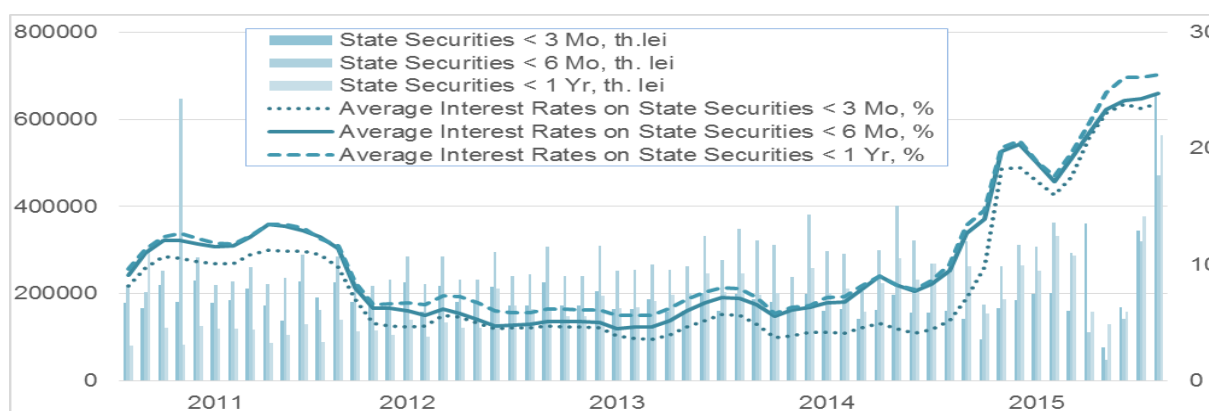
Open-market operations are tools that are based on trade in government securities, which apparently could improve the interest rate channel. But this tool influences the volume of money supply, being conducted by the Central Bank through the sale or purchase of certain commercial paper, thereby creating a currency demand or an offer at a certain price. However, open-market policy has a reverse effect: the purchase of effects by the Central Bank leads to the liquidity increase and vice versa. The transmission of price impulses to the real economy through interest in this case has a lasting effect. In fact, central bank trade obligations with securities are the following:

- constraining obligation: by selling Central Bank securities to banks liquidity absorption occurs in the economy and a decrease in the quantity of money available to banks for multiplication;
- stimulating obligation, by buying securities from banks, the Central Bank provides liquidity and enhances their ability to create money.

Thus, the effect of Central Bank open-market policy influences the ability of banks to create money depending on its will of engaging in the process of lending to non-bank sector that finally has an impact on the volume of money supply in circulation. However, the decision of banks to create money depends also on the rentability that Central Bank offers to these securities, because this tool can have dual effects: trying to limit liquidity, the Central Bank can completely neutralize the creation of money. Namely, if the Central Bank, trying to reduce the money supply, offers state securities with an attractive interest rate, creates favourable conditions for banks to remain active buyers on the money market, which leads not only to the decrease of the bank ability to create money by banks, but even to counteract this (banks remain on the money market as active speculators and will not provide credits to the economy). In this situation the interest rate channel is not working as a mechanism of monetary policy because banks use only purchases of VMS to store assets with a decent return at minimum risk.

All tradable instruments that are the main component of Eurosystem monetary base or other countries with well-developed financial markets have an insignificant structure in Republic of Moldova due to underdevelopment of the stock market on monetary market. We decided to investigate the evolution of interaction of state securities and interest rate in Republic of Moldova in order to identify the reason and the possibility of application of these tools, especially open-market, which uses securities.

Figure 2 - Evolution of state securities in the short term, allocated to banks in Republic of Moldova during 2011-2015.



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

The securities that are used on the monetary market in the RM are state securities in the form of treasury bills with maturities of up to one year and bonds with terms of 2 and 3 years. Lately the NBM offered to SS at a very attractive rate to banks, which on the one hand, keeps the banks on the money market, but on the other hand, leads not only to lower banks' interest in creating and

providing money in economy, but even to its counteract (remaining banks on the money market as active speculators that will not provide credit to the economy).

We can easily notice from the state securities provided to banks in recent years (See Figures 2 and 3) that the high share of short-term state securities in total state securities, which demonstrates short-term orientation of monetary policy promoted by local monetary authorities. It is also obvious that raising the interest rate on state securities does not have its effect on the volume of state securities purchased by banks, while the periods of lower interest rates are characterized by fixed sales volumes, which we consider to be an irrelevant element (not recommended to be applied in the RM). Hence, we can conclude that the decisive elements in the process of SS purchase of banks is not the interest rate, but the offer and the settling day. Therefore we believe that establishing a high rate of SS in order to maintain banks' securities on the market is not only unwarranted, but also increases the value of state debt, which will further affect more the involvement of banks in monetary policy (raises the amount of debt compared with the interest rate offered by state securities)

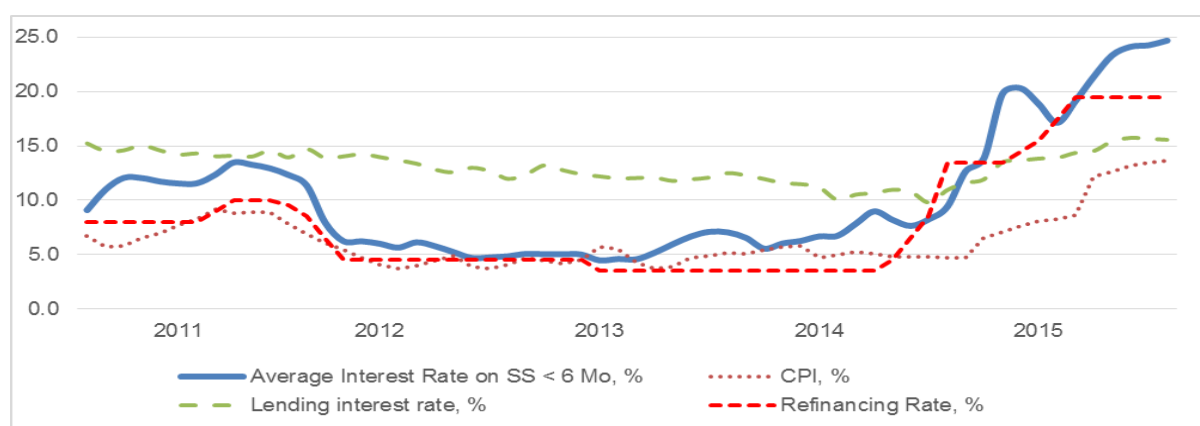
Figure 3 - Evolution of state securities issued with a maturity of 2 to 3 years, allocated to banks from Republic of Moldova in 2011-2015.



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

At the same time, effects of diminishing inflation increase interest rates on state securities. Thus, the high discordance between the refinancing rate, the rate of return on government securities and average loan rate proves the lack of interest and at the same time maintaining profitability at banks within state securities. (See Figure 4)

Figure 4 - The evolution of refinancing, interest rates on government securities and bank loans, and inflation in RM, 2011-2015.



Source: Developed by the author based on NBM data. Available: <http://www.bnm.md/>

In these circumstances, the formation of bank interest is not focused on refinancing rate, but on the rate of return on risk-free assets.

We realize that high rates of interest on government securities have currently another connotation than the interests of monetary policy - namely to refill the state budget and at the same time, they have a negative indirect impact on effects of monetary policy, as banks pursuing high profitability, co-reported with zero risk, invest, in particular, on money market, which does not allow the granting of loans, and thus respectively –

investment of money into the economy. We believe that, if it is desired an efficient monetary policy which is orientated to economic development, the mechanism of financing the budget deficit may be directed from a rollover term and an cointerest related to financing (incentives for banks to procure state securities for long term, e.g., by using them as collateral to obtain loans to refinance in the short term).

Conclusion

The efficiency of using the rate interest is based on the mismatch of refinancing system. Thus, although the refinancing rate is an important instrument of monetary policy in most developed countries, in Republic of Moldova it does not have any influence on the cost of long term resources in the banking sector, and has no significant effect on the money supply.

1. The inefficiency of monetary policy tools can be explained by the fact that the transmission channels of results of these instruments are non-profitable in Republic of Moldova; there is not a clear and precise relationship between the Central Bank and banks. Thus, the instruments used by the Central Bank do not reach and have no response effect on commercial bank. For example, the interest rate channel: increasing compulsory reserves has not led to a significant increase in interest rates. In this respect it is necessary to improve the monetary policy in the economy, the release of monetary transmission channels, by pursuing objectives correlated with central bank targets banks, by motivating them to participate in the efficient financing of the economy.
2. The base rate, to which should be directed the commercial banks in setting interest rates on placements of non-banking sector are often lower than the refinancing rate, due to their ability to mobilize the resources efficiently and fierce competition on the market of solvent debtors.
3. It may be noted another paradox of the effects of current monetary policy, which consists in the fact that the increase of refinancing rates during 2015 has increased the liquidity of the banking system, contrary to the purpose of applying of this instrument. In this case we conclude that the only instrument that has had the effect is the mandatory reserve rate, which is extremely high - 35.5%, or, at such rate any channel of monetary policy is no longer effective. Thus, in order to ensure the effectiveness of interest rate channel of monetary policy it is necessary to solve problems in refinancing system.

The importance of ensuring the efficiency of refinancing in modern conditions is explained by the fact that, currently, at the high rate of development, required by the real economy, there are few opportunities to use traditional measures. If monetary policy is ineffective, the real economy, stifled by high interest rates and uncertainty about macroeconomic developments will abandon long-term projects, opting for short-term investments that do not lead to sustainable economic growth.

Low efficiency of the interest rate channel can have several reasons, either fundamental or structural, but one that cannot be neglected is distrust. Therefore it is necessary to act in order to improve confidence in the banking system reliability and stability of monetary policy.

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THE PRESENT ROLE OF CENTRAL BANKS – UNCONVENTIONAL MONETARY POLICIES

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Abstract:

The 'Great Recession/crisis' (2007-2009) shockingly marked a drastic change in the ways, means and types of monetary policies initiated and operated by central banks in more and more countries. 'Anticipated' by Japan in the 1990s, the stagnation-deflation tandem has become a common denominator especially for western developed countries (Northern America and Western Europe). Being initially an 'exception from the rule', the so-called *unconventional* monetary policies have gradually evolved into a characteristic/fixture of macroeconomic policy system in most developed economies. This study aims to decipher the determinants, forms and effects of these policies, also including a short 'study case', considerations and conclusions.

Key words: central banks' role; unconventional monetary policies; quantitative easing; deflation; negative interest rate(s).

JEL classification codes: E 58; F 33; G 01.

The turning points of the long cycles of economic history have usually marked profound and extensive changes in both real and nominal dimensions of economic and financial components of human society, including economic policies. If we refer to the 20th century and the first two decades of the 21st century, it is obvious that the most important crucial stages of the world economic history ("*Correlation and interdependence between monetary/nominal and real economy in the context of the international financial crisis*", in *UFB Review*, no.1/2011, p. 21) were represented by 'the Great Depression' during the 1930s and 'the Great Recession'(or crisis) unleashed in 2007/2008, having deep consequences for at least a decade.

1. The Great Depression determined the coagulation and afterwards proliferation of Keynesian and neo-Keynesian theories and economic policies which, after the World War Two, favoured a new ascending phase for the long economic cycle. The stagnant stage of the 1970s (mainly stagflation) forwarded neomonetarist and neoliberal theories and economic policies which, unfortunately, did their best to justify an aggressive process of so-called liberalization and deregulation of international financial system, especially regarding capital markets and banking sector, during 1980s & 1990s. Initially – but misleadingly – that kind of neoclassical approach regarding the economic policies seemed to stimulate growth and to temper inflation, so that the 1990s and the beginning of 2000s were considered by the 'mainstream' economists as 'the Great Stability' or 'the Great Moderation' (particularly in USA and UK). In fact, that was a period when the surge of the speculative capital and funds only masked the ever deepening of the *rupture between the nominal/monetary economy and the real economy* (L. C. Ionescu, "*Necessity of a new type of symbiosis between the nominal and real economy*", in *CCFM, Financial Studies*, no.3/2013)

Under these circumstances, the crisis which burst in 2007/08 has proved to be much more violent, widespread and dangerous than any other economic and financial shock since 1930s and the last world war. The contradictory and intricate nature of the crisis is confirmed by the inefficiency of the 'traditional' macroeconomic policies (mainly monetary and fiscal). In the postwar period, fiscal and monetary policies were key instruments in fighting inflation and/or unemployment. This time inflation almost disappeared in the western economies, while unemployment has stood high and growth (GDP) rate has been stagnant. Moreover, *deflation* has replaced inflation as a very resilient 'public enemy', after a historical pause of over half a century.

This threatening and enduring trio – stagnation, deflation, unemployment – sadly confirms the thesis I have reminded above and which I expressed and argued ever since early 1990s: speculative monetary and financial flows of capital have gradually but swiftly overwhelmed *real* economy, starting in 1980s and 1990s, exacerbated by the so-called liberalization & deregulation, under the pretext of stimulating competition, while in reality the *oligopolistic and monopolistic*

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international structures have suffocated the genuine sources of economic value added. A striking effect of this eroding process has been the declining trend of the rate of return in the developed economies. Based on international statistics, the main asset classes (stock, bonds, commodities) recorded substantial decreases of their rates of return. Referring to a 30-year period, from mid-1970s to mid-2010s, in USA, the composite rate of return (stocks/bonds/commodities) almost halved, from 11.03% to 6.53%. Here are the data comparing the 30-year average annual growth rate to annual growth rate calculated for 2004 – 2014(in %): for stocks from 12.6 to 8.1; for bonds from 8.7 to 4.6; for commodities from 9.79 to -2.77 (D. Shairp, A. Werley, M. Feser, “ Long-term Capital Market Assumptions”, in J. P. Morgan Asset Management, 2015)

The three components of the composite average reflect the interface between nominal/real facets of the economy (US stock), the evolution of the nominal economy (bonds) and the stage of the real economy (commodities). It is significant that the most dramatic decrease was recorded by the rate of return within real sector of economic activity. The analysed period “contained highly unusual economic, financial and global economic policy conditions. Those conditions ranged from financial euphoria and real asset bubbles to the Great Recession in the US and the crisis in the Eurozone, with public policy prescriptions reminiscent of the 1930s. Ultimately, these events and conditions resulted in global asset declines not seen since the 1970s, if not the last 80 years.”(D. Shairp, A. Werley, M. Feser, “ Long-term Capital Market Assumptions”, in J. P. Morgan Asset Management, 2015, p.8)

In such circumstances, the diminishing returns of key components of economic activity (especially those linked directly to real investments) have necessarily led to an almost continuous decline in the level of interest rates. According to the estimate of the former governor of the Bank of England (Marvyn King), the international average 10-year real interest rate fell from about 4% at the end of 1980s to 1.5% when the crisis began (2008) and has steadily fallen further *to around zero (!)*. This situation has not been simply an ‘accident’ for the financial domain, but an extremely serious crossroads in the evolution of the world monetary and financial system, affecting thoroughly both macroeconomic policies and economic theory - economics or political economy (Graph 1 - BIS, Working Paper no. 569/2016).

Alan Greenspan, former chairman of the Federal Reserve, had a highly controversial role in paving the way for the crisis by an ‘easy money’ monetary policy. However, after the crisis burst, Greenspan identified its causality in continuous decline of real long-term interest rates (since early 1990s) which finally engendered the subprime housing bubble. As an apologist of ‘free market virtues’, he wrote: “Markets have become too huge, complex and fast-moving to be subject to twentieth century supervision and regulation. No wonder this globalized behemoth stretches beyond the full comprehension of even the most sophisticated market participants.”(A. Greenspan, “*The Age of Turbulence: adventures in a new world*”, The Penguin Press, New York, 2007, p.489). This type of ideological positions clearly show how the US financial legislation evolved from Glass – Steagall Banking Act of 1933 (separating commercial from investment banking to avoid monetary & financial hyper-speculation) to Gramm – Leach – Bliley Act of 1999 (opening largely the doors for ‘sophisticated’ financial derivatives).

Traditionally the main instruments of the central banks’ monetary policy has consisted in (order of importance) refinancing/reference interest rates, open-market operations (OMO), reserve requirements. In the period of highly proclaimed ‘independence’ of the central banks – 1990s to early 2000s – the attention of various ‘monetary policy committees’ was focused on the so-called refinancing or reference interest rate(s). As long as the interest rate in the real and, consequently, in the nominal economy was significantly positive, the level of the ‘reference’ interest rate established/announced by a central bank could have an effective impact on nominal and, afterwards, on real economy (an increase ‘cooling’ the investment and consumption and a decrease acting as an incentive for economic growth). Once the medium and even longer term interest rates in the economy tended to 0%, the level of the reference interest rate has become ever less relevant for a central bank’s monetary policy. Both practice and theory show that a ‘guiding’ interest rate less than 1% could have only a quite marginal effect on nominal and, especially, real flows of an economy.

Figure 1 – The long-term decline in real interest rates ¹⁾



¹ Real rates are generated by subtracting realised PCE core inflation from nominal interest rates.

Source: National data.

Obviously we are referring mainly to *real* interest rates. However when inflation rate is declining towards very low levels and signs of deflation are identified in the economic evolution, the interest rate has a tendency to become *negative* (examples from 2015-2016: Japan, Sweden, Switzerland, Denmark).

This is a difficult and delicate turning point not only for the central bank's macroeconomic role, but also for the economy as a whole. An extremely low interest rate is 'transmitted' to the commercial banks which, instead of stimulating the saving and, consequently, the investment process, begin to punish the savers (!). Thus the rational connection between saving and investment has been broken. In this dramatic context, the so-called *unconventional monetary policies* have tried to counteract the notorious weakness of a minimal reference interest rate (including 0%) or even negative (which is, in fact, an economic aberration). This is why and how the 'unconventional' monetary policy has come into the picture of macroeconomic policies. It is known that open-market operations (OMO) have their origin in an *unconventional* monetary scheme used by USA Federal Reserve system toward the end of the 1930s and in the 1940s, in the specific conditions of the post-depression period. Similarities between the 1930s depression and the 'Great recession/crisis' (started in 2007/08) aroused again the interest for such unusual monetary policies.

Therefore central banks, in agreement with important international monetary institutions (E.g., IMF Staff Note, November 4, 2009), abandoned the 'orthodox' policy and adopted techniques of supplying cheap liquidity to monetary, banking and financial markets, in a rapidly increasing quantity. In fact, here one can identify the key element of the much debated *quantitative easing* (QE), the term quantitative referring to the growth of money supply and the proportions of central banks' balance sheet, exponentially amplifying assets and liabilities.

Being the first developed economy to witness stubborn stagnation and deflationary trends towards the end of the 1990s, the Bank of Japan already launched a 'QE' experiment in March 2001. By QE procedure, banks may accumulate considerable excess reserves in an attempt to act as an incentive for increasing the volume of credits to economic agents. However the duration, intensity and consequences of the crisis, recession and stagnation in most developed economies have pushed more and more central banks to adopt 'quantitative easing' scenarios. The US Federal Reserve system (Fed) started the QE experiment in November 2008, followed by other 'waves' (QE1- Nov.2008; QE2- Nov.2010; QE3- Dec.2012). The Bank of England joined this trend in March 2009. The European Central Bank (ECB) adopted the QE procedure since May 2009. Ever more central banks have embraced *unconventional monetary policies*, which in fact is a syntagm meant to blur the image of a grand failure of the neoliberal policies and neoclassical theory, reflecting and, at the same time, determining the deepening rupture between nominal and real facets of the socio-economic organism.

If 'normal' open-market operations represented an instrument to monitor money supply, when interest rates are too low (tending to the zero lower bound or even becoming negative), then the risk of a 'liquidity trap' is almost imminent. Consequently, the main component of the monetary policies has changed from an interest rate policy to the so-called *quantitative easing* which already passed through different phases: from tremendously amplifying buying & selling government bonds, *central banks begin to purchase other securities, such as corporate bonds and, recently, shares of stocks in the open market!* This is a serious blow both to the much proclaimed 'independence' of a central bank (let us remember the feverish campaign of the 1990s) and to the core of the neoclassical/neoliberal theories (Table 1 – BIS, Working Paper no. 570/2016).

Therefore quantitative easing has more 'qualitative' elements which send intense signs regarding the necessity of a *profound restructuring* of the economies presently dominated by transnational financial capital, *requiring a new paradigm* for economic theory. The grave rift between nominal/monetary and real economy has ever more blocked the normal flows between the vital centres of the functional & pragmatic triad (of the socio-economic organism) having a dangerous impact on the theoretical & methodological triad, both being determinant for any socio-economic activity of human society (L. C. Ionescu, "*Positive and normative approaches in the evolution of economic theory*", in *Journal of Euro and Competitiveness*, no. 3(7)/2016). Initially, about a decade ago, unconventional monetary policies (UMP) were regarded as measures of *force majeure*. In the meantime, it is obvious they tend to become a rather permanent component of monetary policy system, raising intricate questions on the role of central banks in developed market economies: (i) are these policies compatible with the much proclaimed principles of 'free market' functioning? (ii) do not central banks get too many 'emergency powers' over market economies and, ultimately, over society as a whole?

Table 1

A taxonomy of monetary policy implementation measures

Policy	Description	Examples
Interest rate policy	Setting the policy rate and influencing expectations about its future path	
Forward guidance on interest rates	Communication about the future policy rate path	The central bank "expects the key [...] interest rates to remain at present or lower levels for an extended period" ²
Negative interest rates	Setting the policy rate below zero	Negative deposit interest rate at the ECB and at the BOJ ^{4,5}
Balance sheet policies	Adjusting the size/composition of the central bank balance sheet and influencing expectations about its future path to influence financial conditions beyond the policy rate	
Exchange rate policy	Interventions in the foreign exchange market	
Quasi-debt management policy	Operations that target the market for public sector debt	Purchases of government debt
Credit policy	Operations that target private debt and securities markets (including banks)	Modifying the discount window facility Adjusting the maturity/collateral/counterparties for central bank operations Commercial paper, ABS and corporate bond funding/purchase
Bank reserves policy	Operations that target bank reserves	The central bank conducts "money market operations so that the monetary base will increase at an annual pace of about 60-70 trillion yen" ¹
Forward guidance on the balance sheet	Communication about the future balance sheet path (composition/size)	"The [BOJ] will purchase JGBs so that their amount outstanding will increase at an annual pace of about 50 trillion yen... as long as it is necessary for maintaining [the 2% price stability] target in a stable manner" ³

¹ Bank of Japan, 4 April 2013, http://www.boj.or.jp/en/announcements/release_2013/k130404a.pdf. ² ECB, 4 July 2013, <https://www.ecb.europa.eu/press/pressconf/2013/html/iss130704.en.html>. ³ Bank of Japan, *ibid.* ⁴ Starting on 5 June 2014, https://www.ecb.europa.eu/press/pr/date/2014/html/pr140605_3.en.html. ⁵ Starting on 29 January 2016, http://www.boj.or.jp/en/announcements/release_2016/k160129a.pdf.

2. The quite modest results obtained by UMP experiments (stagnation, deflationary trends, low level of investments, high unemployment) have begun to provoke disappointment and a critical attitude from specialists, but also from public opinion. Martin Feldstein – President Emeritus of the National Bureau of Economic Research (USA) – bluntly declared: "What is now clear... is that unconventional monetary policy and extremely low interest rates have also major financial risks that could hurt the European and US economies in the years ahead, (...) potentially setting the stage for another asset price collapse." (*"The Fed Unconventional Monetary Policy – Why danger lies ahead"*, in *Foreign Affairs*, May/June 2016 issue). By QE schemes, central banks in Northern

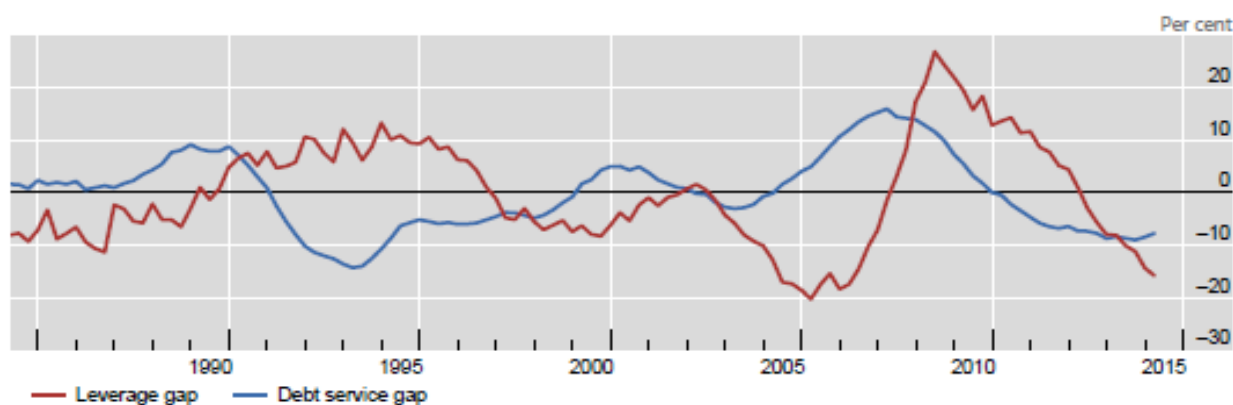
America and Western Europe have accumulated assets which are worth trillions of USD and/or EUR. Such a massive intervention in the financial market mechanism could have contradictory effects: in the short run, it may alleviate some painful post-crisis symptoms (acting as a sort of morphine), but in the long run, unless it is based on a profound restructuring of real economy, it would contribute to mispricing assets, including equities and mortgage-backed securities and real assets such as housing.

As M. Feldstein has underlined, “there is no doubt that unconventional monetary policy has increased the risk of such systemic instability. (...) Despite the close link between quantitative easing and financial instability, the Fed continues to downplay the connection. (...) In both Europe and the US ... macroprudential policy has done little to mitigate the growing risk of financial instability that unconventional monetary policy has caused.”(idem) Therefore, not only the ‘Great Recession/crisis’, but also its aftermath keep conforming H. P. Minsky’s theory and concept of *financial fragility* as inherent to a market economy, especially when dominated by financial capital, based on monopolistic and oligopolistic structures. Moreover, Minsky also draw the attention on the tandem *debt – deflation* (H.P. Minsky, “*Stabilizing an Unstable Economy*”, McGraw-Hill, 1986 (first edition), especially chapters 8 & 9) as a very dangerous circumstance for long stagnant economic environment. The overwhelming dimensions of debt – both public and private in 1990s & 2000s – obviously represented an important prerequisite for the present *malaise* in the world economy (L.C. Ionescu , “*The economy of Indebtedness*”, in *Journal of Financial and Monetary Economics*, no.1/2014, ISSN & ISSN L 2392 – 9685). For example, between mid-1980s and the eve of the financial crisis (2007/08), household debt rose from under 70% to almost 120% of the household income in the USA and from 90% to about 140% in the UK.

The huge size of debts constrained governments to adopt restrictive fiscal policies or austerity programmes aiming to reduce public budget deficits, while the private debt weakened

the investment incentive, postponed inter-firm payments and diminished inter-bank transactions (Graph 2 - BIS, WP no.569.

Figure 2 – Evolution of the leverage and debt service gaps



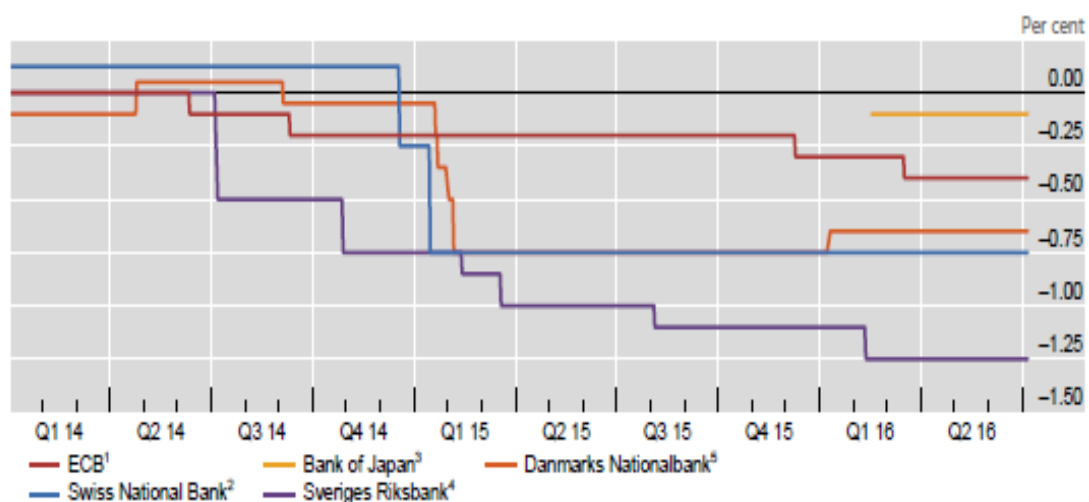
Source: Authors' calculations.

In this peculiar climate, only the central banks have seemed to be able to furnish the necessary liquidity to the economy (firms, banks, households). However, to use Mervyn King' phrasing, this has been ‘alchemy’ of monetary flows via money supply, which may be a temporary alleviation of real economy hardships, but in the long run cannot offer an effective solution for the multiple disequilibria accumulated world-wide.

Although he was the governor of the Bank of England for a decade (2003-2013), M. King has considered that “the fragility of our financial system stems directly from the fact that banks are the main source of money creation; ... most importantly of all, how we can end the alchemy of our present system of money and banking.”(M. King, “*The End of Alchemy – money, banking and the future of the global economy*”, Little, Brown / W.N. Norton, 2016, p.8). In this context, M. King has a justified radical vision: stagnation has again become “synonymous with capitalism”, so that is needed “an intellectual revolution”. In this way, he approaches the core of the present international turbulence: the origin of the 2007/09 crisis has represented a serious “failure of the conception that underpins current economic and financial policymaking”.(ibidem)

Starting from King's explanation, there can be identified one of the main contradictions of the present-day monetary policies: the level of reference interest rates is no longer able to stimulate demand and growth in the short run and it is too low to determine a proper balance between saving and spending or productive investment in the longer term (Graph 3 - BIS, WP no. 570).

Figure 3 – Central bank deposit rates sink into negative territory



¹ Rate on the ECB deposit facility. ² Interest rate charged by the Swiss National Bank on sight deposits. ³ Interest rate on the third tier of excess reserves held at the Bank of Japan. ⁴ Rate of interest banks receive when they deposit funds at the Riksbank. ⁵ Rate on one-week certificates of deposit.

Sources: Bloomberg; Datastream.

In such circumstances, there persists a structural disequilibrium between saving and investment which ignites a misallocation of capital to speculative purposes. Consequently, the burst of the 2007/09 crisis “was not the fault of particular individuals or policies. Rather, it was our collective failure to manage the relationship between finance – the structure of money and banking – and a capitalist system.” (M. King, *The End of Alchemy – money, banking and the future of the global economy*, Little, Brown / W.N. Norton, 2016, p.16).

An edifying example of the misleading nature of the neoliberal deregulation offensive during the 1980s – 1990s consists in the striking difference between its pretended objective and the effective consequences of that campaign: the ‘Big Bang’ of 1986 in UK and the Bleach-Gramm-Bliley Act of 1999 in USA (eliminating the reminiscence of the Glass-Steagall Banking Act of 1933), to mention only the most important legislative changes. Presented by the neoliberal propaganda as efficient measures to enhance competition in the financial sector, in time, it has become obvious that the ‘deregulation and liberalization’ process mainly led to a new gigantic wave of mergers and acquisitions, including takeovers of stockbroking firms and mergers between commercial banks and securities companies. The assets of the big international banks doubled in early 2000s. At the same time, the rapid extension of the interbank trade with ever more sophisticated financial products (mainly complicated ‘derivatives’) determined a higher interdependence among the actors of the financial markets, thus dangerously increasing and internationally spreading a wide range of risks in most financial markets.

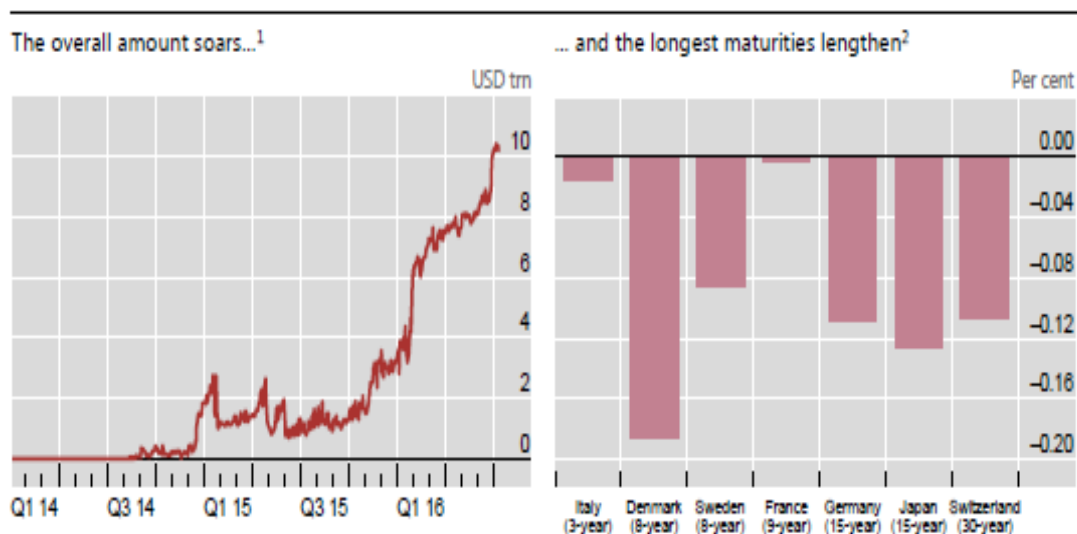
Moreover, after the ‘liberalization’ and ‘deregulation’, many important banks relied less and less on their own resources, preferring more and more borrowing. Leverage has increased dramatically: “With a leverage ratio of even 25%, it would take a fall of only 4% in the average value of bank’s assets to wipe out the whole of the shareholders’ equity and leave it unable to service its debts.” (M. King, *The End of Alchemy – money, banking and the future of the global economy*, Little, Brown / W.N. Norton, 2016, p.24). There lies a major cause for the resounding failure of the much debated and proclaimed ‘Basel II’ accord. Its ‘final’ form was released in mid-2004 and had to be gradually implemented until 2008. But as a historic irony, the provisions of the Basel II did not prevent “the Great Recession/Crisis”; on the contrary, its procyclical nature even worsened the impact of the financial turbulences.

Trying ‘to learn from the bitter lessons’ of the crisis, the Basel Committee on Banking and Regulation published a first form of a ‘Basel III’ accord in the fall of 2010: “...The Basel III accord is the most recent revision to international capital standards for banks. ...The main focus of the changes in Basel III is to increase banks’ equity capital requirements. This emphasis is a reflection of the conclusions drawn from the crisis; that bank fragility is more prevalent than previously thought and the motivation for governments to assist banks in poor financial condition is very strong during a crisis.”(*The Basel Committee’s response to the financial crisis: report to the G 20, Bank for International Settlements, October 2010 and “Economic Brief”, June 2011*) As the Basel II provisions represented ‘too little and too late’ to have a meaningful importance, it is also doubtful that a Basel III accord would really contribute to solving an extremely intricate situation facing the international banking system: the historical replacement of the *intermediation of loanable funds*, specific to the ‘traditional’ bank functioning, by the *financing through money creation*, more and more characteristic for the present-day banking system, when “there are no loanable funds of real resources that bankers can collect and then lend out.”(*M. Kumhof and Z. Jakab, “The Truth about Banks”, in Finance and Development, March 2016, p. 51*) (Graph 4 - BIS, WP no. 570).

For a better understanding and to illustrate the facts and opinions previously presented and analysed, there follows a concise ‘case study’ based on the *minutes of the Monetary Policy Committee* of the Bank of England (Mark Carney – Governor). We have considered that the relevance of the decisions taken, in August 2016, has been enhanced by the fact it was a meeting that took place *after* the UK vote to leave the European Union, therefore mixing the trends in the EU with those in the USA: “The Bank of England’s Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. At its meeting ending 3 August 2016, the MPC voted for a package of measures designated to provide additional support to growth and to achieve a sustainable return of inflation to the target.”(*Bank of England, Inflation Report, August 2016, p.i.*)

The ‘package of measures’ consists of: (a) 25 basis point cut in the Bank Rate (from 0.5% to 0.25%); (b) another Term Funding Scheme (TFS) to strengthen the pass-through of the cut in Bank Rate; (c) the purchase of up to GBP 10 billion of UK corporate bonds; (d) an expansion of the asset purchase scheme for UK government bonds of GBP 60 billion, raising the total stock of these asset purchases to GBP 465 billion (!). The fact that *central banking* has entered a ‘new era’ of monetary policy is underlined – inter alia – by the way the last three decisions would be financed: through the *issuance of central bank reserves*. This procedure would have been almost inconceivable a few decades ago.

Figure 4 – Government bonds trade at negative yields



¹ Analysis based on the constituents of the Bank of America Merrill Lynch World Sovereign index as of February 2016. ² Yield per maturity, Bloomberg generic yields, prevailing on 6 July 2016.

Sources: Bank of America Merrill Lynch; Bloomberg; BIS calculations.

As regards the first mentioned measure, a 0.25 percentage point reduction of the reference central bank rate is highly improbable to have an effective impact on real economy. Its main meaning seems to be an 'orientation signal' for monetary and financial markets, announcing the central bank intention to continue its efforts for counteracting deflationary tendencies. In fact, in the minutes of the MPC was evoked the possibility of another cut of 0.1% until the end of the year. It seems to be more a game of 'esoteric' financial terminology than a pragmatic approach of the problems confronting real economy. MPC itself recognizes this confusing situation. 'Normally' the cut in the Bank Rate should lower borrowing costs for businesses and households: "However, as interest rates are close to zero, it is likely to be difficult for... banks and building societies to reduce deposit rates much further, which in turn might limit their ability to cut lending terms..."(idem)

Being aware of this obvious risk, the MPC has launched a TFS (see above), providing funds for banks at rates rather similar to the Bank Rate (0.25%). That would be an attempt to transform QE in *credit easing* for the benefit of firms and, potentially, households. This would be an *indirect* way to stimulate *real economy*. Unfortunately but explicably, quasi-similar initiatives of monetary policy taken after 2009 did not have the anticipated beneficial effects either in the USA or in EU economies, except for a slight alleviation of the crisis impact.

In our view, it is ever more obvious that only a *direct* approach of the real economy problems could have palpable results. Some minor steps have been made: from indexed long-term repo actions, funding for banks and purchase of government bonds to the purchase of corporate bonds, hoping that the money received would be invested in other corporate assets. Nevertheless, real economy and households are not yet benefitting from these QE schemes. For example, small and medium sized enterprises (SMEs) seem to be neglected, despite their 'natural' propensity to productive investment. Another serious brake for the efficiency of the QE programmes is the continuous deepening of social inequality. Helping the rich to become richer cannot contribute to solve the grave social and economic problems, but will amplify speculative capital movements – nationally, internationally, globally.

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CHALLENGES IN IMPLEMENTATION OF UNCONVENTIONAL MONETARY POLICY INSTRUMENTS IN POST CRISIS ENVIRONMENT

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Abstract:

Global financial crisis has led central banks to rethink their monetary policy framework. Nowadays is discussed the possibility of adding unconventional measures to the traditional toolkit of monetary policy. However the main objections rest on still unsolved practical problems which brings the implementation of these measures under normal conditions. And, mainly, they should be integrated into the overall framework of the monetary policy and coordinated with over measures.

The aim of the paper is to set out new approaches to study the challenges implied by the implementation of unconventional monetary policy measures, their inter-relations with traditional tools and their effects on attainment of the strategic goals of monetary policy, in the post crisis environment.

Key words: unconventional instruments, monetary policy, quantitative easing, credit easing.

JEL classification codes: E52, E58, E61

1. Introduction

During the global financial crisis, many central banks both, in developed and developing countries had moved to non-standard measures of monetary policy, due to the following reasons: first, in many developed countries, central banks had exhausted the possibilities of the "standard" tools to stimulate the economy after key interest rates were reduced to almost zero; secondly, appeared the need to address the issues of financial instability, and central banks had taken various measures to address the problems related to the functioning of financial markets.

The global financial crisis has affected to varying degrees the developed and developing countries, which in turn determined the nature of the problems faced by central banks of these groups of countries, as well as the scale of the implementation of non-standard measures of monetary policy. Countries with emerging markets have been forced to deal with problems associated with high inflation and capital flight, which did not allow to carry out a large-scale reduction of interest rates to stimulate the economy in most countries. At the same time, even after the reduction of inflationary pressures, developing countries have not been able to lower interest rates to levels close to zero (in developed countries) due to the higher level of risk inherited in the national assets.

Thus, in developing countries were applied measures of large-scale redemption of assets (quantitative and direct credit mitigation). Countries with emerging markets relied heavily on the indirect credit mitigation measures: central banks have expanded list of counterparties and assets that can participate in transactions with them, provide liquidity to commercial banks for longer than the pre-crisis practice time.

In case of emerging markets, implementation of unconventional monetary policy measures arises a series of issues, related to its correlation with traditional toolkit, and coordination with other macroeconomic policies.

In order to explore the exposed problem, the study was structured as follows: in second section was made a short introduction in theoretical framework of unconventional monetary policy instruments, in third section were explored the main challenges faced by EMEs in implementation of unconventional monetary policy and in the fourth part were provided some recommendations for sustainable implementation of non-standard framework.

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2. Classification of unconventional monetary policy measures used by central banks during the global crisis

The literature provides several classifications of unconventional measures of monetary policy or of policy of balance sheet accounts.

1. Unconventional measures of monetary policy include those measures that increase the size of the balance sheet accounts of business entities, and those that change the structure of their balance sheets. (Bernanke et al. 2004)
2. Alternative measures are divided into: a) measures of quantitative easing, which usually refers to the purchases of long-term securities performed by the Central Bank; b) credit easing measures (Bernanke 2009; Lenza et al. 2010)
3. Alternative measures can be divided into the measures used to maintain financial stability or for macroeconomic stabilization.

But the terms used in these classifications are interpreted by the authors in different ways. Thus, the terms of "quantitative easing" (ie, the purchase of bonds) can be used in the financial analysis to investigate the consequences of liquidity allocation in the secondary market, but can be used also for macroeconomic analysis in context of consequent reduction of long-term interest rates.

Similarly, the term "credit easing" may be used for measures to support financial stability (eg, liquidity allocation for important secondary credit markets) and for direct aid to the borrowers (eg, Central Bank loans for corporations).

4. Types of unconventional measures can be classified according to how relevant transactions are recorded in the balance sheet of the Central Bank;
5. Some experts analyze unconventional measures DCT in terms of the markets in which they are implemented: a) measures of the exchange rate policy; b) policies related to the management of sovereign debt; c) the credit policies; d) measures of bank reserves policy.

3. Challenges faced by EMEs in implementation of unconventional monetary policy

Analysis of non-standard measures undertaken in developing countries during the global crisis is compromised by the fact that in times of crisis, some of the Central Bank only began the transition to the full establishment of a well-functioning framework of monetary policy.

The widespread view at the beginning of the global financial crisis was that the emerging markets should not be affected at large scale. However, after the collapse of investment bank Lehman Brothers, many developing countries have also been affected to varying degrees and consequences.

There are several key features of the implementation of non-standard monetary policy measures in developing countries compared to developed. The central banks of countries with emerging markets relied heavily on credit for mitigation measures, extending the list of assets that can be used in transactions with the central bank, as well as increasing the number of central bank counterparties. Also, central banks in developing countries have increased the maturity of the offered liquidity for commercial banks. Key interest rates in developing countries, remained high compared with developed countries, and did not approach the zero level.

According to the calculations carried out in Ishi et al (2009), for 40 developing countries, the average level of key interest rate was about 6%. Opportunities for developing countries to reduce interest rates were limited by the need to pertain inflation. In addition, relatively high interest rates in EMEs were determined by higher risks inherited in their assets. Therefore, reduction of interest rates did not occur, due to the threat of capital flight from emerging markets.

The higher level of risk of assets from developing countries did not allow central banks to undertake large scale measures for quantitative or credit easing instruments, as the additional liquidity could intensify capital outflows from emerging markets. Therefore, the application of measures of quantitative easing was an exception for countries with emerging markets: Only the

Bank of Israel carried out the redemption of long-term government bonds in 2009 from March to August.

It is also one of the motives for which the central banks in developing countries did not redeem assets, due to the risk of losing the confidence in the central bank's policy. Large-scale purchases of government securities by the central bank would be regarded as a loss of their independence and could cause an increase in inflation expectations.

The reduction of interest rates did not happen immediately after the collapse of Lehman Brothers, but only a few months later. It should be noted that for some countries (eg, S. Korea) was an important moment the reciprocal agreement for currency swap with USA which provided a dollar liquidity swap lines. Another feature of the monetary policy in developing countries was the declining rate of reserve requirements in order to increase the amount of liquidity available for commercial bank usage.

Thus, central banks in many developing countries were faced with the need to select the orientation of the monetary policy. On the one hand, the global financial crisis had a significant impact on the prices of assets in developing countries, causing their decline. In addition, there was a depreciation of the national currency and an increase in inflation. Lower interest rates would lead only to further exacerbation of these problems. On the other hand, a decline in economic growth, could serve as an argument for monetary policy easing. At the same time, in developed countries interest rates were declining, increasing spreads between the rates in developed and developing countries.

As a result, countries with emerging markets shifted to lower interest rates at different times, in dependence by how successful was the fight against inflation. For example, Asian countries were able to achieve a faster decrease in the growth rate of the general price level. In other states, such as Latin America, Russia and Indonesia, for a long time, the rate of inflation could not be reduced. Thus, we can conclude that during the acute phase of the global financial crisis in developing countries was more feared the rising inflation expectations, which increased challenges in the financial markets and, as a consequence, the further depreciation of the national currency, which could lead to softening of the monetary policy. Central Bank of this group of countries chose to abandon the lower interest rates. At the same time, to support the financial sector and economic activity, alternative instruments have been used. To the traditional toolkit, lower interest rates, the central banks moved later, first in Asia and then in Latin America and other emerging markets.

Central banks in some developing countries, in response to the worsening of the financial crisis, eased requirements for assets that can be used as collateral during liquidity provision operations. These countries include, in particular, Chile, the Philippines, South Korea and Russia. In addition, many central banks had increased the maturity of liquidity to commercial banks.

In Argentina and the Czech Republic, for participation in repo transactions with the central bank were allowed the guaranteed loans. In Korea in the list of assets that can be used by commercial banks to carry out operations with the central bank, had been included liabilities of commercial banks and bonds of some government agencies. Chile's central bank had started to accept term deposits as collateral for repo transactions. At the same time, the longest maturity for liquidity provided to commercial banks, was extended from 1 day to 180 days.

In many emerging markets, also were changed the parameters for credit instruments of constant action. For example, in Brazil as assets allowed for repo transactions with fixed terms, were accepting credit requirements. The Bank of Mexico after the beginning of the acute phase of the global financial crisis had created a new tool for providing liquidity to commercial banks under the expanded list of assets at a discounted rate.

It should also be noted that in some developing countries, there were no serious problems in the money market, so the central banks did not apply to the corresponding non-standard measures. These countries were Colombia, Malaysia, South Africa and Thailand.

Currently, in many emerging markets many non-standard measures, used during the crisis, are not used any more. However, recently, the central banks of some countries have moved to the implementation of measures of quantitative easing, directed toward stimulation of bank lending. Thus, have become widespread a variety of instruments directed to support lending for small and medium-sized enterprises. In addition, it is worth noting that a variety of programs for supporting

lending to small and medium-sized businesses in some emerging markets were undertaken since the beginning of the 1990s. In fact, these mechanisms that are the part of the operational mechanism of the central bank, meet the definition given by the IMF measures to mitigate the indirect credit easing.

4. Recommendations for implementation of non-standard measures in EMEs

During the global financial crisis, the Central Banks from developed and developing countries gained a great experience in implementation of non-traditional measures of monetary policy, which allowed them to identify the most successful approaches to the realization of non-standard measures and to develop criteria for assessing the most appropriate actions of the central bank during a shock period. Below we provided some recommendations for central banks to ensure an appropriate application of non-standard measures in EMEs.

1. Objectives of unconventional monetary policy measures taken to ensure transparency and accountability of the Central Bank

- Objectives and content of the non-standard measures DCT should be clearly announced and should be related to the objectives of the Central Bank.
- The Central Bank should provide full information on the functioning of the transmission mechanism of the implementation of non-standard measures, as well as specify the risks associated with this policy.
- The Central Bank should announce the operational details of the implementation of non-standard measures of monetary policy, including the terms, conditions and results of the auctions to provide liquidity.
- The Central Bank should report on progress in achieving the objectives for non-standard measures of monetary policy.

2 The coordination of monetary, fiscal policies and financial sector regulation

- Non-traditional monetary policy should be directed towards maintaining financial stability and must be accompanied by measures in the field of financial regulation and supervision, all directed to annihilate the crisis situation.
- Policy of the central bank to change the balance sheet accounts must be clearly separated from fiscal policy.

3 The development of the appropriate framework for unconventional monetary policy measures

- The central bank should have sufficient operational flexibility for implementation of non-standard measures.
- Non-standard measures of monetary policy should be designed in such a way as to minimize disturbance of the functioning of the economy, in particular, the threat of unfair behavior and inefficient resource allocation.
- The strategy of implementation of non-standard measures of monetary policy should be designed in advance and will be announced at the beginning of their implementation.

4 Appropriate control of the risk assumed by the central bank in the process of implementation of non-standard measures of monetary policy

- For each type of operations designed to provide liquidity should be developed the customized tools for risk management (list of assets accepted as collateral, pricing mechanism)
- Private debt securities may be used in operations with the central bank (involving direct or reverse transactions) only under the condition that they have a fairly high investment rating.
- The central bank should have sufficient financial strength and the degree of the risk assumed by the central bank should be discussed with the government (including the need to develop a plan to make resources available to the central bank, if a situation arises in which they will need it.

- The central bank should announce measures to support its financial stability, which can be taken in the event of a loss from the implementation of the quantitative or credit easing.

Conclusions

In order to overcome the consequences of the global financial crisis, many of the Central Bank was forced to look for new tools of monetary policy, which the regime would depend on the socio-economic potential of the country and would be consistent with the level of development of its financial market.

In order to maintain macroeconomic stability in the conditions of financial crisis, many central banks have turned to unconventional measures of monetary policy. These measures include a variety of purchases of bonds (public and private), large-scale foreign exchange intervention and direct lending to the private sector of the Central Bank. The addition of unconventional measures to traditional toolkit should be associated with the identification of problems related to when and how to implement them better. They should be integrated into the overall framework considering the potential failures and cost which they could generate.

In this study we supported the view that non-traditional measures of monetary policy should be used only in special circumstances, in order to restore macroeconomic and/or financial stability when other tools are not effective. It should be a clear distinction between fiscal, monetary and financial policies to avoid excessive pressure put by the government on the Central Bank.

Accumulating on the accounts and deposits of government funds and making private sector dependent on government support, the Central Bank shall take over the often excessive financial risks. Thus, on the one hand, it may lose some of its independence (financial and operational), on the other - to be in the center of a number of potentially serious conflicts of interest (for example, between taxpayers and the owners of financial institutions).

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INTERNATIONAL ECONOMICS AND FINANCE

THE MONEY LAUNDERING PHENOMENON IN THE CONTEXT OF ECONOMIC CRISIS

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Abstract:

The following paper represents a analytical article, that aims to describe the impact that the economic crisis has on the money laundering phenomenon. The procedures and behavior of different participant of banking and financial market. We describe the methods, tools and costs that are used to legalize dirty money from illegal activities, emphasizing the importance of cooperation between supervision authorities and law enforcement structures that are in charge with prevention and combating the money laundering activities in a jurisdiction. The main issue is to analyze the influence that the economic crisis has on the financial infrastructure and to use the right method to assess this influence and to create the necessary tools to reduce the negative side of this phenomenon.

Key words: Transactions, banking system, financial infrastructure, supervision, legalization.

JEL classification codes: G01, G28, K42, L51.

Introduction

Money laundering is a very vast, complex and large topic, which requires a flexible and well thought understanding of the financial and nonfinancial mechanisms of the world economy, trans-border relations and international financial system. The global economic crisis has highlighted many problems and weaknesses of the modern world, from this point of view the money laundering phenomenon is not an exception. The present paper will only deal with the relationship between money laundering and the economic crisis, for functional and informational reasons.

The channels for money laundering in the modern world function as joint elements where money can flow from one area to all the rest. That's why only a global approach to anti-money laundering, can be effective in order to understand the link between financial crimes and economic crises.

•Money laundering is a criminal offence aimed at presenting wealth of illicit origin or the portion of wealth that has been illegally acquired or concealed from the purview of authorities, as legitimate, through the use of methods that cover the identity of the ultimate beneficiary and the source of the ill-gotten profits (Van der Does de Willebois, E, 2011).

Keep in mind that money laundering is a criminal offence that effects usually are harmful for the functioning of a state and damaging the socio-economic structure, both domestically and globally. The process of laundering money may occur in a variety of ways, such as with the tenuous exploitation of a complex list of webs, secrecy jurisdictions and/or tax havens, the manipulation of the concept of legal persons and legal arrangements to shell companies that can operate as covers for corrupt individuals.

The crisis focused our attention on weak implementation of supervision rules, the corruption of authorities, all combined with the consumer behavior of numerous established financial institutions and market insiders in developed economies as in the European Union or U.S.A. has lead in some degree to the devastating effect of the economic crisis.

The description of the problem and critical state-of-the-art

The money laundering phenomenon is extremely important for the adequate operation of nearly every form of international, national or small criminal organizations or semi-legal entities.

After the economic crisis the anti-money-laundering procedures, which are designed to prevent or limit the ability of criminals to use their illegal earnings, must become a demanding and useful element of anti-money laundering plans as a result of high demand for money laundering services.

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Money laundering actions has potentially destructive economic, financial, security, and social weight. It provides the channels for criminals, human traffickers, illegal arms and drug dealers, corrupt public and business officials, and others to manage and enlarge their illegal organizations.

The economic crisis has brought with it, the need to introduce and apply new regulations and measures to protect financial systems, taking into consideration the fact that crime has become more and more global in nature, and the financial aspects of crime after the crisis have become more complex due to enormous demand for liquidity, easy profits and huge financial possibilities of criminal organizations as potential customers for financial institutions. The fast advances in technology and the globalization of the financial services industry offers the opportunity to create new models of covering illicit assets. Modern financial systems, in addition to facilitating legal commerce, also allow criminals to order the transfer of millions of dollars instantly using personal computers and satellite dishes.

Because money laundering techniques are largely based on existing international financial infrastructure and transactions, the organization and execution of money laundering methods are limited only by human fantasy. Money can be laundered through banks, currency exchange offices, brokerage firms, gold and silver dealers, casinos, car dealerships, insurance companies, and trading companies.

A result and a trend of the crisis is also the massive concentration of dirty money in private banking facilities, offshore jurisdictions, shell companies, free trade zones, wire systems, and trade financing that can cover criminal activities. Using these organizations, criminals are using financial tools and economic infrastructure in many countries. Without a proper supervision, regulation and cooperation between authorities, the money laundering as a phenomenon can dissolve the structure and strength of a country's financial institutions. As a result of high consolidation of capital markets, money laundering can also negatively influence currencies and interest rates.

Basically, the movement of laundered assets into international financial arena, can erode national economies and currencies. From this perspective the phenomenon of money laundering is not only a supervision or legal problem, it brings a serious local and global security issue as well.

This aspect is a not only an issue for the world's major financial conglomerates and offshore zones, but also a big dilemma for emerging countries. Undoubtedly, any country integrated into the worldwide financial infrastructure is at threat. As emerging countries open their economies and financial sectors, they become more and more possible destination for financial crimes procedures.

Methodology and data

The procedures of money laundering commonly engage a list of different action used to camouflage the origin of financial flows so that those assets, money or other kind of funds may be manage without disclosing the launders, who are looking to use them. These operations generally fall into 3 steps:

1. **Placement** - the action of placing illegal income or assets into financial organizations through deposits, stock brokers, wire transfers, or other channels.
2. **Layering** - the measures of splitting the revenue from criminal activities from their real origin through the use of layers of complex financial operations.
3. **Integration** - the process of adopting an apparently legitimate transaction to camouflage criminal and illegal profits. Through these stages, money launderers are trying to transform their criminal money or assets derived from illicit activities, into funds with an apparently legal nature.

Undoubtedly, one of the most severe economic influence of money laundering is felt in the private sector. Money launderers and criminals usually use fasade companies, which intermix the criminal nature funds with legitimate funds, to camouflage the ill-gotten profits. In U.S.A, for example, organized crime and a international bank, has used offshore jurisdictions to mask activities from drug trafficking (Corji J, 2015).

These semi-legal entities have large access to considerable criminal money, allowing them to finance fasade company products and services at high levels above the benchmark of other legal companies. In some cases, fasade companies are able to offer products at better prices, compared to other manufacturers. For these reasons, fasade companies have a unique leverage of

convenience over legal organizations that get investments from financial or capital markets. This makes it challenging, if not impossible, for legal business to fight against facade companies with sufficient funding, a scenario that can result in the elimination and rejection of private sector business by facade organizations or semi-legal companies, which is definitely a post crisis effect.

Apparently, the administration perception of these dirty organizations are not loyal with the classic and common open market ethics of legal business, which results in present and future unfavorable macroeconomic effects. Business and financial organizations that depend on the benefits of crime have further confrontations in appropriately controlling their assets, liabilities, and transactions. For instance, considerable amounts of laundered money may appear at a financial institution, but then disappear quickly, without no reason, through wire transfers as a result of non-market circumstance, such as new regulation or law enforcement measures. This situation can bring to liquidity issues and destabilization of banks. Certainly, illegal and criminal actions has been identified with a series of bank collapse around the world.

Furthermore, we can see how the moral hazard brought to frauds, money laundering, and bribery scandal at HSBC (Brinded, 2015) and the 2016 discredit of Deutsche bank as a risky equity scheme carried out by a trader at a subsidiary unit — had significant criminal or fraud components (2016). The former managing director of the International Monetary Fund, has estimated that the degree of money laundering is between 2 and 5 percent of world gross domestic product, or at least \$600,000 million (Camdessus, 2015).

In some emerging market countries, these illicit proceeds may undersize government potential, resulting in a loss of control of economic situation by governments. It is true that in some particular cases, the absolute significance of the acquired assets base of laundered profits, can be used to squeeze markets or even small economies.

Money laundering can also negative affect currencies and interest rates as launderers reinvest money where their methods are less likely to be identify, comparatively than where rates of return are bigger. A significant number of studies show that the crisis has highlighted the fact that money laundering can expand the menace of monetary instability as a result of the misallocation of capital from unnatural distortions in asset and goods prices.

The short term effects of money laundering and other financial crime may result in inexplicable changes in money demand and increased volatility of international capital flows, interest, and exchange rates. The unpredictable nature of money laundering, coupled with the attendant loss of supervision control, may do sound economic framework difficult to achieve.

Rather of preserving their profits money launderers are not interested in profit generation from their investments. However, they are trying to invest their funds in tools, that are not obligatory economically beneficial to the territory, where the money landed. Moreover, to the extent that money laundering and financial crime redirect funds from sound investments to low-quality investments that cover their profits, economic growth can suffer. In some states, for instance, entire sectors, such as construction and real estate, have been financed not because of actual demand, but because of the short or middle term interests of money launderers. When these sectors are no longer interesting for the money launderers and their organizations, they are leaving them, creating a distortion of these industries and big damage to countries that could not stop these damages.

At some level the money laundering cuts the government tax payments and as a result indirectly damaging the rest of tax payers. It also makes government tax collection more problematic. This lack of tax payments usually generates the increasing in tax rates than would normally will work if the untaxed profits of crime were legal in nature.

Money laundering is damaging the work of many countries to introduce reforms into their economies using the privatization processes. Criminal organizations have the financial resources to fight the legal purchasers for old state-owned enterprises. Moreover, while privatization programs are often economically profitable, they can also serve as a tools or assets to launder funds. In the past decades, criminals have been able to buy industrial entities, hotels, energetic companies, insurance companies or banks to hide their illegal profits and to continue their criminal activities (Mauro S. 2013).

Many countries are working hard to maintain their reputations and financial institutions away from being associated with money laundering, especially in today's international economy. The belief in markets and in their central role of profits is compromised by money laundering scandals and financial crimes such as the laundering of dirty money, trans-border financial fraud, insider trading of securities, and theft. The negative and dirty character that results from these actions and behavior diminishes international legal opportunities and sustainable growth, while attracting international criminal organizations with undesirable reputations and short-term goals. As a result, the development and economic growth is damaged. More than that, if a country's financial prestige is hurt, repairing it, is very complicated and it needs enormous government abilities to solve an issue, that could be prevented with proper anti-money-laundering programs, controls, frameworks and proper supervision and law enforcement

Results

It is not a secret that there are important public losses and risks affiliated with money laundering. Money laundering has a central role in legalization process of dirty profits and crime actions all around the globe. It allows drug and human traffickers, corrupt officials, and other criminals to enlarge their influence and transactions. The result of this phenomenon is the permanent increase of government expenditure due to the need of development for law enforcement mechanisms and supervision to fight the large consequences that results. The economic crisis has stopped the overall development of the world economy, in this respect the financial institutions are damaged from many sides, including the absence of stable and permanent cash flows which are crucial for a normal function of this institutions. The lack of flows and liquidity and also the desire for good life, has determine many financial institutions to accept dirty funds or assets from criminals. On the long ride, this process brings to criminalization of financial systems, keeping in mind that the degree of money laundering is between 2 and 5 percent of world gross domestic product, or between \$600,000 million and 1.5 trillion.

Among its other negative socio-economic effects of the crisis, the money laundering phenomenon contribute to the switch of economic potential from the market, government, and citizens to criminals. On short ride, it brings the old perception that crime can't be punished. More than that, the absolute potential of the economic power that the criminals win from money laundering, has a corrupting result on all levels of society. In the worst cases, it can bring to the silent control of government and other central authorities.

Per general, the money laundering as a global and long term phenomenon presents the world community with a complex and dynamic challenge. One of the main results of the economic crisis is the fact that deficiency of legal profits in the world economy is extremely large, on the other hand, dirty money are concentrated and ready to be used. To survive many financial institutions agree to use this funds just to stay alive, this perspective is creating an aggressive behavior on the market from both sides (criminals and financial institutions).

It is obvious that international nature of money laundering requires global standards and international cooperation if we want to short the possibility of criminals to launder their profits. (Fabre, 2005).

Conclusions

For the last two decades the interdependence and interconnection between financial markets has achieved the highest level of integration. The globalization process brought to the international community a large range of problems and issues be they economic, social, military or political. From the economic point of view, the world economy has never been so volatile and unpredictable, especially if we are talking about different types of financial crimes. One of the principal trends of the modern world is the fast and aggressive development of the shadow economy. As a phenomenon, money laundering became the main bridge and the joint point between shadow and legal economy. Money launderer and criminal organization, has huge financial potential, as a result of their illegal activities, on the other hand, we see the large number of financial organizations, that are dealing with big financial issues as a result of money flow decreasing. Being in a complicated situation the financial institutions and business entities, are attracted to use ill-gotten dirty money. Indeed, the economic crisis that begin in 2007-2008, has a major influence on governments, largest market, international business and trade. Indirectly crisis periods are the best time for active

development of the shadow economy and organized crime. From this point of view money laundering is not an exception because it is a vast, complex and large topic, which requires a flexible and well thought understanding of the financial and nonfinancial mechanisms of the world economy. However, regardless it's complexity money laundering, can bring to the following effects:

- Disintegration of the legal private sector:
- Fragmenting the integrity of financial markets:
- Loss of economic policy control:
- Economic distortion and instability:
- Loss of revenue:
- Risks to privatization efforts:
- Reputation risk:

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CENTRAL BANK'S COMMUNICATION – A NEW REGIME INFLATION TARGETING CHALLENGE (THE CASE OF REPUBLIC OF MOLDOVA)

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PhD(c) Olga Hinev¹⁵

Abstract:

In this article, we try to examine the definitive aspects of a transparent frame and credible capable to ensure anchoring inflation expectation, case that actually most central banks with inflation targeting regime have gambled. Making reference to Republic of Moldova, we can mention that from the moment of obtaining independence, Republic of Moldova has faced with the problem of high inflation, the cause that got milder once the national banking system reoriented of the inflation targeting strategy. The implementation of inflation targeted strategy has imposed a lot of challenges in the perimeter of National Bank of Moldova communication politics, because the success of this strategy is caused by the anchoring inflation expectations and therefore the credibility of institution. Starting with the other central bank's experience, we come with the remedies for improving the communication of National Bank of Moldova in order to achieve the inflation target.

Key words: inflation targeted system, communication, monetary policy, inflation expectations,

JEL classification codes: E31, E52, E58.

Introduction

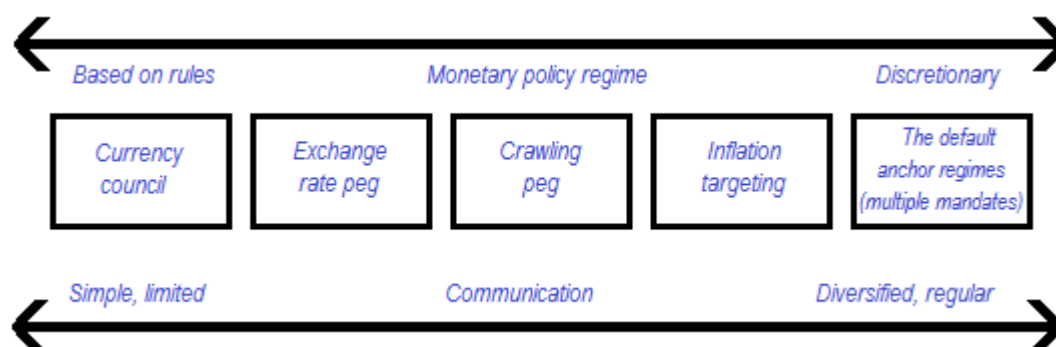
Central bank's communication principles have evolved during a long period of time from one limit to another. If during the period of 1920-1944, Montagu, Norman - the Bank of England governor said (Holmes, 2013 p.68) "Never explain, never apologize" then later, Issing – the Bundesbank and European Central Bank's economist (1990-2006) emphasize the essential and indispensable role of the central bank's transparency, saying (2005, p.66): "Today, there is a general consensus among central bankers for the fact that transparency if not only an obligation for public entity. But also a real benefit of the institutions and its policies". The theoretic literature related to monetary policy outfitted the need of monetary policy communication (Blinder, 1998, Woodford, 2001, Bernanke, 2004, Blinder, Ehrmann, Fratzscher, Hann and Jansen, 2008). Blinder (1998, pp.70-72) support the idea that: "A more informative enhanced openness could enhance the effectiveness of monetary policy... [Because] the expectations related to the future behavior of a central bank's provides a vital link between long-term and short-term rates. A more opened central bank ... provides market with the information about its views in the context of fundamental factors, which guides monetary policy ... thus creating a viscos circle. By predictability of its behavior, central bank contributes to the creation of more predictable market reaction in the context of monetary policy. This in turn causes more enhanced economy management". And, Woodford (2001,p. 12) insist on the fact that successful monetary policy conditionality is not reflected in the management of overnight interest rates, but the management of inflation expectations, focusing of the primary role of central bank's transparency to achieve the objective of monetary policy. Guided by those judgments, central banks around the world over the last 20 years have increased the effort for communication to the general public, reiterating its importance for guiding public expectations.

To note that, central bank's communication depends on monetary policy regime that seeks to achieve the fundamental objectives of the bank. From figure 1 we can see that effective workability of the inflation targeted system implies also a more complex communication, diversified and broad overlapping with providing simple concise and authentic explanations, so as to give the central banks credibility and predictability, as well as repetition of the sent messages to obtain a better understanding among the general public.

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Figure 1 - Central Bank Communications in terms of monetary policy



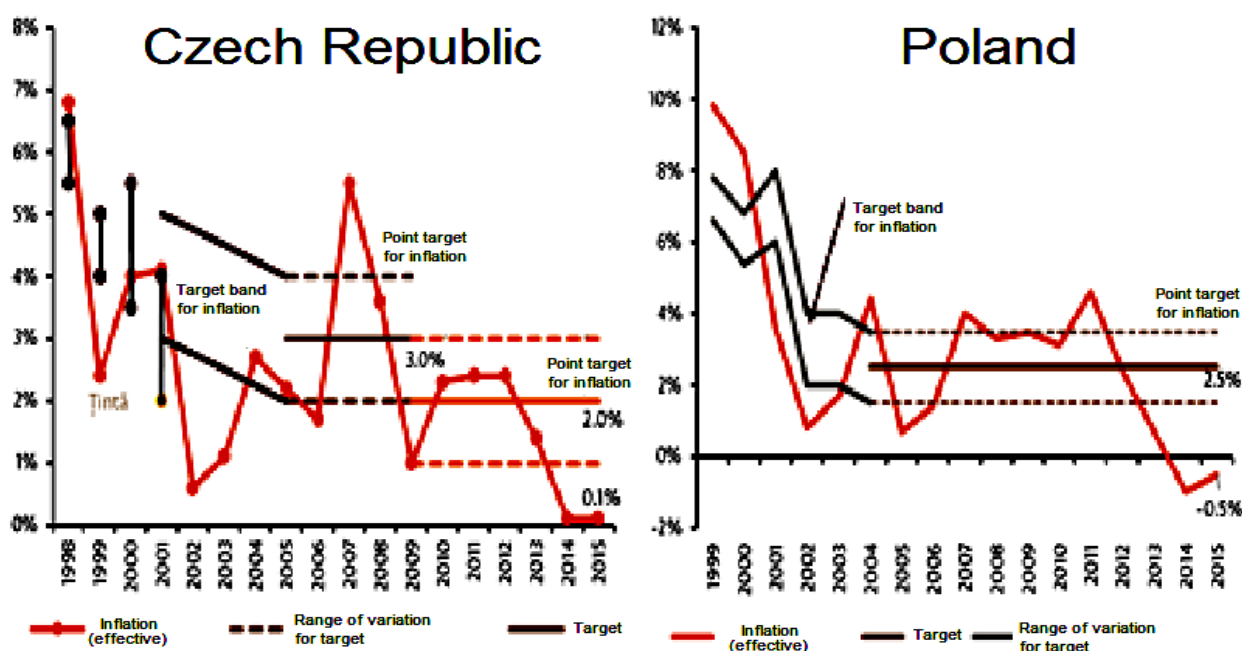
Source: made by the author based on Blinder A., Goodhart C., Hildebrand P., Lipton D., Wyplosz C. (2001). „How do central banks talk?”, *International Central for Monetary and Banking Studies, Geneva Reports on the World Economy*, 3, pp. 10-11

Compared to the strategy of targeting exchange rate and monetary aggregates, the inflation targeting strategy depending on internal circumstances permits monetary policy to react on internal shocks both external and internal, it enjoys of high independence, transparency and responsibility, those three pillars, gives the central bank's credibility and provides central bank with reputational gains while the channels and communicational tools used are exploited to its maximum.

Communication of Czech Republic and Poland's monetary policy towards the perspective of achieving inflation objectives.

In the 90's once with the rationale advantages of medium term price stability, central banks of Eastern and Central Europe have resorted to abandon various categories of exchange rate, monetary councils, intermediate targets for inflation targeting strategy, of which is the Czech Republic and Poland. In both cases, this strategy has marked flattering success form the very first years of implementation, fact confirmed by alleviation of inflationary and further positioning this close to the inflationary target (Figure 2).

Figure 2 - Czech Republic and Poland's Central Banks performance in achieving inflation objectives



Source: elaborated by the author based on central bank reports on inflation in Czech Republic and Poland.

Form the Figure 2, we can observe that the Central Bank of Czech since 1998 – the year the regime of inflation targeting strategy was implemented hasn't failed to effectively manage the inflation till 2015, and so annual inflation was positioned within the confidence interval of the inflationary target ten times. Polish Central Bank, with the implementation of the inflationary targeting strategy has managed to temper the inflationary process, thus the annual inflation rate has come to range around with a market horizon of only four times during 1999-2015.

However, in order to achieve its primary objective of maintaining price stability, the Central Bank of the Czech Republic and Poland have relied on the credibility and predictability, creating a transparent framework capable of providing an effective communication policy. In this order, in both cases Inflation Report - published quarterly, was the mainstay of communication with the public. The difference according to the country was marked by the fact that the Czech Central Bank has been publishing quantitative forecast of inflation from the first reports, and in case of Poland starting with 2004, until then the Central Bank included only consideration of the likelihood of meeting the inflation target.

To mention that, the NBP develops two reports (Monetary Policy Council obligation under art. 227 of the Constitution of the Republic of Poland), called Policy guidelines and report on the implementation of monetary policy. The first contains a characterization of internal and external factors that confronts monetary policy, short-term objectives of monetary policy and, respectively, the tools to be used to achieve these objectives. While the second contains a performance assessment in achieving the inflation target, a description of macroeconomic conditions and monetary policy tools used to ensure the fundamental objective. Those tools of communication contributes to a greater understanding of monetary decisions and reception by the general public of causal link between what was proposed and what was achieved by actions of the monetary authority to achieve its primary objective. And last but not least it contributes to increased central bank accountability for its actions, although BNP status is devoided of any provisions related to sanctions to be applied or justification for the deviation from the target, such as the Bank of England. Central Bank of Poland and the Czech Republic are transparent in dealing with macroeconomic forecasts (Table 1).

Table 1

Forecasted macroeconomic indicators, subject to publication

Indicators	Czech	Poland
Inflation (quantitative)	+	from 2004
Gross domestic product (quantitative)	+	+
Exchange rate (nominal)	2009-2013	-
Interest rate (quantitative)	3M PRIBOR	WIBOR
Labour market indicators (quantitative)	-	+
Macroeconomic forecasting model	-	+

Source: elaborated by the author based on central bank reports on inflation in Czech Republic and Poland.

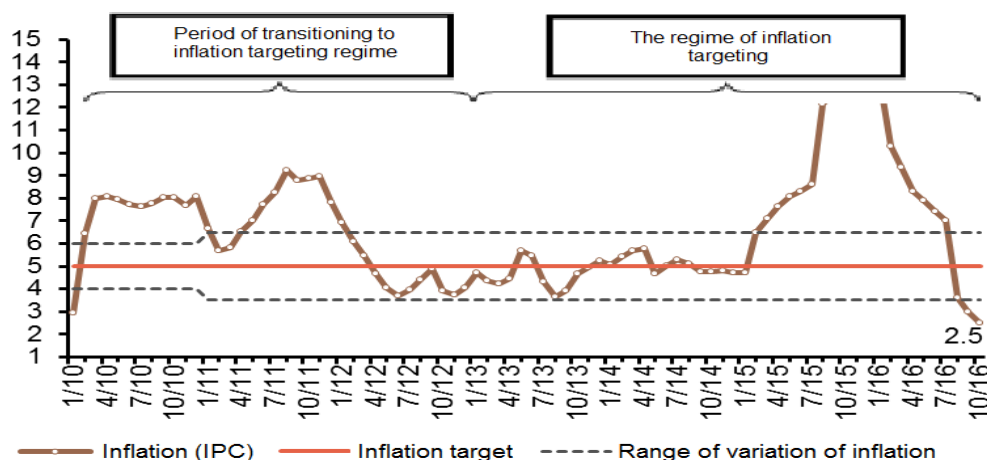
The monetary policy council meetings, personal choices of members, press releases and transcripts after every meetings, various educational projects, a number of publications, researches and case studies argued the understanding of the issues reflected in the monetary policy strategy of general public in both countries, thus contributing to improving the monetary policy transparency and anchoring inflation expectations respectively towards achieving the inflation target by analyzed central banks.

Inflation strategy management evaluation in Republic of Moldova under the monetary policy's transparency.

Referring to Republic of Moldova, we can find that the monetary policy authority's most important aim starting with 2006 is ensuring and maintaining price stability, at the same time, NBM is advocating for a healthy, stable financial system and economic policy support, without detriment to its fundamental objective. Transition to a inflation targeting strategy in 2016, have imposed a series of challenges in the action area of communication policy of the National Bank of Moldova, given the fact that before declaring the inflationary target system, NBM managed national inflation level

by targeting monetary aggregates regime, that do not involve complex, systematic and diversified communication depending on the tools applied and targeted groups.

Figure 3 - National Bank of Moldova's performance in achieving ionflation objective from the transition to inflation targeting regime.



Source: prepared by the author based on NBM monetary policy strategy and National Bureau of Statistics of Republic of Moldova statistical data.

During the transition to the inflation targeting system were created prerequisites for the implementation of the scheme itself, which also include placing the annual inflation rate in the corridor of variation target during 2012, continuing this trend until early 2015 as can be seen in figure 3, along with strengthening the independence of NBM, exchange rate flexibility, and last but not least – increase of NBM credibility from the public regarding the monetary policy transparency. In this context, under the realization process of tasks stipulated in the monetary policy strategy, as a result of reorientation to a inflation targeting regime, NBM has introduced new communicational tools, fact confirmed by the publication of Board meeting administration schedule (since august 2015 – Executive Committee) of NBM on monetary policy promotion, inflation report calendar publication (in 2010, Monetary Policy Report), alike the monetary policy operations balance. In order to ensure decision making process more transparent, NBM public after each meeting press releases about the monetary decisions. Develops press releases related to evolution of inflation level, with inflationary determinant factors. To mention that, the publication of reports on inflation are preceded by conferences with NBM governor and media representatives. We note that, National Bank of Moldova is reserved at the chapter of forecast indicators, only providing quantitative forecast on inflation and provide reflections related to the deviation of GDP. Table 2 reflects the defining characteristics of transparency in decision making process related to NBM monetary policy.

Table 2

**Strenghts and weakneses of National Bank of Moldova
in the context of monetary policy decisions**

Arrangements for providing information related to monetary policy decisions	NBM
1. Decisions related to interest rate changes are anounced immediatly	Yes
2. Statements related to decisions that foresee any changes.	Yes (press release)
3. Minutes of committee meeting on monetary policy	Yes (after 6 months)
4. Official minutes to provide on formation about:	
- internal debate	Yes
- member's personal opinions	No
- personal choices of member's votes	No
5. Transcripts of the meets are available to the public after: (years)	No

Source: prepared by the author according to Blinder A., Goodhart C., Hildebrand P., Lipton D., Wyplosz C. (2001). „How do Central Banks talk?”, International Central for Monetary and Banking Studies, Geneva Reports on the World Economy, 3, p. 48

Conclusions

Literature and international practice have demonstrated the indispensable role of central bank communication in order to achieve proposed objectives. Related to the case of Republic of Moldova, we consider that communication strategy within the NBM is one effective but incomplete in terms of tools and communication channels that need to be optimized in order to achieve the basic objective of ensuring and maintaining price stability. It is necessary to keep in mind that taking an international practice form the communication perspective, it is important to adjust this to the institutional and operational autochthonous specific in the context of inertial character of Moldovan economy, moderate financial education of the general public so as to avoid any excessive fluctuations on financial-currency market and speculative actions.

In this context we recommend organizing press conference after each monetary policy decisions explaining the fundamental decisions, thereby enhancing the understanding of the interplay between macroeconomic developments and NBM actions.

To increase the transparency and credibility of NBM, NBM is welcome to take responsibility in case of deviation from the basic objective through the immediate publication of the explanations along with a list of actions to be taken toward bringing inflation to its level. Supporting financial education by launching a project whose target audience is made up of students of economic faculties of major universities, teachers and doctoral students.

Only a flexible framework for communication with pro-active approach, extensive explanations of vision and bank strategy will build a predictable economy environment, and ultimately will help achieving the NBM objectives proposed

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DERIVATIVES FINANCIAL MARKET DEVELOPMENT AS A RESULT OF INNOVATION ACTIVITY IN FINANCIAL MARKET

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PhD Victoria Postolache¹⁷*

Abstract:

Development of financial derivatives as financial innovation and development of market of financial derivatives expand in general is the result of the investment activity in the financial market, linked with widening of investment space of the financial capital non-integrated into the production process and which is not a part of capital loan. Thus, implementation of financial derivatives was generated by the redistribution of price risks and their economic functions: providing coverage possibilities, insurance against changing prices on the capital market and insurance of financial risks.

Key words: financial derivatives, financial innovation, financial risk, vanilla derivatives, hedging

JEL classification codes: G 15, G 23

Introduction

In the context of financial globalization during recent decades, have appeared premises to unify national capital markets in a single investment space, defining states to place their savings in profitable businesses, affairs around the world. Since 1970 of the 20 century, during development of post-industrial society and changes that have occurred in the financial market, have appeared the derivatives markets or derivative financial instruments. Over 25 years, functioning of this market was not large enough, but high growth rates recorded in the early 21st century had conditioned acceleration of market transactions on financial derivatives market which led to its transformation into a global market.

Description of the problem

The problem of financial derivatives is new one for national banking sector, being conditioned by the transition to IFRS and involves the need for a deeper study in defining and applying them in Republic of Moldova. Thus, in order to solve this problem, National Commission of Financial Market have developed the Regulation regarding derivative financial instruments and requirements for their disclosure, where is mentioned that: "derivate financial instrument represent an asset or financial bond (obligation) whose value depends on/ or derives from the value of other assets such as asset, a bond, a commodity or an index of prices for assets whose value is settled at a future date". As derivatives financial instruments may be a forward contract, futures contract, caps contract and floors on interest rate, a swap contract based on interest rate or an option contract.

Methodology and data sources

The typology of derivative financial instruments is varied and is difficult to classify them according to the features that they represent. Opportune classification of financial derivatives was a point of interest not only for brokers in the secondary market, but also for financial institutions taking into consideration that financial derivatives, in large part, are off-balance sheet financial instruments.

Historical, are known two big categories of derivatives:

a. first generation derivatives, known as traditional derivatives, generic derivatives, ordinary derivatives, standard derivatives. According to exchange language, first generation derivatives are called vanilla derivatives. Standard derivatives are historical derivatives, having classic contractual terms, known and appreciated by all participants of the capital market.

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b. second generation derivatives, are known as non-generic derivatives, non-standard derivatives. According to exchange language, these derivatives named exotic derivatives, has appeared recently (in the 90s) once with development of international capital markets, with the increasing demands from investors, with the necessity of trading some complex products, flexible, at a reasonable costs, etc. They are called exotic derivatives because there are some facilities and contractual conditions different from those of standard derivatives. Exotic derivatives are standard derivative personalized contracts, are contracts that incorporate some facilities and operational technical elements.

Of course, one of the main criteria is one that classified financial derivative by functions or the nature of contracts into: forward, futures, options and swap contracts. The characteristics of these financial derivative were the basis of several scientific researches, such as those of D. Chance, John Hull, W.C. Hunter, D. Marshall, J. Conrad, A. Crockett, Robert W. Kolb, J.F. Sinkey, D.A. Carter, R. Merton, R. Stulz, R. Williamson, F. Allen, A. Santomero etc.

The defining elements of classic financial derivatives are the following:

forward is a simple instrument, personalized between two parties in order to buy or to sell an asset at some moment in the future for a certain price. Instruments are traded outside the stock market, usually, between two financial institutions or between a financial institution and one of its clients. These contracts are non-standardized contracts, each of them is usually adapted to the owner's specific.

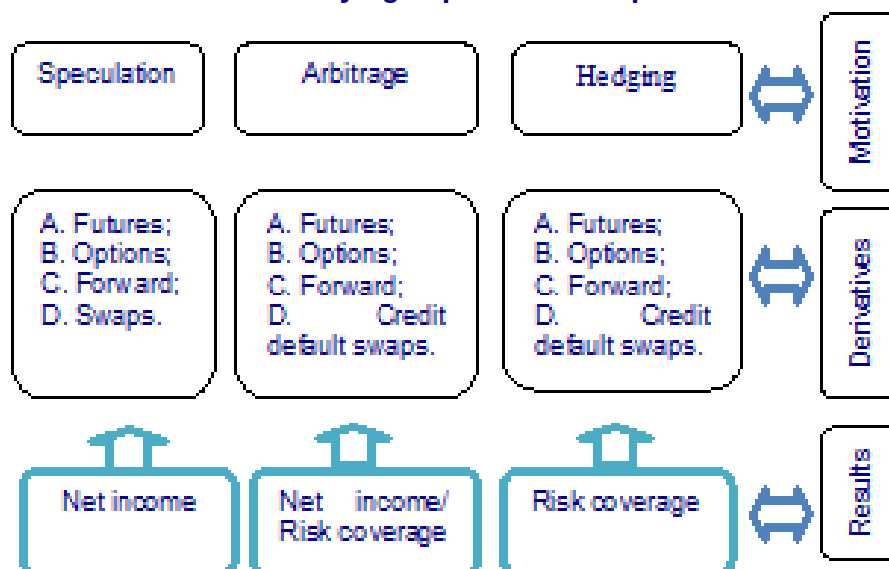
futures are an agreement between two parties in order to buy or sell a quantity of some asset at some time and specific place.

options are the most important group of derivative securities. Options are defined as contracts between two parties, where one part gains the right, but not the obligation, to buy or sell a particular asset, at a specified price on/or before a specific date. The person that obtains the right is called option buyer or option holder, while the other one (who offers the right) is known as an option seller. Option seller gets a option premium for possibilities offered to buyer.

swap in an agreement between two contracting parties in order to change the future financial flows. The swap agreement is used different terms: cash flow maturity, currency that is going to performed payment flows and payment method, all determined by the parties involved in contract. Since its appearance in the 80s, international swap market has known an impressive development, being caused by the growing liquidity of these swap contracts once with development of a strong secondary market.

The most relevant criterion of IFD's classification, in our opinion, would be in addition of goals: increasing profitability and reducing risk (speculative derivative and hedging), as shown in figure 1.

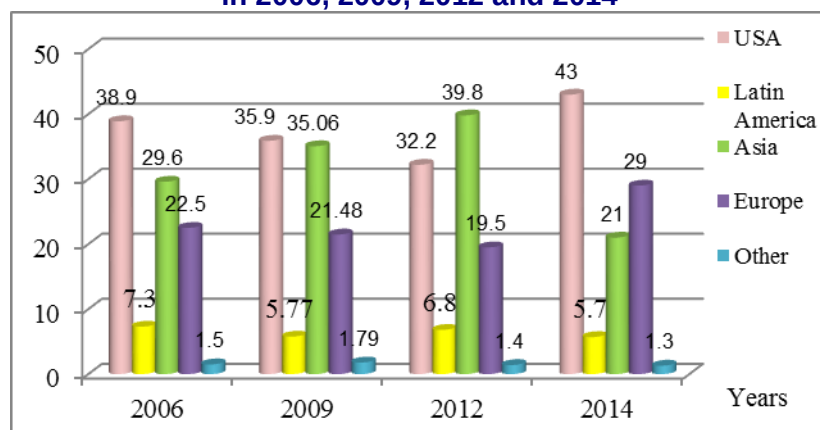
Figure 1 - Classification of financial derivatives after the bank intends to use the underlying impact on bank performance



Source: elaborated by the authors.

Dividing financial derivative market according to geographical criterion (figure 2), we remark that Asian derivatives market registered a growth from 29,6% to 39,8% that force diminishing share of other regions, in special USA and Europe. Safe positions owned by Asian states are due to influence of crisis in USA and Europe, and less in Latin America. One of reasons that caused derivatives market transformation in developed countries is the increasing competitions at the level of forming regional centers. The change in regional structure is presented in 2014, when USA holds its hegemony on financial derivative market, followed by Europe and Asia.

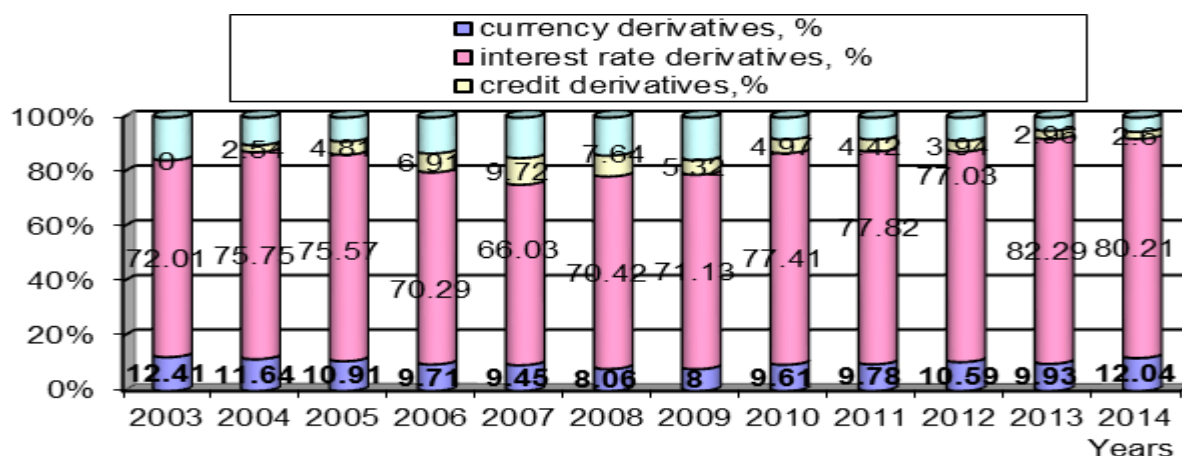
Figure 2 - Regions share in the total volume of financial derivatives in 2006, 2009, 2012 and 2014



Source: elaborated by authors based on BIS data (www.bis.org)

Worldwide, in entire volume of financial derivatives is included derivative on interest rate, currency derivatives, swaps on interest rate and others. Analyzing the structure of financial derivatives, reflected in figure 3, we can see that for period of 2003-2014, in structure of financial derivatives dominate derivative on interest rate, whose major share varies within the interval 66,03% - 82,29%, this shows an increased capacity of these financial derivatives to generate additional income. For the periods of 2003 – 2006 and 2008 – 2014 currency derivatives holds the second position in this ranking, which a share that reduces form 12,41% to 9,71%, and starting with 2008 the situations changes by increasing of their share from 8,06% to 10,59% in 2012, followed with a small reduction to 9,93% in 2013 and increase again during 2014 to 12,04%.

Figure 3. Financial derivative distribution by active



Source: elaborated by authors based on BIS data (www.bis.org)

During the fact that swaps on credit risks hold the third position in the economic growth of 2003 – 2007, in spite of financial derivatives structure, its share register a growth form 2,54% to 9,72%, followed by a reduction to 2,6% at the end of 2014. Causes that determined such a structure are:

- redirecting financial derivatives transactions from mature markets to new markets - Asia, Latin America;
- financial collapse of 2008 - 2010, caused by the structure redistribution of financial derivatives to continued prevalence of interest rate, because they allow both sharp volatility cover the period and offers the possibility of speculative operations;

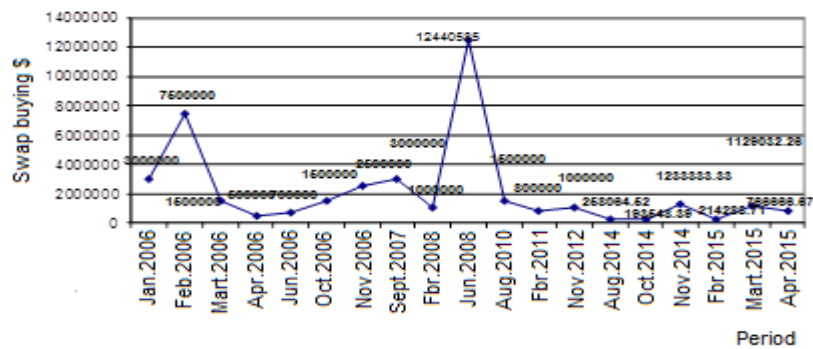
- most bank assets are dependent of interest rates;
- attractiveness of instruments with minimum risk and maximum profit etc.

Results obtained

Currently, in Republic of Moldova are certified only currency derivatives, evolution which is analyzed by NBM (BNM), and presents data regarding swap operations of buying and selling for USD, EUR and forward. Thus, according to data submitted by NBM (BNM) we conclude that:

- USD buying swap (figure 4) evolves non-uniform, being constant for the period of august of 2010 – april 2015, in june 2008 it reached its peak;

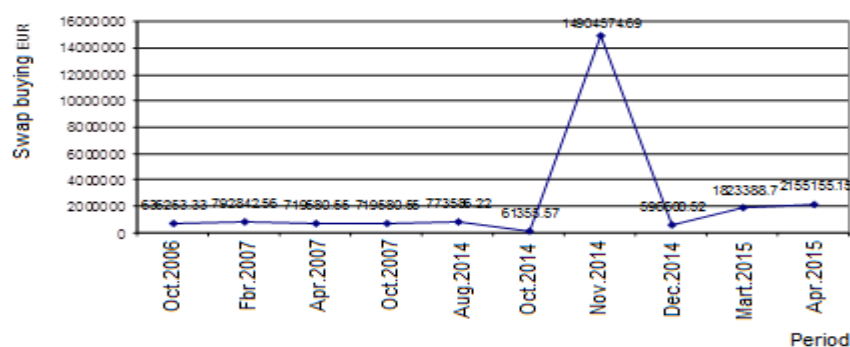
Figure 4. Evolution USD buying swap transactions, in USD



Source: elaborated by authors based on www.bnm.md data

- EUR buying swap (figure 5) doesn't manifest special tendency, being traded almost at the same value in the certified period, its peak being recorded in november 2014;

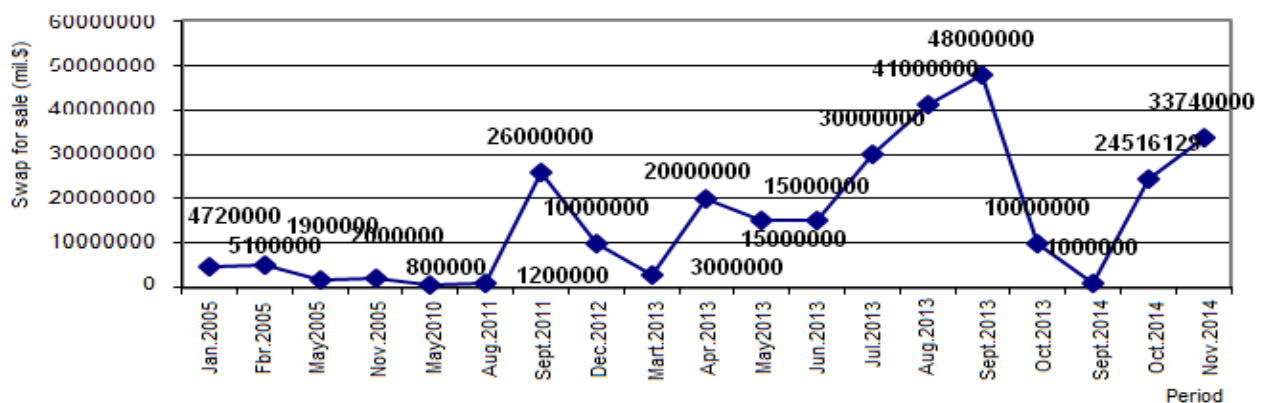
Figure 5. Evolution EUR buying swap transactions, in USD



Source: elaborated by authors based on www.bnm.md data

- USD selling swap (figure 6), compared to the buying swap evolves differently, showing a non-uniform evolution, its maximum value being certified in september 2013;

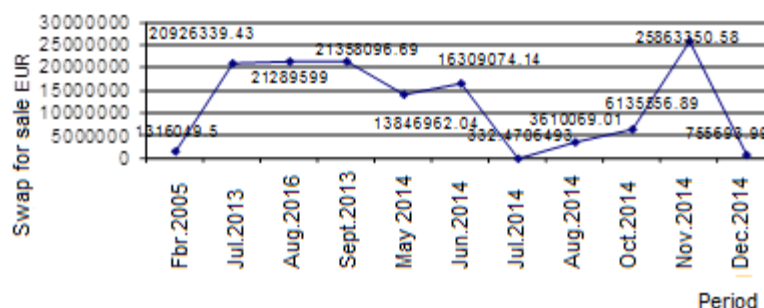
Figure 6. Dynamic of transactions USD selling swap, in USD



Source: elaborated by authors based on www.bnm.md data

- EUR selling swap (figure 7) is not traded regularly, november 2014 being remarked with a significant growth, and a significant decrease during december 2014.

Figure 7. Evolution EUR selling swap transactions, in USD



Source: elaborated by authors based on www.bnm.md data

USD buying forward transactions compared to currency swap, are non-uniform reflected in NBM reports, being certified at the end of 2012, 2013 and 2014.

For the economy of Republic of Moldova IFD market is necessary for economy only as far as it allows reducing the uncertain in economic activity. According to this criterion, market evolution is acceptable only under proper state policy.

Conclusions

During this research all analyzed data helps us to mention that the financial derivative market is an important part of financial market, its development creates background for development of the entire economy. Nowadays, consequences of global crisis are not analyzed exhaustively. Existence of possibility to choices plays an important role, because we cannot know how the financial market will evolve in uncertain conditions.

Future directions to be approached

Studying world experience, identification of economic laws objective and functional dependence, but also finding optimal conceptual proportions of transaction with the financial derivatives in the market economy is the starting point in determining the strategic priorities of the process of cooperation development between the financial and real sectors of economy by trying to operate financial derivatives in Republic of Moldova.

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SOME THOUGHTS ON THE DIVERGENT CONDUCT IN CENTRAL BANKING

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Abstract:

In the recent post-crisis years, the monetary policy, especially of central banks in the advanced economies, is marked by the limited space for handling the conventional instruments. This feature is a defining one to reflect the new challenges faced the monetary authority, because it has complex repercussions at the global level of the economy. There is a vast literature dealing with the new challenges for central banks, but in this paper we will focus on presenting the reactions of central banks to the new post-crisis conditions, in order to highlight the differences or similarities of their policy conduits. In our view, the post-crisis age for central banking is related not only to the time for adapting the monetary policy framework at the challenge of the narrow room for policy manoeuvre, but also to the time of potential divergent paths for conducting the monetary policy, in the global perspective.

Key words: post-crisis time, monetary policy challenges, advanced and emerging economies

JEL classification codes: E52, E58, F62

1. Introduction

The monetary policy in major advanced economies is marked by a limited space for handling the conventional instruments, especially in the recent post-crisis period. This feature is a defining one to reflect the new challenges faced by the monetary authority, because it has complex repercussions at the global level of the economy. On the one side, the central banks experiencing “zero lower bound” condition are those that dominate the global economy and also are constrained to use unconventional monetary policy instruments, in order to achieve the assumed objective. On the other side, these measures influence the monetary policy of other central banks, particularly of those from the emerging economies.

The challenges for conducting the monetary policy are not only large, but also complex ones, varying from those regarding the relation between the monetary policy objective (the price stability) and the financial stability policy, or those related to the proportion of used conventional and unconventional monetary policy instruments (Criste, 2014; Criste and Lupu, 2014; Criste and Lupu, 2015), to the problem of assessing the impact of unconventional measures implemented by central banks (Altavilla and Giannone, 2015). In the present paper we will focus on describing the reactions of central banks to the new post-crisis conditions, in order to disclose how divergent are their monetary policy.

2. Debates on the central bank policy in the post-crisis era

There is a deep concern on the way of adapting the monetary policy strategy in the post-crisis time characterized by a narrow space for policy manoeuvre (BIS, 2016). In this context, there are new challenges regarding the influences of the external monetary policies, i.e. those that dominate the global economy, on the domestic ones, especially for monetary policy of the emerging economies.

The unconventional monetary instruments applied especially in developed countries had produced adverse effects in the financial markets from emerging economies through the channel of capital flows, of assets' prices and of the exchange rate, the monetary policy being in the difficult position to counter the global capital movements. Therefore, the relaxed monetary conditions from developed countries make difficult handling the monetary policy instruments: a restrictive conduct of the monetary policy to counteract the external shock increases the capital inflows, which

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stimulate the local lending cycle and the increase of the asset prices. Capital inflows require interventions on the forex market for the exchange rate adjustment.

The effects of US monetary policy greatly affect the world economy as a result of the US dollar domination in the global financial markets and international trade (Bruno and Shin, 2015). Cetorelli and Goldberg (2012) and Rey (2013) show that, in fact, the US is the engine of the global financial cycle, and from this perspective, the change of the Fed monetary policy conduct affects the financial conditions of other economies.

A number of empirical studies (Bauer and Neely, 2013; Fic, 2013; IMF, 2013) addressed the issue of the effects entailed by the application of unconventional measures and largely conclude that emerging countries with sound economic fundamentals and more developed financial markets were relatively more resilient to adverse shocks related to global central banks' decisions. In contrast, other studies argue that emerging economies with larger and better developed capital markets have been subject of these pressures more from outside (Eichengreen and Gupta, 2014; Aizenman et al., 2014) or that sound macroeconomic fundamentals (lower levels of public debt, higher foreign exchange reserves) have not protected them against the effects entailed by the Fed unconventional measures (Eichengreen and Gupta, 2014).

Although the results of these studies are not converging, overall, it seems that most national currencies have depreciated in the post-crisis phase, and the countries with weaker economic fundamentals were strongly affected by the "foreign" monetary policy. Turkey's central bank largely used foreign exchange reserves to ease the pressure on the currency, and the central bank of South Africa has used the exchange rate as the main tool to absorb the shock. Many emerging countries have been forced to increase the interest rates to reduce the capital outflows and the pressure on the exchange rate (Turkey, Mexico, South Africa, Brazil).

There are also concerns considering the effects generated by the interdependences between the emerging and developed economies.

Emerging economies play an increasingly important role in the world economy (mainly, through the commercial and financial channels) and growth prospects in these countries are more and more reflected in the global economy - a slowdown of the economic growth in these countries affects a potential economic recovery overall.

For the emerging economies, the liberalization of capital accounts and the increasing role of external financing, especially through the lending channel are factors that determine the dependence on the external financial environment. McCauley et al. (2015) points out that this dependence is especially on the US financial conditions, as most of these loans are in US dollars. The increase of external crediting denominated in US dollars, especially from 2008, is determined not only by the rapid and high growth rates in emerging countries, but also by more favourable interest rates for dollar and by expectations regarding the evolution of the exchange rate of local currencies (Bruno and Shin, 2014).

A study of the BIS (2016) shows that the dependence of the emerging economies on foreign loans and the accumulation of a large stock of debt denominated in foreign currency increased the potential for generating bottlenecks in the developed countries. Lower interest rates in the US and a weaker dollar had stimulated for a period the lending activity, increased the asset prices, and encouraged the economic growth in emerging economies, but the modification of the financial conditions in US could generate adverse effects in advanced economies.

3. Methodology and data

Based on these debates and discussions, the present study focuses on identifying some important characteristics of central banks' monetary policy, in the recent post-crisis phase. In this sense, considering a number of twenty-three central banks, some of global importance, others of local importance (see Table 1), we aim at highlighting the way in which the monetary policy relates to the current challenges. For this purpose, we look both at the dominant type of measures applied (conventional or unconventional) and at their direction of use, reflected by the type of monetary policy conduct (tighten or easing). Generally, the monetary policy stance is defined by the central bank's responses to the challenges facing it. This behaviour is founded on the relation between the main objective of monetary policy and the economic conditions, both domestic and external.

Table 1

**Classification of central banks according to the type of the economy
and the degree of global influence**

Central banks with global influence from:		Central banks with local influence from:	
advanced economy	emerging or developing economy	advanced economy	emerging or developing economy
- European Central Bank (ECB) - Federal Reserve (Fed)	- People's Bank of China (PBC)	- Bank of Canada (BoC) - Bank of England (BoE) - Bank of Japan (BoJ) - Czech National Bank (CNB) - Danmarks Nationalbank (DNB) - Norges Bank (NB) - Reserve Bank of Australia (RBA) - Reserve Bank of New Zealand (RBNZ) - Swiss National Bank (SNB) - Sveriges Riksbank (SRB)	- National Bank of Romania (NBR) - Magyar Nemzeti Bank (MNB) - National Bank of Poland (NBP) - Bank of Mexico (BoM) - Central Bank of Brazil (CBB) - The Central Bank of the Russian Federation (CBRF) - Central Bank of the Republic of Turkey (CBRT) - Reserve Bank of India (RBI) - South African Reserve Bank (SARB)

Source: authors' representation

Our analysis refers to the third stage of the post-crisis era, considering that the post-crisis time could be divided into three stages, according to the three major unfavourable events produced after the global financial crisis outbreak: the early stage, after the Lehman Brothers shock (between the end of 2008 and 2010); the middle stage – the Eurozone crisis (2011-2012); and the recent post-crisis stage, after the declining of oil and other commodities prices (since the middle of 2014).

The data and information used in this paper are taken from central banks' annual reports and from the central banks' websites.

4. Results

Overall, the results of our analysis, summarized in Table 2, show different patterns of monetary policy stance across the selected central banks, depending on the specific "source", as the main element that influences the monetary policy decisions (managing the domestic economy, the dominance of the external monetary policy or the global market conditions).

Table 2

**The diversity in conducting the monetary policy across central banks
during the recent post-crisis stage (after 2014)**

CRITERIA	The main source of influences for monetary policy conduct					
	Managing the domestic economy		The dominance of the external monetary policy		The global market conditions	
	The monetary policy stance					
	tightening, towards normalization	easing	tightening	easing	tightening	easing
Standard measures	CBB	PBC, NBR, NBP, MNB	BoM, SARB, CBRT			BoC, RBA, RBNZ, NB, CBRF, RBI
Non-standard measures	Fed, BoE	BoJ, ECB, CNB		DNB, SNB, SRB		

Source: authors' representation based on central banks' Annual Reports 2014, 2015, and data from central banks' official communications (for 2016).

In the developed countries, regardless of the dominant element of influences (either the domestic economy, the monetary policy dominance or the global market conditions), the monetary policy was mostly an easing one, though the Fed has kept policy interest rates (Federal fund rate) unchanged since the end of 2015, and the Bank of England has never operated further policy interest rate cuts (i.e. Bank rate). These central banks are pursuing forward an adjustment of the monetary policy conduct, from an easing monetary policy, to a more restrictive one, mainly based on maintaining the using of non-standard monetary instruments, not by increases in interest rates as a priority for monetary policy. Other central banks (Bank of Japan and ECB) adopted a more aggressive easing for monetary policy conduct, by focusing on avoiding the potential deflation episode and also on detracting from the potential risks of a "de-anchoring" of inflation expectations over the medium-term, as a result of a persistent undershooting of the inflation objective.

Instead, in the emerging countries, the monetary policy conducting is more heterogeneous, depending on the dominant element ("source") of influence. Some central banks have adopted a relaxed conduct of monetary policy, while others - a restrictive one. For instance, the Central Bank of the Russian Federation and Bank of India have adopted an easing monetary policy, in order to reduce the adverse effects of the commodity prices falling, given that those countries' profile is developed based on natural resources, with economies dependent on the terms-of-trade. On the other hand, the Bank of Mexico, and central banks from Turkey and from South Africa have adopted a restrictive monetary policy, being forced to increase their interest rates as a response to the Fed's monetary policy stance. They are further constrained by this dependence, either in order to maintain the monetary anchor (currency peg), or to avoid a more severe vulnerability concerning the foreign exchange market and the capital movements.

Another category includes those central banks whose policy is oriented primarily to the domestic economy. People's Bank of China adopted a loose stance by introducing new monetary stimulus in order to support economic restructuring. Likewise, central banks of Poland, Romania and Hungary are in the same category with an easing monetary policy and applying conventional measures to respond to internal problems in the economy. Instead, the Central Bank of Brazil has a tightening monetary policy conduct, in response to the deep economic recession and to the higher inflation.

Based on the measures implemented by central banks and also on the stance adopted during 2015 and 2016 years, Hochstein (2016) qualifies five categories of central banks: "*Unconventional normalizers*" (Bank of England and Federal Reserve); "*Disinflation fighters*" (European Central Bank and Bank of Japan); "*Forced followers*" (Bank of Mexico, South African Reserve Bank, Swiss National Bank, Danmarks Nationalbank and Sveriges Riksbank); "*Terms-of-trade victims*" (Central banks of Canada, Australia, New Zealand, Norway and Russian Federation) and "*Idiosyncratics*" (People's Bank of China, Central Bank of Brazil).

4. Final remarks

In the post-crisis time, a general feature of central banks, mainly from the advanced economies, is the running short of standard policy options.

The analysis made for the twenty-three central banks shows a diversity of "models" for monetary policy stance, according to some factors: the dominant "source" of influence, the space for using conventional instruments, and the temporary factors.

Sánchez (2016) underlines that the main concern in this post-crisis time is not the monetary policy differences across countries, which has happened many times before, but the using more or less intensively, the unconventional monetary policy measures, with their consequence derived from the difficult problem of a timely withdrawal of monetary stimulus. However, we consider that the differences matters, at least because they produce divergences regarding central banking conduct across countries, so that they could further amplify the macroeconomic uncertainty engendering an increasing volatility in the financial markets.

Moreover, a persistent divergence of monetary policy across countries, for an extended period, affects the international channels of monetary policy transmission. In this regard, the potential effects driven by measures applied by central banks with global influences on the other economies, refers especially to the capital flows, to the bond markets, and to the foreign exchange markets.

In the near future, as Mishra and Rajan (2016) underline, a major challenge remains to identify, at the global level, some simple rules for monetary policy, in order to avoid or at least to minimize the potential negative effects generated in the domestic economy by the external monetary policy of major central banks. This condition implies assuming an international responsibility in conducting the monetary policy.

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AN OVERVIEW OF ROMANIA'S FOREIGN DEBT OVER THE RECENT YEARS

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Abstract:

The paper analyses indicators reflecting the state of Romania's foreign debt by maturity and creditors, as well as the structure of the reserve assets held by the National Bank of Romania (NBR), over the period 2013-2015. One may notice that during the surveyed period, the medium and long-term foreign debt has decreased gradually. The private foreign debt has had the same trend, on the background of the mistrust and risk aversion of creditors, but also of a modest flow of liquidity and of the economic activity still recovering after the strong effects of the global economic and financial crisis. As revealed by the analysis, in the structure by creditors of the medium and long-term foreign debt, the multilateral loans have been prevalent. The almost continuous, yet modest, increase of NBR' reserve assets shows the financial and banking credibility and stability of Romania. The paper is based on the chapter "Assessing the external equilibrium", from the research project "The financial state of Romania" elaborated in "Victor Slăvescu" Centre for Financial and Monetary Research in 2015, under the coordination of PhD Constantin Marin

Key words: foreign debt, reserve assets, public debt, sustainability

JEL classification codes: F34, H63

Introduction

The foreign debt is important particularly in terms of sustainability, since it affects the future economic development of any particular country.

On the background of the global microeconomic and macroeconomic evolutions, and of the demands of information users, the methodological framework governing the foreign sector statistics has been renewed. Thus, as of 2014, the international methodology standard for drafting the balance of payments and the international investment position has been updated. The new methodology, presented in the IMF Handbook *Balance of Payments and International Investment Position, sixth edition* (BMP6), replaces the BMP5 version from 1993. The new methodology aims to support a higher level of completeness, coherence and harmonization between the balance of payments and other sets of macroeconomic data such as: national accounts, statistics of the governmental finances, monetary and financial statistics, etc.

Description of the problem

The foreign debt of Romania, although at a sustainable level according to the international standards, has increased almost continuously after 1990, on the background of the needs of the national economy and of the insufficient domestic capital.

After 2009, which represented a turning point in the evolution of the medium and long-term foreign debt and its components, during 2013-2015, the medium and long-term foreign debt has decreased gradually, against a shrinking total foreign debt. The public foreign debt has increased in 2014, compared to the previous year, and has decreased slightly in 2015, being, nevertheless, still higher than in 2013.

The private foreign debt has diminished slightly from 2013 to 2015, on the background of continuing mistrust and risk aversion of creditors, but also of a still modest flow of liquidity and of the economic activity still recovering after the strong effects of the global economic and financial crisis.

As shown by the structure of the foreign debt by creditors, the multilateral loans have been prevalent, almost every year of the surveyed period, which shows the interest of the international financial institutions for the evolution of the Romanian economy, as well as the need of the

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Romanian economy for foreign financing both during the period of economic boom and, particularly, within the context of the world economic and financial crisis. In each year of the surveyed period (2013-2015), the multilateral credits have decreased slightly.

The almost continuous, yet modest, increase of NBR's reserve assets in 2013-2014, with a slight reduction in 2015, reveals the financial and banking credibility and stability of Romania.

Methodology and data sources

Hereinafter, based on the BMP6 methodology, we shall calculate and analyse in dynamics several primary and relative indicators, which highlight the evolution of the short, medium and long-term foreign debt, as well as of the structure of the medium and long-term foreign public debt, and also the structure of reserve assets held by the National Bank of Romania.

We shall also try to document the importance of understanding this field for the proper management of the macroeconomic policies.

The data have been taken from NBR statistics.

Results obtained

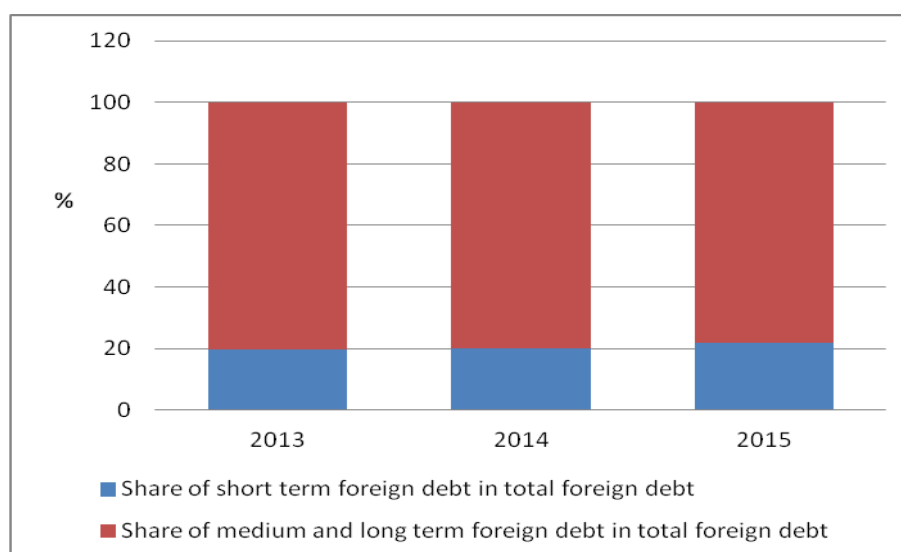
1. Indicators for the short, medium and long-term foreign debt

The total foreign debt displayed a decreasing trend in 2013-2015, which has been stronger in 2015, when the decrease was of 8.2 percentage points, compared to the level of 2013 (Milea, 2014).

Regarding the structure by maturity of the foreign debt, one may notice that the proportion of the short-term foreign debt within the total foreign debt has increased in 2013-2015, being around 20%, which shows a rather adequate structure of the foreign debt. Nevertheless, in terms of value, the short-term foreign debt has decreased in 2014 and has increased in 2015.

The medium and long-term foreign debt holds the majority share in Romania's total foreign debt in the surveyed period (see Figure 1). As we know, a longer maturity can support the sustainability of the national economy since the burden of the debt is spread on a longer period of time, so that it represents no burden for the budgetary decisions of the government and it doesn't endanger its development projects. Compared to 2013, the medium and long-term foreign debt has diminished in 2014 and in 2015, both as a absolute value and as a share of total foreign debt, on the background of the total foreign debt's decrease. Romania's medium and long-term foreign debt has had a turning point in 2013, which was the first year after 1990, when the medium and long-term foreign debt diminished (Milea, 2014).

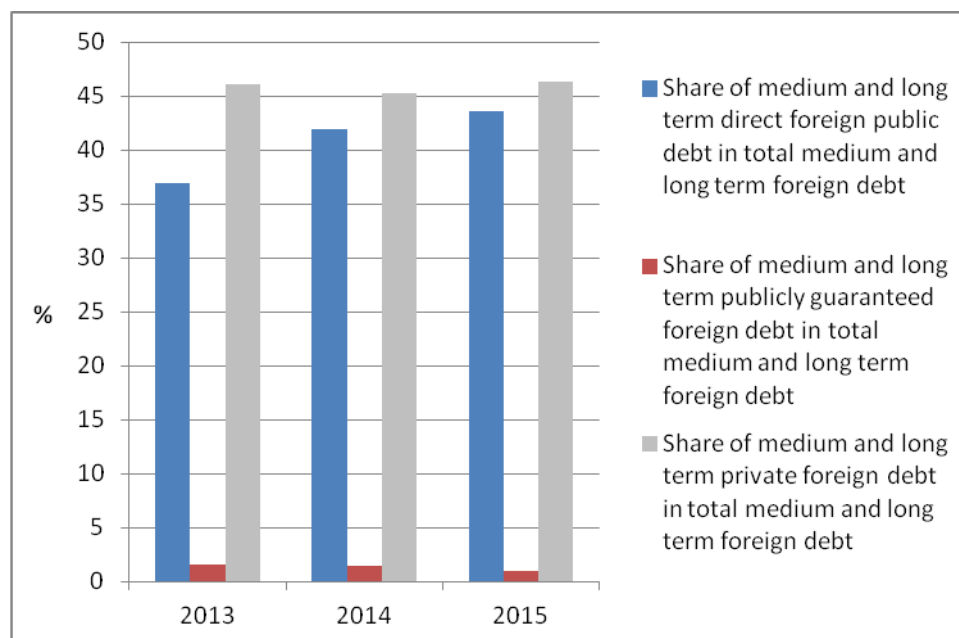
Figure 1 – The trend of the short term and of the medium and long-term foreign debt of Romania (%)



Source: NBR data

In terms of creditors, the public foreign debt has increased in 2014 and has decreased in 2015. However, the proportion of the foreign public debt within our country's medium and long-term foreign debt has augmented in 2013-2015. This evolution of the foreign public debt has been determined mainly by the evolution of the direct foreign public debt, and less by the publicly guaranteed foreign debt, which has decreased in each year of the surveyed period (2013-2015). The proportion of the medium and long-term publicly guaranteed foreign debt within the total medium and long-term foreign debt also displayed a decreasing trend (see Figure 2).

Figure 2 – The trend of the components of the medium and long-term foreign debt in Romania (%)



Source: NBR data

In the period before the crisis, the increase of the public debt has been offset by a higher rate of economic growth, but after the onset of the global economic and financial crisis, the access of Romania to financing on the international capital market has been strongly limited. In this situation, Romania required assistance from the international financial bodies (such as the World Bank, EU, IMF), on the condition of adopting painful domestic restructuring measures. The public debt increased strongly in 2009-2011, as means of financing the budget deficit; requiring later for the fiscal consolidation several other adjustments, even tougher than those generated by the effects of the financial crisis (e.g. cutting of the public wages, the reduction of some public expenditure, the decline of public investments, the latter being maintained, however, over the budget deficit).

According to the Financial Stability Report (FSR) from 2015, although Romania's public debt (38.6% of the GDP at the end of 2015 – FSR 2016, lower than in 2014, 39.8% of GDP), is still below the maximal level regulated by the Treaty of the European Union (60%), and below the value reported by most EU member states, its high dynamics, due to the financial crisis, to the process of fiscal consolidation or to the procyclic character of the Romanian fiscal policy, requires a deeper analysis.

The foreign debt had the largest contribution to the decrease of the public debt stock between December 2014 and December 2015, with a share of GDP decreasing slightly from 20.7% to 19.1%, while the domestic debt has increased during the same interval (by 0.3 percentage points, to 19.4% of GDP (FSR 2016).

According the RSF 2015, after 2012, the public debt also increased due to the creation of a hard currency financial reserve, available to the Ministry of Public Finances, meant to cover the requirement of liquidity of the state, covering entirely the foreign public debt service and about 50% of the total public debt service. It must be mentioned that the hard currency financial reserve, available to the Ministry of Public Finances, which represents also an asset element, is included in the total public debt, which makes the net foreign public debt to be significantly lower than the figures from the statistics (for instance, in 2014 it represented 35.3% of the GDP, according to FSR 2015).

According to RSF 2015, the “sustainability of the public debt must be evaluated from at least four points of view: its size, the residual maturity, the cost of financing and the structure of investors' base”.

In terms of the size of the public debt, Romania is still below the critical threshold which might trigger economic recession (according to FSR 2015, it is calculated econometrically to 40-45%), but very close to it, which calls for a prudent maintenance (below 3% of the GDP) of the budget deficit.

The medium residual maturity of the public debt has expanded between 2008 and 2015, according to FSR 2015, which is important for the decrease of the refinancing risk and for the diminishment of the annual financing requirement. In terms of the public debt sustainability, a maturity inadequate to the needs may be a risk factor even more important than the level of the public debt.

The measures of fiscal consolidation and attaining the macroeconomic balances, the improvement of the country rating given to Romania by the main rating agencies, and the inclusion of the Romanian state securities within some international reference indicators for the investments in assets of the emerging states, are aspects which generated the increase of the average maturity of the newly issued securities, and the improvement of the liquidity on the secondary market. During the following period, particular attention must be granted to the need to refinance titles issued previously, the public debt being estimated to peak in 2016. Furthermore, about 29% of the state securities stock (worth of 11.8 billion Euros), is due in 2015-2016, while the rest is spread up to 2044. Under these circumstances, the fiscal-budgetary policy for 2015-2016 must remain within prudent limits, aiming to refinance the due debts in, as good as possible, terms of cost and maturity (FSR, 2015).

A positive fact is that the financing costs for the public debt have decreased significantly in the period 2008-2015, while the debt has increased three times. Within the context of a possible trend reversal at the international or regional level, the cost of public debt financing might become a risk factor for its sustainability. The “reduction of the public debt financing costs has been influenced both by the favourable external conditions (very low interest rates and high liquidity), by the domestic macroeconomic structural adjustments (decrease of the budget deficit, lower inflation rate) and by the liquidity conditions from the local monetary market” (FSR, 2015).

The level of concentration of the investors' base regarding the public debt has decreased between 2009 and 2014, according to FSR 2015, but the financing of the public sector has been largely done by the banking sector; however, this trend might reverse in the future on the background of the changes from the banking sector (due to the implementation of the European proposals meant to increase the capital requirements for the exposure to the sovereign debt, to the rebirth of the demand for credits and to the need to boost the economic growth). In terms of the financial stability, the strengthening of the relation between the public debt and the local banking sector, had also positive consequences such as: improved liquidity of the banks, lower risk of regional contagion within the banking system, in the context of uncertainties in the euro zone, and the avoidance of an erratic financial desintermediation within this sector.

According to FSR 2015, the capacity for additional financing of the public sector by the local banking sector is still limited, under the conditions in which the exposure of the credit institutions towards the public administration is important (21.5% of the total banking assets, in December 2015).

As of 2012, the Romanian state has diversified the foreign markets by issuing state bonds on the US market. The Romanian state bonds in US Dollars account at present for a third of the value of the foreign markets' issuance, according to data from July 2015. A higher fiscal deficit, most probably, will have to be largely financed by non-residents (given the important exposure of the residents on such portfolios). The higher proportion of non-residents financing the public debt might increase the risk of contagion if the international markets will experience changes in the risk appetite of the investors (FSR, 2015).

In conclusion, regarding the sustainability of the public debt, according to FSR 2015, “the average residual maturity has increased, the costs with the interests have decreased, and the portfolio of investors in state securities has diversified. Therefore, the profile of the public debt sustainability has

improved over the recent years, offsetting the increase of the public debt. The stock of the public debt has, nevertheless, to be monitored carefully, given its significant increase compared to 2008”.

The Romanian medium and long-term private foreign debt has decreased from 2013 to 2015, on the background of a continuous risk aversion of the creditors, of a still low liquidity, of an economic activity still below its potential, as a consequence of the effects of the global and regional economic and financial crises, particularly the euro zone debt crisis. Before the outburst of the crisis, the private sector usually borrowed from the foreign markets, against rather advantageous costs compared to the cost of the domestic sources of financing, due to the still high interest rates for credits in Romania, and to the persistence of the overvalued real exchange rate of the national currency, and sometimes, to the inadequate behaviour in the crediting process of the banks operating in Romania. Within this context, in the years before the crisis (2009, included), on the background of the optimism generated by the economic boom, the foreign debt of the private sector increased significantly.

The private foreign debt represented most of the Romanian medium and long-term foreign debt in the period 2005-2010, which shows, on the background of a macroeconomic context still dominated by uncertainty, a significant increase of the dependency on the foreign financial markets. A good thing for the sustainability of the Romanian foreign debt is the decrease of the weight of the private foreign debt below 50%, as of 2011. The analysis also shows that the proportion of the public foreign debt has been almost equal, in 2014 and 2015, to the proportion of the Romanian private foreign debt within the medium and long-term foreign debt, but remained, however, lower than the latter (see Figure 2).

In 2013-2015, the balance of the financial account showed, unlike the previous years, capital outflows on the background of an increase in the net assets larger than the boost of the net liabilities, which means higher rights over non-residents, therefore a positive influence on the international investment position. This has occurred in 2013-2015, due to paying back the long-term credits, despite the inflow of foreign direct investments and portfolio investments (except in 2015 for the portfolio investments). The loans taken by Romania from the securities market at the same time with the decrease of the foreign long-term loans signifies the replacement of the institutional creditors by private creditors. Under the conditions in which the debt from the multilateral institutions is cheaper, taking into account the interest rate demanded for the countries perceived as riskier on the international private capital markets; the longer period of grace; and the longer total duration, the replacement of the creditors shows a deeply negative evolution of the Romanian economy. Instead of paying back the already committed foreign debt, we keep on making more debts, under harsher terms (Milea, 2014).

This shows the importance of a complex and coherent strategy for paying back the foreign debt, in close relation with the still low level of restructuring of the national economy, and with the progress of the economic reform. A national borrowing strategy must be drawn up and observed; which should establish an optimal ratio between the medium and long-term debt and the short-term debt, respectively between their due dates, so that the burden of the foreign debt should be spread uniformly along the years, thus avoiding payment peaks.

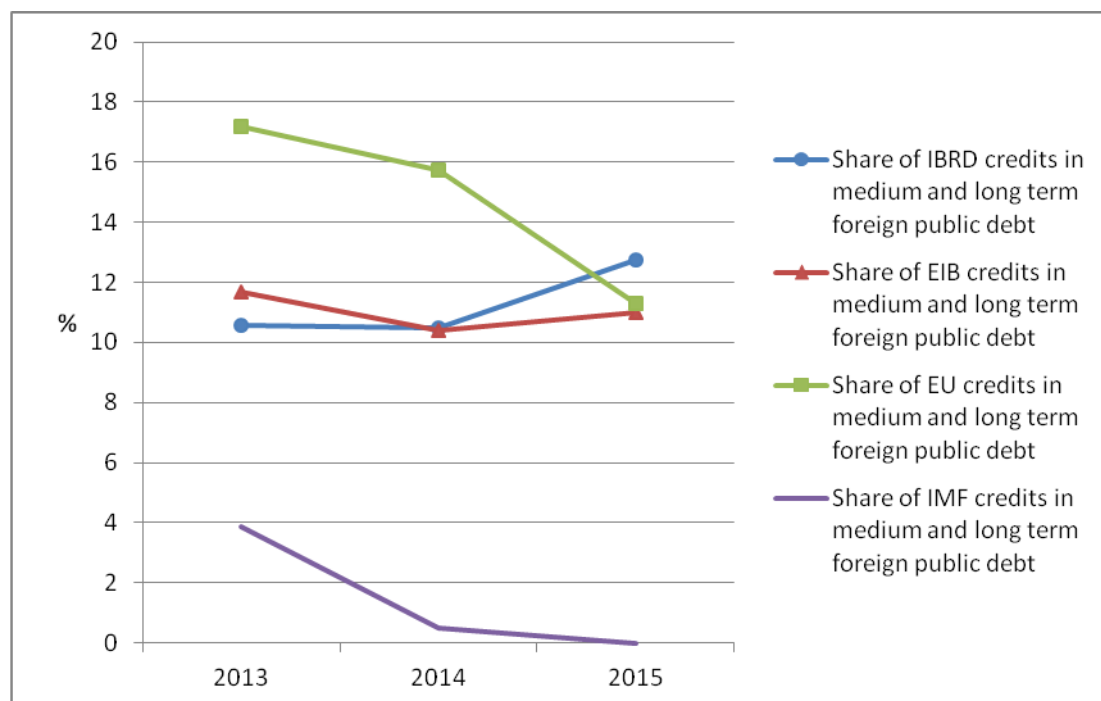
2. Indicators for the structure by creditors of the medium and long-term public foreign debt

In the structure by creditors of the medium and long-term public foreign debt, the majority proportion has been held by the multilateral credits almost every year of the analysed period, which shows the interest of the international financial organisations for the evolution of the Romanian economy, as well as the needs of the Romanian economy for external financing both during the economic boom and, particularly, within the context of the world economic and financial crisis. However, it can be noticed a decrease of the proportion of the multilateral institutions within the medium and long-term public foreign debt during the analysed period (NBR, 2016).

Analysing the structure by creditors of the medium and long-term public foreign debt, we notice that between 2013 and 2015, on the background of reimbursing the loans to the International Monetary Fund (IMF) and EU, Romania has borrowed from the International Bank for Reconstruction and Development (IBRD) and from the European Investment Bank (EIB) (except for 2014) (NBR, 2016). Thus, the weight of the EU and IMF loans has decreased significantly in 2013-2015, while the

weight of IBRD loans has increased (particularly in 2015), and the weight of EIB loans has remained around 11%. The proportion of the loans from the European Union is important, although it has decreased from 17.20% to 11.32% in the period 2013-2015 (see Figure. 3).

Figure 3 – The trend of the structure by creditors of the medium and long-term foreign public debt in Romania



Source: NBR data

The loans from the European Commission and IBRD are to be paid back in 2015-2019 and in 2022-2023, which might decrease the stock of foreign public debt.

Despite the excessive mediatisation of the loans from IMF, they have a lower weight than those from IBRD, EIB and EU.

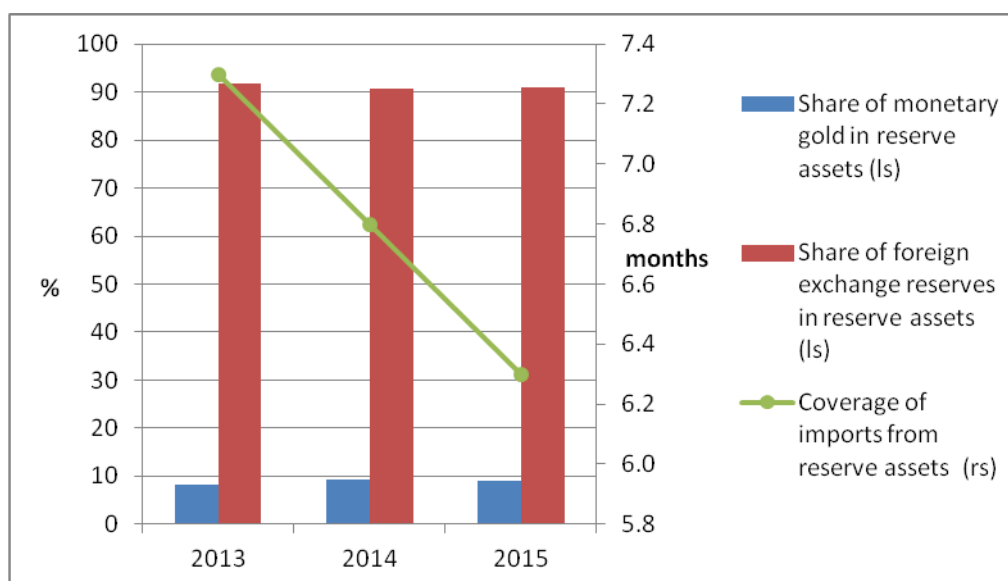
The loans from official creditors have several advantages: generally, their costs are lower, they have a longer period of grace, a longer total duration, which alleviates the paying back effort. These loans have also disadvantages: limited available volume; the extended use of such type of financing conveys a not encouraging message towards the foreign investors, because the exceptional financing is meant to cover the current account deficit and to support the structural adjustment of the economy. Within the context, this signal means efforts to reform the economy, never properly accomplished (Milea, 2014).

3. Indicators for the structure of the reserve assets of the National Bank of Romania

The reserve assets of the National Bank of Romania have increased slightly in 2014, compared to 2013, but they have decreased slightly in 2015, compared to 2014. This evolution reveals the financial-banking stability and credibility of Romania. The reserve assets are those actual external assets (expressed in hard currency) that can be urgently available to the monetary authorities to manage the exchange rate, to finance the balance of payments, to support foreign credits and to maintain and improve the confidence in the national currency. They are fundamental for the credibility of a national economy, and they must be supported by adequate, responsible public policies, which should make best use of them.

The structure of the reserve assets of NBR shows that although the monetary gold holds a low proportion within the total (about 9%) and it has decreased severely in 2013, compared to the previous period, its value still amounts to about 3,000 million Euros in 2013-2015, with a moderate increase in 2014 compared to 2013 (see Figure 4).

Figure 4 – The trend of the components of NBR's reserve assets



Source: NBR data

In the surveyed period, the foreign exchange reserves of our country have remained almost unchanged, although they have decreased slightly in 2014.

The coverage of imports from reserve assets (in months of imports) is high enough to be considered at an acceptable level to cover the imports. However, its decrease from 7.3 months of imports in 2013 (NBR, 2014) to 6.3 months of imports in 2015, may be a warning concerning the sustainability of imports, particularly if the unfavourable evolution continues.

Conclusions

The structure of the foreign debt in terms of due date is rather adequate, the short-term foreign debt not exceeding 20% in the surveyed period.

Although the public debt of Romania is below the maximal standards set in the EU, its fast dynamics and the often procyclic character of the Romanian fiscal policy require a close monitoring of the evolution of the public debt stock.

The public debt sustainability has improved during the recent years on the background of a longer residual maturity, of lower interest rates costs and due to the diversification of the investors in state securities.

A good fact for the sustainability of the Romanian foreign debt is the decreasing proportion of the private foreign debt, which went below 50% since 2011. Toward the end of the analysed period, the share of private foreign debt got near the proportion of the public foreign debt within the medium and long-term foreign debt, being slightly higher than it.

The loans taken by Romania from the bonds market, along with the decrease of long-term foreign loans, signifies the replacement of the institutional creditors with private creditors. Under the conditions in which the loans from the multilateral institutions enjoy better terms (lower interest rates, longer period of grace, longer total duration), the replacement of creditors shows a deeply negative evolution of the Romanian economy. Instead of paying back the existing foreign debt, we keep borrowing, under harsher conditions.

The almost continuous, yet modest increase of the NBR's reserve assets reveals the financial-banking credibility and stability of Romania.

We conclude by highlighting the importance of a complex and coherent strategy of reimbursement of the foreign debt, in close correlation with the level of national economy reorganisation and with the progress of the economic reform. It is also necessary to draw up and observe a national borrowing strategy, which should consider setting an optimal ratio between the medium and long-

term debt, and the short-term debt, between their due dates, so that the burden of the foreign debt is spread uniformly along the years, thus avoiding the payment peaks.

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THE EUROPEAN UNION REGULATORY FRAMEWORK FOR SOCIAL ENTERPRISE

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Abstract:

The paper analyzes the European Union's regulatory and investment initiatives in support of social enterprise. Based on supply and demand side analyses, the research evaluates EU policy intended to create an enabling environment for social enterprise formation, sustainability and scale. These policies are integrated within the EU regulatory framework for "inclusive" growth, as articulated in Strategy "Europe 2020", as well as within the small and medium enterprise investment funds of the Multiannual Programming Period 2014-2020. The research evaluates these regulatory and investment initiatives within the broader context of the EU's evolving strategy for economic revitalization and resiliency, which espouses both traditional and innovative forms of SME finance and regulatory support.

Key words: social entrepreneurship, EU social enterprises

JEL classification codes: E69, F21, G15

Introduction

In response to limited public funding and rising demand for social services, organizations have increasingly leveraged revenue-generating business ventures as a way to meet their social objectives. This trend has led to the emergence of "social enterprise" -- organizations that utilize "earned" income to generate sustainable operating models and deliver improved social outcomes to the communities they serve. These types of organizations navigate many of the challenges faced by both nonprofit and private sector businesses. As revenue-generating businesses with a primary social mission, they rest at the nexus of traditional and social business.

The development and scale of social enterprises (SE) is prerequisite to the materialization of the EU's vision of Smart, Sustainable and Inclusive growth as codified in EU 2020 Strategy. These hybrid organizations are a key component of addressing the recessionary aftereffects of the financial crisis while also supplementing social services in the absence of government intervention. In accordance with this new growth model, the European Union (EU) has implemented an array of financial and regulatory activities to accelerate the positive effects of SE throughout Europe.

Description of the problem

Following the financial crisis, millions across Europe were jobless, while stagnating recovery continued to destabilize the macroeconomic environment. In Central and Eastern Europe, for example, exports had fallen by 23%, while the region's imports contracted by as much as 28%; in Bulgaria, a country which had only recently joined the EU, growing risk aversion among foreign investors continued to decelerate capital inflows.

Just as these problems were becoming more acute, the capacity of government, civil society and philanthropy -- the traditional stewards of the public welfare-- was attenuating; greater demand for social services came at a time during which governments, bridled with crisis, saw expenditures and revenues continue to diverge. The notion that business would drive economic growth while the government and civil society would address social problems -- tenuous to begin with -- was proving even less tenable. **If the EU was to recover, and if it was to recover in a way that embodied the ideals of socioeconomic equity and environmental sustainability, it would have to find a way for the private, civil and public sectors to collaborate.**

This notion has been a driving force that has blurred the traditional boundaries between industries, sectors and market actors. For-profit business and investors have increasingly embraced the

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notion that they can generate both a financial profit and social and environmental value; non-profit organizations increasingly pioneer revenue-generating ventures to increase the scale and scope of their impact; and the public sector continues to work to accelerate this hybridization rather than to affix traditional boundaries.

Social enterprise rests at the confluence of these trends. They combine philanthropic values with market-based principles, leveraging consumer purchasing power or market gaps to advance pre-defined social and environment goals. They navigate between the public, private and civil sectors. And they advance the precepts of smart, sustainable and inclusive growth through both the products they create and the people they employ.

The Social Enterprises and Social Entrepreneurship Funds Market in EU

Social enterprises (SE) act as drivers for social change by providing innovative solutions and making a significant contribution to meet the objectives of Europe 2020 Strategy. The social economy in Europe is estimated to engage over 15 million employees, equivalent to about 7 % of the working population in the EU (European Commission, 2013). In Europe, over 92 % of SE are organized as associations, foundations or other similar forms, 7 % as cooperatives and 1 % as mutual companies. The greatest number of SEs are found in UK, followed by Germany, Spain, France and Finland (CIRIEC International, 2012).

The social mission of these entities is interrelated with sustainable and inclusive development and intended to address social challenges across Europe. Social enterprises operate in areas such as the the environment, education, healthcare, bio-products, fair trade, and provision of goods and services to socially excluded sectors of the population. These entities are extremely versatile and constantly innovate their products and services, undertaking alternative ways of generating income, thus bringing entrepreneurial and commercial dimension to the provision of general interest services. SEs foster entrepreneurship along several lines: 1) they bring about economic activity to areas neglected due to their low profitability potential; 2) they offer an alternative model of economic growth based on social inclusion, 3) they produce social innovations by identifying and addressing social needs.

SE operations align to entrepreneurial, social and governance dimensions. Typical SE elements include a) a primary social mission advanced through reinvestment of their surplus for the promotion of social aims and b) an inclusive and participative manner of governance involving employees, consumers and stakeholders. SEs adopt a coordination mechanism based on cooperation, reciprocity and democratic governance that ensures the active participation of all interested stakeholders in their operations. These organizations cultivate “social capital” as their activities require active collaboration and civic engagement. SEs work to achieve systemic change by introducing new business models, improving value chains and exploring unused resources in the provision of public and general interest goods.

SEs produce both economic and social outcomes -- contributing to improving market competitiveness, increasing consumer choice and broadening opportunities for skill development and innovation. With respect to impact measurement, a lack of standardized metrics persists, with the majority of SEs relying on their own measurement practices or not measuring social outcomes through a formal evaluation process. These inconsistent practices lead to difficulty in comparability and standardization at both the enterprise and investment level. Moreover, due to their low visibility, SEs find it difficult to obtain financing from socially-driven entrepreneurship funds (SEFs), which reduces the opportunities for sustainable and inclusive growth across Europe. On the demand side, the lack of diverse sources of financing increases the cost of capital and limits resources for generating social change.

According to the European Commission (2015), SEs adopt a “hybrid” business model through which revenue generation materializes through both market and non-market sources, including government subsidies, grants, donations and membership fees. The mapping exercise undertaken by the European Commission indicates that the public sector funding dominates the revenue streams of SEs, which reflects the extent of overlap with public sector priorities, such as work integration and welfare services. The welfare effects of deeper economic integration in the EU is

not only limited to production and consumption, but includes positive influences on employment, production, income levels, specialization etc. (Marinov, E., 2015).

A key operational challenge for SEs relates to a lack of sufficient visibility, which leads to low awareness and limited recognition of their socioeconomic value. A dearth of recognition depresses growth and financing prospects. SEs also face difficulties in attracting staff and managers with the requisite necessary skills and experiences. In addition to deficiencies in human capital, the SEs lack networks and infrastructure for business development services (such as strategic planning, consulting services and specialized training). For a majority SEs, growth prospects extend beyond their access to appropriately structured capital. However, new public sector funds, such as the European social entrepreneurship funds (EuSEFs) created under the EU-wide new regulatory regime (see below), have helped to address this finance gap. Despite the increasing availability of public sector capital, issues such as the absence of common mechanisms for measuring social impact has continued to impose limitations on private investment. And finally, SEs must navigate an array of regulatory issues across EU member states, which additionally serves to inhibit development and scale.

According to estimates of the European Investment Fund, there are approximately fifty social entrepreneurship funds (SEF) in Europe with a focus on SEs. The average size of these funds ranges from EUR 10 to 20 million. The venture philanthropy market in Europe is approximately EUR 1 billion, which represents less than 10 % of the EU venture capital market and less than 1 % of the private equity market. The largest SEFs are located in UK, where the social investment market is considered to have reached maturity, and France, followed by the Netherlands and Germany. Despite the new regulatory framework for European social entrepreneurship funds, the cross-border activities of these funds have only reached 4 % compared to 12 % for the venture capital market and over 20 % for the private equity industry. The limited supply side opportunities reduce competition among SEFs, which contributes to increasing inefficiency within the EU capital markets.

According to estimates from EVPA (2014), support for SEs through venture philanthropy and social investing has continued to rise -- reaching EUR 8 million in 2012/2013. The economic and social development sectors attracted the highest amount of social investments (22% of funding), followed by education (14%), research (13%), health (13%), culture & recreation (9%). Non-profit organizations, those without trading revenues, and SEs are the key targets of venture philanthropy. Grants (57%) represent the primary financing instrument for social enterprises, followed by debt instruments (20%) and equity (quasi-equity), reaching 15 % of total investments. More than 57% of venture philanthropy organizations in Europe invest domestically, while only about 9 % invest internationally. The majority of venture philanthropy organizations prefer to exit the investment through sale to management team (28%), followed by sale to other social investors (25%) and sale to corporate or commercial investor (14%). Only 4 % of investments were exited through the public shareholder base.

The Social Business Initiative

The Single Market Act of 2012 included the Social Business Initiative (SBI) -- created under the EU Programme on Social Change and Innovation (2007-2013) -- as an instrument to bolster the social economy and create an enabling environment for SE. The initiative established a financial instrument of EUR 90 million to improve access of social enterprises to EU funding. The initiative also introduced the investment priorities for the period 2014 – 2020 via Regulations of the European Regional Development Fund and the European Social Fund.

The Social Business Initiative contained three main directions in support of social innovation and the social economy in Europe:

➤ Capital Access

- The European regulatory framework for social investment is intended to facilitate access to the financial markets for social enterprises. Moreover, social stock exchanges are designed to enable the trading of SE shares while the establishment of EU passport for European social entrepreneurship funds (see below) seeks to incentivize private investment in SE. In addition, structural funds have been reformed to enable member states to direct structural fund financing to SEs. The European Commission developed a comprehensive strategy for support and promotion of these entities via the structural funds through providing guarantees, quasi-equity and loans.

➤ **Visibility**

- The SBI increases the visibility of SEs by developing approaches to evaluate their impact and performance. These activities include the creation of frameworks for the segmentation and development of SE business models. Public and private insertions and conducted landscape analyses of the SE sector to enhance visibility. For example, the European Commission mapped European SE market to identify best practices in public sector intervention in support of SE growth.

➤ **Legal and Regulatory Environment**

- The SBI improves the legal environment for social enterprises, particularly during enterprise formation by conferring SE's legal and fiscal definition through standardized processes. Supportive regulatory frameworks enable and promote hybrid nature of SEs. The initiative creates an enabling fiscal framework for SE to deliver goods and services. National rules on public procurement in particular differ greatly among EU member states. Moreover, state aid rules concerning provision of services of general economic interest should be simplified by applying the minimis regulation for social enterprises providing such type of services.

As part of the initiative, the European Commission proposed the establishment of a) the Programme for Employment and Social Innovation (see below) for the programming period 2014-2020 and b) the EuSEF (see below) to develop the EU market for SE financing through the provision of equity, debt and risk-sharing instruments for SEs. In 2013, the European Commission adopted the Social Investment Package which articulated the vision for modernization of welfare states in the context of the economic crisis and longer-term structural challenges. The package emphasized public investment in the development of human and social capital and the role of the private and third sectors in improving the process of socio-economic inclusion.

Main Aspects of the Programme for Employment and Social Innovation 2014 – 2020

Social innovations (SI) encompasses the development of new products, services, models, markets and processes. SI satisfy a social demand and lead to a more efficient use of assets and resources, while also catalyzing the production of social outcomes across economic sectors (non-profit, public and private). SI is included in the Europe 2020 Flagship Initiative, "Innovation Union" and Horizon 2020. In terms of EU intervention, SE is regarded as a source of growth and job creation. The Horizon 2020 SME financial instruments are open to socially innovative enterprises in addition to the existing EU structural and investment Funds.

The **European Programme for Employment and Social Innovation 2014-2020** is a continuation of the EU Programme on Social Change and Innovation for the new programming period. The program identifies SI as a means for solving social challenges and supporting SEs with long term impact. According to the program, the social economy and social entrepreneurship constitute an integral part of the EU social market and play a significant role in achieving greater social convergence across Europe.

The Programme is expected to improve SE access to different types of finance through its EUR 919 million Microfinance and Social Entrepreneurship Axis. The support will encompass development of the social investment market by providing equity, quasi-equity, loan instruments and grants of up to EUR 500,000 available to SEs which meet the following criteria: annual turnover not exceeding EUR 30 million; an annual balance sheet total not exceeding EUR 30 million; the SE must not be part of a collective investment undertaking. The Programme has been established to contribute to the implementation of Europe 2020 targets and is one of the four financial instruments targeting employment and social affairs in the 2014-2020 period.

Main Elements of the European Social Entrepreneurship Funds Regulatory Framework

The new regulatory regime, which established the European Social Entrepreneurship Funds (EuSEF) brand and marketing passport, is expected to contribute to increased investment activity. The heightened market transparency may serve to encourage investors to identify investments and thus allocate greater amounts of capital in SEs. In addition, heightened transparency can help to

boost cross-border activity of social investment funds, leading to a more vibrant and competitive social entrepreneurship fund market.

The Regulation on European Social Entrepreneurship Funds (EuSEF) introduces a harmonized set of rules for qualifying social entrepreneurship funds. The regulation permits certain alternative investment fund managers to market their EuSEF throughout EU pursuant to a single passport without opting for full compliance with the Alternative Investment Fund Managers Directive (AIFMD). In case the assets under management of the AIFM of EuSEF exceed the EUR 500 million threshold, they become liable to AIFMD authorization and must comply with AIFMD together with the specific requirements contained in the EuSEFs Regulation.

Funds eligible for the EuSEF designation must invest at least 70 % of their aggregate capital contribution and uncalled committed capital in assets that are qualifying investments: equity or quasi-equity instruments, secured or unsecured loans granted to qualifying portfolio undertakings, shares of qualifying portfolio undertakings or units or shares in other EuSEF. The qualifying portfolio undertakings by EuSEFs are those enterprises which a) do not trade on a regulated market or multi-trading facility and b) generated measurable positive social impact as a primary objective in accordance with its rules of association. Other key criteria for these qualifying undertakings include (The Social Investment Business, 2012):

- the enterprise should provide services or goods to disadvantaged or excluded people in an entrepreneurial and innovative way;
- the method of production of goods or services should contain social objectives;
- the enterprise should use its profits chiefly to attain its social objective and distribute its profits to shareholders in such a way as not to prevent its primary social objective.
- the activities of the enterprise are managed in a responsible and transparent manner by involving all workers, customers and stakeholders affected by its business activity.

The EuSEF designation is a voluntary regulatory regime for fund managers who choose to market their funds using the EuSEF label. The designation requires the fund to be supervised by the member state in which it is located. The member state must inform the European Securities and Markets Authority (ESMA) of all EuSEFs it has registered under the Regulation. ESMA executes oversight over all registered EuSEFs in cooperation with member state authorities in which the funds are marketed. ESMA maintains a publicly accessible central register of all EuSEF managers in the EU in accordance with the Regulation on EuSEFs.

The qualifying manager of the respective EuSEF should establish procedures and practices to measure the degree to which the qualifying portfolio undertakings in the EuSEF realize positive social impact. This objective is supported by wide transparency requirements. The manager of the EuSEF is obliged to present the investment strategy of the EuSEF and its objectives, including the following: a description of the assets other than qualifying portfolio undertakings; an outline of the risk profile of the EuSEF; valuation of the assets in the portfolio; costs and associated charges; remuneration calculation for the fund manager; and submission of annual reports to the competent authorities in the home member state in accordance with the existing reporting standards. EuSEFs can only be marketed to professional investors under Markets in Financial Instruments Directive (MiFID) who invest a minimum of EUR 100,000 and confirm in writing that they are fully cognizant of the risks involved in these investments. This group of investors includes socially driven entrepreneurs, high network individuals, industry sector experts and angel investors.

The Capital Markets Union (CMU) Action Plan Consultation by the European Commission (European Commission, 2015) led to a review of potential amendments to EuSEF regulations. The main issue under the said consultation encompasses clarification of the established threshold of EUR 500 million for Alternative Investment Funds Managers Directive authorization required for EuSEF participation. Currently, when the managers of EuSEF exceed the EUR 500 million threshold, they must obtain authorization under AIFMD. This requirement may discourage managers from growing their funds and is not likely to promote the growth and development of the social investment industry in Europe. According to the EVCA (2011), 98 % of all EuVCFs manage portfolios under the EUR 500 million threshold. Since implementation of the regulation, 34 EuVCFs have been registered aiming to raise approximately EUR 1.3 billion capital.

The review process also includes an assessment of the minimum investment commitment of EUR 100,000 by individual professional investors. Currently, EuSEFs can be marketed to non-professional investors who are able to subscribe a minimum of EUR 100,000. The eventual reduction of the investment threshold would broaden the investor base and reduce the risks for investors, especially for those with limited experience in social impact investing. Based on these features, the Regulation on EuSEFs may be opened to non-EU originated managers with expertise and skills in establishing and operating social investment funds. A key objective of the CMU is to catalyze the inflow of capital in the EU, which will be facilitated by allowing non – EU managers to invest internationally according to their sector specific specialization.

Conclusion

As EU countries develop new legal and fiscal infrastructure for social enterprise development, policymakers and practitioners must balance traditional forms of civil society with innovative and market based development strategies. An array of EU interventions may serve to create such balance and form an enabling environment for SEs, which includes enabling investors and creating a robust process of intermediation. SE is not a panacea. Instead, SE provides a clearly-defined organizational form through which entrepreneurs can pursue both “profit and purpose” and investors can leverage their investable assets to generate both social and financial returns. Because of SE’s social potential, the EU and other government entities are highly incentivized to engage in market intervention in support of SE formation and scale. However, these efforts should avoid market distortion or an over-dependence and non-sustainable reliance on government grantmaking. The success of public sector intervention in support of SEs will not be determined by the scale or scope of SEs themselves – but the scale and scope by which SEs increase social cohesion and foster sustainable economic growth.

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CORPORATE AND PERSONAL FINANCE

ECONOMIC ASPECTS OF LOGISTICS DEPOSITS

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Abstract:

The purpose of this paper is to describe warehouse economy logistics. The research has been carried out within the frame of a project that examined the economy for a business of warehouse logistic. Warehouse management systems is based on such factors as statistics and trends. This article examines the feasibility that arise while trying to organize and optimize its transportation economy. Also, economic aspects of other logistics procedures like collection and warehousing, are analysed.

Key words: Logistics goods, logistics deposits, automated storage systems

JEL classification codes: L23, L91, M21

1. Introduction - conceptual approaches to logistics goods

Logistics plays an increasingly important role in companies' activities, being a permanent connection with the manufacture, sale, marketing and customer service. By organizing a logistics activitie, this function can make a real contribution to the growth of the company. Logistics include two categories of core activities and supportive. The main groups of activities within the logistics are logistics activities functional regarding security of supply, storage, design and organization of flows, programming flows and maintenance and logistics business operational, which covers all handling activities, transport, handling, control, maintenance flows etc.

In the current business environment, as in the future, it is not advisable for companies to implement and execute those strategies aimed only fulfill marketing plan with the lowest possible cost. More and more practitioners and mentors in the conceptual states that logistics is a real source of competitive advantage. By reconsidering the strategy of logistics services for customers, the organization can meet a higher level expectations of business partners.

Logistics occupies a unique position within the company that allows it to coordinate relations they influence both the flow of information, and on the goods, with the ultimate aim execution of orders received. The flow begins when the client decides to make an order and ends when the order is fulfilled.

Today, logistics departments are present in the organization charts of many large companies in Europe, UK and the US, along with the departments of marketing, production and finance. Companies who believes that the only purpose of any business is serving the customer understand the strategic significance of logistics in the process.

In Romania, this function has been realized relatively recently, and in most cases, both in private companies and public sector, "rings that form the supply chain" are managed in isolation, being absent integration between the various logistics functions.

Important component of the economic activity of businesses in the retail, distribution of goods has recently become an important function by transforming the enterprise in terms of practical and scientific coverage and transition to the broader concept of freight logistics.

2. Deposits - classification and location rules

Merchandise warehouses are storage or storage points respectively, located along the physical path of a product from manufacturer to end user. It has to distinguish between the concept of deposit and the warehouse. It is estimated that the warehouse is storage for raw materials in general good under processing or use, while the deposit is to keep in perfect safe qualitative and quantitative goods for sale to customers.

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Deposit can be defined notion of economically and technically. From the economic point of view, the deposit base unit is in the process of technical and material supply includes all stocks of materials or finished products stored within the enterprise to supply uninterrupted supplies to beneficiaries.

From a technical standpoint deposits consist of entire buildings or areas specially equipped with machinery, facilities and equipment necessary to carry out various operations, in order to preserve materials or finished products.

Depending on the form of ownership, deposits can be: the producer, wholesale trade, retail trade or of trustees.

The importance comes from the fact that deposit on their side now can take action to reduce costs and inventory and upside profitability through higher levels of service to customers as a result of the application of modern techniques serving.

Over time, the emergence of modern sales techniques just-in-time storage pregnancy decreases the importance of increasing the constant movement in a time of increasingly shorter and better conditions all resources to customers. While deposits increased importance because, in addition to storage function, they acquired the reception function and delivery of orders, especially by electronic means, which leads to transformation into a warehouse distribution center.

The number and location of deposits are determined by the spatial coordinates of customers and production facilities, and products particularities.

A deposit will be set on a particular location, unless generate favorable effects in marketing and sales and reduce total costs

3. Automated storage system

Next a description to an automated system for storing different product categories and its virtual prototype. The storage system AS-RS (automated storage and retrieval system).

AS-RS systems consist in a variety of items controlled automatically placing or retrieving products from storage areas defined. [1]

These systems are commonly used in applications where: there are a number of products moving in and out of the storage; density storage spaces is important because of constraints due to space; accuracy is critical due to the potential damage that may occur on products;

AS-RS systems can handle both products stored in standard and non-standard units (eg stacks of boxes on pallets standard), just like in the following figure.

Systems of the type shown above (Figure 1) share the deposit in three areas:

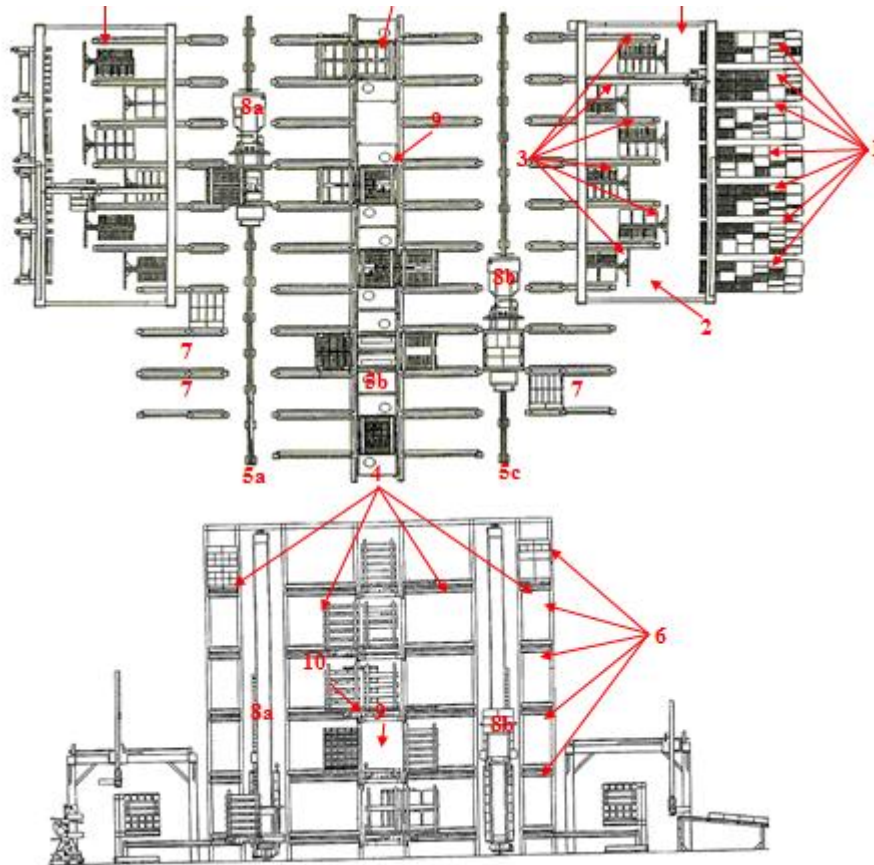
- I. A loading area;
- II. A storage area;
- III. A download area.

Cargo area is made up of accumulation conveyors 1, palletizing system of double Portal 2 and stationary storage devices 3. Stacks products are formed and placed on fixtures, where they will be taken over by a transport device type shuttle .

Storage area shows several vertical racks 4, lanes divided by vertical 5. vertical racks are divided horizontally into six different levels, each level being divided in turn into areas for storage of products 7. Lanes vertical (a, b, c) are used to transport products stacked to be stored or retrieved from racks.

Automated vehicles cross the aisles between racks of storage. Vehicles transporting goods from the loading of the storage area and then unloading area. The products are transported being placed on pallets in a stack.

Figure 1 – Storage system



Exterior corridors 5 (a and c) moving an automated mobile crane type 8 (a and b), which can perform translational movement horizontally along the aisle, and vertical translation movement. Inside track 5b is divided into 5 levels, each level featuring a transport system type mobile cart 9 and moves itself. Both the 2 mobile cranes, and cart-type systems shows horizontal platforms designed to store type system ensures takeover shuttle 10 respectively storing stacks of products.

The whole movement of goods in and out of the storage area is controlled by an electronic inventory. This system monitors controls the routes to transport stacks of products. The controller provides storage and stacks after taking algorithms such as first in - first out (FIFO) or last in - first out (LIFO).

Download area presents a more fixed storage devices 3, which will be taken over stacks of products using other instruments for transport. Storage system shown in Figure 1 consists of several subsystems operated electro-mechanics, each with its own role (storage, transport, transfer). System components are presented in Table 1.

Tabel 1

System components

No. Crt.	Name	Number
1	Conveyor feed	21
2	Palletizing System	1
3	Fixed storage devices	10
4	racks	4
5	Transport corridors	3
6	Storage levels	5
7	Storage products	290
8	mobile cranes	2
9	automated cart	5
10	shuttle system	5

4. Case study - MACROMEX

The company that makes the study of this project is called S.C. Macromex S.R.L and is headquartered in Bucharest, str. Mihai Eminescu, nr. 27, sector 1.

Macromex was established in 1993, in a difficult time of transition from a controlled economy to a truly democratic, which is characterized by competitiveness, not least performance and professionalism.

Similarly, the company Macromex aims in the immediate future, strengthening its position as a dominant player Macromex Food Service in HoReCa sector.

The expanding operation in countries neighboring the EU is also on the priority list of Macromex. The first countries where Macromex opened subsidiaries are Czech Republic and Slovakia, but the list remains open.

The products are imported from companies in Europe (the Netherlands, Spain, Belgium, France), USA, Brazil and Canada, Macromex the sole distributor in Romania of some international brands such as: President, Societe, Philadelphia, Linco, Dujardin, FarmFrites Royal Greenland, Guseppe, Sadia.

Customers of this company are many, namely over 6000. Macromex is allied with them in the fight with the biggest competitor that they have: TIME. Customers are the most important: CORA, XXL, Penny Market, Kaufland, Matrose, Carrefour, Selgros, Auchan.

In essence, transport involves carrying out the following activities:

- choosing the most appropriate mode of transport (road, rail, sea, air, through pipelines);
- Evaluation and selection of bidders transport services, which the company calls;
- strengthening transport;
- establishing transport routes;
- timing of shipments.

Macromex has developed an infrastructure extremely effective based on the material, human and integrated systems IT enabling tracking activity step by step and provides flexibility by linking all processes in order to obtain permanent lowest cost depending on each situation. Routes are determined by a software tool that depending on the point of delivery and the delivery schedule agreed with clients, establishes the dynamic optimal route. Basically the organization in the field of resources and the implementation of work procedures creates one of the most important advantages of Macromex: the most efficient distribution network in Romania.

Direct distribution of products has the following advantages:

- products are shipped quickly and directly from the company to customers, reaching fresh to them;
- transport company ensures optimum transport products;

Macromex have an auto park with 160 trucks, including 70 trucks and vans of ultimate generation with miscellaneous dimensions, most important of them have refrigerated spaces with two temperatures, realizing dynamic allocations of trucks and optimizing routes, using digital maps incorporated in ERP sistem, processing commands in real time, selection and application of filters on data base with monitorizing of payments on every location; manipulation, transport itself, storage with immobilizations and losses.

We suppose as Macromex imports 2 tons of congealed fish from Nuuk, Groenlanda, at logistic center from Bucharest, choosing 2 methods of transport: firstly, the chosen transport is road, and secondly case the transport is secured by a ship at Constanta, after this the goods is transported road at storage from Bucharest.

The transport cost is calculated by:

$$CT = C_a + C_m + C_t + C_d + C_i + C_p$$

1. Transport rutier (unimodal)

a. $Q_m = 2$ tone

$$P_a = 10 \text{ euro/buc}$$

$$n_e = 30$$

$$k = 1,25$$

$$C_a = \frac{100}{Q_m} * \frac{P_a}{n_e} * k$$

$$C_a = \frac{100}{2} * \frac{10}{30} * 1,25$$

$$C_a = 21 \text{ euro/t} * 2t = 42 \text{ euro}$$

b. $n_m = 2$

$$p_m = 3 \text{ euro/t}$$

$$n_{tr} = 2$$

$$p_{tr} = 2 \text{ euro/t}$$

$$I_s = 0,5 \text{ t}$$

$$C_m = n_m * p_m * \frac{n_{tr} * p_{tr}}{I_s}$$

$$C_m = 2 * 3 * \frac{2 * 2}{0,5}$$

$$C_m = 14 \text{ euro/t} * 2t = 28 \text{ euro}$$

c. $C_{tmi} = 0,5 \text{ euro/t/km}$

$$D_{tmi} = 5000 \text{ km}$$

$$C_t = 0,5 \text{ euro/t/km} * 5000 \text{ km} = 2500 \text{ euro/t} * 2t = 5000 \text{ euro}$$

d. $C_d = 0$

e. $V = 5000 \text{ euro}$

$$d' = 8 \%$$

$$T_t = 6 \text{ zile}$$

$$C_i = \frac{V + d'}{365} * T_t$$

$$C_i = \frac{5000 * 0,08}{365} * 6 = 7 \text{ euro}$$

$$f. C_p = \frac{2}{100} * 5000 = 100 \text{ euro}$$

$$CT = 42 + 28 + 5000 + 7 + 100 = 5177 \text{ euro}$$

$$CT/kg = 5177/2000 = 2,6 \text{ euro} \cong 10 \text{ lei/kg}$$

2. Shipping and road (bimodal)

a. $C_a = 42 \text{ euro}$

$$b. C_m = 3 * 3 * \frac{3 * 2}{0,5}$$

$$C_m = 21 \text{ euro/t} * 2t = 42 \text{ euro}$$

$$C_t = C_{tmn} * D_{mn} + C_{tmr} * D_{mr}$$

$$c. C_t = 0.2 \text{euro} / t / km * 4000 km + 0.5 \text{euro} / t / km * 250 = 925 \text{euro}$$

$$C_t = 925 \text{euro} * 2t = 1850 \text{euro}$$

$$d. C_i = \frac{5000 * 0.08}{365} * 14 = 15 \text{euro}$$

$$e. C_p = \frac{2}{100} * 5000 = 100 \text{euro}$$

$$CT = 2049 \text{ euro}$$

$$CT/kg = 1,03 \text{ euro} \cong 4,2 \text{ lei} / kg$$

Table 2

Two variants calculated

Variant 1 (unimodal)	Variant 2 (bimodal)
$C_a = 42 \text{ euro}$	$C_a = 42 \text{ euro}$
$C_m = 28 \text{ euro}$	$C_m = 42 \text{ euro}$
$C_t = 5000 \text{ euro}$	$C_t = 1850 \text{ euro}$
$C_d = 0$	$C_d = 0$
$C_i = 7 \text{ euro}$	$C_i = 15 \text{ euro}$
$C_p = 100 \text{ euro}$	$C_p = 100 \text{ euro}$
CT = 5177 euro	CT = 2049 euro

At final, will be choosed the variant 2 because generate lowest transport costs then roading transport, the naval transport is more cheaper than all options.

Figure 2 - The variant chosen



From the perspective of logistics profitability, the stocks own a critical weight in a ensemble of costs, about the management of stocks, through the main activities realised by logisticians, sign up:

- developing policy about stocks of raw materials, materials and finished products;
- established the mix of products from stock, depending by contribution of various articles at sales/company profit;

- determination of safety stock and at level of resupply;
- application the strategy "just-in-time".

The necessity of savings the material resources and money, using with maximum of efficiency at current assets need an optimum level of stocks (Adochiței M., Adochiței A., *Finanțele întreprinderii în economia de piață*, Editura Mitrea, Piatra Neamț, 1993, pag. 103). For this it is necessary judicious organization of supply in order to reduce the assets of material values, for insurance of stocks synchronized with real needed of production. In the sight establishing of optimum stock, optimum amounts the stocked and optimum interval of resupply it is necessary to found ways to balancing of two antagonistic costs: storage stocks (who grow up with ordered quantity) and the cost of order (who decreases with the ordered quantity).

Although the stocks have a general common structure, as a result of different ways are managed is not possible to generalize one optimization model (Băsanu Gh., Pricop M., *Managementul aprovizionării și desfacerii*, Editura Economică, București, 1996, pag. 110). The option for certain method heed about the concrete factors who influences the size of storages for each material resource.

In conditions of differential stocks it is used with good results the ABC system. This grouping the materials goods which supplies and it stocked in three groups. The criterias of grouping are multiple: delivery frequency, individual value and totally of material resources founded in stock; insurance source (by import or internal); supply form.

The most used criterias in group assets by ABC method relate at value of medium stock at different goods. Using this criterias of grouping, the ABC method allow the formulation of some stocks as low possible resources, ensure by a accelerative speed of rotation and a necessary moderate finance.

In case of group A of importance, the attention is targeted in sense of using demanding mathematics methods, which will be considered elements (factors) concrete who conditioning the level of stocks and it insurance his formation at lowest possible dimensions.

For group B it applied two strategies:

- established of distincts models with one degree of a medium exigency for dimensioning stocks of products from this group;
- usage methods elected for group A at materials which, from value perspective presents features of this group and at models for group C, products which can be assimilated.

For materials from group C can be used models less demanding and which will retain into account just factors with decisive action in dimension stocks. The method insurance the dosing efforts to touch principal objective of stocking gestion, that to owned products stocks as low possible, but which allowing rhythmic consumption, with minimum costs, in conditions of controlled risk.

Grow up program of logistics efficiency activities

The marketing program represent an unfolded plan of a complex activity of marketing, made up by an ensemble of practical actions, in order achievement or a set of objectives, trailloads in time, with responsibility precision, of human resources, materials and financial necessary. In vision of A.W. Frey, the concept of program is "an writing formulation, specifying objectives of marketing and describe the principals middle of realizations of them; he show where want to get one firm and how intend to go there".

In practics, the program of marketing return the strategy of marketing of firm for next period, indicating the points where will be necessary to take some decisions, integrating and coordonating controllable factors in activity of marketing of firm, the components of mixed marketing, such that to generate maximum efficiency in every moment during the program, like for all provided period.

In development of marketing programs it calls at one series of cantitative methods of identification and evaluation of proceses which composing the environment of underway the firm activity.

Activities program

Simbol	Content activites	Time activites	Activities		
			After	Simultaneous	Before
A	Market study of congealed products from Cehia	60 zile	-	-	-
B	Analyze study results	14 zile	A	-	C
C	The decision to establish a subsidiary in Cehia	21 zile	A, B	-	D
D	Register society in the host country	60 zile	C	I, F	E
E	Closing the distribution area	30 zile	D	-	J, K
F	Setting area of distribution	14 zile	C	I, D	G
G	Selection and contacting potential customers	20 zile	F	-	H
H	Closing contracts for distribution	30 zile	G	-	J
I	Appointment subsidiary director	10 zile	C	D, F	E
J	Purchase technology of management	60 zile	E	K	L
K	Purchase vehicles	40 zile	E	J	L
L	Hiring the operative and executive personal	30 zile	K, J	-	-

Activities budget

Activitie	Budget
Study of market frozen products from Cehia	10.000 euro
Analyze study results	2000 euro
Decision to establish a subsidiary in Cehia	1000 euro
Register society in host country	20.000 euro
Renting necessary space(5 years)	3.000.0000 euro
Establish the area of distribution	5000 euro
Selection and contacting potential customers	1000 euro
Renting contracts for distribution	500 euro
Appointment the subsidiary director	1000 euro
Purchase the technologies of administration	600.000 euro
Purchase vehicles	250.000 euro
Hiring operational and executive personal	8000 euro
Total buget	3.898.500 euro

5. Conclusions

Macromex means professionalism, a force in distribution and logistics which offered complete and effective services of her clients. Benefiting of experience, resource, information and flexible infrastructure, the company offers his partners the possibility to be always with one step before events which characterized market.

The vision was and is Macromex to become a leader in terms of logistic infrastructure and to be a distributor of some international strong brands on romanian market. Over the time Macromex acquired an incontestable position of leader in imports domein and distribution of refrigerate and frozen foods field which need some special services at high standards like and precision looking the absolut control about temperature of storage and transport. Starting with month july of this year will start an project of the foundation of first subsidiary external, in Cehia, program whose the budget is estimated at almost 3.900.000 euros, what will be strengthen the position on the products frozen and refrigerated in market.

In future, Macromex, counting on potential of grow up of HoReCa (hotels, restaurants, catering), what would determinate taking the decision to establish a separate division for this type of services. Beside the development of segment HoReCa, Macromex will be establish investitions to extending logistic infrastructure and sharing, but in advanced technologys of gestion of stocks. Have a permanent changing process of auto fleet, the maximum duration of use at vehicle being 5 years.

In all these years of activity, Macromex have the strength and the vision to dezvolting himself and to permanently upgrade his services, become a partner of european waist. Firm services bring a

plus of competitiveness to products and own brand values certified or providers and carry on all of this qualities to end consumer by Macromex clients, increasing also the value of his services.

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SPECIFICITY OF THE LOCAL FIRMS ACTIVITY

PhD Mihail Dimitriu²⁶

Abstract:

Currently, one of the unsolved problems in Romania is linked to disparities occurred in the living standards of the population in certain areas of Romania. To eliminate these disparities should, in our view, to put emphasis on the sustainable development of companies with activities at local level. Thus, it can provide sustainable jobs and on the consumer side, an offer of goods and services consistent with the sustainable needs of the population. The study makes a pertinent analysis (based on annual balance sheets) of economic and financial potential, utilization of potential, the results and performances of companies with activities locally in Romania between 2007 -2014, providing support for decisions to help the business environment in Romania.

Key words: local communities, goods and services, companies' activity

JEL classification codes: D04, D24, H41

1. Introduction

In the context of sustainable economic development, SMEs play an important role. However, if we refer to ensuring the purely local communities should refine the analysis, taking into account only those businesses with local vocation. Of course, first comes into question public services provided by legal firms and other goods provided local communities, in terms of free competition or monopoly.

2. Public services and local communities

Public service in the current sense is an activity of the institutions of state administration of a legal person, public or private, providing an activity of general interest.

Creating public services have long been state monopoly both in Western countries and communist countries, but for different reasons: for the capitalist state, to ensure the rights and freedoms of all its citizens, it was an obligation satisfies general interests; for the communist state, public services under the management of private enterprises constituted a threat.

Since the interwar period, the state and its institutions were forced to entrust some public services to private individuals as it could not meet social requirements. Thus, it is arose the idea of a service of general interest provided by a private firm. In 1964 Laumbadere show that "public service is a general interest activity, performed by a private person having powers under the control of political power (Ajda 1964, p. 91). So, according to this definition, the public service must meet the following conditions:

- A first condition is "general interest". Analyzing this aspect, we find that in the activity of firms is difficult to distinguish what is the general interest and private interest.
- The second condition refer to (according to the definition of a private firm) advantages for serving the general interest which enjoys such authority and not equality in its relations with third parties. This report will enable the authority or monopoly activity or issuance of unilateral acts or setting fees.
- The third condition concerns the administration control over the activity of services. Thus, a private person can only perform a public service by a delegation given by an institution public and it is necessary to delimit the perimeter within which they may act.

The current definition outlined in the late 80s recognizes that some public services performed by private individuals should not necessarily enjoy the prerogatives of public power. This concerns in particular to a series of public social services (health, culture, education, etc.) which are provided by private firms.

Since 1990, the idea of democracy in Romania was imposed in practice management system through the transfer of public services and states their teaching duties to private given that they

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should not necessarily enjoy the prerogatives of political power. However, the state currently has a monopoly on services considered of national interest that we establish and coordinate centralized (police, civil status, PSI, maintenance of inland transport, etc.).

From the definition given above, public service characteristics are:

- Public service is organized and authorized directly by an authority of local public administration, operating under its supervision;
- Public service aims to meet the needs of the public, corresponding to the general interest;
- Public service is always provided by government, whatever that is done (thru its own activities or through other service providers);
- The establishment of public service is the exclusive attribute of deliberative bodies, namely the local councils and their organization and functioning of the executive authorities is the attribute that is the prefect (the county) and mayors (for Municipalities).

3. Firms with local activity - factor of local economic development

At the local level, along with public services, there are a number of activities that are provided directly in the community, and not of the responsibility of the local public administration, such as local commerce, people transport, local tourism etc. These firms are created in accordance with the Law of Companies No.31/1990 and it operates under the principles of the law of supply and demand on a regulated local market.

Some public services, since 1990, have been privatized; much slower process than economic, but not because of lack of legislation, but in particular because of officials in public administration.

Privatization in Romania, was supposed to start first, with public services to create precedent under which privatization phenomenon to become politically acceptable.

In the management of public services we inspired a number of viable systems of the developed capitalist countries. Regarding privatization, did not take into account the many ways and forms used in these countries, when the phenomenon is much wide than generally (ex.: railways in the UK and Japan, the Renault factories in France, distribution electricity and telecommunications in the USA etc.).

The paradox is that in our country just administrative doctrine is the biggest obstacle to privatization. Thus, there are several hypotheses of administration, both the central and the local government level, which resulted in hindering privatization of public services in some areas and that proved to be false.

A first hypothesis is that there are not enough private service providers to ensure competition and whether it would be only one provider would reach monopolistic practices. This hypothesis believes it is wrong for the following reasons:

- Assume that the state monopoly is preferable to a private company; reality show, however, that after 1990, the administrative bureaucracy is worse than any other bureaucracy, and state monopoly is permanent, consumers no longer have any hope of improving services if they are bad, and in Romania in the past 10 years they leaves much to be desired;
- In public service, highly diversified, there are several potential providers. Thus employees of kings may establish a company and can take over the public services or managers of state firms can set up companies in the field. Finally, privatization of public services can attract private entrepreneurs by offering some better gains than the state or by the possibility of using money received from the redundant (between 8:20 salaries) to launch a business.

The second erroneous assumption lies in the fact that the administrations central or local publics think public services as national monopolies. It is well-known case of maintaining services for the public interest under the patronage of the state (airlines, railways, urban transport, etc.);

An example of false public utility is the privatization of telecommunications services in almost all countries in Europe; generally, private companies have lower costs and a much higher quality and efficiency of services. Not the same happened in Romania, where the sale of part of Romtelecom shares to a Greek firm that has generated more expensive phone calls within five years, 20 times.

A third hypothesis is wrong in the state's obligation to provide public services to ensure poor people's access to them. It is well known that the state subsidizes a range of public services, in order to provide users with cheap services, only those subsidies have a number of undesirable effects, such as for instance, the public transport. But, this subsidy generates monthly basically the following:

- Lack of motivation of employees (managers, engineers, economists) to reduce production costs;
- Maintaining in service of unsolicited trails;
- Lack of organization.

All presented lead to an expensive transportation and ultimately affecting poor people because they generally are public transport users. On the other hand, the grants are paid from the budget (local or central), so poor people pay all the taxes. In addition it should be mentioned how the government subsidizes all citizens regardless of the fact that some of them have or no means to pay the services.

A positive example is the subsidy for system of public transportation used in the US, which only grants a subsidy for poorest people to pay the cost of the ticket. This compensation system can be used and health services, housing or education.

Finally, the fourth hypothesis obviously false is to state that public services are intended for citizens, not for profit. In reality, no one from public service can be free, i.e. ineffective.

In conclusion, it must be recognized that privatization is easier in some areas such as telecommunications, energy distribution, transmission, but more difficult in the case of education, health, since they require the intervention of central government.

Even in this case, it must be recognized that the central government or local provides a range of public services. It has accepted that they can be administered by a number of private individual companies on a contractual basis.

Precisely the lack of funds should oblige the central or local governments to privatization for eliminate subsidies.

Partnership method has the advantage that induce competitive behavior of public service providers and while not involve high costs for the state budget or local budgets.

When is adopted a flexible legal framework relative to capital movements is possible and the interest of foreign investments is growing to simplify the administrative burden for central or local government. The partnership has at least in the broadest sense of cooperation between state and private companies, many variations, such as public works subcontracting, leasing of land and infrastructure for public execution, franchising joint ventures.

Economic, social and political, in many countries poorly developed or developing, does not allow full implementation of privatization of public services or at least not in form the sale of shares. It is therefore possible that Michel Todoroi, an eminent western economist, has been right when he said "public corporations can still play an important role in economic development as long as the political will exists to minimize the abuse of economic power, will correct share price and market distortions useless."

In analyzing the firms with local activity must be considered and performance indicators applicable to the evaluation. These indicators can be grouped into the following categories on which we present below, and based on the results obtained in Western countries: economic indicators; Quality indicators.

In the economic indicators field we can specify:

a) The unit cost performance is an excellent indicator that can be easily understood by citizens and local elected officials, not experts in the field. For example, is can compare the annual cost of schooling for a student from a school with the same type of costs from another educational institution (in the same country or in different countries).

In some European Union member states, the information relative to "unit cost" is published in a form allowing comparisons at national level (e.g. Denmark, Sweden, and Norway).

It is also becoming more frequent issues of international comparisons about unit costs. The unit cost, the starting point in studies on labor productivity, which is compared in time and weighted index to eliminate the effects of inflation. At the same time, it must take account of changes in the quality of service provided.

The "unit cost" is very good to compare productivity developments. In technical fields it is used for a long time. Thus, most of the local authoritarians know the cost of m³ of water or the removal of waste (tons or m³ per capita). When public services are charged, this indicator is very exact. It should however be borne in mind that for other services "unit cost" is difficult to calculate. Thus, existing systems of evaluation and analysis does not always provide information on the costs of a service, and this because sometimes the difficulty lies in defining unit measure. For example, it is very difficult to quantify "unit cost" itself, where local social care services, care of disabled people, or children in need.

In such areas the development of reliable performance indicators is very difficult to achieve and requires several years.

b) Rates are selling price of local public services, products, taking into account the investment costs and inputs (raw water, energy, labor, etc.);

c) Indicators of efficiency are needed especially in areas where local public service is a natural monopoly. In these circumstances, could for example, a network of water efficiency, measured as the ratio between the water and the amount of water produced and invoiced.

Quality indicators:

The concept of quality of public services is generated thru the nature of the benefit recipients' expectations. From this point of view, important elements of local public services are:

- Opportunity;
- Continuity;
- The comfort of citizens.

However, sometimes activities carried out by local government have other objectives than satisfying the individual beneficiary, having admitted certain common objectives, namely:

- Providing local public services without economic constraints;
- Treating people equally to local public service provision.

In these cases, service delivery should focus primarily on needs and not on demand. The level of satisfaction of the beneficiary should not be the only indicator of quality. Thus, in some technical fields it is relatively easy to measure quality. For example, in the electricity supply quality corresponds mainly to the lack of breaks, and in terms of the quality of public waste collection, it cannot be measured by the number of complaints received from beneficiaries claiming delays in delivery or negligence manipulation. It is also very difficult to measure the quality of public social services, health or education. In these areas there unique performance indicators and the main problem that arises is "apportioning responsibility to define quality?":

- Provider
- Beneficiary;
- A group of experts.

Efficacy is probably the most important factor in local public services chapter. These can be provided in an economical and efficient manner, but if you do not meet their primary objective, may be a waste of energy (resources).

As we mentioned previously, there are areas where measurements are made more delicate due mainly to difficulties arising in defining goals and objectives. The political intentions must be translated into operational objectives, which is a very delicate operation. Moreover, given the relationship between a service and a goal (or purpose) it is sometimes particularly difficult to establish.

The distinction must be made between effectiveness and efficiency so when constructing a road, the efficiency is measured by the cost / Km. Effectiveness corresponds to the following indicators:

- Report of reducing cost and travel times;
- Reduce transportation costs;
- Decline in the number of accidents.

In documents made available by Member States to the European Union are not many examples of performance indicators that can reflect the effectiveness of local public services in the fields of education, social aid, health, helping the elderly, etc. However, it can make a general idea on the effectiveness of service based on a number of other factors relevant and reliable by which it is much easier to accomplish more complex studies to determine the effectiveness.

Regarding the use of performance indicators by local authorities, in most cases, they are used as complementary information for management control of local public services.

In technical fields such as water and electricity, sewage treatment, road maintenance, efficiency indicators are used more time because:

- Production activity in these areas is easily measured;
- Dates are the same as those used in the calculation of tariffs;
- Staff trained to use the measurement results.

On the contrary, in other sectors, the use of these indicators is the latest. Services like maintenance of green spaces, gardens and public parks, schools and social welfare wake often political interest and introduced new techniques for managing their supply level. And in the important area of environmental protection it is often possible to define objectives and results expressed as performance indicators.

4. Evolution of the companies' active locally in the period 2007 -2014

To draw some conclusions relating to firms active locally, we used the annual financial statements made available by the Ministry of Public Finance for 2007 – 2014 periods. The selection criteria for companies operating locally have been the industry (classification according to NACE rev. 2008) and their size (micro, small and medium size firms, according methodological Ministry of Public Finance).

Analysis indicators selected relate to economic potential, the utilization of its economic and financial results and performance, both in the regions structure and the dynamic for the period 2007 -2014. As regards developments in the economic potential of companies active locally were used following indicators: total assets, property, available cash, current assets, number of staff and number of companies. From the point of view of the average value of total asset, the data are presented in the following table.

Table 1

Dynamics of average total assets during 2007-2014 for companies grouped by region

No. crt.	Region Development	Total average assets per unit -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	1461496	132,30	135,15	122,94	153,53	156,04	144,48	145,04
2	NORD – EST	1392468	127,02	127,35	116,70	137,93	143,34	132,63	149,22
3	SUD – VEST	1607482	143,75	147,86	118,04	133,28	143,98	160,65	164,18
4	SUD – EST	1963858	132,02	131,40	108,12	125,89	135,30	148,25	175,66
5	SUD	1631711	136,20	125,91	118,71	146,38	155,53	147,24	159,78
6	CENTRU	1816460	133,17	127,86	110,62	130,29	138,47	140,99	161,15
7	VEST	1854544	135,81	118,91	109,44	135,37	148,95	144,42	148,35
8	BUCUREȘTI - ILFOV	20722439	137,39	115,30	151,98	149,92	141,98	142,10	283,64
	Total	6445978	133,42	121,25	140,42	149,56	148,15	148,53	250,09

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

It is noted that the total average value of assets increased 2.50 times during 2007-2014, which may be positive, but it appears obvious disproportion between Bucharest - Ilfov region and other regions. The average level of total assets in 2014 to a company in Bucharest - Ilfov region is over 10.55 times higher compared to the average for a company in South - Eastern region (the region next level of this indicator) and over 14.88 times for a company in the Northeast region (last ranked the level of this indicator). Dynamically, the average total assets for the Company increased by 2.83 times over this period for the Bucharest - Ilfov and miss with 45.04% for the North - West.

Analysis of fixed assets, as an important element of the total assets of a company can be done using the following table.

Table 2

**Dynamics of average fixed assets during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average fixed assets -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	735513	133,72	136,94	117,75	139,12	141,33	137,74	151,01
2	NORD – EST	741554	132,32	129,45	110,44	128,16	133,97	126,35	163,58
3	SUD – VEST	836162	149,98	168,97	102,71	117,69	126,17	157,90	174,57
4	SUD – EST	994331	132,59	123,39	91,89	107,90	111,72	135,99	167,86
5	SUD	831096	139,81	125,04	107,26	132,16	140,95	140,87	169,10
6	CENTRU	1008817	138,37	133,82	102,11	118,94	124,32	137,01	170,91
7	VEST	985240	138,42	122,50	103,32	130,00	137,02	141,68	151,03
8	BUCUREȘTI - ILFOV	12616569	138,59	117,17	151,64	143,74	130,76	132,46	297,34
	Total	3816140	135,11	122,80	138,73	141,98	135,53	139,83	265,96

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

The total value of tangible assets has a significant share in firms active locally. At country level, for 2014, this indicator represents approximately 59.20% of total assets. In this case, detach the same conclusion: Bucharest - Ilfov region has companies with the highest average value of tangible assets in the year 2014, and dynamic lowest increases are recorded for companies in the North - West and North - East.

Another analysis is the evolution of the structure and level of available funds, which can provide an insight into the financial resources of these companies for the period 2007-2014.

Table 3

**Dynamics of average available monetary funds during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average available monetary funds -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	77370	113,66	111,79	112,65	137,17	138,14	145,51	148,75
2	NORD – EST	61168	105,86	90,15	106,05	119,94	119,65	123,34	148,44
3	SUD – VEST	64564	121,02	101,86	108,49	122,01	122,10	137,87	139,89
4	SUD – EST	72886	114,30	103,42	112,79	127,20	135,99	140,06	152,40
5	SUD	74557	125,63	112,62	113,86	131,79	129,15	141,19	150,08
6	CENTRU	82290	106,36	102,59	104,06	119,59	126,33	134,70	155,27
7	VEST	80703	110,00	95,89	99,65	117,15	128,31	131,15	143,49
8	BUCUREȘTI - ILFOV	401146	128,37	105,67	124,73	122,35	114,07	118,05	274,46
	Total	153390	120,57	105,94	119,45	126,19	123,06	128,94	233,83

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

In this case, firms in the North - East averaged reduce the financial resources at the end of 2014, 6.55 times lower compared to the average for the region Bucharest / Ilfov. Dynamically, the smallest increases recorded for firms in the South - West with an increase of only 39.89% in 2014 compared to 2007 and an average level at the end of 2014 of the lowest (only 64 564 lei).

Regarding current assets, mostly consisting of receivables situation is presented in the table below.

Table 4

**Dynamics of average current assets during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average current assets -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	725983	130,85	133,30	128,28	168,34	171,18	151,42	139,46
2	NORD – EST	650914	121,50	125,16	123,20	148,08	153,10	139,16	135,65
3	SUD – VEST	771319	137,57	126,94	133,23	148,72	161,63	163,37	154,23
4	SUD – EST	969527	131,23	142,36	130,32	150,49	167,55	165,02	184,46
5	SUD	800615	132,55	126,80	130,31	160,78	170,28	153,67	151,14
6	CENTRU	807643	127,08	120,89	120,56	143,54	155,00	145,63	150,42
7	VEST	869304	132,85	114,83	116,38	141,48	162,51	147,53	145,42
8	BUCUREȘTI - ILFOV	8105870	135,41	112,21	152,55	160,13	160,53	158,03	264,65
	Total	2629838	130,97	119,01	142,87	160,53	166,43	161,15	230,16

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

From this perspective, a high level of this indicator, as is the case in the Bucharest / Ilfov is not necessarily favorable. The claims, which have the largest share represents a particular problem for the Bucharest / Ilfov, where they increased 2.64 times in 2014 compared to 2007.

In firms with local activity generally activates on average about 15 people in 2014, changes in the level and structure presenting below.

Table 5

**Dynamics of average number of employed during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average number of employed -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	7,30	107,76	106,47	86,64	97,84	95,26	85,52	122,70
2	NORD – EST	7,62	104,58	95,29	84,52	88,96	89,50	80,34	127,68
3	SUD – VEST	7,57	109,18	80,27	67,74	78,54	74,07	71,41	131,47
4	SUD – EST	7,73	103,43	96,04	76,65	84,56	84,83	77,83	131,04
5	SUD	7,87	107,74	100,40	80,91	93,86	90,92	93,78	112,13
6	CENTRU	8,69	114,58	108,46	79,90	87,75	87,01	83,11	128,14
7	VEST	7,61	109,02	97,04	82,60	91,75	92,27	79,30	123,80
8	BUCUREȘTI - ILFOV	37,16	118,00	94,69	114,09	105,98	100,61	97,85	231,67
	Total	15,14	110,95	97,71	93,74	96,98	94,47	89,88	175,65

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

If this indicator analysis, the Bucharest / Ilfov stands out clearly with more than 37 employees, a typical mid-size firms, while in other regions, average operating companies with under 10 employees (micro specifically). A cause of the situation in 2014 is the dynamics specific to the Bucharest / Ilfov, where the average number of employees has increased 2.31 times during 2007-2014, while the rest of the country, this indicator increased by only 12, 13% in the South region and 31.47% for the region of South - West.

The number of firms with local activity increased on average by 7.64% in 2007 – 2014 periods, this situation presenting analytical regions in the table below.

Table 6

**Dynamics of number of companies during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Number of companies -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	70124	90,28	95,73	90,38	91,13	90,85	96,30	109,09
2	NORD – EST	51806	92,26	94,68	90,69	90,53	89,19	93,17	105,10
3	SUD – VEST	34759	83,61	98,68	94,22	94,77	94,22	98,90	108,37
4	SUD – EST	56240	89,81	96,39	92,24	92,27	91,34	95,23	105,32
5	SUD	54965	90,97	97,78	94,29	94,36	93,89	98,19	105,11
6	CENTRU	57455	87,89	93,76	89,70	89,32	88,57	92,04	105,27
7	VEST	45389	86,94	95,43	89,90	89,85	89,15	93,32	107,73
8	BUCUREȘTI - ILFOV	124022	85,35	98,41	92,37	96,56	98,08	103,96	111,14
	Total	494760	88,33	96,46	91,66	92,69	92,49	97,14	107,64

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Given the economic and financial crisis period, it is observed that in the period 2008 - 2013, the number of companies at national level was lower than in 2007, only the last two years recorded an improvement of the situation. We can say that 2014 will be a change in trends recorded until then, the number of firms is higher this year in all regions than in 2007.

Overall, in terms of economic and financial potential, can make two observations:

- Dynamically, the Bucharest / Ilfov has the highest values of the indicators for characterizing growth potential, while the North - West and North – East region had the lowest values,
- The structure, the mean for economic and financial potential of the region Bucharest - Ilfov 2014 is over 2 times higher than the rest of the country.

These figures show that local economic development was done differently across the country, levers, instruments and means of enhancing the potential of being more concentrated in the region Bucharest / Ilfov and much less in the Northern area of the country.

In terms of the use of economic and financial potential, we used the following indicators: average personnel costs and total costs. In terms of personnel costs, data presented in the following table.

Table 7

**Dynamics of average personnel costs during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average personnel costs -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	159213	132,99	119,95	106,89	132,94	141,00	129,96	143,81
2	NORD – EST	156199	129,23	116,05	97,60	116,59	123,09	121,12	153,77
3	SUD – VEST	169696	146,27	113,22	95,18	114,82	121,15	140,79	159,32
4	SUD – EST	166407	135,17	117,51	96,00	116,64	121,86	123,24	154,59
5	SUD	179955	134,64	113,97	99,79	124,49	132,23	125,54	156,60
6	CENTRU	214066	137,20	117,11	102,39	126,04	134,85	134,23	158,21
7	VEST	195076	134,97	107,77	101,78	129,22	138,94	127,34	150,54
8	BUCUREȘTI - ILFOV	1771828	149,11	126,13	150,66	156,22	150,24	157,53	278,55
	Total	576652	140,72	122,64	129,55	145,26	146,25	150,01	238,53

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Although the period 2008 - 2014 the total number of firms with local activity was lower compared to 2007, average personnel costs were consistently higher compared to 2007. In the case of the Bucharest / Ilfov, if in 2012 the number of companies was lower by 7.51% compared to 2007, with average personnel costs was 50.24% higher! The same situation exists in other regions. Only in 2010 and only four regions, namely North East, South West, South East and South, average personnel costs were lower than in 2007. One possible cause of this situation is the rise in turnover and performance indicators, while the demand is covered.

If we look at the average total expenses for the period 2007 - 2014, the situation is as follows:

Table 8

**Dynamics of average total expenses during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average total expenses -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	1357823	139,21	121,51	105,23	132,44	141,38	119,08	138,01
2	NORD – EST	1246524	131,48	110,29	101,81	121,38	132,20	113,07	137,08
3	SUD – VEST	1315944	143,85	108,84	101,76	116,29	123,84	114,19	148,36
4	SUD – EST	1381035	139,36	117,68	108,17	129,33	140,63	118,91	140,99
5	SUD	1568657	143,47	112,13	103,81	132,66	140,58	122,97	151,35
6	CENTRU	1547448	137,83	109,37	102,22	121,25	128,06	117,83	148,25
7	VEST	1399502	141,24	104,14	102,36	129,45	143,22	113,56	140,47
8	BUCUREȘTI - ILFOV	18935175	148,84	114,50	149,69	164,82	159,78	160,53	267,04
	Total	5801265	142,52	114,90	132,30	153,47	155,50	149,52	235,31

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

While at the country level, total assets have increased an average of 2.50 times, total expenses increased by 2.35 times, which reflects a better use of assets. The same trend is manifested in all developing regions.

In terms of economic performance, a special place is the amount of turnover. The dynamic, total, in 2014 this indicator was 2.39 times higher than the level reached in 2007, a level higher than that registered on the total expenses (an increase of 2.35 times), as can be seen lower.

Table 9

**Dynamics of average annual turnover during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average annual turnover -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	1316739	136,22	117,32	102,22	128,47	137,81	116,21	140,84
2	NORD – EST	1142280	130,84	109,18	99,07	119,96	130,83	112,41	133,44
3	SUD – VEST	1161212	141,69	104,79	99,37	113,29	119,75	106,61	144,22
4	SUD – EST	1267492	139,95	115,53	106,74	129,72	139,66	117,60	137,26
5	SUD	1454538	141,88	108,74	101,42	128,58	136,77	120,11	146,55
6	CENTRU	1459195	136,85	107,22	101,18	120,17	127,72	116,24	148,63
7	VEST	1296787	137,33	101,25	100,62	127,07	140,47	110,97	139,87
8	BUCUREȘTI - ILFOV	18496299	143,24	113,97	145,92	156,16	152,36	156,16	273,44
	Total	5618386	113,52	129,38	147,34	149,98	113,52	110,51	239,83

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Distance between levels of development of regions increased during the period under review, partially reflected by this indicator. The average level of annual turnover for firms with local activity has increased in the North – East region with 33.44% in 2014 compared to 2007, while in the Bucharest - Ilfov region this indicator increased 2.73 times!

Total average income increased an average of 2.36 times the total land in the analyzed period, the largest increases being between 2013 and 2014, but is lower than those recorded turnover (2.39 times). The situation is the structure as below.

Table 10

**Dynamics of average total income during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average total income -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	1432932	135,57	116,27	101,27	128,84	136,72	115,48	142,85
2	NORD – EST	1242435	129,57	107,13	98,00	117,91	128,49	110,65	134,60
3	SUD – VEST	1250149	141,21	104,00	98,47	112,92	119,83	107,41	142,92
4	SUD – EST	1435411	136,57	112,54	103,60	126,11	135,25	114,78	144,02
5	SUD	1609200	141,52	107,89	100,53	128,53	136,28	119,30	151,46
6	CENTRU	1586595	135,56	104,56	99,04	117,96	125,08	114,62	149,24
7	VEST	1427294	136,91	99,27	98,39	125,40	138,39	110,63	140,19
8	BUCUREȘTI - ILFOV	19612227	143,65	111,59	145,96	96,57	151,62	155,26	268,27
	Total	5994358	138,38	111,32	128,72	108,81	148,73	144,92	236,81

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

In this case, the region of the North - East is inferior both in terms of growth (average growth during 2007-2014 to 34.60%) and in terms of the average level achieved in 2014 (only 1242435 lei recorded in relation to the region Bucharest / Ilfov – 19612227 lei).

Regarding the performance of companies with local activity, an important indicator is the average realized gross profit.

Table 11

**Dynamics of average gross profit during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average gross profit -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	119497	99,41	83,61	76,14	108,48	103,40	98,78	198,61
2	NORD – EST	73102	102,22	78,73	76,23	91,71	99,12	98,36	145,52
3	SUD – VEST	76617	116,08	74,61	79,84	100,09	96,47	97,27	149,35
4	SUD – EST	134259	115,71	82,10	76,61	106,21	97,46	112,98	194,32
5	SUD	111964	118,22	78,34	81,96	103,57	104,05	100,85	165,01
6	CENTRU	115031	119,48	74,70	75,41	91,49	99,07	100,83	166,65
7	VEST	100582	100,65	75,82	73,99	95,99	109,02	95,61	148,20
8	BUCUREȘTI - ILFOV	1199138	110,62	113,97	136,70	81,62	87,11	110,17	283,38
	Total	380848	108,41	102,71	116,09	89,91	95,00	111,14	253,43

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Although the period 2008 - 2012, five out of eight regions recorded average results below the base year 2014 the situation has improved, the increases are significant, especially in the region of Bucharest / Ilfov (an increase of 2 83 times) but more modest in the North - East and West region.

The regions and the country total in the same period under review there were total losses, which averaged 2014 were 2.22 times higher compared to 2007. These losses were higher in the period 2009 - 2013 period strongly influenced by economic and financial crisis, as can be seen from the data table below.

Table 12

**Dynamics of average total loss during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average total loss -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	44388	179,03	242,71	195,59	222,52	234,84	221,00	108,52
2	NORD – EST	77191	136,46	158,59	190,15	186,32	198,27	172,34	211,28
3	SUD – VEST	142412	189,21	250,13	202,10	241,63	244,45	420,40	223,93
4	SUD – EST	79884	198,63	256,11	231,67	212,79	263,56	314,46	153,79
5	SUD	71422	145,42	188,81	177,53	220,63	210,40	213,54	170,79
6	CENTRU	75884	169,62	187,13	143,54	159,28	157,39	185,50	152,53
7	VEST	72790	180,47	192,55	160,72	177,66	215,11	164,30	158,08
8	BUCUREȘTI - ILFOV	522086	253,87	259,80	285,54	306,03	272,86	218,91	256,90
	Total	187756	212,88	238,47	240,84	264,48	253,49	226,27	222,64

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

The situation is unfavorable for the regions South - West and North - East where in 2014 the average total company gross profit is lower than the average total loss.

Due to the above statements and the influence of factors more or less local (purchasing power of the population, locally, the financial strength of the local public administration, the funds raised locally in the economic cycle, etc.) in the period under review average total liabilities increased 2.11 times at the country level. The situation is the structure as below.

Table 13

**Dynamics of average total liabilities during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average total liabilities -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	1099470	136,92	141,63	136,85	168,22	171,91	157,85	144,28
2	NORD – EST	1125197	121,42	121,72	121,31	145,30	151,55	137,39	159,58
3	SUD – VEST	1781001	143,03	125,56	122,41	137,88	151,31	189,53	218,31
4	SUD – EST	146677	139,94	144,92	134,29	153,11	167,26	179,64	18,30
5	SUD1	1249394	137,35	129,03	126,80	165,24	167,85	157,45	167,86
6	CENTRU	1253793	137,04	128,60	117,34	141,08	148,38	149,48	156,41
7	VEST	1321712	139,69	125,80	123,04	149,12	164,60	157,02	144,00
8	BUCUREȘTI - ILFOV	9820170	138,39	112,22	144,60	154,46	151,41	144,18	232,43
	Total	3432682	135,00	120,41	138,44	157,07	159,58	154,66	211,64

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Average total debt was at the end of 2014, higher average value of current assets, both at the country level and at the regional level (with one exception, the South – East region). There are cases, such as the South - West or the Bucharest / Ilfov regions when total debt average increased more than 2 times in the analyzed period, which makes us say that locally, providing goods and services was done increasingly more on credit, whether it is long, medium or short, and in the future will appear new problems related to the reduction of these debts.

In terms of performance labor utilization, labor productivity in companies that operate at the local level has increased over the period analyzed by 6.64 times at the country level, mainly reflecting the increased turnover. The situation in dynamics and structure are presented in the following table.

Table 14

**Dynamics of average labour productivity during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average labor productivity -dec.31.2014- (lei/employee)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	180375	126.41	139.29	164.34	215.79	312.18	424.21	486.92
2	NORD – EST	149906	125.11	143.35	168.02	226.58	331.20	463.41	484.32
3	SUD – VEST	153397	129.78	169.42	248.53	358.49	579.57	865.26	949.17
4	SUD – EST	163971	135.31	162.77	226.66	347.72	572.46	864.99	906.04
5	SUD	184821	131.69	142.63	178.78	244.91	368.42	471.86	616.71
6	CENTRU	167917	119.44	118.07	149.52	204.76	300.56	420.37	487.59
7	VEST	170406	125.97	131.43	160.11	221.74	337.57	472.39	533.71
8	BUCUREȘTI - ILFOV	497748	121.39	146.11	186.87	275.35	416.98	665.46	785.44
	Total	371096	102.32	135.48	212.95	329.32	395.73	486.56	664.34

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

At the end of 2014, average labor productivity in the Bucharest / Ilfov region was 3.32 times higher compared to the North – East region, which can translate into a different level of annual turnover to the same number of employees. An argument could be offered and the prices at which goods and services for local communities. It is known that prices and general living standards in Bucharest City are higher than those recorded in regions such as North - East and North - West.

Another cause could be the level of pay for employees. From this point of view, the situation average cost of labor in dynamic and structural regions are presented as below.

Table 15

**Dynamics of average labour cost per employee during 2007-2014
for companies grouped by region**

No. crt.	Region Development	Average labor cost per employee -dec.31.2014- (lei)	Dynamics (2007=100%)						
			2008	2009	2010	2011	2012	2013	2014
1	NORD – VEST	21810	123.41	112.66	123.37	135.87	148.02	151.96	117.20
2	NORD – EST	20499	123.57	121.79	115.48	131.06	137.53	150.76	120.43
3	SUD – VEST	22417	133.97	141.05	140.51	146.19	163.56	197.16	121.18
4	SUD – EST	21527	130.69	122.36	125.24	137.94	143.65	158.35	117.97
5	SUD	22866	124.97	113.52	123.33	132.63	145.44	133.87	139.66
6	CENTRU	24634	119.74	107.98	128.15	143.64	154.98	161.51	123.47
7	VEST	25634	123.80	111.06	123.22	140.84	150.58	160.58	121.60
8	BUCUREȘTI - ILFOV	47681	126.36	133.20	132.05	147.41	149.33	160.99	120.24
	Total	38088	126.83	125.51	138.20	149.78	154.81	166.90	135.80

Source: Own calculations based on annual financial statements of economic operators in the real economy of Romania, 2007 - 2014, Ministry of Public Finance

Although the average level of annual turnover and profit for the Bucharest / Ilfov region are much higher compared to the North - East region (of 16.19 times, 16.40 times respectively) in 2014, in terms average labor cost ratio is only 2.32 times in favor of the Bucharest / Ilfov region.

Dynamically, the labor cost increases are quite modest in all cases for the period under review, with larger increases in 2013 (an increase of 97.16% in the South West region), which shows a quasi-constant in terms motivating wage labor.

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TTIP A NEW CHALLENGER FOR UE

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Abstract:

In line with Jean Monnet's functional conception, economic integration still constitutes the core of the European project. Nevertheless, the EU institutions increasingly face old and new challenges: from the Eurozone debt crisis to the structural divides among the member economies, from the position in the international trade flows to the elaboration of common policies in crucial sectors. These challenges address the need to deepen the analysis of the internal and external factors affecting the European economies in order to devise strong and adequate strategies.

In this section, EUE aims to provide valuable and in-depth insights on relevant economic issues that lie at the heart of EU system functioning and implementation. Therefore, we welcome the publication of high-quality reports and analyses.

Key words: economic integration, international trade and legislation, sustainable development.

JEL classification codes: O1, Q0, P3, P33

The **Transatlantic Trade and Investment Partnership (TTIP)** may open a historical new chapter in the U.S.-EU relationship. The broad agreement, currently under bilateral negotiations, goes well beyond the establishment of the world-largest free trade area: TTIP aims to integrate and harmonise the involved economies through the reciprocal liberalisation of trade in goods and services, the removal of non-tariff barriers, and the improvement in rules. Since custom duties are already low between the U.S. and the European markets, **the TTIP's innovative core regards its regulatory component**, which ambitiously looks for setting **global benchmarks**, thus reasserting the Western leadership at the international stage. Indeed, the closer cooperation between the Atlantic edges would result in an expected increase in the global multilateral trade flows.

“European Union Experts – EUE” is an international non-governmental organization, which embraces the former temporary staff from the European Commission and other EU institutions. The headquarter of the association is in Bruxelles. The association has been promoted by the Clenad “Liaison Committee of the Detached National Experts” on May 2001 and officially registered on April 2005. Clenad is the official network constituted by the European Commission that represents the public officials of the Members States Countries seconded in the European Institution for a temporary period.

General objectives of the organization are:

- promote European ideas and integration;
- keep the contacts between former EU experts for crossover discussions in different fields and via regular meetings;
- exchange views for the introduction of European projects in Member States.

The Association uses the experience gained by its members in the European institutions and public bodies to promote the ideals of European integration in societies, national administrations, institutions and organizations.

The **main activities** of the European Union Experts are the following:

- transfer of best practices among EU Member States;
- to inform through the Association's website;
- preparation and distribution of electronic bulletins;

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-promote assistance through the EUE members to NGOs, Public Organizations, single experts and private companies for the preparation of projects under the Structural Funds, Community and Technical Assistance Programs;

-participation to European initiatives relating the scope of the Association.

-organization of seminars and conferences;

An often-cited independent study estimates that economic activity in the European Union and in the United States might be raising, respectively, by €119 billion and €95 billion a year – in other words, a **0.4-0.5% growth in GDP**. In addition, the TTIP's spillover effects would also increase global income by almost €100 billion [1]. According to this source, "as much as 80% of the total potential gains come from cutting costs imposed by bureaucracy and regulations, as well as from liberalizing trade in services and public procurement".

Nevertheless, after seven rounds of negotiations, very little is known about the agreement's actual impact on the European societies. Notwithstanding the mutual benefits in trade liberalization and productivity, many concerns have been emerged regarding the definition of a common regulatory framework. Due to the undeniable cultural and normative differences between the two sides at the bargaining table and within the European Union itself, **TTIP's critics condemn a potential lowering in standards, particularly over labour rights as well as in the food, environmental and chemicals sectors**. Bureaucratic hurdles undoubtedly inhibit economic growth, but the attempt to unify divergent approaches could lead to damaging distortions in health and safety regulations.

From this perspective, the sounding **declassification of the EU negotiation mandate** does not clarify the terms under discussion [2]. The directives released by the European institutions declare the respect of the existing international legislation – specifically the WTO commitments – and the promotion of "high levels of protection for the environment, labour and consumers, consistent with the EU *acquis* and Member States' legislation" (par. 8). The provision is later strengthened by affirming that the "regulatory compatibility shall be without prejudice to the right to regulate in accordance with the level of health, safety, consumer, labour and environmental protection and cultural diversity that each side deems appropriate" (par. 25).

Below these generic statements, a crucial question remains open: **how to effectively harmonise or overcome distant liberal traditions, which lay down different social paradigms, into a comprehensive economic mechanism?** From this point of view, it is necessary to consider that private-public relations are quite contrasting between the United States and the Old Europe – where, as an example, the former emphasizes the assertive role of private investments in bolstering the economic growth, while the latter encourages a much stronger state intervention in order to support welfare systems. Moreover, deep distinctions exist among the European economies themselves – as illustrated by Esping-Andersen's welfare state typologies [3]. Finally, the plurality of government levels (both in the U.S. federal structure and in the EU stratified system) is not a side issue.

It is a matter of fact that sharing of regulatory practices does not imply the enforcement of an identical legislation, but **the wide reach of the agreement demands attention to how develop a greater regulatory compatibility without compromising social and institutional balances**. In this sense, TTIP's scope (industrial goods, agricultural products, services, investment, procurement, protection of intellectual property rights, capital movements and payments) feeds oppositions against the risks of its envisioned outcome (from the lowering of labor rights and wages to interference in the treatment of personal data). The TTIP Advisory Group reports that the negotiation sessions aim to "build bridges between the two sides rather than changing their existing systems" [4], but the safeguard clauses frequently added in the EU documentation are not sufficient to devise the transition to a common framework.

As an example, discussions on the **sanitary and phyto-sanitary standards (SPS)** are expressly bound to the related WTO obligations, but so far the EU State Members and the United States have transposed the Codex Alimentarius standards – which constitute the basic term of reference of national legislations to guarantee safety, quality and fairness of food production and trade – in different ways. As regards **chemicals**, the two counterparts recognize the authority of distinct procedures and the EU delegation, backed by the European companies, has repeatedly excluded

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) from the bargaining arguments.

The debate is presently focused on the application of the so-called “**precautionary principle**”. Enunciated by the art. 191 of the Treaty on the Functioning of the EU, the principle enables preventive measures when scientific data do not fully evaluate risks connected to a determined product, action or policy. While the European institutions strictly adopt this parameter, in the context of risks management the United States traditionally privileges a cost-benefit approach that results in loose restrictions. Within the European boundaries mass media have drawn attention to the American use of pesticides, GMOs, hormones and hazardous techniques such as the hydraulic fracturing. Simply put, a European product has to be proven safe before its commercialization, whereas in the United States it is necessary to prove that a product is unsafe in order to remove it from market. Although many analysts warn that real differences are less pronounced, the precautionary principle is a controversial issue and influences what each delegation considers negotiable or non-negotiable.

In brief, **the complexity of the required technical arrangements might hide profound and uncertain political implications**. At the moment it is not possible to evaluate whether the agreement will affect the internal competition and sovereignty in the EU State Members. TTIP might be an opportunity “to reduce unnecessary costs and administrative delays stemming from regulation”, as underlined by the EU Commission. However, the lack of transparency that has clouded the negotiation rounds worsens the concern that the tug-of-war between the U.S.-EU delegations might end in a downward compromise for one of the two sides. Following this assumption, the Washington political leverage and the strength of U.S. corporations is going to open a gap in the European economies, threatening the sovereign autonomy of every Member State.

On the contrary, **the institutional framework envisaged by the EU institutions introduces several cooperation and control mechanisms** (e.g. a consultation procedure, a permanent regulatory committee, a dispute resolution process). Nevertheless, in spite of the publication of a position paper for all the interested areas, a **serious communication deficit**, between the European institutions on one hand and stakeholders and citizens on the other, still persists. After the official request sent by the European Ombudsman Emily O'Reilly in the past July [5], Brussels has undertaken initiatives to open a dialogue with representatives of the civic society. This effort, among other things, led to the releasing of the negotiation directives. Still, the TTIP's importance is not corresponded by an adequate involvement of the national and sub-national levels. In short, **TTIP's negotiation appears to be a top-down process**. Therefore, the EU institutions should engage an **inclusive approach** in order to meet a larger consensus on a controversial agreement; otherwise, Brussels will be perceived again as a technocratic bureaucracy with no democratic endorsement from the European societies.

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THE FIRM, AS STRUCTURE OF ECONOMIC GOVERNANCE

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Abstract:

The purpose of this paper is to approach the theory of the governance structures, i.e., the firm, the market and the hybrid form of organisation, starting from several conceptual limitations between the terms of governance and the governance proper. Each structure of governance relies on a particular type of contract (institutional component) and varies with the characteristics of the transactions. The basic distinction between the firm and the market is that the firm relies in authority in allocating the resources. Then use of the authority relations gives an advantage to the firm compared to the market, the gain from lower transaction costs. The administrative decision presumes taxation costs that are lower than the costs of negotiation and taxation of each contract of the independent transactions performed on the market.

Key words: governance structures, firm, market, hybrid governance form, transaction cost

JEL classification codes: D23, G34

1. Introduction

The economic governance refers to the processes that support the economic activity and the economic transactions by protecting the property rights, by taxation of the contracts and by use of collective action to develop an adequate organisational infrastructure. These processes are accomplished within formal and informal institutions. As field of research, the economic governance studies and compares the performance of different institutions under different conditions, the evolution of these institutions and the transition from one set of institutions to another.

Governance is an appliance that involves at the same time institutions, relations, rules and behaviours, i.e. much more than the structure represented by the term of governance. Enterprise governance, in the general meaning, can be defined as a coherent aggregation of institutional devices and practices of an entity, which legitimate the functions of authority exerted directly by the leaders and by the hierarchical delegates. If the governance system of an enterprise is inadequate, the enterprise may be inefficient.

Two levels can be distinguished when describing a firm:

- a) Its governance, i.e. the mechanisms that legitimate the role of the management and its supervision, as well as the power of the delegated power (seen as an institution – the written or customary constitutional right of the institution);
- b) Its management, i.e. the actual exercise of power, taking managerial decisions, with all the consequences bearing on the final performance.

The economic exchanges within the companies are not governed by the price mechanism, like on the market, but rather by governance structures that presume rules and hierarchic supervision. The governance structures are institutional forms or arrangements and they refer to the different ways of allocating incentives and opportunities. They appear as a natural result of saving on the transaction costs. The governance structures are the hierarchies (companies), markets and the hybrid forms. Each of them presumes a transaction cost, and the selection and survival of one form or another depends on the efficiency of reducing the cost depending on the attributes of the transactions.

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2. Analysis of the alternatives of governance of the economic activity

After analysing the governance structures, it is important to present their characteristics. The essential features of each governance structure may allow inferring the operational criteria of the process of choosing between the three unknown forms: company, market and hybrid form.

The company (hierarchy). For Ronald Coase, the company and the market are alternative ways of economic coordination. The company is seen by the theoreticians of the neo-institutionalism as a governance structure, seen as a complex combination in which the monetary motivations and impulses remain important, yet not unique. The company remains “a team relying on a connection of contracts, each side aiming to accomplish its specific investment (human or physical) function of the accepted hierarchical structure...” (Ménard, 2005, p.287) Unlike the market, the company has the advantage that the transactions run and are regulated by *orders*.

Ménard says that this advantage comes from: first, the capacity of supervisions to reallocate human resources without negotiations decreases the cost of transactions and is a strong means of curbing in certitude. Second, internalization of transactions provides the necessary framework to expand the area of rationality, to enhance the quality of decisions by the «division of the cognitive work», which the hierarchies make possible. Third, the communication system developed and coordinated by the entrepreneur is a gain compared to the market-provided information, costly and hard to access. The main coordination system of the company is the *hierarchic order*, which involves allocation, monitoring and control. Thus, on the basis of a hierarchic structure, known before hand, each individual carries on the received orders. Transactions are done in the manner and with the duration set by the hierarchic structure pre-set and accepted by the involved parties. Controlling is one of the main instruments used to render the company more efficient, because it aligns the interests of the managers with those of the shareholders, prevents and limits the opportunistic behaviours, prevents or solves disputed with minimal expenditure of time and money, etc.

From Coase we also have the essence of the underlying contractual relation: the company contract is one of *subordination*. The internal organisation or hierarchy is, as Williamson considers, a more elastic and adaptable form of organisation than the hybrid form of organisation, when strong disturbances occur due to partner's situation of dependence. Williamson calls this type of contract „forbearance”, suggesting that in technical organisational, quality, production or marketing matters, justice cannot be called in because it doesn't have the necessary competences. The company is its “own judge”, both in the first and last instance. The intervention of the justice to solve litigations concerning company's policy is meaningless as long as the legal framework is observed. The possible disputes are solved by managerial decision, with no need for external instances. The hierarchy is the court of last appeal when solving the internal company conflicts.

The subordination contract is, and remains, the distinctive mark of the company, as Coase put it. Actually, it is a sum of internal contracts, designed and written under the same philosophy, the hierarchic subordination. Subordination, however, can be subject of *ex ante* negotiation, when deciding on the level of the rights and duties, and the technology of the process which materializes them. Hierarchy, as structure within which the process takes place, is not, however, negotiable.

Market. Market transactions are “controllable” through the *mechanism of prices*. The prices adjust and balance the demand and offer. It is used by the economic actors which want to make good transactions while cutting on the cost of information.

The market displays a large level of autonomy of the economic actors. The relations are impersonal; the actors don't know each other, like in the case of a company. Unlike the company, negotiation is allowed on the market. It is done within the limits set by the objective price revealed by the demand-offer relation. Within the limits set by the market, one can negotiate. Inobservance might end in bankruptcy. However, the freedom of movement on the market is not without limits, because there is a legal framework consisting of a set of norms that stipulate the participants and the nature of the goods to be exchanged, the restrictions imposed by the law of competition and the sanctions for those evading it.

Looking at the market as a self-regulating environment which sanctions swiftly the cheaters, Coase believes in reputation, which constructs and maintains responsible behaviours. A cheater, once uncovered, is not punished just by the offended party, but also by the collective. The social

structures acting on the market, the associations of manufacturers or consumers, consolidate a “feeling of justice” (Greif, 2005, p.727-786). On this basis, an individual participates in the sanction decided on someone who didn’t cheat on him, hoping that his gesture will cut down the probability of emergence of a new cheater whose probable victim might actually be him. Sometimes, the collective coercion might be tougher and with higher losses than the one coming from the state authority.

Thus, we may say that the market is a governance structure within which the exchanges are organised, accomplished by consented constraint based on reputation, moral hazard and civic spirit. This constraint is operable via a contract through which the property rights are transferred and which is negotiated based on price information.

The type of the classical commercial contract is associated to the market governance structure and allows coordinating, through the mechanism of prices, the transactions which don’t involve specific assets, rather goods that can be transacted simply, with no ambiguities and indefinable terms. The buyers and the sellers are not in a relation of dependence; each of them can leave the relation at a mere cost. Market is enough to sanction the irresponsible and opportunistic behaviours.

The classical contract is concluded on a short term, and renewed only if the current suppliers have the best offer on the market. The possible disputes are solved in justice, using the existing legal support. Since the sides in conflict are not linked by any specific act and are, therefore, not interested to continue the contractual relation, the classical contract allows solving the litigations.

The hybrid form. Williamson acknowledges the existence of hybrid structures of governance, which take some features from the company or from the market; however, none of these features can be identified. These governance structures have both certain market characteristics (the exchange relies on the mechanism of prices), and certain company characteristics (presence of a coordinating authority). The commercial sector (economic activities), one can distinguish three discrete forms of governance structures: the classical market, the hybrid contractual and the hierarchy.

The most important features characteristic to the hybrid forms are: joint investment, contracting and the competitive environment.

In the case of the hybrid forms, the economic actors consent to make a *joint investment* by summing the efforts, resources and investments with the purpose of accomplishing a common goal. Although the convergence and the common goal gather the partners within a network in which they share the resources, the sides remain legally distinct entities. The common interests determined by the exploitation of these resources produce joint administrative structures: organisms for planning, information collection and processing, accounting, etc. Planning can target the quality, quantity, the staff policy and, within limits, the price policy.

The hybrid forms are the object of a *contract* whose dominant feature is its lastingness. These contracts are incomplete long-term contracts, flexible enough to allow the necessary adaptations and to cut down the contracting costs, but credible enough to protect the value of the specific investments and minimise the risk generated by opportunism. Such contracts apply to the transactions in which the sides maintain their autonomy, but are bilaterally dependent. The contract facilitates the mutual adaptation and continuity in the case of unforeseen consequences which may appear during the process of transaction. The contract provides a general framework of cooperation through mechanisms of coordination, which complete the contract; it allows the partners to join efforts and can solve conflicts, through contractual stipulations. It is an incomplete contract, strongly negotiated *ex ante*, but open to *ex post* adaptations. It is rather close to the contract used to solve disputes between companies. By comparison with the other types of contracts, market or company related, the contract of the hybrid form is a neoclassical one.

The *neoclassic contract* is necessary for the transactions which presume specific investments, while the use of classical contracts within an institutional market arrangement proves inadequate and costly. This is so because, on the one hand, the relation of bilateral dependence between the sides compels them to ensure the continuity of the transactions. On the other hand, the risk of opportunism calls for complete contracts which to foresee all the possible future events and behaviours and requires using more authoritarian and inflexible coordination and control mechanisms, than the classic market contract.

In most cases, the neoclassical contracts characterise the long-lasting, stable relations between companies which have already agreed on a common manner of conducting the relations of

cooperation. This aims, first of all, maintaining the cooperation within specific limits, rather than the strict contractual obligations. Competition tensions might arise because of the incomplete contracts concluded between the partners from the hybrid form. The *competition hybrid environment* can be designed internally, when it targets own partners, and externally, when it targets companies or other hybrid forms.

These characteristics, analysed separately, can be found in the composition of other governance structures too. However, if we analyse them together, these characteristics serve as mark by which the hybrid form is outlined.

The companies (organisations) are permanently in the position to decide whether using the market or organising the activities internally; otherwise, they have to decide between “delegating the execution of a work”, “doing the work” or finding intermediary arrangements (hybrid forms). The selection of the adequate governance structure for the organisation of the economic activity is given by the characteristics of the transaction, which determine the costs which, in turn, determine seeking the best adapted organisational arrangement.

The variables which determine the selection of the governance structure can be classified in endogenous (internal), i.e. the intrinsic characteristics of any type of institutional arrangement that may influence the level of the transaction costs, and exogenous (external), i.e. characteristics of the transactions and of the institutional environment.

3. The company as source of reducing the transaction costs

Williamson formulates a theory of the economic organisation which correlates transactions (with different attributes) with the governance structures whose costs and benefits are distinct, in a discriminatory manner (i.e. saving transaction costs). The argument of the transaction costs relies, basically, on the efficacy of the competition to select among the more or less efficient manners and to transfer the resources to the first ones.

In his view, *saving transaction costs* presumes the following steps:

- Identification of the micro-analytical factors accounting for the differences in the transactions costs of the different transactions. These factors are generated by the limited rationality and by the opportunism of the agents, by the size of the transaction (frequency, level and type of incertitude and specificity of the investment) and by the characteristics of the transaction process (processuality presence unanticipated consequences);
- Association of the transactions to governance structures;
- Observance of the inter-temporal processual characteristics of the economic organisation.

While the behaviourist hypotheses are universal, the transactions vary within the afore-mentioned dimensions. The transaction process also matters under the aspect of temporality; because opportunism can show up both ex-ante (information asymmetry) and ex-post (distribution of the profits doesn't reflect the initial investment).

If the frequency of transactions between sides is low, the level of incertitude is high and, furthermore, there are conditions of specificity of the investment, given the hypotheses regarding the human behaviour, transactions are institutionalised within the organisation. In this case, the hierarchic integration in organisations is the most efficient alternative of economic organisation.

The advantages of the company (hierarchy) are:

1. The principle of specialisation works within the company, and it allows the individual actors (each one with his limited rationality) to take care of an aspect of the general problem. Through mechanisms of coordination and control, the results of all activities are integrated at the top of the hierarchy, so that the organisation has the capacity to expand the individual limits if rationality.
2. Each of the organisational units can be confronted with a given aspect of incertitude and complexity of a situation, getting thus to understand a problem which was previously under the sign of total incertitude.
3. The company has mechanisms which limit opportunism; using the bonus, promotion or control systems, and the organisation has the capacity to direct, to a certain extent, the efforts towards the accomplishment of the common goals.

4. Rejecting the very idea of negotiation, the organisational hierarchy has the capacity to limit opportunism even in the situations when there are a low number of partners involved in transactions. The organisation, as governance structure, generates cooperation and reduces the incidence of the opportunistic behaviours both ex-ante, and ex-post.

5. The company discards the information asymmetry in favour of the management, because the communication system developed and coordinated by the entrepreneur is a gain compared to the information coming from the markets, costly and hard to process.

6. The subordination contract specific to the company can be object of ex-ante negotiation; the company can decrease or eliminate the transaction costs in the ex-post phase of the contracts. This type of contract allows adjusting, with costs that are not large, of the contracts concluded inter-company.

7. The company is better than the market in terms of information too. Compared to the market, the companies have the privilege of setting filters for the non-significant or useless information; routines can be used to develop coded (common) languages, thus reducing the cost of information; using staff specialised in tracking market signals, these can be processed swiftly and at low costs.

8. Due to the own mechanism of coordination and control, the company has the advantage of the subordination contract. This contract is the expression of the will of those leading the company; it is incomplete, but adaptable and can be completed by the same authority which initiated it. Because just one side does the writing and adapting, this type of contract seems more flexible than the neoclassical contract, specific to the market. This contract is also more advantageous as incertitude grows (because the assets become more specific and the frequency of transactions increases), the risks of opportunism being much too important and damaging to the contractual relation, to allow being governed by a contract which allows the autonomy of the parties.

9. The company relies on authority in allocating the resources. The use of authority relations gives the company advantage over the market – the gain from lower transaction costs. An administrative decision presumes lower taxation costs than the costs of negotiating and taxation of each independent transaction concluded in the market.

Within this context, a natural question comes up. Is it possible that a national economy works as a single company?

The arguments in support of this hypothesis are shown below. First, a company of such size will have a position of monopoly and will benefit of all advantages running from it. Within this context, the existence of the market, as place where the demand and offer meet, determined by labour division, irrespective of its form, is pointless.

Second, the cost of contracting the production factors (part of the transaction cost) can be decreased within the company, because the company will not have to negotiate and conclude an individual contract for each production factors; rather, it will conclude a single, long-term, contract the relation between the production factors being of collaboration. When the structure of production must be changed, there will be no need of further negotiations between the owners of the production factors. The process of concluding contracts will be thus simplified, because the transactions between companies are replaced by factor-consumer transactions.

Third, a big-size company will eliminate the inclination towards opportunism, because there will be no information asymmetry, which leads to incompleteness, to the fact that same people have information about a particular transaction, while others don't, and the access to information has a cost which some pay and others don't. Within this context, the complete type of contract will be used, with firm and covering clauses, which doesn't have to be adapted and renegotiated to/and according the new circumstances, because the future can be predicted. The ex-post transaction costs determined by the renegotiation of contracts will be zero.

The opportunism, shown every time two or more economic agents are involved in a cooperation endeavour, will no longer be present. The relations within the company will be harmonious and there will be no conflicts of interest between the main and the agent, which might generate agency costs. From this perspective, the transaction costs might trend towards zero, since there are no stakeholders. This approach has, nevertheless, limits:

- The monopoly position of the company is not in agreement with the free market spirit; it will always be necessary to develop a market which to balance the trends of monopolizing the economy;
- In the case of a large company, the management of resources is difficult and wasting can occur; the transactions are concluded and run within a complex and uncertain environment, in which the economic agents don't have the possibility of forecasting accurately the future, in which there is information asymmetry where there is discrepancy of the information which the participants in a transaction hold; the asymmetric information influence the relations and provide the basis for an opportunist behaviour displayed by adverse selection and moral risk;
- Within the complex process of decision-making within the company, aiming to maximize their value, inefficiencies will occur, yielded by the conflicts of interest between the holders of these interests;
- The economic activities of the companies are diverse and complex; the axes of multivalent are attacked, which has adverse effects on the managerial activity, which is hard to do within the context of interdependence between the branches and sub-branches of the national economy.

The counterarguments mentioned here show that there will never be a single company covering the entire national economy, and that there will never be just companies, with no market. The two forms of coordinating transactions, the company and the market, coexist. The company doesn't appear as a reaction to the market, but in order to reproduce the market conditions within the conditions of lower transaction costs. If this condition is not met, the company doesn't appear, and the mechanism of prices is the one coordinating the activities. It may happen that the company itself, is not always successful to manage the transactions at costs below the prices

The coexistence of the two governance structures makes sense just within the competitive economy, because planning within the company works when the resources of the same company have the freedom of moving and finding the most efficient users. Thus, the competition between companies is present concomitantly with planning within the companies, the competitive market being the one that provides the framework for activity.

We may say that the company is a component of the normal competitive environment, which takes advantage of the free competition advantages.

4. Conclusions

The economic governance refers to the processes undergoing within the institutions, which support the economic activity and the economic transactions by protecting the property rights, by levying the contracts and by invoking the collective action with the purpose of providing an adequate organisational structure. As field of research, the economic governance studies and compares the performance of different institutions, within different conditions, the evolution of these institutions and the shift from one type of institution to another.

In the neoclassical economy, the company is considered, somehow, as a given thing, being thus considered as something natural. Important is the maximizing behaviour of the company on the market and its impact on the general balance, not the internal processes (organisation of the company, its structure and behaviour). The neoclassical pattern is a theoretic one, which preserves the managerial and institutional variables in order to simplify the working conditions of the economic system. The market pattern is simplified by reducing company activities to a single, problem-free, production function, and by disregarding the transaction costs.

Through the transaction costs, the economic organisation is explained by the relative superiority in terms of efficiency (minimizing the transaction costs) of one form of organisation (the company) in relation with the other (the market). In the neo-institutional economy, the company represents an alternative, to the market, of allocating the resources, or an alternative organisation of the transaction costs on the market.

The basic distinction between the company and the market is the fact that the company relies on authority in allocating the resources. The use of authority relations provides advantage, compared to the market, the gain of reducing the transaction costs. An administrative decision presumes

lower levying costs than the costs of negotiating and levying each individual contract of transaction done on the market.

The existence of transaction costs for the coordination of the market activities determines the companies to internalise these costs. Internalisation, in turn, is accompanied by higher organisational costs. The process of internalisation is valid up to a point defined by the level of the costs needed to organise the activities within the company.

The organisations (companies) are permanently making arbitrages between using the market or internalising some activities, otherwise said, between “delegating the execution of a job”, “doing the job” or finding intermediary arrangements (hybrid forms). The selection of the adequate governance structure for the organisation of the economic activity is given by the characteristics of the transactions. They determine the costs which, in turn, determine the selection of the best adapted organisational arrangement. Everything takes place under the umbrella of the behavioural hypotheses (limited rationality and opportunism).

Each governance structure has its specific properties, which define the capacity of that structure to coordinate a transaction or another. The selection of the *institutional component* aims to reduce the transaction costs. Selection is the result of a cost-benefit analysis. For instance, when the attributes of the transaction (frequency, level of incertitude, specificity of the investment) presume high costs in the situation of unpredictable events, the hierarchical integration in the organisations will be better (win terms of economic yield) than the hybrid form of organisation which, in turn, will be better than the classical contract. Thus, the governance structures (institutions) are the natural outcome of the efforts of minimising the transaction costs. In a real world, the transaction costs are not null, and the existence of inadequate rules may lead to inefficiency. The transaction costs, in turn, depend on the institutions, being the result of a particular institutional configuration, of defining the property rights, the ways of organisation and availability of information and of levying the contracts.

The main conclusion regarding the quantification and measurement of the transaction costs is that they can be measured within the financial-banking institutions, but not quite exactly. Thus, after analysing the concept of transaction costs and its defining elements, the conclusion is that these costs are hard to identify, while their impact on the increase of the profit, although being real, is hard to describe.

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THE MICROFINANCE SECTOR IN EUROPE

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Abstract:

Microfinance in Europe is gradually being consolidated as an essential tool of social policy, for the promotion of self-employment, microenterprise support and the fight against social and financial exclusion. This is demonstrated by the renovation of the initiatives in support for the sector by the European Commission in the framework of the Program for Employment and Social Innovation (EaSI) 2014-2020. This work is intended to present the main characteristics of the European microfinance sector and how the provision of financial and non-financial services could help entrepreneurs to overcome the challenges to rural development, thereby supporting their businesses and boosting the local economy. In this regard, microfinance often targets unemployed or people excluded from the traditional banking system who wish to start their own business, significantly contributing to self-employment and job creation.

Key words: Microfinance, European Union, microcredit, business, rural areas

JEL classification codes: G20, G21, Q01, Q14

Scale and development of the microfinance sector in Europe

During 2012-2013 both the overall total volume and the number of microloans (Microloans for both personal and business purpose) show a steady growth of microcredit provision among the MFIs surveyed in Europe compared to past years. MFIs covered from the 24 countries disbursed a total of 387,812 microloans with a total volume 1.53 billion EUR in 2013 (benchmark from 2011: 204,080 microloans with a volume of 1.05 billion EUR). The trend is the same for organizations based in EU member states only: 207,335 microloans with a total volume of 1.26 billion EUR (benchmark from 2011: 122,370 loans with a total volume of 872 million EUR). Compared to the data from 2011, this translates to an increase of 45% of the total value of microloans and 69% of the number of loans reported by the EU-based participants of the survey in 2013. This indicates remarkable growth of the observed micro-lending activities among the MFIs surveyed in Europe since 2009. The number of loans disbursed increased by more than 400%, the reported total loan volume has more than doubled since 2009. The overall allocation between microloans for business and personal purpose has slightly shifted towards loans for business purpose. In 2013, 79% of the total value of microloans was issued for business purpose, i.e. 21% for personal consumption purpose (2011: 74% for microloans for business purpose, 26% for microloans for personal consumption purpose). Overall these results indicate a steadily increasing trend of the scale (both in terms of numbers as well as total volume) of microfinance provision in the EU in 2012 and 2013, compared to 2011. Three aspects contributed to this development: an increased coverage of organizations in certain EU-member states, more loans provided per institution covered (e.g. in France) and a higher average loan size per institution. In regard to the latter point the average volume of loans disbursed in 2013 was 8,507 EUR (2011: 5,135). In the covered EU member states the average volume was 9,234 EUR, which is an increase compared to the results from the previous edition (2011: 7,129 EUR).

Institutional types and missions

The institutional diversity in the sector is still high. Non-governmental organizations (NGOs) or foundations, non-bank financial institutions (NBFIs), governmental bodies, savings and commercial banks, credit unions, cooperatives, community development financial institutions, microfinance associations and religious institutions are active in microcredit provision in Europe. The distribution in the year 2013 among the institutional types shows that the highest shares of institutions surveyed are NBFIs (29%) and NGOs or foundations (23%), accounting for more than half of all surveyed organizations. While the share of NGOs and foundations is similar to the share identified

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by the last survey in 2011 (22%) the share of NBFIs in the sample has risen compared to 2011 (20%). The prevalence of both institutional types is observable as well in the subgroups of small, medium and large MFIs. The stated missions of the surveyed organizations also show a high diversity with regard to economical and societal policy goals. Microenterprise promotion is the most widespread goal, with more than two thirds of all surveyed organizations including it as part of their mission, followed by job creation (58%), social (56%) and financial inclusion (50%). Organizations with a specific focus on women and migrant empowerment form a smaller part of the surveyed organizations (29% and 20% respectively). The vast majority of the surveyed MFIs (85%) include at least one dedicated employment goal in their mission (microenterprise/SME promotion and/or job creation).

Financial performance and sustainability

One of the major issues of the European microfinance sector is the question of organisational sustainability. In terms of portfolio quality the total value of the microcredit portfolio affected by overdue loans for more than 30 days was lower for both 2012 and 2013 (2012: 12.8%, 2013: 13.1%) compared to 2009 (16%), although a bit higher than in 2011 (12%). Nevertheless, this illustrates an ongoing positive trend in the microloans sector, as institutions with lower portfolio at risk have lower impairment loss expenses and higher return on assets. Although the overall situation for portfolio at risk shows a positive evolution, PAR30 remains quite high in some of the covered countries. Regarding the profitability the microfinance providers manage to achieve overall positive return on assets (2012: 6.7%, 2013: 5.6%). As for the cost structure the participating institutions managed to decrease their expenses compared to 2011 with an operating expense ratio of approximately 18% in 2013. In combination with lower impairment loss expenses, this indicates overall decreasing expenses, which might lead to an improvement of the financial sustainability in the sector. Overall in the sector there is an ongoing trend of decreasing impairment loss and operating expenses, which might lead to improvements in financial sustainability.

Outreach to target groups

The availability of data on the outreach of European MFIs to specific target groups and social performance indicators remains limited. The results of the survey indicate that women continue to be underrepresented as a target group (compared to the gender balance in the total population), although to a lesser extent than in the previous years. Information on the outreach to ethnic minorities and immigrants is even scarcer. With regard to the target group that will be specifically addressed in this publication the data available show that only 24.3% of the MFIs involved reported to serve rural populations in 2013. In general, the country with the highest share of loans disbursed to rural populations is Bosnia-Herzegovina with over 123m EUR in 2013 or 64% of the total value of microloans disbursed in the country by surveyed MFIs. The ten institutions surveyed from Poland provide the second highest value of rural microloans disbursed with over 90m EUR in 2013 (46% of the total value of microloans). This outcome might be related to higher agricultural activities in those countries relative to the overall economy. Romania with its 17 MFIs surveyed disbursed to rural clients+ more than 37m EUR in 2013, the 36% of the total value of microloans disbursed by surveyed institutions in the country.

The rural entrepreneurial environment in Europe

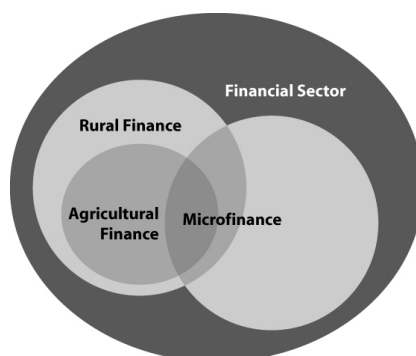
The promotion of entrepreneurship depends not only on the presence of entrepreneurial individuals in an area or community but is also strongly reliant on the specificities of the socio-economic context. According to the EU Rural Review (EU Rural Review n. 10, 2011, European Network of Rural Development) the entrepreneurial environment can be seen as “the inter-connected set of factors that encourage innovation, promote risk-taking and foster the emergence and growth of new enterprises” including “various sources of information, different resource providers, markets, technologies and numerous intermediaries that facilitate the processes associated with business start-up and development”. To foster the entrepreneurship the presence of all these factors is not enough. In fact it's also fundamental the way they combine and their proper interaction. Within rural areas the entrepreneurial initiative is confronted with the combination of the specific economic conditions of rural environments and the characteristics of the rural entrepreneurs. Therefore in rural areas, a deep understanding of the challenges of the entrepreneurial environment is even more important. On this subject the ESoF research project (*Developing the Entrepreneurial Skills*

of Farmers (ESoF), 2008, EU 6th Framework Programme) has further developed the concept of entrepreneurial environment focusing on rural areas. The project analyses the economic, social and cultural factors that influence the development of entrepreneurial skills in rural areas with particular reference to farmers. Generalising the main findings of the project is possible to draw a distinction among external and internal entrepreneurial environment applicable to the rural setting as a whole. Accordingly, on one side the external entrepreneurial environment is represented by the social and business context in which the rural entrepreneurs are operating. This include the repercussions of the globalisation processes and of the policies adopted at EU and national level, the demand from consumers, the supply chains structures in place, climate and energy trends and environmental issues. On the other side, the internal entrepreneurial environment is associated with the skills and competences of the rural entrepreneur. This refers on one side to the business skills necessary to run an enterprise (sectorial expertise and managerial competency) and on the other side to the skills needed to deal with changes and innovate the business (opportunity, strategic and networking skills). In order to boost the variety of entrepreneurial business in rural areas, it is fundamental to improve both external and internal entrepreneurial environment. The EU Rural Review (2011) highlights three categories of obstacles to rural entrepreneurship in EU. The first category is connected with the small size, low population densities and remoteness of rural communities. The second category is associated with the social and economic composition of rural communities. Finally the nature of internal and external linkages also strongly affects the rural entrepreneurial initiative. Given these main constraints, the provision of microfinance emerges as a powerful tool to support and empower rural entrepreneurs improving both the internal and external entrepreneurial environment.

Microfinance in rural areas

The provision of financial and non-financial services could support new or established entrepreneurs to overcome the rural challenges supporting their businesses and boosting the local economy. In this regard microfinance often targets unemployed or people excluded from the traditional banking system who wishes to start their own business, significantly contributing to self-employment and job creation. According to CGAP (*CGAP Donor Brief No. 15 October 2003*) rural microfinance encompasses the provision of a range of financial services such as savings, credit, payments and insurance to rural individuals, households, and enterprises, both farm and non-farm. It includes as well the financing for agriculture and agro-processing funding input supply, production, distribution, wholesale, processing and marketing (Figure 1).

Figure 1 - Rural microfinance



Source: CGAP Donor Brief No. 15 October 2003

Nowadays the successful implementation of effective delivery of services and outreach are still important challenges in the provision of microfinance in rural areas. Each rural area has its own characteristics and as a consequence, institutional design, methodology, products and delivery of services need to be adapted accordingly. Some challenges faced by rural MFIs are similar to those facing any MFI while others are specific to rural organisation providing loans for farm-based activities. According to USAID (*USAID RAFI Notes Issue 1*) the following are some of the factors that constrain both the supply and demand for finance in rural and agricultural areas:

- High transaction costs for both borrowers and lenders;
- Generally lower population density and dispersed demand;

- Often limited economic opportunities available to local populations;
- High risks faced by potential borrowers and depositors due to the variability of incomes, exogenous economic shocks and limited tools to manage risk;
- Seasonality – potentially affecting both the client and the institution;
- Heavy concentration on agriculture and agriculture related activities exposes clients and institutions to multiple risks;
- Lack of reliable information about borrowers;
- Lack of market information and/or market access;
- Weak institutional capacity;
- “Crowding out” effect due to subsidies and directed credit;
- Lack of adequate or usable collateral (lack of assets, unclear property rights);
- Inhospitable policy, legal and regulatory frameworks;
- Undeveloped legal systems, inadequate contract enforcement mechanisms;
- Undeveloped or inadequate infrastructure;

Even if this extensive list of constraints relies mainly on experiences in developing countries it provides in any case a useful and comprehensive insight into the main challenges that also a European MFIs could be confronted with. Obviously MFIs operating in rural context do not have the possibility to choose the challenges they will face and many times the various challenges reinforce and compound each other. The following section presents examples of European MFIs able to overcome some of the constraints mentioned above with the adoption of innovative methodologies and strategies.

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TRENDS OF MICROFINANCE IN THE CURRENT SOCIAL AND FINANCIAL INCLUSION (II)

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Abstract:

Increasingly more we are concerned about a real problem the indebtedness of the population, the lending capacity of financial institutions and increasing alarming number of people non bankable, and the social and economic gap between the welfare of the rural population in European countries developed in Romania. This was always a big problem, but after 1990 the number in poverty increased relative and absolute alarming far about 5.6 million people according to the latest reports of the National Statistics Institute. The articles is based on this reality and try to synthesize the ideas of those who tops the rural society and are able to create financing models that will contribute to creating systemic solutions to this state of decline. With the integration into the European Union, Romanian authorities must submit new principles and rules to adapt Romanian legislation with EU legislation, especially in the current context of social and financial inclusion. At present digitization trend of the financial sector has a major impact on financial institutions and non - banking. Creating new models for banking (networks of external agents, banks with branch network), new opportunities for customer access and management of back-office are just some of the challenges microfinance sector , the sector that is in a continuous process innovation and adaptation.

Key words: social inclusion, financial inclusion, microfinance, rural sustainable development

JEL classification codes: Q0, Q01, Q1

Introduction

We are currently witnessing many challenges in all fields, but in the financial result of the crisis, they are more visible. These challenges have a direct impact on sustainable economic development, mention: combating poverty, hunger, quality education, sătătate & welfare, gender equality, access to clean water, renewable energy, growth & decent work, infrastructure, industry and innovation, reducing inequalities, communities and sustainable cities, sustainable consumption and production, climate change, protection of aquatic, terrestrial protect lives, peace, justice and strong institutions, public and private partnerships sustainable.

To meet these challenges we need to mobilize on identifying financing mechanisms through which to ensure the provision of financial and non-financial that may help entrepreneurs to overcome the challenges for rural development, supporting their businesses and stimulate the local economy. In this regard, often targeting microfinance unemployed or people excluded from the traditional banking system who want to start their own business, contributing significantly to self-employment and job creation. Thus, we can define microfinance as follows: source of financial services to entrepreneurs and small businesses that do not have access to banking and related services.

There are two main mechanisms for the delivery of financial services to such customers:

- based on banking relationships for individual entrepreneurs and small businesses;
- based group, where more entrepreneurs come together to apply for loans and other services as a group: the method by which the social inclusion of the poor; way to promote economic development, employment and economic growth by supporting micro - entrepreneurs and small businesses.

According to CGAP (The Consultative Group to Assist the Poor) Microfinance Rural comprises providing a range of financial services such as savings, credit, payments and insurance for individuals in rural areas, households, businesses (both agricultural and non-agricultural). It also includes funding of agriculture and agro-processing, such as the provision of inputs, production, distribution, wholesale, processing and marketing. Some challenges faced by micro enterprises

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(IMF) rural areas are similar to those facing any IMF while others are specific to rural organizations that provide loans for farm-based activities. According to USAID, the following factors constrain both the demand and supply in rural and agricultural finance:

- High transaction costs for both creditors and debtors;
- Low population density and demand dispersed;
- Limiting economic opportunities available to local populations;
- High risks faced by potential borrowers and depositors due to variability in revenues,
- Exogenous economic shocks and limited tools for risk management;
- Seasonality - may affect both the client and the institution;
- Greater concentration on agriculture and agricultural related activities, expose institutions to multiple risks;
- Lack of reliable information on borrowers;
- Lack of market information and / or market access;
- Weak institutional capacity;
- "Exclusion" effect caused by subsidies;
- Lack of adequate safeguards (lack of assets, unclear property rights, etc.);
- Legal uncertainty and lack of regulation adapted to new needs;
- Underdeveloped legal systems, inadequate mechanisms for the implementation of the contract;
- Underdeveloped infrastructure or inadequate.

Although this list is mainly based on the experience of developing countries, it provides a useful and comprehensive global challenges of creating models tailored microfinance current context of social and financial inclusion. The World Bank estimates that today, more than 16 million people are served by 7,000 microfinance institutions worldwide.

We can define some standard microfinance services: credit, savings accounts, money transfer, insurance. Microcredit is one of the services offered by microfinance institutions. The principle of microcredit is to provide small loans to entrepreneurs and those who do not have access to traditional bank loans. We also need to remember that microcredit is not similar to microfinance! With these micro-credit, micro-projects can be developed, thus providing jobs and supporting the local economy. Microcredit is booming, mainly in developing countries.

Here are some milestones in the history of microfinance apariției. In 1800 Lysander Spooner theorist wrote a paper in which underlined the benefits that they bring micro entrepreneurs and farmers, seeing in them a way to achieve social inclusion of the poor. Independent Spooner, Friedrich Wilhelm Raiffeisen founded the first cooperative banks lending to support farmers in Germany. În anii 80 - Grameen Bank of Bangladesh Mohammad Yunus, pioneer of microcredit, as seen today. Another pioneer in this sector Akhtar Hameed Khan. At that time it introduced several innovations in this sector. Shorebank, founded in 1974 in Chicago, was the first bank microfinance and community development. The World Bank estimates that today more than 16 million people are served by 7,000 microfinance institutions worldwide. Experts CGAP (Consultative Group to Assist the Poor the) say that this means that about 500 million families benefiting from such small loans making possible new business.

Some principles that summarize a century and a half of practice was set in 2004 by CGAP and adopted by the G8 leaders at the G8 summit of 10 June 2004:

1. Poor people need not just loans but also by way of savings, insurance and money transfer services;
2. Microfinance must be useful to poor households: ajutându- them to increase revenue, purchase goods and / or can cushion against external shocks;

3. "Microfinance can pay for itself", grants from donors and government are scarce and uncertain, as such, to reach large numbers of poor people, microfinance must pay for itself;
4. Microfinance means building inst. permanent local;
5. Microfinance means integrating the financial needs of the poor in the central financial system of a country;
6. "task of government is to enable financial services, not to provide them."
7. "Donor funds should complement private capital market, not compete with it";
8. Donors should focus on capacity building;
9. Microfinance should measure performance and to present both the financial and social.

From here we could also conclude that microfinance is seen as a tool for socio-economic development and can not be regarded as a charity!

Considering the above mentioned and linking with statistical statements poverty dramatic globally reported by global players of the (UN, EU, UNDP, FAO, World Bank, OECD, etc.) that "almost 3 billion people live on less than \$ 2.5 a day and nearly 80% of the population lives on less than \$ 10 per day; More than 1.3 billion people worldwide living in extreme poverty or absolute characterized severe lack of basic needs of existence; 1 billion children live in poverty; according to UNICEF, every day about 22,000 children die from poverty and hunger; 805 million people suffer from chronic hunger and malnutrition; over 750 million people lack access to drinking water, minimum health standards compliance; nearly 25% of the population (about 1.6 billion) live without electricity, 38% of adults globally have no access to basic financial services according to Global Findex 2014.

Corroborating the actual situation of the standard of living of the population globally with financing mechanisms identified by leaders of multilateral agencies, global banks, international financial institutions, the World Bank Group by His Excellency President Jim Yong Kim, the resulting global commitment Universal Financial Access 2020 having as target those 2 billion adults excluded financial, to achieve a percentage as high financial inclusion thereof, identify certain mechanisms and funding models to combat poverty, raising the percentage of social inclusion, economic and financial level local.

Materials and methods

Regarding the Methodology of research on Microfinance, complexity and diversity of the issues addressed have required the use of Methods, Techniques, and Procedures tools and interpretation of scientific Investigation The which we attached to the particular Importance:

- ☐ documentation, namely accessing and studying general and specialized bibliography, domestic and foreign, state approach to knowledge Microfinance and rural issues investigated scientific substantiation of the research;
- ☐ rational method, used as instrument year of knowledge, reflection, analysis, organization and approach ongoing scientific research;
- ☐ integration of forms, methods and logical operations research carried out through the use of analysis and synthesis, abstraction and concretization, comparison, generalization and systematization;
- ☐ statistical methods, through the use of descriptive statistics and statistical analysis;
- ☐ observation method, carried out systematically and analytically;
- ☐ discussions with experts from national and international Institutions and Institutions, but also the beneficiaries of Microfinance products and services;
- ☐ data analysis and interpretation, using graphs, charts and figures to highlight various developments in Microfinance.

Using the classic instruments of scientific research, based on analysis and synthesis, induction and deduction, general and particular and adding modern methods. Yarmouth, we Achieved substantial and pertinent Analyzes and studies on rural Microfinance main ways, both Internationally and

especially national. Our own contributions on the issue has highlighted investigated During research work and theoretical significance and the value resulting from the application Conclusions and Proposals That we have formulated and Promoted. Also, the results of research Were disseminated During 2015 in the frame of national and international scientific conferences and through publication in scientific journals I Attended, as author. The research results is presented Using tables, figures and graphs. The theoretical information for the research Needed Were Taken from literature and Specialized works (books, studies, papers, articles, etc.) in the field of Microfinance investigated, from home and abroad. Statistical information and concrete data on how Microfinance works Were Taken from reports and statistics of the Microfinance Institutes action involved action in the country and abroad as well as to public and private Bodies specialist.

Results and discussions

Microfinance in the current global context

We are currently witnessing many debates about the development of mechanisms to provide complementary financial products and services, for people excluded financial poor, and finding solutions for them to be taken out of absolute poverty and relative. By strategy microfinance institutions to provide capital, trust, financial advice, respect for this category excluded financial, comprehensive, primary knowledge and financial expertise on financial education, empowerment at the individual, relationship between actors, capital for entrepreneurs, digitizing technology services and rapid access to the market, financial institutions and other institutions support microfinance become active agents in combating poverty in all its dimensions and levels.

The integral development of complex potential human capital of the customer and / Family and the current system of social networks its favor the development of products well-established and innovative financial, whose repayment to have a majority share interest rate remunerative (or price) and costs reduced administration to ensure the economic sustainability of microfinance institutions well managed.

Commodity in microfinance is microcredit.

The basic product of microfinance is microcredit a loan flexible, very small in terms of its size, intended to acquire productive assets in order to increase the incomes of those who accessed and allowing reimbursement person covered financially in a short period of time in small installments, secured more than moral type.

"Microfinance loan size is small and in three dimensions:

1. In absolute monetary value, compared to the standard business loan so as to operate in a segment where there is no banking competition;
2. regarding the debtor's income, so it is easier payback;
3. regarding portfolio lender, so the default of one borrower has no impact on financial soundness.

Loan size is kept small for the following reasons:

- A. for any portfolio, the more unique small loans, lead us to a large number of recipients, thus the greater the range of the target population;
- b. objective of attracting people and keeping extremely poor funding mechanism not relevant to the richest people that are accessed from other channels of funding. This is important because, as a general rule, where both poor and non-poor are eligible for a credit line, non-poor will get a larger share of funds at the expense of the poor, because the non-poor are usually better educated, better informed, better able to meet the requirements more at ease in the relationship with the lender.

It is possible that changes in population target of reducing the number of extremely poor (for their definition or threshold becomes higher) to be in a positive direction based on this financial instrument microfinance in this way, in addition to micro- classic loan and other products are offered (eg larger loans).

The poor can afford to pay a base rate per annum, if the loan is to stimulate immediate result of his income and repayment in just a few months.

Keeping short-term repayment period forcing the borrower to focus on improving low-risk activity and is consistent with its current planning horizon of the short typical of the poor.

Microloans are solid opportunities to improve step by step in the lives of the poor. Microfinance microloans starts from the base to provide an integrated package of complementary services, including payment services, taking into account national specificities and local flexibly.

As a rule of thumb for the Adequate Remuneration of the loan, Muhammad Yunus (2007, p. 68) Has to proposed a Green Zone of interest at the market rate plus up 10 PERCENT, the Yellow Zone The which equals the cost of funds at the market rate plus 10 to 15 percentiles, and the Red Zone, where are the rates is Higher than in the Yellow Which is one and the moneylenders' Territory.

The lending institution can't afford the huge number of small John Beck, if the administrative cost of each procedure is high: it has to be be much Smaller than in a bank, shifting the burden of proof from the operation to the personality of the client. A deep understanding of Her / His history, way of thinking, motivation, trustworthiness, bonds to the family and the neighborhood, Reasons for being poor allows a Successful long-term relationship made up of recurrent loans each Fostering year Advancement In Her / His Life .

The theory of games has Shown That widely repetitive "games" (loans) generated a setting where are it is better for the borrower to pay back (so to have the prospect of obtaining trust again) than to cheat. Successful as They are, "tit-for-tat" strategies rely on the first positive move of the lender, WHO trust first, engendering economic year effect reinforcing the psychological effect of "demonstrating That WAS deserved trust".

Located near the offices has Microfinance clients, lenders and officers meet often There is a social control and due to face-to-face interaction in the neighborhood. In Some instances, officers apr Even Microfinance stable physical offices to renounce to travel and stay by Their potential clients, guested in Their houses.

High ratio of repayment, With 98% to 100% paid back loans on time, it is the strongest single reason presented by the largest microfinance institution for financial and political community skeptical. Yes, training neglected poor, illiterate and lacking formal living hygienically questionable after a life lived under very heavy customer can be good for financial products, keeping promises and activating all their energies to their business and personal.

A key success factor still is the recruitment policy of the institution micro finance, which should select people who care about the broader objective of the organization wishing to have a continuous concerns over the formation profesonale and adapt to all that is new in constant technical and interpersonal skills, and honest. A special monitoring system should be really in place to check fraudulent credit that is relatively easy business. Technology should be applied for recording transactions, but the bottom line is double checking organizational customers and employees.

Report refund quickly gained the interest of external donors for MFIs and its level under 98% put the institution under severe control. Prudential reserves built to cope with crime and pushing up costs tend to lead to higher interest rates.

To escape this nexus thorny difficulty, some MFIs have established a "zero tolerance", usually late payment. Even one day, not even a cent. A massive pressure is put on the poor, threatened and forced to pay.

Consequences for the organization are much deeper. Forced by ensuring 100% reimbursement on time, individual creditworthiness becomes irrelevant, there is no need to examine her / his personality is served everyone to ask for a loan.

However all this depends on the extreme pressure put on the poor whenever a tranche comes due. The staff is hard and assumes no reason to delay even minimal breaks the relationship of trust and respect, and the rough side of microfinance gets closer and closer to the moneylender. Indeed, if the poor do not have money to pay back, he will have to obtain it from moneylenders, paying by

opening new loans at exorbitant rates, which can be easily growing debt. After paying back in time micro-loan, he / she is left with a mountain of debt elsewhere. The poor became poorer, oppressed, exploited, without hope.

If the loan was too high in terms of current income debtor than the default it is particularly easy. Low setting ceilings on the loan size in proportion to the debtors' ability to show regular income would reduce the probability and severity of default, although leap forward in life shortening and narrowing borrower outreach.

Coupling microcredit micro-insurance lead to better management of repayment default and default risk could be reduced to the lender while the borrower would be covered by it.

Poor service providing insurance against risks of any kind is mission micro-insurance. A little repetitive payment covers - in a pool of people - the likelihood of a negative event that performs deep one. By sharing risk, the price can be kept low and partners affected person disruption can be avoided.

Micro-insurance is getting into new areas such as health risks, damage to property in productive assets, climate change, crop insurance for farmers, housing storm damage, etc. These extensions are based on the observation that poverty can easily be the result of negative events that the poor are most affected by risks more widely and that their precautionary savings are badly needed resources to freeze.

A recent development in microfinance is to identify a digitized financial services Incorporated into a new good or durable equipment could improve the lives of the poor directly or through trade sales revenues through the services they provide.

For example, mobile phones were purchased by poor women in Bangladesh (using a micro-credit) and services of telephone calls sold the entire village, increasing not only income women (and her ability to pay back the loan), but also centrality its social ("Before nobody invited me to ceremonies marriage, now I'm the first to know and be invited, because they use the phone to invite all others" as Muhammad Yunus cited the Asia-Pacific summit Microcredit CPC 2008).

"Partner key innovation is the manufacturer or service provider worldwide (eg mobile phone manufacturer or telephone company), which is extremely interested in selling in rural areas and the poor. By signing and implementation of franchise partnerships with economic giants or new entrants, MFIs vehicle modernization are areas in which it operates, entitles the technological level of their clients and to diversify their products. In other cases, microfinance institution could be selling durable goods directly margin operating business to contribute to fixed costs. "

In the context of global climate change a particularly important categories of durable goods, which should be channeled through such agreements are green clean technology, eg lighting systems powered by solar energy.

Microfinance for integrated supply chains

MFIs in different locations may prove to finance large groups and overlapping businesses that could become suppliers and customers to each other. It is frequently the case that, at different times and in different MFIs, their clients understand growers farmers, processors, small craftsmen and producers, street vendors, small shops, and even transport operators and logistics and other providers of input and specialize. Prin recognition service potential commercial cooperation between them to build consistent and smooth supply chains, networks of MFIs can boost their income customers, making them more reliable borrowers, as the latter to take advantage of matching counterparts peer in terms of size, market power, knowledge and attitudes.

On the other hand, micro-credit for working capital firms unique is somewhat a result of the operation relatively primitive supply chain itself as under developed, suppliers do not require cash on delivery, but rather to issue an invoice whose payment will be due later on (eg 30, 45, 60 or 120 days), so as to allow the company to sell and be paid earlier than the supplier.

Microfinance currently enjoys strong growth and steady worldwide and confirms the important role of microfinance institutions in poverty reduction:

Microfinance in rural areas

Support and revive small-scale farming requires a comprehensive platform of political and developmental initiatives that are tailored to the unique needs of farmers and diverse family farms;

To keep the long tradition of farming family friendly policies and regulations are necessary for the environment;

Improving access to land, water, markets and credit - as well as legislation on the ownership and use of standardized land - creates a solid foundation for productivity, solid ground on which farmers can and will invest in the future of their farms;

Public investment in rural infrastructure, public services, training and education can give small farmers the help they need to be competitive in a market increasingly globalized;

Encourage women and youth to participate in agriculture will guarantee long-term viability of family farming.

The European Commission and the European Investment Fund mobilizes this year from € 237 million in loans to support 20,000 micro-enterprises in the framework of the European Programme for Employment and Social Innovation (EASI). European Investment Fund (EIF), which manages EASI guarantee on behalf of the European Commission, and six microfinance institutions are signing agreements to guarantee that funding will open access to micro-enterprises. They will contribute 17 million euros to guarantee signed today, which is expected to lead to micro-credit worth 237 million euros. The six agreements guarantee target those who want to start or further develop their own micro-enterprises, especially people who have difficulty entering the labor market or in access to finance. These first offers that allow micro credit contracts will be signed between the EIF and Qredits Microfinanciering (Netherlands), Association pour le Droit à l'Initiative Economique (France), microfinance Ireland (Ireland), PerMicro (Italy), Kutxa / Caja Laboral Popular (Spain) Nextebank (Romania) covering six countries only 5 months after the launch of EASI. In total, the security EASI 96 million is expected to provide leverage more than 500 million euros in 2014-2020, loans to promote jobs and growth in Europe over the next 15 years, unlocking a total of 30800 microcredit and 1,000 credits for social enterprises. Guarantee of 96 million euros for microfinance providers or social financing is managed by the EIF on behalf of the European Commission. EIF will not provide direct financial support to enterprises, but will implement the facility through local intermediaries financial, such as microfinance institutions, finance and social guarantee, and banks active in the EU-28 and more countries participating in the program EASI . These intermediaries will deal directly with stakeholders to provide support under warranty EASI.

Microfinance in Europe is gradually being established as a social policy tool essential for promoting self-employment and micro-enterprise support fight against social and financial exclusion. This is demonstrated by initiatives and support from the European Commission under the "Programme for Employment and Social Innovation (EASI) 2014-2020." In this respect, the Commission considers that the following types of loans as microcredit:

Business -Microcredit a loan under 25,000 euros to support the development of self-employment and micro-enterprises and

-Microcredit Personal loan under 25,000 euros to cover the needs or personal consumption, such as rent, personal emergencies, education, etc.

We are currently witnessing several microfinance innovations requiring legal and regulatory reforms, modernization of property registries, investment in information infrastructure, and massive efforts in education. It must be remembered that most institutions involved in agricultural lending are small and not regulated. They use technologies adapted micro-credit that do not meet the needs of farmers, especially regarding the need for borrowing and repayment frequency. These shortcomings default risk itself. Donors and governments can play a vital role in supporting these smaller institutions to grow, consolidate and, eventually, to activate the market. They can also help financial intermediaries rural liability by mobilizing savings, access to capital markets, and the provision of credit lines that would facilitate long-term lending. Capacity building of consumer financial means to do more with the little handy prepares people without access to conventional banking services to enter the formal financial system. Also means improving the performance of financial services providers. Specialized in microfinance institutions have emerged in the small

business sector development start they needed, in addition to financial support (microcredit), specific training - training and financial consulting. Due to the lack of specific financial experience in business, small entrepreneurs need continuous training and consulting, and opportunities to interact with other businessmen. Currently in Romania there are three main categories of actors in the market for microcredit encounter:

- First category refers to entities cooperatives inspiration: the specificity of this type of system is to build micro-credit institutions (NBFIs), based on the organization's members. One of the most popular forms of this is represented by the cooperative credit;
- The second category refers to non-governmental organizations with the aim to achieve financial intermediation;
- The third category refers to banks on the market that specialize in microfinance services to micro-antreprenoripropriilor households and economic activities.

The provision of microfinance in rural areas requires MFIs to adopt innovative responses in order to reach rural entrepreneurs in an efficient and sustainable, practitioners might find these useful lessons learned to design future strategies. Inventory of best practices collected, a common set of lessons learned:

- A value chain approach facilitates the adoption of innovations to customers and increase profitability Rural Affairs. For the IMF, it is important to develop links between businesses market, suppliers and end markets. In fact, contracts between producers and sellers and / or providers reduce price risk, enhance production quality and help guarantee repayment. To be most effective, these arrangements could combine technical assistance and provision of specified inputs on credit.
- Developing partnerships and alliances with institutions and infrastructure can facilitate increased mobilization and provision of various existing services, thus ensuring better conditions for customers in rural areas. Collaborating with governments and local NGOs / associations, partnerships with commercial banks or development alliances innovation, including new stakeholders (eg customers of rural entrepreneurs ") may be beneficial to reach a better out and meet the needs of entrepreneurs in rural rural.
- Developing products and flexible services tailored to the needs of rural farmers / entrepreneurs need in rural areas. Payment flexible repayment schedules and guarantee schemes to allow MFIs to attract more customers. However, the terms and conditions of loans should not compromise the sustainability IMF (portfolio quality, liquidity management, etc.). A key role in assisting clients in rural areas is to define the terms and conditions of the loan officer, who should be chosen with care in rural areas, well prepared and targeted customers in the field.
- Technology reduces transaction costs for both parties (lenders and borrowers), and creating sustainable rural financing potential. IMF introducing technological innovations in their operations are able to reduce transportation and communication costs are higher in rural areas. Training and commitment lending and back office staff are critical to a successful introduction of non-traditional instruments.

Must risk management activities to be improved constantly, thus the financing agriculture can flourish. Measures have been taken in recent years by reducing access to information and transaction costs through borrowing group. However, uncontrolled risk continued to be a major impediment to the development of rural financial markets effectively. Public-private efforts should be renewed and enlarged platform-needed investments at various levels to address these issues. Farmer level, governments should stimulate the recovery of agricultural extension services, while farmers have become so that financial education to be able to take some risks. Governments, donors, and insurance companies should work together to develop insurance products as yield are cheap, durable and designed properly. Governments, stock exchanges and financial institutions also need to work towards the development of structured financial products, and other instruments hedging the price and reduce risk. Romanian financial system will be forced to align with the practices of countries with a developed system of agriculture microfinance to address innovative new models in microfinance through modern at the current time. After a period of searching and waiting, we are at the stage where we are obliged to approach the decisions that lead to the restoration of new principles and creating new institutions to provide loans for actors and sectors of their local vital for the economic consolidation of settlements and human welfare. It is about

creating institutions specializing in microfinance to finance economic entities with legal personality: non-banking financial institutions in rural areas to support crediting legal entities and individuals active: institutions to carry out microfinance activity, educational institution specialized in rural areas . Capital required to establish such institutions should be ensured through government financial contributions for the payment to be repaid in time. Another important aspect is to create innovative models of microfinance and training of human capital involved in providing financial services in rural areas and in the financial education of those who accessed microcredit. European and world are currently trying to carry out special programs for microfinance in rural areas. These concerns and decisions can directly influence the development activities in rural areas through access to microcredit. We are at the stage where we are obliged to approach decisions leading to the reestablishment of new principles of lending institutions to ensure local stakeholders and vital sectors and localities to strengthen economic welfare. It is the establishment of banking institutions to finance economic entities with legal personality: banks, in rural areas, where crediting legal entities and individuals active: banks to finance exclusively educational or health institutions in rural areas. Capital required to set up such institutions should be ensured through government financial contributions for which payment to be repaid in time. In this action may be involved and the 25 commercial banks operating in Romania and food companies are involved in lending. To achieve this goal of establishing a national system of microfinance rural areas should be started from what was good in the credit system areas in Romania in the interwar period, especially from existing models today in some European Union countries, as well as models of microfinance in countries on other continents.

Agricultural cooperative role - in Romania and worldwide

Recently the Law no. 164/2016 amending and supplementing Law No agricultural cooperatives. 566/2004 and for the establishment of measures for its application. The law establishes the legal framework of the organization and functioning of cooperatives in agriculture, agricultural cooperative is an autonomous association of individuals and / or legal, as appropriate, legal entity of private law, established on the basis of their expressed consent of the parties and which is organized and It operates according to this law. Thus, the agricultural cooperative is an autonomous association with an unlimited number of members with variable capital, which operate economic, technical and social development in the private interests of its members.

By the proposals, the definition of agricultural cooperatives Grade 1 includes individuals, freelancers are entered here, for clarification, individual enterprises and family enterprises defined according to GEO no. 44/2008, under the basic regulation of the economic activities by authorized individuals, sole proprietorships and family businesses, as amended and supplemented. Grade 2 agricultural cooperatives are the new vision, corporate consist of individuals of freelancers, being here introduced individual enterprises and family enterprises defined according to GEO no. 44/2008 and legal persons, where appropriate, to integrate horizontal and vertical economic activity performed by them and approved in accordance with law no. 566/2004 (Eugen Staicu – www.legestart.ro).

Matching Art. 6 includes cooperative agricultural cooperatives, legal entities and industries in areas such as: a) agricultural service cooperatives, cooperative system which provides services for small producers; b) purchases and sales of agricultural cooperative that organizes both purchases of materials and technical resources required for agricultural production and sales of agricultural products; c) agricultural cooperative agricultural product processing, which provides typical products, branded with permanent presence; d) agricultural cooperatives and small manufacturing industry in agriculture; e) operating agricultural cooperatives and agricultural land management, forestry, fisheries and livestock; f) for financing agricultural cooperatives, mutual assistance and agricultural insurance; g) agricultural cooperatives types mentioned above and the other which will be in compliance with this law.

Agricultural Cooperative commercial activities, is producing goods and services in agriculture following in this order: a) providing the conditions for obtaining economic advantages by all cooperative members; b) ensuring supply requirements cooperative members with the means of agricultural production; c) the acquisition of agricultural goods of vegetable, animal and fish, according to market standards; d) creating conditions for agricultural products processing plant, animal and fish products to be obtained finished food quality standards and consumer market; e)

recovery of production achieved; f) socio-economic development of rural areas. Agricultural cooperatives cooperative based on the following principles:

- a) the principle of voluntary association and open;
- b) the principle of democratic control of cooperative members in the cooperative;
- c) the principle of economic participation of cooperative members;
- d) the principle of autonomy and independence agricultural cooperatives;
- e) principle of education, training and information cooperative members;
- f) the principle of cooperation between agricultural cooperatives;
- g) the principle of concern for community sustainable development.

The cooperative movement in Romania - brief history

The cooperative movement has a long tradition in Romania, our country is, together with cooperative organizations in England, Belgium, Italy and France, a founding member of the "International Cooperative Alliance (ICA)" (...). A precursor was Spiru Haret (1851-1912) who in 1899 initiated a bill on the establishment of Popular Banks, teachers involved in cooperative activity, setting obșteilor lease, organizing consumer cooperatives and others. After World War it, an outstanding representative of the cooperative idea was Gromoslav Mladenatz (1887-1958), which made higher education in Germany, finalized by obtaining doctorate in economics thesis "The concept of cooperative". Professor at the Academy of High Commercial and Industrial Studies between 1929-1951, is the author of "cooperative Treaty" (1933) and the book "History of cooperative thinking" (1935). In his book "History of doctrines cooperatives" (1931), the cooperative represents "a free association of a number of smaller producers or consumers, which estab înțau a joint venture through which an exchange of services between partners." The first forms of association in rural Romania have emerged with the introduction of modern cooperative principles embodied by Ion Ionescu de la Brad (1818 - 1891), economist, statistician, agronomist, prominent representative of the Romanian agricultural sciences. He expressed his viewpoint on the different types of associations in the popular publication "Romanian Peasant." Thus, the first association of the economy, credit and mutual aid be taken first in Bistrita in Transylvania County in 1851; in the town of Braila in 1855; Brad Roman village in the county in 1860; Rasinari village in the county of Sibiu in 1867 and in Bucharest in 1870 (*Professor MARIUS BĂCESCU, rural cooperatives - a chance to revive the village Romanian Academy of Scientists in Romania, Romanian Statistical Review nr. 6/2010*).

The cooperative was in the sense of time, a collective economic unit, which address various occupations with low economic potential: small farmers, craftsmen, employees. The aim of the meeting was cooperative associate members of needs and to obtain benefits from this activity. Thus, the cooperative system not abolish property and freedom, but make them available to the masses, as producers and consumers, expanding the social basis of a democratic society. Agricultural cooperatives as a form of associative work undertaken jointly, in his opinion Mladenatz was the only form of social organization that peasant economy by combining individual ownership of land with modern agricultural collective ownership of the inventory. As the price falls to Romanian agricultural products in the international market during the economic crisis of 1929 - 1933, he recommended the involvement of cooperatives in grain trade, in order to eliminate intermediaries and adopting a structure of production efficient. Establishment of farmers in associative assess it opens new opportunities for economic development by attracting local advantages, and using zonal or regional power in order to increase prosperity collective members, their families and community (*Professor MARIUS BĂCESCU, rural cooperatives - a chance to revive the village Romanian Academy of Scientists in Romania, Romanian Statistical Review nr. 6/2010*).

Beginning of cooperative movement in Europe

Consumer cooperative in the small English town of Rochdale (founded in 1844) is considered the first modern cooperative, which was based only on its own members without outside help. It began as a consumer cooperative and evolved into-a multi-purpose cooperative with social and economic activity. Modern cooperative leaders in England were Robert Owen (promoter autosusținerii

workers - suggesting consumers>Create associations) and William King (who supported the voluntary nature of cooperatives, but also political neutrality and religious identity), France Charles Fourier, Philip Bsan (founder of the first production cooperatives) and Louis Blanc (proposed replacing free competition with co-production) in Germany Victor Aimé Huber (precursor to consumer cooperatives) and Ferdinand Lassalle (supported freedom and independence from state cooperatives). In Germany it creates for the first time cooperative lending to farmers taking-I Friedrich-Wilhelm Raiffeisen as a starter (1864).(Filip ALEXANDRESCU, Flavius MIHALACHE, social economy and cooperatives, Expert Publishing House, Bucharest, 2011)

Agricultural cooperatives in the European Union

After creating the EEC, the cooperative structures by organizing producers mutated form cooperative unions local, regional federations branches and products, integration cooperatives with national companies or multinational corporations (*Luminita Zahiu - political future structure of agriculture and agricultural, Economica Publishing House, Bucharest, 2003*). EU countries are agricultural cooperatives in shapes and types that vary by country, and are essentially based on the same principles of organization and operation that are based on Directive. 67/532/25 European Council in July 1967 and which relate to agricultural cooperatives. With this directive „ cooperatives are entities that the law of the State are named as such, but is based on cooperative principles. EU agricultural cooperatives is organized on three levels as follows:

1. At primary level associates farmers in simple forms of associations in the European Union are called cooperative degree they were formed for the joint execution of the following objectives:

- Agricultural works;
- Joint exploitation of the earth;
- Joint use of production capacities;
- Or to make investments in various fields.

2. At the secondary level are organized associations of agricultural cooperatives primary cooperatives which are called Tier II and aimed to invest in upstream and downstream agriculture for collection or processing of agricultural products (*Dumitru Musca - Forms of association in EU agricultural, Mirton Publishing House, Bucharest, 2000*).

3. At tertiary level cooperatives are organized by grade III, regions or even nationally by participating cooperatives Grade II forming financial groups, commercial and industrial powerful. These include networks of cooperative factories that provide processing and marketing or banks by bringing together expertise and resources in a particular area or region. It is worth noting that EU Member States have not organized agricultural production cooperatives, the land and to bring those lands to work jointly modeled former communist countries. The exception is East Germany, where he held a number of cooperative production, large over 1500 hectares. But these cooperative owned land owners. They hold about 38% of the agricultural area of the East German Länder (<http://www.europa.eu.int> European Institute of Statistics EUROSTAT- year 2005). Farms, especially small developing cooperative ties and integration with large agrifood companies, which take over Raw agricultural contract. The Western European agrifood promote cooperation in all forms of social organization of farmers: small farms, medium and large agricultural cooperatives and cooperative societies, national or transnational food companies.

In Western European countries, specialized farms is an important feature of the production structure, determined by technical and technological modernization and deepening division of labor. Specialization requires the development of cooperation between agents along food production chains, based on the supply of inputs, production of agricultural raw materials, storage, processing, marketing of products. The principles underlying relations of cooperation in agriculture European Union are:

- Freedom of choice of the form of cooperation;
- Obligation on members to bring equity and the economic activity of the cooperative participate in the delivery of products, compliance technologies for the production of agricultural raw materials delivered to the cooperative;
- The principle „ a man -a vote "the decisions taken at the cooperative regardless of capital;

- The principle of the cash dividends under statute;
- Principle of territoriality, "or limiting the scope of action of a given community cooperative.

In the European Union, agricultural cooperatives are represented by national organizations and are directed and supported by Community bodies: the General Committee of Agricultural Cooperatives (COGECA), the Committee of Agricultural Producers (COPA) and the International Cooperative Alliance (ICA).

Case studies

FRANCE - In France there are 21,000 cooperatives, which include about 75% of French farms. It shows that 3.5% of the economically active population is part of the agricultural associations. In addition to production cooperatives French offers advice to its members. Due to the long experience they come with valuable advice in terms of agronomy, economics and strategic planning. Mentioned that they contribute actively to the development of environmentally friendly agriculture. Cooperatives are investing in innovation, expanding their sphere of activity and finding new sources of revenue. An example is investment in biofuels. Also, farmers' associations are using different management tools to control developments in agricultural prices. That does not mean that their members are reshaping agriculture still remains their core domain. Come to help and credit unions. For example, in 2013, the cooperative bank Crédit Agricole has reported the highest revenues in the system. Two other associations in the same sphere, Groupe BPCE and Groupe Mutuel Crédit, occupied third and fourth in the ratings. French unions were permanently in a constantly changing, adapting to the economic environment. They started by gathering the harvest together, then gradually came into cooperative groups. If at some point, someone in the group wants to increase profits, not only create strategic alliances. Alliances allow them to reduce costs, exchange experiences, and to consolidate the leading positions in the sector. Since French law restricting the activities of cooperatives in a particular territory, they were forced to develop their own structures to expand and be competitive. Accordingly, although the number of cooperatives decreased after mergers and takeovers, their incomes were instead on growing.

SPAIN - About 15% of the population is framed in cooperative organizations, most of which were established under regional legislation, not national ones. Unlike other European countries, the number of Spanish cooperatives is above average. At the same time they are quite small, only 39% of them having over a thousand members, which prevents them obtain higher profits. As numerous as it is different: from modest local cooperative to cooperative with deliveries to industrial level. There are large cooperatives that process the products they sell to retail distributors. However, about 75% of the turnover reported by the Spanish cooperative societies are in the hands of a quarter of the cooperative and this because of mergers and takeovers.

ISRAEL - About 70% of agricultural land in Israel are processed by cooperative members. The association is voluntary and is not prohibited out of the cooperative. People in the forefront unions are democratically elected, usually from among its members. Sometimes lead people come from outside but must necessarily have experience in the management of cooperatives or to members of other agricultural cooperatives. Are closely linked, Israeli agricultural cooperatives are organized on two levels: locally and regionally. The local first grade are divided into three types: unions at the village level, kibbutzim and moshavuri, the last two being the most numerous. The difference between these three forms of organization makes controlling how production and consumption cooperatives. For example, in kibbutzim community decides how much each family needs to live, and moshavuri is a private matter. Moshavurile are kibbutzim and production cooperatives in which decisions concerning the household are taken collectively. In kibbutzim land belongs to the community, or as agricultural machinery, and economic activity responding elected leadership. Members of kibbutzim have no right to have around the house plots on which to process them individually. In moshavuri land belonging to each household individually, as well as buildings on their lots or agricultural machinery, and the decisions taken by each family. It can be said therefore members moshavurilor are actually individual producers working for their own farms. Use the services of village-level cooperative for: farm supplies are collectively harvested and transported goods together local traders, and maintain machinery and workshops for their usage in common. Also, these unions may lead to harvest production accounts or other customers. Second-degree cooperative organizations operating at regional level and falls within their local kibbutzim and moşavurile, not individual farmers. These handles sorting and packaging production harvested and

are responsible for warehouses, factories for the production of mixed fodder, elevators and gins cotton - cotton ginning machinery. All these deals and processing plants. Second-degree cooperatives belonging and acquisition organizations. They offer professional advice and unions dealing with computer data processing. The important thing is to play the role of financial intermediaries between farmers and banks, helping the first to obtain and share the credit.

USA - There are less cooperative than in other countries, only three thousand to many. Instead most American farms are part of them. Thus distinguish cooperative selling, closing of transactions, supply and credit. Cooperatives sales charge of processing and marketing of agricultural products. Basically everything increases and US produce is managed by cooperatives. Also they provide jobs for most residents of rural areas. Help farmers who do not know how to negotiate wine cooperatives specializing in concluding transactions, which helps obtain reasonable prices for the goods they produce. Farm supply cooperatives engaged in the manufacture, sale and distribution of products essential for proper administration of the household, such as fuel. From the banks credit cooperatives and associations are part of the credit system in agriculture. Besides loans, they support farmers and other operations, such as export financing. Depending on the goods delivered to each farmer a percentage of sales lies with the union, depending on which is calculated profit to farmers. Specifically, after processing, processing and marketing of cereals and other commodities. Cooperative businesses are totally in her hands or, rather, in the hands of a board of directors elected by its members. It noted that every member is entitled to a single vote and all votes are equal, unlike limited companies or other business.(<http://agrobiznes.md/>)

Through the system of cooperative can be created funding mechanisms to support business development members and training (increasing financial literacy) level members both at the administrative level and at the level directly productive to train for jobs at an entity level as opportunity for rural residents.

Funding programs at a cooperative helps provide capital, technical support, educational opportunities and antreprenorilae that can help local residents with a direct impact in the development of member companies and increase the number of jobs in the community cooperative.

Conclusion

CGAP Estimates That the world is over 500 million family farms, farms that provide food to more than 2.5 Billion people, People who live with less than \$ 2 daily. I believe it is our duty, as Economists, to identify the most efficient models of Microfinance and to support Those Who Are people in absolute or relative year degree of poverty. The constraints Of Those Who Are working in Microfinance for Rural Areas has Numerous, Risks and limitations have as collateral, especially if we consider bankable That vulnerable segment in terms. However, we have now witnessing a train in many Debates That make us say many factors That increasingly turn Their attention to financial and social inclusion of rural areas. (Paper Otilia Manta, www.ibima.org).

The Specialized micro finance in rural development is the pillar of support for small businesses, sustainability and rural Improving Their real life. The progress of financial inclusion is the result of digitization trend of the financial sector, with a major impact on Financial Institutions. Creating new distribution models (networks of external agents, with Banks branch network), the emergence of new Opportunities for customer access and management of back-office has just Challenges Some of the Microfinance sector has Passed through innovation and continuous adaptation.

The Phenomenon of "Microfinance" has created new Opportunities for customers: easy management of household savings, revenue collection, payment of bills and taxes. Using it still must become more concrete and consistent in Romania, and Customers shouldnt BE THESE educated to master new digital tools. It is undeniable That a revolution is taking like! In the context of the financial crisis, Microfinance Continues to grow, offering new digital form BE sell it or help access to new Customers and services provided to beneficiaries.

Rural Areas, as Reported by the EU Rural Review, has generated Foreca to 48% of the gross value of the EU economy and 56% of total employment in the Member States. A typical characteristic of the rural economy is the presence of small and medium enterprises (SMEs), many of Which has micro-enterprises with a high percentage of self-employment jobs. Innovations in Microfinance for rural area, especial for poor farms, and have a big potential to directly impact the

food security for the poor farms. The analysis of the rural area for Microfinance is a big gap of knowledge, especially regarding the Possibility of integrated services in agricultural Microfinance.

In the International Food Research Institute (IFPRI) from World Bank - Vision 2020 WAS to conceptualize and assemble the concept of Microfinance rural and agricultural to bridge the gap of knowledge by Promoting innovation in the Provision of financial services for rural households and Creating new innovative directions Risks and manage the run for the rural poor. The Importance Of The Realities of Rural Areas facing small farmers, Including low education levels (According to statistics provided by the National Institute of Statistics) and the lack of access to modern financial instruments According to size and Their Requirements, lead us to claim That Currently dominant subsistence agriculture (in Romania, Currently, about 2.5 million farms There has semisubzitența According to statistics). That mean we thes Conditions, Those Involved in Developing new models for Microfinance Institutions must create new and innovative badly Needed to be closer to the Needs Funding for small and midle farmers. Digitisation Existing technologies offer us new concept in Microfinance with direct impact on final costs. The new Microfinance facilities have direct impact to address the Risks faced by small farmers and midle. The combination Between the financial services and non-financial services Such as technical support services, marketing and financial consulting offers the integration of ITS in the complete production value chains. Finally, from the micro level at the macro level, it is Necessary to Create an enabling environment for the development of Policies and the legal framework for the Implementation of Rules and Regulations, European and international Also, rural infrastructure and support contributes greatly to Sustainable access rural Microfinance to reality.

We are witnessing Currently in the increasingly Concerns UN member states on Sustainable Development Goals (Sustainable Development Goals) targets That has a series of targets That Will states use to realize policitile the next 14 years. Given That Currently the global witnessing Increasing poverty, unlike the Objectives set out in Agenda 2015 (in Which I included the development goals of the millennium) the wealthiest involved action for Those in Need (disadvantaged) under Agenda 2030 is major Involvement of the states, each Member hazel rings collectivity is present generation and the generations GMT.

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DEVELOPMENTS AND TRENDS IN THE SME SECTOR IN ROMANIA AND SEVERAL EUROPEAN UNION MEMBER STATES

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Abstract:

Small and medium enterprises have been standing for many years in the top of European policies, being considered a key factor for growth, employment and economic competitiveness. Our paper provides an overview of the SME sector developments in the European Union, in relation to the European economy, highlighting the disparities in performance between EU countries and sectors of economic activity. There are also analyzed the most important developments and changes in the SME sector in Romania, after eight years of the integration on the single European market, focusing on the performance recovery capacity affected by the global crisis, compared to the overall situation or other countries States within UE28.

Key words: SME, employment, value added, EU member states

Jel classification codes: D24, G01, G38

Introduction

Around the world, SMEs represent more than three quarters of all companies. These companies are considered the real economic motors that contribute in large measure to economic growth of their countries.

Category of Micro, Small and Medium Enterprises (SMEs) is made up of enterprises which employ fewer than 250 people and have an annual net turnover of up to 50 million euro and / or total assets up to 43 million euro.

Although SMEs play an essential role in the European economy, however, they often have difficulties in obtaining capital or credits, particularly in the start-up phase. Their limited resources may also reduce access to new technologies or innovation. Therefore, support for SMEs is one of the European Commission's priorities for economic growth, creating jobs and economic and social cohesion.

Methodology and data sources

The analyzes are based on SMEs' traditional indicators for characterization (the number of active firms, employment and added value) presented statically and dynamically, as absolute values or percentages, general or disaggregated, by size class of SMEs and sectors of activity. They are mainly based on Eurostat statistics taken in the databases of the last European SME Report 2015/2014 published by the European Commission, National Trade Registry Office and NSI statistics in Romania, Global Entrepreneurship Monitor Report and other related papers.

SMEs performances in European Union

In 2014, 22,3 million SMEs were active in the non-financial business sector across the EU28. The non-financial business sector consists of all sectors of the economies of the EU28 or Member States, except for financial services, government services, education, health, arts and culture, agriculture, forestry, and fishing SMEs account for 99,8% of all enterprises in this sector.

In 2014, SMEs in the non-financial business sector generated almost 58% of the sector's total value added, and employed almost 90 million people (67% of the sector's total employment).

Within the SME population, micro-enterprises accounted for 92,7% of all enterprises active in 2014 in the non-financial business sector, and small and medium enterprises for only 6,1% and the large ones for 1% respectively.

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In contrast to the concentration of enterprises in the micro SME segment, the relative importance in 2014 of the three SME groups in total non-financial sector business employment and value added was much less showed:

- Micro SMEs accounted for 29,2% of total employment, small and medium-sized SMEs for 20,4% and large enterprises for 17,3% respectively.
- Micro SMEs accounted for 21,1% of total valued added, small and medium-sized SMEs for 18,2% and large enterprises for 18,5% respectively.

Within the micro SMEs, businesses without any employees accounted for 59% of all businesses in 2012, the last year for which such detailed information is available.

Distribution of these indicators values according to the three size types, namely micro, small and medium, is presented in the table below:

Table 1

**SMEs and large enterprises:
number of enterprises, employment and value added in the EU, 2014**

	Micro	Small	Medium	SMEs	Large	Total
Enterprises (number)	20.710.324	1.373.365	224.811	22.308.500	43.766	22.352.260
%	92,7	6,1	1,0	99,8	0,2	100
Persons employed (number)	39.274.088	27.452.716	23.257.412	89.984.216	44.438.724	134.422.944
%	29,2	20,4	17,3	66,9	33,1	100
Value added (million euro)	1,358	1,169	1,188	3,715	2,710	6,425
%	21,1	18,2	18,5	57,8	42,2	100

Source: European Commission, 2015, Annual Report on European SMEs 2014/2015

Thus, a rate of about 92% of SMEs in the EU are micro-enterprises. The number of small businesses represents about 6,1% of the total European SMEs; medium enterprises have a very low share in terms of their total number of SMEs, respectively 1%. Regarding the number of employees, most of them operate in micro enterprises, their share in total employment in SMEs reaching almost 30% in 2014. As for the value added, micro- enterprises contribute with a percentage of over 20% in added value of SMEs in the EU, small businesses had a 18,2% contribution to total value added in the SME sector and medium enterprises contributed with 18,5% to total value added in 2014.

The three performance indicators are inter-related, evolution in time of one of them influences the developments of the other two, in a greater or lesser extent, conditioned also by other macroeconomic factors, determining the development disparities between EU countries.

Thus: in only six European countries (most important in size and level of economic development: Germany, France, Great Britain, Italy, Spain and Poland) operate 66% of active SMEs in the non-financial economy, which provide 69% the total number of employees and generate 74% of added value.

On the other hand, the development gaps of SMEs tend to grow. Only in eight European countries, including Germany, SMEs have managed to exceed in 2014 levels of added value and number of employees that were recorded in 2008.

SMEs in four countries (Estonia, Lithuania, Denmark and Finland) recorded increases in value added above the threshold of 2008, but not in the number of employees, which continues to record negative annual changes.

Meanwhile, most states, 15 respectively, did not return to values from the 2008, nor in terms of value added or number of employees. Romania is in this group of countries, behind Hungary and the Czech Republic, but still ahead of other economies such as Portugal, Cyprus, Spain, Croatia and Greece.

Table 2

Evolutions and trends of SMEs' performance in EU

Indicator	2008	2009	2010	2011	2012	2013	2014	2015
Number of firms	21261849	20974190	21755376	21901107	21810243	21614919	21564839	21646395
Number of employees	90806273	90332632	89933916	90077618	89297328	88843465	88981523	89585622
Value added (mil. euro)	3622465,1	3273275,5	3425857,2	3570666,4	3626206,3	3666778,7	3769518,6	3899312,9

Source: European Commission, 2015, Annual Report on European SMEs 2014/2015

The number of companies in the SME sector in UE28 had a negative evolution immediately after the beginning of the crisis in 2009, resuming subsequently its positive dynamics of growth rates until 2011. However, in the last two years, there was a decline of values in 2013, the decreased number of firms in Europe being of -0.9% compared to the previous year. The number of employees in SMEs had the most dramatic evolution of all indicators, with successive decreases year by year, except 2011, when there was a slight recovery due to improving macroeconomic context factors in the EU. The added value is the performance indicator of SMEs that performed the best and constantly positive after the crisis year 2009. However, annual values, although increasing, recorded rates of change more and more smaller from year to year.

The perspectives for European Union SMEs in 2015 and 2016

SME performances depend mostly on the macroeconomic developments in the EU and the more specific action is needed to improve the business environment in which SMEs operate, able to contribute to their sustainable and solid growth.

The outlook for the future performance of SMEs in the EU28 is positive, and stronger than in 2014, but remains unreliable (Table 3).

Table 3

2015 and 2016 forecasts of annual growth in SMEs performance indicators (% change)

Size class	Indicator	2013- 2014	2014- 2015	2015- 2016
Micro	Enterprises	1,2	0,5	0,7
	Value added	3,2	2,9	3,3
	Employment	1,3	0,5	0,8
Small	Enterprises	0,8	0,7	0,8
	Value added	3,3	3,1	3,5
	Employment	1,0	0,8	0,9
Medium	Enterprises	0,9	0,9	1,2
	Value added	3,3	3,8	4,2
	Employment	1,3	1,2	1,3
Large	Enterprises	0,5	0,0	0,2
	Value added	3,1	2,8	3,1
	Employment	1,0	0,4	0,5
SMEs	Enterprises	1,2	0,5	0,7
	Value added	3,3	3,3	3,7
	Employment	1,2	0,8	0,9
Total	Enterprises	1,2	0,5	0,7
	Value added	3,2	3,1	3,4
	Employment	1,2	0,6	0,8

Source: European Commission, 2015, Annual Report on European SMEs 2014/2015

For the years 2015 and 2016, annual growth of 3,3% and 3,7% is expected for EU28 SME value added. In contrast, employment and number of enterprises are forecast to lag behind, with growth in 2015 and 2016 of roughly 0,8% and 0,9%, and 0,5% and 0,7% respectively.

According to the size-class differences, medium size SMEs are forecast to slightly outperform small and micro enterprises in both 2015 and 2016 and across all three indicators. Large firms

are expected to follow a similar pattern, although their expected growth is lower in the case of value added, employment and number of firms.

Member States, in terms of SME performance, present the following situation:

- Italy presents a decline in both SME value added and employment.
- Hungary, Slovenia, Finland and Slovakia show small declines in SME employment but positive value added growth, and Spain shows weak growth in both indicators.
- eleven Member States are expected to post cumulative growth in SME value added and employment of between 0% and 6%.
- ten Member States are expected to show double-digit SME value added growth and solid employment growth from 2014 to 2016.

Disparities between SMEs economic sectors within European Union

European SMEs operate mainly in five economic sectors: Commerce, Manufacturing, Construction, Professional services, scientific and technical activities, Hotels and restaurants. In these five key sectors perform more than 78% of SMEs, employing about 80% of employees in SMEs and generate a percentage of about 71% of their total value added.

Table 4

Forecast growth of EU SMEs by sector, 2014- 2016 (% change 2014-2016)

Sector	SME value added	SME employment
Manufacturing	4,4	-0,2
Construction	4,0	-2,6
Wholesale/ retail sale	7,8	2,5
Food services	6,5	2,3
Professional services	9,6	4,2
Other sectors	8,4	3,3
Total	7,0	1,7

Source: European Commission, 2015, Annual Report on European SMEs 2014/2015

There are some disparities regarding the performance indicators(according to: enterprise size class, economic sector or country of residence). Of the three size classes, only micro and medium enterprises increased their added value above the threshold of 2008, while small firms are still below the values known in previous years of the crisis. Regarding the dynamics of the number of employees, all types of active SMEs are currently employing fewer employees than in 2008, the largest decline in employment producing in micro-enterprises.

We notice, according to the table above, that at EU level, most affected by the crisis were SMEs in the construction and manufacturing industry, which experienced a decline in the number of employees, tending to diminish in the period 2014- 2016 .

At the same time, most dynamic in their recovery, in terms of number of employees, were the SMEs in three sectors: Business Services, information and communications, Real Estate and Other Services, which exceeded the pre-crisis levels and have an upward trend.

Regarding the value added, an upward trend is presented by SMEs in Professional Services, Retail and Real Estate.

SMEs in Romania and other European Union states

The SME sector in Romania has been severely affected by the global recession manifested with maximum intensity in 2009 and 2010. In general, statistics on the SMEs in Romania is below the European average, and the performance profile of the country is below the EU, both because of the crisis and the significant drop in GDP in the national economy and the effect of general instability, factors that together have severely affected the progress of SME policy.

However, trends in 2013 and estimates for 2014 and 2015 show a recovery of the SME sector, close to pre-crisis levels, in terms of number of companies and number of employees, but less of added value.

Radiography for 2014 of SMEs in Romania indicators, compared with the European average, is as follows:

Table 5

SMEs characteristics in Romania vs EU, 2014

Size	Number of enterprises			Number of persons employed			Value added		
	Romania		EU28	Romania		EU28	Romania		EU28
	Number	Share(%)	Share(%)	Number	Share(%)	Share(%)	Mil. euro	Share(%)	Share(%)
<i>Micro</i>	392.377	87,1	92,7	884.895	22,2	29,2	7	13,5	21,1
<i>Small</i>	48.024	10,7	6,1	928.801	23,3	20,4	9	16,1	18,2
<i>Medium</i>	8.643	1,9	1,9	866.563	21,7	17,3	11	20,0	18,5
SMEs	449.044	99,6	99,6	2.680.259	67,2	66,9	27	49,6	57,8
<i>Large</i>	1.637	0,4	0,4	1.309.863	32,8	33,1	28	50,4	42,2
Total	450.681	100	100	3.990.122	100	100	55	100	100

Source: European Commission, 2015, Annual Report on European SMEs 2014/2015

We notice, according to the table above, that Romania's economy is characterised by the relatively low proportion of micro firms. The SME value added is about 50%, 8 percentage points below the EU average. However, SME employment is almost the same with the EU average, at 67% of total employment. Taken together, these indicate significantly lower SME productivity and competitiveness in Romania.

Labour productivity (taking value added per head as a proxy) of micro, small and medium-sized enterprises is 75- 77% lower than the EU average. The “non-financial business economy” has not yet fully recovered from the crisis. SME value added in 2014 was still around 12%, lower than in 2008, although it has increased by 16% since 2009. It has been a jobless recovery, with only a 2% increase in SME employment since the crisis and SME employment still 225.000, lower in 2014 than before the crisis.

However, developments within the non-financial business economy as a whole have been more varied, with some sectors experiencing significant growth while others remain in recession. One sector which has not yet recovered is accommodation and food services. The value added of SMEs in this sector was 19%, lower than in 2008. Several factors have contributed to this slow recovery: the lack of a national tourism strategy, underdeveloped and uncompetitive accommodation infrastructure, lower investment in tourism infrastructure since 2009 and a service industry, which is not considered to meet European standards. In addition, the value added tax (VAT) rate for accommodation is higher than in many neighbouring countries, which also reduces competitiveness. The government has recognised the difficulties facing the sector and has proposed a reduction in the VAT rate, from 16% to 9%, for tourism services such as accommodation. Introducing a holiday voucher scheme is also expected to help domestic tourism.

After years of growth, new firms registrations fell by over 50% in 2009 as a result of the economic and financial crisis. Only 57.074 new firms were registered, compared with 101.527 in 2008. Although registrations subsequently recovered, they fell again in 2014, with only 101.627 new firms registered, against 124.816 in 2013.

The downward trend would have been even more pronounced without government intervention, in particular the “SRL-D” programme, which has supported the creation of 14.000 new firms, resulting in 26.000 new jobs since 2011.

The outlook for the non-financial business economy as a whole, and especially for SMEs, is positive. The number of SMEs is expected to increase by 6,2% from 2014 to 2016. The creation of around 190.000 additional SME jobs is predicted by 2016, a rise of 7,2% from 2014. The outlook for SME value added is particularly optimistic, with annual growth of 8,5% forecast until 2016.

The general economic conditions facing SMEs improved in 2014. According to the latest survey of financing conditions faced by SMEs, directed by the European Central Bank in 2014, the most pressing problems faced by SMEs were:

- finding customers- this remains the most pressing problem for SMEs. In some cases, this may explain a hesitancy to invest and add on new employees even if firms have sufficient cash to do so.

- access to finance.
- market condition, namely lack of customers and competition.
- availability of skilled staff or experienced managers and regulation. Romania, among other countries as Bulgaria, Croatia, France, Slovenia, identified “regulation” a major problem of SMEs. The fact that the relative importance of the latter two factors is rising, while the relative importance of finding customers is declining, suggests that the structural business environment issues are gradually becoming more important, while the effect of the recent adverse cyclical developments is gradually waning.

Conclusions

Romania's non-financial business economy has not yet fully recovered from the crisis. In 2014 SME value added and SME employment were still around 12% and 225.000 lower, respectively, than before the crisis. In 2014-2016 the number of SMEs is expected to increase by 6,2%, around 190.000 new SME jobs are predicted and SME value added is projected to grow annually by 8,5%.

General conclusions on the current situation of Romanian SMEs reveal several deficiencies of performance and competitiveness gaps that determine an insignificant role of them in the SME sector in the European Union. In this context some positive peculiarities are highlighted in structure, related to size classes and economic sectors, which constitute a valuable potential of competitiveness, which could be exploited through policies and effective public interventions in order to strengthen and improve the competitiveness of SMEs in Romania.

Certainly, the guarantee of good long-term developments of the Romanian SME sector is given by the coexistence of several conditions: to maintain a critical mass of active enterprises in the economy with the development of the technological innovation and the assurance of qualified human resources, adapted to the current rate of technological change at global level.

As regards the SME policy priorities, investing in education and training is important. More funding is needed to improve vocational training and align education with the needs of the labour market. Even though recent export figures register an all-time high, more effort has to be put into improving the export capacity of SMEs, for example through support services and co-financing. Better coordination of innovation policies is needed to create synergies between the public sector, institutions and companies.

Therefore, future actions should continue to focus on a mix of complementary measures to improve the business environment, financing needs and facilitating SMEs' access to appropriate tools, with a stronger focus on business innovation and training qualifications and professional competences highly specialized. An effective mechanism for monitoring and evaluation the measures implemented and new initiatives remains a requirement for business environment to be implemented by developing appropriate methodologies and active involvement of representative SMEs.

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RELATIONSHIP BETWEEN CORPORATE DEVELOPMENT AND SHORT-TERM CREDIT DYNAMICS

PhD Iuliana Militaru³⁴

Abstract:

It is an established fact all firms need, for achieving long-term development, long-term financing sources – most important being, among them, retentions and bank loans; but, long-term development is definitely not possible if the firms' experiences in meeting its financial leverage, i.e. in maintaining and bolstering its liquidity. This is no minor benchmark: liquidity of a firm is nothing less than its ability to meet its obligations without selling/mortgaging its fixed assets – indispensable to long-term development. Putting it in another light, long-term finance sources cannot replace short-term ones, i.e. short-term credit, especially if firm's economic cycle is adaptable/adapted to – or even designed for – using as a rule short-term financing. Furthermore, a basic route to long-term development, a sustained increase in sales volume, needs a good use of short-term credit.

Key words: financing sources, trade credit, debt

JEL classification codes: D24, G31

Introduction

The financial structure of a company is the sum of all financing sources that participate to the setting of a firm's composition (Tirole, J. (2006), p.118; Stancu, I. (2003), p.643) of capital invested in the company, and thus to:

- Financing current activity of the company;
- Financing the (extensive) of the company.

It's necessary to outline, from the very beginning, that the financial structure of a company, cannot be confused with the capital structure of the company – as happens sometimes in the literature; in fact, capital structure of a company is the (main) component of the financial structure due to the fact that:

- a. the company's capital structure includes only long term financing sources (Brealey, R.A., Myers, S.C., Allen, F. (2014), p.54);
- b. in addition, the financial structure of the company includes both long term and short-term financing sources.

The reason for which the trade credit is a distinct component of the financial structure - instead of being "absorbed" as part of "Credit" - e.g. "Short-term credit" - needs including in this paper, an explanation, one built of several arguments.

Firstly, due to the fact that, on average and in market economies in general, trade credit may be considered an ideal tool – e.g. free for financing – literature distinguishes two components of trade credit, the first being free, while the second it isn't - and, technically, cannot be – free (Ehrhardt, M.C., Brigham, E.F. (2011), p. 670):

- free trade credit
- costly trade credit.

The first component of trade credit refers to what constitutes trade credit transactions that were conducted within the discount period, and the second component comprises trade credit transactions conducted outside the discount period.

Consequently, trade credit becomes expensive - which is not mandatory, ineffective or inefficient, when the cost of contracting and using is higher than the other sources of financing investment projects.

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Furthermore, technically speaking, the trade credit is (Ehrhardt, M.C., Brigham, E.F. (2011), p. 789) a debt assumption generated by the selling goods or services of a company on credit (e.g. to another firm), registered debt:

- a) in an account receivable from the supplier or
- b) in an account payable (debt) by the purchaser.

From this point of view, it's obviously that this type of credit, the trade credit, is significantly different from the short term bank credit, by the fact that it not only supports or finances, daily productive operations - or generally short term, but it is literally one of the manifestations form of this activity.

And this, all the more, at least in a market economy, as trade credit is designed to function in together with the company production cycle itself - including, and especially, by calibrating it, in principle, at least, to maturity commercial credit, calculated according to period driven by sales cycle of goods (Dobrotă, N. *et al.* (1999), p.146).

There are, of course, short-term lending limits, beyond which it becomes inefficient, if not absolutely useless: in a market economy, at least, the credit process, of any type, cannot finance investment projects, e.g. long-term investment for development a business of a company; in return, however, the same short-term lending process - i.e. trade credit - is indispensable production cycles normal course of business.

These remarks are very precious for our approach of critical analysis for the determinants of a company's financial structure, because it outlines one of the most important determinants of its functions, namely the designing of desired financial structure of the firm characteristics (materialized as such of) the structure and activity of the company.

Thus, till now, has been expressly outlined in the literature, one of the objective conditioning that leads to the necessity of investigating the ways for realizing the desired financial structure (i.e. desired, ultimately, by the firm's shareholders) of the company, the need to choose between (Tirole, J. (2006), p.141):

- (I) the total payment to investors, mainly in the form of a fixed amount predetermined to creditors
- (II) the same payment, also mainly, in a more flexible manner to shareholders.

In this field, the determinants of the financial structure of a company are (and will be) identifiable by management of any firm, as the first effect of daily performing of undertaken management processes to ensure the company operation itself - in other words, for and through its short-term dynamics – in the process of developing the firm's development strategy - which means, for its long-term dynamics.

Regarding the calibrating perspective for the short-term company's functioning, and therefore of financial structure, the need to choose between creditors and shareholders, as an absolute majority of firm's investors, is (in economic terms) satisfied by reliance on short-term loans - including trade credit.

In this way – in the sense described above – short-term financing of the company is, in principle, viable, given the payments to the creditors can or even have to be made at a (pre) determined maturity.

We can conclude, therefore, that financial structure of a (relatively) strong company, that act - or might act - in an oligopoly must adjust development strategy in the long term, and implicitly the financial structure taking into account the following preconditions:

1. maintaining sales volume at a (sufficiently) high level;
2. (acute) necessity of increasing profit size – in long-term.

At microeconomic level, these conditionings could be considered as manifestations of a determinant of a company's financial structure, namely the strengthening of a dominant market position on the basis of intensive use of short-term lending – and especially trade credit.

Regarding trade credit, in its quality of essential financing source for operations of the company, and simultaneously of advantageous form of short-term lending, some observations will clarify the

(potential) role of commercial credit in making financing decision, by analyzing factors that influence the efficient use of this form of lending.

Thus, for the beginning, it must be stressed that, especially in a hostile environment from financial perspective, commercial credit can be an indirect solution for financing investments at microeconomic level, i.e. by preserving the financial funds of the company to be used later to finance investments, funds that would otherwise be destined for short term financial needs.

Results obtained

In addition, in practice, the proportion of firms that use trade credit, in modern market economies, from the entire range of investment funding sources, is circumscribed by the following characteristics (*The Use of Trade Credit by Businesses* (Reserve Bank of Australia - September Quarter 2013), p.1):

I. trade credit can be used as a tool for operationalization the *price discrimination*

II. trade credit can be used by companies in order to verify the quality of acquisitions before paying for them

III. this type of loan is at the same time, an important source of external financing for companies that are not listed on the stock market (Ibid, p.2).

Price discrimination, is, on the one hand, accessible practically only to large companies, and in particular those companies that act as monopolies (Mankiw (2006), p. 326). On the other hand, trade credit will be conducive to a company, in the context of practicing price discrimination - from the point of view of financial engineering, of practicing it by its creditors - if the monopoly that play or could play the role of lender (Ibid., p. 328) in the trade credit mechanism:

1.will face a high mobility of sold product / products in multiple markets – connected to each other (Ibid., p. 327- *Exempli gratia*, through e-commerce is possible to acquire a cheaper product from a foreign market than directly from the Romanian market);

2.will have difficulties in the ability of measuring the debtors desire / possibility to pay a given price;

3.fails to decrease the price size down to the marginal cost price.

At least equally important is the observation of the fact trade credit is of the outmost importance for unlisted companies in their need to finance themselves - and not only for the latter.

It is, thus, a *directly* advantage for companies that benefit from holding such shares, the fact that companies that issue such securities have a good financial situation; in other words, it is a direct advantage obtained by an *indirect* way.

Cost quantification of (using) different financing sources is carried out according to two fundamental criteria regarding the structure and operation of those sources, namely:

➤ Source of funding resources, that decide calculation the value of one of the two types of costs of the financing sources use, respectively:

1.The **cost** of financing sources using that do not come from the company's investors, but from its stakeholders and from:

- a.Banks (in this case, by granting short-term loans)
- b.Suppliers and, possibly
- c.Employees

2.The **capital cost** of financing sources provided by firm's investors (e.g., shareholders and banks - by granting long-term loans)

➤ The *lifetime sources* of financing (Ibid., p. 342) according to which is calculated:

1.The **cost of short term debt** - contracted to finance the (current) activity of the company and as such, being outside the scope of permanent sources of financing

2.The **capital cost** of long-term financing sources used to finance the firm's investment

In summary, for the components of financial structure of the company that, on the one hand, are made available by the stakeholder and, on the other hand, represent, in principle, the foundation of firm's (current) financing activity is calculated the cost of using, whereas for the elements that

compose the capital structure – in strict terms – is quantified the cost of capital (of using for financing investments at the microeconomic level).

1. The cost of financing sources contracted by the company and used by this in short-term, or, more clearly, the cost of short-term financing is high, i.e. short-term financing is expensive - for company - basically, when is used mainly, being high, at least the relative cost of this type of funding.

The mainly using of short-term financing sources will not be used typically for any company, but only in cases tell them, 'special', as we shall demonstrate below.

On the one hand, generally in any market economy, the cost of financing sources borrowed and used by the company in the short term is relatively high - that is, non-negligible - big enough to endangering the existence itself of the company, by bankruptcy risk materializing, given the following economic and financial circumstances (Ehrhardt, M.C., Brigham, E.F. (2011), p. 703):

- (1) Firstly, short-term loans (especially those granted by banks) are generally riskier than long-term loans;
- (2) Secondly, a firm that borrows financial funds of sensible sizes in the short term - from any source whatsoever - is likely to fail after the (sudden) outburst of a recession, given following effects of recession will substantially affect the company:
 - a. The company will find very hard to meet its obligations towards its creditors;
 - b. The company will not be able to obtain an expansion /extension of the loan (e.g., in short-term).

On the other hand, there are a number of strengths of short term financing sources, but only in the situation in which the economic cycle of the company is designed specifically to use, or at least to be compatible with its support of short term financing; thus, the company's activity, in such a case, will have a number of characteristics, the most important being (Ibid., p. 703):

- (I) the financial funds need registration with a cyclical or seasonal rhythm - which, moreover, should be emphasized, do not need a long-term funding, due to the fact that interest rates are generally lower for the short term (banking) loans those for the long term;
- (II) framing the moments in which occurs the need for financial funds in a descending trend in the short term (i.e. achieving an economic activity in the near future of which the need of financial funds decreases, following that in the future cycle of time to return at previous (high) level.

To measure the amplitude of all these financial dynamics – emphasize, in the short term - is used, most often, the called current liquidity ratio, whose calculation formula is: current assets/current liabilities.

This ratio is extremely important, due to the fact that the result of ratio above is relevant both for a supplier – i.e., if you borrow a trade credit - and for a bank – given the decision to grant a bank loan; in either of the two situations, the frame that describes the quality of credit using can be characterized in the following terms (Ross, S.A., Westerfield, R.W., Jordan, B.D. (2013), pp. 57-58):

- a) the lender is in a more favorable position as the value of current liquidity ratio is higher - in this case, than 1;
- b) the debtor obtained from the magnitude of the current liquidity ratio, information about both effectiveness of trade credit and the management of the business itself, given that:
 - i. good or high value (≥ 1) may indicate
 1. a good company from the perspective of liquidity existence
 2. a poor condition of the company, because of the inefficient use of liquidity and, respectively, other short-term assets
 - ii. a value low than 1 suggests the existence of a negative net working capital, an unusual situation for a "typical" ("average") company.

The existence or usefulness of liquidity - in this case, the financial funds obtained in the short term - for a company in terms of trade credit (where it is supposed to play the role of the debtor) can appreciate more precisely by circumscribing the value of trade credit cost.

This value is, in fact, as important as the amount of current liquidity since the current liquidity indicates the quality of the financial perspectives of the company – e.g., the future size of financial

funds needs – whereas the quantification of the cost of using trade credit by the company reflects the today efficiency of investment.

Turning to the trade credit analysis it must be emphasized that ***it acts as a multiplier of the financial resources*** obtained by the firm in the short term, given the magnitude of these resources increases directly proportion to:

- 1.the increase in sales volume, according to the following dynamics:
the increase in sales volume → development the production capacity of the company → the increase of company production → a new increase of sales volume
- 2.the extension of deadlines for returning the amounts (of credit period) through the operation represented by amounts received as trade credit grow even without an increase in actual sales.

Future directions to be approached

This multiplier paradigm is in itself quite daunting, because it shows further investigations are needed for determining the *true* characteristics of multiplier's mechanism; in other words, for determining whether financial resources *alone* are required to put this mechanism in motion.

This is a rather important component of the theory of trade credit. For, given what can be conceived as its closest 'relation', i.e. the multiplier found in macroeconomics – both in theory and, what is most important, in practice – it is essential to clarify what *this* multiplier, namely trade credit, is made of.

The economy possesses a number of self-adjusting mechanisms, the multiplier being one of the most important, given a *market* economy is based on spending; thus, the multiplier process 'ensures' a change in spending will generate a *larger* (in relative quantitative terms) adjustment of total expenditure, the main lever being marginal propensity to consume (MPC) (Schiller, B.R. (2003), p. 207).

MPC is, itself, the reflection of consumer behavior, whose mechanism is derived from the very structure of consumption, that is (Ibid., p. 2130):

- a) autonomous consumption – i.e., consumption 'free' of *income* factors/influences;
- b) induced consumption – i.e., consumption based on income factors/influences.

In our analysis, the investigation needed has the object of determining whether trade credit is a function of only sales volume, or is influenced of such factors as 'consumer' confidence – in this case, *purchaser* confidence.

Conclusions

Companies carrying out "typical" economic activities will use short term financing sources only in order to finance the (current) activity of the firm, not to finance its investments; in this case, the relative cost of short-term financing will be reduced, and, anyway, will not reach too high a level, at least not in 'average' circumstances and not against firm's own goals and interests.

On the other hand, however, it is clear a well-managed company *should* find it within its grasp to finance, through use of short-term credit and especially of trade credit, its day-to-day activities, so that short-term/trade credit *will* finance its project investments, be it indirectly.

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THE EUROPEAN COMMISSION'S TAIEX INSTRUMENT

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Abstract:

TAIEX is the Technical Assistance and Information Exchange instrument of the European Commission. TAIEX supports public administrations with regard to the approximation, application and enforcement of EU legislation as well as facilitating the sharing of EU best practices. It is largely needs-driven and delivers appropriate tailor-made expertise to address issues at short notice in three ways: workshops - EU Member State experts present specific areas of EU legislation in workshops to a large number of beneficiary officials; expert missions - EU Member States experts are sent to the beneficiary administration to provide in-depth advice on the transposition, implementation or enforcement of a specific part of EU legislation; study visits - a group of three practitioners from a beneficiary administration take part in a study visit to an EU Member State's administration. The TAIEX mission is to provide institution building support in all areas of the EU acquis with the view to support efforts in alignment, application and enforcement of legislation of the acquis in the Beneficiary Countries. The TAIEX mandate to provide assistance covers: Turkey, the former Yugoslav Republic of Macedonia; Montenegro, Serbia, Albania, Bosnia and Herzegovina and Kosovo*; Turkish Cypriot community in the northern part of Cyprus; Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Republic of Moldova, Morocco, Palestine, Syria, Tunisia and Ukraine. All countries covered by the Partnership Instrument; EU Member States in the framework of the administrative cooperation within the policies managed by DG for Regional and Urban Policy. TAIEX assistance is open to: Civil servants working in central public administrations; Judiciary and law enforcement authorities; Parliaments and civil servants working in Parliaments and Legislative Councils; Representatives of social partners, trade unions and employers' associations; TAIEX does not provide direct support to civil society, private citizens or to individual companies. This year 2016 marks the 20th anniversary of the launch of TAIEX, the Commission's instrument of technical assistance and information exchange. An occasion not only to celebrate, but to both look back and into the future.

Key words: European Union, program, legislation, business.

JEL classification codes: Q01, P33

TAIEX Background

TAIEX was created in 1996 and is managed by the Commission headquarters DG Enlargement, Institution Building Unit (D4). The Institution Building Unit is responsible for the three main technical assistance instruments of DG ELARG: TAIEX - short term technical assistance (two weeks maximum); TWINNING - long term technical assistance (1-2 years); SIGMA: horizontal support scheme in co-operation with the OECD. His mission is to provide institution building support in all areas of the EU acquis with the view to support efforts in alignment, application and enforcement of legislation of the acquis in the Beneficiary Countries.

TAIEX beneficiaries and partners

The TAIEX mandate to provide assistance covers:

- Turkey, the former Yugoslav Republic of Macedonia; Montenegro, Serbia, Albania, Bosnia and Herzegovina and Kosovo;
- Turkish Cypriot community in the northern part of Cyprus;
- Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Republic of Moldova, Morocco, Palestine, Syria, Tunisia and Ukraine.
- All countries covered by the Partnership Instrument

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- EU Member States in the framework of the administrative cooperation within the policies managed by DG for Regional and Urban Policy.

TAIEX assistance is open to:

- Civil servants working in central public administrations;
- Judiciary and law enforcement authorities;
- Parliaments and civil servants working in Parliaments and Legislative Councils;
- Representatives of social partners, trade unions and employers' associations;

It is good to know that TAIEX does not provide direct support to civil society, private citizens or to individual companies. Also, there are some beneficiary groups: Central Governments, Ministries; Government Bodies; Public Agencies; Regional and Local Authorities; National Parliaments; Judiciary; Private Sector Associations; Social Partners. There are some specific forms of assistance, like: seminars/workshops (single/multi-country); peer reviews for the candidate countries (monitoring of progress in the approximation of the *acquis communautaire* to improve strategies and to prepare regular reports); assessment missions (identify needs and elaborate strategies); expert missions (advice and guidance); study visits (providing opportunities for officials of beneficiary countries to understand how MS deal with practical issues); regional training programme (train the trainers). As we speak about the TAIEX activities for private sector associations, we can mention that TAIEX launched this programme in 1998 with the main objective:

- to inform and train business operators on key issues of the *acquis communautaire* having direct impact on their activities;
- to share experiences and best practices between SMEs of the TAIEX beneficiary countries and the EU M-S.

This programme in particular aimed at reaching representatives of SMEs by organising:

- TAIEX «Business Weeks »;
- TAIEX “Business know-how exchanges on approximation and implementation of key EC Internal Market legislation”;

Where it is used?

TAIEX is used in the following fields (http://ec.europa.eu/enlargement/tenders/taix/index_en.htm): agriculture and food safety; freedom, security and justice; environment, energy, transport and telecommunications; internal market; support to the Turkish Cypriot community; TAIEX REGIO Peer 2 Peer.

Agriculture and food safety - The TAIEX instrument delivers assistance across the agriculture, food safety, veterinary and phytosanitary and fisheries sectors. The timely provision of targeted expert help is of particular importance in the veterinary sector. Disease control simulation exercises, both before an outbreak of disease and a rapid deployment of experts immediately after disease detection, have been of significant benefit for the participants. Priorities for agricultural policy assistance are centred on the establishment and development of paying agencies, delegated national institutions charged with the responsibility of administering trade mechanisms and processing farm support payments, from the application stage through to verification, payment and audit. Furthermore guidance is given on the implementation and enforcement of the Common Organisation of the Markets and a range of policy areas from state aids and rural development to quality issues such as the protection of geographical indications and organic farming standards.

Freedom, security and justice - Strengthening the European Union as an area of freedom, security and justice without internal borders continues to be a priority and it is a model that TAIEX assistance contributes to export. The range of legislation is wide, covering issues such as free movement of persons, visa policy, EU external borders policy, Schengen area, immigration, asylum, judicial cooperation in civil and criminal matters, drugs policy coordination, data protection, fundamental rights, racism and xenophobia, police and customs cooperation, crime prevention, fight against organized crime. At the same time, the target groups remain varied and diverse, composed not only of officials of the Ministries of Justice and the Ministries of Interior but very

often includes those who have to apply the *acquis* in their daily work: judges, prosecutors, police officials, other law enforcement agencies, border guards, officials from migration and asylum authorities, customs departments, etc.

Environment, Energy, Transport and Telecommunications - Classical TAIEX assistance or support via the Environment and Climate Regional Accession Network (ECRAN) is provided to our beneficiaries in all fields covered by the environmental legislation (air quality, waste management, nature protection, chemicals, industrial pollution and climate change). Environment and energy are key policies closely linked as production of energy has an impact on the environment and the climate. The topics addressed go from renewable energy and energy savings to market liberalization in the oil, gas and electricity sectors. In the area of transport, sectors covered include maritime, inland and aviation including joint programmes with the European Maritime Safety Agency (EMSA), the European Civil Aviation Conference (ECAC). Technical knowledge is also transferred on Information and Communication Technology (ICT) and its market regulation. TAIEX activities are organized on topics such as electronic communication, number portability, broadband infrastructure and postal services.

Internal Market - The Internal Market is underpinned by a range of supporting measures and policies which the EU and its Member States have adopted to sweep away the technical, regulatory, legal, bureaucratic, and other barriers that stifled free trade and free movement within the Union. Activities cover a vast array of *acquis* measures, mainly related to the four freedoms, but also extended to EU policies, programmes and initiatives in a larger sense. Assistance is particularly focused on social and employment policy, intellectual property rights issues, financial services, competition policy and consumer protection and health policy. Focus is also given to SMEs and industry, competition issues including state aids, structural funds, EMU and free movement of capital, taxation and customs.

Support to the Turkish Cypriot community - Against the backdrop of EU measures taken, aiming at an end of the isolation of the Turkish Cypriot community by encouraging economic development, the TAIEX instrument has been designated as the vehicle for implementing all technical assistance to support the preparation of the Turkish Cypriot community's ability to apply EU legislation. The main objective of TAIEX assistance to the Turkish Cypriot community, in the framework of the cooperation with the Directorate-General for Regional and Urban Policy, is to prepare the legislative and enforcement capacity so that the EU *acquis* will be immediately applicable upon the entry into force of a comprehensive settlement of the Cyprus problem. To support this programme, TAIEX engages Member State experts in a number of technical areas:

- Support for the implementation of the “Green Line” Regulation
- Assessment missions aimed both at evaluating legislation and administrative capacity and at developing in close cooperation with local counterparts, a structured plan for future technical assistance

Medium-term expert visits on strategy and Turkish Cypriot capacity building and the development of key co-ordination structures within the Turkish Cypriot community

TAIEX REGIO Peer 2 Peer - The TAIEX REGIO Peer 2 Peer was created in cooperation with Directorate-General for Regional and Urban Policy. It facilitates short-term exchange of know-how between cohesion policy experts and administrations involved in the management of ERDF and Cohesion Fund in all Member States. It is part of the Commission's broader effort to help Member States strengthen their administrative capacity. Public sector institutions involved in the management of the ERDF or Cohesion Fund can request support. As under the TAIEX instrument, 3 types of exchanges can be provided: short-term expert missions, study visits and workshops. The tool is easy to use and flexible. The application can be done online, the main information required is: the type of exchange requested; a short explanation of the need for assistance; the objective of the exchange for the applicant; the topics of interest; a designated contact person and the profiles of the potential participants; an estimated timeframe during which the exchange could be organized.

LOGISTIC FLOW DESIGN FOR SME`S

Nicolae Tunsoiu³⁷
Daniela Cîtu³⁸

Abstract:

This article describes a system of bottling lines of a solution often used by the population, namely acetone. This system is created virtually, from the introduction of glass used on the production line until it is being put on the palatial packaging, using CATIA software. Bottling line is particularly suitable for the development of SMEs in the economic market.

Key words: material flows, flux of raw materials, SWOT analyze

JEL classification codes: L23, L65

1. The study substantiating the management of material flows in realizing a product

The bottling process

A bottling line represents a series of production machines made to work together in order to bottle liquids in bottles. These lines can be found as facilities like making drinks, including wine producers and refreshments, like companies that produce drugs and cleaning products. Each bottling line can count on a personalized design to satisfy the needs of each specifiv product.

A bottling line can include human work at one or more points along the line, or it can be completed automated with the help of robots and logistic equipments from the start to til the end of the process.

The working cycle of the bottling lines: while the bottling lines differ based on the product and producer, many lines include the same positions or basic components. Each station is responsible for one or more steps during the bottling process. The majority start in a station where the empty bottles are loaded onto a conveyor belt or another machine. From here, the bottles begin a cleaning process and are subjected to suction to eliminate the air inside so that the bottle can e filled. After that, the bottles go into a filling station, which can include a rotation device or a in-line filling system.

Once the bottles are filled with liquid, some can be sucked one more time to eliminate the excessive air. This step is extremely important, with things like wine, where the oxygen remained in the bottle can have a huge impact on the taste and quality. Then the bottles go through a machine that applies a cap or cork to seal it. Then they go through a labeling machine only if the bottle requires a label or a stamp. Finally the bottles are packaged and wrapped on a palette to prepare them for transportation.

The display of these machines may vary, the equipment producers usually arrange the bottling line based on the specific objectives of production. The machines should be arranged to minimize the errors and to increase the productivity or debit.

Systems that perform the transfer function in the bottling flows are conveyors. These can be with or without gravitational action, their purpose being transportation with a controlled continuous motion the objects found in between the machines from the flow. Without bottling equipment, these companies would have it impossible to satisfy the demand of famous drinks and othe liquids. Automated lines also help reduce the need for human work which helps with cutting into production costs.

That being said the equipment for bottling lines can't withstand a small beer factory or other smaller companies. These machines need a substantial investment in advance and can be more expensive than a simple bottling line with small lots.

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2. The specifying characters of products made in the flow

It is proposed to achieve an automated system of bottling the acetone in plastic bottles, integrated within a flow logistic for the development of a SME.

The activity represent the designe, development production and delivery of cosmetics products and products for clean in Romania.

In the flow made by me, a logistic flow of bottling, I used boxes for delivery the plastic bottles which are filled with acetone with a maximum volume admitted in the box of 2210 ml. To highlight the achievement of the bottling operation an automatic line a product will pass successively throught a certain number of operations, so finally showing a stack composed with number of packed products. For this reason it will achieve a automatic line for achieving the bottling acetone, these with the following characteristics:

- Acetone (CH_3COCH_3) it is an organic solvent of meaning industrial and chemicals
- It's a colourless liquid with a characteristics smell. It is part of the aliphatic ketones.
- It is easy flammable, forming with the air an explosive mixture, also it is dissolves in water and in most solvents

Packing operation:

- ✓Primary packaging (the acetone will be bottle in a plastic bottle);
- ✓Secondary packaging;
- ✓Tertiary packaging.

Primary packaging will do in a plastic bottle which are the following charactestics:

- specific underrezistenta la mediuweight ;
- humidity resistance;
- acid and alkalin-proof;

Distinctive characteristics of the bottle:

Figure 1 - Primary bottle packing



Secondary packing will be made in cardboard boxes wich have to follow next requests:

- assuring products sorting and their integrity;
- keeping the product from extern factors;
- really good rigidity and mechanical resistance for keeping the products;
- assuring a plain surface to be labeled.

3. Establishing the flux of raw materials for creating the product

Producers of automatic bottling sistems are many and come with all sorts of bottling machines, machines wich correspond to different types of logic fluxes.

Automatic bottling line AFS 1000-4 from WURSCHUM is a constructive example with acetone bottling equipment. This line is equipped with an electric servo filling machine with the control unit and cylinder unit, the filling station with up to four heads and anti-leak valve, safe case and touchscreen for machine.

Figure 2 - Automatic bottling line

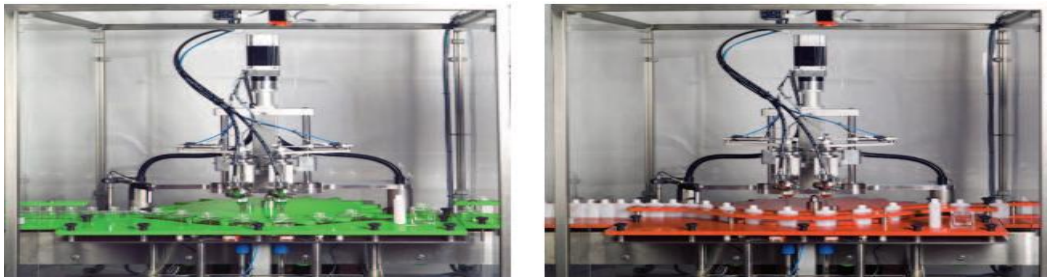


Acetone bottling line consists of:

- ✓filling system;
 - ✓capping system;
 - ✓labelling system;
- Filling system:

- Nozzles are firmly mounted at a certain distance from filling station and don't need to be moved.
- Transport is done in a star shape, moving the bottle from conveyor band to the transfer place, and after filling they're transported outside on conveyor band.
- While the bottles are being filled they're not in contact with the conveyor band

Figure 3 - Filling System



Capping system: caps are placed on bottle with a system. Afterward every bottle has a cap on it. The cap will be positioned and softly pressed. The capping system is going down and when the cap is touched this fits it. When the couple cap is touched, the machine automatically stops, and the capping system returns to it's initial position.

Figure 4 - Capping System



Labeling machines are solid, made from inoxidable steel, equipped with step by step motors and servo, machines TADBIK are made in conformity with EU regulations, in a production unit ISO 9001:2000. Labeling machines Tabdik Shrink Sleeve apply termoconducting label on just a part of the surface or on all of it, at speeds of 24.000 bottles/hour.

These machines are versatile and can be integrated in the actual production line. Using a rotating cutting system, labeling machine SLV – 50100200400 will offer a correct cut and will extend cutting blades's life span. SLV-line is capable to utilize a variety of materials like PET, PVC and OPS, with width from 40 to 60 microns. With the color touchscreen interface, the operator can easily change parameters.

4. Developing an SME

With a production of 4 million 50ml plastic bottles per year and 12 employees, an SME can be one of the newest producers and merchants from Romania and Sud-East Europe.

Products portofolio

- oAcetone 50 ml – Used as solvent for nail polish.
- oAcetone is bottled in 50ml glass containers and are labeled according with regulations
- oTransport will be done covered according with legal regulations
- oThe product will not pe exposed to solar radioation.
- oStoring will be done in dry, well aired, safe, away from fire, solar radiatons. And freez places.
- oStoring/transporting tempeperature: 5-30 C Humidity: 0-80%
- oUnlimited valability in original packing, respecting the storing

Domain analyse – product market

SME carries out annually on average over 4 million products annually. The most known brands are Farmec, Farmax, Madin, Promax, Cien. The focus should be on expanding the market, the volume, but also on product diversity.

Market size evaluation involves aspects such as:

- Market capacity: Acetone market in Romania is estimated at 7-10 million euros, increasing by over 5% annually due to the diversification of product lines offered and the growing demand of its customers;
- Market dynamics: the market is evolving over time, its structure and size being in a continuous dynamic movement. Market size is characterized by a degree of mobility and relativity.
- Market structure: consists in global market segmentation in a number of distinct, uniform and different from other groups;
- Market segmentation: the two important segments are the products of care, known as “Care”, generally comprising face creams, and the cleaning products “Cleansing” comprising solvents, cleansers, tones, scrub or mask products. On the two market segments the situation is different due to factors such as purchasing power and the level of education of some customer segments.

SWOT Analysis

In a professional context, SWOT analysis is used to measure the profitability of a business or project.

An SME strengths are characteristic or distinctive competencies that it possesses at a higher level compared to other companies, particularly competitors, which ensures a certain advantage to them. In others words, strengths, are activities that the company performed better than competitors, or resources that they possess and which exceed those of other companies.

The weaknesses of an SME are feature of it that determines a lower level of performance in comparison with the competing companies Weaknesses are activities that the company do not realize at own or resources that it needs, but it doesn't have.

Opportunities are positive external environmental factors for the company,in other words opportunities offered by the environment to the company, to establish a new strategy or to reconsider the existent strategy in order to exploit profitable arising opportunities.

Threats are negative external environmental factors for the company, in other words circumstances or events that can adversely affect, in a significant measure, the company's ability to fully achieve the objectives set causing the reduction of its economic and financial performance. As with opportunities, "threats" of various natures and causes, permanent lurk the company, their timely referral anticipation allowing the company to reconsider its strategic plans so as to avoid or minimize its impact.

Table 1

SWOT analyze

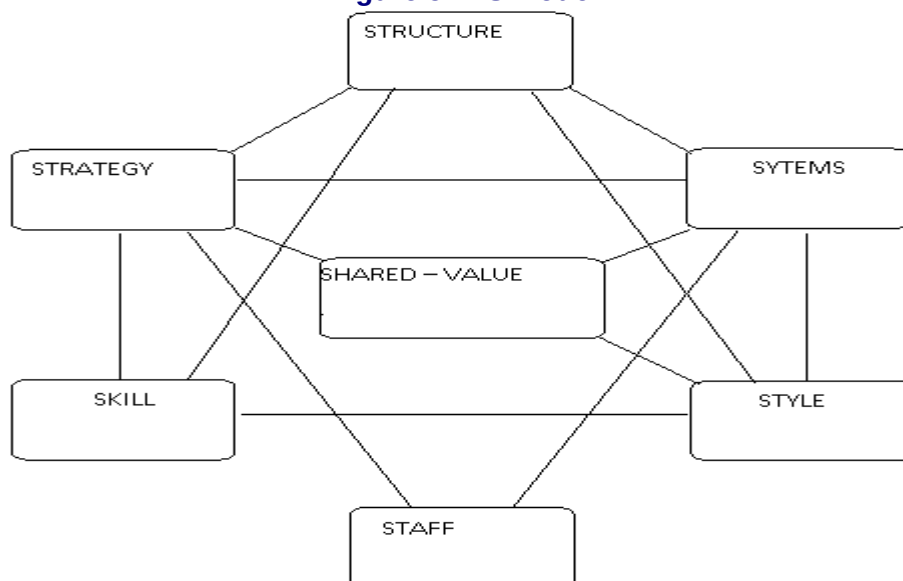
Strong Points	Weak Points
Latest technology Good promoting 99.8% pure acetone Low prices Minimum degree of workforce It holds international quality certificate ISO 9001 Attractive pack Clear organization of departments and hierarchical relationships between them Qualified employees	Company reputation Not covering a wide range of consumers Easy access to credit
Opportunities	Threats
Efficient distribution channels The small number of domestic manufacturers Export growth (for Romania) People perception that due to very good promoting remains with a new image in terms of company	Economic crisis Unemployment rising The education level of the population Increased competitors from imports. Country's political instability

7S Model

7S model represents a model of success guaranted by seven independent variables, but that are interdependent and influences strategical decisions. So named because of variables whose name in English begin with the letter S, the model highlights the fact that there isn't a preferred order or hierarchy between these factors, and the adopted strategy involves reconsideration to the other success factors.

The 7 variables are divided into two categories: the first category called "hard" and includes elements of strategy, structure and systems, and the second category called "soft" and includes the following elements: staff, leadership style, methods and commune values.

Figure 5 - 7S Model



- Strategy: SME mainly uses marketing strategy, which is one of focusing on consumer needs and desires, but also a strategy of cooperation with joint order to achieve goals.
- Structure: The organizational structure is now a functional one.
- The system: The existing system in an SME is functional and quite flexible, able to adapt to the market and current trends in technology.
- The staff: Starting from the top management level to the employees from the factory, the entire staff is highly trained. Each job has associated a job description so that every employee knows exactly what tasks have to accomplish.
- Leadership style: The style of leadership present at the SME level is a modern, well-organized based on a series of well-defined principles.
- The methods: The company is using a modern technology in the manufacturing process using high quality natural ingredients.
- The values: The main values of SME aim the accent on quality in manufacturing products.

Figure 6 - Risk analysis



6. Conclusions

We realized an automated bottling acetone system, integrated in a logistic flow. Bottling logistic flow is represented by a fully automated line, made up of several groups of machines controlled by a central system and equipped with a common transport system, fully automatized, for carrying products in order to achieve the final packaging.

To achieve the logistic flow, we analyzed several constructive variants from different manufacturers. We watched these logistic flows to cover the widest range of fields, from the food industry, to the chemical industry. After choosing the optimal logistic flow reference, we did a market analysis for choosing a software system variant capable of performing management of material flows.

Besides the ability to manage production flow We decided that it can adapt an ERP software system able to plan and organize all logistics activities within the flow.

We realized a project feasibility analysis in an SME case. We analyzed the situation of firms in the market, we developed a new strategy, that after we looked at the domain and the market of the

product, then made the SWOT analysis of the company. I also had to realize the competitive position analysis of the 7S model, so that in the end to draw some conclusions regarding the future of an SME in the Romanian market.

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AGRIBUSINESS MARKETING AND MANAGEMENT

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Abstract:

Agriculture is a business. As a business it is critical to understand who your market is and what they want as well as how economic forces will affect your business. Moreover, according to the Food and Agriculture Organization of the United Nations (FAO), agribusiness includes the supply of agricultural inputs, the production and transformation of agricultural products and their distribution to final consumers making agribusiness one of the main generators of employment and income worldwide. This paper aims to answer questions related to agribusiness marketing in agriculture. The first and probably most important is "What are you selling?" Then, "are you marketing a commodity or a product?" "What is the price?" And of course, "Is your market local or the world?" Following these basic questions, the details of what a business in agriculture means will be discussed.

Key words: agriculture, business, marketing, management

JEL classification codes: Q01, Q14

Basic Economics

When we speak about basic economics we should think at: - supply and demand; - opportunity cost; - risk. "*Supply*" means how much you will produce at a given price and "*demand*" is about how much you will buy at a given price. When supply equals demand and markets clear we say that we are *in Equilibrium*. The point is that you can sell only what consumers will buy at a given price. If price is too high, demand falls. If price is too low, supply falls. In agriculture it is a bit more complicated since after harvest supply is fixed. So, price will adjust to clear the market (example: market for houses or land). Now, if you ask "What is my time worth?" The answer is: the value of your time is its *opportunity cost*! Or, the opportunity cost of your money is what you could earn if you invested it somewhere else! Historically, owner's cost of labour and capital are ignored in calculating profit/loss in agriculture. Why is this important? Because, your net returns/breakeven need to reflect all costs. This is typically ignored by many farmers in the US when calculating breakeven prices or returns on investments.

Risk is the uncertainty or the unknown relating to an action or an activity. There are many types of risk: production/technical risk; price/market risk; financial risk; legal risk; personal risk. Here are some examples of risk in Agriculture: - availability of labour or capital; - equipment breakdown or accidents; - health of the business owner; - weather, natural disasters, and power loss; - changing government regulations; - crop and livestock disease; - terrorist attack on food industry. A very important issue when we talk about this subject is the ability and willingness to assume risk. Ability and willingness are not the same. Ability means "having the economic resources to pay obligations that arise." Willingness means "having the personal fortitude to accept responsibility of paying for obligations that arise." An individual needs both capacity/ability and willingness to assume risk. How to assess the risk associated with an activity? The most likely outcome, the average outcome, or the outcome of an expert opinion? Example: weather. The variability of outcome, range of possible outcomes, standard deviation among outcomes, and the coefficient of variation? Also, about decision making under risk, it is good to know some things. Identify alternatives, such as assume the risk, manage the risk, avoid the risk, etc. Tools for assessing risk: decision tree, payoff matrix, decision rules, most likely outcome, maximum expected outcome, risk and returns, safety first, break-even probability, etc. Managing risk not the same as reducing risk. If you reduce risk too much, you may also be reducing potential profits. Managing risk involves deciding which risks to accept, which to control, and which to avoid. The likelihood or probability that an event will occur. The magnitude of impact if the event occurs.

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Management Basics

Above all, management is about decision making. Also we speak about the role of goals, decision making process, about Strategic/Business Planning and, of course, about management skills. The functions of management are: planning, deciding, implementing, controlling and adjusting.

We "planning what to do", "deciding what to do" and then implementing what was decided and controlling/adjusting to respond to the outcome. It is good to know that management is an ongoing process, performing each of the functions on an ongoing basis. An outcome of the "control/adjust" step is to review, refine and update the previous plan, decision and implementation. Also, management is "attaining the organization's goals through an effective and efficient manner through planning, organizing, leading, and controlling". We say it is *effective* when the goal is accomplished, *efficient* if use as few resources as possible, *planning* when developing a vision for what and how it to accomplish and *organizing* when identifying, acquiring, and using resources to accomplish the vision. And moreover, *leading* when motivating others to work towards the same goals; steps needed to implement the plan and then *controlling* when measuring the results, assessing if progress is being made and making appropriate changes/adjustments. A meaningful goal is:

- Specific;
- Measurable (offers a means to assess progress toward achieving the goal);
- Challenging but realistic;
- Time specific (a specific time when the goal should be achieved);
- Addresses key result areas.

Here are some common business goals: earn a profit, increase owner equity, do not assume unreasonable risk, offer workers a safe place to work, operate the business in an honest, ethical manner, offer consumers a safe product, minimize long-term adverse environmental consequences of the business operation. Goals are the criterion for making a decision - "Among my alternatives, which one do I think will best allow me to achieve my goals." Of course, setting goals takes time, requires effective, open communication. Last but not least, effective goals have specific characteristics.

Decision making is a process which implies: identify and define the problem or opportunity; identify alternative solutions; collect data and information; analyze the alternatives and make a decision; implement the decision; monitor and evaluate the results; accept responsibility. Long-term decision making is "strategic planning" or having a strategic vision, provides a framework for making and implementing short-run decisions. Basic questions of strategic planning: *Where are we? Where do we want to go? How do we get there?*

Strategic Planning is a multi-step and on-going process about define the mission of the business, formulate goals for the business, assess the resources of the business, survey the business environment, identify and select strategies to achieve the business goals and Implement and refine selected strategies. Here are some strategic planning questions: What is the current status of my business? (inventory the business); What are my interest and skills? (consider the owners' skills and interests); What are my expectations about the future? (assess the business environment); What do I want to accomplish? (establish business and personal goals); Will the current business be feasible in the future? (assess capacity of current business to fulfil the owners' goals); What alternatives are feasible for the future? (identify alternatives and assess whether those alternatives can fulfil the owners' goals); What steps are needed to implement the feasible alternative? (develop a plan to implement the chosen alternative); What might prevent me from implementing the plan? (identify potential risks and opportunities; prepare contingency plans); How do I monitor progress over time? (develop processes and benchmarks to monitor and control implementation); How should I prepare to document, share, and revise my plan?

A good management means good communication skills! It is know that the purpose of communication is to exchange information, but also to persuade and influence. Add to this the nonverbal communication (e.g., body language), listening (reading and viewing) and informal communication within a group and you will have the complete picture.

Leadership! Another one important skill for management. A portrait of a leader should be like this: visionary leadership; transformational leadership (state a vision, shape values, trust colleagues, build relationships, involve others); willing to work towards a goal that benefits others; knowing when to lead and when to allow others to lead and lead by example. Moreover, ability and willingness to facilitate change, understand forces that cause change, external (environment) - consumers, competition, technology, suppliers, advances in production, communication and transportation technologies, implications of technological advances but also internal - experience, goals. And not to forgot, the ability and willingness to participate as a member of a team, a willingness to collaborate (if agriculture is growing more interdependent, would managers need to collaborate more frequently? how does information and risk, as well as the other economic resources, relate to a strategy of collaboration?), the negotiating skills (if interdependence and collaboration are trends in agriculture, do managers need the ability to effective develop, negotiate, business agreements?)

One more thing on this issue - a sense of business ethics and social responsibility (Ethics - moral principles and values that govern behaviour, different than law). Or, another way to say, it is about balancing social responsibility against achieving the goal of business success. Examples of ethical values and practices: honesty, integrity (will not compromise moral and ethical principles), being respectful of others, e.g., employees, customers, local and global community, taking responsibility when a task needs attention, striving to achieve the group's goals, not just personal goals, protecting confidential information, acknowledging the accomplishments and contributions of others (rather than taking credit for the accomplishments), accepting responsibility when something has gone wrong (rather than "pointing the finger" at others), respecting others and accepting that their values, goals and practices will be different than yours, but that their practices are no less valuable, practicing open communication (not gossiping; informing people when they need to be informed).

Conclusions

Agriculture is a business! That means:

- need to understand who your market is and what they want;
- need to understand economic forces and how they could affect you – risk;
- need management skills;
- decision making and leadership;

SUSTAINABLE ECONOMIC DEVELOPMENT

SUSTAINABILITY OF PRODUCTION AND CONSUMPTION PATTERNS OF THE ROMANIAN ECONOMY

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Abstract:

The present and future economic development involves a high consumption of resources, natural, informational to generate economic goods to satisfy global demand. The danger would be excessive use of natural resources because planet is unable to replace them, to restore them or store them. The fault that generated the time between the economy, the primary activity human creative economic goods to satisfy the needs of humanity and nature as the main reservoir for the production of natural resources, life support, coordinate to ensure biodiversity, biorhythm and perpetuation species, has produced position papers for the purposes of reconsidering production methods, development trends and development needs of mankind in ensuring and preserving the six to life. In this regard, we propose an analysis about the efficiency and effectiveness of production models that the company applies incidence and polluting productive activities on the natural environment, diets, consumption patterns and their impact on the sustainability of the economy.

Key words: patterns of production, consumption patterns, sustainability

JEL classification codes: Q01, C51, C83,

Introduction

If the state fails to design a fair institutional construct, market failures will prevail and informal institutionalization will tend to substitute the formal one. Thus, the result will be a variant of "bandit capitalism". The idea of institutions that work properly is in a simple way expressed by Joseph Stiglitz: "each partner does what he is supposed to do, there is good coordination, conflict is marginalized, and the economy grows smoothly in a rapid pace. Institutional environment located at the opposite end is characterized by changes inhibited by bureaucratic requirements, corruption and fraud, which tend to become dominant."

In the current situation in which a number of social issues are unresolved by the free play of supply and demand, due to lower purchasing power and thus global demand, the economy is in a situation of social collapse whose costs are devastating, with huge medium and long term implications. These problems are mainly unemployment, increasing poverty absolute, and decrease welfare (combined with early school leavers, increasing illiteracy, decreased life expectancy, and infant mortality).

Conceptualizing of the strategy

In these situations it is required concentrated support of the economy through structural leverages as follows:

-manufacturer support facilitated by monetary, fiscal leverages, regulatory requirements of the phases of the production cycle;

-lack of guidance and strategic action in the economic sectors and regions of the country by identifying available resources, the needs of the community and, by reference to them, development of mechanisms for attracting investment and supporting them through concerted actions of the authorities, private capital and active labor;

-labor motivation. In Romania, the remuneration of labor is low because of low labor productivity. This, after 20 years of transition, is a pathetic excuse for covering economic policy mistakes in unitary managing labor market.

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Low wage is a consequence of several factors, such as:

- ✓low attractiveness of entrepreneurship, private property and free enterprise; mismanagement of economic resources in order to create competitive economic goods, whose solvent demand could bolster the offer of economic goods and hence labor demand;
- ✓union pressure on employers, legislative supported, to keep the system in production of a segment of labor insufficiently adapted to market development requirements (low-skilled manpower, inexperienced in fields complementary to the European business environment);
- ✓tax burden on both the employee and the employers;
- ✓inadequacy of labor force training to meet current and future needs of labor market;
- ✓transposition of habits and customs acquired during the Communist years on performed work lack of interest in quality of the achieved product, the existence of downtime in production, failure in applying rules and procedures related to the process, stations coverage with workforce whose training is inconsistent with the requirements of the job;
- ✓low interest in raising the skills and training of the workforce with age over 40 years;
- ✓market under-representation of large and very large firms in productive areas which absorbs the active labor force, especially in rural economic areas;
- ✓irrational exploitation of natural resources and derivatives, which increases the cost of the product, due to cover production requirements through imports;
- ✓poor health status of the population which has a negative impact on efficiency and work motivation, leading to decrease in active life expectancy and hence early retirement;
- ✓increasing social costs due to the rise in unemployment, premature aging of population, increasing the proportion of people unable to work of the total population;
- entrepreneurship education;
- awareness of danger of transforming Romanian economy in a global economy valve of resources (natural, human, territorial), in the absence of political and social consensus between societal forces to outline a long-term action plan revolving around market development, creation of employment, providing subsistence needs for citizens, work motivation, interest in education, assessing the usefulness of moral values in Romania.

In these circumstances, the question arises: how can we create jobs and hence purchasing power if we buy goods from another area of economy, without trying to develop a local economy to provide those goods needed to cover the needs or as an expression of an optimal situation, to develop a local economy to produce economic goods by resources capitalization?

The optimal situation would be to develop a local economy to capitalize local resources to encourage the exchange of economic goods through trade creating revenue for the local community, with a beneficial effect on the individual and general welfare, under the rational exploitation of natural resources on principles of sustainability (care for the opportunity of future generations to enjoy at least as much natural resources as the present generation benefits from).

However, existing development resources for agriculture and therefore agricultural production, necessary to cover the needs of the local market, it is imperative for the local authority to create leverages through which traders to capitalize on inputs and contribute to the adjustment of supply to demand needs . On the other hand, domestic producers will have to develop competitive production systems, implement modern production management systems, customer centered, ie the quality of the final product. In this context, we identify a high degree of disparity of GDP registration in Romania in relation to regional GDP calculated based on the relationship:

$$D = 100 \frac{1}{Y} \sum_{i=1}^n |(y_i - Y)| (p_i / P)$$

where:

y_i is the regional per-inhabitant GDP of region i ;

Y is the national average per-inhabitant GDP;

p_i is the population of region i ;

P is the population of the country;

n is the number of region of the country.

What do we suggest?

First of all an inventory of existing natural resources to identify natural growth potential of the economy. Without such a tool we can not achieve a development medium and long term plan indicating the main ways to stimulate local entrepreneurship in order to increase the welfare of the village.

Secondly, review of revenue and expenditure, identifying sources to support local entrepreneurship, incentives that we can provide for young people for local economic development in order to shape a productive local economy, creating jobs. In this respect there should be achieved a balance of workforce to identify potential population growth, commune potential to attract investment to provide jobs to stabilize the young population in the common complex, thereby helping to reduce the emigration of young people once with the departure of studies or moving residence abroad for employment insurance.

Third, identification of the potential of the local economic development through exploitation of resources. From the development of entrepreneurship, the local economy will win, on the one hand by increasing the welfare of the community as a whole, on the other hand by increasing the tax base and the collection of local revenues, with the development of economic infrastructure of the village.

Local economy

The concept of local economy lies in the need for regional economic development of local economic community whose objective is to implement economic reform programs aimed at both infrastructure and increase the welfare of citizens.

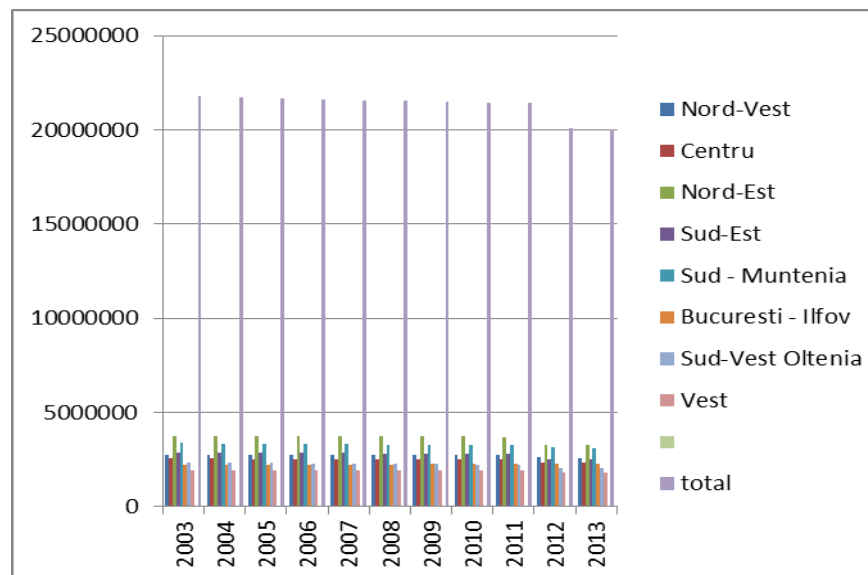
There is no universally accepted definition of the local economy, it has a certain degree of autonomy from the national institutional economy, but combines local specificities, existing economic resources, creates strategies to exploit by attracting investors to develop both horizontally (adding new businesses that produce goods / services similar to those of the company and operates in the same chain sequences of research - development - production - sales.) and vertically (expanding the scope of business activity in the industry part) aimed at creating jobs, and ultimately, increasing economic welfare of the community.

Population on 1 January by NUTS 2 region (persons)

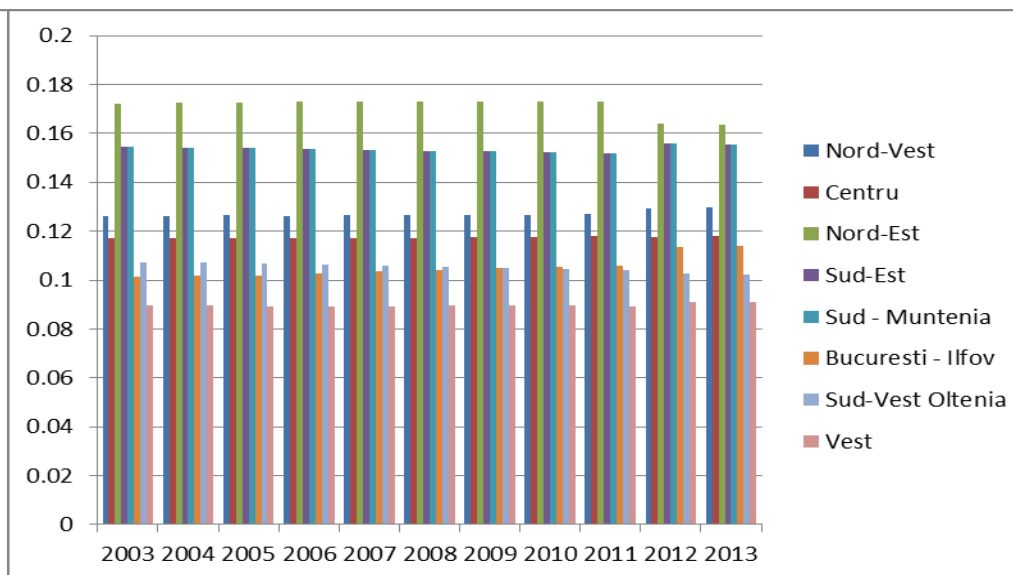
Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nord-Vest	2750406	2743281	2742676	2729181	2729256	2724176	2721468	2719719	2717532	2598877	2594823
Centru	2548331	2543512	2533421	2534378	2524176	2524628	2526062	2524418	2522692	2360578	2359405
Nord-Est	3746330	3742868	3735512	3734946	3727910	3722553	3717621	3712396	3703283	3294204	3278798
Sud-Est	2863406	2855044	2849959	2843624	2834335	2825756	2818346	2811218	2802532	2538949	2523354
Sud	3368615	3350248	3338195	3321392	3304840	3292036	3279786	3267270	3253712	3128799	3108150
Bucuresti - Ilfov	2208150	2208254	2209768	2215701	2232162	2242002	2253093	2261698	2267419	2279145	2282244
Sud-Vest	2336018	2325020	2313903	2301833	2285733	2270776	2257752	2246033	2232814	2067357	2048702
Vest	1951518	1943025	1935094	1929158	1926707	1926700	1924488	1919434	1913831	1828087	1824598
Total	21772774	21711252	21658528	21610213	21565119	21528627	21498616	21462186	21413815	20095996	20020074

Source: Contribution of authors based on Eurostat and INS-Romania Data.

Population on 1 January by NUTS 2 region, 2003-2013



Share of population in the total population, 2003-2013



Source: Contribution of authors based on Eurostat and INS-Romania Data.

Population on 1 January by NUTS 2 region (Pi/Ptotal- %)

Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nord-Vest	0,126	0,126	0,127	0,126	0,127	0,127	0,127	0,127	0,127	0,129	0,130
Centru	0,117	0,117	0,117	0,117	0,117	0,117	0,117	0,118	0,118	0,117	0,118
Nord-Est	0,172	0,172	0,172	0,173	0,179	0,173	0,173	0,173	0,173	0,164	0,164
Sud-Est	0,155	0,154	0,154	0,154	0,153	0,153	0,156	0,152	0,152	0,156	0,155
Sud	0,155	0,154	0,154	0,154	0,153	0,153	0,156	0,152	0,152	0,156	0,155
Bucuresti - Ilfov	0,101	0,102	0,102	0,103	0,104	0,104	0,105	0,105	0,106	0,113	0,114
Sud-Vest	0,107	0,107	0,107	0,107	0,106	0,105	0,105	0,105	0,104	0,103	0,102
Vest	0,090	0,089	0,089	0,089	0,089	0,089	0,090	0,089	0,089	0,091	0,091

Source: Contribution of authors based on Eurostat and INS-Romania Data.

Regional gross domestic product by NUTS 2 regions - million EUR

Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nord-Vest	46582	54045	70761	86679	110148	126194	106430	112298	118646	118619	127959
Centru	46505	54205	71111	87019	110701	126495	106615	112368	118570	118743	128141
Nord-Est	46550	54268	71204	87567	111661	127244	107329	113260	119684	120041	129449
Sud-Est	46812	54096	71079	87303	111963	127576	107708	113100	119155	119540	129091
Sud	46269	53420	69990	85872	109819	124635	104731	110720	116678	117990	127256
Bucuresti - Ilfov	41662	48271	61098	75408	94851	104428	90188	94058	96909	97389	104482
Sud-Vest	48184	55968	73607	90216	115165	131200	110769	116512	122669	123265	133071
Vest	47666	55275	72326	88414	112729	128146	108372	113828	119998	120460	129881
Total	370230	429548	561176	688478	877037	995918	842142	886144	932309	936047	1009330

Source: Contribution of authors based on Eurostat and INS-Romania Data.

IPIBi-PIBi

Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nord-Vest	46582	54045	70761	86679	110148	126194	106430	112298	118646	118619	127959
Centru	46505	54205	71111	87019	110701	126495	106615	112368	118570	118743	128141
Nord-Est	46550	54268	71204	87567	111661	127244	107329	113260	119684	120041	129449
Sud-Est	46812	54096	71079	87303	111963	127576	107708	113100	119155	119540	129091
Sud	46269	53420	69990	85872	109819	124635	104731	110720	116678	117990	127256
Bucuresti - Ilfov	41662	48271	61098	75408	94851	104428	90188	94058	96909	97389	104482
Sud-Vest	48184	55968	73607	90216	115165	131200	110769	116512	122669	123265	133071
Vest	47666	55275	72326	88414	112729	128146	108372	113828	119998	120460	129881

Source: Contribution of authors based on Eurostat and INS-Romania Data.

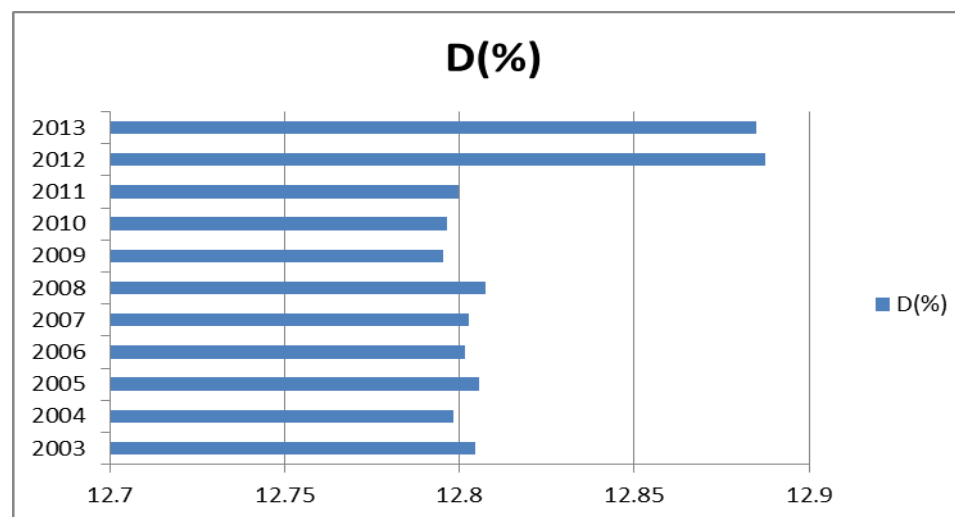
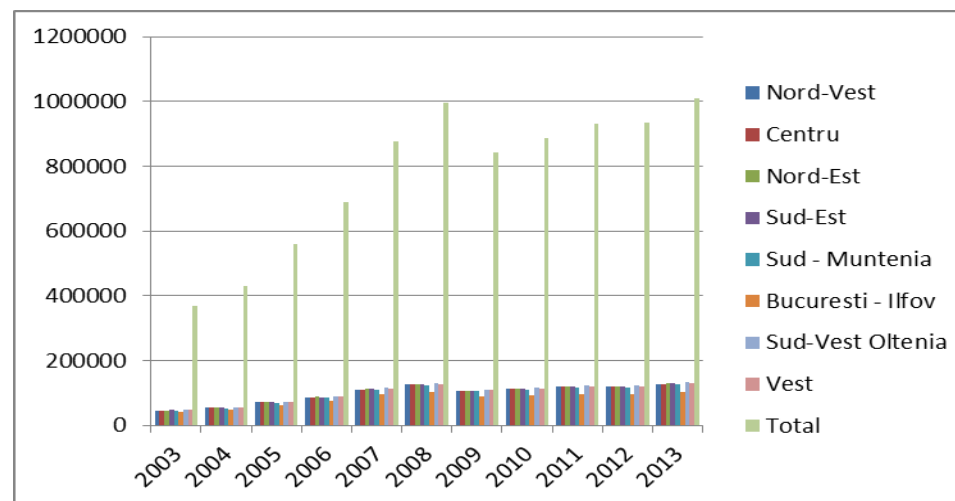
I PIBi-PIB I*Pi/Ptotal

Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nord-Vest	5884,39	6828,75	8960,65	10946,80	13940,20	15968,26	13472,77	14230,56	15056,84	15340,18	16584,90
Centru	5443,04	6350,21	8317,93	10205,32	12957,44	14833,87	12527,14	13216,91	13968,35	13948,16	15101,67
Nord-Est	8009,62	9355,42	12280,77	15134,42	19302,57	22001,99	18559,73	19591,01	20698,03	19677,53	21200,58
Sud-Est	7242,60	8347,52	10955,29	13418,08	17158,25	19508,20	16431,72	17217,64	18104,95	18611,50	20041,59
Sud	7158,59	8243,20	10787,45	13198,14	16829,69	19058,48	15977,55	16855,33	17728,58	18370,18	19756,71
Bucuresti - Ilfov	4225,27	4909,65	6233,68	7731,60	9817,84	10875,18	9451,86	9911,89	10261,29	11045,17	11910,72
Sud-Vest	5169,70	5993,52	7863,85	9609,44	12206,58	13838,59	11632,79	12193,06	12790,67	12680,77	13617,47
Vest	4272,36	4946,78	6462,01	7892,78	10071,62	11468,40	9701,12	10180,01	10724,66	10957,97	11837,15
Total	47405,58	54975,04	71861,64	88136,57	112284,20	127552,96	107754,68	113396,42	119333,36	120631,46	130050,79

Geotime	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
D(%)	12,804	12,798	12,806	12,802	12,803	12,808	12,795	12,797	12,800	12,888	12,885

Source: Contribution of authors based on Eurostat and INS-Romania Data.

Regional gross domestic product by NUTS 2 regions - million EUR, 2003-2013



Source: Contribution of authors based on Eurostat and INS-Romania Data.

The omnipresent terms in the local economy are: economic resources, local authorities, public-private partnerships, investors, sustainability, fair intergenerational exchange, social enterprises.

Most authors analyze the principles, parameters and policies "LED-Local Economic Development". Local economic development is a local activity designed and implemented by agencies in the public and private sectors of the community through a set of programs and projects. Through this process is achieved growth of welfare of members of communities and businesses (Profiroiu A., Racoviceanu S., Țărăngă N., 1998). Achieving this objective requires cooperation between public and private sector representatives in the process of exploiting human, technical, financial resources of a community, associated within a sectorial or cross-sectorial framework of activities, private or public, with the aim of creating employment.

Essentially, local development is a development policy, mainly economic, applied to a territory and which concerns the local community. By means of some factors and social and local economic structures, mainly local small and medium enterprises (SMEs), this policy materializes its objectives relating to the use and development of local resources and creating and sustaining a stable and profitable business environment (*D. Porojan, C. Iftimoaie, Dezvoltarea locală durabilă în contextul globalizării, Ed. Irecson, București, 2008, pag. 22*).

The local economy is approached also by the financial resources available to local authorities (local taxes paid by businesses and individuals). Therefore, local businesses benefit from economic policies and, through compulsory levies, from locally mainly financed by local government expenditure, which indicates that economic development is the result of collective actions of local public and private sectors and the local community.

An important source for local economic development is to promote entrepreneurship local and regional, by giving ways to support entrepreneurial activities: institutional and financial support (availability to attract financial capital) or promotion of association for the development of entrepreneurship.

Conclusion

Following the effects of the financial economic crisis that started in the middle of 2007, which has created premises for the strong come-back of the state in economy on positions of direct player, it is found not only the development of state's role, but also the reorientation towards the national state, protecting the national interest complementary to globalization, revitalizing national elites, as exponents of local culture, accomplished through the direct access to universal values, thanks to globalization. In this respect, orientation towards economic and social consensus becomes catalyzing factor of inherent changes in the behavior of markets and also of economic agents.

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SUSTAINABLE ECONOMIC DEVELOPMENT OF THE RURAL AREA OF ROMANIA THROUGH THE MEANS OF ICT

Valentina Botan⁴⁴

Abstract:

This paper aims to analyze the positive impact that ICT (Information and Communication Technologies) could have on the rural area of Romania from the perspective of sustainable economic development. I will focus on 2 main factors: ICT infrastructure and economic activities from rural area impacted by ICT in Romania. The findings will be put in balance with the other countries' experience.

Key words: ICT, sustainable economic development, rural, agriculture.

JEL classification codes: O3 Q1 R2

Introduction

The role of ICT (information and communication technologies) in promoting a sustainable economic development has been already recognized by the most important institutions at global level such as UN in the "Sustainable Development Goals" and by regional level actors such as European Union in the "Europe 2020 Agenda". The impact of ICT on the 17 sustainable development goals is being analyzed by various contributors; I will focus my study in this article on stressing the possible positive effects of ICT on poverty eradication, by "empowering" the people from rural area.

From this paper perspective ICT has the mission to positively impact the small scale farming by helping the sustainable economic development of rural regions and be adopted also by the less-favored people including aged-ones. ICT shouldn't focus on large scale agriculture only, thus leading to the elimination of human being from the agricultural production chain and giving a hand to the depopulation process of rural area. It should help to improve the quality of life in village and make a bridge between rural and urban areas and connect people from rural area with the rest of the world. Otherwise we risk to become a global village without villages.

Description of the problem

In Romania 2.8 million holdings are under 1 ha, which represents 71% from the total of agricultural property. Even if this figure is going to decrease in the future, small farming is not a "phenomena" that should be eliminated. It has long been supposed that large scale agriculture, which is highly automated, is the best choice for local community and economy. In his works, Otiman (2013) advocates for the support of medium sized commercial farms, demonstrating their role in providing economic vitality. He has shown that the four severest poverty pockets in Romania are found precisely in the areas with the highest land cover by very large farms. Actually small is or can be beautiful and ICT can make a contribution to this.

From our point of view, the correct strategy wouldn't aim to decrease the number of people living and working in rural area, but allowing them to diversify the money-earning activities. Governmental strategies should help people to make the agricultural production more profitable, but also encourage other economic activities in rural areas such as: organic farming, tourism, beekeeping, hand-crafting (manufacturing) and why not services outsourcing. The aim of this article is to make suggestions on how ICT can help on this, based also on international experience.

ICT uses in rural area - international experience

In this study we are not analyzing the use of ICT for improving the healthcare, education or administration services in rural area, however it is important to mention that people's quality of life in rural area can be significantly improved by ICT means and this has of course an impact on economic results as well.

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At global level, there are already consistent examples on how ICT has improved the economic situation in villages. Surprisingly best practices from this area do not come from highly developed European countries, but from Asia (India, South-Korea, Philippines) and Africa (Kenya, Ghana, Tanzania) where small farming is still alive and authorities are putting a lot of effort in revitalizing it.

The broad categories of information required by farmers, irrespective of their location and crops can be categorized as know-how, which helps a farmer with fundamental information such as what to plant and which seed varieties to use; contextual information such as weather, best practices for cultivation in the locality; and market information such as process, demand indicators and logistical information” (Mittal et al., 2010).

Having in mind the fact that farmers are working outside and their computer literacy is not always at a high level, PC applications wouldn't be very helpful for them. Therefore developers have focused on providing accessible and user-friendly mobile applications for agriculture and rural development – M-ARDs.

Accessible mobile devices and applications have started to spread in the most remote and poor areas of Africa or Asia. In the World Bank Report for 2011 (Zhenwei, 2011) on Mobile Applications' use for Agriculture and Rural Development we can find many examples of applications covering a full range usages. Based on the above mentioned report and also on Miller's (2013) report for Food and Agriculture Organization of UN, in Table 1 we have classified these applications and explained their possible usage.

Table 1

Applications and their possible usage

Mobile Applications for Rural Development (M-ARDs)	Characteristics
M-ARDs for contextual information	Provide information regarding the weather prognosis, the spread of pests, diseases, appropriate fertilizer use, best practices, etc.
M-ARDs for marketing	Provide information regarding the selling prices and acquisition prices
M-ARDs for trade	Connect sellers with buyers
M-ARDs for logistics	Help farmers to track their own agricultural machinery using GPS technology, but also put them in contact with distributors and other delivery services providers
M-ARDs for financial services	Used for online payments or for receiving money
M-ARDs for Credit and Financing	Inform farmers on credit opportunities or grants, funds and other governmental financial assistance
M-ARDS for Insurance	Provide assistance with online insurances
M-ARDs for accounting and record tracking	Provide book-keeping software adapted to farmer's activities and needs, may have an ERP soft integrated
M-ARDs working as calculators	For appropriate use of fertilizers, pesticides, water, seeds, crops, medicines, etc.
M-ARDs for employment	Put in contact season job-seekers with farmers
M-ARDs for disaster managements	Early warning systems to inform farmers about impending natural disasters (floods, drought or cyclone)
M-ARDs for resource management	Track the usage of water, soil, air and other consumables

Source: FAO. 2013. ICT uses for inclusive agricultural value chains. Rome

As an intermediate conclusion made also by the World Bank in the above mentioned report we can say that mobile applications for agricultural and rural development (m-ARD apps):” offer innovative, dynamic, interdisciplinary services. These new services could raise incomes and create more opportunities for people in rural and underserved communities in developing countries as well as stakeholders throughout the ecosystem for m-ARD apps”.

As per an article from The Economist from Jan. 2011, in some African countries the market of mobile applications is already oversaturated. Many applications have been launched with funding from government and donors, they have been used while being free, but when it came to the next stage and farmers had to pay for them, very few IT companies could make profits on selling them. The lesson to be learned from this is that the offer of ICT applications, for small farming especially,

should be better correlated with the real needs, as the major challenge is to make the small farmers to use the software applications and improve their efficiency.

One important aspect, touched above was the implication from government in financing the applications development at first stages, in providing trainings and disseminating the information on ICT benefits. A very good example on government involvement which has already a long period of implementation is the project Information Network Village in Korea (INVIL), a platform launched in 2001. It has been designed to reduce the digital divide between rural and urban regions and to increase the income level of local residents. An interesting aspect of this project is that the initiatives do not come from central administration, being very far from the reality and thus inefficient, as usually happens, but vice-versa. Villages submit applications which must be approved to gain entry to the INVIL platform. All INVILs appear on central portal with descriptions of their agricultural specialities and tourist attractions. Orders can be made online and products can be sent anywhere in country within 3 days. Villages are supported by government in identifying potentially best selling products and branding them. In 2013 INVIL platform facilitated about 39 million in online sales and 17 million visitors. (Source: UNCTAD IER 2015)

Another example of successful development of rural area through the means of ICT comes from China. In 2009 China's main e-commerce platform Taobao registered 20 000 small businesses offering local food specialities (as per UNCTAD report from 2010). This platform has been created by the owner of Ali Baba platform and was dedicated right from the beginning to the small businesses. In 2016 this platform has already registered a number of 500 million users. Today, Taobao has two major platforms – the TMall, where established brand owners sell directly to customers, and the Taobao Market place, where smaller companies and budding entrepreneurs set up their shops.

ICT Infrastructure readiness of Romania

When starting the analysis on how can ICT contribute to rural development we need ensure that the necessary infrastructure is present. The good news is that even if compared to other EU member states, the situation is rather satisfying in Romania. As per Euractive site The European Commission estimates that in 2008 41.7 % of people living in areas of the EU with low population density (rural) had never used the internet. The Digital Agenda for Europe (DAE) included in Europe 2020 strategy aims to speed up the penetration of high-speed internet while the households and firms should take advantage of the digital single market. These targets are represented by the following indicators:

1. *internet infrastructure* which deals with internet coverage. The rural area of Romania has a good internet infrastructure coverage – house-holds with DSL (digital subscriber line) coverage represented 57%, standard - cable 96% and NGA (new generation access connection with high speed) - 25% in rural area as per 2012 data.
2. *accessibility and internet take-ups*, which indicates the actual subscribers for the different broadband technologies. The number of subscribers to broadband connections is still very low – only 35% of house-holds from rural area have a subscription.

According to Europe 2020 Digital Agenda the migration to high-speed broadband has just started but at a very slow pace; 11% of homes subscribed to at least 30 Mbps, despite the fact that high-speed broadband is available to 54% of homes, which shows that currently only a minority of EU citizens choose subscriptions to high-speed broadband. European Commission has set some Common EU broadband targets for 2025 among which one is providing access to networks offering a download speed of at least 100 Mbps to all urban and rural households.

ICT is usually perceived as an appanage of young and urban people and in some countries this is the reality. As per BRAT (Romanian National Bureau for Transmedia) in Romania the usage of internet in the rural area is 59% (comparing to 75% in urban area) and is approximately the same for various categories of age: 14-24 years = 22%, 45-54 = 16%, 55-64=17%. Other good news stressed by the same report by BRAT is that internet is not used only for entertainment reasons, as some may expect. If split by topic of interested, this report shows that 38% of people from urban

and rural area use internet for educational and personal development reasons. Having that in mind, we can conclude that from the infrastructure point of view Romania meets the necessary pre-requisites for developing rural activities based on ICT tools.

The use of ICT in agricultural and non-agricultural activities in rural area of Romania

The role of ICT in the development of rural area of Romania has been assessed as highly important by the Ministry of Agriculture and Rural Development (MARD) and included in the National Rural Development Programme for the 2014-2020 period.

A brief description of Romanian agricultural sector is required as a background:

In the Factsheet on 2014-2020 Rural Development Programme for Romania we see that approximately one third of all farms in the EU are found in Romania, with some 3.9 million farm holdings. Farming structures are highly polarized: large and medium sized farms, account for around 7% of holdings, but manage some 70% of agricultural area, and have a clear competitive potential. On the other hand 93% of the holdings are less than 5 ha, these are typically subsistence and semi-subsistence holdings, which manage the other 30% of the agricultural area.

In our opinion the poverty eradication in Romania should focus on those 93% holdings that have to be supported to find the way to a sustainable economic development. From this paper point of view, one solution could be a better usage of ICT means. For small holdings the organic or bio agriculture could be the best choice.

Marco Schulter, Director of Federation of Organic Agricultural Movements has declared for Euractiv that approximately 95% of European Agriculture is conventional, but the demand for organic products is increasing continuously. Some studies (Buizer 2015) or (De Ponti 2012) and (Seufert 2012), cited by the French newspaper Le Monde, have already proven that the organic agriculture can be more productive as it was used to believe. The difference in productivity between organic and conventional agriculture is not greater than 20%. The European statistics show that more and more farms are applying for organic certification. Between 2010 and 2015 the number of organic holdings in the EU rose by 23.4 %. As per Eurostat, the highest increases were recorded in Bulgaria, Romania and Croatia (over 100 %).

Romanian Ministry of Agriculture puts a lot of hope in developing the organic agriculture in Romania. In the National Rural development Plan 2014-2020 there is a strategy dedicated to certify organic meadows and pastures. According to latest figures 95% of the 1700 certified organic producers are animal farmers, and the majority of them hold 2-5 cows and an average of 5 hectares of meadows and pastures (Szocs 2015). In the vision of Bio Romania, an Association that stands for the sustainable economic development of agriculture and rural area, "the country could take a leading rank among the highest acreage of certified organic fields from the EU". The first challenge for the development of organic farming in Romania is the certification according to European regulations, but the next one will be undoubtedly selling the organic products on domestic and the European market. Here ICT will have a role to play in ensuring the necessary networking between the producers and clients.

Another aspect that should be stressed out when talking about the modern agriculture is the concept of **Digital Agriculture** (a term for the use of computational and information technologies to improve the profitability and sustainability of agriculture and food systems). In an article published by the Cornell University, Harold van Es, professor in the School of Integrative Plant Science (SIPS), and Joshua Woodard of the Charles H. Dyson School of Applied Economics and Management investigated how farmers from USA are incorporating digital technologies and advanced analytics into farming operations. Their conclusion was that "agriculture, like other industry sectors, stands to see tangible benefits in the form of increased production efficiencies once digital agriculture technologies are effectively employed". Mr. Joshua Woodard added that "the surge in digital agriculture technologies has led to the accumulation of large amounts of data. High-resolution soil data, site-specific weather maps, aerial imagery, nutrient applications, and milking and animal health records are being continuously generated by farms across the country", but farmers are not ready yet to benefit from these huge data because of lack of analysis capacity. So the next step, planned by the University of Cornell is to provide analytics and research capabilities to farms.

In Romania, according to Ziarul Financiar, 5% from 1,5 million farmers use ICT applications for agriculture. But the majority of applications for agriculture are dedicated to large scale producers. Some examples are briefly described below:

- Geomatic applications developed by Siveco (SIVGIS), GPS-carto provided by SC Trans Serv Agro.
- ERP (Entreprise Resource Planning) application Charisma developed by TotalSoft that is already used by large scale producers as TCE 3 Brazi, Doripesco, Agrana sau Agricola Bacău.
- There are 2 applications AQUAmax and Agro-Assist which are developed by DuPont Pioneer. AQUAmax is an online catalog for cross-breed corn which provides the user with a wide range of information regarding the products, including the information on the crops from different areas of Romania. Agro-Aist is a digital agenda that can use the location and direct this information to the nearest metrological station which can provide back information on weather conditions, soil temperature, etc. Based on this information the farmer can set his working calendar. The farmer can also interact through these applications in real time with a specialist from Dupont. But these applications are set to work only with Pioneer products.

As an intermediate conclusion on the Romanian ICT market dedicated to agriculture we can say that this market is very poor developed. The major part of IT solutions providers focus on large-scale producers. Applications for small farming are almost inexistent. Of course interested farmers can buy software from international IT companies, but in agriculture it is very important to have applications adapted to local conditions and realities. As ICT companies are looking for profit, they might wait to have real requests coming from small farmers and develop applications on demand. But as the worldwide experience has shown, in this area, the initiative should come from governmental agencies which can put in contact farmers with ICT providers and in the beginning government or external donors have to cover the expenses with product development, testing and first stage implementation. Only after some good examples of best practice we may expect a grown interest from more and more users from rural area.

Globally, according to an AgFunder (<https://agfunder.com/research/agtech-investing-report-2015>) report in 2015, technological start-ups received investments of 4,6 billion dollars for developing projects in agriculture, which was double comparing to 2014 showing an evident interest of investors in this sector. This figure should ring a bell for Romanian start-ups as well.

An important objective is the **diversification of money-earning activities** in rural area. As stipulated in RDP (Rural Development Programme), one of the 3 priorities is the social inclusion and local development in rural areas. This plan aims to create almost 27 000 jobs in rural areas, to set up and develop 3 000 non-agricultural businesses with support from government. Nearly 27% of the rural population should benefit from investments to improve rural infrastructure

People from rural area can receive between 50.000 and 200.000 Euros from European Union Funds for non-agricultural small businesses. These businesses could also benefit from ICT tools that brake the distance and time barriers. I will describe above the impact of ICT on some non-agricultural activities in rural area of Romania.

One of traditional businesses in rural area is **bee-keeping**. Even if bee-keeping is rather developed in Romania there is still a lot of place for improvement from the efficiency and profitability point of view. This can be achieved through a better use of ICT: applications for beekeeping and marketing ICT tools. The Ministry of Agriculture is coordinating the activity of Romanian bee-keepers through the National Beekeeping Programme. This Programme covers bee-keepers expenses with the IT system for hives' identification and many other expenses. There is also a platform <http://anunturi-apibio.ro/> where bee-keepers can find any product and information related to their activity, starting with medicines and ending with available transport for hives relocation. Honey and other bee-products are also successfully sold through social network sites and e-commerce tools.

From the software point of view dedicated to this activity, Romanian IT market doesn't have yet an adequate offer. On the international market, there are many ERP software products that provide basic functions of a diary but also full statistics of the development and the produce for each bee-garden and beehive by year, a map showing where fly bees etc. Romanian beekeepers need localized software products.

Hand-crafting, in organized form has almost disappeared in rural area in last decades (Otiman, 2013), but some successful examples of small businesses from rural area selling their products

via ICT tools are starting to emerge. We can find now in social media many profiles of small businesses from rural area selling traditional clothes, natural cosmetics, ceramics, wood crafts, furniture, glass crafts etc. Internet offers the possibility to reach clients from anywhere at no cost if social networks as Facebook, Twitter or Instagram are used, or at relatively low cost for e-commerce tools described later on in this article.

Tourism in rural area or **agro-tourism** is a source of earning that can be improved via ICT tools. As per Eurostat, November 2013 data, rural area of Romania offers 285 488 bed places, which is a very low number if compared to top countries as France and Italy who have around 5 mil bed places each, and it is lower than in Central European countries top performers: Poland and Czech republic which have more than 600 thousands beds each. So, there is a lot of room for improving this figure and that can be achieved through a better use of communication means (including online advertising, booking). For example on booking.com, one of the most popular searching engine in tourism, one can find about 5000 properties in rural areas in Romania.

At European level, DANTE, a project co-financed through European Regional Development Fund has also identified areas where ICT can play the role of catalyst in promoting rural tourism. This project has already promoted some successful ideas that can be implemented also in Romania, such as web portals for riding holidays for people who love horses, a project that was launched in Germany. Also, this project contributed to the development of smartphone applications for promoting the rural communities offering accommodations and other touristic services. Romanian agro-touristic destinations could be added to this European platform.

Such platforms have been already developed also in Romania, for example www.ruraltourism.ro or the portal created through a project co-financed by European Union www.cazarelapensiune.ro. Through this project an e-learning platform for tourism providers from rural area – www.intreprinatorturism.ro, has been launched.

E-commerce for rural small businesses

In Romania, even if the e-commerce is booming, the online market places for agro products are almost inexistent. In 2016 the first online Platform, called Trust, was launched. It allows small farmers to communicate via smart phones with agricultural cooperatives in order to sell their bio-products in hypermarkets. There is also an online platform where organic food providers from Romania present their offers, Bio Romania Market. The shopping is not online yet, the client just gets the coordinates of the producer and can get in touch with him later on and usually the client is the one who has to reach to the farmer. Another online shop where local producers sell their grocery products, natural cosmetics, textiles, pharmaceutical organic products and handcrafted products is Depirinromania.ro.

E-commerce could be a tremendous solution for small and niche producers from rural area, but there are some challenges to overcome, such as logistical issues related to bad road network in Romania, the payment method and maybe insufficient internet literacy. These pitfalls could be overpassed only with an implication from government.

Outsourcing – another opportunity to be analyzed is the outsourcing, especially for IT services. Romania has already followed the development model of India for IT outsourcing in urban area.

UNCTAD report from 2010 has stressed the growing interest in developing countries to undertake domestic outsourcing. For the expansion of the ICT sector to have a significant impact on the rural poor, linkages between the urban and rural areas are important (Tiwari, 2006). According to Ernst & Young (2011), there are more than 50 successful Rural Centers in India providing BPO Services to both domestic and global clients. Rural BPOs have come up as an alternative for low -end, low-skilled data entry work in IT, or payroll processing, billing and insurance-claims review (Thoppil, 2012). For the expansion of the ICT sector to have a significant impact on the rural poor, linkages between the urban and rural areas are important (Tiwari, 2006). There are also freelance IT jobs that can be performed also from rural area. An example in this direction is Bangladesh. As per statistics provided by 2014 A.T. Kearney report, there were more than 650,000 freelancers in Bangladesh registered on Upwork (*Upwork is a California-based website, previously known as Elance-ODesk when two companies merged*) alone, though their skills and track records vary. In 2013, Bangladeshi freelancers on Upwork earned \$21 million.

Conclusions and future directions to be approached

The contribution of modern ICT is felt in all rural activities, whether it can be economically quantified or not, if we refer to the social impact through the use of e-learning and e-healthcare systems.

The role of information dissemination being almost achieved, the next challenge of ICT would be to improve the use of IT applications which can directly influence the economic indicators of small farming and small business in general in rural area. It is important to mention also that the know-how transfer has to be bilateral, which means that farmers need to collaborate with ICT developers when creating new applications. ICT applications should address the real needs of farmers. Organic or Bio farming for example has a history of thousands of years and each local community has transferred best practices between generations. Fortunately that information hasn't yet been lost in Romania and what ICT can do is to digitalize it and make it available for the next generations in a more attractive and effective manner.

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TRANSFORMING CURRENT ECONOMY IN CIRCULAR ECONOMY – FRAMEWORK IN THE EUROPEAN UNION

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Abstract:

The research aims at the necessity of giving up “procurement, production, consumption, and elimination” type of economies to the detriment of “reuse, repair, reconditioning, and recycling” type. The analysis is meant to present and emphasize that, currently, to be competitive means to properly use resources, ensure their productive reuse, as well as assuring the reduction/elimination of waste deposits. The transition to a circular economy has the opposite effect of linear on, with increased prosperity, and, above all, the future of human existence.

It is a primordial and major necessity, but it will not happen without correct policies. EU intends to transform circular economy into reality and in order to achieve this goal, *it is necessary to limit the environmental impact*, improving, at the same time, the economic well-being.

Key words: circular economy, current pressures, proposals

JEL classification codes: A11, O10

1. Introduction

We still cohabitation under the linear economic systems of the XIX century, the relationship between an efficient use of resources and waste reduction is highlighted as a major problem and the switch to a circular economy is more a necessity for appreciating waste as a resource, for learning from nature, where nothing goes to waste. The solution is to give up the current approach, in which we extract limited raw materials and use them one time to obtain a product.

The crossing has the premise the abandoning the “procurement, production, consumption, and elimination” type of economies to “re-use, repair, reconditioning, and recycling” model. To be competitive means to capitalize proper use of resources, recycle them, ensuring their productive re-use, as well as, reduction/ elimination of waste units. The causes of waste are: the unsustainability of production and consumption habits, inadequate waste management and the lack of public awareness and civic conscience.

The disadvantages of linear economy are well known, what prompted like a viable solution, transition to a circular economy – the necessity of reintroducing used products into the circuit (be it natural elements, or technical materials and products that need to be transformed, used and usable as long term), as well as the necessity of focusing on optimum waste management, with the purpose of an efficient and rational use of resources.

The necessity of transforming the current European economy: Voting for “Circular Economy” project represents an historical moment, both for the European Union, and for the whole global society. The policymakers are opened to making the first step towards avoiding humanity collapse because of over-consumption. The road to implementing it is extremely difficult. For Europe, this project coincides with an unprecedented global crisis, which may be the basis of a rejection of sustainability growing plans.

At present, Europe records a dense population, stuck on an intensive-usage type of economy, it registers high and volatile prices of resources, characterized by a growing resource and energy import dependence, compared to other regions: 40% (on average) of raw materials come from imports. On the one hand, we have a percentage of 55% for strategic resources, such as metals and nutrients - phosphorus it is imported being in a proportion of 92%. The viable solution is obtaining added value from resources we use, ensuring a high economic productivity.

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We must be aware of the fact that the ratio between economic growth and resource consumption is at the basis of current crisis: we have little resources as to sustain economic growth, and, in the future, exhaustion will result to an unmistakable destruction of the society because of related effects pollution has on the environment.

2. The pressures to transforming the current EU economy

Transposition to practice requires the existence and manifestation of a buffer-period, which, at the beginning, will register negative effects as well

First, the companies will accept and adapt with difficulty to the new business model, that means sustainability investments, and not profit from pollution. The current inertia of the financial system is high, there are registered high shares in terms of economic investments in politic decision, and so, the transition to a circular economy seems extremely difficult.

The members of the European Parliament supported this idea by voting in favor of circular economy (at Strasbourg), but the plan wasn't fully supported. The vote demonstrates the companies' concerns as to the changes that need to be applied and population's unrest when comes to losing their jobs in the process of assimilating the new economic model.

Also, in the industrial activities it is held that it is more convenient to produce using resources and not recycle the waste. We also add the principle according to "you can obtain an infinite economic growth", and the fact that it is considered as "the natural resources are unlimited, available, and they can be thrown". By these statements, only aggravates the current pressures on all socio-economic levels. Is emerging, a more obvious need of giving up to the linear economy model and to supporting the transformation of existing EU economy by means of a swab period.

The members of the European Parliament support that is absolutely necessary to identify economic growth solutions, by using only 10-12% of natural resources. The European Parliament, by the agreed legislation, they want to impose a series of measures and objectives, but they also name the penalties for non-compliance.

In the current situation, in EU, large amounts of money are provided for technologies subsidizing and pollution sources, which require targeting to research and support of initiatives which ensures sustainability.

Once again, it is clear that, it will be extremely difficult to giving up the current type of economy, as long as the industry is dominated by the corporations producing pollution in order to develop and by government subsidies. A clear example is energy industry, a financial colossus, that imposes major and necessary reforms, but which also presents the biggest resistance to change. The main question: does EU want a circular economy, but the society and big companies subscribe to this need to ensure resource efficiency in the future?

The Package of measures on circular economy establishes a common and coherent framework in order to optimize the resources and it requires:

- political decision pro changes;
- policies and long term planning of investments;
- an increasing awareness and involvement of citizens, companies and of their behavior towards in terms of resource efficiency.

In terms with the objectives set regarding the efficient resource use, these derive from the necessity:

- of a whole circuit approach and a better correlation between various politic domains and initiatives such as: Roadmap to an Efficient Europe in Terms of Resource Use, The 7th Environment Action Programme, The Energy and Climate Change Package, or the European Strategy "Innovation for durable growth: a bio economy for Europe";
- developing a politic framework, advantageous for circular economy at national, regional and EU levels – adopting measures that combine intelligent regulations, market tools, research and innovation, stimulants, sharing information and support for voluntary approaches;

- the application of the Eco-design Directive to the criteria of efficient usage of resources, for durability, modularity, reuse and recycling capacity, with grating proper consumers' assistance, including for the priority product categories of the Work Plan 2015-2017; -Establishing compulsory objectives in terms of ecologic public acquisitions (GPP - green public procurement), of national governments and European institutions;

- monitoring the progress of the initiative "An Efficient Europe in Terms of Resource Use" in the context of 2020 European Strategy.

The developing of a circular economy is a necessity, the key-element for accomplishing all the objectives concerning the efficient use of resources, ensuring the growth of economy and a smaller dependence of primary resources, which will ensure a better environmental protection.

3. Proposals of supporting the transformation of the European economy to a circular economy

The European Commission considers absolutely necessary transition to a circular economy as being absolutely necessary, including it in the Research Agenda of the European Union.

In order to accomplish this objective, the Commission's proposals vary and they include:

- new indicators ensuring and monitoring resource efficiency;

At EU's level, to ensure resource productivity – an indicator having with the role of supporting all member states in focusing their policies and promote EU's political synergy, such as employment and research.

It was propositioned that resource productivity to be measured in terms of the objective that correlates the raw materials consumption with GDP, suggesting a 30% improvement until 2030 (RMC - Raw Material Consumption), objective that needs to be taken into account at the next European Strategy revision of 2020.

Specific objectives are necessary for each country as well, because of the productivity and resource usage differences

- policies that would encourage recycling and to act on products' life cycles in order to become durable;

Stimulating changes applied to products' life cycles and value chains – it also appears a significant potential for workplaces – may be benefic (recycled materials, joint usage schemes of automobiles).

However, until 2019, the European Parliament requests European Commission to establish a number of indicators and sub-indicators that would reflect both the real resource consumption, as well as services and products' life cycles. This request is identified as a contradictory demand, because the producers aim, on the one side, at low life cycles for their products, and on the other, they discourage parts repairing/ replacement, the consumer being forced to buy a new product.

In the current conditions, the demand to limit the use of resource is imposed, as a necessity for the products to have long guarantee periods, by supporting easy repairing, and efficient recycling, in order not to waste the resources used in their production.

- creating "green" workplaces, encouraging ecologic entrepreneurship;

Workplaces are ecologic as long as they support the transition to a durable economic model, energy saving, the use of renewable energy sources, and if they preserve natural resources, protect and preserve ecosystems and biologic diversity, reducing waste volume.

Once with the necessity of a revision of objectives concerning recycling and waste, with related proposals in the view of improving buildings' environmental performances, the Commission proposed new interconnected initiatives for ecologic workplaces and SME's.

Actions towards ecologic workplace employment represent the politic framework for the employment market and the necessary qualities to encourage the transition to a green economy: low CO₂ emissions and high efficiency from the point of view of energy and resource usage. Also,

the structural change overhauls and supports the employees in order to sustain and acquire new necessary skills.

The “green” action plan for SME’s supports the exploitation of available business opportunities, ensuring the efficiency of resource usage for small and medium-sized European enterprises, to this we add ecologic entrepreneurship and the opportunities offered by ecologic value chains. The new business plans are the basis of “consumer” changing into “user”, and support the orientation/ change of the demand for disposable items into repairing/ renting based services.

- EU waste objective reexamination;

The policy concerning waste represents a strong promoter of recycling and reuse, and also certifies that major changes are imposed in order to close the loop.

Waste represents a primordial concern – rendering a productive use for tonnes of materials that can be found in waste, represent a major necessity.

Several of the instruments certain countries could use, have been identified, such as: separate waste collection, taxation applied to waste deposits, “pay or throw” schemes, and an extended responsibility of producers.

By the end of 2016, European Commission plays a special role – it must drastically reexamine waste legislation.

Together with the European Commission, through Lisbon Treaty, it was created and added – the Committee of the Regions (CoR) (2009) – complementary to the three community institutions (the Council of the European Union, European Commission, European Parliament), with the role of representing local and regional interests of the communities.

Its demand is compulsory for the whole legislative process that involves the European Parliament and European Union’s Council, in domains such as: economic and social cohesion, trans-European infrastructure networks, transport, health, education and culture, occupation, social politics, worker training, environment protection, climate changes, civil rights, and last but not least, energy.

In order to adopt and apply the EU decisions at a proper level, it surveys the compliance of subsidiarity and proportionality principles. The commission demand modifications for certain proposals made by community institutions (Table 1, Table 2, Table 3)

Table 1

CoR's changes on the products' design

European Commission Proposals	CoR's Changes
<i>encouraging</i> the products' design with the propose of reducing the impact they have on the environment, as well as reducing waste generation in the course of production and use of products, without distorting the internal market	<i>ensuring</i> that the products' design with the propose of reducing the impact they have on the environment, as well as reducing waste generation in the course of production and use of products, without distorting the internal market
measures: development, production, and selling of durable products, from the technical point of view, which can be reused and recycled after becoming waste, to make subject to reuse and recycling, to facilitate the proper implementation of the waste hierarchy The measures take into account the entire life cycle impacts of products	measures: <i>identical</i> with those held by the European Commission

Source: data processed by author

Following European Commission' analysis, CoR's amendment, the importance of avoiding waste can be observed – the main reason for transition to circular economy, with an even higher importance than recycling and reuse

On the other hand, in order to ensure resource efficiency, changes must take place at the source of products, improving the development phase of products as to make them reusable, repairable,

and recyclable, as well as package optimization. All these have a significant contribution to avoiding waste generation.

Consequently, ambitious aims are necessary when it comes to ecologic projection of products, products and services' "eco-design" must be controlled. European Commission must present, by the end of 2016, an "Eco-design Directive" plan, that would control, monitor, and approve the way in which companies run their production activity, according to circular economy.

Table 2

CoR's Changes on the biowaste

European Commission Proposals	CoR's Changes
<i>Minimum reductions of waste contamination</i> , the member states ensure differentiate collection of bio-waste, by 2025. The Commission performs an evaluation of bio-waste management in order to present a proposition, if needed	<i>Ensuring optimal recycling for organic waste materials</i> , member states ensure differentiate bio-waste collection, by 2025. The Commission performs an evaluation of bio-waste management in order to present a proposition, if needed.
Measures: - <i>establishing minimum demands for bio-waste management</i> ; -quality criteria for compost and digest from bio-waste, in the interest of guarantee a high protection level for human and environmental health.	Measures: - quality criteria for compost and digestate from bio-waste, in the interest of guarantee a high protection level for human and environmental health

Source: data processed by author

After the analysis, we can observe the fact that, because bio-waste is not a contamination factor, a maximum waste capitalization must be taken into account.

On the other side, it must acknowledge the adaptation flexibility to the local conditions and new technologies; the way of waste collection/management must not be imposed, their quality is of major importance.

Table 3

CoR's Changes on the municipal waste

European Commission Proposals	CoR's Changes
In the composition of municipal waste there is household refuse, retail, as well as waste generated by small enterprises, office buildings and institutions (schools, hospitals, government buildings), that are similar in nature and composition to household refuse, <i>collected by municipalities or in their behalf</i>	In the composition of municipal waste there is household refuse, retail, as well as waste generated by small enterprises, office buildings and institutions (schools, hospitals, government buildings), that are similar in nature and composition to household refuse.
In this category there are: -Heavy waste (domestic appliance, furniture, mattresses etc.) -Garden waste, leaves, lawnmower waste, street garbage, waste bins content, and waste generated by market cleaning. -Waste coming from selected municipal services – parks and gardens maintenance, as well as street clearing	In this category there are: -Heavy waste (domestic appliance, furniture, mattresses etc.) -Garden waste, leaves, lawnmower waste, street garbage, waste bins content, and waste generated by market cleaning. -Waste coming from selected municipal services – parks and gardens maintenance, as well as street clearing
In this category we may include similar-sources waste, with the same nature and composition, that: -Are not collected in the behalf of municipalities, but are directly collected through producers' liability schemes or private non-profit institutions that reuse and recycle mainly by separate collection. -Come from rural areas that do not have a regular waste collection service.	In this category we may include similar-sources waste, with the same nature and composition, that: -Are not collected in the behalf of municipalities, but are directly collected through producers' liability schemes or private non-profit institutions that reuse and recycle mainly by separate collection. -Come from rural areas that do not have a regular waste collection service.
In this category are not included: -waste coming from sewage and treatment network, including sewage sludge -waste coming from constructions and demolitions	In this category are not included: -waste coming from sewage and treatment network, including sewage sludge -waste coming from constructions and demolitions

Source: data processed by author

According to the table, we can observe the fact that, in order to evaluate the degree in which the member states accomplish the legislative objectives concerning waste and to compare their policies, a common definition is needed.

This evaluation has not the goal of evaluating local authorities' performances, and so, municipal waste should not be defined by who collects the waste, but by what it is collected (their composition).

4. Conclusions

In the present conditions the necessity to move from linear economy model to circular economy model is a primordial need. We began, on the one hand, from the stringent need of an optimal resource usage and so reducing primary resources addiction, workplaces development – higher than exploitation industries and nonrenewable energies – as well as, environmental protection; on the other side, from the necessity of reintroducing used products back in the circuit, avoiding/reducing their transformation into waste and ensuring optimum management implementation, one in which residual waste should be reduced to an absolute minimum quantity.

Positive results have been observed: the legislative changes, the waste quantities in garbage wholes, and they are more low, the reduction of dangerous substances for specific waste streams and the higher recycling quotas.

However, a series of aspects that need to be modified and improved has been observed: the negative impact on the environment determined by an expected waste generation growth, the incapacity of benefiting from various ways of reducing GHG emissions, as well as the lack of progress in terms of jobs in the environment services sector.

Hereinafter, defining new ambitious objective is necessary; in order to contribute to the accomplishment of the objective of promoting and supporting to the circular economy, efficient in terms of resource use and zero waste

Achieving the objectives or close them will vary considerably from a member state to another, from one region to another; can be challenging tasks for many of the member states and local and regional authorities, especially for those experiencing difficulties.

New targets:

- should be established after a detailed analysis of the causes of failure of current targets and their consequences;
- to base on deeper debate with the member states and their local and regional authorities related to necessary measurements for an efficient and successful monitoring and implementation.

The established targets must be correlated with the quality of the recycled/ recuperated materials, so that they will not damage the environment and human health and ensure the possibility of a loyal competition with primary resources; it will ensure the collection and recycling of waste who contain significant quantities of critical raw-materials.

All these ensure a strongly support for the necessity and benefits of transition to a circular economy, being the key-element to achieve all the objectives on resource efficiency, ensuring that economy can grow and be less addicted to primary resources, and it is distinguished by attention to the importance of waste disposal and their re-use

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TOWARD CIRCULAR ECONOMY IN THE E.U.

Cătălin Drăgoi⁴⁶

Abstract:

The passage to a circular economy is the main subject of the European Commission agenda, defining the Europe 2020 strategy for the “intelligent, sustainable and favourable increase to inclusion”. The environment and social global tendencies represent some serious challenges to the economic development, health and stability of the entire world. A transformation to the inclusive circular economy would be essential for future sustainability.

Key words: environment, circular economy.

JEL classification codes: H23, Q28.

Introduction

Aiming to solve the fundamental problems which the current society is fighting with, Europe should develop on inclusive and “circular” economy which offers significant jobs and intelligent use of natural resources. Such economic system needs business models with intensive labour force, including repair services, remanufacturing, renewal, spare parts collection, new conception of services and products. It replaces the “life end” concept (of a product) by restoring, using the renewable energy sources, eliminating the toxic chemical substances use affecting the reuse and generating the elimination of the high quality waste, materials, products, systems, creating therefore some circular business models. A taxation amendment by moving the fiscal tax from work to natural resources use and consumption is creating incentives in saving the natural resources and bringing materials in a closed circle, reinforcing the circular economy. Lower taxes on labour would allow the maximum element in human capital, stimulating services, innovation and education.

What are the main trends in the current fiscal systems to encourage circular economy?

Internalization of the external costs. The governments worldwide avoided, for long periods, to internalize the external costs, and even now they are hesitant to change the enterprise legislation. An external cost occurs when the production or consumption of a good or service requires costs incurred by a third party. These costs are born by the society or by the natural persons, rather than by the polluter. Internalization of the external costs means that the total economic, social, health and environment costs are covered by the price of a product or service, application of the “polluter pays” principle.

However, “polluter pays” taxation gained support in time. The carbon emissions are the focus of attention, important institutions arguing in favour of setting a price for the carbon. The landscape of the green taxes changes rapidly worldwide due to the trend of internalizing the external costs. Fiscal instruments, such as the carbon tax, or similar, are the most efficient policies which reflect the environmental costs within the price of energy and which promote the development of clean technologies, while providing a valuable source of incomes. The fiscal policies also play an important role in approaching other major environmental challenges, such as air quality and urban crowding. The carbon taxes might bring significant revenues to the public budgets.

Low environmental taxes. The environmental taxes have a high growth potential, still unused, and are less denatured than the taxes on labour and incomes. The administrative costs and the transaction costs for green taxes are lower than in other taxes (particularly the income taxes). Nevertheless, in the EU, the environmental taxes have been at the lowest level for more than a decade. The environmental taxes, in agreement with the definition used by the European Commission, include the taxes on energy, transportation, pollution and extraction of resources. The energy taxes are levied on the energy products used both for transportation and for stationary purposes, gas and diesel oil included, fuel oils, natural gas, coal and electric power. The fuel taxes for transportation are levied for the use of energy products/fuels for transportation. The transportation taxes (except the fuel) are linked to the property right and to the cars. The pollution

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taxes are dues on the emissions in air and water, on solid wastes and noise management. The resources taxes include taxes pertaining to the extraction or use of the natural resource. The CO₂ taxes are included in the energy taxes rather than in the pollution taxes, and many times it is not possible to be identified separately. The environmental taxes are generally considered to be favourable to the growth, because they are less denaturing than the taxes on labour and incomes. The administrative costs and the transaction costs for green taxes are lower than in other taxes. Furthermore, the loss of efficiency due to the green taxes is much lower than for the labour taxes.

The European Commission says that the economic distortions caused by the labour taxation are significantly higher than the environmental taxes. However, the environmental fiscal revenues are a rather small part from the overall fiscal revenues in the EU. The environmental taxes remain underdeveloped in many member states and their revenues, in terms of GDP percentage, decreased despite the efforts of passing to a more ecological society.

Environmentally-deleterious subsidies. Almost all the countries use direct and indirect subsidies (tax exemptions and lower taxation rates) for environmentally-deleterious activities. Environmentally-deleterious subsidies are still increasing, even though the international institutions plead for the reduction of these subsidies because they hinder the enterprises to invest in ecological technologies. These subsidies encourage the excessive consumption of energy and accelerate the exhaustion of the natural resources. The total pollution costs, such as ecological damages, healthcare costs and economic impact, are not included in the pollution cost. These costs are born by the society or by the natural persons, rather than by the polluter. Almost all the countries use direct and indirect subsidies (tax exemptions and lower taxation rates) for specific environmentally-deleterious activities. These include tax exemptions and lower taxation rates for burning fossil fuels, which pollute, are hazardous to human health, cause premature death and climate changes. The subsidies with potentially negative environmental effects, particularly in the field of fossil fuels, transportation and water, are estimated to more than 1,000 billion euro per year. They cause high levels of wastes, emissions, extraction of resources and have adverse impact in biodiversity. They may block the enterprises in inefficient practices and prevent them from investing in ecological technologies. These subsidies take various forms, such as tax exemptions and lower taxation rates. The expenditure with subsidies worsens the fiscal balances and affects the priority public expenditure and the private investments, in the energy sector included. The subsidized energy distorts the allocation of resources by encouraging the excessive consumption of energy, promoting the high capital-consuming industries, reduces the incentives for investments in renewable energy, accelerates the exhaustion of the natural resources.

Value added tax. It plays a special role as factor within the consumption patterns. After the beginning of the financial crisis, the standard VAT rates have shown an increasing trend in most member states. The implicit taxation rate on consumption, as measure of the fiscal burden on consumption, didn't evolve significantly. The main legislative change, was the introduction of the lower VAT rates for a limited number of services based on intensive labour, in an effort of promoting labour force employment in these sectors. Generally, the modern European taxation systems apply high rates on labour force employment, while leaving the use of natural resources with low taxation rates, or even with subsidies.

Change of incentives. The increase of the taxation rates for the use of natural resources (such as water, toxic emissions, metals and minerals), brings both challenges and opportunities for the enterprises. On the one hand, this will be a challenge to reduce the water consumption and the carbon footprint. On the other hand, when the costs with natural resources increase, the business with efficient technologies thrives. This creates activities which "close the loop", or use renewable materials. When the labour taxation rates decrease, the human resources become more available. This creates major business opportunities. The business patterns can shift towards labour-intensive activities, including services of urban mining, repairs and maintenance, product remanufacture, research-development services. Lower fiscal burden on the labour force is also available to sectors such as healthcare, education and scientific research.

EU policies and initiatives. According to the European Union, the transition towards a circular economy, essential for the accomplishment of the resource efficiency targets set by Europe 2020 Strategy for smart sustainable and inclusive growth, implies:

- Stimulate recycling and prevent the loss of valuable materials;

- Job creation and economic growth;
- New business patterns, eco-design and industrial symbiosis, which can turn towards “zero wastes”;
- Lower greenhouse gases emissions and lower environmental impact.

There are many European policies, initiatives and measures that support specific aspects of the transition towards a circular economy, among which: implementation of Europe 2020 Strategy and greening the European Semester; implementation of the Roadmap to a Resource Efficient Europe, the 7th Environment Action Programme, which will guide the European environmental policy until 2020; EU contribution to the development of the world sustainable development goals for the post-2015 development agenda.

In 2015 the European Commission adopted a consistent package of measures on circular economy to help businesses and European consumers' transition to a stronger economy and circular resources are used in a more sustainable way.

The circular economy has the potential of creating many jobs throughout Europe, while preserving the precious and depleting reserves, reducing the environmental effects and making good use of wastes by transforming them into products. Sectorial measures have also been stipulated, such as quality standards for the secondary raw materials. Among the main actions that have already been adopted, or which are to be undertaken during the mandate of the current Commission, are: Development of quality standards for the secondary raw materials with the view of increasing the trust of the single market operators; Measures plan for ecological design, with the purpose of product recycling, additional to the energy efficiency; Review of the Fertilizers Regulation, with the purpose of facilitating the recognition of organic fertilizers and waste-based fertilizers on the single market, and of supporting the role of bio nutrients; A strategy regarding the plastic materials within the circular economy, approaching aspects such as the recycling potential, biodegradability, presence of harmful substances in the plastic materials, reduction of marine wastes, as stated in the Sustainable Development Goals; Actions for water reuse, including a draft of regulation regarding the minimal requirements for reusing the waste water.

The following elements are among the main issues of the reviewed regulation:

- A common EU objective of recycling 65% of the urban wastes, and 75% of the packaging wastes, by 2030;
- Promotion of economic instruments deterring the storage in garbage dumps;
- Concrete measures to improve reusing and to stimulate the industrial symbiosis – transformation of a by-product on an industry into the raw material for another industry;
- Economic incentives for the producers to introduce more ecological products in the market and to support the recovery and recycling schemes (for instance, for packages, batteries, electric and electronic appliances, vehicles).

All these programs are funded with over 650 million euro financing within Horizon 2020 Program and 5.5 billion Euro from structural funds;

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MANAGING THE RENEWABLE ENERGY GRID INTEGRATION PROCESS: RISKS AND CHALLENGES

PhD(c) Irina Nasalciuc⁴⁷

Abstract:

The energy supply security is an essential condition for further economic and social strategic development hence renewable energy generation proves to get involved efficiently in solving this issue. As business-as-usual scenarios proved to be non-strategic for modern economies promoting clean energies, scientists are continuously seeking for new policies and management frameworks appropriate for renewable start-ups. Periodic paradigm shifts operating on energy markets drive impressive market transitions aiming to perform higher innovative approaches over the composite energy generation portfolios thus providing advanced managerial mechanisms for renewable energy strategic deployment inclusively. Thereby, the current study aims to reveal an updated insight over the risks and challenges arising under the energy markets deployments and to identify productive management maneuvers able to provide the appropriate grid integration of intelligent energies. In this purpose there are on their way of implementation different systemic methods of research, including scientific abstraction, deduction, analysis and synthesis, etc., in order to outline the running directives for the strategic transition towards green economies and its management peculiarities.

Key words: transition, innovating energy grids, de-risking renewables

JEL classification codes: D81, G32, Q21

Introduction

The renewable energy (RE) investment efficiency continues to attract much attention within the academic, managerial and policy making communities especially due to the remodeling attempts of economic theory, the involvement of sustainable models on the economic development cycles and the innovative caveats of market failures as a result of the 2007-2010 world economic crisis lessons. RE markets represent the perfect alternative for conventional energy markets in the global problems of mitigating climate change (Nordhaus, 2010) and consequently of preventing market failures due to the limited amount of externalities implied in the technological process of RE production. Risk-averse investors consider the innovative RE technologies with much skepticism and doubt preferring the mature and certified energy technologies (Komendantova et al., 2012). „Investing in natural capital” (Nordhaus, 2010) by financing start-ups based on RE technologies ensure energy production, reduction of GHG emissions and respectively mitigation of the climate change process, consequently, it would induce a targeted pressure on energy producers based on fossil technologies for a technological revolution to mediate energy production in terms of capturing their GHG emissions, so being able to meet the targets of a global warming to a maximum of 2°C preindustrial levels (IPCC, 2007). The energy sector consisting both of RE and conventional energy markets records impressive transitions from one year to another, being submitted to a periodical “paradigm shift”, given the technological progress, governmental initiatives, international organizations deployment directives, climate change pressures, market competition, etc. At the same time, as market failure risks theory suggest for modern markets to better efficiently allocate economic resources in production processes and to undertake risks calibration assessments, it is considered that RE projects are exposed to versatile risks and market barriers locking their further deployment.

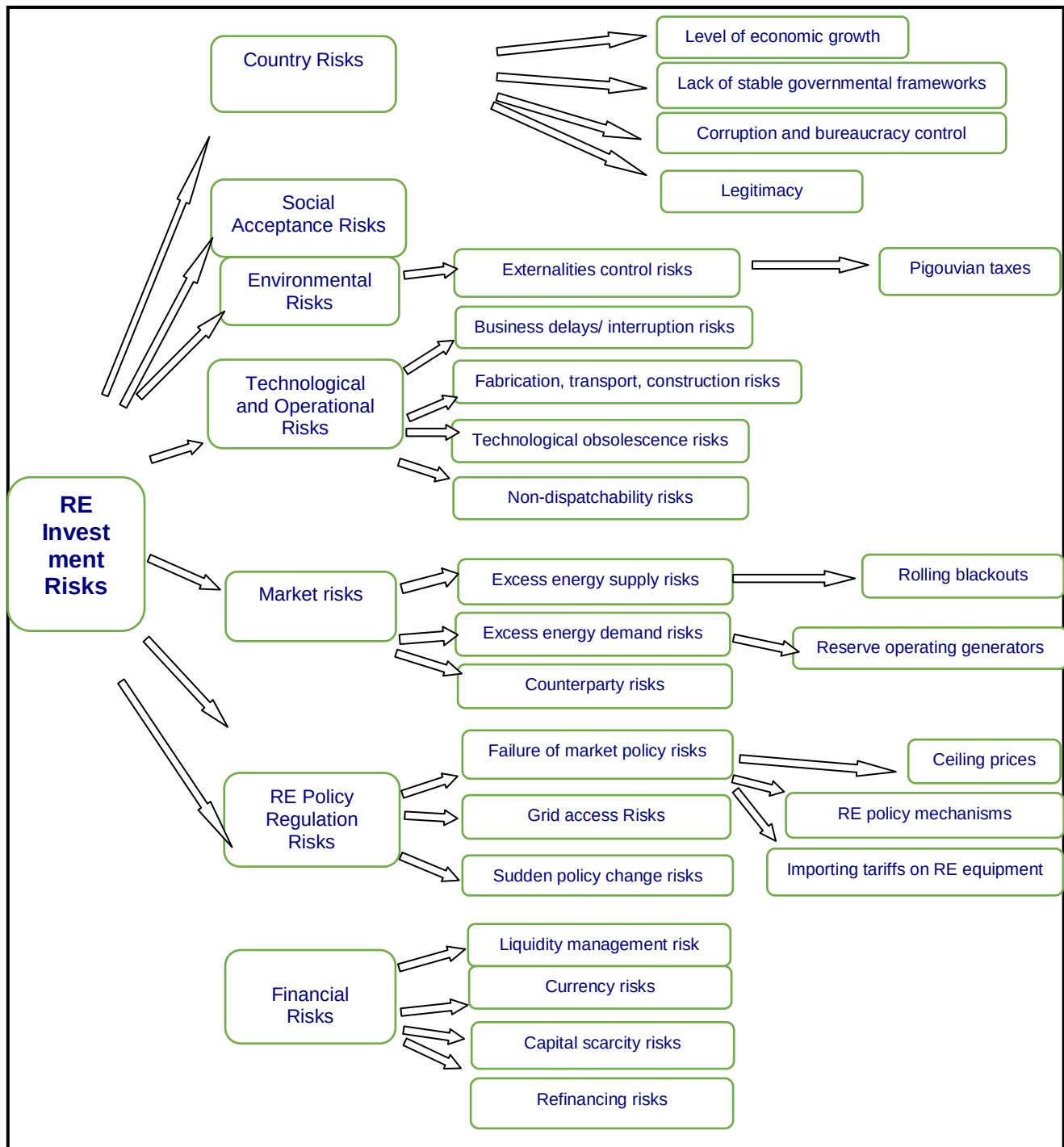
Therefore, the current paper focus on peculiar RE risks identification and evaluation basing on theoretical and practical resolutions found in the specialized literature (Section 2) and forwards a set of public and financial incentives experienced in different countries and projects to limit the investment risks exposure (Section 3). Finally, the paper submit its conclusions and recommendations.

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Assessing risks and barriers operating on RE markets

In the literature regarding the RE investment risks issues exist already well defined theories which require adequate attention and analysis to better put them in practice and manage. For instance, Paul N., De Jager D., Tesniere L., Roijen S. (2016) investigate the role of policy design in mitigating the risks in RE markets and forwards country risk profiles for EU member states. Wing and Jin's (2014) paper overviews the RE policy and investigate its deficiencies. Also important theoretic step changes to RE risks framing were made by Watts (2011), Kitzing and Weber (2015), Turner et al. (2013), Waissbein et al. (2013), Negro S.O., Alkemade F. and Hekkert M.P., (2012), etc. Basing on this grounds, I consider the following risks interfering on RE investment decisions (see Figure 1).

Figure 1 - RE investment risk categories and subcategories and their interrelations



Source: made by the author basing on the literature review

Assessing the above figure, it becomes obvious that investment flows in RE technologies are highly responsive to risk factors and policies that create the market conjunctures, thus, investors frequently prefer to direct their capitals to other reliable markets. It is well known that investors are liable to uptake riskier decisions if the rate of return increases equally yet the uncertainty risk incidence creates additional investment indecision thus blocking industry deployments and consequently interfering on detriment of strategic and sustainable progress. The countries management over the RE sector entail highly complex policy schemes which aim to mediating the increased RE investment flows thus assisting at the diversification of energy portfolios, supporting the emerging innovative technologies and absorbing market risks away from this projects. I identified seven main risk categories interfering on RE investments and fifteen descending risks labeled below.

Country risks- placing RE projects in strategic contexts

The country risks become more obvious when analyzing them in the context of globalized markets and can drive important shocks for the non-domestic large-scale RE projects. I consider country risks being the starting point in risk assessment made by investors basing on ascertainties assuming that the direct dependence between the countries political and economic development levels and the RE start-ups feasibility is highly perceived by business developers. Usually, country risk assessments are undertaken for each investment project and they try to establish the risk levels exposure coming from, for example, **level of economic growth**. It is well known that emerging economies are more risky than the mature ones due to the limited well-functioning national markets and its propensity to show degenerating reactions in situations of economic recession shocks. Consequently, investors could endanger their businesses to additional risk costs when investing in RE projects placed on emerging economies. A **lack of stable governmental frameworks** can be overseen under either democracy regimes or authoritarian counterparts. There are investors which secure their businesses from the continuous risks coming from the chaos of the democracy (changing policies under different governments) preferring the discontinuous risks coming from the stable dictatorships. Even though the dictatorship regimes are often accompanied by other economic risks such as bureaucracy and corruption, inefficient legal systems etc., so the dictatorship regimes prove to not be the right solution all the times. There are also opinions arguing that economic growths are not arising from the political institutions but that growths are determining countries to become more democratic (Glaeser et al., 2004). Basing a business on **corrupted and bureaucratic** grounds imposes side costs expressed through implicit taxes on income thereby indirectly reducing the rate of return to investors. The bureaucratic procedures and added corruption create a non-stimulating environment for further deployment of RE and increases the levels of uncertainty on markets. RE projects rely frequently on cooperation schemes (such as PPP) and under bureaucratic and corrupted structures the operational processes could be threatened. The dependency upon **legal policies** operating in different countries is perceived as first barriers for investment decisions as respecting property rights is essential for any project developer. Legitimacy entail the effectiveness of the system also, being considered that investors and project developers can't wait in legal delays for too long.

RE environmental risks – underlying the need to promote green growths

The cost of climate change caused by hidden social costs of externalities associated to conventional energy technologies, may harm seriously the modern economies given the markets remodeling transition processes (IAWG, 2010, pp.9), (Nasalcu, 2016, pp. 11). Among RE policy makers and knowledgeable investors it is considered that the RE investment projects must start, in fact, from the **environmental assessments** and not from their economic feasibility, implying **cost-benefit** analyses for both investment and operational stages looking for private profit approaches and social benefit approaches, thus meeting the green targets of limiting the global temperature to a 2° rise (above preindustrial levels). It is worth emphasizing that in spite of their substantial investment costs and modest operational costs compared to lower investment costs of fossil-fuels and consistent operational costs, the big economic advantage of RE projects consists in their inessential externalities. Several scientific investigations estimated the mean levels of externality costs for RE technologies fixing a modest value of 5 eurocents/kwh damage with a variation of externality values of 0,29 \$/kwh for onshore wind technologies, 0,69 \$/kwh for solar technologies, 5,2 \$/kwh for biomass technologies and 3,84 \$/kwh for hydro projects (Sundqvist, 2004, pp. 1755). As we can notice, among the RE indicated externalities, biomass technologies prove to be the

most expensive projects to society thus presenting substantially lower externalities than coal (14,87 \$/kwh) or oil externalities (13,57 \$/kwh). “In the context of addressing market failures, the research on externalities becomes imperative, primarily, from the perspective of the inability to **efficiently allocate the resources** in the economic processes respecting externalities the noninvasive manner of influence and because of the disqualification of economies to achieve the **Pareto optimum**.” (Nasalcu, 2016 a, pp. 3). Internalizing the “**external diseconomies**” (Pigou, 1920) associated to energy technologies is performed through **pigouvian taxes** and attempts to counterbalance and recover the damage costs (externalities associated to CO₂ emissions, air pollution emissions and combustion and accidents mediating) imposed to society after production processes.

RE social acceptance risks – dealing with technology inconveniences

The social acceptance barriers arise because “renewable energy conversion tends to happen closer to where the energy consumer lives (the “backyard”), thereby increasing its visibility and bringing the environmental impact closer to their residence.” (Wustenhagen, Wolsink and Jean Burer, 2007, pp. 2684). The “Not-In-My-Backyard” (NIMBY) habit of mind represents the contradiction of a general acceptance of public support for renewables and the individual resistance for establishing a RE project in the community’s direct vicinity. Withal, regional policies of promoting RE technologies are guided by the principles of solidarity and social cohesion so as to provide encouragement to disadvantaged “socio-economic rings” aiming to improve the living standards and economic development reliability. The RE social acceptance risks may interfere at different social levels:

1. **Socio-political acceptance**- if the project is fundamentally strategic for community and country and there exist social resistance against investment decisions, governmental bodies could determine the project developers to introduce financial participation for directly involved stakeholders, afterwards this costs can be attracted from over regional beneficiaries which do not fall under the direct project impact (crowdfunding) taking the form of regional co-subsidizing or absorbed by governments through project subsidies costs. Other risks are referred to as ‘*de-legitimacy*’ barriers, meaning that competence institutions do not recognize the performances of RE technologies, their feasibility (technology costs) and their economic and technical potential (Negro, Alkemade, and Hekkert, 2012, pp. 3842).
2. **Community acceptance** – usually the RE projects follow a logic community acceptance U-curve registering in the sitting phase a decreasing NIMBY acceptance from high levels to low ones and in the running phase an increasing NIMBY acceptance (Wolsink, 2007). The U-curve scales varies depending on the community’s confidence referring to external stakeholders (investors, governmental bodies, policy makers etc.).
3. **Market acceptance** –are encountered in the literature under ‘*negative attitude of incumbent firms*’ referring to energy generators based on fossil-fuel or renewable ones with well-established market shares, sometimes monopolized, making difficult the innovative technologies entrance (ex. in UK 80% of wind power installations are hold by large utility companies basing on aggressive market strategies absorbing independent RE developers) (Stenzel and Frenzel, 2008).

RE technological and operational risks – challenging innovations

The technologies entrained inside the RE business projects depict the future financial outcomes based on their market maturity and siting resource suitability. There are opinions arguing that RE technological risks and related uncertainties are being addressed through technology adoption decisions and consequently on investment decisions (Masini and Menichetti, 2013, pp.14). Technology choices come from proved overcoming of technology and cash-flow “valleys of death”, and most frequently refer to a five year testing in countries like Germany, Switzerland etc. Technological and operational risks are addressed as systemic breakdowns because of the employers, equipment or internal processes fail and entail substantial losses to investors. Accosting the RE technological constraints, investors consider the **non-dispatchability** and the **technological obsolescence risks** as other technological risks. While non-dispatchability risks refer to the inability of RE generators (ex. Wind, Photovoltaics) to produce more energy during the peak hours and consequently to benefit from “risk-premiums”, the obsolescence risks (innovation risks) refer to the outdated RE technologies facing difficulties in cost-competition with other up-to-date RE technologies entering the market.

Trailing a RE technology in its life cycle from deep “valley of deaths” to pre-commercial pathways require intensive and continuous national **research and development (R&D) programs** based on long term energy strategies (Negro, Alkemade, and Hekkert, 2012, pp. 3841). R&D investigations are seeking to design market scenarios developments following different RE technology innovations appropriate to existent resources. Stuck-in technologies can be propelled through appropriate market designs able to emancipate RE technologies. Seeking to control the technologic risks, governments can set requirements regarding **compliances for technological quality standards** – FIA represent an efficient tool for controlling the certified (from R&D stages) technological quality standards under which investors bend their businesses underwriting to subsidy programs. Thereby, governments implement programs of partial or full technologic guarantees for eliminating the technologic risks from markets (Michelez et al., 2011, pp.95). It is obvious that investors underwrite their RE projects to risks related to **fabrication, transport, and construction stages**. The first phase of project development is highly important for project developers given the risks of damages during transportation, installation and construction phase. Coming from the high costs of technologies involved in the RE projects, any additional equipment damage brings supplementary costs disadvantaging the developers. During transportation process it must be taken into account the weather conditions to avoid damages and during installation the good experiences presented by providers specialized in establishing RE technologies to avoid engineering failure. The risks related to **delays or damage during operational stages** is also related to technologic issues and assume natural disasters, as a consequence of vandalism and other unpredicted situations. This risks may imply additional costs to developers given the losses of plant’s breakdowns and the repairing periods implied in the process (out of orders).

RE market risks – striving to equilibrate the generation capacities

Market risks may impose considerable damages resultant from market maneuvers and the unpredictable productivity of RE plants given the dependency upon weather factors. Thereby, the lower capacity factors influence the stability of future incomes and rise fluctuant electricity sales which under inadequate market manipulations enlarge financial losses to investors. Assuming that governments strive to national economic growths (meaning the GDP levels) and innovative-technical advances, obviously that emerging economies must consider the excess **energy demand** concern given the dependency principles of this two indicators. “The more advance of a country, the more electricity demand of a country.” (Goh et al., 2014, pp.920). Consequently, given the non-storability and dependency upon weather conditions of energy generators, it is sometimes difficult for the existing generating capacities (renewable and conventional ones) to supply at any point in time the required levels of energy demand (high demand hours). In fact, the periodical few hours of commodity scarcity represent for energy investors the real opportunity to counterbalance their capital investments, but given the regulatory constraints of prices, ceiling prices do not allow the prices to get too high, thus stressing even more the volatility of market prices (Joskow, 2006). Therefore exist several governmental energy market maneuvers to ensure the ceiling price levels. Firstly, in the situation of excess energy demand, system operators are entailed to operate system voltage reductions seeking for promptly demand reductions. Secondly, it can be underlined that several countries have decided to entail an operating generating reserve (ex. SUA operates with an operating energy reserve of 10-15 %). Thus, it is considered that strategic energy markets should place the non-dispatchable energy producers (ex. PV, Wind, nuclear, hidro) as current operating capacities and exclusively the dispatchable conventional energy generators as operating reserve capacities(ex. oil-gas, coal, biomass etc.). **Excess energy supply** bring other constraints to RE developers, this performing as falling electricity prices and setting out the rolling blackouts. The lower established ceiling prices levels are, the higher risks of energy producers to get a rolling blackout notice from power off-takers. Even if RE generators set PPA and other guarantee contracts of the production trading facilities, there is always a risk of market glut threatening developers. Another concern regarding market risks is respecting to **counterparty risks** which may impose significant barriers for RE market trading. Counterparty risks address the risks of default and bankruptcy of the power off-taker bringing chain damages to RE project developers and investors.

RE policy regulation risks – key drivers to green investments

RE policy regulation is the key driver for decarbonized economies as countries choose to implement sustainable policies for deploying green energies ensuring thereby the strategic

economic growths. Government industry assistance is a key factor for **setting strategic targets** for RE deployment and choosing the right policy regarding the promotion of certain RE technologies and their calibration this proving to be a challenging issue for ambitious governments given the technological progresses, innovative approaching frameworks and aggregating the composite energy portfolios. Actually, the RE policy regulations enjoy an enough diversity and maturity to be transferred on emerging energy markets and technologies and the risks associated with the **failure of market policy** are important enough to taking them into account. Governments set targets for aggregate RE generations designing national energy portfolios and adapting market mechanisms for reaching their missions. Currently, RE markets operate with various **policy mechanisms** which proof to be better or less advantageous for different scale market economies. Some policy instruments entail higher risks costs given the higher exposure and influence directly the RE levelized cost of energy (LCOE). In this paper I refer exclusively to feed in agreements policy instruments operating on RE markets, which proved their effectiveness in time and enjoy enough popularity, avoiding to analyze other policies like utility quota obligations and mandates, tradeable RE certificates or net metering.

Feed in Agreements (FIA) are the most common RE supply policy driver offering long term power purchase agreements (PPA) for off-taking RE electricity. The PPA can be fixed for 10-25 years and guarantee a determined price payment for each kilowatt-hour produced, dependent or independent of electricity market prices, basing on composite cost criteria like project scale and site, project technology type and resource quality. The FIA offer the possibility to policy makers to control national energy technology portfolios mix, to promote RE technological progress through de-risking policy instruments and to ensure the control of energy supply security. Thus, FIA can take the form of a **feed-in-tariff (FIT) payment system** or a **feed-in-premium (FIP) payment system** which assume different risk levels to reaching the rate of return assessments. As a FIT policy implies fixed price payment levels independent from the market prices fluctuations, it is considered to be less risky to investors than a FIP given the certainty of stable generation revenues thus avoiding to interact with the electricity spot markets and consequently keeping away from market risks. A FIP policy assumes a premium payment added to the spot market electricity price, thereby following the market electricity price fluctuations and providing less risk protection from market risks to investors. In what follows we will see the plurality of FIA FIT and FIP payment schemes according to Kitzing L., Mitchell C. and Morthorst P.E. (2012, pp.3), Couture T.D. et al. (2010) and Couture T. and Gagnon Y. (2010):

1. **Fixed FIT** – payments determined depending on technology group
2. **Time-dependent FIT**- assuming two-three categories of payments for different technologies deployed or different demand levels registered(day/night, peak/ off-peak)
3. **Target price FIT**- the payment scheme is starting from target prices and undertakes adjusting add-ons above market prices (it is known also as contracts for difference)
4. **Indexed FIT** – payment schemes are being set depending on national economic indicators as exchange rate to euro or price of natural gas which are uncertain at the investment.
5. **Constant FIP** – non-variable adder-on top of the spot market price remaining independent on electricity price increases.
6. **Sliding FIP** – premium payments which are dependent on market price being limited with an established premium cap and premium floor.

The RE policy plurality require careful government attention when attributing FIA to various technologies paying consideration to compatibility of national resources with innovative RE technologies, national/regional spot market deployment levels and social costs of RE. From all FIA categories constant FIP could be the most risky policy to society as during peak demand hours the spot market prices increase and the constant adder-on enlarge the total costs of RE generation. While, the fixed FIT assumes only the risk of decreasing updated value of RE generation revenues given the long technology lifetime and the unchanging stable payment commitments independent from inflation, spot market prices etc. it appears that indexed FIT solves this issue. Across countries there can be reported an outstanding experience regarding the FIA policies being adjusted and mixed in various forms, existing even countries which offer the opportunity to investors for choosing which FIA policy to apply to individual RE projects (ex. in Spain, Estonia, Slovenia, Czech Republic). Most European countries choose to implement FIT payment systems rather than FIP ones forasmuch eliminating additional risks (inflation, fossil-fuel energy prices, etc.)

and providing equity investment feasibility to project developers and due to its country's socially efficient costs.

Sudden policy change risks refer to 'stop-and-go' policies marking the volatile deployments in market adjustments and subsidy systems (ex. policy changes in Netherlands between 1998-2001 years, also happened in UK, Sweden, etc.). Gaining higher confidence levels in long-term uninterrupted policy frameworks propelling large-scale RE projects, could drive to increased interest from investors, lenders, venture capitals and other stakeholders. There are opinions arguing that sudden policy change risks are more likely to take place on nascent markets than on emerging or mature markets (Noothout et al., 2014, pp.36), thereby investors assume higher costs for risks undertaken, and consequently energy generators provide higher prices to the wholesale markets.

Another key concern regarding the RE policy regulation risks is related to **grid access risks**, which refer to ensuring duly grid connection for new projects. These may perform important barriers to investors if the market liberalization level is low and the uncertainties regarding the grid access are detected at planning stages. In conditions of grid access imperfection and bureaucracy, investors may give up the RE investment initiatives or to price investment risks into the costs of financing. The future smart grids are expected to be technically adapted to increasingly fluctuating energy supplies from renewables, while the actual infrastructures quality prove to be regionally inappropriate for various RE technologies, thereby investors meet serious barriers for further project developments.

RE financial risks – aggregating the risks and their manageability

RE financial risks lie in aggregated risk levels from the above described market barriers being determined by their complexity and plurality manifested on RE investment environment. Investors and project developers aim high in-time incomes, burdening the capital distribution sharing process. High up-front investment costs still performs major barriers for RE projects requiring careful management for equity-debt capitals entailed under business development. Thereby, **capital scarcity risks** are addressed as first pressing barriers arising during planning stages even if business assessments prove feasible indicators in long-run, performing "limited availability of local debt finance" (IRENA, 2016, pp. 37). The most frequent capital bidders for renewables are venture capitals, private equities, asset financiers, public quoted companies, credit markets etc. The financial problems arising during operational stages of RE projects address **liquidity management risks** as low cash reserves reported to updated liability levels, thus emphasizing the business's vulnerability in short-term cash flows. RE liquidity management risks consider the systematic and unsystematic risks arising under FIT and FIP payment systems, high transaction costs and incidence of other financial interferences (ex. changes in fuel prices for biomass projects) or low cash back-ups during new investment operations, which bring liquidity constraints to investors (Kitzing and Weber, 2015, pp.119). The liquidity issues involve the low RE asset liquidity and pricing them in "liquidity premiums" thus enlarging the costs of capital for RE projects. **Refinancing project risks** arise "when the maturity of the loan is mismatched with the lifetime of the asset, and the borrower is unable to refinance the outstanding loan midway through the life of a project." (IRENA, 2016, pp.71). Otherwise said, refinancing risks refer to risks exposure during operational stages of indebted RE projects which can't afford to meet its liabilities and requiring a refinancing. This situation comes conjunctively with the liquidity risks given their interrelation and are undertaken basing on RE projects degree of diversification. The RE project's debt is shifted into long term finance, existing cases when the more attractive refinancing lead to lower LCOE. I consider **currency risks** as financial risks even if their framing refers rather to country risks (issues related to sovereign rates, foreign exchange rates and convertibility). Financial mismatches may arise when business's liability is backup by different currency assets (incomes) or when signing contracts in hard currency and the inability to pay-off the PPA price in hard currencies from the power off-taker.

De-risking RE grid integration –breaking down the drawbacks

When speaking about de-risking RE grid integration, it is essential to approach the issue referring to the entire system up-to-date operating instruments and technologies, arguing the recurrent policy redesign: "attention must be paid as when one instrument should give way to another and when a technology should be abandoned" (Connor et al., 2013, pp. 14). Further, the entire system

barriers should be updated and addressed to innovative management strategies, considering theoretical approaches towards risks and their management, well known internal strategies and mechanisms able to mitigate and control the damage exposure. A best practice among managers is **diversifying activity portfolios** with positively correlated assets and establishing a portfolio management. The portfolio diversification for RE can be made with regard to geographic locations or regarding the technologies involved in the energy portfolio. There is also **scenario analysis approach** which establishes presumptive future outcomes considering the expected future alternative events. A scenario approach is applied for decision taking stages taking into account FIP, FIT schemes and risk/ return expectations. Accounting RE de-risking incentives and instruments require careful assessments of their effectiveness given the little experience of risk transferring and risk managing featuring the intelligent energy markets and designing “an approach that monitors the interaction between funding and regulation elements at different stages of the value chain” (Trumper et al., 2014, pp. 169). Currently, a big range of risks threatening RE markets are throw up on insurance markets and other risks damaging large-scale RE projects are absorbed by public finance institutions entrained to mobilize private capitals towards renewable investments (see Table 1).

Table 1

Managing the investment risks depending on de-risking levels

No.	Transferable risks	Manageable risks	Pertinent risks
1.	Country risks	Social acceptance risks	Environmental risks
2.	Counterparty risks	Refinancing risks	
3.	Failure of market policy risks	Capital scarcity risks	
4.	Business delay/ interruption risks	Technological obsolescence risks	
5.	Sudden policy change risks	Non-dispatch ability risks	
6.	Grid access risks	Price volatility	
7.	Currency risks	Liquidity management risks	
8.	Fabrication, transport, construction risks	Excess energy demand/supply risks	

Source: made by the author basing on the literature review

Examining the above table becomes obvious that most RE associated investment risks can be transferred to insurance markets (damages during plant construction, installation, transport, fabrication or operational phase; project delays etc.) or managed in appropriate ways avoiding and mitigating risks, thereby investors are free of part of the undue economic threatening. After all, RE investment risks are pointed through the **financial instruments** and **financial incentives** and their concordance of operating on regional/national markets. Accordingly, involving financial instruments and incentives could look for some governments expensive but their real economic value lies practically in the avoided costs of removed risks from RE markets (Schmidt et al., 2012). Fixing the total costs of the RE financial instruments may imply complex and highly aggregated data modelling process, but the total costs of a given financial incentive is even more difficult to evaluate due to the uncertain evolution of fuel prices, technologic progress and the anticipated investment costs for RE.

Investment risks/costs may be debated, as well, through the **policy de-risking instruments** (Waissbein, et al., 2013) operating on the market which either decreases risks (and accordingly diminishes the average cost of capital investments) or increases the returns for taking higher risks (through subsidies, premiums, grants, financial incentives etc.). FIA register twofold financial efficiency firstly given the facilities of accessing the grid and PPA and secondly given the guaranteed price payments over long periods (FIT) or premium payments above RE market prices (FIP).

In spite of the outstanding RE technological investment cost reductions, the financial project costs (equity and debt costs) continue representing an important barrier to large scale up-front allocations. Setting the RE markets risk/return profiles may reveal contradictory impacts to investors/society thus requesting to price the barriers on both sides. The high up-front costs issue and capital scarcity risks can be solved through interventional one-time direct and indirect public incentives like **capital subsidies, grants and investment tax credits and loans**. In developing countries the RE projects may be provided with the possibility to engage to **concessional loans** from public finance institutions entailing lower interest rates, expanded grace periods or prolonged loan tenors. Yet, project developers may imply also **flexible hybrid structures** combining two

financial instruments improving the risk transfer and reduction. There is also the possibility to involve **partial loan guarantees** assured by development banks which could provide local banks with the reliability they need to issue loans the RE markets need, thereby, a part of the default risks are transferred to public actors (Waissbein et al, 2013, pp. 37). There are opinions arguing that in developing countries banks manage offering loans only on short-term basis creating additional challenges for RE projects that require, actually, long-term loans for their cost-competitiveness, thus justifying the high costs for energy. Consequently, low-income developing countries face more exposure to develop projects refinancing risks, because of short debt's lifetime (commonly 5-10 years) and the inconsistencies with the RE assets lifetime (commonly 20-25 years). Refinancing risks are known in advance thus their management is preventable. Usually, RE projects undertake financial mitigating measures like **liquidity guarantees** or **put options** to manage this type of risks. Liquidity guarantees represent the assurance undersigned by financial institutions that a liquidity support will be provided to project developers in the case of cash scarcity.

The currency issues may be boarded coming from **hedging instruments** given the successful experience with **forward contracts and swaps**. A currency forward contract may remove risks of losses in value appearing during transactions by locking in the differences beforehand. In the case of currency swaps, the project developers can lend hard currencies from international financial markets at minimal or zero currency exchange risk. There exist also, **currency risk guarantee funds** which may solve the long-term issues of currency risks covering the differences in exchange transactions between hard currency and local currency. In other cases, developers entail political risk insurance in cases of exposure to currency risks. Coming from the complex operating system markets of renewables, the presence of liquidity risks is not surprising. Liquidity concerns may be mitigated by internal maneuvers which can include setting **debt reserves** for unexpected liquidity scarcities, using the surpluses from **debt service accounts** or establishing contingent equity to back-up RE projects. External instruments designed for limiting liquidity risks may take the form of the same **liquidity guarantees**. Unfortunately, liquidity risks are being referred in the current research to manageable risks given the limited financial instruments and incentives to fully transfer this risks.

Market risks assume the threatening arising from RE market conjunctures (energy demand and supply) which influences the price levels and project revenues. Excess energy supply risks may be accosted through **futures contracts, derivative and forward contracts** aiming to better control the RE price volatility, while transferring this risks is not possible currently. Market risks can also be approached through the financial uncertainties associated with **weather derivatives** and the issues related to them. Thereby, weather derivatives are used to support the project revenue caveats associated to weather variability and its financial impacts over RE projects. There are also measures to address counterparty risks, implying instruments like **governmental guarantee, political risk insurance, partial risk guarantee** or through **export credit guarantee**. Government guarantees may assure the backstop risks of counterparty late payment or default by promising timely assistance in RE trading or by financially returning the project with the equivalent losses. Political risk insurance may also capture counterparty risks because there are still countries where power off-takers are acting on energy markets as state-owned entities, thus being directly interested in alleviating the market constraints from investors. Partial risk guarantee may intercede when exist counterparty risks "by enhancing public utility creditworthiness" (IRENA, 2016, pp. 56) while export credit guarantee may cover the liquidity and credit pressures arising under counterparty default. Existing this variety of instruments aiming to limit counterparty risks, I consider them as transferable risks.

Country risks and RE policy regulation risks imply direct dependency of each other and create market deployment backgrounds for renewables. For instance, FIA prove to be an efficient policy tool able to design the RE market policy, to ensure the grid access for electricity producers, to work properly against RE sudden policy changes and to solve some financial issues. Despite their strengths, FIA may perform as policy disincentives interfering on natural market processes through overpriced/underpriced FIT, unrepresentative contracts duration, grid access postpones, delayed payments, adapted FIT/FIP (i.e. active FIT cuts for Solar PV in Spain (Del Rio and Mir-Artiques, 2014)) and can easily rise the failure of RE market-based risks allocation mechanism. Both, country risks and RE policy regulation risks may be transferred through **governmental guarantees, political risk insurances, export credit**

guarantees and partial risk guarantees protecting RE projects from sudden policy change risks, failure of market design and grid access risks.

Overall technology and operation risks may be transferred away from investors through **insurance markets** and **product guarantees**. Commercial insurance option is used to transfer business delay/interruption risks and technology engineering failure or damage during fabrication, transport, installation and construction stages. In spite of all this, insurers often underline that “there is a limited understanding of most RE projects and associated risks” (UNEP, 2004, pp. 19) (excepting the well-practiced onshore-wind projects) and consequently the insurance products do not always fit completely the innovative RE technology projects. There is essentially important the accordance of product guarantee covering which sets some technologic or financial protection in case of product quality inconsistencies. Also, it is worth emphasizing that emerging technologies are well back-up by venture capitals so as investors may again benefit from risk transfers binding partnerships with them. There are situations when operation and maintenance (O&M) service providers may cover the losses from business interruption given the **agreed contracts**. Referring to technologic and operation risks we can underline the **partial credit guarantee** option for mitigating this type of risk or **export credit guarantee**. **Partial credit guarantees** may mitigate technology risks by enhancing their credit and export credit guarantee may back-up innovative technologies with financial standby guarantees in case of derivative failures. Technologic obsolescence risks may be managed through innovative approaches regarding the operational maneuvers of renewables or through attentive contracting procedures thus assuring the same trading levels after up-to-date technologies entering the RE market. Non-dispatchability risks may be only adequately managed and predicted using statistic data and market prevision, being nonexistent market instruments to work properly against this constraints.

The costs of social acceptance risks are being scored as the lowest share from the total risk assessment costs, however this is expected to change given the government's active promotion for RE and consequently the increasing pressure on communities under incidence. The best managing practice with regard to this risk types is considered the stakeholder participation under innovative democratic processes which involve interested parties in early stage, open dialogues concerning the RE project benefits to nearby communities. Enabling a financial participation to stakeholders prove to be a successful way for determining a better social acceptance level, but even so this risks can't be fully transferred. RE Environmental issues seem to be a pertinent risk for energy markets, ongoing projects engaging to environmental damages with constant or sometimes increasing externality levels dependent on technologic production processes. The low values of externalities associated to renewables allow us to neglect almost all environmental risks associated to different technologies, excepting biomass technology which prove to be the most environmentally riskier given the fuel interference in production process.

Conclusions and further approaches

The deep digging on RE investment risks revealed an imposing heterogeneity of barriers which are blocking the renewables market uptake and keep away investors from engaging in stepping the market process. There are risks which may be absorbed easily from RE investors through insurance markets and national public institutions and other risks which may be addressed through innovative management maneuvers according to up-to-date technologic approaches. I consider the only pertinent risk drawing back renewables and consequentially the strategic deployment of green economies is environmental concern which may be challenged for almost all RE technologies, assuming the case of biomass technology. Thus, I consider that the big problem of de-risking renewables process is concerned to a lack of insurance products, supposing that there may be under stimulation from RE project developers and investors for generating adapted insurance products from insurers. Consequently, I admit that periodic paradigm shifts operating on energy markets drive impressive market transitions so as to RE policy de-risking instruments and financial instruments and incentives fail to align with outstepping countermeasures. It is worth to be emphasized, that further research to be undertaken, could approach the reasons developers hesitate to step-in cooperation with insurers and public institutions so as to ensure a more reliable investment forecast.

Policy makers play a crucial role in amending the RE de-risking process by developing policies which bias the risks away from investors, mitigate misalignments between technologic transitions

and market approaches, trace RE supply chain specific features and appropriate policy intercessions, works on cultivation of social cohesion mentality among citizens with respect to accepting and encouraging the RE project developers, manage the renewable energy grid integration process and governmental patronage towards green economies. The goal of this research is considered to be reached given the impartial overlook on RE investment risks issue and its attempt on targeting the investigation course implying de-risking measures and consequently contributing to a revolutionist understanding of the grounds which rise RE underinvestment and low renewable generation.

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ENVIRONMENTAL RISK ASSESSMENT AND THEIR IMPACT ON THE PROFITABILITY OF THE FIRMES

PhD Gabriela Cornelia Piciu⁴⁸

Abstract:

The present paper conceptualized from economic perspective ecological risks, defining their scope and approach trivalent folks: activities - risks - effects.

Knowledge and awareness of environmental risks and consumer information and consultation strategies for environmental companies creates market advantages. It appears that those firms that are involved in the assessment, management and financing of environmental risk reduction, become more profitable, showing greater flexibility in market dynamics and innovation. They also become more present in the local community, responding to social concerns and interests.

From this perspective, the paper presents theories and experiences in the field of environmental risks, analyzing economic developments and interpretations of how the events generated by them were reflected in the strategies implemented so far by the companies in Romania

Key words: globalization, environmental risks, pollution, environment

JEL classification codes: Q51, Q53, Q59

Introduction

Environmental risks have large implications on the profitability of companies. Their evaluation is needed both in relation to environmental risk management, cost reduction needed them, and in terms of opportunities that companies have.

For economic subjects representing risk the possibility of an event generally unfavorable consequences for the performance: cost, quality or duration of execution.

The major risk is the unfavorable and production of a complete disaster, rigidity to maintain the original policy already outdated and may have serious consequences for the surrounding environmental, especially when environmental change is perceived very late; the original decision should be checked and adjusted conjuncture and time.

We'll summarize the main causes that can lead to environmental risks specific to a company:

A. having internal causes environmental risks; refers to the internal environment of firm elements:

- Inconsistency between objectives and resources available;
- Deviations from standard procedures in execution technology;
- Inconsistencies between operational plans and the reality of production;
- Incorrect definition of protective measures against environmental risks;
- The absence of adequate organic crops goals.

B. having external causes environmental hazards; refer to the company's relationship with constituents outside environment:

- Erroneous predictions of environmental risks;
- Modification of the regulations relating to environmental risks, environmental norms;
- Incorrect definition of resources purchased externally
- Modification of unpredictable factors considered stable (economic, social, international);
- Distorted the assessment of the environmental situation in the area.

Analysis of ecological risks may be created quantitative methods stochastic methods by which to quantify the dispersion of possible values in the form of predictions of cost / time or qualitatively

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through a formal investigation based on accumulated knowledge and methods of diagnosis using checklists.

It must also note that the analysis of ecological risks may be realized as a precaution on means and methods of conception to production during the elaboration of the technical documentation, or in the operational phase as an analysis prior, identifying the causes of adverse events for corrective action in future cycles.

It is obvious that human activity is currently leading to environmental damage. For this reason, new development models must be identified that preserves affordability capacity of the environment, the environmental risk reduction, the only way is to reduce the intensity of pollution caused by human activity. In this regard, in our opinion, economic development can be sustained only if it ensures environmental protection. Otherwise, the gradual erosion of the environment will void economic growth.

Place pollutant is evident in "human system", but lately emerged and developed in our country "Environmental Economics", which, while acting as a subsystem of the economic system, however, the products and services provided by agent economic, reduce pressure on the system of the human system environment.

In Romania, in the area of environmental risks occurred several trends, among which we can mention the following:

- Environmental issues were amplified and sharpened, accidents and environmental disasters are becoming increasingly severe, covering large territories;
- Nearly full economic freedom lead to accidents environmental implications of local, regional, national and even international significant;
- Legislative and institutional changes have led to slow response of institutions to issue environmental risks;
- The scarcity of financial resources has led to a "motivation" of organizational links involved in environmental risk protection for low activity;
- Structure of the economy generally necessitates the use of resources that can lead to environmental risks of depletion of these materials.
- Economic downturn has led to a reduction or improvement of parameters that define the "state of the environment";

It should be noted that the phenomenon of ecological risk is not a prerogative of large companies and product quality standards, restrictions on environmental risks are not different size. Small and medium-size firms are disadvantaged in the process production institutional care, treating effluent pollutants, developing clean technologies. It is the task of government authorities to pay greater attention to these types of companies to help them in the ecological survival through financial incentives, technology transfer, access to resources or less polluting sources, administrative and financial incentives.

If environmental risks, are significantly more preventive than curative measures, to mitigate the consequences, and they all handled through the social costs they require.

In what follows, we will try to sketch a few indicators necessary for revaluation of all economic activity in terms of efficiency coupled with environmental risk issues. These indicators serve to choice of priorities in financing various projects in environmental protection.

Thus, each economic unit will be assigned a so-called ecological risk, calculated according to economic profitability and share of pollution:

$$GRE = \frac{RE}{\text{The share of pollution}}$$

where:

RE = economic profitability

GRE = degree of ecological risk
share their own pollution,

pollution = share (but) + share takeover of indirect pollution (cp) =
= The pollution made by other companies and internalized undertaking.

The optimum is achieved when economic profitability is maximized and environmental risk is as small.

The impact of environmental risks on firms

Making a return is larger economic management issues, and a smaller share of pollution is problematic as environmental management. So this degree of ecological risk is optimal when the two interests are harmonized, economically and environmentally.

To determine its own share of pollution (but) will be set a number of levels of pollution share their qualitative leap so that businesses be as big transition from one level to another.

For determining indirect share takeover pollution (hp) calculation formula will apply:

$$C_i = n / c$$

in which:

n = coefficient of use;

ci = share their own pollution

Determination of n is as follows:

- Material

$$n = \frac{\text{quantity of finished products}}{\text{the amount of raw material}}$$

- Materials technology

$$n = \frac{\text{the amount actually consumed}}{\text{the amount established by normative (pre-calculated)}}$$

- Energy resources

$$n = \frac{\text{the amount of energy actually consumed}}{\text{the amount of energy required (pre-calculated)}}$$

To achieve an effective work from all points of view, it is necessary:

- To share their own pollution is the smallest, which is for the moment an elusive due to lack of financial resources for the introduction of new technologies and security systems necessary to equip existing installations;

- Making a takeover pollution allowances from other operators at a smaller value. This is easy because involving only a shift on suppliers of raw materials and energy and a more efficient manufacturing activity in the sense of rational use of the available energy, materials technology and reduction could not be much waste after the manufacturing process.

There is a tendency to establish relations with undertakings by a factor GRE (ecological risk) as small as possible, so to stimulate activity unprofitable, tend blocking efficiency of enterprises

Conclusion

With the inclusion of companies in a risky environment, this degree will be made public and the trader will have to attach a name and number that represents the degree of environmental risk. This number will be passed in all documents circulated by the company. When the economic entity considers that the measures we achieved an update report that defines the degree of environmental risk, will draw up a memorandum of calculation justifying that will be switching to another level, to take advantage of advantage of it.

In a study conducted by the Ministry of Environment in the UK, shows that 53% of companies have realized increases of up to 15% in sales due to increasing environmental performance, 42% of companies have benefited from better positioning in the market 51% of companies recorded substantial savings in resource use, 65% of companies reported a better image in relation to customers, 75% said that environmental performance superior helped to attract new customers or to qualify for new business and 65% reported direct financial savings, following the establishment of appropriate targets and performance indicators environmental actors;

It is obvious that environmental performance and business performance management are closely linked.

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OPPORTUNITIES PROVIDED BY CIRCULAR ECONOMY FOR FIRMS

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PhD Alina Georgeta Ailincă⁵⁰*

Abstract:

Today, though there are many projects at the international, regional and national level underlining the need to implement sustainable development; just a small number of them find the best manner to put this concept into practice. Thus, the implementation of sustainable development concepts can be made through circular economy. Therefore the paper presents the necessity to move from a linear model to the circular model, then a few methods of transition to circular model from linear production model. The new model of circular economy considers that the companies need to create more value by reducing the dependence on the limited resources. Taking into account the above, the paper emphasizes the importance of reconsidering the best use of resources at a time when the major risks are threatening the welfare and prosperity. Also, the indicators analysed by Europe 2020 strategy (including Program 20-20-20), highlights the importance of the switching to a different type of economy, the circular economy. Thus, this article highlights the benefits of circular economy, from the social and environmental perspectives.

Key words: circular economy, methods of transition, benefits of clean production,

JEL classification codes: F64, O34, Q57

1. Introduction

As the paradigm of manufacturing in the last two centuries have been handled by the linear model, today it feels more and more the need for a new Industrial Revolution to free up production practices. In these times, the old model endangers the competitiveness between the regions of the world and between states due to the volatility and the lack of predictability of raw materials prices. At the same time, the resource scarcity, grater urbanisation, the increasing regional disparities and between environments (urban-rural), extraordinary advancement of technology, all of them offer the opportunity of finding appropriate solutions through the circular economy model. The assumption that the natural resources are usually much cheaper and accessible are more and more not validated. Circular economy enrolls in the paradigm of sustainable development, ensuring economic growth by reusing finite resources. Besides, as the European Commission states the "Circular economy offers an opportunity to reinvent our economy, making it more sustainable and competitive. This will bring benefits for European businesses, industries, and citizens alike." [12]

The growing scarcity of resources together with advances in technology and greater urbanisation

In European Union, in order to reduce waste, boost recycling and a more judicious resources use, the paradigm of circular economy can use the Europe 2020 strategy targets. Thus, the strategy can be a useful tool for circular economy having five headline targets concerning: employment (e.g. to be employed 75% of the 20-64 year-olds), research and development (e.g. investing in R&D no less then 3% of the European Union GDP), education (e.g. no less then 40% of 30-34-year-olds completing third level education and the early school leaving rates being reduces below 10%), poverty and social exclusion (e.g. the number of people at risk of poverty and social exclusion being reduced with 20 million), energy sustainability and climate change (e.g. the reduction of greenhouse gas emissions with 20% or even 30% comparing with 1990, the increase in energy efficiency with 20% and at least 20% of energy coming from renewable).

Besides the help of sustainable development indicators and Europe 2020 strategy indicators, at the EU level the circular economy targets aims explicitly at:

- recycling 65% of municipal waste by 2030,

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- recycling 75% of packaging waste by 2030,

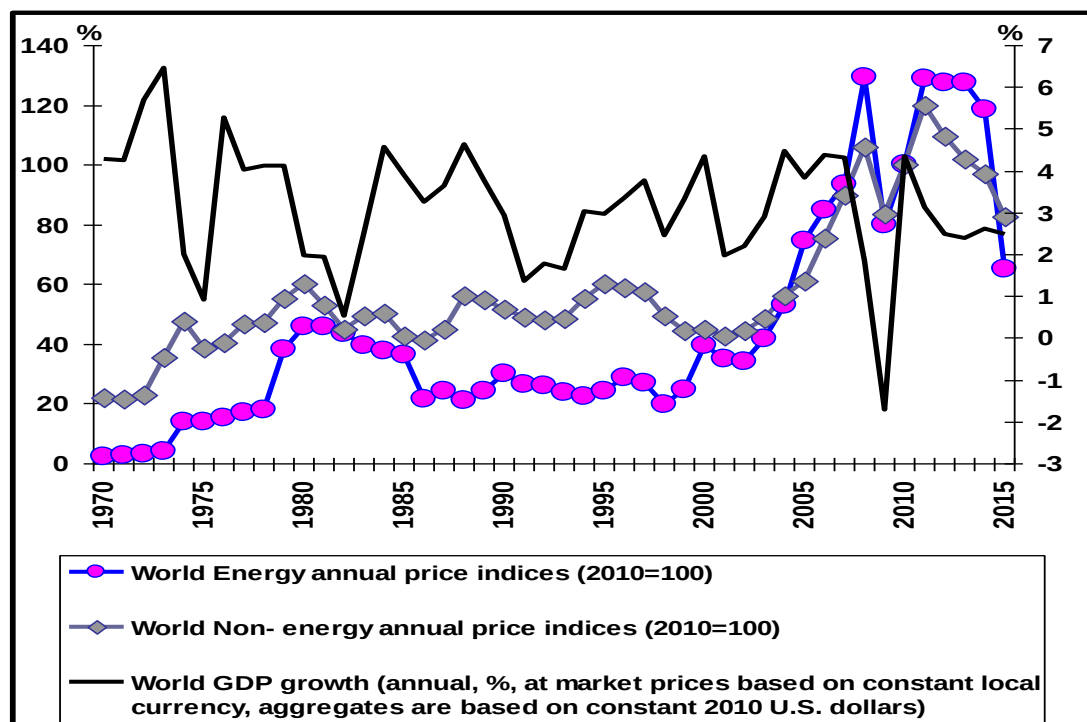
- reduce landfill to maximum of 10% of municipal waste by 2030 and forbidding separately collected waste land-filling.

At the same time, European Commission is looking to diversify and promote economic instruments and incentives for increasing the recycling rates, for offering “greener” products to the market and for stimulating industrial symbiosis and discourage land-filling throughout the EU.

2. THE IMPORTANCE OF THE TRANSITION TO THE CIRCULAR ECONOMY MODEL

Considering the threats on medium and long term regarding the welfare, prosperity and competitiveness, the discussions on more judicious use of resources contribute to obtaining adequate responses in the economic environment. Thus, in a circular economy, companies have increasingly more chances of reducing the dependencies on limited resources. The problem arises from the general macroeconomic context trend. In this sense, in recent times, there are numerous debates regarding the capacity of decoupling the evolution of commodity prices from the economic growth rates, knowing that the economies of the world are no longer capable to sustain high GDP growth rates with small increases in prices (see, fig.no.1).

Figure 1 - Comparisons between the trends of World GDP growth rate and World commodity price indices of energy and non-energy products



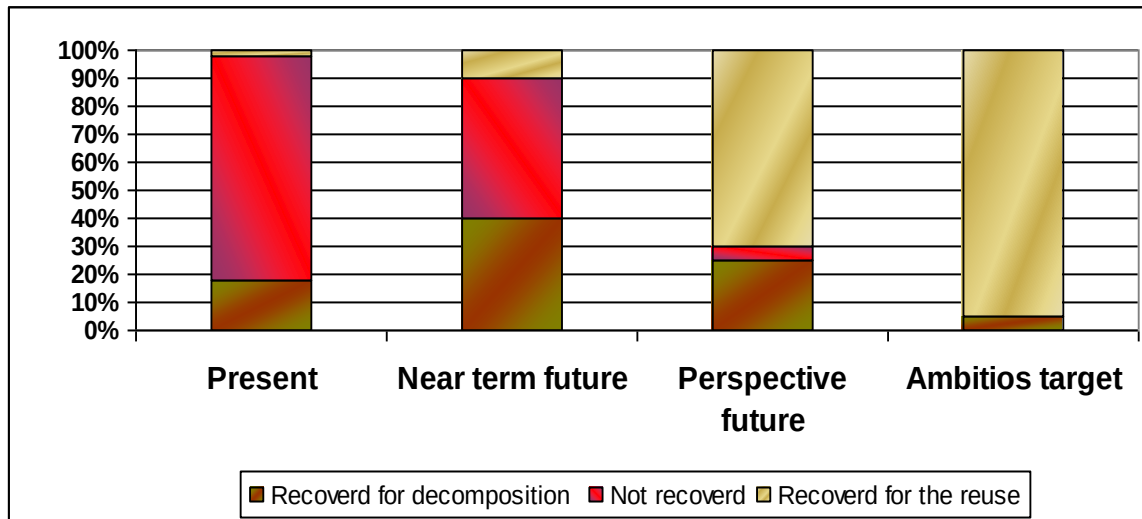
Source: authors' conception on the basis of the statistical data of World Bank Commodity Price Data (The Pink Sheet) and World Development Indicators, updated 17/11/2016

The necessity for a new economic model cannot be ignored any longer taking into account the volatility of the resource market and the increasing chances of their exhaustion. Thus, in circular economy, in order to use natural and less natural resources as long as possible, companies are trying to reuse components and even entire products in the production process. [10]

No just the variation or the growth of commodity prices can be a problem for the economies of the world but rather the continuous growth of wastes, which is a great problem for the environment. A discussion that can be made is between durable goods and consumer goods. Thus, according to the 2013 Ellen MacArthur Foundation report “Towards the circular economy opportunities for the consumer goods sector”: “Fast-moving consumer goods currently account for 35 per cent of material inputs into the economy, a significant part of total consumer spending on tangible goods, and 75 per cent of municipal waste. Importantly, the consumer goods sector absorbs more than 90

per cent of our agricultural output—possibly our most embattled resource in the future. "Thus, the waste management cannot be just a private or the companies' problem but rather a whole society problem: private and public, all together. The solutions can be beneficial for all. So, according to 2013 Ellen MacArthur Foundation report, the circular model: "offers materials savings in Europe that could be worth USD 380 billion in an initial transition period and up to USD 630 billion with full adoption." [8]. The capacity of transition to the circular model is frail but with the proper incentives and ambitious targets – the future might look much better (see fig.no.2).

Figure 2 - Possible trends for the circular economy



Source: authors' conception on the basis of the data from Euromonitor 2011, Expert interviews, Ellen MacArthur Foundation circular economy team and 2013 Ellen MacArthur Foundation report.

Note: decomposition means that materials can be biodegraded or recycled and reuse means the direct or indirect reutilisation for the same or different industry.

The emergence of circular economy model is, on the one hand, the recognition of the awareness of real value of (natural) resources, and on the other hand the response to the aggressive throwaway culture (e.g. it is considered, at the global level, that the cost of throwing at trash bin is more than 2 trillion of US dollars), needing more and more to highlight the benefits of reusing and considering waste a new valuable resource. The circular economy is a forward looking thinking that sustains on longer horizon of time the economic growth and has an important impact on transforming the production and consumption chains by encouraging the use of materials and waste over and over again, in cascade (as in the blue economy framework). The circular model of an economy is not just a conservative policy towards the environment but a way of efficient cost reduction and material saving. Thus, the companies can use this economic model of circular economy in order to reduce risks (e.g. concerning the chain of supply with raw materials) to cut costs, to protect the environment in which it works and to develop a reputation of a "green company" among others companies and customers.

The transition to a circular economy from the linear model (extract-use-throw) implies a substantial change of production process, necessitating the restructure of the old ways business practices, interdisciplinary collaborations, media and social support, policymaker incentives included in adequate laws, investors attention and breakthrough innovations. Thus, the research and development of innovative methods of processing and remanufacturing should be encouraged by policymakers to meet the technical challenges of putting production on circular paradigm. [2]

3. PROS AND CONS OF CIRCULAR ECONOMY

Circular economy implies basically a restorative rethinking of the production (manufacture, design and packaging), distribution, selling and consumption processes. A smart design, a good choice of materials, a functional raw materials saving production process will contribute to the increase in resource productivity, sustainable profits and larger new business opportunities for managers.

Considering the principles of circular economy, the companies must focus on selling services rather than selling goods (e.g. service economy), retaining and protecting property rights on products. In this way, the companies are motivated to conceive products with longer lifetime. [5]

The circular model of a national economy needs a significant financial public and private investment. In order to implement circular model, the state has to promote research and innovations (e.g. - inspired by nature as Biomimicry), IT and a friendly business environment in which is promoted the reuse of resources. The companies' financial capacities to sustain the implementation in day to day life of circular model are too small, are without prospects and incentives. This will lead to the postponement or quitting in implementing this model.

Thus, one major argument against the implementation of circular economy is the precarious financing at company level. The transition to the circular model requires a new approach about business risks and costs. In this sense, the sources of financing must be also diversified. In the present, the main source of financing of this type of businesses is the banking loan. Thus, it is crucial to improve banks' ability to finance circular businesses [4]. At the same time, new ways of obtaining the funds must be considered (e.g. sale of stakes on stock exchange, finding daring investors, related (twin) businesses in order to support circular business, more judicious management of expenses and extremely - selling the company with a linear model of production and opening a new circular business from scratch).

Another major problem is that the extended lifetime of the product must be reflected in the companies' revenues. But, in a context of poor economic growth, a persistent deflation and an increasing global commercial competition, the idea of higher prices (which reflect the investment in circular model) that should sustain higher revenues does not seem financially advantageous for the companies.

The incapacity to envisage the risks, the uncertainties related to the reducing, repairing, reusing and recycling processes, the uncertainties regarding the prices of natural and reused resources (including the operational costs) make the estimation of the full potential of the circular businesses model to be more difficult.

But the profits are there to be harvested and the firms and financial institutions that are willing and capable to switch to this new type of business are increasing in number. According to McKinsey the savings from the transition to circular economy are about 630 million of dollars by 2025. A tremendous relief could come from decoupling from prices fluctuations of resources market. [6]. Thus, with lower volatility of quantities and prices of the resources comes a greater security for supply, increasing the resilience of the company with a circular model of business.

The circular economic model can help companies to address some strategic challenges: reduced margins of the profit on the grounds of globalization process, fragmentation of the markets, high geographical dispersion of the production process, high barriers on entrance on product markets, stagnation of mature markets, low final goods prices and increased competition. In this sense, the holistic understanding of the production process will allow companies to identify inefficient areas and adopt practices of remanufacturing and creating mutually beneficial partnerships with their suppliers. [9] Thus, the companies can maximize the number of consecutive cycles of products and closing the loop. If it is designed adequately, each additional cycle takes some of the net material, energy and labour costs of creating a new product or a component of the product. [3] In this sense, the natural capital is preserved and the wastage is reduced and reconfigured. This internal and external (e.g. taking back for recycling any product ever made by this type of company and promoting local suppliers) reverse logistics could solve numerous supply problems, being more effective due to a frequently collection of wastes and could save important transport cost (on the grounds of smaller collection distances), reduce the consumption of energy and the carbon footprint.

A strong drawback for implementing circular model is the complexity of materials. These modern goods contain several different materials in an intricate composition. Thus, the companies have to tackle the process of refurbishment and reuse in an innovative manner. The cost can be in a first phase quite elevated, so small companies can have an insurmountable financial problem in order to implement this circular approach.

The circular model of the economy can synchronize the companies' interests with the consumers' interests and in order to work properly the benefits must be mutual. The basic role of the companies is to increase consumers' fidelity, satisfaction and reputation.

In circular economy model the consumer has an important role because the chain of the product transformation and use does end at consumption phase. The adoption of such a model requires of course the existence of motivations or benefits for the consumer. For example: in exchange for a discount voucher or a lower price old products can be returned in order to buy a new product or a free repair for an item of clothing or shoes. For food product, in order not wasting food, less good-looking or close to expiration products they can be sold with a lower price and the expired but still good for consumption products could be donated to needy canteens or the assisted social shelters. The purpose of preserving the product utility must come first for companies and the consumers can be drawn into this clever mechanism. The consumer can have the satisfaction of contributing to a better, more secure world concerning the preservation of the natural resources. At the same time, ensuring his independence (e.g.. food, clothing, energy, etc.) might motivate him to collaborate but equally it could transform him into a powerful negotiator for the sale of his waste.

Companies that have a good connection with customers have many alternatives for recycling and reuse: can recycle their own used goods using an integrated resource recovery system, can work with specialized recycling companies (to recover some of the products components or to sell the whole damaged product as waste which by recycling can become components for other companies) or to sell degraded products on waste trade markets. Decreasing the cost of sorting and separation can develop enormously the recyclers markets and can reduce barriers of entrance on these markets.

Even at the end of its cycle of life the value added of a product is still high enough to motivate recycling and reusing. Therefore both companies and the state should invest heavily in the transition to the circular economy. The state will gain from encouraging the implementation of circular economy by preserving natural resources and ensure a stable and sustainable flow of alternative resources for the production process at the companies' level. It will be able to benefit from new business opportunities and from the creation of new jobs, thus can collect more revenue from broadening the tax base and can reduce cost with social assistance. The benefits that would flow from this transition to circular model would be very large, at the global level and the net savings from materials could be quite impressive. The highest benefits may come from the automotive sector, machinery and equipment industries. [1] Also forests, grasslands and agricultural lands could major benefit from this model by using the land for cultivation and protecting flora and fauna and not for burying waste.

Concerning Europe 2020 Strategy at European Union level, the comparisons between the values of these indicators in years 2000, 2008 and 2014 or 2015 with the Europe 2020 targets are quite alarming regarding: poverty, gross domestic expenditure on R&D, share of renewable energy in gross final energy consumption and early school leaving from education and training. Basically, all social indicators seem to be less well aimed than the environmental ones (see fig. no.3). Thus, in the context of adopting the circular economy model not only the management of environmental issues will be much better covered but especially the Europe 2020 strategy social and educational indicators (e.g. by creating new and sustainable jobs and adapting the education system to the needs of the circular economy).

The transition to the circular economy will need an important development of research and innovation field in numerous industries and will contribute to the reduction of energy consumption per unit of output using more and more the renewable energy sources. Thus, the European Union must use its will and power to increase the incentives for research and development field both at European and at the national level.

For circular economy important requirements are related with the redesign of materials and the rethinking of the systems of production, distribution and consumption. Their innovation potential is a great opportunity to be exploited for the next close future. Thus, the giant companies should and would be probably most interested in this important change for the world economies. [11]

Figure 3 – The trends of the Europe 2020 targets in EU countries



Source: Eurostat data, authors' calculation and interpretations

The remanufacturing and recycling industries are already absorbing more labour force in Europe, United States and all around the globe and its importance in revitalizing the labour markets is still at the beginning. The less skilled workers and the top ultra-specialized workers (e.g. researchers, product developers, inventors, etc.) will likely be the most wanted for the development of this field. Therefore, most likely, immigrants will play a key role in this overview image. This could create initially some adjusting problems for the developed economies and especially for domestic/old ways workers. Of course, the situation will improve in short time, considering also the fact that labour market competition is more than necessary in order to boost this system. Therefore, the circular economy will provide many benefits (resource preservation, sustainable economic development, reduction of costs, new and sustainable jobs etc.) that will appear gradually. Initial, this approach will imply new working models and numerous innovations that will reflect mostly into the costs of the transition to circular economy. [7]

Conclusions

In a circular economy, companies have increasingly more chances of reducing the dependencies on limited resources and must rethink the whole business - starting with the renegotiation of the contracts with suppliers and the motivation of consumers to become part of the business transformation. But no matter how large companies are on the market of various products and services will not be able to implement the transition to the circular economy, requiring also the involvement of the state, of the judicial system, of the regulators on product standards, of investors, of researchers and teachers, of inventors, of consumers, of employers, of employees and of trade unions.

If is implemented correctly – in the right dose with the right incentives, the circular economy can bring benefits for everyone involved and especially for the environment and the human society as a whole. It can also provide answers to the transition to a truly sustainable development of human society, leaving future generations the chance of a prosperous future. The transition won't be easy; costs can be extremely high at first, but the benefits that will follow will certainly worth the effort.

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SUSTAINABILITY DEVELOPMENT AND SOCIAL RESPONSIBILITY IN HIGHER EDUCATION

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Abstract:

The paper attempts to highlight the relation between sustainability development and social responsibility, at higher education level, in actual context characterized by dept and dynamic changes, incertitudes and economic pressures.

Based on theoretical constructs and practical ideas we develop a model for a sustainable university in accordance with social responsibility. We explore the interferences between the sustainability forms of the university and the ways to reach performance and, in the same time the social responsibility.

Based on a literature review and documentary research, we researched modern trends, models and practices of academic management, supportive of sustainability and responsibility.

Key words: sustainability, University Social Responsibility, strategy, vision

JEL classification codes: Q01, I23, M14

Introduction

Social Responsibility (SR) and sustainable development (SD) are the key elements of the academic field, considering the role of vector that universities play in the development of the society, being the generator of knowledge and the main shaper of our lives in a world consumed by challenges and explosive changes.

Social responsibility can be regarded as a necessity not as a requirement of an organization on the impact of its decisions and activities regarding the society and environment through a transparent and ethical behaviour that contributes to a sustainable and healthy development, and to the welfare of the society. Responsibility also means to take into account the expectations of stakeholders that are in accordance with the current legislation, consistent with the international norms of behaviour and integrated into organizations through the networking system.

Through the practices of sustainable development in the management of higher education institutions, universities can demonstrate their commitment to the specific practices of social responsibility. Therefore, these practices should be a part of the existence philosophy of universities as a way to function, to work and practise in the economic-social context. Social responsibility should be incorporated into the fundamental values of the university and in the manner of holding activities at each level and department.

This paper explores the concept of Socially Responsible University (SRU) and pictures the framework to identify the ethical requirements nowadays, in a modern and complex world. This is because education was perceived as a powerful and fundamental system that inter-correlates the economic, social and environmental concerns in a sustainable development strategy that helps nature and community on their way to a more sustainable future.

The central point of education is to create a sense of responsibility both globally and locally. Education is seen as a vehicle, a driving force, a trigger, a core value and a key factor in human development. UNESCO believes that education is the key to the economic, social and environmental development, but also the determining factor in creating a society that teaches and enables a sustainable future. (UNESCO, 2007)

This is possible by practising responsible management through an interactive dialogue with the society and community in order to promote sustainable human development through education, knowledge change, services delivery, research and teaching. All these underline the need to

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emphasise an ethical collaboration not only with the academic community but also with the business community in what concerns the stakeholders' involvement. (Vallaey's, 2013)

Research methodology

The implemented research is based on documents and reform strategies and is founded on an analysis of numerous studies conducted by higher education institutions in analyzing their sustainable development approach, having as support the social responsibility with an impact on global and local communities.

The method of investigation was the documentary analysis which included: works of literature regarding the relationship between sustainable development and social responsibility in today's universities; articles, studies and reports dedicated to educational policies in the country and the EU. We have also shown, based on observation, analysis of educational effectiveness and comparison, the importance of creating a socially responsible university that favours the development of the whole society towards a more sustainable future.

Conceptual approaches SRU and SD

SRU concept can be approached from several perspectives. Thus, SRU is a policy of ethical quality in the academic community activities through responsible management on education, knowledge, research, in a participatory dialogue with the society to promote sustainable human development and involves the following steps as shown below:

Figure no.1 - Steps in achieving SRU



Source: adaptation (Chen et. al., 2015, p. 165)

SRU can be perceived as a philosophy of the university to use an ethical approach to develop and engage with local and global community in order to support social, ecological, environmental, technological and economic development. SRU acts as a key player in social changes through the policies regarding quality in ethics, which determines the academic performances. (Chen et al, 2015, p. 165)

There are seven requirements in ISO 26000 standards, which are specific for the social responsibility to promote the sustainable development, as follows:

- Organizational governance materialized in: accountability, transparency, providing actions and deeds;
- Human rights - diversity;
- Labour practices, which includes: value and development, employment benefits, healthy working conditions, balance in life;
- Environment - environmental conservation and offering academic programs in respect to the environment;
- Fair operating practices: responsible involvement in relation with the public and the promotion of SR;
- Students' requirements - providing sufficient information to current and prospective students;
- Community involvement: providing grants for projects and also funding and support to preserve the environment.

Based on these requirements, the following key principles were established: accountability, transparency, ethical behaviour, respect for the stakeholders' interests, respect for the rule of law, respect for the human rights and respect for international norms of behaviour.

Through developing sustainable development practices by the university management, their commitment to social responsibility practices can be demonstrated. Vallaey's, F. (2013) highlighted the importance of the SR and identified its key features, pointing out the need for the awareness of the following elements:

- ✓SR is a responsibility regarding the actions and practices of universities and their impact on society;

- ✓SR requires a management practice which aims to build a responsible society by eliminating the negative impact and promoting sustainable forms of development;
- ✓SR functions in accordance with the legal provisions;
- ✓SR requires coordination between stakeholders.

The Socially Responsible University meets the economic, social and ecological aspects of the sustainable development. These requirements are found in the development strategies and in the operational plans that are developed by the university and highlight an important aspect of the university's interaction with the internal and external stakeholders and with the society as a whole.

SR is the key support to a sustainable development. The two concepts inter-correlate so that the SD is built on a set of values, practices and ethical conduct that are characteristic to SR. Moreover, SD requires more ethical aspects and values than issues related to science and technology. In this regard, the necessary elements for an SD program are focused on:

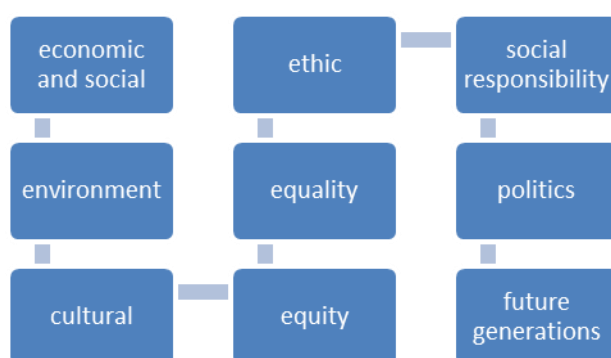
- Ethics and values;
- Leadership skills in SD;
- Defining the SR skills and abilities;
- AN understanding of how a society develops;

An important step in education for SD was the launch of the Decade of Education for SD (DESD), since 2005. Its objective is to integrate the principles, values and SD practices in all forms of education and learning. It is necessary to encourage changes in behaviour, which will create a more sustainable future in regard to the environmental integrity, economic viability and just society for the present and future generations (UNESCO 2005). The education for SD covers all levels of formal and informal education, but the primary role falls on higher education as the graduates of these institutions will be the future leaders of communities and organizations, resulting in overwhelming efforts in SD. Cortese (2003) stated: "Higher education bears a profound and moral responsibility to raise awareness and to transfer and shape knowledge, skills and values that are necessary to create a sustainable and just future."

Higher education institutions prepare professionals, who develop, conduct, manage, teach, research, work and thus, they influence the society. Thus, universities have a critical and tangible role in developing principles, quality and awareness not only to perpetuate the philosophy of the sustainable development, but also to improve what they achieved.

The general framework for SD requires a critical analysis of the following aspects, according to figure no. 3.

Figure 3 - General framework for SD



Source: adaptation (Higher Education for Sustainable Development, 2007)

The Higher Education Funding Council (HEFC) has taken a visionary approach through an integrating strategy that signifies the importance of incorporating SD in higher education. Based on benchmarks, HEFC provides: higher education sector will be recognized as a major contributor in the society's efforts to achieve sustainability through the skills and knowledge the students have and put them into practice by content and sharing knowledge in business and community, through the commitment of public policies and through its own strategies and operations. (HEFC, 2009)

Analysis of visioning exercise

Many universities have formulated a vision that expresses the objectives at the highest level in the future, in terms of SD based on SR. A comparative analysis of the vision is relevant starting from the following table:

Table 1

Approaches of the universities' visions

University	Vision
University of Copenhagen	The university will contribute to global SD as follows: -maximizing global responsibility and the role of leadership in the less developed countries by facilitating the transfer of knowledge, capacities building and increasing the mobility of staff and students; -integration of environmental, social, economic and ethical aspects in teaching and research activity; -the extension of the disciplines spectrum that contributes to research in SD; -specialization in approaching urgent issues regarding energy through teaching and research in natural and social sciences and through adopting the sustainability of science as a theme of teaching and research;
Hosei University	Hosei University will help to achieve sustainability in Japanese society. We will achieve this by the fact that we act as a social entrepreneur and a community leader. Research and teaching will be applied interdisciplinary and we will develop a partnership with stakeholders from different sectors of activity. The university's graduates will be able to adapt to the changing needs of the Japanese society and to provide sustainable solutions.
University of Veracruz	The university will be a tool for transformation and a driving force in the change towards sustainability. We will be a relevant local institution, responsible to help and provide solutions that are relevant to the community by using the global techniques. The university will lead by its own example to achieve the highest standards of sustainability in teaching, research, management and labour in society. The graduates will be responsible citizens and the staff will be an agent of change towards sustainability. We will achieve this by coordinating teaching, research and communication with the needs in the public, private sector, by building strengths regarding the cultural and social awareness to create a university with wide interdisciplinary objectives for sustainability.

Source: adaptation (Higher Education for Sustainable Development, 2007)

A brief overview of the analysis of the designed objectives at the level of the universities listed above reveals the following:

Table 2

Statements expressing the organizational goals

Goal	Agent of change	Example
-Contributions to the sustainable regional development; -helps the company to achieve a sustainable development	-to be an instrument of change; -to provide the change; -to be a social entrepreneur; -to be a community leader;	-to gain the respect of future generations; -to incorporate sustainable development; -to be responsible to the needs of the society; -to be the key in sustainable development; -to be a model of university with outstanding achievements and excellence in sustainability

Source: adaptation (Higher Education for Sustainable Development, 2007)

SD is an integrated component in each university having ambitious goals. Universities tend to become both models and agents involved in the economically, socially and ecologically balanced development of the society. The documents of strategic planning include clear objectives and modalities of action to fulfil the mission of the higher education organization. Note that both SD and SR should be landmarks in designing the strategic plan of each higher education institution, a process that is complex and characterized by intensity, which allows access to all stakeholders at all levels of higher education.

Conclusions

SR and SD represent the landmarks in analysing how universities make a contribution in increasing the quality of life. The new challenges of the contemporary world put universities at the heart of finding and formulating viable solutions for a more sustainable future. Yes, SD cannot be successfully integrated into what a university means as a whole, but only through a social responsibility based on values such as: ethics, equity, quality, commitment, excellence and social entrepreneurship.

SR is the intangible and profound part of SD, which cannot always be accurately perceived, but which has a major influence and a decisive impact on the development of a society. Universities must rethink their vision and mission and adopt a strategy that is based on true values, so that higher education institutions to be the promoters of a healthy development of society and lead to an improved quality of life.

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ECONOMIC INTEGRATION IN UE AND GLOBALIZATION ISSUES

GLOBAL TRENDS AFFECTING HUMAN RESOURCES IN THE FINANCIAL SECTOR

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Abstract:

With the rise of globalization and mass communication, the world is becoming a smaller place. The financial sector must navigate the choppy waters of a complex global economy by understanding the major demographic, technological and societal shifts. It is obvious that the global trends also affect human resources role. The continuous evolving financial sector will face several challenges from both the future workforce and from the changing nature of work itself.

Technology transforms workforce composition and culture by eroding physical barriers in the workplace. An increasing number of jobs may be conducted virtually (save on the costs of premises) with direct impact on job creation. Employees may work from a place of their own, making their physical presence less important: the growing phenomenon of crowdsourcing - "the human cloud" – where employees possessing a wide range of skills and expertise, take advantage of technology to perform a variety of tasks.

Sweeping demographic changes across both the developed and developing world will place greater pressure on both the government and private sector to initiate and implement creative solutions to educate, integrate and retain a rapidly changing and diverse working population.

In this context, training in banking services and finance as well as in financing rural activities is a very important tool. Banks are there to make money, but not in a risky way, and they require a different profile for success. The financial sector is looking for different leadership qualities. It's about how the business interacts with customers rather than innovation with products.

Key words: human resources, financial sector, banking, training

JEL classification codes: F36, G15, G32

The globalization of business, the changing demographics and the changing patterns of mobility are global trends who affect the financial sector. Engaging and integrating a global workforce means the cultural integration and clashes/unrest will continue to grow globally, at both societal and corporate levels. Talent shortages will continue to grow globally. A lot of studies are carried out in the field of HRM (Human Resources Management) over the last years. All of them are extremely important because the results and conclusion.

From September to December 2009, PricewaterhouseCoopers conducted its 13th Annual Global CEO Survey. The survey looked at the measures CEOs took in response to the global financial crisis, how they view the future business environment and what changes they are making to adapt their organizations. In total, 1,198 business leaders in over 50 countries were surveyed (*Managing people in a changing world Key trends in human capital a global perspective – 2010, Human Resource Services, PwC Saratoga*). "Companies worldwide are emerging from deeper cost-cutting than expected. In the 12th Annual Global CEO Survey, conducted as the financial crisis unfolded late in 2008, 26% of CEOs told they expected headcount reductions over the following 12 months. A year later, closer to half of respondents said they actually cut jobs and at least 80% of CEOs in each region of the world initiated cost reductions. In the latest survey, CEOs also told they would change a number of people management practices and processes as a result of the economic crisis. A majority of companies (79%) are intending to increase their focus and investment on how to manage people through change, which includes redefining employees' roles in the organization.

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The same number (79%) want to change their strategy for managing talent. And 68% will increase their investment in leadership and talent development as a result of the crisis. The scale of these anticipated changes suggests that, for whatever reason, existing people management practices did not support the business when the crisis hit. The CEO survey highlights three major human capital failures which were brought to the surface as a result of the downturn:

- Existing reward models are broken. Whether as a result of regulatory or public pressure, reward models are seen as not fit for purpose in many parts of the world. This is not just confined to financial services; the criticism of reward models can be seen across almost every sector. In addition, the heavy burden of pension and healthcare liabilities are crippling many otherwise successful organizations in the US and Europe.
- CEOs were unable to move talent around quickly when the crisis hit. This led to large-scale layoffs to save cash at one extreme, but also left crucial talent gaps at the other. Organizations will have to find more agile ways of deploying and reallocating talent to where it is most needed. Doing this while keeping employees engaged is key, with 75% of CEOs planning to invest in improving employee morale and engagement. As organizations move through recovery, those that underwent drastic headcount reduction now face the costly exercise of rehiring and reskilling as demand improves.
- Many organizations lack the key skills needed to operate and compete in the new emerging environment. For example – greater risk awareness, market adaptability, change management capability, responding to new customer demands. CEOs in many parts of the world also believe that governments have largely failed to supply a workforce with the right skills (57%). This is likely to support why 76% of CEOs plan to increase their investment in training and development".

Respondents to a study commissioned by KPMG International, give similarly mixed messages. About eight in ten (81 percent) respondents say that putting in place the most effective talent management strategy will be key to competitive success. Some six in ten (59 percent) believe that HR will grow in strategic importance. But just 17 percent maintain that HR does a good job of demonstrating its value to the business. Meanwhile, the forces of globalization, talent constraints and new technology are driving rapid change to the HR function. Fifty-five percent of survey respondents believe the metrics that define success in HR today will fundamentally change over the next three years ("*Rethinking human resources in a changing world*" - amcham connection, july/august 2013, prepared by KPMG) The study "Rethinking Human Resources in a Changing World" examines the nature of the challenges facing the HR function and its future direction. The report's main findings include the following:

- *Global workforce* - HR is struggling with the challenges of managing a global, flexible workforce. The global workforce has become increasingly integrated across borders while simultaneously growing more virtual and flexible;
- *Employee engagement* - Finding ways to engage with workers will help address the challenges of this global, flexible and remote workforce. Insights from interviewees for this report point toward improved employee engagement as the way to address many of these problems;
- *Streamlining through ICT* - Technology has already transformed HR and the application of data analytics will foster even more profound change. Sixty-nine percent of companies surveyed say it is more common for the HR function to provide web-based and/or mobile HR platforms (e.g. benefits, payroll) than it was three years ago; only three percent of respondents have cut back on these technology enhancements;
- *Data analytics* - The advent of data analytics – the most commonly cited area by respondents for IT investment in the next three years – will lead to the next technological quantum leap for HR;
- *Technology and economy* - These are the twin catalysts for HR transformation. Powerful technologies, emerging in times of heightened financial constraints, present a rare opportunity for HR to enact longoverdue reinvention.

As a conclusion, HR needs to:

- develop greater confidence, leadership and credibility, so that HR heads can deservedly insist on a place in strategic conversations at the highest levels;

- develop closer partnerships within the company, especially with line managers who will inevitably use technology driven HR services to play a greater role in employee management;
- recast its strategy so that it begins from a whole-business perspective and is aligned with the needs of the entire company, not just the HR function.

We can see the changes in the nature of worker profile in the Financial Sector:

- demographic shifts will continue and intensify: structural changes in the global population with profound implications for the composition of labor force and ageing populations across the globe poses a challenge;
- countries with high rate of youth unemployment have greatest difficulty in findings managers and employees with the right attributes - “lost generation”: people of 15-to-29 years old who are neither in education nor employment;
- changes in the education system to prepare an overwhelming population - technology transforms workforce composition and culture - eroding physical barriers in the workplace/ an increasing number of jobs may be conducted virtually (save on the costs of premises), direct impact on job creation, employees may work from a place of their own, making their physical presence less important, “the human cloud” – crowdsourcing employees possessing a wide range of skills and expertise, taking advantage of technology to perform a variety of tasks;
- globally, in countries previously dominated by either the agriculture or manufacturing sectors (e.g. China), the services sector grew more quickly against the agricultural sector;
- the global multinational as the new normal: expand operations at global level;
- temporary employment – the new normal;
- increase in the number of women entering the workforce;
- global migration and the great war for talent - limited cultural homogeneity within national workforce, due to substantial movement of populations domestically and cross-border (for example increased foreign population inflow into Germany);
- increased demand for tasks where employees have a comparable advantage;
- need for high – skilled university graduates;
- changes in the culture of the workplace

Financial Sector Companies will need to build partnerships with educational institutions and governments with the aim of ensuring an adequate pipeline of the skills required (technical, vocational skills or adults continuous education).

EXIT STRATEGIES IN THE EURO ZONE

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Abstract:

There is no easy exit out from the Convergence Economic Zone and Monetary Union (EMU), which means that both the Eurozone and the EMU are deficient due to lack of these criteria. It is a must that these criteria to be quickly invented. People have learned that nothing is eternal, immutable, and after several millennia of history had to know that when they do conventions for creating and recognizing an entity, especially for entry into this entity, they should propose criteria and output / lack of recognition of that entity.

Key words: Economic and Monetary Union, Financial Market, Currency Market

JEL classification codes: G1, G15

Introduction

The convergence criteria necessary for joining the Eurozone, part Economic and Monetary Union (EMU) are: a) inflation of State candidate to be no more than 1.5 percentage points higher than the average of the best performing countries in the EU; b) annual budget deficit of the state to join the euro zone must not exceed 3% of GDP; c) the cumulative budget deficit should not exceed 60 percent of GDP; d) the euro against the national currency does not vary by more than 15% in the two years preceding the changeover, which requires compliance mechanism of the European Exchange Rate II (EMRS II); e) nominal long-term interest rates to be more than two percentage points higher than those applied by the three EU countries with the best perform.

Description of the problem

The Euro was an experiment noble, but failed, says Robert Barro, a professor of economics at Harvard University and senior fellow at the Hoover Institution at Stanford University (USA), in an opinion explained in the Wall Street Journal: "In instead of wasting more money on expanding the system and develop even greater rescue funds would be better for the EU to consider the best ways to return to a system of individual coins." Until recently, the euro seemed destined to expand across Europe. This is no longer available. The European countries, which were remaining outside the Eurozone, do not seem to embrace the now the common currency. Seven eastern European countries that joined the EU the biggest "wave of enlargement" ever created - the Czech Republic, Hungary, Latvia, Lithuania, Poland, Bulgaria and Romania - have announced many years intention to review obligations It is responsible for adopting the euro. Euro can be removed in stages in the same way in which they gave up the individual currencies of countries that have adopted the euro. Speculation about the future of the Eurozone, in the context of sovereign debt crisis, faced by the member countries of this area sometimes reaches unprecedented levels. The main "candidates" for a possible exit from the Eurozone were, until now, Greece and Germany, the weakest and the most advanced European economies.

Preliminaries

Two countries of the Eurozone, the UK and Denmark, have explicit provisions "opt-out" to avoid the common European currency, and popular opinion was strongly manifested several times against joining the euro. In Sweden, which does not have a specific "opt-out" official but refused the ability to meet one of the requirements for membership, a survey in November 2011 on euro adoption was mostly negative (80% no, 11% yes, 9% undecided).

Fiscal and monetary crisis exists in EU countries was already shown in 2008 with the onset of the global crisis. The option of a monetary union without fiscal and political union, is an impossible dream. Currency ham is inevitably linked to a common central bank with the power of lender of last

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resort. This configuration creates important features of the Tax Union, as evidenced by the possibility of bankruptcy of state in 2009-2011 for Greece, Portugal, Ireland, Italy and Spain.

Policy response to the crisis every step has been to strengthen the monetary union - money loan, granted by the EU and IMF, ECB involvement and more tax EU's desire to influence fiscal policies of each government. A common currency that circulates freely in a free trade area, should lead ultimately to a centralized political entity.

EU states in great detail how the candidate countries can qualify to join the euro, but offers no recipe for exit or expulsion from the Eurozone. One possibility would be natural to start removing the least qualified members, to the lack of fiscal discipline or economic criteria.

Eusko Experiment

Eusko, the currency of Basques, "complementary" euro, designed according to its promoters to strengthen the local economy and promote Basque language and culture, was launched on 31 January 2012 in the French Basque Country.

According with Association Moneta Euskal (Basque currency), Eusko will allow "accelerating trade, relocation and reorientation of the economy," said during a press briefing held in Bayonne (southwest France), co-chairman of its Edme-Dante Sanjurjo. Euskal Moneta began to present the project in 2011 in various places in the Basque Country and launched a public consultation which ended with finding a name: Eusko. Eusko with a value of one euro will be changed to 40 homes exchange, across the French Basque Country, exchange house located generally in enterprises and to the craftsmen partners. Will can be used the secure banknotes of 1, 2, 5, 10 or 20 Eusko.

Herrikoa, a venture capital company in Bayonne specialized in local economic development, will guarantee "reserve fund" of Eusko made up of the volume withdrawn from circulation euro for each Eusko released. Euskal Moneta claims that he met with the initiators of similar projects both in France and in Germany, Bavaria, where transactions are made in "Chiemgauer". In these experiments, the goal is often the same: dynamization, the strengthening of the economic liason into a city or region. For Eusko, the Basque language dimension is added: partner companies will display bilingual inscriptions, and in return will receive free courses of Basque language.

Asked by Agence France-Presse in connection with Eusko, a spokeswoman for the Bank of France commented: "It's kind of bartering. The only currency that is legal tender is the euro".

German example

A better plan is to start from the top. Germany could create a parallel currency - new Deutsche Mark (D-mark) with a reported 1.0 per euro. The German government could guarantee that bondholders can convert German government securities in euro in new tools D-mark with a base a one-to-one to a fixed date, possibly two years. German private contracts denominated in euros will switch to the new D-mark in the same period. The transition period will provide the euro and the new D-mark circulates as parallel currencies. Other countries could follow a path to reintroduce their own currencies for a period of two years.

Germans still retain and use the Deutschmark even though Bundesbank, Germany's central bank, allowing them to always change the old currency into euros. Bundesbank calculations show that, 14 years after the adoption of the euro marks remaining in circulation equivalent to 6.6 billion euros. Deutsch mark, that are for some adults, but almost unknown for many children still can be changed into euros at the rate fixed in 2001. The Bundesbank official, recalled of that fact in December 2015, forced by a survey conducted in November which establish that 54 % of residents have home banknotes in Germany and, especially, old coins.

The official rate of the German central bank is 1.95583 marks per one euro and marks can be exchanged at the Frankfurt headquarters or regional headquarters of the bank.

Greek model

During the debt crisis, Greece was an obvious candidate for exit from the Eurozone, but instead of expulsion, the EU's response has been to provide a bailout sufficient to dissuade the country to leave the euro. However, after several years of consumption Greek crisis, truths are revealed...

Thus, in early 2016, the former finance minister of Greece Yanis Varoufakis said in an interview that the country's Prime Minister Alexis Tsipras asked to develop a plan to set up a parallel currency in Greece where it is not. It could reach a bailout agreement with creditors country. Varoufakis also said that Tsipras was thought to adopt Plan X, to introduce a parallel currency, but he was advised not to follow this path by Greek Deputy Prime Minister Yannis Dragasakis.

Varoufakis talked about alternative sources of funding requested by the Greek government at the time. He said he opposed funding from Russia desired by some members of the cabinet. Varoufakis showed how China was willing to sign an agreement to invest in Greece, but the deal was abandoned after a phone call from Germany.

The Italian example

In turn, whenever he had the opportunity, through the voice sound of heads of parties - Cuias was the Northern League or her prime ministers - one being Silvio Berlusconi called for a New Pound, but with parity against the euro.

If the other member countries, from the Euro Zone, follow these trends, the disappearance of the euro at a time to sow at a time with the disappearance of the 11 European currencies, taken individually, from 1 January 2002, when it was introduced effectively into circulation euro coin.

A key issue in the return to national currencies of the countries in the Euro zone current is to avoid the drastic reduction in value of government bonds for the weak members of the Eurozone. The issue that prompted massive intervention, official market of the ECB on a "colleague" its US - Federal Reserve (Fed) from 2015 and the measure which is to pump money market (so-called policy of "quantitative easing ") was required by actual and potential losses in the value of government bonds from Greece, Italy and other countries. Governments and financial markets worry that these depreciations will lead to bank failures and financial crises in France, Germany and other countries.

Conclusions

A new - restored or rebooted - system of national currencies of the member countries of the Eurozone will be more credible.

The return to national currencies of the member countries of the Eurozone will increase the value of all bonds of the countries concerned, which have a strong personal credibility and would not have to take care of its weak neighbors. Even bonds of Italy and other weak countries are likely to increase in value because individual credibility concerns will be offset by improved functioning of the whole system.

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PROSPECTS FOR TRIGGERING THE CRISIS AND RELATED INVESTMENT OPPORTUNITIES

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Abstract:

Crisis occurred, is occurring and will occur. Each crisis comes with threats and opportunities. The main problem is the difficulty to predict or to anticipate them. Never less, it is possible to not repeat passed mistakes. Accurate forecasting is difficult and today we don't have enough tools to make exact forecast. It is almost impossible to find a model of investment opportunities. During the ongoing EU integration process of Republic of Moldova, people realize that EU is not perfect. It is noteworthy to remember some historical facts of the country. Republic of Moldova took part of a very unequal Soviet Union and the fear of a similar organism is still present in society spirit. In the same time, the opportunity of solving some problems together with other European countries cannot be neglected.

Key words: remittance, forecast, econometrics

JEL classification codes: JEL: C53, JEL: F24

Introduction

We are living in a global society, full of crises generating events. From an epistemological point of view, the evolution of today phenomena (social, economical or political) is not linear any more, but is achieved through a succession of crises. The word "crisis" comes from the Greek κρίσις (KRISIS) which means decision, "turning point", a situation requiring a decision. It should be also mentioned that the word "crisis" is translated in Chinese by two words that paradoxically have two opposite meanings: the first meaning is crisis itself (danger) and the second is "opportunity" (Greene GJ, Lee M, Trask R, Rheinscheld J., 2000). In this way a crisis could be considered as an opportunity. This is the desired outcome of a crisis, seen as an opportunity and an integral part of a continuous process of development.

During a crisis period we are in a permanent state of fear, anxiety and uncertainty about the future. Our instinct of defense and conservation urges us to behave sometimes irrationally and even increase this volatility. All of us have a cognitive capacity of filtering the information and understanding phenomena in our own way, thus transposing it in a certain behavior related to the market. Consequently crisis is a period that offers to individuals and entrepreneurs a broad horizon of new possibilities. Technologies are constantly changing. They offer both possibilities and desires to undertake new businesses and provide solutions for all businesses.

Crisis is a subject one can discuss a lot about, but it is clear that its consequences could not be exact foreseen, thus deteriorating economic situation in most countries. Establishing the real causes that led to the outbreak of the financial crisis, it is one of the objectives of many economists, each trying to give a rational explanation of what had happened.

The recent financial crisis in Republic of Moldova confirmed what theoretical and empirical studies have already shown. Different types of financial crises are hardly distinguished, they just coexist. Some studies can be found (Bauer, C., Herz, B. și Karb, V., 2007) that make a distinction between pure currency crises, external debt crises and twin crises in terms of sequence of events and economic consequences.

The present article analyzes prospects for triggering the crisis and related investment opportunities. It is focused on Republic of Moldovan authorities' unclear decisions. In today EU integration people realize that EU is not perfect. It is noteworthy to remember Moldova's history. The country took part of a very unequal Soviet Union and the fear of a similar organism is still present in society mind. Some young persons, pushed by mistakes of older generations, change totally their pro - European views. If before Moldovans were lost in transitions, now Moldovans are lost between countries. The article is not intended to provide a particular set of formulas

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prescriptions, but it is intended to help readers have some more information about this phenomenon.

Description of the problem

For many years, crisis in Republic of Moldova did not get a lot of attention. Journalists, policy makers, and economist have tried to explain the rapid changes. Some have provided well-reasoned analyses that carefully identify and weight the many contributing factors. Others have tried to reduce the complex story to a sound bite, often to make a political point. A lot of information is available, but it is necessary to sort it. It is evident that crises and frauds occurred in many countries. So, one could learn from others crises, mistakes and success. One way is to analyze them according to an historical approach. Literature review enables to identify most recent crisis, for example:

1992-1993 Black Wednesday;

1994-1995 Economic crisis in Mexico;

1997-1998 Asian Financial Crisis;

1998- Russian financial crisis;

2000-2001 Turkish economic crisis;

2000 decline in economic activity in developed countries;

1999-2002 Argentine economic crisis;

2001 dot-com bubble;

2007- 2010 subprime to global financial crisis.

There is a lot of literature covering issues from the beginning to the end of these crises. Thus, despite other problems, it is easy to identify that there was too much reliance on mathematical models applied to economy. CDO as the most famous model for pricing structured credit securities is the Gaussian copula model. A common fallacy is that the marginal distribution and correlation matrix are sufficient for describing the joint distribution of multivariate distribution. But this hypothesis has some limits. Correlation only measures linear dependence. If we simulate points from the bivariate normal and Meta-Gumbel distributions, bivariate distributions have standard normal marginal distributions, and in each case the correlation is the same. But Meta-Gumbel distribution is much more likely to anticipate large joint moves. Some limits of CDS are mentioned in Arnold Kling 2008 articles, Idiosyncratic risk, systemic risk, (Arnold Kling, 2008) etc.;

2008-2011 Icelandic financial crisis was a major economic and political event in Iceland that involved the default of all three of the country's major privately owned commercial banks in late 2008, following their difficulties in refinancing their short-term debt and a run on deposits in the Netherlands and the United Kingdom. One problems besides others was that relative to the size of its economy, Iceland's systemic banking collapse was the largest experienced by any country in economic history. As in recent crisis in Republic of Moldova, the Central Bank of Iceland found itself, not well prepared, unable to act as a lender of last resort during the crisis, further aggravating the mistrust in the banking system. The crisis led to a severe economic depression in 2008–2010 and significant political unrest.

2010 European debt crisis. Some causes are only connected to monetary reasons and not a fiscal union, banking growth or competitiveness problems and they could vary from country to country, because each country has its own law, traditions, language. Even if a lot of literature exists, is good to make an analysis of drop in exchange rates from 1.6 to 1.1. European crisis also showed that some countries are more close connected than others. As an example one can consider how much money the German government saved as a result of the Greek/ Euro zone crisis. It has been clear that crisis-driven capital inflows to Germany have led to higher demand for government bonds. As a result prices went up and yield down. If you manage a debt stock of about 75% of GDP it seems clear that the continuous roll-over of parts of that stock and the issuance of new debt will be conducted under very favorable circumstances. According to calculations of the reputable Leibniz Institute for Economic Research in Halle (IWH) the German government has saved more than €100bn since 2010. The first paragraph of the study basically says it all: "This note shows that

the German public sector balance benefited significantly from the European/Greek debt crisis, because of lower interest payments on public sector debt. This is due to two effects: Firstly, in crisis times investors disproportionately seek out safe investments ("flight to safety"), bidding down the returns on safe-haven assets. We show that German bunds strongly benefited from this effect during the Greek debt crisis. Secondly, while the European Central Bank (ECB) monetary policy stance was quite close to an "optimal" monetary policy stance for Germany from 1999 to 2007. During the crisis monetary policy was too accommodating from a German perspective, due to the emerging disparities across the Euro area. As a result of these two effects, our calculations suggest that the German sovereign saved more than 100 billion Euros in interest expenses between 2010 and mid-2015. That is, Germany benefited from the Greek crisis even in case that Greece defaults on all its debt (a total of 90 billions) owed to the German government via diverse channels (European Stability Mechanism [ESM], International Monetary Fund [IMF], or directly). (Geraldine Dany, Reint E. Gropp, Helge Lüttke and Gregor von Schweinitz, 2015) Two things are very interesting to bear in mind in this context. Firstly, as the study notes, even if there is a full write-down of all 'rescue' loans, the overall balance is still positive for the German government. And secondly, the misguided fiscal policy aim of a balanced budget ('black zero') has been achieved as a result of the Euro zone crisis rather than taking tough political decisions. In essence, this is yet another example that shows how much misunderstanding there is about who pays and who benefits from the multiple crises we are currently living through.

The Russian financial crisis in 2014 is also well described. A lot of information covering it from the start to the end exists, underlining authorities policies and decisions, sanctions, panics, oil and gas prices. And the answers from Russian authorities with impact inclusive for Moldovan people.

More recently, in 2016, British withdrawal from the European Union (also referred to as Brexit) was a political goal that has been pursued by various individuals, advocacy groups, and political parties from across the political spectrum since the United Kingdom joined the European Economic Community in 1973. The UK treasury has estimated that being in the EU has a strong positive effect on the trade and as a result the UK's trade would be worse if it left the EU. The International Monetary Fund forecasts reduced world economic growth following Brexit and greater reductions in UK economic growth. Exist a lot of available information that supporters of withdrawal from the EU have argued that the cessation of net contributions to the EU would allow for some cuts to taxes and/or increases in government spending. However, Britain would still be required to make contributions to the EU budget if it opted to remain in the European Free Trade Area. The Institute for Fiscal Studies notes that the majority of forecasts of the impact of Brexit on the UK economy indicate that the government would be left with less money to spend even if it no longer had to pay into the EU. British government argued that if Britain left the EU, the EU would not impose retaliatory tariffs on British products, pointing out that the EU needed a trade agreement with Britain as German car manufacturers wanted to sell their cars to the world's fifth biggest market. James Dyson argued that it would be self-defeating for the EU to impose retaliatory tariffs on British products because if the EU imposed a tariff on Britain, Britain would impose a retaliatory tariff on the EU claiming that Britain bought 100 billion pounds' worth of the EU's goods and sold 10 billion pounds' worth of Britain's goods. However, proportionally, the government responded that "EU exports to the UK are worth 3% of EU GDP, while UK exports to the EU are worth 13% of UK GDP – four times more." British government suggested laws to be passed in order to follow the official Leave campaign. It concern Finance Bill (to scrap VAT on tampons and household energy bills), Asylum and Immigration Control Bill to end the automatic right of EU citizens to enter Britain, National Health Service; European Union Law Bill and Free Trade Bill (to negotiate with non-EU countries). From free available information is evident that some nations and cities may have benefits from Brexit. After the vote, several global banks quickly began the process of shifting some operations out of London and into other European financial centers, as example including Frankfurt, Paris, and Dublin, in order to establish new legal domiciles in Europe in case London headquarters are no longer legally sufficient to serve the rest of the continent, while other European financial centers may benefit. Is evident the risk of economic prospects, fiscal and external performance, and the role of sterling as a reserve currency exists. Economic analysts have pointed out that the UK, as a fiscally and monetarily sovereign nation, retains the ability to service or retire, at any time, any part or all of the state debt that is denominated in the national currency, hence, there is no risk whatsoever of defaulting on that part of its debt.

Methodology and data sources

As in recent crisis in Republic of Moldova, a lot of information remains unknown or even unknowable and exist lack of exact data., This article is based on historical and literature review work. Thus, one manner is to use historical approach in order to use Generalized Linear Mixed Model, an expand to the generalized linear model in which the linear predictor contains random effects in addition to the usual fixed effects. This idea was extended to non-normal data or Mixed linear Models, a statistical model containing both fixed effects and random effects. These models are useful in a wide variety of disciplines in the physical, biological and social sciences. They are particularly useful in settings where repeated measurements are made on the same statistical units (longitudinal study), or where measurements are made on clusters of related statistical units. Because of their advantage in dealing with missing values, mixed effects models are often preferred over more traditional approaches such as repeated measures ANOVA. At the same time many companies preferred analysis of variance (ANOVA) besides others methods.

After reviewing all crises is easy to understand that in a financial crisis process authorities could be involved in different ways. There are similarities and similar steps in case of financial crisis related to contagion effect, moral hazard, bubbles, bad regulation, panics etc. There are Basel rules, and work done by many economist about regulation. For example, Jean Tirole work on why financial intermediaries, such as banks and insurance companies, need to be regulated at all. Good regulations represent a useful tool for dealing with bubbles. Republic of Moldova do not have such a regulation. In comparison with its neighbor Romania where exist more regulations.

Some persons are learning from history, some ones not. One answer to bubbles was cooperative form of organization. But if to use historical approach bubbles was and will be in different sector of economies. Cooperative form of organizations in developed countries even exist, for instance, Sweden generally managed better crisis and threats and anticipated possible bubbles. A relative recent Sweden economic institution estimation, indicates that a short future bubble is possible.

Historical analysis of mathematical models that performed poorly before and during the financial crisis from 2007-2010 financial crisis in US alerts that history is set up to repeat itself. According to Bloomberg News, a bespoke tranche opportunity is just a fancy new word for what was formally known as a collateralized debt obligation (CDO). For years, investment banks put together packages made up of thousands of mortgage loans to sell them to the highest bidders, and buyers happily picked them up because they promised high returns. During the mid-2000s, these CDOs were increasingly filled with bad loans, as subprime loans, that were incorrectly given stellar ratings and peddled off as good investments. As risky homeowners failed to pay their mortgages, the value of the CDOs collapsed, making investors unable to pay back the loans they borrowed to buy the CDOs in the first place. This triggered a ripple effect that caused the U.S. economy to spiral. After the 2007-2008 financial crash, CDOs had a bad rep, which is what led to a rebranding of sorts. Thus CDO is making a comeback -- it's just being called differently: a bespoke tranche opportunity.

Recent financial crisis in Republic of Moldova, (that reduced purchasing power of individuals and translated into lower consumer spending) and it European Integration process consequences is analyzed in an previous article. (Gherbovet Sergiu, 2016) At the same time, without the Kroll report (a company that have information from most important world banks) and help, it could be obvious to anticipate that after financial crisis usually an economic crisis comes followed by a political one and it could be expected, that stability after Political aftershocks of financial crises can be severe. (Howard Davies, 2015) Recent events in Europe provide ample evidence that the political aftershocks of financial crises can be severe. The dataset that covers elections and crises in 20 advanced economies going back to 1870 to systematically study the political aftermath of financial crises. Far-right parties are the biggest beneficiaries of financial crises, while the fractionalisation of parliaments complicates post-crisis governance. These effects are not observed following normal recessions or severe non-financial macroeconomic shocks. (Manuel Funke, Moritz Schularick, Christoph Trebesch, 2015).

Results obtained

As long as Republic of Moldova, an independent state will wait that somebody will solve all its problems, so long problems will appear. Each state serves countries interest manipulating

sometimes the laws. It is evident that IMF as a very important financial institution will not solve all the problems of a country. As an example, when the Swiss National Bank decided to lift the floor on the Swiss franc, IMF was left out of the loop many impact of this decision, one for example was necessary intervention of Central Bank of Romania for people that has credits in francs. Exist different currency wars in the world.

Econometric models have proven to be good for economic analyses but not perfect in predicting crises, therefore, alternative approaches as historic, behavior approach, theoretical models, system dynamics models, analysis, experiences, policies etc. are also needed. Not necessary to use mahalanobis distance to understand that at the moment Republic of Moldova is an outlier of European Union, a weak, captured state.

Each crises comes with opportunities and threats. Statistics is an important tool for analysis, but too much statistics applied to economics is not always the best solution. Econometric analysis (e.g. endogeneity problem – GARCH) is useful, but economics is not only statistics. Economist who are using statistical analysis can come to opposite conclusions than an economist analyst using cause-and-effect methods.

Research gives a certain advantage for a certain period, despite on other fields of sciences, so much work has already been done in economics. There is almost impossible to make some innovation, but it is possible to make economic analysis and to read at least the most visible work that already exist as example analysis of consumption, poverty, and welfare; analysis of market power and regulation; empirical analysis of asset prices. It is very important to know the work performed before, . Even new crisis comes with news, sometimes to solve them a very advanced sciences knowledge is not needed. Extremely simple situations exist as work in libraries with literatures Exist already penalties more serious as in case of 2009 manifestations against the Communist Party, as for example bad impact of economic crisis on demographic processes in Republic of Moldova, as example economic crises and fertility, economic crises and mortality, economic crises and migration. Where the direction of the effect is clear, the size of the crisis effect is not. Even the story is not quite that simple, start with simple question: How large was and will be the impact of the crisis ? If there is considerably uncertainty about future. The financial crisis in Republic of Moldova is a reminder that the economy holds many surprises. We will continue ? New persons can change the results, but the basic logic would still apply. Some results already are dramatic.

Prospects for triggering the crisis in Republic of Moldova are the relationship between socioeconomic status and population mutual evolution. Socio-economic situation has a direct effect on the dynamics of demographic processes. Also, the workforce is a key factor in the production process and, therefore cause economic recovery. If poor socio-economic situation in the previous period resulted in damage to key demographic indicators in anticipation of medium and long-term impact of the demographic factor on the economy will be more pronounced than vice versa relationship (Gagauz Olga, Penina Olga, Tabac Tatiana, 2016). Understanding of what happened and why may affect how we spend and invest our money, and determine the types of policies that make sense. Even if it is not possible to develop a perfect forecast of future it is helpful to identify some warnings signs. Given the size and complexity of the world, the list of forces that determine investment opportunities is incredible long. This article is not intended to examine every aspect of the issue, but instead focus on a few important factors, one for example is that usually related investment opportunities of crisis come from the fact that many assets are on sell. The Moldavian bank fraud management of financial crisis made to be on sell many assets.

To conclude about related investment opportunities is that despite some advances (e.g. diversifications or Capital asset pricing model - a model used to determine a theoretically appropriate required rate of return of an asset, to make decisions about adding assets to a well-diversified portfolio, etc), a perfect model does not exist, never fell in a model. Rules of thumb are helpful guides, as long as one understands their limitations. Economists argue about whose model is better for analyzing, but usually the biggest differences in results are not only because of the models used but most because of the assumptions made. If it were possible to make an exact model or formula, its conclusions would be rule dependable and it could also be a simple matter of coincidence. Consequently, a scientific exact model or formula cannot exist. People behave irrationally, too. Consequently is imposible to make an exact formula that are dealing with corruption, emotions criminalities, etc. In this way, there is no generally known exact mathematic or

logical academic formula or model that has been continuously successful. Rather than to predict what will actually happen, is one lesson readers should take away, it is that analysts who say they know exactly formulas are misleading their audience and fooling themselves. By focusing instead on innovation and factors that will drive future changes or very complicated statistics that miss important aspect, the goal is to provide one extremely simple tool needed to understand a fast-changing world as work with already existed library literature and good economic analyses that was done already.

Conclusions

Of course that nothing is simple, so it should not be surprising that prospects for triggering the crisis and related investment opportunities is often much more complicated than described so far. Crisis has had wide-ranging impacts, and is set in motion a series of events that will be playing out for years to come. But, who do not learn from history are doomed to repeat it. Not all the work that was done by world economist can be applied to realities of Moldovan economy, (e.g., the fact that Federal Reserve was not Lehman's supervisor, in Republic of Moldova is not a Goldman Sachs or AIG model of business, but insufficient attention to the stability often occurs). In general EU are not imposing a pro-European or any kind of future to the partners. Moldova not only lost in transitions, but a young generation of Moldovans are lost between countries. Next generation in Republic of Moldova have to build a new country and to serve the country national interests, without any repeated mistakes: frauds, stolen money or corruption. Challenges of European Integration come with new opportunities and threats. New better reforms must be adopted by future generations of politicians. Some agreements and unions are not working very well, some amelioration could be done in this field too, and is still work to be done. Economics analysis is not only good mathematical models. Very advanced mathematical analysis, good academic tool, could be difficult to be explained to some persons in Republic of Moldova. At the same time, a lot of persons in Republic of Moldova exist that are enough advanced in the field, but some authorities decided that a Czech or Swiss or other formula is better than a Moldovan one. Government policies in one country have implication in other countries

Recent Brexit could be an opportunity or a threat, but for the young generation of moldovans which feel cognitive dissonance, a mental stress between two theories appears. It is not clear if the new EU agreement will be a very theoretical one without any possibilities to improve the existing situation or a reality-adapted one. In mathematical terms is not clear if EU agreement will be a stochastic process or game theory? It is noteworthy to remember the history of the country, as Republic of Moldova took part of a very unequal Soviet Union and the fear of a similar organism is still present in minds. Using some abstraction and philosophy is important to mention, as long as European Union agreement will come to such an agreement that moldovans first must to build Thomas Reuters building and after pushed to send articles indexed in Thomas Reuters database so long this agreement will be with a lot of questions! Behind this types of agreements and the consequences of such of agreements are impacts for too many persons. As recent Brexit, some beds of society in Republic of Moldova is tired of putting penalties (even exist a lot of help from EU) and can take action. Almost any agreement results in winners and losers, and the same can be said for most domestic government policies. Government maintain a wide range of policies that affect the economy. Likewise, many policies have one effect in the country operating the policy, and the opposite effect in other countries. Moldovan government policies is incomplete and oversimplified, is not simply the best, but should be clear that governments have complicated and contradictory effects. Hopefully in the end it is a prudent way, as the opportunity of solving some problems together with other European countries cannot be neglected, for example the problem of big gas subsidies in Transnistria from Russia side making more competitive some products that need gas to be made, and is unclear who will pay for the gas in future.

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ROMANIAN NUTS-2 REGIONS: EU CONVERGENCE AND THE ROLE OF FDI

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Abstract:

This paper shows the progress Romania's NUTS-2 regions achieved in reducing the gap to the average GDP per capita in the European Union and the role of FDI in this process. By using the elastic net methodology, the paper identifies the main factors driving foreign direct investment (FDI) in selected Central and Eastern European NUTS-2 regions. It finds that high GDP and GDP per capita in a region increase attractiveness for FDI. Large FDI stocks contribute, on the other hand, to rising regional GDP per capita. The paper identifies key fields that need support from policy makers in order to enhance FDI and foster convergence.

Key words: NUTS-2, growth, GDP, elastic net

JEL classification codes: O11, O18, H70

1. Introduction

The economic performance of a country is determined by the development of the regions it is composed of. Many middle-income and also some high-income countries show large economic and social disparities on the regional level. In the OECD countries as a whole, more than 40 % of economic growth originate in only 10 % of the regions. In this realm, Romania is no exception from the rule.

Since its accession to the European Union at the beginning of the year 2007, Romania passed through three major development phases: during the years 2007-2008, Romania experienced a boom mainly driven by private consumption fuelled by bank credit, while internal and external imbalances accentuated; during 2008-2010 Romania was affected by the financial and economic crisis, which lead to a severe GDP contraction; since 2011 Romania resumed its convergence process, however at a moderate pace compared to the pre-crisis period.

Despite challenging times, Romania made significant progress in reducing its income gap vis-à-vis the European Union (EU). Its average GDP per capita continued to converge towards the EU average. The catching-up process of Romania was associated with profound internal and external liberalisation and deepened integration in the EU production and technology networks.

In Romania, more than a quarter of its GDP is generated by the capital city, Bucharest, and the region surrounding it – Bucuresti-Ilfov. This region is characterized by a high population density, accounts for about 10 % of the Romanian population, and features an over-proportional share in the capital stock and educated workforce of the country. By contrast, other NUTS-2 regions, such as Sud-Vest Oltenia and Vest contribute by less than 10 % to the national GDP.

A closer look at the eight Romanian NUTS-2 regions reveals that regional performance was quite differentiated among them and the economic and social disparities still remain substantial. When GDP per capita is taken as a statistical approximation of economic development and productivity, Romanian NUTS-2 regions show a striking picture. In the best performing region, Bucuresti-Ilfov, GDP per capita is almost 4 times as high as in the poorest performing region, Nord-Est.

During the past 20 years foreign direct investment (FDI) has played an important role in Romania's economic restructuring and regional growth. However, FDI has contributed little so far to reduce regional disparities which have even increased. *"All in all it can be argued that there are no signs that FDI contributed to reducing the income and productivity gaps within the countries. FDI tend to cement the development gap between stronger and lagging regions."* (Koko and Gustavson, 2004).

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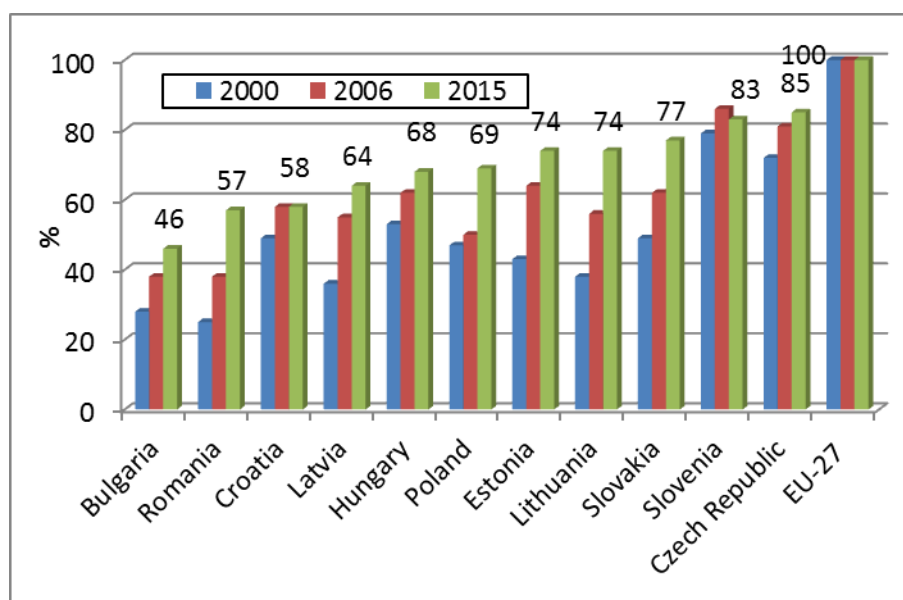
An empirical analysis of the growth-generating economic activity on the regional level requires the availability of relevant regional indicators. Compared to data on the national level, the availability of regional data is much more limited. This is also true for data regarding FDI. Moreover, national accounts data are published with sizable time lags which may amount to two to three years. For this article, we draw upon data provided by the European Commission's Statistical Office, Eurostat and data on FDI provided by the central banks and national statistical offices of the considered countries.

2. Convergence, regional disparities and FDI

Since its accession to the European Union Romania has undergone major economic and social change. In particular, structural change was the result of an adjustment to the new environment induced by the financial and economic crisis. The crisis changed Romania's growth model fundamentally. In the period preceding the crisis strong growth was primarily driven by private consumption and investment, fuelled by extensive crediting with money from abroad. In the aftermath of the crisis, economic growth became increasingly driven by exports and investment in infrastructure with co-financing from the European Union.

At the same time, Romania has made considerable progress in the convergence process. Between 2006 and 2015 GDP per capita, measured in purchasing power standards (PPS), advanced in Romania by 19 percentage points. Compared with the other ten new EU member states (NMS) in Central and Eastern Europe (CEE), Romania ranked together with Poland on the first place regarding its performance in convergence. Quite successful in reducing the gap to the EU-average were Lithuania with 18 percentage points, Slovakia with 15 percentage points, and Estonia with 10 percentage points. During the same period, GDP per capita in the most advanced countries among the NMS, Slovenia and the Czech Republic, showed a contraction of 3 percentage points in Slovenia and a rise of only 4 percentage points in the Czech Republic, respectively (Figure 1). Croatia registered in the same timeframe a stagnation. Also in Bulgaria, Latvia, and Hungary progress was only modest with values below 10 percentage points.

Figure 1 - GDP per capita in PPS, EU-27 = 100

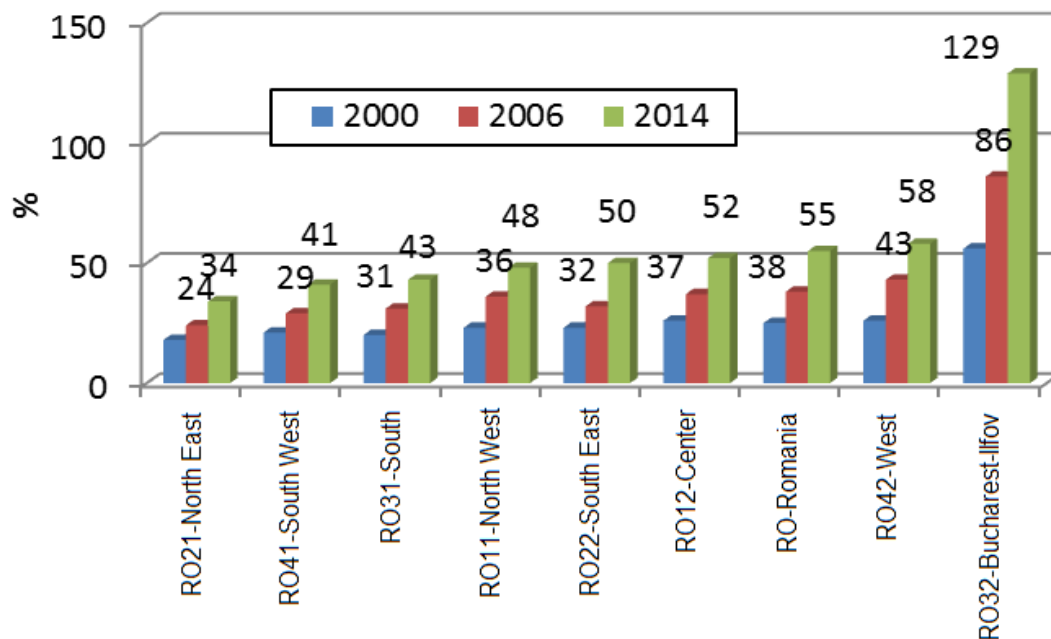


Source: Eurostat

Aggregated data at country level, however, hide deep regional disparities. By contrast, a regional analysis for Romania shows that the region Bucharest-Ilfov accounted for most of the progress in the convergence process. Between 2006 and 2014 GDP per capita in PPS advanced by 43 percentage points in this particular region. In the other Romanian NUTS-2 regions, except for the region Sud-Est, GDP per capita in PPS increased by values ranging between 12 and 17 percentage points (the Romanian average). The lowest value was registered by the region Nord-Est, at the Eastern border, with 10 percentage points, the most populous region in Romania and predominantly rural (Figure 2). Due to their peripheral position border regions usually display a lower GDP per capita compared to the country average (except for border regions that include the

capital city, like Bratislavskij region in Slovakia). Urban regions like Bucuresti-Ilfov, by contrast, show a high concentration of human and physical capital and thus tend to grow faster than the rural regions.

Figure 2 - GDP per capita in PPS in Romanian NUTS-2 Regions, EU = 100



Source: Eurostat

High GDP concentration and fast growth in urban centers is due to “agglomeration” advantages. Businesses may benefit from lower transport costs as they are closer to their markets, they may take advantage from learning from competitors, as they are closer to information sources and the availability of skilled and more productive workers is higher. Furthermore, the overall productivity of the regional economic system rises in such urban agglomerations due to more intensive use of infrastructure by a larger number of firms (OECD, 2007).

FDI has played a major role in the convergence process. According to *Vernon’s product cycle theory* (Vernon, 1966) new products and technologies are primarily developed in the advanced countries. During the mature stage of a product its production is relocated towards countries where production costs are lower, such as Romania and the other NMS. Thus, these countries adopt the technologies created in the countries of the investors. Furthermore, the investors may import the goods produced in the countries of the adopters or export them to third countries. During 2006 until 2015 the stock of FDI almost doubled in Romania. The share of industrial production in FDI stock remained almost unchanged at about 45 %. In 2015 FDI companies in Romania contributed by about 70 % to Romanian exports and over 60 % to Romanian imports, thus propelling the cross-border division of labour.

The manufacturing of petrochemicals and chemicals, vehicles, electrical equipment, metallurgical goods, wood products and textiles attracted most FDI. Regionally, FDI is highly concentrated in Bucuresti-Ilfov with almost 60 % of the investment stock, a trend which is common to the most European capital cities. Regions like Centru and Vest follow with shares ranging between 8 and 9 % of the FDI stock, while the border region Nord-Est attracted only 2.6 % of the total Romanian FDI stock (Table 1). The place of these regions in national ranking regarding the FDI stock attracted till 2015 coincides with the place they occupy regarding the regional GDP per capita.

Table 1

Stock of Foreign Direct Investment in Romania (million euro and %)

	2006		2015	
Romania:	34512	100.0	64433	100.0
București-Ilfov	22205	64.3	38243	59.3
Centru	2559	7.4	5831	9.0
Vest	1948	5.6	5237	8.1
Sud	2228	6.5	4626	7.2
Sud-Est	2653	7.7	2869	4.5
Nord-Vest	1570	4.6	3793	5.9
Sud-Vest	938	2.7	2172	3.4
Nord-Est	411	1.2	1662	2.6

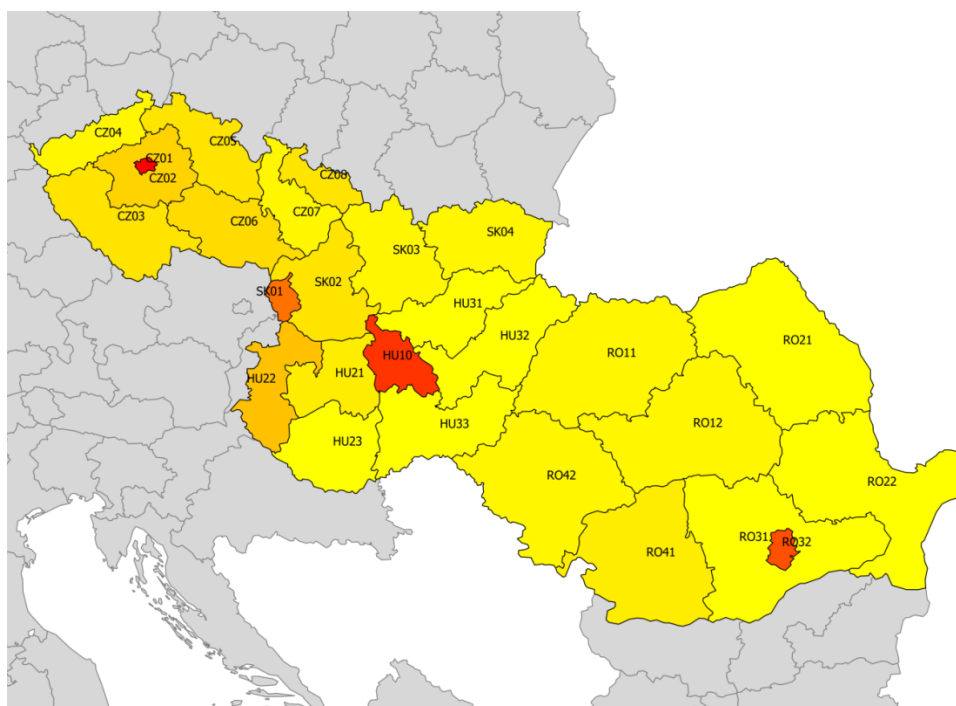
Source: National Bank of Romania

3. Main Drivers of Regional FDI: Methodology and Data

The economic attractiveness of a region can be best described by its ability to attract foreign direct investment (FDI). When using this concept, one has to differentiate between outward FDI (domestic companies invest in a foreign country) and inward FDI (foreign companies invest in the observed country) as well as between flows (the annual stream of investments) and stocks (the aggregated volume of all past investments minus depreciation and repatriation). The following analysis uses data on inward FDI stocks since flows are usually too volatile. Stocks are in fact a moving, weighted average of flows depreciating over time.

The analysis includes the NUTS-2 regions of the Czech Republic (CZ01 Praha, CZ02 Střední Čechy, CZ03 Jihozápad, CZ04 Severozápad, CZ05 Severovýchod, CZ06 Jihovýchod, CZ07 Střední Morava, CZ08 Moravskoslezsko), Slovakia (SK01 Bratislavský kraj, SK02 Západné Slovensko, SK03 Stredné Slovensko, SK04 Východné Slovensko), Hungary (HU10 Közép-Magyarország, HU21 Közép-Dunántúl, HU22 Nyugat-Dunántúl, HU23 Dél-Dunántúl, HU31 Észak-Magyarország, HU32 Észak-Alföld, HU33 Dél-Alföld), and the NUTS-2 Regions in Romania (RO11 - Nord-Vest, RO12 - Centru, RO21 - Nord-Est, RO22 - Sud-Est, RO31 - Sud - Muntenia, RO32 - Bucuresti - Ilfov, RO41 - Sud-Vest Oltenia, RO42 - Vest) as well as the FDI stock data of the year 2011. Since there are only 27 NUTS-2 regions (data points), the results should be interpreted as indicative. Figure 3 shows the distribution of FDI in the countries under consideration, a darker colour (e.g. RO32, HU 10, SK01, CZ01 etc.) indicates a better performance in attracting FDI.

Figure 3 - Regional FDI



Source: National Statistical Offices and National Central Banks of individual countries.

Due to the scarcity of regional data in some countries, the analysis uses eight different properties of a region (explanatory variables) (Table 2):

- Foreign direct investment, inward stocks;
- Population;
- Gross regional product (GDP/GRP);
- Gross regional product per capita, own calculations;
- Population aged 25-64 having tertiary education;
- Human resources in science, technology and innovation (persons being educated);
- National annual road freight transport;
- A dummy variable for regions containing the capital city.

Table 2

Driving Factors of FDI

	FDI 2011 in mil. €	Population	GRP in mil. €	GRP 1000 € / capita	% of pop. tertiary edu- cation	% of pop. being educa- ted as HRST	National ann. road freight transport	Region con- taining capital
cz01 Prague	48,721	1,249,026	38,634	30.9	37.5	39.0	21,711	1
cz02 Central Bohemia	9,875	1,247,533	15,795	12.7	18.6	19.4	45,915	0
cz03 Southwest	6,332	1,209,506	14,978	12.4	17.0	18.3	42,899	0
cz04 Northwest	4,140	1,143,834	12,850	11.2	11.9	12.4	34,547	0
cz05 Northeast	6,171	1,509,758	17,647	11.7	15.0	16.2	40,507	0
cz06 Southeast	8,118	1,666,700	21,362	12.8	20.8	19.6	39,347	0
cz07 Central Moravia	3,136	1,233,083	14,023	11.4	15.9	16.9	32,117	0
cz08 Moravskoslezsko	6,707	1,247,373	14,985	12.0	16.2	18.0	31,481	0
hu10 Central Hungary	38,454	2,951,436	47,021	15.9	32.1	34.0	39,593	1
hu21 Central Transdanubia	4,578	1,098,654	9,243	8.4	18.0	19.6	25,100	0
hu22 Western Transdanubia	13,472	996,390	9,618	9.7	18.2	19.4	20,661	0
hu23 Southern Transdanubia	981	947,986	6,222	6.6	18.0	20.9	15,553	0
hu31 Northern Hungary	1,831	1,209,142	7,087	5.9	15.7	18.3	17,163	0
hu32 Northern Great Plain	2,551	1,492,502	9,126	6.1	17.2	20.3	17,745	0
hu33 Southern Great Plain	1,962	1,318,214	8,269	6.3	18.7	21.4	19,339	0
ro11 North-West	3,987	2,719,719	14,079	5.2	13.5	11.2	28,956	0
ro12 Centru	2,970	2,524,418	14,028	5.6	13.0	10.9	19,527	0
ro21 North-East	2,454	3,712,396	13,234	3.6	12.5	10.2	17,680	0
ro22 South-East	1,806	2,811,218	13,400	4.8	11.6	9.5	21,786	0
ro31 South Muntenia	1,627	3,267,270	15,716	4.8	11.2	9.1	28,009	0
ro32 Bucharest-Ilfov	34,021	2,261,698	31,144	13.8	31.4	26.6	16,970	1
ro41 South-Vest Oltenia	4,215	2,246,033	9,981	4.4	13.6	11.1	13,068	0
ro42 West	4,059	1,919,434	12,590	6.6	14.9	12.3	26,044	0
sk01 Bratislava Region	26,550	622,706	18,297	29.4	37.4	38.5	10,167	1
sk02 Western Slovakia	6,641	1,866,400	21,206	11.4	15.9	16.1	42,037	0
sk03 Central Slovakia	3,336	1,350,688	13,357	9.9	17.6	18.2	21,158	0
sk04 Eastern Slovakia	3,258	1,585,131	13,010	8.2	16.3	17.4	25,562	0

Source: National Statistical Offices and National Central Banks of individual countries, Eurostat

The elastic net has been used to estimate the effects of the seven explanatory variables on FDI. This rather new method calculates a linear regression with some interesting properties. First, it does not either include or exclude a variable (discrete choice problem) but allows for partial inclusions leading to a gradient problem. Thus it is, as the second remarkable property, possible to find the global optimum of explanatory variables for the model. Finding the global optimum in a

discrete choice OLS-model can be very problematic or even practically impossible when there are many explanatory variables. In contrast to ridge regression, some of the coefficients of the elastic net are almost always zero, which in fact excludes the respective variables from the model. The third quality is that correlated explanatory variables constitute much less of a problem than for OLS or Tibshirani's Lasso (Tibshirani, 1996, and Friedman, Hastie und Tibshirani (2009)). This last property is especially useful since some of the explanatory variables here show high correlation coefficients.

The calculation of the coefficient vector β in Lasso is based on the equation:

$$(1) \hat{\beta}^{lasso} = \arg \min_{\beta} \sum_{i=1}^n (y_i - \beta' x_i)^2 + \lambda \sum_{j=1}^k |\beta_j|$$

where the term to the left of "+" is calculated as the sum of the squared deviations.

To the right of this there is the "penalty" or "control" term. Under the condition $\lambda = 0$ there is the known OLS-estimate. For $\lambda > 0$ the sum of the absolute coefficients is also added to the squared deviations. The larger λ , the stronger this limitation. Variables with only small explanatory power are strongly restricted or no longer taken into the model. The parameter λ is therefore also referred to as the "tuning parameter".

The model, with the exception of the dummy variable, was estimated in logs so that the resulting coefficients are rendered as elasticities, indicating the variation in percent of the explained variable when the explanatory variable is changed by one percent. If for example the coefficient of explanatory variable x is found to be 0.95, a 1% variation of x leads to a 0.95% change of FDI.

4. Results

The estimates are presented in Table 3. The model explains 84.2% of the overall variance of the FDI data. This can be considered a high value, suggesting that the model approximates the data well. The elastic net excludes population, education of human resources in science technology and innovation, as well as national road freight transport from the model.

Table 3

Coefficients of explanatory variables, n=27, R²=84.2%

<i>Population</i>	<i>0.0000</i>
Gross regional product	0.8022
Gross regional product per capita	0.5250
Persons aged 25-64 with tertiary education	0.7932
<i>HR in ST, education</i>	<i>0.0000</i>
<i>National road freight transport</i>	<i>0.0000</i>
Capital region (dummy)	0.3141

Source: own calculations

The first included variable is **regional Gross domestic product (GDP)**. Its coefficient indicates that, keeping everything else constant, a region having 1 % more GDP than another one is expected to have 0.8022 % more FDI. Stated otherwise, regions attract FDI in a (slightly) lower proportion than their economic strengths suggest.

The coefficient of regional **GDP per capita** suggests that, keeping everything else constant, a region with 1% higher GDP per capita attracts 0.5250% more FDI.

The same holds for **persons aged 25-64 with tertiary education**. A 1 % increase in their number enhances the FDI expectation by 0.7932 %. This explanatory variable is highly correlated ($r=0.96$) to human resources in science technology and innovation which was excluded from the model by the elastic net. A simple OLS regression using both variables leads to one having a high positive, the other one an accordingly high negative coefficient, which nearly cancel out each other. The elastic net only includes one of them carrying the full information.

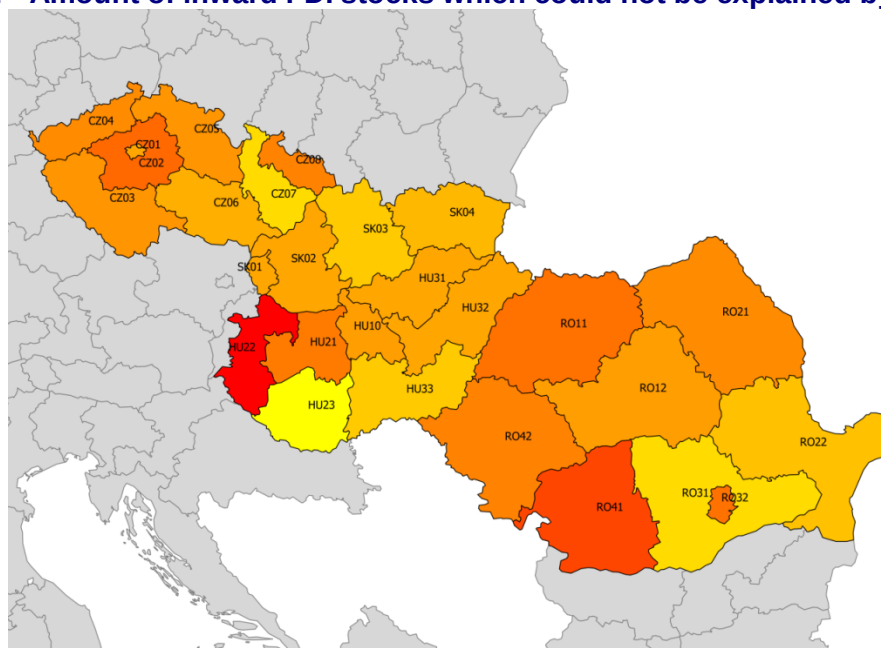
The last variable is the capital dummy. Only regions with the capital of their respective nation receive a 1, all other regions receive a 0. Since that variable is not logged, the coefficient has to be used as exponent in the power function to show the expected effect of a capital city on FDI:

$e^{0.3141}=1.3690$. Just for containing the capital, the region thus gets an additional 36.9% of FDI compared to an otherwise equal region. There may be a number of reasons for that result: foreign investors often perceive the capital as the politico-economic centre of a country. Premises in the capital city help keep distances short and thus transaction costs low when dealing with authorities, which are usually gathered there. Frequently headquarters are located in the capital while the production sites may be based somewhere else – with the production being “booked” for statistical reasons at the location of headquarters. Moreover, headquarter functions regularly require specific knowledge- and capital-intensive services, such as legal counselling or the services of network air carriers.

Interpreting the above results, one must bear the *ceteris paribus* critique in mind. By implication, it is often not possible to change just a single variable while keeping everything else constant. High population almost always goes hand in hand with high GDP (at least within one country), and the capital usually is the most populated place. For analytic purposes, however, this *ceteris paribus* analysis is highly valuable as it disentangles complex effects and distributes its impact to the individual explanatory variables.

Additional insights can be gained by subtracting model estimates from real FDI (i.e. analysing residuals). The resulting difference shows how much better a region performs than expected otherwise by the (explanatory variables in the) model. The highest value is that of HU22 Nyugat-Dunántúl (West Transdanubia), followed by RO41 Sud-Vest Oltenia. These regions attract roughly 3.5 times and twice as much FDI as estimated, respectively. Common to both regions is their high share of FDI in the machine building and especially in the automotive sector. Between 2000 and 2011 the share of HU22 Nyugat-Dunántúl in total Hungarian FDI stock rose from 11 % to 21 %, due to the settlement of large capital-intensive companies in the region. Figure 6 shows the amount of inward FDI stocks which could not be explained by the model. The extent of red color indicates the de facto attraction of FDI relative to the estimated one.

Figure 4 - Amount of inward FDI stocks which could not be explained by the model



Source: own calculations

5. Conclusions

The analysis shows that high GDP and high GDP per capita are factors enhancing the attractiveness of a region for foreign investors. These variables suggest a higher productivity and a higher purchasing power of the population in the region under scrutiny. In turn, FDI itself contributes to rising gross value added in a region, thus fostering this kind of self-enhancing dynamics. At the same time, these indicators can hardly be changed quickly.

Since its accession to the European Union, Romania made significant progress in rising its GDP per capita and convergence to the average GDP per capita in the EU. This progress took place simultaneously with changes in its economic structure, a re-industrialisation of the country, an

increasing degree of competitiveness of Romanian exports, and gain of market shares. These favourable dynamics are, however, characterised by a strong regional differentiation. Progress is highly concentrated in Bucuresti-Ilfov while the other regions show a more modest advancement.

Large markets, with higher purchasing power, such as Bucuresti-Ilfov, offer more opportunities to take advantage of scale economies than smaller markets. In order to reduce their delivery costs, companies with scale economies usually choose locations with a large local demand (Krugman (1991)). But also the availability of highly educated human resources contributes to the success of Bucuresti-Ilfov and makes it an attractive location of FDI.

While Romania is hosting, compared to the other EU countries, a high share of population with secondary education, this share is contracting. For specific qualifications and regions skilled workers are scarce or not available at all. Bridging the gap between the demand for and the supply of workforce represents a challenge for the Romanian policy makers in the future. The experience of Austria and Germany shows that the implementation of a dual apprenticeship system, which combines in-company and school training, can supply the economy with qualifications tailored to the labour market requirements and thus substantially reduce youth unemployment.

The financial and economic crisis has highlighted the vulnerability of the low-educated and low-qualified population which has been strongly affected by unemployment. Policy measures should concentrate on all education stages, starting with the primary school, where support measures are needed for poor and hardly integrated families in order to keep their children in the school system and culminate with life-long learning for the persons in the labour market.

Technological progress, research and development need a highly educated and qualified workforce. Taking into account Romania's low share of population with tertiary education, the lack of such workforce may posit a bottleneck for continued convergence in the future. Policy measures are needed to increase this share and to keep qualified workforce in the country. This aspect will become even more stringent due to demographic ageing and emergence of new growth patterns as a result of the implementation of industry 4.0.

Regions are striving to adapt to a constantly changing economic and social environment in order to increase their economic performance. Nation-wide factors and international business cycles have a crucial impact on regional economic performance but in parallel regional growth can be strongly influenced by region-specific factors. It is these factors policy makers should address on top of the nation-wide factors through tailor-made regional policies. The ability of a region to enhance labour participation rates, change its specialization patterns, foster educational attainment, and the generation and diffusion of innovation has a significant impact on regional performance. Regional factors can thus support or slow down economic growth.

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KNOWLEDGE – INNOVATION – COMPETITIVENESS AN INTEGRATED APPROACH

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Abstract:

The economy based on knowledge uses the knowledge and the innovation as main engines of the economic growth and development.

The organization must not only develop and expand their knowledge but also to use the mechanisms and procedures to transform knowledge into assets. Innovation involves the transformation of this knowledge into products / services and is essential for competitiveness. To remain competitive companies must invest in innovation so as to adapt changes taking place in business.

In this paper we propose dealing with issues relating to knowledge, innovation and competitiveness as an integrated approach.

Key words: knowledge, innovation, competitiveness

JEL classification codes: D83

Introduction

This article aims to bring attention to an integrated approach about three key concepts treated interrelated. The goal is to identify and demonstrate the role of knowledge and innovation within an organization and how they ensure competitiveness. Knowledge and new technologies available to organizations enables employees to collaborate, work and innovate for effective leadership. In the new economy knowledge is the main strategic resource of the organization and the organization led by knowledge brings innovation. Knowledge process involves addressing new issues, changes and by its nature is a process of innovation. Innovation is a challenge for organizations and researchers because it is seen as a catalyst for competitiveness in an increasingly competitive world. It sits in the center of economic and social development, as is reflected in the products and services that support the development and gives a lasting nature.

From information to knowledge

Knowledge is the most valuable treasure of humanity and is based on the need to understand reality. The desire to know is deep in the genetic code of the human being and manifest since early childhood. Information, experience and learning stand at the base of knowledge, Thus, we can talk about knowledge as a process, a phenomenon or a product of human activity.

Knowledge process requires the existence of three basic elements (a cognitive object, a cognitive subject and cognitive relationship between subject and object) and carried on three levels:

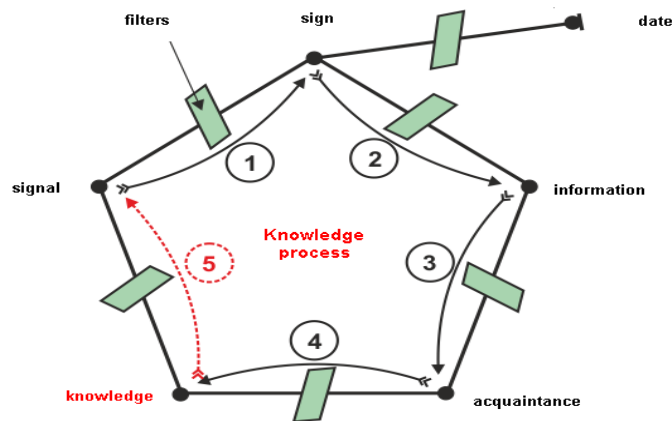
- observational knowledge level, which starts at objects, phenomena, different processes. In this level, the exterior and individual features of the object are perceived using senses;
- empirical knowledge level, where it performed the analysis and description of identical objects class. Data processing is done by using a set of logical operations such as comparison, synthesis, abstraction, generalization;
- theoretical knowledge level, where it monitors the development of concepts and theoretical laws setting. This is the level where the creativity of the knowledge subject has a very important role. (Porumbeanu, O. L. (2004), pp. 127 - 128)

Knowledge is not just a mere accumulation of information, getting them is the result of a whole chain logically and psychologically. Starting from the signal - sign - date - information - knowledge, come to knowledge, as shown in the figure below.

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Figure 1 - Logical flow of knowledge acquisition



Source: PhD Prof. Emil Dinga

By signal we mean any physical phenomenon that impresses one or more of the natural senses of cognitive subject.

The signal is the sign carrier, i.e., the signal has significance for receiver signal. Recognition signal as a sign presupposes the existence of codes of symbolization, on which to recognize that the signal has significance not only for himself but for a referent (denoted). Symbology codes (which may be either individual or from the experience thinking individual and social, surging experience or social thinking) is essentially paintings correlation between signals and referents associated with those codes. For example, we can consider the noise of a waterfall (sign), which stands for the one who hears the existence of water (referent). Thus, the signal referent identification turns signal in sign.

The date represents the sign which does not affect the uncertainties or incompleteness of that sign receiver referent, having just an acknowledgment role. We can say, therefore, that the data brings nothing new to the subject receiver.

Unlike date the information is the sign which reduce, modify or remove an uncertainty or incompleteness.

Knowledge is that information which received, finds into the receiver subject's cognitive background information of the same nature, backgrounded. For example, if a chemist receives information about an amino acid that information turns into knowledge, because it already has a cognitive storage in this area. If information is received by a historian who does not have prior knowledge of chemistry, it will not become knowledge.

Knowledge is the set of cognitive domains wich have cognitive storages formed in a subject. That set is not only logical sum of the individual cognitive deposits, contributing fully to it the synergistic effect produced by their relationship manifested by mutual causal action.

Knowledge, according to neoclassical models of economic growth, represents a category of objects that obey the operation of the market rules, with perfect competition. Knowledge is private goods that are traded on a market subject to competition rules. Knowledge can be commercialized and then, just as producers of knowledge, consider the following rules:

- there is a demand for that knowledge;
- payback and profit-tempting to investors;
- stimulate researchers so that their work become attractive and profitable.

Knowledge can be bought and sold like any other property, whether in the form of goods or services or as capital. The price is determined by the market, including the stock market.

Integrated approach

Nicolescu O. and Nicolescu L. believe that "knowledge economy is characterized by transforming knowledge into raw materials, capital, goods, essential inputs in the economy, and also by economic processes in which the generation, selling, buying, learning, storage development, knowledge sharing and protection become more prevalent and decisive, for profit and long-term economic sustainability." (Nicolescu, O., Nicolescu. L., 2005, p.21)

The new economy is a knowledge-based economy, in which the main factor is the degree of implementation of ideas, innovation and technology.

OECD defines the knowledge economy as an economy based on production, distribution and use of knowledge and information. According to OECD experts are four categories of knowledge: to know-what, to know why, to know how and to know who. (Nicolescu, O.,Nicolescu, C., 2011, p.24)

Literature assigned four essential economic functions to the knowledge: raw materials, capital product and production factor.

Know-how knowledge are those based on applied research, improvement, modernization of processes, products, etc. As raw material they have an essential role in achieving modern products and participate in the implementation of all stages of production processes. When applied research type was completed pass to technological research, but there are situations where this transition is not directly possible, being necessary to achieve fundamental technology research.

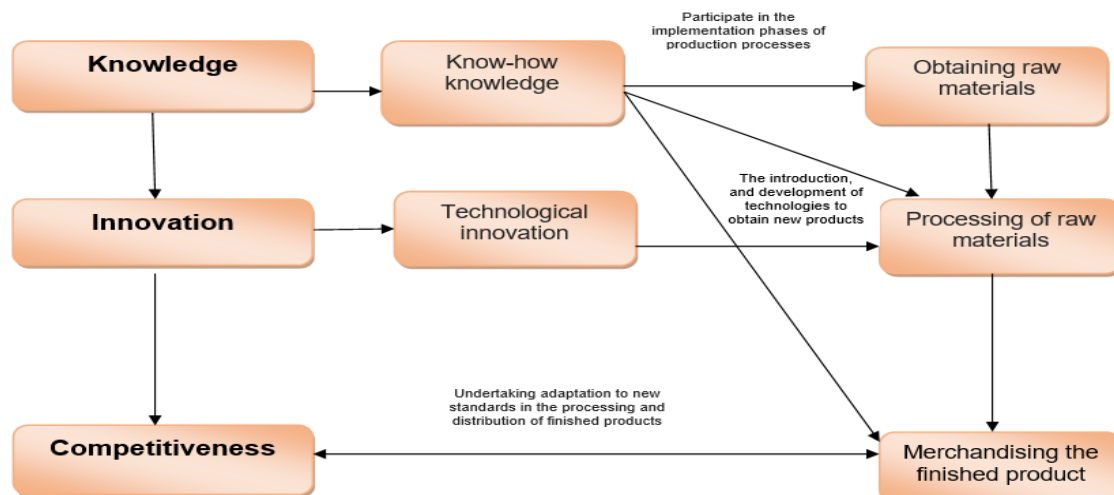
So, preparing for production has resulted in the concept of innovation, thus elaborating technological project. This project consists of decisions relating to raw materials and technologies required.

Raising the technological prerequisite for development organizations in the future, so that should put emphasis on innovation, transfer of technology and know-how, in order to ensure the adaptation of the organization to the demands of the present technological progress and increase their competitiveness on the international markets.

It becomes evident that the organization is more modern as more greater is the weight and role of knowledge as a factor of production. Continued use of knowledge does not diminish their value, but rather with how they are used by both develop and increase their value. Therefore it is important for organization to develop logical mechanisms and find ways to develop and disseminate existing knowledge. The main force of economic growth is the process through the changing disseminated in the economic sphere. Knowledge changes and generate inventions in the areas of scientific and technological research. In these circumstances innovation is a vital essential requirement. (European Commission, 2002, p.6).

Summarizing aspects of the concept of knowledge and innovation processes we present in figure 2 the above processes and the links between them to ensure increased competitiveness.

Figure 2 - Increasing competitiveness through knowledge and innovation



Source: developed by authors

As we can noticed, the type scheme highlights the importance of know-how knowledge and the fact that they are indispensable both for obtaining and processing of raw materials and for merchandising the finished product. The new position of the innovation in relation with competitiveness is resulting from the transition process to the knowledge driven organization.

Conclusions

The knowledge that materializes in new processes and products represent key competitive factor playing a crucial role in opening up new perspectives. But the success of an enterprise depends directly on the ability to exploit this knowledge.

New challenge for businesses is the best use of knowledge, but an effective use and realization requires solutions that combine specialized technologies with the informational ones. An optimal use involves developing existing knowledge and generate new and innovative products and services.

To ensure continued competitiveness innovation process should focus on knowledge not entailing the use of only knowledge but also their capture and transfer by platforms based on knowledge. Businesses can thus advantageously use this knowledge and can respond quickly to changes in the business environment.

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CONSUMERISM: WHERE TO?

PhD(c) Ileana-Andra Mărculescu⁶⁴

Abstract:

As an important component of the study on the consumer's behaviour is social factors that influence such behaviour, and all experts agree that family, social groups, social classes and social status have a significant role, it is highly necessary to analyse consumption from the social economics perspective. Also called "solidarity economy" or "the third sector" (among economies between the private and public sectors), social economy developed from the need to find new, innovative solutions to the social, economic or environment issues of communities and to meet the needs of the community members which are ignored or inadequately fulfilled by the public or the private sector. The primary objective of the social economy, as compared to the purpose of the market economy, is not to obtain profit but to improve the living conditions and to offer new opportunities to disadvantages people or to the vulnerable category people. Although a series of demutualisations of major cooperatives and mutual societies has taken place in some European countries in recent decades, overall, the social economy sector (cooperatives and mutual societies) has seen considerable growth, as recognised by the European Commission's Manual for drawing up the Satellite Accounts of Companies in the Social Economy. The more expensive the goods are when purchased and then are scarcely used, the more profitable the new type of consumption is for the customers who consider that it is more important to use a product than to own it.

The social role and status define the position of an individual within the group he belongs to (family, club, organisation). The role means the series of activities that are expected to be carried out by that person in relation to those around him, while the status reflects the general esteem he enjoys in that society. The consumer's behaviour reflects both his role and his status, often people choosing products that highlight their status. The "social economics" phrase makes anybody think of economics and of sociology at the same time.

More than three decades ago, German sociologist Kurt Braunreuther pointed out in his main study "Economics and Sociology" that "nobody doubts the need to elaborate deeper theoretical links between economics and sociology," which is "a task that will still take some time." Therefore, the inter-disciplinary relationship between economics and sociology is fully demonstrated, the latter having "a significant role mainly whenever problems of the entire society have to be solved, the general social relationship between many social detailed problems being often closer than one might think when addressing a new problem. A too narrow conception of the economic aspects of the entire society leads quite easily to the disregard for the obvious relation between economic and sociological issues. Being aware of the fact that numerous sociological issues are, ultimately, economically important allows for a more exact delineation of the sociological syllabus." (*Emilian M. Dobrescu, Economic Sociology, 2nd edition, Fundatia Romania de Maine Publishing House, Bucharest 2007, p 24 - After Kurt Braunreuther, Economics and Sociology in Contemporary Sociology, works presented at the 6th World Sociology Congress, Evian, 1966, in the volume Theory and Method in Social Sciences, vol. V, Bucharest, Political Publishing House, 1967, p. 388-389 (selectively).*)

For a layman, the skimming of the various definitions of "social economy" has the same result: the main objective of the social economics is the production of goods and services to the benefit of the community, with the aim of promoting the social inclusion of the persons under such circumstances that can generate social marginalisation or exclusion.

"The social economy term may sound like a strange phrase. The last decades have been dominated by many liberalist extremisms: economy must operate according to a pure logic, immune to any interference of social events. Of course, the society benefits after the economy operates and offers its yields. Therefore, the economy must be separated as much as possible from the social sphere. The current crisis has called into question many liberalism dogmas. We are more and more conscious of the limits of pure economics. But whereto should a new direction,

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which I would call post-liberalist, develop? I think the launch of the European social economy programme should be placed in this new context. Obviously, the social economy is not The Solution but only the preamble of a package of solutions that have to be formulated.”(*Cătălin ZAMFIR, Director of the Life Quality Research Institute, member of the Romanian Academy, Foreword to “Social Economy in Europe” published under the coordination of Sorin Cace - Expert Publishing House, Bucharest, 2010*).

Key words: social economy, consumerism, collaborative consumption

JEL classification codes: D11, D12, D91

Introduction

“People take action and involve themselves in practical activities in the society only in their desire to satisfy a need. These are consumption needs, i.e. the people’s needs to own and use goods and services. They represent motives of the human actions and surface as economic interests.”(*Crețoiu Gh., Cornescu V., Bucur I., 2011 p.29*).

As an important component of the study on the consumer’s behaviour is social factors that influence such behaviour, and all experts agree that family, social groups, social classes and social status have a significant role, it is highly necessary to analyse consumption from the social economics perspective.

The social role and status define the position of an individual within the group he belongs to (family, club, organisation). The role means the series of activities that are expected to be carried out by that person in relation to those around him, while the status reflects the general esteem he enjoys in that society.

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Social economy – conceptual limitations

"The organisations of the Social Economy are economic and social actors active in all sectors, which are characterised principally by their aims and by their distinctive form of entrepreneurship. The social economy includes organisations such as cooperatives, mutual societies, associations and foundations. These enterprises are particularly active in certain fields such as social protection, social services, health, banking, insurance, agricultural production, neighbourhood services, education and training, and the area of culture, sport and leisure activities."(*Social Economy Charter of Principles, CEP – CMAF European Standing Conference of Cooperatives, Mutual Societies, Associations and Foundations, 2002*).

Also called "solidarity economy" or "the third sector" (among economies between the private and public sectors), social economy developed from the need to find new, innovative solutions to the social, economic or environment issues of communities and to meet the needs of the community members which are ignored or inadequately fulfilled by the public or the private sector.

Although the "third sector" phrase is used mainly in the English-speaking world to describe the non-profit private sector, largely consisting of associations and foundations, the "third sector" phrase is also used in continental Europe as well as in other areas being synonymous with social economy.

In the United States, Levitt was among the first to use this term, which was identified with the non-profit sector.

In Europe, this term began to be used several years later to describe a sector between the public sector and the capitalist sector, being much closer to the social economy concept.

The third sector became a confluence of various concepts, in particular the non-profit sector and the social economy, which - although they describe overlapping areas - do not match perfectly.

Moreover, the theoretical approaches developed starting from these concepts attach various functions to the third sector in the current economics.

Although there are differences from one country to another, the entire European Union displays comparable entities with similar features, even if they are not presented as part of the "social economy" and are not legally regulated in all member states.

The primary objective of the social economy, as compared to the purpose of the market economy, is not to obtain profit but to improve the living conditions and to offer new opportunities to disadvantages people or to the vulnerable category people.

The social economy gives pride of place to the observance of common values among which:

- primacy of social participants, of persons and of social objectives over capital;
- defence and implementation of the principles of solidarity and responsibility;
- combination of the interests of members/users and the general interest;
- democratic control by the members of the organisation/enterprise;
- voluntary and open membership;
- autonomous management and independence from public authorities;
- the utilisation of the essential surplus to carry out sustainable development objectives and to supply services to members according to the general interest.

Moreover, the social economy enterprises play a significant role in supporting the objectives set by governmental policies, by:

- contributing to the growth of productivity and competitiveness;
- contributing to the development of an inclusive and participative society;

- encouraging and allowing the members of the community to participate in the settlement of local problems;
- demonstrating new ways to deliver public services.

As an activity, the social economy is historically linked to popular associations and cooperatives, which make up its backbone.

The system of values and the principles of conduct of the popular associations, reflected in the historical cooperative movement, are those which have inspired the modern concept of the social economy, which is structured around three large families of organisations: cooperatives, mutual societies and associations, with the recent addition of foundations.

In reality, at their historical roots these three large families were interlinked expressions of a single impulse: the response of the most vulnerable and defenceless social groups, through self-help organisations, to the new living conditions created by the development of industrial society in the 18th and 19th centuries.

Cooperatives, mutual assistance societies and resistance societies reflected the three directions that this associative impulse took.

Although charity (charity foundations, brotherhoods and hospitals) and mutual assistance organisations had seen considerable growth throughout the Middle Ages, it was in the 19th century that popular associations, cooperatives and mutual societies acquired extraordinary impetus through initiatives launched by the working classes.

Throughout Europe, numerous mutual societies and mutual assistance societies were set up. In Latin American countries, such as Uruguay and Argentina, the mutualist movement grew considerably during the second half of the 19th century.

The first stirrings of cooperative experiments in Great Britain flowered in the late 18th and early 19th centuries as a spontaneous reaction of industrial workers to the difficulties of their harsh living conditions.

However, the socialist thinking developed by Robert Owen and Ricardian anti-capitalists such as William Thompson, George Mudie, William King, Thomas Hodgskin, John Gray and John Francis Bray soon exerted considerable influence on the cooperative movement, and from 1824 to 1835 a close connection was established between this movement and trade unions, both being expressions of a single workers' movement and having the same objective: emancipation of the working classes. The eight Cooperative Congresses held in Great Britain between 1831 and 1835 coordinated both the cooperatives and the trade union movement. Indeed, the Grand National Consolidated Trades Union was founded at one of these congresses, uniting all the British trade unions.

William King intervened directly and decisively in the development of the cooperative movement in Britain and influenced the well-known cooperative founded in Rochdale (England) in 1844 by 28 workers, six of whom were disciples of Owen. The famous cooperative principles that governed the workings of the Rochdale Pioneers were adopted by all kinds of cooperatives, which created the International Cooperative Alliance (ICA) in London in 1895, and which have made a notable contribution to the development of the modern concept of the social economy.

According to the 1995 ICA Congress in Manchester, these principles identify cooperatives as democratic organisations in which the decisions are made by a majority of user members of the cooperative activity, so investors or capitalist members, if involved, are not allowed to form a majority and surpluses are not allocated according to any criteria of proportionality to capital.

Other ways in which cooperatives differ from other companies are: equal voting rights, limited compensation for the share of capital that user members are obliged to subscribe and the creation, in many cases, of indivisible reserves that cannot be distributed even if the organisation is dissolved.

The “social economy” term appeared in economics literature for the first time in 1830. In that year the French liberal economist Charles Dunoyer published a Treatise on social economy that advocated a moral approach to economics. Over 1820-1860, a heterogeneous school of thought that can collectively be termed “the socialist economists” developed in France. Most of them were

influenced by the analyses of T.R. Malthus and S. de Sismondi, regarding both the existence of “market failures” that can lead to imbalances, and the delimitation of the true subject of economics, which Sismondi considered to be man rather than wealth. However, most of the socialist economists must be placed within the sphere of liberal economic thinking and identified with laissez-faire principles and the institutions that the emerging capitalism was to consolidate, including capitalist companies and markets.

Social economy underwent a profound reorientation during the second half of the 19th century, through the influence of two great economists: John Stuart Mill and Leon Walras.

Mill paid considerable attention to business associationism among workers, in both its cooperative and mutualist aspects. In his most influential work, “Principles of Political Economy,” he examined in detail the advantages and drawbacks of workers' cooperatives, calling for this type of company to be encouraged because of its economic and moral benefits.

Like Mill, Leon Walras considered that cooperatives can fulfil an important function in solving social conflicts. Walras' paper “Études d'Économie Sociale: théorie de la répartition de la richesse sociale,” published in Lausanne in 1896, marks a major break from the original social economy approach identified with F. Le Play's model. With Walras, the social economy became both part of the science of economics and a field of economic activity that is prolific in cooperatives and mutual societies as we know them today. Only at the end of the 19th century the principal features of the modern concept of the social economy took shape, inspired by the values of democratic associationism, mutualism and cooperativism.

Although the social economy was relatively prominent in Europe during the first third of the 20th century, the economic growth model in Western Europe over 1945-1975 mainly featured the traditional private capitalist sector and the public sector.

This model was the basis of the welfare state, which addressed recognised market failures and implemented a package of policies that proved highly effective in correcting them: income redistribution, resource allocation and anti-cyclical policies.

All of these were based on the Keynesian model in which the main social and economic actors are the employers' federations and trade unions, together with the public administration.

In Central and Eastern European countries, linked to the Soviet system and with centrally-planned economies, the state was the only economic actor, leaving no space for social economy agents. Cooperatives alone had a considerable presence in some Soviet bloc countries, although some of their principles - such as voluntary and open membership and/or democratic organisation - were totally annihilated. In the last two centuries, Czech economists came up with social economy approaches without exclusively privileging profitability. A large number of non-profit organisations during the period of the First Czechoslovak Republic followed this tradition, which dated back to the 19th century.

The consolidation of mixed economy systems did not prevent the development of a notable array of companies and organisations – cooperatives, mutual societies – that helped to address socially important and general interest issues concerning, among others, cyclical unemployment, geographical imbalances between rural areas and the skewing of power relations between retail distribution organisations and consumers. However, during that period the social economy practically disappeared as a significant force in the process of harmonising economic growth with social welfare, while the state occupied central stage. Only after the crisis of the welfare state and the mixed economy systems in the final quarter of the 20th century some European countries saw a reawakening of interest in the typical organisations of the social economy, either as economic alternatives to the models of the capitalist and public sectors, such as cooperatives and mutual societies, or as non-commercial organisations, mostly associations and foundations. This interest sprang from the difficulties that the market economies were encountering in finding satisfactory solutions to such major problems as massive long-term unemployment, social exclusion, welfare in the rural area and in run-down urban areas, health, education, the quality of life of pensioners, sustainable growth and other issues. These are social needs that are not being sufficiently or adequately addressed by either private capitalism agents or the public sector, and for which no easy solution is to be found through self-adjusting markets or traditional macroeconomic policy.

Although a series of demutualisations of major cooperatives and mutual societies has taken place in some European countries in recent decades, overall, the social economy sector (cooperatives and mutual societies) has seen considerable growth, as recognised by the European Commission's Manual for drawing up the Satellite Accounts of Companies in the Social Economy.

Major studies have highlighted the considerable growth of the social economy as a whole in Europe. One of the most significant studies, carried out by CIRIEC for the European Commission within the scope of the "Third System and Employment" pilot project, highlights the increasing importance of cooperatives and mutual societies in creating and maintaining employment and correcting serious economic and social imbalances.

After the Soviet bloc crumbled, many cooperatives in Eastern and Central Europe collapsed. Furthermore, they were severely discredited in the eyes of the public. Lately, however, a revival of citizens' initiatives to develop social economy projects has been taking place and is being reflected in legislative proposals aimed at boosting the organisations in this sector.

In conclusion, beyond its quantitative importance, in recent decades the social economy has not only asserted its ability to make an effective contribution to solving new social problems, it has also strengthened its position as a necessary institution for stable and sustainable economic growth and for a fairer income and wealth distribution, matching services to needs, increasing the value of economic activity serving social needs, correcting labour market imbalances and, in short, deepening and strengthening economic democracy.

If we make reference to our country, I cannot overlook a bitter assumption: "We think it is already late now, after 21 years of off-course transition, for Romania to adopt a "third path" for its socioeconomic development, i.e. to adopt a market economy that would stimulate its workers, paying special attention to the social sector. We lacked the political and moral will, and a certain individual mentality in order to embark on this path. Romania integrated itself, maybe unconsciously, into the global show of the nations affected by the structural crisis of the contemporary crisis..."(Dobrescu E.M., <https://opinionationala.wordpress.com/2013/04/05/a-treia-cale-de-dezvoltare-economico-sociala>).

Of course, the "CRISIS" passed over us as well (is it really over?). But if we refer to the crisis we should not forget that "All the aforementioned losses prove that mankind has learned nothing, neither have the people, from the other financial crises having previously affected the planet. People easily forget a simple thing, i.e. that money is a creation of the human mind, a theoretical construction, a convention, a general equivalent of economic goods. What must be changed is the education of how to perceive the money.

But this would mean a genuine revolution in the education of citizens, in educational systems, which take over and transfer the previous generations' knowledge enhanced by the current generation's knowledge."(Dobrescu E.M., (coord.), 2010, *Book of Crises – An Optimistic Look*, Bucharest, Wolters Kluwer Publishing House; page 122).

Consumism - consumatorism – consumerism

"Consumerism ['consumism' in Romanian], the full expression of "to have," satisfies and pleases on the one hand because it offers permanently, but on the other hand it enhances the thirst and concern because such satisfaction is only the springboard of an insatiable greed."(Pr. Prof. Dr. George Remete, - Excerpt from article "Spirituality and consumerism" www.crestinortodox.ro/morala/spiritualitate-consumism).

As a way of life induced through marketing strategies after the '50s, which in the last half of century determined a radical change both of the individual and of the idea of quality, the definition of consumerism can be concentrated to: "quickly, a lot and cheap," to the major detriment of the health of individuals and environment; in fact, it induces to the collective and individual mind the state of permanent need, which is completely unjustified biologically and rationally.

According to consumerist view, most people nourish a strong desire for consumer goods and aspire to a life centred on this desire, believing that such a life would satisfy their emotional needs to a greater extent than the mere satisfaction of material needs.

“The consumerist mentality and world contradict the Christian Law, the law of the spirit and the law of the being, because it objectifies the person. No matter how strong it glorifies the happiness of the person, according to the consumerist law the man becomes not a happy person but a happy object.”(*Pr. Prof. Dr. George Remete, - Excerpt from article "Spirituality and consumerism" www.crestinortodox.ro/morala/spiritualitate-consumism*).

Strictly philologically speaking, the English word consumerism has two very different meanings: a positive one – “the protection and promotion of the interests of consumers,” and a negative one – “(excessive) preoccupation with the acquisition of consumer goods” (cf. Oxford English Dictionary, 1999).

In Italian, *consumerismo* means “protection of the consumer,” while *consumismo* means “(excessive) preoccupation with the acquisition of consumer goods.”

In the large cities technology already governs the way in which people work and spend their free time. Youngsters in particular begin to interiorise technology, they gradually change it into a state of mind and a behavioural norm. Both communism and today’s techno-globalism aspired to change technology into the very matrix of the consumer’s life.

In post-communism, the obsession of industrialisation was replaced by the “consumerist fever.” Paradoxically, pauperisation of the population stimulated the feverish search of material satisfactions; the craving for quick enrichment, by any means, reached pathological dimensions. Instead of invigorating internal production, consumerism consolidated anti-social practices, corruption and embezzlement. Poor and rich people, young and old people began to be concerned only with the material side of life. The money became the universal benchmark, the highest criterion of value, the alpha and omega of a society whose idealism is reduced to “how to become a millionaire in euros”.

The current society requires us to define ourselves only by our consumption. We should care for nothing else but our comfort. In advanced post-industrial societies the impetuous development of technology allowed the production of consumer goods in surplus amounts and at accessible prices. What was considered as a luxury object yesterday becomes a “necessity good” today, which can be acquired by all consumers. The reign of consumption radically changed the socio-cultural paradigm. Human energies (pulsations, desires) and values which were previously deemed destructive – unconstrained behaviour, hedonism, sexual freedom, ludic experiment – were assimilated, rationalised and finally changed into economic stimuli.

Consumerism “monetises” and contaminates areas which were previously out of the commercial laws – religion, culture, education, family, sexuality. People are more and more defining their identity by their new, consumerist life style which is based on the materialism of post-modernist society.

The assimilation of this new life style has major consequences. In traditional societies, the individual’s personality was determined by well-defined social and economic factors, such as national identity, social class, tradition, education in the family and in school. This “cultural capital” determined the role of an individual in the society. The “life style” is, however, a subjective and changing construction, which is closely linked to individual tastes and preferences.

To consume proves to have become a praxis, a personal experience. Tell me what you eat, what you wear, where you spend your holidays and I’ll tell you who you are. Being dependant on the hypnotic world of consumption, the life style is governed by the “money – technology – comfort” triad. The amount of money you make and your technical abilities are the criteria defining “who” and “what” you are. If you want to have an identity, you must become a submissive “human resource” unconditionally yielding to commercial and technical laws.

According to the consumerist view, most people – in Eastern Europe and “third world” included – cherish a strong desire for consumer goods and their lives are centred on such desire, believing that the accumulation of goods will better satisfy their emotional needs than the mere satisfaction of material needs.

Therefore, the consumer-related practices and aspirations become dominant in the development of their identity.

The adoption of the consumerist culture as a *modus vivendi* spread around the globe, even among the poor or the unemployed, women being the most vulnerable.

Obviously, as societies became more complex, more sophisticated consumption patterns developed, but such a progressive evolution (when goods first considered as luxury goods became necessity goods subsequently) should not serve as a justification of the increase in the volume of consumer goods.

In other words, the ideology of consumption – in the sense of the certitudes regarding the need of consumption in the current life, culture and society – must surpass the restricted historical framework and to adapt to the new socioeconomic and natural developments.

“Let us always be the material but especially spiritual winners of each crisis in our lives! Such a mentality and practical conduct will guide us on another path – the path of knowledge and of wise and tolerant action – at the beginning of a century and a millennium, of which the first ten years have already passed...” (Dobrescu E.M., (coord.), 2010, *Book of Crises – An Optimistic Look*, Bucharest, Wolters Kluwer Publishing House).

Collaborative consumption, an alternative to the social economy

The “collaborative consumption” concept appeared in 2007, when Ray Algar, in a report on the new consumption trends, defined it as the new philosophy of consumption whereby all people can reach an equilibrium between their own interests and the wellbeing of the community they are part of (<http://issuu.com/rayalgar/docs/collaborative-consumption2007rayalgar/2?e=1820632/8449588>).

The advocates of this idea believe we are facing a genuine social revolution, where the pattern of owning things is replaced by the pattern of sharing them.

One of the first areas where the collaborative consumption was applied was the car industry. The first “car sharing” programmes brought significant savings to their users, but such a service also provided environmental benefits as it reduced the inefficient use of resources.

“Car sharing” programmes have developed since 2011 in numerous European cities, such as Munich, Paris, London, Barcelona or Amsterdam, which involved the collective use of cars as part of what many considers as the beginning of a new era in Europe’s history: the era of a rational and efficient use of resources.

Let us take the example of Amsterdam, the capital city of the Netherlands, where an innovative car sharing programme was launched (Car2go). The programme is designed to be easy to use and not to pollute the town as it offers only electric-powered vehicles. In fact, any person who registers in this programme can locate the nearest electric vehicle by means of the [Car2go](#) website or a smartphone application, then he uses his member card to unlock the car and is ready to use it as long as he needs it; parking is free all over the city and, to end the rental, the car is left in a parking lot, not having to bring it to the garage or to charge it.

Many European governments encourage the development of such programmes by promoting their advantages and by funding the projects that support this concept.

In Romania this concept is still at the beginning, but one can see that websites such as www.ecodrum.ro, which offers such services for free, have begun to be more and more utilised.

But obviously the car industry is not the only area where the collective consumption philosophy attracts ever more adherents.

Over the last years the cost of designing the platforms that allow for sharing consumption has reduced due to the development of the internet. Rachel Botsman, co-author of “What’s Mine Is Yours: The Rise of Collaborative Consumption,” explains: “The social evolution of the internet saw several stages: first, it allowed programmers to write a code in common, the result being the Linux operating system. Then, people were able to share their experiences by means of Facebook, while content designers used YouTube to share their achievements. Now we are on the verge of the fourth stage, when people realise they can use the same technology to share all kinds of off-line, everyday products. This could have an as great an impact as the Industrial Revolution by the way

in which it changes ur perspective over ownership " (*Rachel Botsman, Roo Rogers, "What's Mine Is Yours: The Rise of Collaborative Consumption," Hardcover – September 14, 2010*).

An ever larger number of sharing consumption sites has been developed lately. Among them there is LandShare, which is an online network that connects people who want to grow with those who have land to share, or AirBnB, which is a homestay network in which people host travellers in their spare rooms at reasonable prices.

An creative application of the collaborative consumption concept is Tovgaroo, an online toy rental service that connects people who want to exchange or rent out used toys. Subscribers get four to eight toys a month. This system allows them to offer their children access to more toys than they could purchase.

Another web application, Artsicle, allows the art lovers to rent paintings or sculptures for a monthly fee. Thus, the members of this programme can find the right artwork for them without having to buy such pieces, although they have this possibility as well.

In Romania, the best known "collaborative consumption" service is I'Velo, the first automated bike-sharing service that operates in Bucharest, Braşov, Cluj-Napoca, Constanţa and Iaşi.

We should not overlook Olx.ro (former Mercador.ro), one of the largest online free ads company in Romania, which facilitates selling and buying goods and services in local communities and in the vicinity, at advantageous prices. The ads are free of charge and the users are not obliged to create an account to publish them.

More and more such services appear every day due to the investments made and the popularity among the audience. Another reason is the austerity regime ever more countries are forced to adopt. As smartphones and internet gain ground, the collaborative consumption model finds more supporters, thus changing the society we live in.

Although the new concept of "collaborative consumption" disagrees with the basic principles of the traditional economic model (the use of a product entails its ownership, and transactions are usually between a person and an organisation) (Arun Sundararajan, Ph.D. in Economics and Professor at the New York University - www.techonomy.com.), the collaborative consumption will allow people to get what they want without owning it.

The more expensive the goods are when purchased and then they are scarcely used, the more profitable the new type of consumption is for the customers who consider that it is more important to use a product than to own it.

Conclusions

As (any kind of) research would not exist in the absence of reality, it is quite revealing an excerpt from reality, conveyed in the "Top 10 Consumer Trends Of 2015 And Beyond" Report prepared by Swedish company Ericsson, which I got acquainted with during my documentation, from which I take the liberty to mention:

The streamed future: Media use patterns are globalizing. Viewers are shifting towards easy-to-use on-demand services that allow cross-platform access to video content. 2015 will be historic as more people will watch streamed video on a weekly basis than broadcast TV.

Helpful homes: Consumers show high interest in having home sensors that alert them to water and electricity issues, or when family members come and go.

Mind sharing: New ways to communicate will continue to appear, offering us even more ways to keep in touch with each other. Many smartphone owners would like to use a wearable device to communicate with others directly through thought – and believe this will be mainstream by 2020.

Smart citizens: The idea of smart cities is intriguing – but a lot of that intelligence may actually come about as a side effect of the changing everyday behaviours of citizens. As the internet makes us more informed, we are in turn making better decisions. Consumers believe traffic volume maps, energy use comparison applications and real-time water quality checkers will be mainstream by 2020.

The sharing economy: As the internet enables us to efficiently share information with unprecedented ease, the idea of a sharing economy is potentially huge. Half of all smartphone

owners are open to the idea of renting out their spare rooms, personal household appliances and leisure equipment as it is convenient and can save money.

The digital purse: 48 % of smartphone owners would rather use their phone to pay for goods and services, while 80 % believe that the smartphone will replace their entire purse by 2020.

My information: Although sharing information when there is a benefit is fine, smartphone owners see no point in making all of their actions open to anyone. 47 % of smartphone owners would like to be able to pay electronically without an automatic transfer of personal information. 56 % of smartphone owners would like all internet communication to be encrypted.

Longer life: Smartphone owners see cloud-based services of various kinds giving them the potential to live healthier and longer lives. Jogging applications, pulse meters and plates that measure our food are believed to help prolong our lives by up to two years per application.

Domestic robots: Consumers are welcoming the idea of having domestic robots that could help with everyday chores. 64 % also believe this will be common in households by 2020.

Children connect everything: Children will continue to drive the demand for a more tangible internet, where the physical world is as connected as the screens of their devices. 46 % of smartphone owners say that children will expect all objects to be connected.

The “Top 10 Consumer Trends Of 2015 And Beyond” Report was prepared on the basis of the information from the Ericsson ConsumerLab global research programme, a special focus being placed on smartphone owners aged 15 to 69 in Johannesburg, London, Mexico City, New York, Moscow, San Francisco, Sao Paulo, Shanghai, Sydney and Tokyo – statistically representing the views of 85 million frequent internet users.

“The cumulative effect of smartphones becoming part of mainstream society is astonishing. As consumers, we try out new applications and keep the ones we think improve, enrich or even prolong our lives at such a rapid pace that we don't even notice that our attitudes and behaviours are changing faster than ever. Services and products that quite recently seemed beyond imagination are now easily accepted and believed to rapidly reach the mass market. With only five years until 2020, the future really does seem closer than ever before.”(*Michael Björn, Head of Research Ericsson ConsumerLab* (<http://www.computerworld.ro>)).

No matter if we approach consumption from the social economy or the collaborative consumption perspective, the free will constrains us to responsibility. Even to social responsibility or, even more, to corporate social responsibility, which (according to Wikipedia definition) means “to wilfully include public interest in the corporate decision-making and to comply with three fundamental principles: people, planet and profit.”(<http://en.wikipedia.org>)).

This is why it is very important to “Let us always be the material but especially spiritual winners of each crisis in our lives! Such a mentality and practical conduct will guide us on another path – the path of knowledge and of wise and tolerant action – at the beginning of a century and a millennium, of which the first ten years have already passed...”(*Dobrescu E.M., (coord.), 2010, Book of Crises – An Optimistic Look, Bucharest, Wolters Kluwer Publishing House*).

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REGIONAL DEVELOPMENT CONCEPT

PhD(c) Ramona Marcela Puică⁶⁵

Abstract:

Regional development represents a key component for the progress of a Member State of the European Union. The regional developments must be realised through programmes and project financed by the European Union, by the Member State and by the local public authorities. The main objective of the regional development must be to reduce the social and economic disparities between the regions of Europe. The complexity character of the regional development policy is highlighted by the way how are integrated three priority objective of the EU: economic and social cohesion, extending the subsidiarity principle and sustainable development.

Key words: Regional Development, Regional Operational Programme, the National Development Plan

JEL classification codes: R58

Introduction

Regional development policy is an essential component of the reform process in Romania, mainly aimed at reducing economic and social imbalances accumulated, to prevent the emergence of new imbalances and support sustainable overall development of all regions of the country.

This policy was introduced in Romania in 1998. Until then, Romania has not formulated a clear policy of regional development, although governments have acted in this regard by various macro-economic and sectorial policies. Thus, there were specific programs to develop severely disadvantaged areas, such as the Apuseni Mountains, the Danube Delta counties of Botosani, Vaslui and Giurgiu.

With the advancement of reforms necessary for the transition to a functioning market economy and in the context of the requirements that Romania had to meet in order to join the European Union, has outlined the need for adoption by Romania of regional development policies and effective clear that important new element of the reform strategy, which would be beneficial not only for the less developed regions, but also for socio-economic development of the country in general.

Thus, between 1996 - 1998, the European Commission and the Romanian Government developed the PHARE program for regional development policy which had as objective, on the one hand, awareness-makers and the public on regional development in Romania, on the other party proposal of a regional development model own Romania, based on a detailed analysis of the existing situation and the specific historical and cultural framework.

In the following period, 1997 - 1998, administrative units organized at the county level were associated voluntarily outlining the proposed eight regions mentioned in the study saw the establishment of appropriate regional development agencies.

The legal framework of regional development began to formulate since 1998 when the Law no. 151/1998 (amended by Law no. 315/2004) on regional development in Romania, a law which defines the principles, goals, skills, instruments and institutions necessary to promote policy area. National and regional institutions were established under this Act, and in the period 1999 - 2000 was drafted the first National Development Plan (NDP).

The entire institutional and legal framework for development of regional policies is in constant improvement, so as to meet EU and Romanian specificity.

In December 2001, the Romanian government sent the European Commission "position paper" Chapter 21 on regional policy and coordination of structural instruments, including the main actions to be undertaken to integrate the legislative, institutional and programming, partnership, additionally and financial management. Based on this document, Chapter 21 was opened for negotiations in March 2002.

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Description of the problem

To join the EU, Romania had to adopt, implement and develop the *acquis communautaire*. This represents the primary and derived legislation and all policies and institutions created to enforce compliance and appropriate and continuous development of this legislation. *Acquis communautaire* comprises 31 chapters. Most of the *acquis communautaire* must be taken as such only concrete and difficult issues to be negotiated.

The Romanian Government approved in its meeting of 6 December 2001 position paper on **Chapter 21 - "Regional policy and coordination of structural instruments"** and opened negotiations in the first half of 2002, when the position paper related was officially EU Council.

This position paper reviews the progress achieved by Romania and the timing determinant processes continue in the field, on the following matters:

- **territorial organization**: the candidate must agree with the Commission on a NUTS classification for implementing the Structural Funds;

- **legislative framework**: although the *acquis* contained in Chapter 21 does not require transposition into national legislation, candidate countries must have an appropriate legal framework, enabling them to implement specific provisions in the field;

- **programming capacity**: Romania must:

- a) prepare a development plan, according to the requirements of regulation no. 1260/1999 Council (National Development Plan);

- b) have appropriate procedures for programming multi-annual expenditure;

- c) ensure the implementation of the partnership principle in different stages of programming, financing, monitoring and evaluation of assistance from the Structural Funds;

- d) meet the specific requirements for monitoring and evaluation, especially in the ex-ante evaluation of the development plan.

- **Institutional framework**: must be defined tasks and responsibilities of all bodies and institutions involved at regional and national level, in the preparation and implementation of Structural Funds and the Cohesion Fund and the institutional framework for the implementation of structural instruments;

- **Financial and budgetary management**: must be met control provisions specifically available for the Structural Funds and the Cohesion Fund. Moreover, Romania should provide information on its ability to co-finance and public expenditure or equivalent structural action.

According to the position paper, Romania accepts the *acquis* on regional policy in force on 31 December 2000.

Romania falls with all its development regions, namely its entire territory to be eligible for Objective 1 of the Structural Funds. Romania declared its interest in participating, from accession to the European Union in all community initiatives.

Romania wants to participate in economic and social cohesion of the Community and benefit from the full support given by the Structural Funds and the Cohesion Fund under the conditions applicable to the other Member States.

Romania will ensure the consistency of its policy of economic and social cohesion with other Community policies, particularly in the areas of employment, equality between men and women, social policy and training, policy development of small and medium-CAP, common fisheries policy, energy, transport and trans-European networks, application requirements for environmental protection, etc.

Methodology and data sources

The main instrument for achieving the Regional Development Plan is the National Development Plan (NDP). NDP is elaborated on the basis of sectorial planning documents made by line ministries and Regional Development Plans, conducted under the coordination of RDA's.

NDP provides, since 2000, substantiating our country demand for financing development programs of EU funds.

Since the planning document PHARE 2003 was introduced a new approach to programming PHARE funds for the period 2004-2006: the concept of multi-annual programming.

Romania is among the least developed in Europe. His long-term plan is to achieve steady economic growth, faster than the EU average, in the context of a balanced development of its territory, and in particular the reduction of disparities between rural and urban areas.

NDP aims at solving the major problems identified in the global socio-economic analysis, designed to progressively reduce disparities between Romania and the other Member States of the European Union, by simultaneously achieving the following objectives:

1. ensuring long-term revenue growth;
2. combating social and regional imbalances;
3. progressive compliance with environmental standards that Romania will have to meet.

Overall objective of the NDP were initially identified seven priorities, and then be selected and reduced to five:

Priority 1: increasing the competitiveness of the productive sector;

Priority 2: improving and developing transport and energy infrastructure and ensuring environmental protection;

Priority 3: Human resource development, increasing the employment rate and combating social exclusion;

Priority 4: diversification of the rural economy and increasing agricultural productivity;

Priority 5: promoting a balanced participation of all regions in Romania in the process of socio-economic development.

NDP includes an objective of regional development. This materialized in a regional operational program (ROP) which reflects the progress made in developing a regional development policy and in line with EU acquis, will seek wider devolution and subsidiarity principle. Under the supervision and coordination of the former Ministry of European Integration, acting in a management priority regional development policies and decision making processes which includes already the responsibility of local authorities (local infrastructure). It also includes activities that require a regional component to counter the inevitable regional disparities created through management policies at the central level exclusively.

To substantiate the NDP, regional plans were developed for regional development, which served mainly to identify and substantiate 5 of NDP priority "Promoting balanced participation of all regions of Romania in the process of socio - economic development". At the same time, the Regional Development Plans were used to identify measures within sectorial development priorities, so that they can contribute as much to the development of regional priorities, mainly related to increasing employment and suitability qualifications to labour market requirements improving transport infrastructure, energy and environmental protection. In this way, it has achieved greater than in previous versions of the NDP, correlation and complementarity between regional measures and priorities for regional development.

CDRs and RDAs must play a greater role in terms of programming, partnership, implementation and / or selection of projects at NUTS II level. Beyond the ability to perform analysis and develop regional plans for regional development will be encouraged regional partnership structures to achieve consensus on the priorities and regional development measures. Consensus is not easy to achieve, requiring effective involvement in the programming exercise of the various actors in each region.

According to the Commission's recommendations, the priorities included in the NDP 2004-2006 Operational Programme can be found in the NDP 2007-2013, under which Romania has negotiated framework Backed Community.

Results obtained

Absorption capacity is the degree to which a country is able to spend effectively and efficiently the financial resources allocated from structural instruments. To achieve this requires, on the one hand, the absorption capacity of the institutional system created by the state to administer the funds in question and, on the other hand, the absorption capacity of the beneficiaries targeted by these funds. The latter is determined by the capacity of potential beneficiaries to create projects and to co-finance.

1. The absorption capacity of the institutional system

Absorption capacity is thus determined by three main factors, namely: macroeconomic capacity, administrative capacity (at system level institutions involved in the management of structural instruments) and financial and managerial capacity of beneficiary authorities.

a) Macroeconomic absorption capacity

It can be defined and measured in relation to GDP. Thus, the Council Regulation no. 1260/1999 provides that the annual amount of a Member State benefiting from the Structural Funds - together with assistance from the Cohesion Fund - should not exceed 4% of the annual GDP of each country. The Commission proposes to introduce a procedure to allow further involvement in the decision-making process.

Increased budget spending binds to macroeconomic capacity as a result of accession. There is thus a consensus regarding the need, since 2007, Romania ensure budget spending to 2% of GDP higher than today, expense arising strict obligations in the context of European integration: Romania's contribution to the EU budget European (about 1% of GDP) and the amount of national budget priorities and measures needed to be co-financed with EU funds - (still about 0.8 - 1% of GDP). All macroeconomic absorption capacity and ability to absorb keep macroeconomic effects generated by the additional expenses will be incurred.

b) The administrative capacity of absorption - the structures involved in the management of structural instruments

This refers to the ability of central and local authorities to prepare plans and programs in good time to sort out the best of them, organize a partnership framework effectively to respect and administrative burden of reporting and of finance and oversee the implementation process, avoiding any kind of irregularity.

If member countries in connection with the administration of structural instruments can consider three stages: design (which must be assessed by reference to the requirements resulting from regulations on structural instruments), operation (i.e. the extent to which the Structural Funds are managed effectively and efficiently) and performance (i.e. the extent to which structural instruments were administered effectively and efficiently).

Evaluation of the institutional structure. Institutional management structure was defined structural instruments and received the endorsement of the European Commission during the accession negotiations on Chapter 21. By that created the Managing Authority for Community Support Framework (ACIS) which has taken the lead on overall preparedness of Romania to use structural instruments and the other Managing Authorities have taken up their duties can say that in general institutional structure is adequate in this regard there a proper administration.

Also it was performed designation of intermediate bodies, which are representative in their field. An intermediate body is involved in programming (in part), project selection and monitoring administration or possibly support to applicants, managing authorities delegating to them some responsibilities.

2. The absorption capacity of the beneficiary public authorities

Financial absorption capacity is the capacity of final beneficiaries to co-finance projects supported financially by the European Union, to plan and guarantee these contributions domestic budgets multi-annual and collect them from the various partners involved in a project or program.

The final beneficiaries whose absorption capacity is further analysed local governments are the main beneficiaries because they are important for two operational programs: Sectorial Operational Programme Environment and the Regional Operational Programme.

One of the basic principles of cohesion policy is that of co-financing, which means that Member States must contribute financially, complementing Community assistance refundable, meaning reorient national spending to areas where results can be better in the medium and long. At the same time, to develop a sense of belonging vis-a-vis the beneficiaries of the projects promoted.

Naturally, co-financing is the responsibility of the beneficiaries of Community assistance that will support part of the costs of drafting and execution of the projects proposed. First, beneficiaries must cover ineligible expenditure from its own resources within the proposed project.

To calculate how much money will be funding from the European Commission and how big the effort own co-financing of the Romanian side, at project level, is several steps, such as:

- stage I - the elimination of ineligible expenditure

Not all costs within a project ready to be supported by the Cohesion Policy can be covered through structural instruments. Determination of eligible costs is not always easy. If the objective "European Territorial Cooperation", the list of eligible expenditure is set at the European Commission for the "Convergence" it is Romania's responsibility to establish its own system for eligible expenses, with only - the regime of exceptions - certain provisions of ineligibility for each background.

- stage II: private expenditure deduction from eligible costs

Co-financing rate is determined solely from the eligible expenditure. If funded projects generate revenue, public expenditure is calculated net present value of the net revenue from the investment cost incurred during the period of reference.

- stage III: application co-financing rate

For each operational program established a maximum rate of co-financing from the European Union. In this way, Romania has the freedom to fund certain priorities, measures and projects 100% of Community assistance, as long as the balance between different priorities and measures comply with the maximum rate overall operational program agreed with the European Commission.

The effort to co-finance it feels like pressure on local authorities (county councils, local councils), given that fiscal austerity is a reality at least in the medium term in Romania and allocations from the state budget will probably not to increase significantly in the coming years. Also guarantee loans of local government by the state would amount to an additional public debt and budget deficit would affect.

On the other hand, borrowing capacity is limited, both legally and following a low creditworthiness in the context of state guarantees limited. Therefore, the two main sources for co-financing projects are local government own revenues increased volume and accessing loans.

The share of own revenues in local budgets increased in recent years, mainly due to legislative changes which allow greater decentralization of the sources of budget revenues, local governments having control over the level of local taxes, set, where appropriate, by councils local or county. However, a large part of their income consists of income tax, whose level is regulated by central authorities. Often fiscal responsibilities transferred to the local level remain outside the regulatory powers of local government, which translates into a low degree of predictability of these sources of incomes.

Loans can be aimed at both co-financing and pre-financing of structural instruments and possibly the state budget allocations for projects financed by the Structural Funds.

Conclusions

Romania's participation in the implementation of EU regional policy means first opportunity to benefit from a system of values among which are found economic efficiency, environmental protection, ensure standards existential minimum definition of a "role model European" urban values, qualified human resources. At the same time, European integration and openness to the EU internal market involves the challenge of enhanced competitiveness, which can have negative effects on an economy in process of consolidation, as Romania.

In this context, the Structural Instruments is the most important resource that will help Romania to cope with change and integration challenges.

However, regional development policy can not constitute the only key to the overall development of a country, especially given that its real effects on growth are difficult to assess. A critical dimension of this is represented by the nature of the economic system and other quality policy mix that forms the essence of a state economic policy: the legal protection of property rights and market economy, taxation, antitrust, etc. Independent regional policy choices that a country / region they adopt according to its specifics, find the "mix" of policies to ensure optimal development is a challenge and almost always an extremely controversial topic. Development stage of Romania currently required using a policy mix without choose one alternative only: you can not only watch competitiveness, without avoiding the danger to enhance socio-economic disparities to the point where they can turn into explosions and serious social phenomena. Also, we cannot choose any scenario allocation of funds without taking into account development potential, existing human resources and qualification of their economic resources, management, etc.

An economic policy is not good or bad, it is just not appropriate or the timing or the occurrence or condition for which it is applied. Therefore sometimes it is necessary to apply a policy mix that through a conjugate effect to redress many problems to determine the necessary impetus to economic growth. Thus, the screenplay "pro-development" is not an alternative exclusive opted for Romania for the programming period 2007 - 2013, taking into account the fact that the Structural Funds are public funds, aimed at ensuring economic, social and territorial states EU and one of the basic principles of the role of these funds aimed to counter the negative effects of the market economy.

In Romania, for the period 2007 - 2013 does not operate a regional policy itself, but an adapted version of it, a compromise based on the specific conditions of our country in terms of legislative, institutional and capacity to manage - with all the senses it assumed this responsibility from programming to implementation, monitoring and evaluation at regional level.

Future directions to be approached

Determinants of regional development

Ways of measuring regional competitiveness

Regional competitiveness indicators

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