

# Eastern European Journal of Regional Studies

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Volume 1/ Issue 2/ December 2015

# **Eastern European Journal of Regional Studies**

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# **Eastern European Journal of Regional Studies**

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# **CONTENTS**

| E-invoicing in EU public procurement as a tool for cross       |   |
|--|---|
| border trade barriers elimination                              |   |
| Oleksandr TSARUK   |   |
| Analysis of local budgets revenues in the republic of moldova: | - |
| level, structure and dynamics for 2008-2014 years              |   |
| Andrei PETROIA   |   |
| The European Neighbourhood Policy. Challenges for the Eastern  | - |
| Partnership: what's next?                                      |   |
| Cristina JANDÎC, Maia PISANIUC                                 |   |
| Study of improvement of indices maize line to establish their  | - |
| position in hybrids  |   |
| Oxana DIRZU-COCOS  |   |
| European integration dimension of Republic of Moldova          | - |
| as development path in a globalization setting                 |   |
| Natalia ANTOCI   | _ |
| The interaction of science and higher education in the higher  |   |
| education system of the Republic of Moldova                    |   |
| Cristina COSCIUG, Elena SIMCIUC                                |   |
| Company Slogan and a Vivid Image of a Trademark -              | - |
| as Main Components of a Strong Brand                           |   |
| Igor BELOSTECINIC  | _ |
| Views regarding methodology of contemporary European studies   | - |
| Grigore VASILESCU  |   |
| Management of retail chains                                    | - |
| Lilia SARGU, Natalia SHARAFUTDINOVA, Yulya VALEEVA             | _ |
|  |   |

| The new investment instruments developed                            |     |
|---|-----|
| in the international financial market                               |     |
| Rodica HÎNCU, Ana LITOCENCO   | 80  |
| The Ecologization Megatrend of World Economy and the respons        | e   |
| to it by Republic of Moldova in the context of European integration | on  |
| Zorina SISCAN   | 91  |
| Relationship between rural tourism and environment                  | •   |
| Cristina COSCIUG  | 106 |
| The economic impact of refugees                                     |     |
| Silvia LAZARI, Lilia ŞARGU, Alexandru GRIBINCEA                     | 120 |
| Major European transport corridors and their role                   |     |
| in the Republic of Moldova development                              |     |
| Vladislav MACHIDON  | 127 |

# E-invoicing in EU public procurement as a tool for cross border trade barriers elimination

# Oleksandr TSARUK\*

# Abstract

Public Procurement of goods and services always was one of the principal element of e-procurements because it effects economic growth, describes governments' public services and national competitiveness, level of human capital growth in a long run. Furthermore, researching EU policy on e-procurements demands to observe legislature essence and technological models of e-procurement solutions because none of which has not been developed as the universal one yet. Basic European agreements on public procurements and trade, combining with the currently used public procurement models, force to develop a commonly used framework for all EU countries. Monitoring of EU e-procurement system as model for implementation at Eastern partnerships countries was also suggested.

Keywords: public procurement, e-procurements, e-invoicing, European Union, Eastern Partnerships

# 1. Introduction

Electronic invoicing in our days plays an important in most business trends and governmental policy innovations. Under this consideration, economic agents have to understand that selection between electronic invoicing solutions or paperbased ones does not exists anymore because using electronic invoicing is the main global trend in development of public procurements.

In the public sector, e-procurement is a joint term describing a range of different technologies that can be used to automate the internal and external processes related to the sourcing and ordering process of goods and services. The EU e-procurement system is in the evolutionary stage now but despite of different variations in the implantation of e-procurement across the EU states, the trend towards its acceptance find support between national governments as developing strategies to expedite the implementation of e-procurement projects and also to find support in information and communications technology (ICT) sector as one of the beneficiaries. This variety of government implementations usually reflects the

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diversity of commercially developed technologies and business models.

According to our observations most of the e-procurement research papers are focused on the historical aspects of the issue and the practical methods of its implementation. The basic fields of interest in these studies are related to IT system implementation, its efficiency, measuring possible changes in supply chain organization, outsourcing of services etc. Finding optimal way for utilization of information in technological aspects had become one of the main streams in government e-procurement development. A lot of researchers considered this approach regarding ICT/e-procurement analysis.

# 2.

We consider historical aspects for better understanding of the essence of governmental procurements and modern trends in e-procurements using e-invoicing. As we know governmental procurement has a very long history. Researches claim that earliest procurement was written on a red clay tablet found in Syria dates from between 2400 and 2800 B.C. The order was for "50 jars of fragrant smooth oil for 600 small weights in grain" (Coe, 1989, p. 87). Next evidence of procurement related to development of the "silk-way" between China and Greek colonies in 800 B.C. Roman Empire also had trade relations with private suppliers, and European sovereigns also had such undertakings.

In 20th century vast public procurements were found at level of development, which have never being seen before, and one of the main reason was a free trade regime between developed countries. Among the agreement which boosted its development was the General Agreement for Tax and Trade (GATT, 1979) which aimed to the reduction and elimination of discriminatory methods and encouraging competitiveness with the purpose to promote free trade, through scheduling and announcing of public procurement. Its rules and procedures guaranteed the competitiveness and eliminate preconception.

Next impetus on deregulating procurements was given by the Commission of UN for International Commercial Law (UNCITRAL) in 1994 when General Assembly of the UN adopted the draft legislature on procurement of goods and services. UNCITRAL suggested the rules for procurement for states to adopt but they were not mandatory. At the same UN provided assistance to all states to adopt it by the national legislatures. And the aim was similar to GATT to development competitiveness, fair business and accountability in the procurement procedure.

The European Commission adopted the Communication "Reaping the benefits of e-Invoicing for Europe" in 2010. It identified a set of actions to support the uptake of e-invoicing by ensuring legal certainty and promoting the development of interoperable e-invoicing solutions based on a common standard, paying particular attention to the needs of small and medium-sized enterprises (SMEs). The Communication also invites EU countries to take action and promote e-invoicing at the national level. These actions aim to make e-invoicing the predominant method of invoicing by 2020.

Directive 2010/45/EU on the common system of value added tax regarding rules on invoicing to set out new VAT rules regarding e-invoicing and removed the obstacles to the uptake of e-invoicing by creating equal treatment between paper and e-invoices, while also ensuring that no additional requirements are imposed on paper invoices.

We consider the development towards EU e-invoicing system as major European Union policy goal in ICT and interrelated industries according to the following facts. Firstly, we would underline the highest level of interest from principal authorities. Jean-Claude Juncker, the President of the new European Commission, recognized building a joined digital single market as one of his ten priorities. The Europital Agenda of European Commission "Directive 2014/55/EU on e-invoicing in puean Commission's "Digital Agenda for Europe", enforced in 2010 and updated in 2012, is one of flagships programmes under Europe 2020 plan, the EU's strategy "to deliver smart sustainable and inclusive growth". The full implementation of the "Digital Agenda" also aims at "reforming the framework conditions for the internet economy" (Juncker, 2015). The EU policy also identifies main actions to "establish a single area for online payments" (Juncker, 2015). The Digital Agenda identifies that there is a tough connection between the Single Euro Payments Area (SEPA) programme and e-invoicing one: SEPA will also provide a launch platform for value added services linked to payments, such as the development of a European e-invoicing framework.

The next step forward a Digblic procurement" was adopted by the European Parliament and the Council of the EU representing EU governments in April 2014. It defined deadline for implementing e-invoicing system by 2018 by all public administrations in the EU. They need to adopt a new e-invoicing standard, which now is under development, and accept e-invoices only in this commonly considered standard.

Regarding to Directive 2014/55/EU this e-invoicing standard now is the subject of a standardization request by the European Commission to the European Committee for Standardization (CEN), which represents the national standards bodies of the EU Member States and cooperates with international organisations such as the International Organization for Standardization (ISO). The Commission's demands to develop e-invoice standard are based on a semantic data model, which have to contain the necessary elements. It also requests syntax development for the new e-standard to be reproduced in a numerous commonly used syntaxes at the technical level. The working group on this standard named as CEN PC 434 started its work and was expected to announce the results by the end of 2015. The Commission also supports these developments under its emerging Connecting Europe Facility programme.

Recently the US Government was also tracking e-invoicing trend. The Federal Government has a small number of well-established electronic invoicing solutions, as was identified by the Office of Management and Budget. For many

agencies, these systems have eliminated inefficient paper-handling processes and reduced late payment penalties. Obtaining the full value of electronic invoicing requires a coordinated approach that will reduce burden and duplication to both agencies and businesses. On July 17, 2015 the Executive office of US President issued the memorandum #M-15-19 for the Federal-wide approach to eliminate the duplication across local governments and reduce the burden on vendors on e-invoicing issue. According to this memorandum all-electronic invoicing system for public procurement must be developed by 2018.

E-invoicing was developed as technology in the nineties of XX century. Before the millennium, very few countries already had legislation permitting E-invoicing. Now it is legally regulated and on the agenda almost everywhere around the world. The maturity of the market varies between continents and the countries on each continent. But after the first analysis of e-invoicing latest developments we find that some Latin American and Scandinavian countries are the leaders. (See Figure 1).

Although it is certainly true that electronic invoicing has significant making disruption. In most countries in coming years, enterprises will continue to receive invoices and bills both in electronic and paper-based forms. Managing the processing of these invoices is therefore of high importance to ensure that all ends of every deal are completed transparently, accurately, and with the incurrence of as little extra costs as possible.

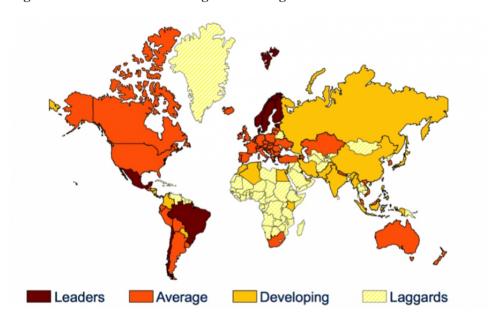


Figure 1. International E-Billing/E-Invoicing in 2015

*Source:* Koch, B. (2015)

E-invoicing is still remains to be an element of the future, especially for the US, the UK, and Europe. Although there is a higher adoption rate in these regions than there is in some parts of the developing world, governments have to truly get on board with e-invoicing and creating standards yet, as they should. By contrast, governments in some of the world's fastest growing economies – Mexico, New Zealand, Norway, Brazil are proactively encouraging the change, with over 50% of all B2B invoices having become electronic.

Recently the Billentis researching team estimated the expected trends for European e-invoicing providers and networks. There are about 25 operators of e-invoicing services in Europe, which are expected to process more than 20 million e-invoices/e-bills per operator in 2015 (Koch, 2015). For the vast majority of the remaining six hundreds operators, the annual e-invoicing volume still lies below 5 million. The volume dropped dramatically in 2014 and will probably decline again by 13-17% per annum in the coming years.

B2B/B2G/G2B B2C >40% 15-40% <15%

Figure 2. European Trends 2015

Source: Koch, B. (2015)

Many countries are declaring e-invoicing as compulsory goal for development. But there are diverse meanings of the terms "e-invoicing" and there is a big difference between objectives and certainty. Such goal is very complicated in government sector surroundings. Objectives within of government administration are usually very broad. In addition, there are many federal states with autonomy of local councils.

There are two main stages of implementing the e-invoicing. The first is when suppliers are free to exchange invoices with the public sector in paper or electronic form. The second is when the suppliers are mandated to send the B2G invoices

electronically. Today Denmark is a pioneer in this field because the e-invoicing was mandatory since 2005. Austria, Finland, Italy, Norway, Slovenia and Spain also considered being early adopters, as does the USA.

A few states in Latin America, Asia and Europe mandate businesses to send e-invoice to the tax authorities mainly for reasons of financial oversights. This is mostly appears as reporting invoice related data but sometimes could be combined with actual e-invoicing between suppliers and consumers.

The Directive 2014/24/EU and 2014/55/EU defined 2018 year for Public Administrations (PAs) in EU member states as a deadline to develop a common e-invoicing standard and to progress the ability to process automated processing of electronic invoices. In addition, they have to transform existing procurement processes towards electronic procedures. Because of the obligation, many PAs are now also evaluating strategic options that go beyond the goals of the EU Directives. They are developing policies with the aim to achieve broad-scale market adoption indexes levels for using electronic processes. These directives will force to increase the proportion of electronic invoices and open the way for cross-border interoperability inside EU and also for neighbourhood policy countries.

Researches estimate that the new directive will affect PAs in EU (Koch, 2015). They have to develop their systems and processes until 2018 at latest with the aim to receive and process invoices electronically.

# Bibliography:

Coe, C. K. (1989). Public Financial Management. Englewood Cliffs, NJ: Prentice Hall

Juncker, J.C. (2015) STATE of The UNION, European Commission Koch, B. (2015) E-Invoicing/E-Billing Entering a new era. Billentis Smith, M. (2013). Pocket guide to cultural assessment. London: Routledge

# Analysis of local budgets revenues in the Republic of Moldova: level, structure and dynamics for 2008-2014 years

# Andrei PETROIA\*

# Abstract

This paper consist largely of analysis of the local budgets revenues of the Republic of Moldova for the period of 2008-2014. The analysis can not offer many information in dynamics due to the few number of years, but we tried to make an analyze of the situation.

Informational support of the work are the laws and regulations of the country; data provided by the Ministry of Finance, National Bureau of Statistics and the literature.

The purpose of this paper is to approach each category of income and part of it, the time evolution of local budget revenues over several consecutive years of budget income distribution in the directions of the Republic of Moldova, and analysis of each component of the local budget.

In this paper, we have analyzed in dynamics structure in total revenues of local budgets, in national public budget, in state budget and in GDP. The main components analyzed were: tax and non-tax revenues, revenues without grants and transfers, grants and transfers from the state budget. Also we have attracted special attention to direct and indirect taxes, as well as their components.

The necessity of this study is to present a clear and concise form of the administrative-territorial units' budget feature, conceptual notions, policies which are reflected on local revenues in Moldova.

This paper aims possibility of revising the budget system structure, improve financial relations within it and its evolution, but it does not reflect fully all matters related to the budget system.

Keywords: local budgets revenues, budget income distribution, budget system structure

# 1. Theoretical aspects regarding local budgets revenues

Local budget process is the set of actions and measures taken by local authorities in order to define financial policy imposed by governmental authority.<sup>1</sup>

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The budget process is the process that starts with budget preparation and ending with the approval of the report on the execution of the budget year.

The budget is a document by which are set out and approved, every year, revenues and expenditures or, where appropriate, only expenditures, according to the system of financing of the budgetary institution.<sup>2</sup>

Public budgeting processes in Moldova reflect the openness of democracy, balancing the various interests and priorities in the community. Budget role is manifested in economic, social and financial activities and is expressed in the following way: from financial point of view it assures distribution of financial resources of the state in order to perform its functions and objectives; from economic point of view state budget includes different instruments and techniques of intervention into economic and social activity through which state carries out economic stimulation policy and social protection policy.

Due to the fact that the budget is a long term process, through several consecutive steps, which include:

- Elaboration of the budget and local budget approval;
- Implementation of the local budget;
- Complete implementation of the local budget;
- Control of local budget execution;
- Approval of the local budget execution.

Achieving a high yield of taxes requires fulfilling the following conditions: tax to be universal, that is to be paid by all those who receive income from the same source, has the same kind of wealth or class of goods; suggests no possibilities to evading the taxation part of the taxable matter.

Although the structure of public revenues may vary in space or time, there are certain criteria to classify them generally available. Considering the main features of revenues, they can be grouped according to the following criteria:

- -the regularity of perception;
- -the economic content of income;
- -the origin of income;
- -nature of the income;
- -the place where the income is considered.

The elasticity of taxes is a requirement that involves the ability to continuously and easily adapt the size of the tax, ie if there is an increase in expenses as referred budgeting, tax may be increased accordingly.

Administrative-Territorial Unit's Budgets - budgets of villages (communes), cities (municipalities), districts, autonomous territorial unit with special legal status and budget of Chisinau Municipality.

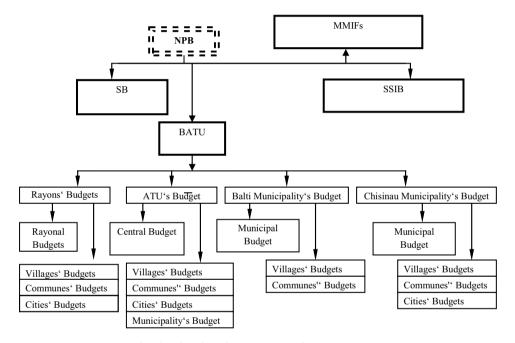
<sup>&</sup>lt;sup>1</sup> TIRON Adriana. *Contabilitatea în Administrația Publică Locală*, Editura Dacia, Cluj-Napoca: 2001, pag. 23

<sup>&</sup>lt;sup>2</sup> Law on budgetary system and budgeting process: no. 847-XIII of 24.05.1996. Official Monitor of the Republic of Moldova. 1997, no. 19-20/197.

Administrative-Territorial Unit's Budgets are classified into the following levels:

- → First level, representing the budgets of villages (communes), cities (municipalities, except Chisinau);
- → Second level, representing the district budgets, the central budget of the autonomous territorial unit with special legal status, Balti municipal budget and Chisinau municipal budget.<sup>3</sup>

Figure 1.1. Organizational chart of National Public Budget



Source: Macroeconomic Fiscal and Budgetary Strategies

# 2. Analysis of local budgets revenues: level, structure and dynamics for the period 2008-2014

For the analysis of income in Moldova we will start from the overall situation of revenue in 2008-2014 and then we will analyse the structure of local budget revenues, components, their dynamics, the causes of that evolution.

Evolution of the total revenues of the local budget is shown in Table 1, and the graphical representation in Figure 2.1.

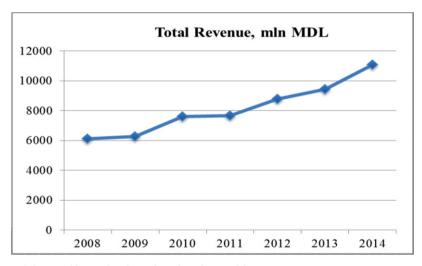
<sup>&</sup>lt;sup>3</sup>Law on Local Public Finance: no. 397-XV of 16.10.2003. Official Monitor of the Republic of Moldova. 2003, no. 248-253/996

Table 1. Nominal value of total revenues of local budgets and their share in GDP

| Indicators                   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014    |
|------------------------------|--------|--------|--------|--------|--------|--------|---------|
| Total<br>Revenue, mln<br>MDL | 6128,9 | 6286,1 | 7614,3 | 7660,9 | 8780,9 | 9445,8 | 11086,9 |
| Share in GDP, %              | 9,74   | 10,47  | 10,60  | 9,33   | 10,00  | 9,46   |         |

Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

Figure 2.1. The nominal values of local budgetary revenues for period 2008-2014



Source: elaborated by author based on data from table 1

The nominal values of local budgetary revenues have an increasing trend from year to year, from 6129 mln. lei in 2008 to 11087 million in 2014. Revenue growth is largely determined by inflation and deducted from the VAT rates to finance staff costs of education and agriculture.

Next, we will present in figure 2.2 the share of total revenues of local budgets in Gross Domestic Product for the period of 2008-2013 because of insufficient data of 2014.

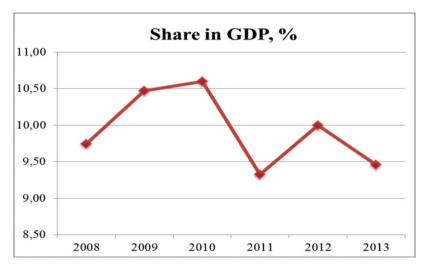


Figure 2.2. The share of total local budgetary revenues in Gross Domestic Product (%)

Source: elaborated by author based on data from table 1

Even if the absolute amount of revenues is increasing in dynamics, the share in GDP has an unclear situation because of fluctuations from 2010. The highest share of total revenues is visible in 2010 with 10.60 % in GDP, and the lowest share was in the next year with 1.3 percentage points less than in 2010.

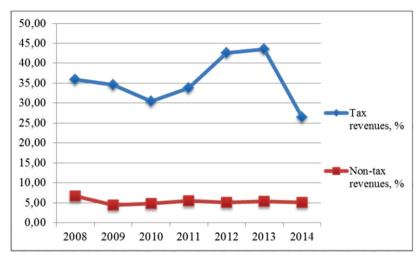
Table 2. Structural analysis of budget revenues and their share in total income of the local budget of the Republic of Moldova for 2008-2014 years, (%)

| Indicators                  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Revenues without grants and |       |       |       |       |       |       |       |
| transfers                   | 46,90 | 42,48 | 38,07 | 42,13 | 50,39 | 51,67 | 34,12 |
| Tax revenues                | 35,90 | 34,64 | 30,51 | 33,78 | 42,56 | 43,54 | 26,38 |
| Non-tax revenues            | 6,72  | 4,42  | 4,85  | 5,48  | 5,11  | 5,31  | 5,09  |
| Grants                      | 0,00  | 0,00  | 0,59  | 1,11  | 0,89  | 1,33  | 1,78  |
| Special revenue funds       | 0,14  | 0,16  | 0,11  | 0,13  | 0,12  | 0,13  | 0,15  |
| Special means               | 4,14  | 3,26  | 2,60  | 2,74  | 2,59  | 2,69  | 2,51  |
| Transfers from State Budget | 50,93 | 55,68 | 57,99 | 54,25 | 46,10 | 43,70 | 59,82 |

Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

From the table above is observed that share of special means is decreasing, comparing 2008 to 2014 almost 1.65 percentage points; the share of special revenue funds maintains the position for the analysed period reaching the highest quota of 0.15% in 2014, and share of grants, with a very low quota, is increasing slowly in dynamics, with the highest rate also in 2014 of 1.8%.

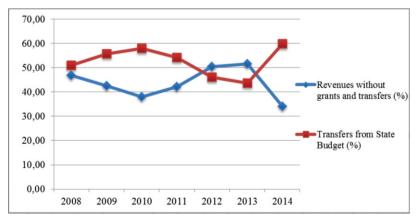
Figure 2.3. The share of tax revenues and non-tax revenues in local budgets revenues



Source: elaborated by author based on data from table 2

According to figure 2.3. we can see that as for tax revenues the curve is fluctuating during 2008 to 2014 with the lowest share of 26.4% in 2014 and the highest quota in 2013 of 43.5%, almost 2 times higher than in 2014. As for non-tax revenues, the curve maintains the position and has very slow fluctuations, we can say that is practically constant.

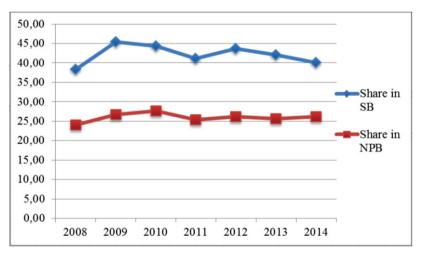
Figure 2.4. The share of revenues without grants and transfers and share of transfers from state budget of the Republic of Moldova (%)



Source: elaborated by author based on data from table 2

From the figure above, is observed that curve of share of revenues without grants and transfers and curve of share of transfers from state budget are opposite, where one increases the other decreases and vice-versa. If we refer to share of revenues without grants and transfers, the highest level was in 2013 with 51.67% from the total revenues of local budgets by 17.55 percentage points more than in 2014. As for share of transfers from the state budgets, the highest percent was in 2014 of 59.82%, with 16.1 percentage points more than in 2013, so as we mentioned above the shares are opposite.

Figure 2.5. The share of total revenues of local budgets in State Budget and in National Public Budget for the period 2008-2014, in percentage



Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

According to figure 2.5. we can see that as share in the revenues of state budget, revenues of local budgets are fluctuating betwen the limits of 40-45%, with the lowest level in 2008 of 38.4% and the highest rate the next year, in 2009 with 45.4% with 7 percentage points more than in 2008. As for national public budget, the share of local budgets revenues fluctuate between the limits of 24-27%, with the lowest level in 2008 of 24.02% and the highest in 2010 of 27.65%, with 3.65 percentage points more than in 2008.

45,00 40,00 35,00 30,00 25,00 Direct tax 20,00 15,00 Indirect 10,00 5,00 0,00 2008 2009 2010 2011 2012 2013 2014

Figure 2.6. The share of direct taxes and indirect taxes in total local budgets revenues for the period 2008-2014, in percentage

Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

In the figure 2.6. is observed a decreasing tendency of the direct taxes, as well as indirect taxes. From the year 2008 to 2010 for direct taxes there were a decrease from 35.16% to 27.5%, then increasing till 40.15% and again decreasing till 23.4% in 2014. As for indirect taxes, the curve has not such big fluctuations as direct taxes.

Table 3. The share of the main categories of taxes in the total direct taxes of local budgets revenues, for 2008-2014 period, percentage

| Indicators                   | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Income tax                   | 68,61 | 74,06 | 73,75 | 74,87 | 57,52 | 58,49 | 63,92 |
| Entrepreneurial activity tax | 19,23 | 13,15 | 12,82 | 13,25 | 33,95 | 33,19 | 22,88 |
| Land tax                     | 9,18  | 9,26  | 8,63  | 7,67  | 5,09  | 4,92  | 7,79  |
| Tax on real estate           | 2,98  | 3,53  | 4,80  | 4,21  | 3,43  | 3,41  | 5,41  |

Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

Next, in figure 2.7. we wil analyze the quota of each component in the direct taxes.

80,00 70,00 60,00 50,00 40,00 30,00 20,00 10,00 0,00 2008 2010 2011 2012 2014 -Entrepreneurial activity tax \_\_\_Land tax Income tax Tax on real estate

Figure 2.7. Dynamics of the main categories of direct taxes of local budgets for the period 2008-2014 period

Source: elaborated by author based on data from table 3

In figure above we can that where income tax increase, entrepreneurial activity tax decrease and vice-versa, are indirectly proportional. The highest rate for income tax was reached in 2011 with a quota of 74.9% in amount of direct taxes and the lowest rate was the next year, in 2012, with 17.35 percentage points less than in 2011. And for entrepreneurial activity tax the highest rate was of 33.95% in 2012 and the lowest of 13.15% in 2009. If we look at land tax and tax on real estate, their curves are decreasing in dynamics slowly, and towards 2014 with an increasing trend.

Table 4. The share of the main categories of taxes in the total indirect taxes of local budgets revenues, for 2008-2014 period, percentage

| Indicators | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
|------------|-------|-------|-------|-------|-------|-------|-------|
| VAT        | 86,34 | 92,74 | 86,18 | 81,43 | 84,83 | 85,77 | 97,37 |
| Excise     | 13,66 | 7,26  | 13,82 | 18,57 | 15,17 | 14,23 | 2,63  |

Source: elaborated by author based on data from www.mf.gov.md/reports [visited 03.02.2015]

120,00
100,00
80,00
60,00
40,00
20,00
0,00
2008 2009 2010 2011 2012 2013 2014

VAT Excise

Figure 2.8. Dynamics of the main categories of indirect taxes of local budgets for the period 2008-2014 period

Source: elaborated by author based on data from table 3

According to figure 2.8. we can not say many things because there only two elements, and they are opposite, with the highest rate for VAT of 97.4% in 2014 and the lowest in 2011 of 81.4% with 16 percentage points less than in 2014. As for the excises, the highest rate was in 2011 of 18.6% and the lowest in 2014 of 2.6% with the same difference of 16 percentage points as for VAT.

# 3. Conclusions:

From the analysis above we can state that as nominal value, revenues are increasing in dynamics, growth which is more based on the increase of taxes. Even if taxes, fees and other revenues are increasing, in the share of Gross Domestic Product this change is not so visible.

Almost all the components of the local budgets revenues are fluctuating for the period of 2008-2014 and we can not say that there is an increase or decrease in dynamics, due to the fact that are taken into consideration only 7 years.

Even if the state still provides important resources, they have the highest proportion of special purpose, which does not allow local communities to have freedom of fund management. In this case increase the income tax rate is a solution of a more broad autonomy to enable local authorities to spend according to their own needs.

Although local bugets revenues provides a slight increase, is expected essential growth of industrial production, agricultural production and investment in

long-term tangible assets.

Regarding the too much weight of foreign grants, if there will be an increase in total revenue, donors will focus on much poorer countries, and we must prepare rational for this perspective.

If talking about direct and indirect taxes, we can state that there is an decrease in direct taxes as well as in indirect taxes as nominal values, the decrease is influenced by the decrease in income tax and entrepreneurial activity tax, and a semnificative decrease in excises for 2014 and in VAT.

There are certain practices that bring more damage than expected improvements. For example, fines and penalties plan, which are always included in the budget in recent years and that, in fact, is a primitive measure of risk coverage of the budget. Everyone claims, especially businessmen, that these measures create more damage than expected effects of the budget as it increases shade work and business affairs does not develop to the extent that they may do so.

Although were drafted necessary laws for budgetary system operation of local autonomy principle, however we can not talk about the existence of real local autonomy as revenues of local budgets are unable to cover expenditures.

The budget has an important role in public life, representing fundamental strategy planning and supervision of financial and economic activity of the state.

# **Bibliography:**

Law on budgetary system and budgeting process: no. 847-XIII of 24.05.1996. Official Monitor of the Republic of Moldova. 1997, no. 19-20/197.

Law on Local Public Finance: no. 397-XV of 16.10.2003. Official Monitor of the Republic of Moldova. 2003, no. 248-253/996.

Law on public finances and budgetary-fiscal responsibilities: no. 181 of 25.07.2014. Official Monitor of the Republic of Moldova. 2014, no. 223-230, Art. 519.

SECRIERU Angela. *Public Finance*. Chisinau: Epigrag, 2004. 423 p.

STRATULAT Oleg. Concept and functions of finance. Chisinau: ASEM, 1996. 56 p.

TIRON Adriana. *Contabilitatea în Administrația Publică Locală*. Cluj-Napoca: Editura Dacia, 2001.

www.mf.gov.md www.statistica.md

# The European Neighborhood Policy: Challenges for the Eastern Partnership: what's next?

Cristina JANDÎC\*, Maia PISANIUC\*\*

# **Abstract**

The world we are living in changes day by day. To adapt better it is important to know what challenges exist. In this research paper I will focus my attention on the European Neighbourhood Policy of the European Union and more precisely on the Eastern Partnership in order to understand what were the reasons to create such a platform, what are the priorities and how it must change in order to ensure the spreading of the democratic values and European standards outside the EU borders. The methods used in this research paper are chronologically and progressive analysis.

Keywords: European Neighborhood Policy, Eastern Partnership

# 1. Introduction

Eleven years have passed since the launching of the European Neighbourhood Policy, a project of the European Union aiming at becoming much more than the policy framework governing the relations with adjacent regions. The ENP is considered an umbrella for a growing number of sub-regional initiatives, such as the Black Sea Sinergy (BSS), the Eastern Partnership (EaP) and the Union for the Mediterranean (UfM).

In 2004, after the largest accession wave, the European Union was inspired to bring the values governing it across its boundaries. Now is becoming clearer that this ambitious goal of expanding the "zone of prosperity, stability and security" is difficult from being achieved. In this research paper I will underline which are the major challenges faced by the EU and its neighbours and what can be changed in their relation, focusing mostly on the Eastern Partnership.

Today, the EU's neighbourhood became more politically fragmented and unstable. The 6 countries from the Eastern Partnership face regional instability, coming from the Russian growing influence in the region, while the Mediterranean neighbours come back to their religious and traditional values, opposing the

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European ones. With the exception of Azerbaijan and Lebanon, predominantly the Muslim countries in the ENP tend to favor the application of Islamic law (sharia) or at least parts thereof and an increased role for religious leaders in politics.

2.

Digging back into history, we can remember the Presidency conclusions of the December 2002 Copenhagen European Council included a section devoted to "The enlarged Union and its neighbours". At that time, the 15 EU member states to "take forward relations with neighbouring countries based on shared political and economic values", the Union remaining "determined to avoid new dividing lines in Europe and to promote stability and prosperity within and beyond the new borders of the Union", concluding that "the enlargement will strengthen relations with Russia". But the aim of getting closer to Russia did not happen, on the other side the relations worsened. By tracking the EU-Russia relation during time, I will try to make a link to the present problems and why now we are facing a crisis of paradigm concerning the Eastern Partnership.

In 1994, on the island of Corfu, Greece, was signed the far-reaching Partnership and Cooperation Agreement (PCA) with Russian Federation. The president Boris Yeltsin in his speech promised to "do everything possible to support European integration". The PCA entered into force in 1997. Under this agreement, a complex structure of cooperation was set up. At the highest level, there were to be 2 summit meetings every year between Russia and EU, and at lower level, a network of different committees and councils that would cover different areas and subjects. The problem that appeared in this ambitious settled structure is that the Russian side intended to discuss all problems at the highest level, not trusting the EU horizontal model of role distribution. And more important than that, the era of Yeltsin ended up, Russian Federation under Vladimir Putin has taken a different perspective toward foreign policy with the Western partners. Russia requested to be treated as a separate actor, not as part of the ENP. In the meantime the first Country Reports and Action Plans were drafted by the European Commission (and the former High Representative for CFSP issues) and the European Neighbourhood and Partnership Instrument (ENPI) entered into force on 1st January 2007 within the framework of the 2007-2013 financial perspectives. Russia was not included as such in the ENP framework, though benefiting from the ENPI funds. During the summit in St Petersburg in 2003, four common spaces between Russia and EU were settled. In Moscow in 2005, agreement was reached on very ambitious "road maps"

<sup>&</sup>lt;sup>4</sup> European Council, Presidency conclusions, The enlarged Union and its neighbours, Copenhagen, 12 and 13 December 2002, point 22. http://ec.europa.eu/research/ era/docs/en/council-eu-27.pdf.

Excerpts of Yeltsin's speech on that occasion can be found at "Athens News Agency Bulletin", Hellenic Resources Network, 25 June 1994, available at http://www.hri.org/news/greek/ana/1994/94-06-25.ana.txt.

for the common economic space, the common space of freedom, security, and justice, the common space for external security, and the common space of research and education. Afterwards we all can remember the Ukraine's Orange Revolution (2004), Georgia's war (2008), Ukraine's war and annexation of Crimea (2014) and other regional events that changed the paradigm of relation between Russian Federation and European Union and even more destabilized the world peace. The Partnership and Cooperation Agreement with Russia expired in 2007 and after the events in Georgia, the launch of negotiations toward a new cooperation platform were postponed. In November 2009, in Stockholm talks started on the so-called Partnership for Modernisation, which was officially launched at the summit in Rostov in June 2010 (during Medvedev presidency). In 2012 Putin returned to take a third term as president of the Russian Federation. This mandate is marked by geopolitical actions that begin to be taken and more important by creating and consolidating the Euroasian Union with Kazahstan, Belarus and other countries willing to join. Instead of moving step by step towards the often discussed free trade area from Lisbon to Vladivostok, Russian policy now sought to establish a customs union with in international perspective fairly high tariff barriers and numerous restrictive practices. We can mark the EU – Russia relation as a failure, which made even more difficult to develop an effective Eastern Partnership policy.

And now let's come back to the values promoted by the European Neighbourhood Policy and to see where exactly it failed. The ENP is based on the EU's own model of economic integration, political and regional cooperation. Here we can bring the notion of "normative power", which EU claims to be. This term can be understood as "the ability to define what passes for normal in world politics" and the most important factor shaping the EU's international role "is not what it does or what it says, but what it is". European Union is not just a political block, but as well an economic one. So, near the term of "normative power", we can underline the term "market power Europe". Gissle Bosse argues that there is no coherent discourse on values nor an agreement among EU actors or among and within ENP partners on the contents and significance of these values. Furthermore, there is a gap between the political rhetoric on shared values and the capability to enforce these values.8 When transferring the values of a space outside its boundaries it is important to take into consideration the local features and realities. But in this respect, the EU has backlogs. Not only European Union has problems at this chapter. Generally, it is almost impossible to bring values abroad and to expect that

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http://onlinelibrary.wiley.com/doi/10.1111/1468-5965.00353/pdf

<sup>&</sup>lt;sup>6</sup> 15th EU Summit: Road Maps for Four Common Spaces", European Commission, available at http://ec.europa.eu/research/iscp/pdf/ policy/russia\_eu\_four\_common\_spaces-%20roadmap en.pdf.

<sup>&</sup>lt;sup>7</sup> Normative Power Europe: a contradiction in terms?

<sup>&</sup>lt;sup>8</sup> Values in the EU's Neighbourhhod Policy: political rhetoric or reflection of a coherent policy? http://eper.htw-berlin.de/no7/bosse.pdf

everyone will be happy by implementing them. Even inside the EU, not every member state perceive the values in the same way.

Let me bring an example of the ambiguity of values. The first 'Wider Europe' Communication of the European Commission (2003) referred to shared values with a footnote to the Charter of Fundamental Rights of the EU, whereas the ENP Strategy Paper one year later focused on international standards, including human rights conventions of the United Nations, the Council of Europe and the Organization for Cooperation and Security in Europe. Let us remember that these values should be put up in practice by some Action Plans. Having these ambiguities in defining them, you can't expect to have clear results. I will focus my attention on the 6 countries from the Eastern Partnership: Azerbaijan, Armenia, Belarus, Georgia, Ukraine and Republic of Moldova. Even between these countries are differentiations which make difficult to unite them under the same umbrella of values and principles. At the previous review of its European Neighbourhood Policy in 2010-11, the EU introduced the more-for-more principle: the EU will develop stronger partnerships and offer greater incentives to countries that make more progress towards democratic reform – free and fair elections, freedom of expression, of assembly and of association, judicial independence, fight against corruption and democratic control over the armed forces. As an example the "morefor-more" principle has worked when Moldova signed the Visa Liberalization Agreement, but from my personal perspective there is no vision how in future will be applied this principle. EU is coping now with extremely challenging problems: euro-zone crisis, humanitarian/immigration crisis. The ENP and more precisely the EaP with the geo-political problems it brings is not anymore a top priority on the EU's agenda.

The two groups of countries (those that signed an AA and those that didn't) from the EaP are by no means homogeneous. In particular, Armenia, Azerbaijan and Belarus have very different expectations vis-à-vis the EU. Moreover, while AAs and DCFTAs were signed with three countries only, other EU instruments (starting with visa facilitation/liberalisation) cover all six countries. Above all, the EaP countries face common challenges emerged from the post-Soviet transformation.

The limits of the Eastern Partnership can be better seen in the case of Armenia. Between 2010 and 2013, Armenia reformed in line with the EU Directives, but on September 2013 they announced the decision to join the Euroasian Customs Union. The EU has shown flexibility in this relation, by opening in 2015 the possibility of the European Union and Armenia signing an association agreement without its free-trade component. Speaking on January 20 after a meeting in Brussels with Armenian Foreign Minister Eduard Nalbandian, Johannes Hahn said that the EU "should make best possible use of the already existing association agreement which we negotiated and safeguarded for future reference," and added that it needs "to be adjusted in order to reflect the new context but the substance of its political part I hope should be kept." Until it is signed the

political part of the agreement, a way to continue the cooperation EU – Armenia could be by enhancing and strengthening the role of the civil society. In the Single Support Framework 2014-2017, support to civil society is defined as "complementary" with only 5% of total funds allocated to this priority. The EU should consider increasing this amount. Azerbaijan and Belarus are another case in the Eastern Partnership that proved its pitfalls. Still, a degree of cooperation with EU should be maintained. The most important are the people-to-people contact, supporting the civil society and stronger links in energy and technical cooperation.

By signing the Association Agreement and the DCFTA, Georgia, Ukraine and Republic of Moldova have taken massive commitments in terms of harmonization to the EU standards and regulations. An effective implementation of these agreements will be possible only with the sustainable support from the European Union. In the case of the Republic of Moldova, the EU has stopped the macro-financial assistance, due to the political instability and financial-banking crisis. Until the country signs an agreement with IMF, there will be no financial support from EU. In reality this means, that the assistance will come not earlier than in March 2016, after the election of the president of the country. A difficult winter is ahead, the Russian Federation by all means puts pressure on the region and the citizen's believe in the association with the EU decreases day by day.

It is important to look at the macro-economic indicators to see the economic performance of the EaP countries.

350

300

250

200

150

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Azerbaljan (¹)(²)

Belarus

Armenla

Georgia (²)

Moldova

Ukraine

EU-28

(¹) 2010: provisional.

(²) 2013: provisional.

Tabel 1. Development of the GDP volume, 2003-2013

Source: Eurostat (online data codes: enpr\_ecnagdp and nama\_gdp\_k)

As shown below all 6 countries recorded a much faster expansion in economic activity, compared to the EU-28. Azerbaijan and Belarus experience the

biggest increase in GDP. The key economic statistics presented in the compact guides of the Eurostat<sup>9</sup> illustrate the situation until 2014. We should take into account that in 2015 both the EU and the EaP countries were even more influenced by the financial economic crisis, regional and the refugee crisis.

GDP per capita in the EU-28 averaged EUR 25 700 per inhabitant in 2013, which is much bigger than the GDP per capita in any of the EaP countries. From the figure above, we see that the lowest GDP per capita has Republic of Moldova, of less than EUR 2000. Azerbaijan, a rich in oil country even though has the highest GDP from the EaP countries, has 4 times less than EU-28 average.

This data shows us the huge difference that exists between the EU-28 and the EaP countries and how accurate should be the economic measures and policies applied. Unfortunately, the differentiation criteria does not work accordingly and the expected results are delayed.

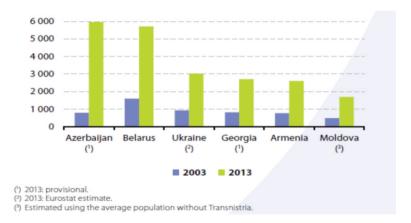


Table 2. GDP per capita, 2003-2013

Source: Eurostat (online data code: enpr ecnagdp)

## Conclusion

Concluding, the European Commissioner for European Neighbourhood Policy and Enlargement Negotiations, Johannes Hahn in his speech in front of the European Parliament from 30 September 2014, shows his determination for helping the countries that signed the Association Agreement/DCFTA "I am determined to ensure Ukraine, Georgia and Moldova get all the support they need to make their own democratic choices, and to undertake the necessary political and economic reforms." This means that there is still support for the Eastern Partnership

9 http://ec.europa.eu/eurostat/documents/4031688/6192590/KS-04-14-896-EN-N.pdf/12402a59-85a2-479a-afe8-21cee7cdc738

Project. In my opinion, there should be a clear position from all the member states concerning the neighbours, both from South and East. Some reforms have been undertaken by the countries. In 6 EaP countries the internal political situation is externally dictated and influenced to some extent. The geopolitical issues are a matter that should be tackled at the EU level. Despite the problems, it is needed bravery to continue the reforms. In the last Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions it is expressed a soft position towards Russia: "The EU's relations with the Russian Federation have deteriorated as a result of the illegal annexation of Crimea and Sebastopol and the destabilisation of eastern Ukraine. There are several issues pertaining to the region on which constructive cooperation would be helpful in terms of addressing common challenges and exploring further opportunities, when conditions allow". 10 The introduced term of "constructive cooperation" leads us to the idea that a communication strategy should be enforced and conducted in order to address the ambiguities in the perception of the EaP, majorly by important Eastern actors such as the Russian Federation. And finally, we can't have feasible reforms unless there is strong local ownership and adjustment to the local patterns. Here I underline again the application of the "differentiation" and "more for more" principle. And even more important, for continuing the successful implementation of the EaP, there is a strong need in defining the strategy and objectives concerning the geopolitical issues.

# **Bibliography:**

- Laure Delcour: "In need of a new paradigm? Rethinking the European Neighbourhood Policy/Eastern Partnership", April 2015
- Erwan Lannon: "The European Neihbourhood Policy's Challenges", College of Europe
- Sieglinde Gstöhl: "The Contestation of Values in the European Neighbourhood Policy: Challenges of Capacity, Consistency and Competition", College of Europe, March 2015
- Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions, Review of the European Neighbourhood Policy, 18.11.2015
- Daniela Huber and Maria Cristina Paciello: "Overhauling EU Policy in the Mediterranean. Towards more inclusive, responsive and flexible policies", Instituto Affari Internazionali, 2015

# Study of improvement of indices maize line to establish their position in hybrids

# Oxana DIRZU-COCOS\*

# **Abstract**

Corn (Zea mays L.) crop that is grown on large areas - over 140 million hectares worldwide, and 400-500 thousand ha in Moldova due to production potential broad diversity of use as food for humans, animals, birds raw material for industrial processing. The upward trend in average yields achieved is largely attributed to the improvement of scientific programs.

Select the line with the characters and traits that are transmitted hereditary hybrids and contribute to their performance, ensure progress in improvement. Therefore, the process of creating inbred lines associated with combining ability testing as a measure of productivity conferred hybrids, is significant research programs. Orientation purpose of improved maize hybrids to formulas and simple change to a superior capitalization heterosis effect and perfect uniformity of plant requires changes in methodology for the creation, evaluation and classification of inbred lines.

*Keywords:* corn, hybrid breeding, heterosis, inbred lines, phenotypic groups, heterotic groups, hybrid combinations, diallel crosses, etc.

# 1. Introduction

Corn (Zea mays L.) is a very valuable plant species with a high yield potential with a wide variety of use as a food source for humans and animals and raw materials for industrial processing, cultivated on large areas worldwide ONA A.D. (2014), but also in Moldova. Worldwide maize ranks third in area and first as production and in our country, the maize area planted is 400-500 thousand hectares annually.

Because of the importance of corn, over time, they have been taken a series of measures to increase production. The upward trend in average fields achieved, largely due to a recovery hybrids with superior heterosis effect. The process of creating inbred lines associated with testing combining ability, is significant in breeding programs. Determining genetic progress is important for improving maize. The improvement in important issues relates to the extension of genetic

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diversity and phenotypic selection of the material. Findings of inbred lines and characters after ameliorative valuable attributes, systematizing their phenotypic and heterotic groups as an effective program to create new hybrids competitive.

Study indices reclamation is crucial to harnessing hybrid combinations. For these reasons it was necessary to conduct investigations that aim to identify the specific features of inbreds scientific rationale for the selection of parental forms in the process of synthesizing hybrid combinations. To achieve this it is planned the following objectives:

- Phenotypic description of biological material after characters UPOV recommendations;
- Findings ameliorative indices in comparative cultures;
- Assess the differences between lines based on the level of heterosis after production of grain;
- Using inbred lines in hybrid combinations and selection State candidates for official tests

# Material and method.

In the present study as a research object in the reference year were used 10 lines of precocity average: MKP 55 MKP 56, MK 271, AS 5538, AS 6751, AS 6370, AS 6430, MV 990, MV 160, AS 525 and 10 lines precocity late half: MV 42/192, AS 587, MK 267, AS 6161, MK 390, AG - 6242, AG 2448, AG 7021, AG 6567, AG 7487. During the growing season, those lines were multiplied for performing subsequent experiences.

Of all the experimental models, those based on diallel crosses are most commonly used for both the multiplicity and diversity of genetic information that they can provide, and for relatively simple in execution.

In general, by diallel crosses are made all hybrid combinations between "p" parental forms.

The most common systems are made 7-10 diallel parental forms. Below the p = 7, the results show a less interpretative value, and more than 10 intervening complications for enforcement experience.

To avoid the limitations of the small number of parental forms that can be used in diallel systems, Kempthorne and Curnow (1961) propose partial diallel systems, which reduce the number of crossings and plots can be substantially reduced. Thus, if the 20 lines in a system Diallele fully type 1/2 (P-1) are required 190 combination, in a system Diallele incomplete use only 60 or 80 combinations without diminishing the accuracy of the statistic information obtained, HAS I., G. BUTNARU, Căbulea I. crystals M., et al. (2004).

In our case, the synthesis will be in the crossing scheme Diallele incomplete type n (n-1)/2 hybrids for experimentation with sufficient guidance comparative cultures.

# Results indicative scientific and practical.

- Classification of each group of inbred lines of maize groups phenotypic and germplasm
- selection of donors of favorable genes for agronomic traits;
- Findings peculiarities of agronomic traits event important in hybrid combinations:
- Highlighting the performance of hybrid combinations in advanced testing for promotion.

# Bibliography:

- KEMPTHORNE O., R.N. CURNOW, 1961, The partial diallel cross. Biometrics, 17: 229–270.
- ONA A.D., 2014, Studiul fenotipic și genotipic al unor linii consangvinizate obtinute din două
- composite heterotice de porumb (Zea mays L.), teza de doctor, Cluj-Napoca, 5-15.
- HaŞ I., BUTNARU G., CĂBULEA I., CRISTEA M., et al., 2004, Porumbul, Studiu monografic, Vol I, Biologia Porumbului, 255.

# European integration dimension of Republic of Moldova as development path in a globalization setting

# Natalia ANTOCI\*

## **Abstract**

In a global market economy, the opening towards outward, standard harmonization and convergence of national economies can create the necessary synergy in order to address the challenges of globalization. Republic of Moldova needs to develop partnership relations with European Union (EU) countries, which have experience in relation to commodity markets, and without which it is difficult to modernize the economy and diversify its export. Moldova's integration into the European Union allows increasing dynamism and sustainability of the economic system of our country and allows implementing a new model of economic growth according to EU Member States' experience.

Keywords: globalization process, foreign trade, Association Agreement with EU

# Introduction

Currently, it is obvious that due to globalization and regionalization of world economy, efficiency and competitiveness of national economies can only be ensured by international institutional cooperation and integration of market infrastructure that would ensure fluidity and flow of capital, technology, information and so one and so forth. In a global market economy, the opening towards outward, standard harmonization and convergence of national economies can create the necessary synergy in order to address the challenges of globalization. If before the formation of centralized nation states in Europe, it has being based on the idea of consolidation (e.g. integration of nations), today they encounter another situation such as the strengthening of regional integration (e.g. internationalization), especially based on economic criteria. Therefore, based on these facts, it is not thoroughly and practically possible to explain the recurrence of formation process of new statehood according to old concepts. [1, p.263].

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# Republic of Moldova's economic growth in a globalized world

Thus, as part of the globalization process, the Republic of Moldova has no choice but to adjust to a very strong economic regional organization, especially when investments for this process come from outside the country. In this context, we consider that European integration is not only a mean to stimulate economic growth but also a catalyst to develop itself in the context of globalization challenges, in terms of enhanced international competitiveness and fully capitalized comparative advantage.

Comparative advantage means cheap but qualified labor, natural and geographic factors and good infrastructure. Republic of Moldova disposes of transport means and other communications that connect trading routes between East and West. If the advantages of our country are created by natural factors, and they usually are static and not reproduced, then the competition, to the contrary, is dynamic and changeable as it relates directly to innovation and investment resources, to market conjuncture, technical scientific discoveries and their implementation in the production process. In this sense, the antitrust policy and support for a competitive environment play an important role in the foreign policy formulation of Republic of Moldova. For instance, World Bank's experts consider the following aspects as relatively safe parts of Moldova such as scientific potential, qualified engineers and the existence of technological networks that connect different businesses into a unique production complex. The relatively weak parts are the following ones: weak competition at regional level, poor orientation with regard to consumer protection side (e.g. marketing) and low quality of production processes.

The increasing degree of market transparency enhances the requirements concerning the competitiveness of domestic goods and services. It is evident that Republic of Moldova needs to develop partnership relations with European Union (EU) countries, which have experience in relation to commodity markets, and without which it is difficult to modernize the economy and diversify its export. The development strategy is ineffective in terms of the possibility of achieving growth and competitiveness, as well as, equal positions in contemporary retail markets. In this context, it is very important for Moldova to increase its pace, quality of economic and commercial development that directly depend on its correlations with countries of the region and the world.

# The role of political and economic cooperation of Republic of Moldova with European Union in a sustainable economic development of our country

The integration process is an important factor to stimulate economic growth. It creates the right conditions and mechanisms to increase operational efficiency of Moldovan economy from behalf of convergence expenses, collaboration and reasonable implementation mechanisms of the European Union's instruments. [2,

p.24]. On the one hand, Moldova's integration into the European Union allows increasing dynamism and sustainability of the economic system of our country. On the other hand, it allows implementing a new model of economic growth according to EU Member States' experience.

Republic of Moldova's integration into European Union implies our country to enjoy of economic and political recognition that will have a high political level, economic maturity together with development and stability. After joining the EU, Moldova will become a country with an open economy. In these circumstances, it would quickly liberalize the movement of people, goods, capital, ideas and increase competition. As well, the labor migration vector will be oriented towards countries with a standard of living higher than in our country.

In case of an economic and trade integration with the European Union, the Republic of Moldova remains free to determine its commercial policy towards other trading partners (obviously, in accordance with its commitments as a World Trade Organization member). [4]. This means, by the way, that Moldova will be free to negotiate a free trade agreement with the Custom Union formed of Russia, Belarus, Kazakhstan or any other country in the world. This strategy is fully in line with the objectives of Moldova's economic and development imperatives. So far, the economic integration with the European Union has already brought some spectacular results. For example, the foreign direct investments from the EU in Moldova's economy have helped the country to find its strongest competitive advantage in completely new economic sectors, such as the production of auto spare parts. [3]. It is equally important for a long-term development of the Republic of Moldova, a country that is poor in natural resources, to boast a friendly and supportive business environment. It is extremely important for Moldova to progress not only in the economic but also social and democratic areas combined with a better-trained human capital and a predictable investment climate. Direct financial and technical support from the EU's behalf is a precondition for Moldova to remove its oppressive business climate and adopt a climate according to the expectations of a modern business culture.

Currently, the Moldovan economy develops unevenly and this fact reduces its economic stability. The situation depends on the circumstances of foreign markets and energy resources. The systematic EU enlargement is not only a form of struggle for markets, but also an attempt to move the border zone of stability and assign to it an essential security. Besides this, the enlargement of EU assigns a political importance for EU in the international arena and allows to essentially influence the creation and maintenance of the world order through such organizations like: United Nations, International Monetary Fund, World Bank, World Trade Organization, etc. However, in the context of globalization, it is important to protect the domestic market and to actively struggle for foreign markets of goods and services, including in developing markets. Therefore, knowledge, new technologies and scientific research centers must stand in the foreground of this process.

International Monetary Fund's observers, western experts and economists conclude that there is no structural restrictions in the economic sphere that would not prevent Moldova to develop fruitful trade relations, with a potential EU integration. It is remarkable the link of Moldova's economy to conjuncture fluctuations of world markets, but there are also some positive movements. The foreign trade is becoming more pragmatic and flexible. Therefore, it assumes a rational approach to problem solving and allows protecting the economic national interests of the Moldovan state.

With regard to Moldova - EU commercial relations, the best model is the model that involves the modernization strategy of development based on democratic liberalization in conjunction with rational protectionism that would provide a necessary competitive environment to stimulate accelerated growth. At the same time, there are issues with regard to Moldova's relations with the EU related to ensuring Moldova's unification as to deepen the partnership with the EU and ensure its integration into the European Union.

In my opinion, the existing experience of Moldova's cooperation with the EU consists of the following factors:

- Adjusting its fundamental interests and positions in the sphere of trade (e.g. advantages and gains from foreign trade, increased offer, etc.);
- Understanding the degree of mutual substitution and dependence between the EU and Moldovan economy;
- Highlighting the historical and cultural closeness intensified by common values in areas such as trade, economic freedoms and democracy.

EU policy stimulates the development of countries that aspire to join EU, but the success depends largely on the domestic potential of Moldova in connection to its speed and efficiency to carry out sustainable reforms. The general principles of harmonization of Moldovan policy to EU policy (e.g. participation, transparency, efficiency, consistency and priority) will determine the economic pattern of Moldova's development, in line with the European integration. The most important measures of institutional harmonization according to EU's standards are the market access improvement, increased investment, increased competition, reduction of corruption, improvement of confidence in reforms and credibility in economy.

The benefits and the costs of the EU enlargement will depend, in particular, on the coordination of two processes - deepening and widening the integration at the current stage, using the experience gained by the association of the states with varying degrees of socio-economic development. Moldova's EU accession process guarantees such advantages as: the peaceful, civilized development, the safe organization of partnership relations with neighboring countries, the continuous development of the trade, stabilization of democratic institutions, ensuring economic and social progress and the impossibility of returning to the authoritarian methods of administration.

Identification of technical-economic development priorities in key areas to enhance the competitiveness according to the indicators of the Lisbon Strategy to the EU average - "improving the conditions for innovation activities and R & D, the development of the informational society, creation of a corporate environment conducive to business private economic sector". These priorities should be achieved through targeted programs financed with state support, concessional loans, public procurement and the provision of government guarantees for investments in equipment purchases which require a significant capital.

The respect of the economic policy principles and the harmonization of trade policies of Moldova and the EU, the changes in legislative and normative-legal acts are important for improving the competitiveness of the domestic and interregional markets, and are essential to the increasement of the effective access to EU markets.

I believe that the harmonization of the mechanisms of economic growth in the EU and Moldova should include: the replacement of the organizational and economic institutions and mechanisms according to the European practice; active implementation of the advanced technologies borrowed for upgrading and developing the infrastructure; creating the foundation for the development of its advanced elaborations and innovations.

The political association and the economic integration will represent a new stage in the evolution of relations between Moldova and the EU. The legal, political and institutional aspects of the new stage will be set by the future Association Agreement with the EU, which would replace the current Partnership and Cooperation Agreement.

The Association Agreement with the EU will recognize Moldova's European aspirations and will cover a number of areas of cooperation which will aim to develop closer political relations and economic integration with the EU:

- The political dialogue, which will involve an increasing convergence of positions of both parties on international issues and common positions on security and stability domain in Europe;
- The regional cooperation as a tool for ensuring stability and security in the European neighborhood;
- Free circulation of goods through the gradual establishment of a free trade zone with the EU;
- Free movement of labor by ensuring non-discriminatory treatment of Moldovan citizens legally employed in work in EU Member States;
- Free circulation of services and capital under the most favored Nation State in economic relations with the EU;
- The legislative harmonization that will entail the gradually increasement of the compatibility of Moldovan legislation with the community acquis;
- The justice and the home affairs, which will include strengthening of the rule of law, development of state institutions that are responsible for law enforcement, preventing and combating crime and other illegal activities;
- The policies of cooperation in the economic, research and technological development, regional and local development, statistics, etc ..., all designed

to assist the economic and social development of the Republic of Moldova;

• The financial cooperation, which will set the principles and criteria under which Moldova will benefit from EU financial assistance to implement the objectives of the Association Agreement.

By signing and implementing the Association Agreement with the EU on June 28, 2014 the Cabinet of Ministers approved a draft legislation on ratification of the Association Agreement between the Republic of Moldova, on the one hand, and the European Union, on the other hand, signed on June 27, 2014 in Brussels.

On July 2nd, 2014, the association agreement between Moldova and the European Union have ratified the plenary session of Parliament.

At the plenary session of the European Parliament of 13 November 2014, 535 deputies voted to ratify this document, 94 against, 44 deputies abstained. The legal and institutional framework of relations between Moldova and the EU is defined by the Partnership and Cooperation signed on 28 November 1994 and entered into force on 1st of July 1998, for a period of 10 years (after the expiration of 10 years being automatically renewed each year).

APC was, above all, a commitment between Moldova and the EU on behalf of the affirmation of democratic values. Through this agreement, the parties agreed to promote a political dialogue designed to strengthen their approach to support political and economic changes in Moldova, contributing to greater convergence of positions on international issues of mutual interest to encourage their cooperation issues on respect for democratic principles and strengthening stability and security in Europe.

In addition to governmental cooperation, trade is one of the main forms of economic cooperation between Moldova and the EU, providing a direct impact on growth and economic development of the country. In the period of January -February 2015, the exports of goods to EU countries (EU-28) amounted to 210.8 mln. dollars (6.7% more than the same period in 2014), accounting for 67.3% share in total exports (55.1% in January-February 2014), the data of the National Bureau of Statistics shows. Thus, the EU countries have supplied goods worth 242.4 mln. Dollars (21.8% less than in January-February 2014) and the imports of goods from CIS countries decreased by 28, 3% and amounted to 184.4 mln dollars. Note that the import volumes decreased for all major trading partners of Moldova. So, the deliveries of the Russian Federation were reduced by 23.1%, those from Ukraine by 37.7%, from Romania - 24.3%, Italy 24.6%, China 12.4%), Belarus by 49.5%, Germany 14.7%. The gap in exports and imports resulted in January-February 2015 a trade deficit of 260.3 million dollars, 116 mln .dollars (-30.8%) lower than that registered during corresponding period in 2014.

The chronic deficit of the trade balance with EU countries, in particular, and significant import pressures lead to reduced production of domestic goods. Therefore, the situation may create branches, which are characterized by unstable development (engineering branch, some types of food and light industry), limited exit opportunities in foreign markets, reduced financial indicators. Also, the costs

for manufacturing production in harmonizing technical requirements with European standards lead to bankruptcy of many agricultural enterprises. Agriculture becomes uncompetitive with imported production. The competitive positions of the export of certain types of goods: clothing, metals and metal products, electrical equipment get worse in connection with trade liberalization and trade preferences from the EU to countries in the developing world. It depends very much on the situation of foreign markets and energy prices.

#### **Conclusions:**

Approximation of EU borders with Moldova directly opens lots of possibilities for expansion and development of the service sector, but in this case it depends very much on the state and development of the infrastructure, as well as the capacity of the Moldovan business to adapt to the new conditions. For example, the transportation services, the cargo processing, the storage and dispatch of cargoes and advisory services, the banking information will become the most requested. However, given the increasing competition, they must be more attractive to business than in foreign countries. Thus, already today, it is important to study the market conditions for alternative proposal. Therefore, if Moldova wants to implement major projects, it has to demonstrate that it is a fully independent country that can guarantee political and economic stability

#### **Bibliography:**

Lîsîi, Tatiana. Unele aspecte ale integrării corporative regionale a țărilor comunității statelor independente / Tatiana Lîşîi // Anuar Științific, volumul VII-VIII, IRIM, 2008. – p. 262-266.

Van Apeldoorn, Bastiaan. Transnational Capitalism and the Struggle over European Integration / Bastian Van Apeldoorn; New York, London: Routledge, Taylor & Francis Group, 2006. – 224 p.

Economist. Reducere substanțială a exporturilor moldovenești în Rusia -

http://eco.md/index.php/economie/macroeconomie/item/1437-reducere-substan%C5%A3ial%C4%83-a-exporturilor-moldovene%C5%9Fti-%C3%AEn-rusiaAcordul de Liber Schimb Aprofundat şi Cuprinzător dintre Republica Moldova şi Uniunea Europeană.

http://www.mec.gov.md/sites/default/files/document/acordul\_de\_liber\_sch imb\_aprofundat\_si\_cuprinzator\_dintre\_rm\_si\_ue.pdf

http://www.statistica.md

# The interaction of science and higher education in the higher education system of the Republic of Moldova

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#### **Abstract**

This article analyses the situation in the sphere of science and higher education integration in the Republic of Moldova, produced within the international project FKTBUM Fostering the knowledge triangle in Belarus, Ukraine and Moldova."The authors consider the main indicators that show the results of research activities at universities and their role in the transfer of the latest scientific achievements in the educational process. The authors attempt to rehabilitate Moldovan universities based on the capacity assessment of higher education institutions of the Republic of Moldova, undertaken by a committee of experts in 2014, which states that the national system of higher education in the Republic of Moldova is focused more on the educational component, considering research activities at universities as a minor component. It is proved that higher education institutions of the country, being a cradle of scientific staff, are so closely associated with science that it is incompetent to separate these phenomena. It is stated that the academic staff actively participates in scientific research and develops an excellent platform to promptly disseminate its results in the society. The comparative data provided in the article include a number of leading universities of the Republic of Moldova and reflect the extent of their participation in publishing and project activities, their role in the training of new scientists. The authors draw attention to the fact that funds for scientific research are distributed unequally, which is a constraint to the involvement of universities in research activities. Comparing investment activities in science in different countries, the level of university graduates' involvement in research activities, the authors arrive at a conclusion about the need to appeal to the European experience, where the involvement of scientific and teaching staff in research activities is encouraged and strongly supported by the state, private business structures and autonomous university policy, which becomes extremely important if we take into account that the Republic of Moldova has signed an Association Agreement with the European Union.

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*Keywords:* educational process, educational standard, reproduction of scientific staff, research structure, scientific activity

#### Introduction

Integration of science and education is a prerequisite for innovation economic development of any country in the world. Expansion of educational opportunities for universities and strengthening their research abilities are the most urgent problems for the Republic of Moldova, particularly in light of the recently signed association agreement with the EU and adoption of the new Education Code, designed to modernize the educational process, to bring it into line with the European standards, whose most important purpose is to ensure the quality of education. Competence assessment of the teaching staff from Moldovan universities greatly depends on the level of its involvement in research activities. Therefore, there is a need to comprehensively analyze the involvement of universities in the Republic of Moldova in scientific activities, their role in the application of the latest scientific results in the educational process.

The connection between science and education can be traced most evidently at the level of higher education institutions, where universities act as an intermediary of educational and scientific institutions integration with industry, cultural institutions and governmental bodies.

According to the Education Code of the Republic of Moldova, research and innovation activities in higher education institutions are carried out as part of their own organizations and/or in partnership with other organizations, economic agents or public institutions [1]. Research institutes, the Academy of Sciences and other higher education institutions involved in joint activities may be among the partners.

According to the data provided by the Ministry of Education and the Central Committee for certification and accreditation of the Republic of Moldova, there are 33 research institutes and 30 universities in the country. These units are studied in accordance with 5 main strategic directions: materials; technologies and innovative products; energy efficiency and renewable energy assessment; health and biomedicine; biotechnology; national heritage and development of the society. The degree of their development depends on the state policy and the way they choose priority directions of the state development, the level of instruction of the specialists involved in research, on the proper allocation of funding for the relevant branches of science.

The universities, which give birth to new specialists, are an essential element and no development of science is possible without it. Every moment of the university activity is associated with scientific activities, whose effectiveness is proved by the following:

1) Events that are valuable from the scientific point of view (conferences, seminars, round tables, etc.);

- 2) Publishing activities (monographs, textbooks, dictionaries, scientific publications, etc.):
- 3) Activities related to bachelor, master and PhD theses (providing consultations, supervising experimental, comparative and analytical methods used in the papers written by university, master and PhD students, independent work on dissertations, etc.):
- 4) Lecture activities (systematization and actualization of lecture notes):
- 5) Project activities (research, funded from various sources, etc.).

Thus, we consider that it is incompetent to state that Moldovan universities pay more attention to the didactic, rather than to the scientific activity. However, there are a number of factors that do not always depend on universities, which hamper their ability to do research. In order to identify these factors we should consider the main indicators of science and education interaction in the higher education system of the Republic of Moldova.

The main indicators of the university involvement in science include their extensive publishing activities, participation in scientific forums, the number of patents for the inventions the major part of which is involved in the educational process, etc. Thus, in 2013 researchers published 199 monographs, 356 textbooks, dictionaries, educational and teaching materials, 1,701 articles in national collections (category A - 10, category B - 850, category C - 841). There were published 373 articles in scientific journals with an impact factor [3]. There were submitted 3.490 abstracts at scientific forums in the country and abroad. It is significant that there were granted 208 patents for our scientists' inventions, over 70% of which belong to the researchers from six leading Moldovan universities (Table 1).

Table 1. Patenting, licensing and certification activities of the universities from the Republic of Moldova

|                      | UASM <sup>11</sup> | UMF <sup>12</sup> | UTM <sup>13</sup> | USM <sup>14</sup> | USARB <sup>15</sup> |
|----------------------|--------------------|-------------------|-------------------|-------------------|---------------------|
| Licensing of new     | 2                  | 0                 | 0                 | 0                 | 0                   |
| varieties of plants, |                    |                   |                   |                   |                     |
| breeds of animals    |                    |                   |                   |                   |                     |
| and birds            |                    |                   |                   |                   |                     |

<sup>&</sup>lt;sup>11</sup> Universitatea Agrara de Stat din Moldova (State Agrarian University of Moldova)

<sup>&</sup>lt;sup>12</sup> Universitatea de Medicina si Farmacie "Nicolae Testemitanu" (Nicolae Testemitanu University of Medicine and Pharmacy)

<sup>&</sup>lt;sup>13</sup> Universitatea Tehnica din Moldova (Tehnical University of Moldova)

<sup>&</sup>lt;sup>14</sup> Universitatea de Stat din Moldova (Moldova State University)

<sup>&</sup>lt;sup>15</sup> Universitatea de Stat "Alecu Russo" din Balti (Alecu Russo State University of Balti)

| Integrated patents    | 2 | 12 | 3  | 0  | 0 |
|-----------------------|---|----|----|----|---|
| Obtained patents      | 0 | 16 | 18 | 39 | 1 |
| Applications to the   | 1 | 17 | 8  | 28 | 1 |
| State Committee       |   |    |    |    |   |
| regarding a patent in |   |    |    |    |   |
| the field of new      |   |    |    |    |   |
| variety tests         |   |    |    |    |   |
| Certificate for a new | 0 | 0  | 0  | 0  | 0 |
| variety               |   |    |    |    |   |

*Source:* Academy of Science's Report on management activities and main scientific results obtained in the field of science and innovation in 2013. Chisinau, 2014, (ASM) - ISBN 978-9975-62-367-4. - 286, p.160-162

Research results of the university academic staff are more often introduced in the educational process (as recommended monographs, text books and lecture material) and later spread in the society as compared to the research carried out by the staff from other departments. This is an important indicator of the role of science in strengthening the country's intellectual potential. The fact that universities support financially the academics who publish their works in scientific journals with an impact factor proves that Moldovan universities strive to support the scientific level and improve their ranking. The effectiveness of this method is proved by its use at State Agrarian University of Moldova, which in 2014 was awarded the first place among all the universities of the country (according to the foreign experts' research) including for its achievements in science [4]. At the same time, according to national experts, Technical University of Moldova occupied the highest position in the university hierarchy.

Nevertheless, according to the study in the field of capacity assessment of higher education institutions of the Republic of Moldova, organized by the Association of Development and Socio-Economic Assistance CATALACTICA, initiated by the Ministry of Education and funded by the Soros-Moldova Foundation in 2014 [4], the national system of higher education in the Republic of Moldova is focused more on the educational component, considering research activities at universities as a minor component.

Experts explain this fact by an imperfect legal framework of education, the absence of strategies aimed to develop science, education and innovations in a number of universities, a special structural unit, which would be engaged in this sphere and would not prefer to allocate funds for the development of scientific research to the Academy of Science of the Republic of Moldova, the Ministry of Education or other establishments, which subordinate 20% of higher education institutions of Moldova.

Participation of universities in institutional projects, which are the basis for fundamental research, is an important indicator of science and education interaction in the Republic of Moldova. Comparative data of the Centre for Fundamental and Applied Research Funding (CFARF) of the Academy of Sciences of the Republic of Moldova about the participation share of higher education institutions in institutional projects and their funding is an example that confirms the uneven distribution of funds (Table 2).

Table 2. The list of ongoing institutional projects for the period 2008-2014

| Year | The total of institutional projects |           | The<br>Unive | total<br>rsities | USMF     |          | UTM                   |         |
|------|-------------------------------------|-----------|--------------|------------------|----------|----------|-----------------------|---------|
|      | Projects                            | The sum   | Projects     | The sum          | Projects | The sum  | Projects              | The sum |
| 2008 | 314                                 | 210,098.5 | 114          | 22,762.3         | 18       | 7,425.2  | 28                    | 3,840.4 |
| 2009 | 314                                 | 285,341.4 | 116          | 24,953.3         | 19       | 8,668.2  | 28                    | 4,270.4 |
| 2010 | 314                                 | 208,226.9 | 116          | 25,824.7         | 20       | 8,880.4  | 26                    | 3,762.9 |
| 2011 | 269                                 | 200,402.1 | 108          | 25,236.7         | 21       | 9,080.4  | 25                    | 3,262.9 |
| 2012 | 268                                 | 223,240.1 | 109          | 29,196.3         | 20       | 9,547.9  | 25                    | 4,243.2 |
| 2013 | 262                                 | 212,583.6 | 105          | 25,639.4         | 20       | 8,355.2  | 25                    | 3,833.9 |
| 2014 | 260                                 | 246,790.1 | 103          | 30,430.4         | 20       | 10,387.1 | 25                    | 4,747.8 |
|      | ASEM <sup>16</sup>                  |           | UASM         |                  | USARB    |          | Un. AŞM <sup>17</sup> |         |
| Year | Projects                            | The sum   | Projects     | The sum          | Projects | The sum  | Projects              | The sum |
| 2008 | 1                                   | 208.9     | 8            | 760.5            | 11       | 1,714.6  | -                     | -       |
| 2009 | 1                                   | 211.9     | 8            | 760.5            | 12       | 1,788.0  | -                     | -       |
| 2010 | 1                                   | 199.8     | 8            | 1,083.0          | 12       | 1,216.6  | 2                     | 1,332.7 |
| 2011 | 2                                   | 491.8     | 7            | 693.0            | 14       | 1,316.6  | 1                     | 892.7   |
| 2012 | 2                                   | 500.1     | 7            | 804.7            | 14       | 1,337.1  | 1                     | 977.9   |
| 2013 | 2                                   | 425.8     | 7            | 706.4            | 11       | 1,152.6  | 1                     | 840.6   |
| 2014 | 2                                   | 459.8     | 7            | 838.4            | 10       | 1,258.9  | 1                     | 913.2   |

Source: developed by CFARF according to the database of Monitorul Oficial of the Republic of Moldova "MoldLex" (Monitorul Oficial al Republicii Moldova, Editie speciala of June 27, 2008; July 531, 2009; June 29, 2010; June 24, 2011; June 22, 2012; August 16, 2013; September 5, 2014).

<sup>&</sup>lt;sup>16</sup> Academia de Studii Economice din Moldova (Academy of Economic Studies of

<sup>&</sup>lt;sup>17</sup> Universitatea Acedemiei de Stiinte din Moldova (University of Academy of Sciences of Moldova)

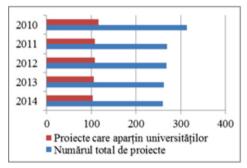
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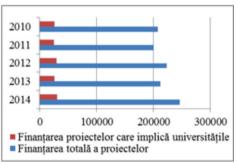
The data in the table accurately reflect the state policy, which, apparently, aims to fund only major fields of economics (unfortunately, agriculture is no longer among these priorities). Agriculture is not paid as much attention as it was before. This can be illustrated by the amount of 913.2 thousand lei allocated for the only project of the University of Academy of Sciences in 2014 and the amount of 848.4 thousand lei, allocated for 7 projects of State Agrarian University of Moldova in the same year. The same situation occurred in 2010 - 2013 (Table 1). Such research funding in SAUM covers neither physical nor material nor moral costs of the scientific and academic staff involved in projects: the allocated funds are not always enough to purchase all the necessary equipment; the experiments that are carried out require much time, depend on the season, climatic conditions, etc.

Project activities in the vast majority of universities are poorly funded and average calculations prove this fact: funds allocated for the institutional projects, in which universities of the Republic of Moldova were involved in 2008-2014 is 11.7% of the total number of the funded projects of this kind. At the same time, the share of their participation is almost one half of all projects. The charts provided below illustrate this fact more evidently (Chart 1, Chart 2).

Chart 1. The ratio of the total number of institutional projects to the number of projects that belong to Moldovan universities

Chart 2. The ratio of funds allocated to institutional projects that belong to Moldovan universities to the total funding of all projects





#### Note:

■ Projects that belong to universities universities

■ The total number of projects

*Note:* 

Funding of the projects that involveThe total funding of projects

*Source:* developed by CFARF according to the database of Monitorul Oficial of the Republic of Moldova "MoldLex" (Monitorul Oficial al Republicii Moldova. Editie speciala of June 27, 2008; July 531, 2009; June 29, 2010; June 24, 2011; June 22, 2012; August 16, 2013; September 5, 2014).

Poor funding of institutional projects, in which higher education institutions of the republic are involved, cannot motivate their employees to participate in research activities.

It is rather difficult to look for alternative ways in order to financially support research activities at universities in the Republic of Moldova, because funding of science and innovations in the Republic of Moldova is largely dependent on the public sector that subsidizes 90% of costs for scientific activities, while this figure is 35% in the EU which is a great incentive to look for the best scientific results that are able to generate income.

Unfortunately, the European practice of interaction between universities and business structures (the latter act as clients that demand scientific research) is poorly distributed in the Republic of Moldova, Meanwhile, the private economy sector is more responsive to the demands of the times and aspires to own new technologies, investing a lot of money and employing qualified specialists. The majority of Moldovan researchers (71%) work at public research institutes, 18% at universities, 11% - in the private sector [4, p.24], which is different from the European model of science and education interaction.

In the EU 13% of researchers work at public research institutes, 40% - at higher education institutions, 45% - in the private business sector. It is obvious that such active participation of universities in research activities provides a high level of intellectual support of the society. The level of costs for a researcher is in its turn an incentive to be engaged in scientific studies. In the Republic of Moldova it is 9000 euro, while in the EU it is 150,000 euro per year [4].

The Republic of Moldova allocates 3 times less funds for one researcher as compared to Russia and Romania. If compared to the USA, our country allocates 80 times less.

The following chart proves that the development of science and education depends on financing. You may find the gross income share of some countries, which is allocated for scientific research (Chart 3):

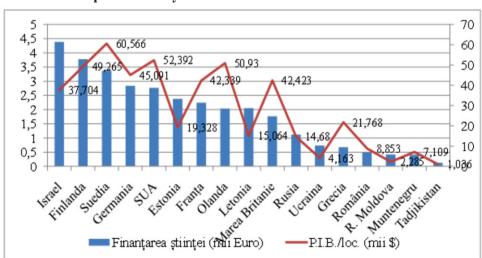


Chart 3. A comparative study of funds allocated for science in different countries

Note:

IsraelFranceGreeceFinlandNetherlandsRomania

Sweden Lithuania Republic of Moldova

Germany Great Britain Montenegro USA Russia Tajikistan

Estonia Ukraine

Funds allocated for science (thousand euro)

GDP/capita (thousand US dollars)

Source: developed by the author in accordance with the World Bank data.

Available: http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS (visited on December 17, 2014): United Nations Statistic Division.

Available: http://unstats.un.org/unsd/snaama/selbasicFast.aspla (visited on February 10, 2014).

The chart mentioned above shows that the higher the investment in science is, the more developed the country is. At present it is rather difficult to overestimate the contribution of science to the country's economy. Therefore, taking into account the fact that the Republic of Moldova has signed the Association Agreement with the European Union, one should reconsider scientific research in terms of European standards as they need appropriate financial support.

One of important indicators of the degree of interaction between science and education is the ability to reproduce the research staff, the essence of which is to reproduce at least 50% from the present number of potential researchers with scientific degrees every 15 years. It is necessary to provide adequate functioning of scientific fields. Thus, the graduates' decision to dedicate their lives to science provides a kind of continuity, the interrelation of higher education and scientific research.

On average, for the last 15 years the Moldovan science, based on the university activity aimed to train specialists - future scientists - reproduced 63.9% of doctors of the existing potential. At first glance, the situation with the qualification increase of the research staff does not seem to be bad. However, having analyzed the data about the reproduction of scientists in each field, we can state that the human potential with scientific degrees is poorly reproduced in the following fields: physics, mathematics, chemistry, agriculture and veterinary medicine. One the other hand, there is an unusual increase of high-quality staff, PhDs and Doctors Habilitatus in political sciences, psychology, law, sociology, pedagogy and economics, which may be due to the social trends of our times, status prestige, etc. (Table 3).

Table 3. Statistics data related to the reproduction of scientific staff in the Republic of Moldova (in every field of science) in 1996 – 2010

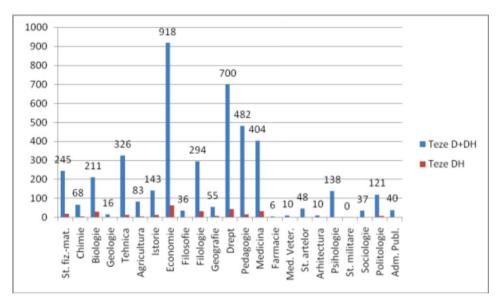
| Field of science         | The total number of people<br>with a scientific degree<br>registered in the Republic<br>of Moldova in 1965 |     |      | The total number of people<br>who took scientific degrees<br>in the Republic of Moldova<br>in 1996 – 2010 |     |  | Reproduction<br>coefficient<br>(r = d / a)<br>(%) |  |
|--------------------------|--|-----|------|---|-----|--|---|--|
|                          | Total (a)  | DH  | D    | Total (d) DH D  |     | $(\mathbf{r} = \mathbf{d} / \mathbf{a})$ |   |  |
| Total                    | 4780   | 572 | 4208 | 3054  | 367 | 2687                                     | 63.9  |  |
| Physics and mathematics  | 582  | 82  | 500  | 171   | 26  | 145                                      | 29.4  |  |
| Chemistry                | 238  | 24  | 214  | 64  | 10  | 54                                       | 26.9  |  |
| Biology                  | 546  | 55  | 491  | 278   | 40  | 238                                      | 50.9  |  |
| Geology                  | 24   | 3   | 21   | 0   | 0   | 0  | 0   |  |
| Engineering              | 669  | 58  | 611  | 126   | 23  | 103                                      | 18.8  |  |
| Agriculture              | 490  | 67  | 423  | 90  | 16  | 74                                       | 18.4  |  |
| History                  | 236  | 29  | 207  | 100   | 18  | 82                                       | 42.4  |  |
| Economics                | 421  | 31  | 390  | 503   | 51  | 452                                      | 119.5   |  |
| Philosophy               | 147  | 21  | 126  | 31  | 7   | 24                                       | 21.1  |  |
| Philology                | 232  | 27  | 205  | 168   | 25  | 143                                      | 72.4  |  |
| Geography                | 22   | 3   | 19   | 18  | 3   | 15                                       | 81.8  |  |
| Law                      | 59   | 6   | 53   | 320   | 20  | 300                                      | 542.4   |  |
| Pedagogy                 | 197  | 4   | 193  | 313   | 15  | 298                                      | 158.9   |  |
| Medicine                 | 806  | 150 | 656  | 639   | 79  | 560                                      | 79.3  |  |
| Pharmacy                 | 16   | 3   | 13   | 29  | 4   | 25                                       | 181.2   |  |
| Veterinary<br>Medicine   | 34   | 5   | 29   | 11  | 2   | 9  | 32.4  |  |
| Arts                     | 40   | 4   | 36   | 38  | 5   | 33                                       | 95.0  |  |
| Architecture             | 1  | 0   | 1    | 0   | 0   | 0  | 0   |  |
| Psychology               | 5  | 0   | 5    | 50  | 4   | 46                                       | 1000.0  |  |
| Military sciences        | 3  | 0   | 3    | 0   | 0   | 0  | 0   |  |
| Sociology                | 8  | 0   | 8    | 31  | 7   | 24                                       | 387.5   |  |
| Political science        | 4  | 0   | 4    | 74  | 12  | 62                                       | 1850.0  |  |
| Public<br>Administration | 0  | 0   | 0    | 0   | 0   | 0  | 0   |  |

Source: Holban I., Cotun C. Dezvoltarea durabila a societatii - problema fundamentala a stiintei Republicii Moldova (probleme, principii, criterii, standarde, date statistice, analize, omologari, opinii).Materials of International Scientific and Practical Conference "Economic Growth in conditions of globalizations". Chisinau, 2014.

The situation with the reproduction of scientific researchers provided above has not changed to this day. Thus, according to the Central Committee for Certification and Accreditation of the Republic of Moldova, as of January 1, 2013 there were 4,391 people who worked on their theses, of which 4,112 - on PhD theses, 279 – on Doctor Habilitatus theses. It is logical to assume that the largest share in the production of certified PhDs belongs to the economic sciences -

20.91%, the smallest share – to military sciences (0.0%), architecture (0.23%) and veterinary medicine (0.23%) (Figure 4).

Chart 4. Statistical data on the distribution of the people who were working on thesis on 01/01/2013 depending on the fields



*Note:* Physics and mathematics; Chemistry; Biology; Geology; Engineering; Agriculture; History; Economics; Philosophy; Philology; Geography; Law; Pedagogy; Medicine; Pharmacy; Veterinary Medicine; Arts; Architecture; Psychology; Military sciences; Sociology; Political science; Public Administration.

#### ■ Doctor + Doctor Habilitatus theses

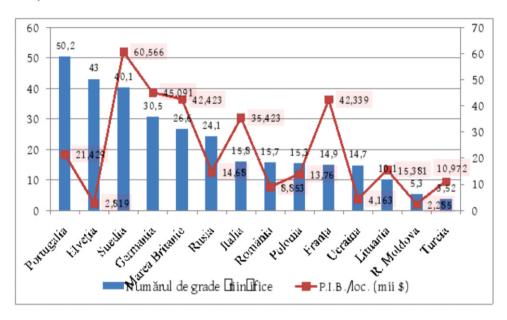
#### ■ Doctor Habilitatus theses

Source: Holban I., Cotun C. Dezvoltarea durabila a societatii - problema fundamentala a stiintei Republicii Moldova (probleme, principii, criterii, standarde, date statistice, analize, omologari, opinii). Materials of International Scientific and Practical Conference "Economic Growth in conditions of globalizations". Chisinau, 2014

Thus, the lack of financial incentive for PhD students, prospects for further development (due to the lack of funding) leads to the decrease of graduates' interest to engage in research activities in various branches of science and, consequently, to the decrease of the number of theses that are ready to be defended on time. The conducted research demonstrates that in 2008 - 2012 only 4.64% of the total number of enrolled PhD students defended their theses on time (2008 - 446 (2.7%), 2009 - 335 (7.8%), 2010 - 422 (3.3%), 2011 - 318 (3.1%), 2012 - 318 (3.1%), 2013 - 380 (6.3%)) [5].

Comparative data about the number of scientific degree holders in different countries show that the level of PhDs involved in research as well as the level of socio-economic development of the Republic of Moldova is not the highest in the world. During 1993 – 2013 scientific degrees were annually awarded in the Republic of Moldova (3,488 PhDs and 502 Doctor Habilitatus), on average 5.3 people per 100,000 inhabitants, which is much lower than in other countries (Chart 5).

Chart 5. Comparative data related to the scientific degrees awarded per 100,000 inhabitants in different countries of the world



Note:

Great Britain

Portugal Russia Ukraine
Switzerland Italy Lithuania
Sweden Romania Republic of Moldova
Germany Poland Turkey

France

Number of scientific degrees

GDP/capita (thousand US dollars)

*Source:* developed by the author in accordance with Holban I., Cotun C. Dezvoltarea durabila a societatii - problema fundamentala a stiintei Republicii Moldova (principii, criterii, standarde, date statistice, analize, omologari, opinii).Intellectusnr. 2, 2014; United Nations Statistic Division.

Available: http://unstats.un.org/unsd/snaama/selbasicFast.aspla (visited on February 10, 2014)

It is obvious that the authorities of the Republic of Moldova should adopt European best practices of supporting the PhDs' status, assume specific measures in order to inspire them from the financial point of view and attract young creative scientific researchers.

#### Conclusions:

The interaction of science and education in the system of higher education institutions of the Republic of Moldova is an objective process, contributing to the intellectual development of the society, transition to the innovative type of development, reproduction of human capital, and universities play a leading role in this process.

However, social transformations that have been taking place in the Moldovan society over the past decades as well as numerous interdepartmental contradictions led to certain defects of the existing system of science and education management. The facts that hinder the development of research activities at universities include: the decrease of funding in scientific and educational fields; uneven distribution of funds among the units involved in institutional projects; the lack of motivation for career development among young researchers; the lack of flexible policies to support major fields of science and economy.

Moldovan universities, being a cradle of the scientific staff and a forge of the society's development, must be supported by governmental structures as to funding, cooperation with the private sector, which serves as a client that demands scientific research, motivation of the university teaching staff to maintain their status. European best practices show that science and education should be regarded as a national asset that determines the level of development and the future of the country

Integration of science and education in the system of higher education of the Republic of Moldova promotes its quality, develops new socio-cultural values shared by the majority of countries in the world community.

# **Bibliography:**

National Bureau of Statistics. www.statistica.md;

Government of the Republic of Moldova. www.gov.md;

Education Code of the Republic of Moldova no.152 of July 17, 2014, published in Monitorul Oficial No. 319-324 of October 24, 2014;

Code on Science and Innovation of the Republic of Moldova no.259-XV of July 15, 2004 Monitorul Oficial No.125-129/663 of July 30, 2004;

Raport privind activitatea manageriala si rezultatele stiintifice principale obtinute in sfera stiinței si inovarii in 2013. Chisinau, 2014, (ASM) – ISBN 978-9975-62-367-4.

- Durcheim E., Educatie si sociologie. Bucuresti: E.D.P., 1980;
- Jaspers K., Texte filosofice. Bucuresti: Editura politica, 1988;
- Holban I., Cotun C. Dezvoltarea durabila a societatii problema fundamentala a stiintei Republicii Moldova (probleme, principii, criterii, standarde, date statistice, analize, omologari, opinii). Materials of International Scientific and practical conference "Economic Growth in conditions of globalizations". Chisinau, 2014. 289 p.
- Holban Ion (1, 2, 3), Gheorghe Cuciureanu (1, 2), Igor Cojocaru (2), Cristina Cotun (2) Managementul resurselor umane in domeniul cdi – o problema de prim rang pentru economia Republicii Moldova
- Holban I. Vectorul European de dezvoltare a Republicii Moldova. Conltietizare si alegere. Institut pentru Dezvoltare si initiative Sociale (IDIS) "Viitorul". Chisinau, 2014.-20 p.
- Kneller G.F., Introduction to the Philosophy of Education, John Wiley and Sons, inc. N.Y-London-Sidney, 1967:
- Oana Banu, Sorin Cace, Corina Cace, Diana Cheianu-Andrei. Evaluarea capacitatii de cercetare a institutiilor de invatamant superior din Republica Moldova. Chisinau, 2014.-99 p. ISBN 978-9975-80-782-1
- Research and development expenditure (% of GDP), visited on December 17, 2014, 12:15, http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS 17.12.2014

# Company Slogan and a Vivid Image of a Trademark - as Main Components of a Strong Brand

# Igor BELOSTECINIC\*

#### **Abstract**

Among other methods, good brand managers always affect clients and strengthen their fidelity to the brand by means of company advertising slogans and vivid images associated with this brand. Slogans may function as useful "levers" or "hooks" helping clients to understand the essence of a trademark and its peculiarity, as well as to nail in clients' minds the established image of a strong brand.

One of the "hooks" attracting attention to brand and helping to nail it in a common man's mind — is a company (advertising) slogan - short message or motto, which actively presents the key theme of the brand in general or of a certain advertising campaign, and contains substantial information, reflecting the essence of campaign's or product's marketing offer.

One must admit that it is nice to recall favorite philosopher's aphorisms or sayings while getting up in the morning, and to whistle an aria from a renowned opera on your way to work. However, more often people sing unsophisticated verses about the "sign of a good taste" and get annoyed by a trivial call to "have a break" going round in their heads. This means that the advertisement of popular chocolate bars and drinks has hit its target. The main lever for success in generation of a positive and recognizable brand image - is the slogan and its graphic image in consumer's mind

Together with other brand components (logo, corporate colors, sound or music image) a slogan generates the system of constant elements which ensure the brand's internal unity and are aimed at creation of exposure effect.

To some extent, we all are "ad eaters" and are always capable of estimating an ad, even if it is at the level of feelings: whether we like it or not. So why a certain advertisement can make us smile, elicit good feelings and cause an urge to buy product/service that is being advertised, and another one - evokes disappointment and annoyance? The answer is obvious: the first one was created professionally and correctly from the point of view of advertising technology and branding and with consideration of consumer's psychology. While the other one is dilettantish.

Keywords: Company Slogan, Vivid Image, Strong Brand

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# Critical analysis of slogans usage specifics as a constituent of strategic brand management

Good slogans have certain charm - like a lightning they illuminates the twilight of lazy TV series. The real value of a slogan depends on many things; we will try to analyze them point by point.

*Information capacity.* It is one of the main properties of a slogan. It defines to which extent the short motto renders key information about advantages of a product, service or brand being positioned. For example, the slogan can emphasize the product's main performance attribute, bringing it to the level of emotional experience (Arcos kitchen knives ad: "Sharp pleasure" ("Octpoe удовольствие")), or accentuate the aesthetic perfection of products multiplied by ultimate quality (advertisement for Konzept "German" bathroom equipment: "The exclusive quality of perfect forms").

*Impact mechanisms.* The marketing value of a slogan directly depends on how it affects the emotional and rational perception of a potential client.

**Rational impact** is the most vulnerable point of a marketing message, since it requires detailed reasoning and does not confine itself to the tight limits of motto. However, a slogan, enabling intellectual perception mechanisms, usually possesses certain power and depth of advertising impact.

**Emotional impact** - main "wounding power" of a slogan. As a matter of fact, the English term itself originates from the Gaulish "slogan" - battle cry. One of the key means for emotional filling of mottoes and messages is brand's visual symbol as manifestation of sales proposition key elements. The symbol does not just contain information associated with advertising object, it also points at a certain range of vibrant experiences and psychological states. As a good example of an advertising symbol can serve the image of tsunami used in the Yamaha Company slogan: "Tsunami of Feelings" ("Цунами ощущений") (advertisement for audio equipment).

Aesthetic value. Modern marketing theory admits that the effect of impact on the key audience can be achieved even without using artistic finish of advertising messages (especially if they point at obvious marketing advantages of a product or service). However, artistic methods contribute to good memorization of information, brand's insight in the potential client's subconsciousness.

Rhyme, rhythm, alliteration, sense allusions - these means help to create a good motto. Rhyme, besides other matters, creates the atmosphere of lightness and allows fitting more information in a text unit. Advertising for Kenwood complex of karaoke establishments had proceeded under the slogan "Sonorous singing amid friends" ("Звонкое пение – друзей окружение"), which included a range of effective marketing components: democratic character, collectivity, sound nature and quality, description of process, emotional state. The rhyme is often used in advertising slogans, although it is not always justified. However, in many cases we can understand unprofessional copywriters who compose advertising messages, since lots of them (usually they are creative individuals without relevant marketing

education and experience) perceive their occupation as art, and art comes hand in hand with creativity. Therefore, this is the reason of fails like: "Dumb or not, we'll make you talk" ("Был бы даже ты немым, приходи – разговорим"). A propos, poetical advertising slogans have existed from long ago. Folklore specialists wrote down rhymed outcries of street vendors from 18th century: "Those who have strong teeth shall taste our turnip" ("У кого зубы крепки, пусть отведает репки").

Our modern pitchmen (sometimes from the Central Market) are able to outshine many advertisers. A lottery ticket seller can sound quite professional: "The draw is coming - prepare the garage" ("Скоро тираж - готовьте гараж").

There is a lot of information about slogan creation techniques and principles, various authors offer ready solutions for development of advertising mottoes and slogans. However, the main branding rule in creation of slogans and vivid visual images has always been and remains the same: suddenness and originality. As it was well noticed by Koen McKenzie "It's a common knowledge that the best color to attract attention is orange, however if you show up wearing orange at an event hosted by Dutch royal family - you would remain unnoticed". The most important thing for a brand manager who approves a slogan - is to find a solution that no one is expecting from him to find.

# Personal vision of modes of application of slogans in Moldovan and foreign practice.

All over the world advertising slogans are created by professionals. The approximate price of slogan creation varies from 200 to 20,000 dollars. Here in Moldova people still don't want or are not ready to pay for an idea - that is why we have a bunch of great slogans like "groats-sugar: qualitative and cheap." It seems that all products/services originating from our country are so qualitative and cheap, that the company once again wants to remind us of this fact.

In general, everything in Moldova is very qualitative and cheap, and would definitely bring success, - "Our experience - is the recipe for your success" (JV "Expedit-Trans-Auto"). The subject of quality and traditions is so hackneyed, that slogans like "Tradition and quality" ("Tradiție și calitate") (Carmez) or "Tradition in art of beer" ("Tradiție în arta berii") (Vitanta) do not stir much interest.

There exist special technologies for creation of slogans, and if we add ingenuity of thought of the person creating (or of the entire department), as well as marketing research - we get a chance to create a successful slogan.

For example, year 1973. Pepsi generation. Hippies, rock-n-roll, freedom. Various youth slangs become usual. Pepsi brand launches this slogan:

"Lipsmackin' thirstquenchin' acetastin' motivatin' goodbuzzin' cooltalkin' highwalkin' fastlivin' evergivin' coolfizzin' Pepsi."

It sounds like total gibberish now, but back than every hippie was humming this tong twister. Starting namely from that period Pepsi has been observing the unprecedented sales growth.

It is hard to tell who created the "You were chosen to choose" ("Ты выбран, чтобы сделать выбор") "Moldtelecom" slogan back in the day (the end of 1990's). The slogan is barely understandable, let alone evoking good feelings or motivating to some sort of positive action in subconscious.

It is followed up by the slogan for Moldova Cyber Community: "Take advantage of life..." ("Пользуйся жизнью..."), which somehow makes us want to add the logical ending "... and we will take advantage of you." Life is for us to enjoy it, not to take advantage of it.

Moldovan companies often suffer from gigantism and superiority complex, that is why they are always "the most reliable, the most time proved, all possess certain skills and at all times and in all places are next to us": "Present at every m2" ("Присутствие на каждом квадратном метре" (Banca de Economii), "Present in every home!" ("Присутствие в каждом доме!" - IP "Salcioara-Vascan" toilet paper). So it goes, the level of our people's consumer culture is not high enough to perceived the sense of slogans that don't seem to call for something, or ones that bear inner meaning.

One of the successful examples of good Moldovan creation is the slogan of "Afes" insurance company: "Secure, thus calm" ("Спокоен, потому что уверен"). It is not that original, although quite influential and task oriented, so, good for them. Another seamless slogan with good sense is the one of AspectInvestVin - "Good wine causes good talk" ("За добрым вином и разговор хороший").

There exist technologies for slogan creation, although there are no general rules for everybody, that is why a slogan can be both short and long.

The example of a good *short* slogan for Zippo lighters: "They work"; and the example of a good long one - Visa: "The sky above and ground below, all you need is a Visa"

So, what are the signs of an effective slogan?

Basically, it has to be concise, clear, but sometimes it may be *rhymed*:

"Drink Guinness – to be the winners" - one of the slogans for the legendary dark porter.

"Have idea - Have IKEA" ("Есть идея - есть IKEA" ("IKEA").

Most often a motto is a *part of company's image*:

"You Press the Button, We Do the Rest" (Ad for Kodak cameras, beginning of 20th century).

"People read and consider us" ("Нас читают, с нами считаются") "Logos-Press" Economic Review Newspaper, Chisinau)

"Confidently behind the wheel" ("Уверенно за рулем") the slogan was created by Promarketing LLC Marketing Agency for Autoprim trade mark)

"Probably the best beer in the world" (Carlsberg beer)

"You can" (Canon). "It's a SONY" (Sony)

Slogans like the last two ones can only be afforded by the companies that have consolidated their brand to such extent, that they do not need evident and aggressively imposed advertising.

Some slogans do not fall with any of the aforementioned categories, but they

are pleasant to hear: "You work hard, life is short - you should play" ("Вы много работаете, жизнь короткая — нужно играться" ("Playstation") "We respect youth. We don't know why." (advertisement for deposits and credit programs for young people in one of the European banks).

Lately, a slogan is almost always accompanied by company's graphic image, and such graphics, picture, photo, collage, enhances or even draws over main attention. A slogan can often shock audience; however it can also "speak" consumer's language.

Sometimes those who create slogans and bring them in line with marketing goals, go to extremes, shocking audience. It is done in order for the client to memorize the goods being advertised. For example, in Moscow, the following motto was written on billboards with vacuum cleaners advertisement: "Will blow for peanuts" ("Cocy за копейки"). Over some time, this slogan was banned and the billboards were removed, but the effect caused by sales and advertisement for the vacuum cleaner trademark was positive for the company sales.

Or, for example, a slogan for low-alcoholic cocktails with natural juice named "Hooch" - "Hooch cocktails. Hoochin' fruits!" ("Коктейли Hooch. Ohoochительные фрукты!"). Such a slogan can only affect a Russian-speaking person with Post-Soviet set of mind.

At that, after events in Ukraine - Euromaidan 2013-2014, and following Russian attack against Ukraine, a slogan was raised to the rang of state greeting and cry: "Glory to Ukraine! Glory to the Heroes!" We also know many examples of slogans for entire regions and countries - these are often created for tourist campaigns. There are several of them known for Moldova: "Moldova - discover Us", "Moldova - discover the routes of life"; Promarketing LLC Agency even jokingly changed this, not so good slogan to: "Moldova - discover Africa in the center of Europe". Starting from 2013 there has been a new tourist slogan presented for the Republic of Moldova. The phrase was chosen by a travel agency following the results of a contest among 623 variants submitted by 152 persons. Moldova will now (starting from 2013) be presented at the world tourist market with the words: "Ospitalitate. Tradiții. Mister" ("Hospitality. Traditions. Mystery") - slogan, unitedly ridiculed by the entire Moldovan internet community: "Hospitality. Traditions. Secrecy of Investigation" and recommended for promotion of Moldovan law enforcement agencies.

#### **Conclusions:**

# Who is a qualitative slogan designed for?

First of all, for company's target audience. A slogan should also positively affect the brand and the company itself.

# What is the main purpose of a slogan?

Technically - to increase company's sales, actually - to form short-term or long-term (there are slogans "for one campaign" and "forever") relations with a client, to raise brand loyalty.

### How can we measure slogan's efficiency?

It is not an easy task, although there are several methods for subjective and objective measurement, such as: specifically formed focus groups, clients' feedback and opinions, data provided by marketing, linguistics, psychology specialists, sudden or long-term impact on sales indices, general increase of brand price, etc. The main efficiency criteria are the smiles on clients' faces and the warmth in their hearts.

Let us give an advice to those who want to create a successful and strong slogan as an indivisible integrated part of a strong brand - put yourself in hands of specialists in branding and marketing domain - in-house employees, those who are truly professional, familiar with marketing, branding, psychology, who have creative and out-of-the-box thinking, who have a gust of specifics of customer behavior (both regular and potential ones). Or to external brand specialists - those who will be capable of objective investigation of local market and creation of truly unconventional, original and strong by impact image and slogan of a brand.

#### Bibliography:

### Books and monographies

- Аакер Д. Создание сильных брендов / Д. Аакер. М.: Издательский дом Гребенникова, 2008. 440 с.
- Дэвис С., Данн М. Бренд-билдинг. Создание бизнеса, раскурочивающего бренд. СПб.: Питер, 2005. 320 с.
- Келлер К. Стратегический брэнд-менеджмент: создание, оценка и управление марочным капиталом, 3-е изд. М.: Вильямс, 2007. - 704 с.
- Кляйн Н. No Logo. Люди против брендов. М.: 2012, Добрая книга. 624 с.
- МакДональд М., Чернатони Л. Брендинг. Как создать мощный бренд. М.: Юнити-Дана, 2006. – 560 с.
- Тамберг В., А.Бадьин. Бренд. Боевая машина бизнеса. М.: Олимп-Бизнес, 2005, 240 c.
- Траут Д., Райс Э. Маркетинговые войны. М.: Деловой бестселлер, 2009. 304 с.
- Тульчинский Г. Бренд-интегрированный менеджмент: каждый сотрудник в ответе за бренд. М.: Вершина, 2006. 352 с.
- Уиллер А. Индивидуальность бренда. Руководство по созданию, продвижению и поддержке сильных брендов. М.: Альпина Бизнес Букс, 2004. 235 с.

# Articles in periodical publications

- Бренды Молдовы зазвучат громче, по материалам пресс-релиза. Кишинев, Экономическое Обозрение Логос-Пресс, № 46, 2012, с. 8.
- Белостечник И. Рынок рекламы: 6 билбордов и 6 роликов на растерзание эксперту (директор агентства Promarketing), журнал «Business Class», №44, 2010, c. 90

# Views regarding methodology of contemporary european studies

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#### **Abstract**

The article analyzes some very important questions of contemporary European Studies, such as actually situation, problems existing in this domain, the specific of European Studies methodology from the multidisciplinary, interdisciplinary and transdisciplinary points of views. A particular attention is paid towards the systematization, classification and analysis of the most important European Studies methods, inclusively generally, particularly and specific ones. Also, a special reference is made to the present necessities and perspectives of the future development of the European Studies methodology.

In this way, there are identified a range of problems that face European Studies methodology. Through them is underlined the weakness of European Studies methodology as it is a very young domain. Another problem is the controversy of the issue, because there are a lot of visions and opinions regarding the status of European Studies methodology. The existing problems in the domain of European Studies methodology can be explained by the fact that European Studies and especially some of its compartments as Political European Studies had developed their own methodologies recently. That is why, their methodology is not yet recognized by the all researchers in domain and thus it is not transferred to students and young researchers through methodology teaching.

At the question if European Studies methodology has its own methods it is clarified that as European Studies are a particular and specific domain, it surely has its scientific principles, methods and techniques. But these methods are at the incipient stage of their development. As result, a general theory of research methods in the domain should be elaborated.

In the domain of European Studies very important are multidisciplinary, interdisciplinary and transdisciplinary methods. So, in the case of the European Studies there can be determined several methodological levels of research and

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disciplinary interconnection. These levels are: monodisciplinarity, pluridisciplinarity, multidisciplinarity, interdisciplinarity and Transdisciplinarity. Each of these levels plays an important role in the research of European Studies.

Generally speaking, the research methods of European Studies are classified in the following categories: conceptual-philosophical methods, general-scientific methods, particular or regional methods and special research methods. In the article are presented the main features and explained the methods of each category. showing the practical aspects of their usage.

Talking about the prospects of European Studies development, there are traced some important thoughts. Through them there are mentioned first of all theoretical aspects of the European Studies. It is about the general theory of the European Studies that should have an important methodological function. The question is, if there is such a theory. We cannot state that it not exists, but also that it is. This kind of theory is going to be formulated.

*Today, there are different theories in the field of European Studies theory, such as:* European integration theories, EU governance theories and others. All of the European integration theories (federalism, functionalism, neo-functionalism and interguvernamentalism), theories of supranational governance, theories of new institutionalism, of rational choice, contemporary theoretical debates between constructivism, rationalism and reflectivism, various economic schools and theories of economic integration etc.- are particular theories of the European integration and none of them examines the European integration in its complexity. Thus, none of these theories can be considered as a general theory of European integration and unification. On one hand, maybe it is good that there are so many theories of European integration and unification among which are held debates. On another hand, this variety of theoretical visions not always contributes to the process of European construction. In this context, it is not surprising that have been appeared a range of new critical opinions that question the hypothesis that stood at the base of theories regarding the EU. In this way, it is interesting the vision of the Russian researcher, V.G.Shemeatencov, who argues that only in their entirety theories of European integration, could present us a complex image and explanation of the European integration phenomenon and all its aspects.

Hence, there can be traced the following points of what a European Studies theory with a strong methodological function should include: firstly, the basic concepts of the researched domain, of all European events including those of integration and unification; secondly, the most important theoretical notions; thirdly, basic theoretical principles that will permit the systematic organization of the European Studies general theory and will direct the process of European construction; and finally, the empirical explication and generalization of European facts and formulation of some prospects and recommendations on this base.

Thus, the most important objective for the development of contemporary methodology of European Studies is the formulation of the own research methods and techniques and development of the interdisciplinary, pluridisciplinary and transdiciplinary methodologies that are the most representative for the European Studies domain.

*Keywords:* European Studies, European Integration, Europe, European Studies Methodology, Methods, methodological levels, scientific research.

#### Introduction

In the article are analyzed and discussed a range of problems of contemporary European Studies methodology that until present time are weak elaborated in the specialty literature. Firstly, is made a detailed evaluation of current situation and of problems and difficulties that exist in the domain of European Studies methodology. Then, is put into the discussion the problem of European Studies methodology distinctiveness from the monodisciplinarity, interdisciplinarity and transdisciplinarity points of view. Further, the attention is focused on systematization, classification and detailed analysis of the main methods used within contemporary European Studies. The article ends with some conclusions regarding to necessities and future development prospects of contemporary European Studies.

## European Studies Methodology: current situation and existing problems

The main questions with which, in our opinion, we should start the discussions at this subject are as follows: 1. Have European Studies their own methodology, methods? 2. If yes, then, which are these methods and which is the respective methodology? Next, which methods are used at present time and could be used in contemporary European Studies?

But, before answer these fundamental questions, let us, firstly, see which is the situation, current condition of and what problems, difficulties are in the contemporary European Studies methodology.

Thus, we will begin with the *current condition and existing problems* of the European Studies methodology, with methods that are used in this domain. From the start, it should be mentioned that in the issue related to European Studies methodology we have a quiet precariously condition, this domain confronting with different problems. Through these problems, we draw attention on the following:

• Despite the fact of significant importance of the research instrument, a fact that is pointed out by many authors, the European Studies methodology is still weak elaborated. It can be stated that the methodology is at the incipient stage of its development. Until today, a little attention was paid to this domain. Moreover, not only in the European Studies domain, but in general, there is such a situation. Many authors underline that in the monodisciplinar field, in other words a field that refers to certain particular disciplines within European Studies, as for instance are research methodology of European

Union law[1] or methodology of research in political science, especially of Comparative Political European Studies[2, p.162-169], we can notice the same situation.

- Another problem is the quiet controversial and precariously condition regarding the elaboration of the proper European Studies methodology, a condition that is complicated because of the existing of a large number of opinions about the status, necessities and perspectives of methodological domain of respective studies.
- The condition and existing problems in the domain of European Studies methodology, in a great measure, are explained by the fact that European Studies, in general, and particularly some of its compartments, such as Political European Studies (as researchers concerned with this issue note), were the last disciplines that were equipped with an own methodological mechanism and this one is not deprived of strong appeals. As result, respective studies and sciences did not find the agreeable mean to create an own methodological mechanism that would be recognized by all specialists in the domain and transferred to students and young researchers through a coherent methodology teaching [2, p.164].

Thus, this is the situation. Now, in order to try to answer to the above formulated questions, an namely if European Studies have its own methodology and methods, and if yes, then which are these methods and methodology and respectively which methods are used in contemporary European Studies, first of all we should clarify the meaning that is attributed to the definitions of methodology and methods. According to the dictionaries, a method (from Greek – a mean, way, a mode of exposure) means a research manner, a system of rules or principles of knowledge and of objective reality transformation. [3, p.457].

Talking about the methodology, according to the same dictionaries (from Greek – methodos – way, mean and logos - science) is an entirety of methods used in a certain science, of which basis is formed by the system of the most general laws and principles of this science. [3, p. 457].

On the other hand, methodology means also the science about the application, practical use of knowledge/research methods in a certain domain. In accordance with Vasile Tapoc, methodology studies the methods and procedures used in science, and organizational principles of knowledge through their acceptance or rejection. A methodology, continues the author, consists of the following elements: 1. philosophical thesis; 2. normative principles that result from these thesis; 3. research strategies that include these principles; 4. evaluation or examination criteria of gained results [4, p.145]. Between methodology and methods, besides those mentioned, there is a relationship. Using a military language, Vasile Tapoc, speaks about the following relationship: if method determines the tactic (i.e. is of local importance), then, methodology imposes strategy (i.e. is theoretically general). On this base, the author makes the following important conclusion: methodology appears as a science or general theory of knowledge methods, as a metamethod – a theory of used methods. [4, p.146].

At the question if the European Studies have their own methodology and own methods, after the brief presentation regarding the current condition of the methodology of these studies, we can give the following answer: European Studies, being a particular, specific, quiet necessary and important domain, from both theoretical and practical point of view, is impossible not have their own methodology, and respectively their own research methods, techniques, principles etc.

The problem consists in fact that as this domain is comparative recent, respectively the European Studies methodology is in a great measure in the incipient stage of advancement and is in the course of elaboration and development. A European Studies methodology, in the meaning described above by the Vasile Tapoc, i.e. a general theory of knowledge and research methods in this domain is going to be elaborated. European Studies, in their general, integrate and cumulated meaning, are still crystallizing their methodological status, seeking to determine which methods and research techniques should be undertaken from other research domains and recognize them as their own and which of them will be applied only in this domain. Starting from this point, we will try to identify which are the methods that are used in the European Studies domain. Before that we will determine what is the specific of European Studies, because without this, will be impossible to analyze the methodological set used in the domain.

# The problem of European Studies methodology specific: multidisciplinarity and interdisciplinarity

As there was analyzed in a previous work [20], European Studies are a specific domain not only from a conceptual point of view, linked to a certain concept of Europe, Europeanness, European culture, conscience and mentality, but as well from disciplinary, methodological, point of view. These subjects are going to be discussed below.

The problem, as well as the main question that appears when we discuss the European Studies methodology is that on one hand, the research object of European Studies is one kind, purposely Europe (in general and in particular European Union, if we refer to contemporary Europe in its process of integration and unification). On another hand, however, there is not enough or sufficient only one discipline (as History of Europe or only European Economy, European policies etc.) to study this object, that is too complex, multidimensional and multisided. Hence, there are required more disciplines taken all apart and together. In other words, it is about multidisciplinarity and pluridisciplinarity.

Taking into account those mentioned above, we can affirm that in the case of European Studies it is about monodisciplinarity when the accent is put on certain particular disciplines, separated, but it also is about the multi-, pluridisciplinarity, when the accent is put on the entirety of disciplines enclosed in an integrated

concept. Respectively, in methodological plan of application of certain methods, techniques, research procedures; it will be about both, used methods in a particular disciplinary domain and those methods that are used in different disciplines. That is why, in the European Studies domain very important and necessary will be the interdisciplinary and transdisciplinary methods, especially those related to systemic and synthetic approaches.

Thus, in the case of European Studies we can and should talk about different methodological levels of research and disciplinary interconnection that form the framework of these studies. These research and disciplinary interconnection levels are:

**Monodisciplinarity Pluridisciplinarity** Multidisciplinarity *Interdisciplinarity* **Transdisciplinarity** 

In respect that noted levels, especially those of pluridisciplinarity, interdisciplinarity and transdisciplinarity, are very important for understanding of the meaning and specific o European Studies methodology, it is necessary and interesting to discuss the way these concepts of methodological diciplinarity are interpreted.

In accordance with the levels presented above, we will start with the monodisciplinarity. Speaking about the monodisciplinarity it is quiet clear the way of its application. It is the case of particular disciplines, each of them having their own specific methodological methods, techniques, procedures, rules and principles that are characteristic to the domain. If we talk about the disciplines from the disciplinary framework of European Studies, each of these, no matter whether is about History of Europe, European Economy etc., has its own established methods. Monodisciplinarity, basically, is strictly necessary, important and producing results in the research process. Moreover, it is, in some perspective, irreplaceable. However, as specialists underline, monodisciplinarity or disciplinary approach has some limits. It become insufficient, especially in some cases, particularly when is about the research of multisided and complex objects and phenomena. Disciplinary approach of a subject leads, in vision of Romanian author Aurel Jula from the Technical University of Engineering-Bucharest, to the drain of scientific creation, reducing it to the simple research technique, monotone and strictly specialized in one limited domain. Disciplinary approach (completed by Vasilescu Grigore) tends to create barriers between the groups of specialists, isolating them in scientific communities.[5] The conclusion can be the one: from methodological point of view, it is correct and welcomed that monodisciplinarity should be completed with other levels of disciplinarity.

Next, there will be presented other levels of diciplinarity that overlap monodisciplinarity. The notions of pluridisciplinarity and multidisciplinarity, as they are explained in the literature, are some kind of synonyms and refer to the study and research not only from the point of view of one single discipline, but also from point of view of many disciplines at the same time. The subject analyzed through this multidisciplinary research will be a rich one. [5] This ascertainment is evident in the case of study of Europe, of European Union. If these are studied only at monodisciplinar level, from economic or political point of view, these studies will be poor and unilateral. In contrast, application of the multidisciplinarity will allow researching of the subject, in our case the Europe (EU), multilaterally, from all points of view, economic, geographic, political, judicial, cultural and civilization one. The result will be an expected one: the research object, Europe (EU), will be richer, more complex, integrated etc.

Interdisciplinarity, at its turn, is very important in the European Studies too. As it is mentioned in the literature, interdisciplinarity has a different aim from that of the multidisciplinarity. It supposes phenomena, concepts and general laws that are common to many disciplines which analyze in various contexts in order to highlight multiple sides and possibilities of their application in the domain of different disciplines.[5] Romanian author, G. Văideanu, in a publication edited since 1972, re-edited in 1985, shows that "interdisciplinarity implies a certain degree of integration among different domains of knowledge and different approaches, as well as application of a common language, admitting conceptual and methodological exchanges"[6] Another Romanian author, Basarab Nicolescu, sees the , interdisciplinarity as a transfer of methods from one discipline to another, having three grades of a such transfer: applicative, epistemological and generating of new disciplines.[7]

It is interesting and significant the parallel and linkage between the interdisciplinarity and Europeanness that is made by some authors. Though interdisciplinarity is a some kind of ideal for a researcher, talking about the difficulties of interdisciplinarity, the author from Romania, Mihaela Frunza, in a review of a work in domain [8], shows that these "are alike with difficulties of the political process of the European integration. This refers not only to the meaning that these two (interdisciplinarity and Europeanness or in the ultimate case the political process of European integration – completed by Vasilescu Grigore) are new experiments which receive support (only) rhetorical and a (very) real opposition and obstruction, but also in the meaning that disciplines "behave themselves" like nations implied in the process of European integration. Both have traditions, customs, methods and borders that are protected when are criticized or when are exposed to an external pressure."[9] The author's conclusion is that interdisciplinarity as well as Europeanness should be understood especially as practices-rather open than closed, rather inclusive than exclusive.

Interdisciplinarity was classified from different points of view. In this way, there are interdisciplinarity of adjacent domains (in which are applied methods and disciplines of other disciplines), interdisciplinarity of problems (it is meant the problems that overcome the borders of some disciplines and the study requires the collaboration of more disciplines), interdisciplinarity of methods (when methods

of one discipline is applied in another one), interdisciplinarity of concepts (when concepts from one discipline are applied in research in other discipline).

It should be mentioned that all highlighted types of interdisciplinarity are very important in the case of discussion of European Studies methodology. Starting from the postulate that methodology in general, methods that are applied and the whole methodological set should help us to find answers and solutions to the questions we are concerned with regarding the objectives, phenomena, processes and European problems, methodological interdisciplinarity comes to contribute in the mentioned meaning.

In this way, one of the bigger questions of methodological order, we can say, main trans-questions or even inter-questions, which will be interesting for us in the case of some integrated European Studies, would be for instance: in what manner the European history, economic development, European societies development, culture development etc. have gradually lead, all together and apart, appearance firstly of the idea of Europe (as a common space of peace, welfare and prosperity), of ideas of Europeanism, Europeanness, Europeanization, of ideas of European integration and unification, and then, later, of the necessity to realize in practice these ideas in the European construction?

This question in the case of European Studies becomes principal and it cannot be ignored in a manner, because within these studies we will not talk about the European history for the sake of history or about the European economy for the sake of economy etc. Our goal is not to educate within these studies historiographers or economists etc. The goal is to educate "Europeanists"!!! Respectively, all disciplines within the European Studies should be integrated, according to the methodological requirements of the interdisciplinarity, in the single one concept – that of Europe! Concepts of Europe, Europeanism, Europeanness, Europeanization as well as other concepts, respectively problems, are and should be common for all disciplinary domains of European Studies. Respectively, research methods of these phenomena and problems are and should be interdisciplinary.

Actually, in Romanian space, as Aurel Jula states in his work cited above [5], there are historic traditions regarding pluridisciplinarity and interdisciplinarity. One of the first Romanian researchers who approached in his works issues and subjects from all disciplinary prospects is considered to be Dmitrie Cantimir. In his famous works such as "Divanul sau gâlceava înțeleptului cu lumea" [The Divan or the scholar's quarrel with other people] wrote in 1698, "Istoria imperiului otoman" [The increase and decrease of the Ottoman Empire], wrote between 1714 and 1716 and especially "Descrierea Moldovei" [The description of Moldavia] wrote in 1716, as well as "Hronicul vechimii moldo-vlahilor" [The Chronicle of the Roman-Moldavian-Walachian people's old times from 1717 and "Sistema religiei mahomedane" [The System Book, or the State of the Mohammedan Religion] from 1722, researched scientific problems are analyzed from geographic, historical, psychological, economic, linguistic, philosophical, religious, literary, and artistically point of view. All of these are synthesized in a personal interdisciplinary manner of the author. Pluri- and interdisciplinary studies have also other authors from Romanian cultural space such as Bogdan Petriceicu Haşdeu, Dimitrie Gusti, Ştefan Milcu, Romulus Vulcănescu, H.H.Stahi and Mircea Eliade. There are respectable experiences and examples to follow in the case of studies of Europe too. As Dmitrie Cantimir had researched multidisciplinary and interdisciplinary phenomena as Moldova or Ottoman Empire, the same is necessary to do when a such complex phenomena as Europe is studied.

Finally, it is about transdisciplinarity, which is characteristic in a way to the European Studies domain research too. Transdisciplinarity, as Basarab Nicolescu noted and cited later by Aurel Jula, is among, alongside and above the disciplines and supposes the dynamic birth through various actions of reality levels. [5]. In other words, if pluridisciplinarity represents a more pronounced integration based more or less on symmetric communication between different explicative paradigms, transdisciplinarity regards an interconnection of many disciplines that lead to apparition of new disciplines or to other domains of knowledge and research. As a possible example of a such transdisciplinary approach could be the new discipline, respectively the "European Integration" course that is taught at the Faculty of International Relations, Political and Administrative Sciences of Moldova State University. This course is an examination on the base of interconnection of different disciplines, of knowledge, problems and methods of more disciplines, such as Europe History, European Economy, Political System, European Institutions and Policies, European Law, Philosophy of European Unification, European Cultures and Civilizations etc. Anyway, such a discipline could not appear if at it base there would not be a narrow monodisciplinar approach. Only an integrated, multisided, multidimensional examination, i.e. a certain multidisciplinary, interdisciplinary and, especially, transdisciplinary examination offers the possibility to present in entirety the complex and complicate process of European integration.

#### Sistematization, clasification and analysis of main European Studies methods

In general, methods that are applied in scientific research, including those regarding the research in European Studies domain, are classified, as it has been already established in methodological literature (we refer here to the author from Chisinau Vasile Țapoc who presents this classification in his well-known work "Teoria și metodologia științei contemporane: concepte și interpretări" [Theory and methodology of contemporary science: concepts and interpretations]) [4, p.166], in the following groups or categories:

- General methods or general and logic methods (conceptual-philosophical methods);
- General-scientific methods:
- Particular or regional methods;

#### • Special research methods.

Hereinafter, briefly will be presented groups of methods presented above. (There will be enumerated and presented only the main and mostly used research methods). A more detailed description of respective methods can be finding in methodological works, inclusively in cited above work of the Vasile Tapoc)

General methods or general-logic presents the highest level of methodological generalization. This group, in fact one of the most important in science, builds conceptual basis, the philosophical base of scientific methodology for all sciences and respectively for sciences within European Studies as well. These methods, being elaborated, formulated and advanced through the centuriesold history of sciences development, are considered to be the most universal, i.e. of maximum generality and utility in their usage, named also as philosophical methods, are very important and include as follows: realist-empiric method (identified by Aristotle); dialectic method (advanced by Plato in antiquity, developed through the centuries by many thinkers, then elaborated in a systemic way by the famous German classic Hegel, continued in the contemporary period and considered to be one of the most important conceptual methods in the entire history of sciences!); inductive method (advanced by Francis Bacon at the beginning of modern period in science philosophy); deductive method (established by Rene Descartes in modern time); analytical method (initiated by John Locke, later developed by many philosophical and scientific schools and become one of the most used and widespread method in all contemporary sciences, especially in philosophy and science of XXIst century); phenomenological method (comes of Hegel philosophy and is promoted systematically by Edmund Husserl); hermeneutic method (elaborated and developed by Hans Gadamer and Paul Ricoeur); Structural-functional method (elaborated and established by many methodological researchers of the XXIst century science) etc.

Some authors classify the methods of maximum philosophical and scientific generality into four big groups: I – analytical methods (methods of natural sciences, of language science, mental philosophy); II- interpretative methods (hermeneutics, phenomenology, and dialectics); III – integrative methods (theoretical-systemic, constructive, deconstructive methods); IV- other methods of philosophical research.

General-scientific methods (some authors identify them as general-scientific principles) are also of extended generality and are applied in a large number of sciences, practically in all or in majority sciences. Among the most important and widespread methods of this group can be enumerated: historical method, mathematical-demonstration method, intuition, generalization, abstractization, modeling, ascension from the abstract to the concrete, formulation, axiomatization, observation, experiment, comparison, analogy, hypothesis etc.

At a lower level of methodological generality are placed particular (regional) methods, considered by some scholars as being special. Among these can be mentioned some famous methods as: content-analysis, event-analysis, quantitative

and qualitative analysis, other forms of analysis as factor analysis, correlation analysis etc., sociological methods of analysis etc.

The logic-systemic methodological set ends with the methods of the lowest level of generality- special methods, which are peculiar to certain sciences. These are the methods that are peculiar to each science and are related to its object of study.

The methods from all presented above groups are applied by all disciplines within the European Studies. Each of these methods are selected and combined in a proper manner, inclusively through inter-, multi-, pluri-, transdisciplinarity described above. However, there are special methods, peculiar to European Studies in entirety. Although these, as we had mentioned earlier, have not crystallized their own methodological framework yet, we can talk about some more special methods, applied in European Studies, especially taking into account that these methods are a part of a big political sciences domain, inclusively that of international relations, from conceptual and disciplinary point of view. In accordance of this, we will focus, hereafter, on some methods that are applied or can be applied in the European Studies domain, taking onto consideration their peculiarities:

- Firstly, it is about the political science methods, mostly about methods of political analysis, methods, techniques and procedures presented within the well-known Dictionary of Political Analysis [10]. These are the most applied research methods and techniques of the contemporary political science. In contemporary European Studies are applied or can be applied different methods, techniques, rules, procedures, approaches, concepts, theories etc., of general political science, as well as of international and comparative analysis, social analysis, behavior analysis, techniques of science and philosophy of science, statistic analysis, other methodologies and research techniques. (A selective bibliography regarding these research methods and techniques is presented in the above-mentioned dictionary [10, p.182-195]).
- For European Studies, as these are part of international relations science from conceptual point of view, an important significance has research methods and techniques with geo- character, respectively geo-methods: geopolitical methods, geo-economics methods, geo-strategical and geo-cultural methods etc.
- Among other methods and techniques applied by the European Studies can be mentioned the following: cross-cultural methods, practiced by contemporary European Studies; historical-linguistic methods and comparison methods, applied especially in text and political speech analysis, quantative and qualitative methods of analysis and research, multicultural methods and methodologies, applied by contemporary European Studies especially regarding the spread of multiculturalism phenomena in European states. (As examples can be presented some works about Europe of such authors as Mircea Maliţa [11], Constantin Noica [12], C.W.Watson [13], in which are applied multicultural methods.); complex research methods and methodologies, inclusively and especially those systemic, structural,

structural-functional etc.; anthropological methods, applied in present in many European studies, producing good results: (here can be mentioned as examples of studies with anthropological methods as works of authors Emmanuel Todd [14], Elizabeth Pond [15], Antoine Compagnon and Jacques Seebacher [16]); communication methods with different quantitative and qualitative approaches, application of different types of factor analysis, correlation analysis etc.; contextual analysis method (content-analysis): also, different sociological methods with linear models (surveys, samplers, etc.), logic analysis, qualitative data analysis, case studies, interview techniques, question design, different measure-matrix approaches etc.

Hence, it can be argued that methodological set of contemporary science, inclusively of the sciences within the European Studies, is quiet various. However, methods are methods. There are no good or bad methods. Not always application of the most contemporary methods will automatically lead to good results. As, Vasile Tapoc wrote, with reference to Russian researcher Ivan Petrovici Paylov, "with a successful method and with a less qualified researcher can be achieved extraordinary scientific results, while application of a wrong method, without inadequate knowing the subject, no scholar, no matter how qualified he or she is, will be not able to contribute with something valuable to science. "[4, p.165] All methods are good. In this context, Vasile Tapoc states:" the method is good if only normative principles are adequate to essential features of research subject and to necessary actions that should be undertaken in order to know these features in the process of research" [17, p.25]. So, everything depends on how we can apply and use methods during the research and not on proper methods. That is why, the same Vasile Tapoc insists on understanding/interpretation of methodology as a general theory on principles of methods' application in scientific research [4, p.5]

# Necessities and development perspectives of contemporary European Studies methodology

In present, although European Studies methodology has reached a certain level, there are necessities and some development perspectives of it. Among a plenty of problems that exist at this subject we will focus on several below.

First of all, we will start with a statement regarding theoretical aspects of the European Studies, which are very important, inclusively in methodological plan. It is about general theory of European Studies, a theory that has, should have an important methodological function. The question is if we have such a theory today. We cannot say we have not. But, we cannot, also, affirm that we have such a theory. A general theory of European Studies is going to be elaborated. The problem is that at the theoretical chapter of European Studies are elaborated a range of theories as so called European integration theories, more recently theories of European Union Governance and other theories (some of them are examined within the work "Politics in the European Union" of Ian Bache and Stephen George. Especially it is about the first part of the work "Theory" [18, p.18-97]).

All existing theories of European integration (as theories of federalism, functionalism, neo-functionalism and interguvernamentalism), theories of supranational governance, theories of new institutionalism, of rational choice and sociologic institutionalism, multilevel governance theories, contemporary theoretical debates between constructivism, rationalism and reflectivism, recent neo Marxist theories regarding European integration and European Union, various economic schools and theories of economic integration etc.- are particular theories of the European integration and none of them examines the European integration in its complexity, from all points of view and aspects. Thus, none of these theories can be considered as and cannot assume the role and function of a general theory of European integration and unification. On one hand, may be it is good that there are so many theories of European integration and unification among which are held debates. On another hand, this variety of theoretical visions not always direct and guide the practical process of European construction. That is why, recently, as the authors of mentioned above work "Politics in the European Union" state, "new critical perspectives that question the hypothesis that stood at the base of theories regarding the EU have been appeared" [18, p.19].

In this context, when there are more particular theories of European integration and none of them can have a high level of generalization and does not claim the role of a general theory, we agree with the Russian researcher, V.G.Shemeatencov, who, analyzing main European integration theories, inclusively from a methodological point of view, argues that only in their entirety, theories of European integration could present us a complex and adequate image and explanation of this unique European integration phenomenon and all its aspects. [19, p.351].

In our opinion, a general theory of European Studies with an important methodological function, in particular a general theory of European integration and unification too, that will guide and practice European Studies, should include:

- The basic concepts of the researched domain, here it is about the European events, including those of integration and unification. This is because, even if there are a lot of works about Europe, European integration and unification, there are some vagueness, especially regarding the European future, regarding what kind of Europe we want to build and how the tomorrow Europe, a unified Europe would look like etc.;
- Main theoretical notions, their definition and operationalization;
- Basic theoretical principles, which are as important as methodological functions, that will permit systematic organization of general theory of European Studies and, at the same time, will guide the practice of European construction. It is about different methodological principles. The most important among them, according to the theory and methodology of contemporary science are: immeasurability, correlation, elementariness,

- complementarity [4, p.148-160];
- As contemporary European Studies, as it was analyzed in one of previous works [20, p.8-9], tend to become and, in fact, are the research of problems characteristic to all contemporary Europe's states, in the period of integration and unification processes development, a major importance has the explication and generalization of empiric acts and phenomena and formulation on this basis of lawfulness of European integration processes, of forecasts and practical recommendations.

#### Conclusion:

To conclude, the most important issue, in the context of necessities and perspectives of further contemporary European Studies methodology development, is the focusing on the elaboration of some own research methods and techniques, as in present, most frequently is applied a methodological set from other domains, other sciences etc. Of course, special efforts are necessary in methodologies development regarding interdisciplinarity, pluridisciplinarity and transdisciplinarity, because these, as we saw, are the most representative and necessary for this multidisciplinary domain of European Studies. So, European Studies methodology should be developed in a proper way in order to analyze and explain the principles, procedures, phenomena and mechanisms of functioning and advancement of European integration, European Union and Europe in general.

# Bibliography:

Metodologia cercetării în dreptul Uniunii Europene - http://www.csde.ro/?cat=161 Sergiu Miscoiu. Predarea metodologiei cercetării în stiinta politică: câteva lectii desprinse din experienta unui Masterat francofon în co-tutelă. // Revista pentru Asigurarea Calității în învățământul superior. Vol.3, Nr.2, septembrie 2011.

Dictionar filosofic. Bucuresti: Editura Politică, 1978.

Vasile Țapoc. Teoria și metodologia științei contemporane: concepte și orientări. Chisinău: CEPUSM, 2005.

Aurel Jula. Interdisciplinaritatea și transdisciplinaritatea, factori de creștere a calității învătământului universitar. – Noua viziune asupra calității europene. Bucuresti, 2006.

G. Văideanu. Educația la frontiera între milenii. În colecția Idei contemporane. Bucuresti: Editura Politică, 1972.

Basarab Nicolescu. La Transdisciplinarite. Manifeste. Paris, Ed. Du Rocher, 1996. Basarab Nicolescu. The Transdisciplinary Evolution of the University. – http://perso.club-intern, et.fr/nicol/ciret/, last modified on May 18, 1999.

Practising Interdisciplinarity in Gender Studies, coordonată de Enico Demeny. Raw Nerve Books, York, 2006.

Mihaela Frunza. Interdisciplinaritatea - între teorie și practică. -

http://www.observatorcultural.ro/Interdisciplinaritatea-intre-teorie-si-practica\*articleI

Jack C. Plano, Robert E. Riggs, Helenan S. Robin. Dicționar de analiză politică. Bucuresti: Ed. ECCE HOMO, 1993.

Mircea Malița. Zece mii de culturi o singură civilizație. Spre geomodernitatea secolului XXI. Editura Nemira, 1998.

Constantin Noica. Modelul cultural european. București: Humanitas, 1993.

Watson C.W. Multiculturalism. Buckingham, Philadelphia: Open University Press, 2000.

Emmanuel Todd. Inventarea Europei. Timișoara, 2002.

Elizabeth Pond. Renașterea Europei. Editura PANDORA-M, 2003.

Antoine Compagnon, Jacques Seebacher. Spiritul Europei. Vol.I. Date și locuri. Vol.II. Cuvinte și lucruri. Vol.III. Gusturi și maniere. Polirom, 2002.

Vasile Țapoc. Disertația științifică. Inițiere în cercetarea științifică și filosofia succesului. Chișinău, USM, 2000.

Ian Bache, Stephen George. Politica în Uniunea Europeană. Traducere din engleză: Cristina Duca. Editura Epigraf, Chişinău, 2009.

Шемятенков В.Г. Европейская интеграция. Москва: Международные Отношения. 2003.

Studii Europene în Republica Moldova: Colecție de programe analitice. Coordonator Grigore Vasilescu. Chișinău, ISPRI, 2005.

# MANAGEMENT OF RETAIL CHAINS

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#### Abstract

Background: Despite the diversity of theoretical and methodological approaches to the formation of customer focus in the management of companies, theoretical and methodological provisions are necessary, including approaches to the management of consumer value of trade service, assessment of efficiency of trade networks, personnel management system, which allow us to implement customer-oriented approach in the trading networks taking into account specifics of trade service.

Methods: In this article, based on comparative analysis and sociological study, the analysis was carried out as to 5 trading networks in Russia and Moldova.

Keywords: retail networks, efficiency, strategies of development

World experience of development of services shows that one of the most effective management technologies became the customer-oriented approach. Particularly successful when implemented in the areas where the competition for the buyer is the most acute: banking, insurance and telecommunication fields. Because of this, modern, scientific researches are mainly customer-adapted to these areas and do not address particularities of a specific organization.

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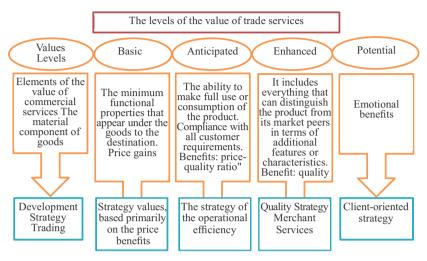


Figure 1. The levels of the value of trade services

Source: elaborated by authors.

Despite the variety of theoretical and methodological approaches to the formation in the management of companies that are customers focused, the need of theoretical and methodical know how, including approaches to the management of the consumers value of trade services, evaluation of the efficiency of a trade network, human resource management system, permit to implement the customeroriented approach in the trading network with specific trade services.

It is known that the value of trade services to consumers is not only the material of the product, but also the conditions, the atmosphere of its acquisition, the characteristics of communication with potential buyer of sales staff, the interaction of customers with each other and so on. Depending on the quality of the components proposed to differentiate trade services on four levels: Base expects potential, advanced. Determine the value of commercial services for each level and the corresponding development strategy (Figure 1).

It is well known that the value of trade services is determined by the following benefits and costs for customers: quality in the first place; optimal price-product quality; discounts, bonuses and other benefits of the price; Save time on making a purchase; emotional benefits and costs. It was found that the customer-oriented approach to managing the value of commercial services account for the emotional benefits.

Analysis of the client-oriented literature brings up that there are a sufficiently large number of definitions of client-oriented foreign and domestic scientists, but they do not reflect the peculiarities of trade services. Taking into account the value of the trading services offered to define customer orientation as a system management solutions retailer aimed at shaping a positive customer experience and the ability to extract the distribution network continued profitability in the long term by managing customer value.

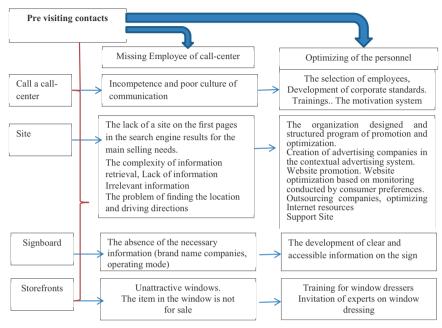


Figure 2. Map of consumer experience

Source: elaborated by authors.

The proposed schematic of existing experience allows you to control the value of trade services at each point of contact and form a positive consumer experience.

It is proved that the traditional indicators based on the measurement of sales and market share in terms of customer orientation are losing their relevance. In the context of a client-oriented management requires other methodological procedures, it is not based on sales and market share, and other objects of measurement principle. With a customer-oriented approach, such an object of measurement becomes the customer loyalty.

To interpret the performance of retail chains, we proceeded from the assumption that revenue is determined by the number of customers and average check (Figure 3).

Figure 3. Evaluation of the impact of trade-based network - customer satisfaction



Source: elaborated by authors.

The proposed contact group indicators for measuring customer satisfaction are shown in Table 1. Each of the five indicators group is characterized by a number of individual indicators derived from the analysis of foreign and domestic scientific publications.

Table 1. Indicators to assess customer satisfaction

| Group rate       | oup rate Individual performance                                    |  |  |  |
|------------------|--|--|--|--|
|                  | -Profit for the period of active buyers (CLV customer lifetime     |  |  |  |
|                  | value)   |  |  |  |
|                  | -Customer equity trading network (customer equity)                 |  |  |  |
|                  | -Index of net support (NPS / net promoter score)                   |  |  |  |
|                  | -The index of customer satisfaction                                |  |  |  |
| Retention and    | (csi / cdi - customer satisfaction / delight index)                |  |  |  |
|                  | The coefficient of limitations, frequency and cost (RFM - regency, |  |  |  |
| growth of        | frequency and monetary value)                                      |  |  |  |
| regular          | -The share of regular customers to the total number of customers   |  |  |  |
| customers        | -Increasing the share of repeated visits                           |  |  |  |
|                  | -Size Single purchases loyalty;                                    |  |  |  |
|                  | -The average size of the purchase of existing customers,           |  |  |  |
|                  | -The average frequency of visits to the store                      |  |  |  |
|                  | -Customer retention rate   |  |  |  |
|                  | Expenses for customer retention                                    |  |  |  |
|                  | Profit from investment in the buyer (ROIC return on investment     |  |  |  |
|                  | in customer)   |  |  |  |
|                  | -The average frequency of visits to the store                      |  |  |  |
|                  | -The average size of new customers buying                          |  |  |  |
| Attracting new   | -The cost of attracting new buyers on the ruble                    |  |  |  |
| buyers           | revenue  |  |  |  |
| buyers           | -The share of attracted customers to total customers               |  |  |  |
|                  | -Revenue from new customers  |  |  |  |
|                  | -Coefficient of increase in the number of new buyers               |  |  |  |
|                  | -The growth rate of purchases of new buyers                        |  |  |  |
|                  | -Factor turnover growth of new buyers                              |  |  |  |
| Planning for the | -Coefficient of apostasy (defection rate)                          |  |  |  |
| buyers lost      | -Level Retention customers (retention rate)                        |  |  |  |
| -                | -The Number of claims and complaints from customers                |  |  |  |
| The increase in  | -Turnover of Impulse sales   |  |  |  |
| the average      | -Turnover of Cross-selling   |  |  |  |
| ticket cost      | Č  |  |  |  |
| Business         | -Three * M (measuring, management, monitoring) relationship        |  |  |  |
| reputation       | management of all groups interested in the activities of the trade |  |  |  |
| Trade Network    | network  |  |  |  |
| (GoodWill)       | -The degree of fame trade network in the target market             |  |  |  |

Source: elaborated by authors.

On the basis of expert method, which was attended by heads and specialists of 52 network trading structures of Russia and Moldova have found that customer focus in the management of trade organizations of the city is rarely used: only 4 organizations representing the respondents, it is implemented to the full extent and 6 organizations – just part of them. Among the obstacles to the implementation of customer orientation, 14% of the total number of respondents cited lack of qualified staff and lack of understanding of colleagues, the main part of the respondents -72% - pointed to the lack of adequate knowledge and skills to implement it. It is noteworthy that the lack of financial resources is not noted, by none of the respondents. The main source of information about the client-oriented approach in the management of most of the respondents named the Internet and training in educational institutions.

It was established that at least a significant problem in the way of customer orientation in the management of trade organizations is the lack of understanding of the essence of this category by management. When selecting the characteristics that best describe this term, the majority of experts (54%) are inclined to the fact that the process of the formation of customer satisfaction; 15% - the process of creating a positive customer behavior, 4% - indicated that they do not know the term and only 27% of the total number of experts pointed out that the customer-oriented - is the process of improving interaction with customers.

The special role of the personnel management system in the formation of customer orientation (Figure 3). Established principles of improving the management of personnel of customer-oriented trade organizations: respectful leadership to employees and customers, the involvement of managers in the service process, a team approach to the management of personnel, awareness of employees and effective motivation. The implementation of these principles will help to organize the customer service at a high level, which is one of the prerequisites for the effective implementation of customer orientation in the network of trade organizations.

The close relationship of the quality of service of the staff makes it necessary to find effective tools to manage the quality of trade services. One such tool is the corporate standard.

It was established that the corporate standards affecting different aspects of trade management, not only in the effective management of human resources, business processes, material-technical base, but also in the formation of socially oriented business that has the potential to become one of the main prerequisites for expanding the client base and the formation of satisfaction and customer loyalty.

The basic rules for the development of corporate standards:

Rule 1. Corporate standards should not contradict the mandatory requirements of state standards and industry standards;

Rule 2. It is necessary to allow the quantitative measurement of the standard requirements to the object of standardization;

Rule 3. The standards should include organizational and methodological support necessary for their implementation, including the interaction of structural subdivisions of the company; resources and personnel; responsible personnel; documentation (log books, reports, protocols, conclusions, records, reports, etc.).

A list of corporate standards for network trade organizations, determine their role in the formation of customer oriented businesses. For example, corporate environmental safety standards show the main stages of the formation of a substantial part of the standards. Defined principles for the development of standards for waste prevention by the use of synthetic packaging materials:

- 1) Careful attitude to the containers and packing materials;
- 2) Complete the transition from disposable to returnable containers;
- 3) Priority natural materials;
- 4) Rejection of unnecessary packaging.

The results of the implementation of corporate standards in the trade network "Assorti" for saving energy and water resources. The main goal of these standards the rational use of natural resources, which is one of the indicators of socio-oriented business, that allows to increase customer loyalty to the trade organization. High savings of utility payments is due to water supply, from 19.5% in 2011. to 30% 2013. compared with 2010. The costs for energy consumption decreased by 5.2% to 11.6%. As for the not so great economic effect of lowering utility payments (for 2011-2013. He was 8.4 thousand. Rub.), There is a need to take into account the cost of installation of meters that have been produced in 2011. at cost of 149.1 thousand rubles. However, the company did it consciously, understanding prospects and social significance of the project for the implementation of customer focus.

#### Conclusion

Carrying out a research allows us to establish the following main conclusions and recommendations:

1. Revealed the essence of the value of trade services. It is proved that values become less material production, as part of the intangible that includes indicators of the availability of goods and services in general, the atmosphere of the purchase, the buyer characteristic of communication with sales staff, customer interaction with each other.

Assigned to the base, is expected to expand the potential and the level of the values.

- 2. Given the specificity of the trading services offered to define customer orientation, with respect to retail chains, as a system of administrative decisions aimed at shaping a positive customer experience and the ability to extract the distribution network continued profitability in the long term by managing customer value.
- 3. Organizing an economic approach to the management of commercial networks based on client orientation. It includes the management of the value of

trading services for the contact point. Spend detailing trade services identified point of contact, which are structured into three groups: pre visiting, during the visit, after-sales. Formed consumer experience, comprising of: contact points of possible problems and ways to prevent problems at each point.

- 4. To assess the effectiveness of client-trading networks developed a methodical approach based on evaluation of customer satisfaction. The system of indicators to assess customer satisfaction; increase and retention of old customers. attract new customers, Planning care of old customers, increase the value of the average check, goodwill trading network. Synthesis satisfaction rate is determined based on individual and group performance.
- 5. Examined the special role of the personnel management system in the formation of a client-oriented approach in the trading networks. The problems and developed the principles of personnel management in order to improve the efficiency of trade organizations.
- 6. Define rules and procedures for the development and implementation of corporate standards in order to create customer focus. For example, environmental standards define the main steps of forming a substantial part of corporate standards. The results of the implementation in the trade network "Assorti" corporate standards for saving energy and water resources, whose main objective - the rational use of natural resources, which is one of the indicators of socio-oriented business, in turn, allows to increase customer loyalty to the trade organization. Parallel trading organization received economic benefits in terms of reduced utility payments

The results of the studies are theoretical and practical significance in the management of commercial networks based on customer oriented business.

# Bibliography:

- Дымшиц М.Н. Потребительская лояльность: механизмы повторной покупки. M.: 2007, 232 c. 118
- Филип Котлер. Маркетинг менеджмент 2-е изд. СПб.: Питер, 2006. 464 с. 375
- Ламбен Ж.-Ж. Стратегический маркетинг. Европейская перспектива. СПб.: 1996, 386 c. 213
- Портер Е. Майкл, Конкурентная стратегия: Методика анализа отраслей и кон курентов/ Майкл Е. Портер; Пер. с англ. — М.: Альпина Бизнес Букс, 2005.—454 c. 102
- Şargu Lilia, Rogojină E, Melnic Ge., Identificarea avantajelor negocierii prin prisma competitivității, În: Simpoyionul Internațional ,, Disponibilități Creative în Lume" ediția a VI-a din 15 februarie 2015, Iași, ISBN 978-606-576-703-4, pag. 154-160

# The new investment instruments developed in the international financial market

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#### **Abstract**

The development of an economy in general is conditioned by the investment and business environment of a country. The investment activity has an increasing impact on the level of competitiveness and performance of an economical agent that may contribute to the business expansion, providing and selling higher qualitative services and goods. In the same time, taking into account that the participants of the financial market become sometimes more cautious in their activity as a result of different events, as financial crisis that take place, the financial market may be very flexible and may develop extremely fast without even having a support from the regulatory and supervisory authorities. In this regard, the article aims to reflect the new investment instruments that have been developed all over the world as a result of the world financial crisis, instruments that are rapidly expanding in the financial markets lately, and what are the main difficulties and problems related to these instruments.

Key-words: investment, financial market, lending, risks, financial resources, field.

#### Introduction

The market evolution and development depends on the actions of the market participants and its regulators. From all the times, the functions performed by the financial markets are constant:

- transferring financial resources across time and space;
- clearing and settling payments;
- pooling resources and sharing ownership;
- price discovering;
- managing risk;
- dealing with asymmetric information problems.

The functions performed by the financial markets remain the same over time, but the instruments, institutions and players who carry out these functions change and evolve. In the same time, the financial markets affect and are affected by the rest

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of the economy and the regulatory framework.

One of the factors that made the world's financial market to change is the financial crisis. Its consequences may have unpredictable influence on the market's development. Following the financial crisis from 2000 that took place all over the world and as a result of it, the banks' reluctance of expanding their credit portfolio, there have been developed new financial and investment instruments on the world financial market like peer-to-peer lending and equity crowdfunding [9].

#### Peer-to-peer lending

Peer-to-peer lending (P2PL) is a process of lending money to unrelated persons (peers), without needing a traditional financial intermediary such as a bank or other traditional financial institution. This lending process takes place online on peer-to-peer lending companies' websites using various lending platforms and credit checking tools. Peer-to-peer lending is also known as crowd lending.

Early, peer-to-peer lending was also characterized by disintermediation and reliance on social networks but these features have started to disappear. While it is still true that the development of internet technology and e-commerce makes it possible to do away with traditional financial intermediaries and that people may be less likely to default to the members of their own social communities, the emergence of new intermediaries has proven to be time and cost saving. Extending crowd resources to unfamiliar lenders and borrowers opens up new opportunities for both sides.

Most peer-to-peer loans are unsecured personal loans. Secured loans are also offered by using luxury assets such as jewelry, watches, vintage cars, fine art etc. as collateral. Such loans are made to an individual rather than a company. Other forms of peer-to-peer lending include student loans, commercial and real estate loans, payday loans, as well as secured business loans, leasing and factoring [6].

# Particularities of peer-to-peer lending

Peer-to-peer lending does not fit cleanly into any of the three traditional types of financial institutions like deposit takers, investors, insurers, and sometimes it is categorized as an alternative financial service. The key characteristics of peer-topeer lending are:

- it is conducted for profit;
- no prior relationship between lenders and borrowers is needed;
- intermediation by a peer-to-peer lending company;
- transactions take place on-line;
- lenders may choose which borrowers to invest in:
- the loans are unsecured and are not protected by government insurance;
- loans that can be sold to other lenders [8].

Investing through a peer-to-peer lending platform is not the same as putting the money in a deposit account with a bank, building society or credit union. The Government guarantee on deposits, that applies to savings products such as a term deposit, does not apply to funds invested in peer to peer lending.

Unlike bank depositors, peer-to-peer lenders can themselves choose whether to lend their money to safer borrowers with lower interest rates or to riskier borrowers with the prospect of higher returns.

An investor decides how much he wants to invest and depending on the lending platform - how his money will be used. For example, an investor may be able to choose to fund one loan in particular or be able to invest in a portfolio of loans. In addition to this, investors may be able to choose the minimum interest rate and select a loan period that fits their needs.

However, in some cases, the investment decisions are made by the platform operator or the investment manager.

Regarding the borrowing process, when borrowers apply for a loan, the platform operator evaluates their suitability by checking their credit history and their capacity to repay the loan. These factors allow the platform operator to assess the lending risk. Not all platforms disclose the lending risk of each borrower. Repayments from borrowers are collected through the lending platform and passed on to the relevant investors at predetermined intervals. The investor's capital can be returned as part of the repayments or at the end of the loan period.

One of the main advantages of peer-to-peer lending for borrowers consists in getting better rates than traditional banks can offer. The advantages for lenders are higher returns than those obtained from a savings account or other investments. The interest rates related to peer-to-peer lending also have a lower volatility than other investment types [4].

In the same time, the interest rates are set by lenders who compete for the lowest rate on the reverse auction model, or are fixed by the intermediary company on the basis of an analysis of the borrower's credit. Borrowers assessed as having a higher risk of default are assigned higher rates. Lenders mitigate the individual risk that borrowers will not pay back the money they received by choosing which borrowers to lend to, and mitigate total risk by diversifying their investments among different borrowers [5].

In this context, it is necessary to mention that the interest rates and the methodology for calculating the rates have varied among peer-to-peer lending platforms, ranging from 5% - 36%, depending on loan terms and borrower ratings.

# Peer-to-peer lending intermediaries

The lending intermediaries are the ones on which is based the whole process of peer-to-peer lending. These intermediaries work for profit generating revenue by collecting a one-time fee on funded loans from borrowers and by assessing a loan servicing fee to investors - either an annually fixed amount or a percentage of the loan amount.

Because many of the services are automated, the intermediary companies can operate with lower costs and can provide the service more cheaply than traditional financial institutions, so that borrowers may be able to borrow money at

lower interest rates and lenders may be able to earn higher returns. Compared to stock markets, peer-to-peer lending tends to have both less volatility and less liquidity [4].

Most peer-to-peer intermediaries provide the following services:

- on-line investment platform to enable borrowers to attract lenders and investors, to identify and purchase loans that meet their investment criteria;
- development of credit models for loan approvals and pricing:
- verifying borrower identity, bank account, employment and income;
- performing borrower credit checks and filtering out the unqualified borrowers:
- processing payments from borrowers and forwarding those payments to the lenders who invested in the loan;
- servicing loans, providing customer service to borrowers and attempting to collect payments from borrowers who are in default;
- legal compliance and reporting;
- finding new lenders and borrowers [2].

In the peer-to-peer lending process, the platform operator keeps the personal details of all investors and borrowers confidential. Also, some platforms do maintain a fund that may compensate the investors that suffer losses due to borrower defaults. However, if there are a large number of defaults, the fund is unlikely to have enough money to compensate all the investors [1].

Making an analysis of the peer-to-peer lending companies and according to the data exposed in the Table 1, it can be seen that United Kingdom is the only country that has so many peer-to-peer lending platforms which means that the peerto-peer lending industry is quite developed. This development may be explained by the fact that it's the first country in which first appeared this kind of financial service.

| Table 1. The world's peer-to-peer lending platforms and their appearance | all |
|--|-----|
| over the world   |     |

| No. | Country       | Year   | Main P2PL platforms                             |
|-----|---------------|--------|---|
|     |               | of     |   |
|     |               | appear |   |
|     |               | ance   |   |
| 1.  | United        | 2005   | Zopa, Funding Circle, RateSetter, Lending       |
|     | Kingdom       |        | Works, MarketInvoice, Assets Capital, Unbolted, |
|     |               |        | LendInvest, Ablrate Funding Knights,            |
|     |               |        | Rebuildingsociety, Thincats, Folk2Folk          |
| 2.  | United States | 2006   | Prosper, Lending Club, Zidisha, Upstart         |
|     | of America    |        |   |
| 3.  | Sweden        | 2007   | Trustbuddy AB, Lendify AB, Toborrow AB          |
| 4.  | Estonia       | 2009   | Bondora, Omaraha, Estateguru, Crowdestate,      |
|     |               |        | MoneyZen, Investly, Fundwise                    |

| 5.  | China       | 2010 | CreditEase, Lufax, Tuandai, China Rapid       |
|-----|-------------|------|---|
|     |             |      | Finance, DianRong                             |
| 6.  | India       | 2012 | i2ifunding, Lendbox                           |
| 7.  | Poland      | 2013 | GiveTake                                      |
| 8.  | Germany     | 2013 | Auxmoney, Lendico, Smava, Zencap              |
| 9.  | Australia   | 2014 | SocietyOne, DirectMoney, RateSetter           |
| 10. | New Zeeland | 2014 | Harmoney                                      |
| 11. | Singapore   | 2014 | Funding                                       |
|     |             |      | Societies, CapitalMatch, Entreexchange,       |
|     |             |      | Crowdo, Fundacity, MoolahSense, New Union,    |
|     |             |      | Kyepot  |
| 12. | United Arab | 2014 | Beehive                                       |
|     | Emirates    |      |   |
| 13. | Israel      | 2014 | eLoan, Tarya, BLender, CreditPlace, Incredita |
| 14. | Canada      | 2015 | Grouplend                                     |
| 15. | Latvia      | 2015 | Mintos, Twino                                 |
| 16. | Brazil      | 2015 | Biva  |

Source: Elaborated by the author based on www.wikipedia.org

Also, in the last two years (2014 – 2015) a lot of peer-to-peer lending operators have emerged in many other countries like Australia, New Zeeland, Singapore, Canada, Latvia, Brazil.

## Factors that influenced growth of the peer-to-peer lending companies

Several factors influenced the rapid growth of the peer-to-peer lending platforms. First of them is the banks' refuse to increase their loan portfolios after the financial crisis. In this way, the public turned to peer-to-peer companies for lending and borrowing. The environment for peer-to-peer lending was already ripe around 2005-2006 as it may be seen from the table 1, during the time of the subprime lending boom. Many borrowers were left out of the subprime lending market because they didn't own a home or had very weak credit scores. Only the "better" subprime borrowers could actually qualify for mortgages. The main source of loans for these individuals was credit cards, but these were expensive, with interest rates typically ranging from 15% - 21% annually. Payday loans were an even more expensive option and would only lend up to a few hundred dollars at a time. This left many people without reasonable borrowing options.

Second, interest rates that fell to very low levels in the mid-2000's, leaving investors frustrated by the lack of higher yielding investment opportunities, especially in the credit markets. People typically talked about "search for yield" and "yield compression" – the fact that interest rates on riskier loans were close to the rates offered on safe loans.

Another factor that influenced peer-to-peer lending's growth is the invention

of the internet, that is a technological improvement and makes it possible for individual borrowers to present their cases to individual lenders. Borrowers were now not only able to present the usual credit information required, they were also able to tell their own personal stories about why they were in need of a loan and what they intended to do with the money. In addition, the process of gathering and processing credit information has become cheaper and more automated with the development of credit-scoring algorithms.

Besides this, taking into consideration the new generation that raised with Internet and new technologies, having access to different services online, very few people actually go to a bank, market etc. every transaction, purchase and acquisition being summarized at a click. This thing also caused the rapid growth of such type of financial service.

Thus, peer-to-peer lending greatly attracted borrowers who, because of their credit status or even the lack of it, did not qualify for traditional bank loans. This is why peer-to-peer lending has become of the fastest growing investment vehicles of the latest times. It has enabled the possibility of better rates for borrowers than traditional banks have been able to offer.

# The specific risks of the peer-to-peer lending platforms

The financial market in general and all the financial institutions and intermediaries are exposed to different risks in their activity and peer-to-peer lending industry is not an exception. Further, there are presented the main risks that are appropriate to peer-to-peer lending.

# ✓ Lending risk

In most cases, the company operating the lending platform does not lend its own money, so all the lending risk is taken by the investors. This means that the lender is more likely to lose some or all of his money if the borrower does not repay the loan.

This risk is reflected in the comparatively high returns that are likely to receive for an investment. However, there is the possibility to still lose your money even if it is chosen a loan that has been listed as low risky one.

## ✓ Assessing credit risk

The operators of peer-to-peer lending platforms often make claims about a borrower's ability to repay the loan and, in this regard, they may also rate or grade borrowers by their level of creditworthiness.

It's important to keep in mind that these ratings are based on a point in time assessment only and are not the same as the ratings used by an external credit rating agency or even consistent with the ratings used by other peer to peer lending platforms.

Before a person invests, he should understand and feel comfortable with how borrowers are assessed before they are given a loan. A high number of defaults or late repayments by borrowers could be an indicator of the platform operator's poor credit assessment process.

In addition, it's important to remember that a borrower's ability to face the repayments can change over time, for example, because of illness, unemployment or a change in their financial circumstances. If a borrower can't keep up the repayments, he has the right to apply for a "hardship variation", which presumes the possibility to modify the terms of the loan by changing the amount or timing of the repayments.

If a person has invested in a loan that is the subject of a hardship variation, it may mean that the term of his investment is extended and the returns may be less than originally expected [1].

In addition to this, other risks that are related to peer-to-peer lending are the lack of Government's guarantee, which means that in case of a borrower's default, or even bankruptcy of the peer-to-peer lending operator, the lender loses all his investment in the loan without getting anything. Besides, not all the platforms have compensation procedures for lenders in case an investment is lost due to fraud or an error within the lending platform. In this situation, the lender is bearing the full risk of not getting his money back.

# **Equity Crowdfunding**

Equity crowdfunding is a term that refers to open calls to the public in order to raise funds for a specific project. These calls are often published and promoted through internet and with the help of social media. The funds typically raised generally come from a large number of contributors in the form of relatively small contributions.

Originally, crowdfunding was based on donation principle. A person or a business who wanted to finance a project would ask for donations to help fund the project. Donors frequently received rewards related to the project, based on the amount donated. For example, some authors used crowdfunding to finance the printing of their novels and reward the donors with signed copies of the book. Thus, crowdfunding of commercial projects generally relies on mutually beneficial exchanges to ensure success.

Nowadays, the equity crowdfunding is the online offering of private company securities to a group of people for investment. Because equity crowdfunding involves investment into a commercial enterprise, it is often subject to securities and financial regulation. Equity crowdfunding is also referred to as investment crowdfunding, crowd investing or crowd equity.

In this regard, the equity crowdfunding may be defined as a mechanism that enables broad groups of investors to fund startup companies and small businesses in return for equity. Investors give money to a business and receive ownership of a small piece of that business. If the business succeeds, then its value increases, as well as the value of a share in that business. Coverage of equity crowdfunding indicates that its potential is greatest with startup businesses that are seeking

smaller investments to achieve establishment, while follow-on funding, that is required for subsequent growth, may come from other sources [3].

Lately, crowdfunding rapidly evolved in several directions, including raising money through issuance of debt and equity to donors, which is called securities-based crowdfunding. In equity-based crowdfunding, each backer receives shares of a company in exchange for money they pledge. The first robust case of equity crowdfunding was the formation of the Australian Small Scale Offerings Board in 2007, which has raised 138,478,362 dollars so far.

Equity-based crowdfunding currently differs from an initial public offering in several key aspects. First, there is no underwriting involved, since shares are issued directly to donors and do not pass through the hands of brokers or dealers. Second, the shares are considered to be privately placed equity rather than publicly traded equity. Finally, shares issued are typically not traded on a secondary market.

The fact that equity crowdfunding is currently considered to be privately placed equity has important consequences for its issuance and trading. The sale of privately placed equity to unprofessional investors creates legal liabilities for the issuing company related to the return on this investment. In fact, issuing privately placed equity to unprofessional investors is not legal in many countries unless specific regulation is put in place to allow it.

# Main issues and constraints regarding peer-to-peer lending and equity crowdfunding

Global regulators have been examining peer-to-peer lending as they explore its potential. In mid-May 2014, the Federal Reserve Bank of New York hosted a meeting to discuss the role that the new investment instrument could play in the United States of America's economy. Other organizations have questioned whether this phenomenon may be the next evolution of inclusive banking or simply a new financial instrument in need of tougher surveillance.

There has been an increasing interest in peer-to-peer lending on the part of professional investors, especially since 2013. Hedge funds and large wealth managers are making huge loans through United States of America's peer-to-peer lending platforms, tempted by yields of up to 24% at a time when returns on cash and government bonds are stuck at very low rates. Nevertheless, most of the money for the peer-to-peer lending now comes from institutional investors such as hedge funds, rather than from the general public.

The enthusiasm that professional investors show for peer-to-peer lending raises a serious issue: as professional investors squeeze out individual lenders, will they leave the market later if it produces disappointing results? In other words, do professional investors in peer-to-peer loans only represent "hot money" that is chasing the latest trend? Another issue consists in the fact if the peer-to-peer lending is truly "peer to peer" since the lenders become more and more institutional investors? Peer-to-peer lending market has not been tested by any downturn or a negative shock yet, so how it will perform remains an open question.

However, the regulation of cross-border loans is untested and could be complicated. There is no common European framework for supervision and the European Commission, International Monetary Fund are still in the process of carrying out further research on the sector. There are differing opinions about how best to conduct supervision, some experts saying that regulation for borrowers and lenders could be split between different countries and others saying that a single point of contact would be needed [7].

This leads to the question of how and to what extent peer-to-peer lending may possibly spread to other markets. This is especially appropriate for the European markets and South East Asia, where the countries are smaller and issues related to cross-border lending could cause a lot of problems.

Regarding crowdfunding, one of the main unresolved challenges at the moment is a practical one: if an investor buys shares in a crowdfunded company today, how are those shares converted back into cash later? In the very short run, this may not be a concern, since the companies anticipate high growth for several years. In addition, some countries require minimum holding periods on crowdfunded equity. For example, in the United States of America, equity crowdfunding investors must hold their investment for a minimum of one year. The meaning of this rule is to prevent investors from buying stock in a company and then trying to inflate its worth in a "pump-and-dump" scheme. But the lack of a clear exit strategy discourages potential investors from purchasing crowdfunded equity.

One option for an investor exit strategy is to sell equity on the secondary market, which in the case of crowdfunded investments are private exchanges that act similarly to public exchanges. Examples of these are Gate Global Impact and Second Market. These are not exchanges, but instead – private and more informal marketplaces.

The secondary market for crowdfunded securities is in its nascent stages, so it is harder to sell crowdfunded investment stock on the secondary market than it is to sell the stock of a public company on a public exchange. There aren't enough buyers available to make shares very liquid on the private secondary market. In addition, crowdfunded equity is still considered privately placed equity, which creates legal liabilities for sellers of equity who sell to unprofessional investors. This also creates obstacles for trading.

A second exit strategy option would be the sale of the company through a merger or buyout by a private equity investor. If the majority owners in a company vote to allow a buyout, there is an opportunity to sell one's shares and one may experience a gain on one's investment. Professional investors may prefer to buy out all equity investors, in which case the investors gain their exit.

A third exit opportunity is for the company to go public and list its shares on a stock exchange for the general public to purchase. Initial public offerings can be the exit of all exits – they are what investor's dream of when they invest in startup

companies.

The only option that offers the investor any degree of control, however, is selling on the secondary market. All the other options, including mergers and acquisitions, are decided by the majority stockholders. For instance, Groupon - the well-known group-buying website, was offered 6 billion dollars to sell the company, but the majority shareholders turned down this offer and unfortunately, the minor shareholders had no control and many of them were frustrated by this decision. Thus, there exists an element of lack of control over the means by which investors exit crowdfunded investments.

Equity crowdfunding has generated a great deal of excitement because it is a new concept. The challenge to regulators is to put regulations in place that provide sufficient investor protection, but not so costly and not discouraging the market development. In addition, regulation needs to be implemented quickly, before investors either become frustrated and leave the market, or they decide to push ahead without regulations, which often leads to problems later.

A final challenge for policymakers regards the incentive to use regulation to shape the market or push it in a certain direction. Governments appear to be of the mentality that equity crowdfunding should be conducted in the context of longterm, patient, buy-and-hold investments. But no one still knows if that's the correct vision for the future of equity crowdfunding.

#### Conclusion:

In conclusion, it may be stated that the development of these two instruments proves that the financial market is very volatile and sensitive and can evolve in different directions without having even any support from the competent authorities.

The peer-to-peer lending and crowdfunding market has evolved substantially from its beliefs in better decision-making by the crowd in 2005. Besides, the new technologies' development and the banks' frustration to extend their credit portfolio facilitated the growth and extension of the new alternative financial services.

However, despite of the increasing number of peer-to-peer lending companies, the number of people (lenders and borrowers, investors and entities) that call for financial resources, the higher profits and returns that people get from such lending and businesses, there are a lot of problems and issues related to such forms of financial services as the lack of regulation, cross-border lending, default, covering the risks, exiting from a crowfunded company etc. that must be settled. And taking into account that these two markets are developing extremely fast, the solution of these problems must be found as soon as possible.

#### Bibliography:

- Australian Securities and Investment Commission' Information. Peer-to-peer lending. [online]:
- https://www.moneysmart.gov.au/investing/managed-funds/peer-to-peer-lending.
- Bradley C., Burhouse S., Gratton H., Miller R. A. Alternative Financial Services: A Primer. FDIC Quarterly 3, Federal Deposit Insurance Corporation, 2009. [online]:
  - https://www.fdic.gov/bank/analytical/quarterly/2009\_vol3\_1/AltFinServic esprimer.html.
- Douglas D., Overly S. (May 20, 2012). Washington Post: As-regulators-set-rules-for-equity-based-crowdfunding-investors-prepare-for-its-impact, 2012.
- J. D. Roth. Taking a Peek at Peer-to-Peer Lending. Time 15 November 2012. [online]:
  - http://business.time.com/2012/11/15/taking-a-peek-at-peer-to-peerlending.
- Lepro S. Prosper Ditches Auction Pricing for Model Like P-to-P Rival's. American Banker, 2010.
- Moenninghoff S., Wieandt A. The Future of Peer-to-Peer Finance. [online]: http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2439088.
- Report on Congressional Committees. Person-to-person lending: New regulatory challenges could emerge as the industry grows. [online]: http://www.gao.gov/new.items/d11613.pdf
- Wright R. E., Quadrini V. Financial Intermediaries. [online]: http://www.saylor.org/site/wp-content/uploads/2012/06/ECON302-1.2-1st.pdf.

www.wikipedia.org

# The Ecologization Megatrend of World Economy and the response to it by Republic of Moldova in the context of European integration

#### Zorina SISCAN\*

#### **Abstract**

The article reflects the outcomes of the author's first phase of research on Ecologization which is conceptualized as a socio-economic megatrend as well as the megatrend of world economy. The author argues for the fact that Ecologization is not homogeneous megatrend but embraces many trends, some of them are even opposite by their character. In doing so, the author distinguishes several dimensions and various forms of the manifestation of the megatrend. The article also includes some results on the author's study on the response of the Republic of Moldova to Ecologization in the context of the state's European integration.

Keywords: megatrend, ecologization, world economy, Republic of Moldova.

#### Introduction

The megatrends that influence the development of socio-economic and business activity have been attracting increasing attention of researchers beginning with the 80s of the XX century. John Naisbitt together with his son Jim Naisbitt did a substantial research and launched the term "megatrend" as the most general and powerful direction which had been producing impact upon the socio-economic development of the USA. They enumerated 10 of such directions. At the start of the XXI century it has become evident that the directions they had revealed for the USA are actual for the whole world. More and more research and reflections have been spring up worldwide. At the same time, less attention is paid to conceptualization of the megatrends of the world economy, and even the least to substantiation of Ecologization as such a megatrend. The processes which compose the latter have been reflected in various studies as the elements of some other

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<sup>&</sup>lt;sup>18</sup> Naisbitt, J. (1982), Megatrends: Ten New Directions Transforming our Lives, Warner Books.

<sup>&</sup>lt;sup>19</sup> See, for example, from the most recent., Schreiber, U.. Megatrends 2015; Making sense of a World Motion. URL: www.ey.com/.../ey\_megatrends\_report\_2015 or Singh, S.. Top 20 Global Megatrends and their Impact on Business Cultures and Society. URL: www.frost.com/prod/servlet/cpo/2130/6007.

megatrends (for instance, green technologies as Technological advance megatrend, greening economy and business as the components of sustainable development megatrend).

The purpose of the article is, first, to conceptualize the Ecologization as a distinguished socio-economic megatrend which has been influencing the development of World economic system so far as to become its intrinsic megatrend; secondly, to trace, in the limit of the article, the responding reactions of the Republic of Moldova to the megatrend in the context of the country's strategic vector to European Union integration.

The character of the article is methodological.

## Megatrend conceptualization

By a socio-economic megatrend it is understood here the most general direction that produces its impact on all socio-economic systems at all levels, shaping so far a global socio-economic space, and which is acting persistently for centuries, forming a global socio-economic time.<sup>20</sup>

Having leaned upon this conceptualization, one may further define the megatrend of World economy as a powerful direction which influences not few but all national economies, contributing to re-engineering of economic systems at various levels (micro level – companies, mezzo level – branches etc.), and which acts for decades or even centuries. It calls forth new technologies of production, new investment policies, new kinds of goods and services, new marketing strategies, and new directions for business activity.

#### Ecologization as a megatrend

In its broad sense, Ecologization as a socio-economic megatrend can be traced as far back as thousand years ago, and can be observed in various cultures. It has been linking with the search for a harmony in society, associated with unity of man and Nature (Taoism, Yoga, Zen etc.). In its narrow sense, Ecologization can be associated with the profound Ecologic Crisis which got its start in the middle of the XX century, and today is also linked with the Global Climate Change issues. Having analyzed the main causes of the Crisis and its actual increase, one may refer to the process of industrialization (another socio-economic megatrend)as well as the conception of rapid economic growth. The latter is based on the intention to maximization of profit with simultaneous minimization of investment payoff time. As an outcome, it has been practicing industrial technologies which allow economics of scale, fast revenues and, at the same time, squeezing of all resources used. From economic point of view and for a short-run, such an approach to socio-economic activity has distinguished by high economic efficiency. It is

<sup>&</sup>lt;sup>20</sup> See for more details: Şişcan, Z. (2009). Fundamentarea de noi abordări ale managementului strategic şi cros-cultural în contextul megatendințelor socio-economice, Chişinău.

industrialization due to which the economically advanced countries of world economy have reached their recognized level, and Newly industrialized countries follow them, using the same conception of rapid economic growth. The social, human and natural resources costs, however, are too high, so as for a long-run, the socio-economic activity based on rapid economic growth conception is not effective and even efficient, because both society and business are charged in direct and indirect manner for the usage of Nature unfriendly technologies, what evidentially increases costs.

It is not incidentally that, beginning with the 80s of the XX century, a new conception has been getting its recognition – the sustainable human and socioeconomic development.<sup>21</sup> The accent here is put on the optimization of the profit as well as on the resource usage in such a way to let the next generations benefiting from them too.

Ecologization is based on this conception but cannot be reduced to it, as it has its own dimensions of manifestation.

First of all, as it has been mentioned above, it has been caused by industrialization based on ecologophobic technologies which entailed increasing pollution of air, soil, water, including World Ocean, as well as the exhaustion of natural resources, flora, fauna etc. In the context of the response to Ecologic Crisis, the ecologization "was born" in world economy as the trend to "greening" economy and business. It has been manifesting by:

- increasing attention to ecologophilic technologies;
- development of organic agriculture and increasing attention to food security
- economic response to the challenge of Global Climate Change;
- search for renewable energy solutions;
- shift in automobile industry from petrol-based engines to the hybrid ones. and further to electro mobiles:
- development of social corporate responsibility of companies, embodied in numerous eco-projects as well as the compensation and recycling policies;
- revision of some quality standards, those being treated more as ecologic ones:
- appearance of number of not-for-profit organizations which run their successful business due to ecologization megatrend: elaboration and implementation of projects related to environmental protection, consumer rights protection, assistance provided to governments in revision of legislation for developing the respective sanction mechanisms regarding such activity of economic agents that causes environmental harm, and further assistance in implementation of those mechanisms;
- constitution of ecologic responsibility concept as a frame for developing an

<sup>&</sup>lt;sup>21</sup> See for more details: Banuri T., Hyden G., Iuma C., Rivera M. (1994) Defining and Operationalizing Sustainable Human Development: A. Guide for the Practitioner. – New York: UNDP.

attractive image, and even competitive advantage of companies or national economies.

The latter is closely connected with economic sense of globalization in world economy: since the end of the XX century, the economically advanced countries have been putting accent on outsourcing which presupposes replacement of production from those countries to the countries in transition and developing countries for being closer to low-cost raw materials and human resources as well as for benefitting from fiscal and other facilities which are usually practiced by the transiting and developing countries to attract FDI. Ecologization in the developed countries manifests itself by the means of replacement of ecologic unfriendly production, due to the fact that the ecologic standards in transiting and developing countries are usually low, if any. Owing to this fact, however, the Ecologic Crisis deepens there, so as Ecologization gets its place on agenda of their socio-economic development too, but in delay. Besides, majority of developing and transiting countries has gradually been losing its natural ecologic competitive advantage at global market, because of increasing pollution, if special governmental measures are not undertaken for otherwise.

Thus, Ecologization in its first dimension has been manifesting as an immediate reaction to deep Ecologic Crisis provoked by industrialization and the conception of rapid economic growth.

The second dimension of Ecologization is closely linked with industrialization too. The matter is that industrialization produces not only negative consequence for human development, in terms of ecologic crisis, but positive as well, as far as the socio-economic development is concerned. Industrialization megatrend has been addressing the solutions of number of global problems of world economy of economic and non-economic origin: hunger, poverty, epidemic and pandemic diseases, satisfaction of human primary needs (physiological ones, in security etc.), socio-economic modernization for higher productivity... In the very context, among other kinds of industry, there has been developed without precedent chemical industry. Synthetic goods of all kinds have become the solutions for many problems mentioned above, and not only. In the framework of this dimension, Ecologization has paradoxically been manifesting itself through the "global call" for not using natural goods.

Starting with the 60-70s of the XX century, the "call" was associated, on the one hand, with marketing the synthetic products which, at the beginning, were of high cost, taking part of the category of expensive or even luxury goods. On the other hand, "the call" was and still is linked with the ecologic crisis, mentioned above. "Green" movements worldwide have been addressing to consumers to prefer synthetic goods, instead of natural ones, keeping so far "hundreds of trees" or "dozens of animals". The aged people remember some scandal cases of the aggressive manifestation of "the call" registered in 60s-70s of the XX century, when some "green-movers" splashed gasoline out ladies and gentlemen in natural fur cloths and tried to put them in fire. The endeavors were undertaken to force rich

people to buy synthetic cloths by the use of fear, in case the means of "good-willarguments" had no effect.

The "call" is actual today, but in much softer manner. One of the eloquent examples is when electronic devices are being positioned as contributors to protecting nature (something like "Save information on flash rather than on paper!" and "Read electronic books for keeping trees alive!").

In its third dimension, which got to be flourishing the last decade and is in growth, Ecologization manifest itself through the opposite appeal to consume only natural goods. These kinds of products are being positioned in the world economy as "100% natural", "bio goods" and "organic goods". In the context of world economy, being developed as global market economy, this dimension of Ecologization allows companies, and even national economies, constituting their new competitive advantages by promoting the "organic" or "economy" class of goods. The first is oriented to high income segments due to the fact that completely natural goods today involve higher costs of production, transformation, packaging etc. For receiving real natural goods the traditional technologies in agriculture and manufacturing are being addressed to, some of which call forth the necessity to create the special conditions for production, deposit etc. that can also be associated with extra costs.

The "economy" class of goods is being oriented to low income segments as it contains number of synthetic ingredients/materials, the production cost of which is progressively decreasing.

As the world economy statistics shows, the distribution of organic agriculture by regions is as follows: Oceania 17.3 million ha, Europe 11.5 mln ha, Latin America 6.6 mln ha, Asia 3.4 mln ha, Africa 1.2. mln ha.

The USDA Organic 101 blog (2012) emphasizes that for being qualified as organic or certified with organic label, the goods should be free from genetic modification; grown without conventional fertilizers and additives or ionizing radiation.23

The global organic food market is in growth: from 57.5 billion USD in 2010 to 104.7 billion in 2015. Europe has the largest market share with revenue of 28 billion USD. In North America growth constituted 12% from 2010 to 2015, and "the Rest of the World (ROW) which includes Latin America, Australasia, and others is expected to grow at the highest CAGR of 16,5%... The demand for organic goods is concentrated in countries where consumers have high purchasing power like Japan and South Korea". 24

Besides new-market-interest aspect of Ecologization, the reason of its

<sup>&</sup>lt;sup>22</sup> Research Institute of Organic Ariculture, FiBL (2015), The World of Organic Agriculture. Statistics and Emerging Trends 2015. URL: www.organic-world.net/yearbook-2015.html

<sup>&</sup>lt;sup>23</sup> Schroeder, J. (2015). Organic Marketing Report 2015. URL: www.organicnetwork.biz/ <sup>24</sup> Transparency Market Research (2015), Organic Food Market – Global Industry Size, Share, Trends, Analysis and Forecasts 2012-2018.

URL: www.transparencymarketresearch.com/organic-food-market.html

increasing manifestation in the third dimension is the fact that synthetic ingredients and materials often produce undesirable effects upon the health of humans. Food and pharmaceutical industries, having reached great success in combating hunger and diseases, got the tendency to abuse with synthetic ingredients of coloring, flavoring, conserving etc. action, some of which producing allergy and even new diseases (adverse reactions). More than that, some companies being guided by rapid economic growth conception, maximization of profit intention and feeling pressed by global market competition are in a hurry to launch new synthetic food or pharmaceutical products with little testing time, if any. This also can be associated with corruption as one of the problems of contemporary world economy.

The dilemma for socially responsible food and pharmaceutical companies which follow the standards of Ecologization in second dimension (not making harm to nature) is in fact that they cannot test their products on animals any more. Smaller companies just pay for quality certificates based on laboratory test results, and then family doctors worldwide collect the feedback information. Bigger companies or those who take more care of reputation and endure, therefore, higher costs, organize tests for paid volunteers, and in hospitals for no-choice patients.

For the most profit-maximization oriented companies the following scenario is being practiced too. The companies of food and pharmaceutic industries create a consortium in which a food company makes the production costs as low as possible by the use of significant number of cheap synthetic and, sometimes, even dangerous ingredients. In doing so, it creates immediate job for its pharmaceutical partner. The latter, in the mainstream of Ecologization megatrend in the third dimension, start offering consumers the new products which are based on natural ingredients that are supposed to absorb the toxins, clean and revitalize the consumers, but the products are high in price, because of natural ingredients. Such based on nonsustainable-development-concept business practices entail the lack of trust of consumers in industry, in general. It is not incidentally, that in the 80s of the XX C., in the USA, John and Jim Naisbitts figured out a "self-assistance" or "helpyourself' megatrend25 which, today, it is worthy to be observed and conceptualized as a new megatrend of world economy and which is associated here with Ecologization in the fourth dimension. It is understood here as a healthy lifestyle that allows minimizing drugs usage and maximizing extension of young age benefits. Huge business opportunities are associated with this dimension, directed to the future: ecologic tourism; health and recreation facilities; SPA and biocosmetic industry; anti-age series of goods and commercial programs; sport and fitness centers; organic food restaurants and shops, "environmentally integrated" hotels (in mountains, in ice, around water etc.); personal health coaching, including revival of ancient practices like yoga, u-Shu etc.

<sup>&</sup>lt;sup>25</sup> "We are shifting from institutional help to more self-reliance in all aspects of our lives" (p.2); the megatrend number 6: "From Institutional help to Self-help" – we learn to trust and rely only on ourselves (p.59). Naisbitt, J. (1982), Megatrends: Ten New Directions Transforming our Lives, Warner Books.

One more – the fifth – dimension of Ecologization that can be traced, but it is ambiguous. It refers to bioengineering and genetically modified goods. On the one hand, they can be positioned as "eco", because they are still natural; on the other hand, from the point of view of Nature, such products are outcomes of mutations which, under natural conditions represent exceptions, but in human socioeconomic system turn into industrial series. The problem here is that the consequences of the consumption of the GMOs are even less predictable than of those synthetic ingredients, because their impact upon human organism is much more complex. In spite of the fact that the consequences of the GMOs are little studied yet, global GMOs industry has rapidly been growing since the end of the XX century. It is not incidentally that in such advanced and intelligent world economic structure as the European Union it becomes a standard for producers to indicate the GMOs ingredients on their goods in order to inform consumers and allow them choice in purchasing goods.

# The response of the Republic of Moldova to Ecologization in the context of **European Union integration**

The research (that goes on) shows that feeling the pressure of Ecologization, the Republic of Moldova has more been addressing the development of green entrepreneurship rather than eco-economy as a system. The efforts for green business development can be grouped in three main categories: governmental actions; international cooperation, first of all with the EU, within the respective programs and projects; efforts undertaken at microeconomic level by economic agents.

Having referred to the governmental actions, one may notice that their main focus is on eco-agriculture and energetic sector.

In eco-agriculture the most of attention is paid to eco-agro-food industry. It was adopted the special law - Law No. 115 of June 9, 2005 on eco-agro-food production. On its basis there has been developed number of governmental decrees and regulations for implementing the eco-agro-food production and marking mechanisms.

In doing so, the EU regulations have been taken into account. First and foremost, the Regulation (CE) No. 834/2007 which sets the standards for ecologic production, marking and controlling as well as the import regime of eco-goods in to the EU from the third countries.<sup>26</sup> In the very context, it has been elaborated and launched by the Ministry of Agriculture and Food Industry of RM (MAIA) "The Program for promoting ecologic production and commercialization of 2010-2015".<sup>27</sup>

URL: www.maia.md/

<sup>&</sup>lt;sup>26</sup> European Commission (2007), Regulamentul (CE) Nr. 834/2007 al Consiliului din 28 iunie 2007. URL: www.justice.gov.md/.../32007R0834-Ro,pdf

<sup>&</sup>lt;sup>27</sup> Ministry of Agriculture and Food Industry (2010), Program pentru promovarea producerii si comercializării ecologice pentru anii 2010-2015 (HVA).

Despite the fact that the development of Eco food production is a chance for Moldova to find its niche at the EU market, the priorities traced in the Program leave room for moderate perspectives: agriculture of the RM "should be somewhere in the middle, going on the development of intensive agriculture and launching the ecologic agro food production".<sup>28</sup>

For short-term economic interest as well as under conditions of chronic socio-economic crisis such a position is justified.

For the strategic and sustainable socio-economic prospective, the eco-agro industry should become the priority, should attract more governmental attention and investment, because the individual efforts of farmers, the gastarbeiters' money (which are mostly dispersed in consumption) as well as the occasional support by the means of European and other international grants is not enough, but the effect of responding the Ecologization in terms of developing eco-tourism, eco-food production, eco-agriculture, eco-construction etc. can become significant and can turn into the competitive advantage of the national economy at global market.

It seems to be encouraging, in the frame of these ideas, the growth of eco-agro-food production oriented to export in the Republic of Moldova (see figure 1).

75760 80000 67730 57800 48750 60000 42370 31870 40000 23766 20000 0 2009 2015\* 2010 2011 2012 2013 2014

Figure 1. The Dynamic of eco-agro-food production oriented to export (prognosis included\*)

Source: Data of the MAIA Program adapted by the author<sup>29</sup>

As it is seen from figure 1, the eco-agro-food production oriented to export is in growth, including prognosis for 2015 (75.760 tones), what constitutes export growth in 1,3 times, compared with 2013, and in 3,2 times, compared with 2009.

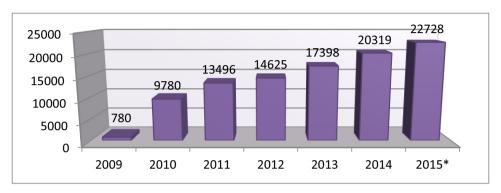
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<sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> Ministry of Agriculture and Food Industry (2010), Program pentru promovarea producerii şi comercializării ecologice pentru anii 2010-2015 (HVA). URL: www.maia.md/

It can be observed the simultaneous significant increase in the volume of ecoagro-food production oriented to the local market (see figure 2).

Figure 2. The dynamic of eco-agro-food production oriented to the market (prognosis included\*)



Source: Data of the MAIA Program adapted by the author<sup>30</sup>

As it is observed from the figure 2, the eco-agro-food production oriented to the local Moldovan market has delayed compared with that oriented to export (780 tones and 23.766 tons in 2009, respectively). This can be explained by many reasons, among which the most considerable are as follows. First, many Moldovans, traditionally, have close ties with countryside. Before 2009, despite urbanization, they usually brought natural food from countryside to their city home. Secondly, consumer literacy for Moldovan customers was not characteristic, having taken into account little period of free market economy experience, and habit to consider food provided by local producers as natural one. Besides, Moldovan consumers have always had a kind of admiration for imported goods, especially from the EU, as the best quality ones. Moldovan consumers used to trust a lot in both local and foreign producers. Thus, the local demand for eco-agro-food was not so much specified.

During last decade and till the present, however, the situation has gradually been changing. First of all, because of deep and chronic socio-economic crisis, many Moldovans (around 1/3 of population) have been going abroad as gastarbeiters. It means that many houses of countryside have been left without workforce or the advanced-aged and minors who remained have little forces to develop agro production. The current trend is that those who live in cities prefer to buy from the supermarkets, as the transportation cost for travelling back-and-forth to countryside is in permanent increase. At the same time, city provides more and better paid jobs and living conditions than countryside so migration to city is a

<sup>30</sup> Ibid.

persistent trend. Due to living in cities, the consumer literacy of Moldovan customers increases. They learn to differentiate synthetic food from the natural one, owing to Ecologization megatrend, to European integration process that brings ecostandards and to their gasarbeiter experience in economically developed countries.

The development of eco-agro-food in Moldova, however, faces a lot of challenges. As the empirical study on this point conducted by the author by the means of interviewing and case-study methods has shown, the farmers interested in green entrepreneurship in eco-agro-food industry suffer, first of all, of such problems as lack of financial and technical support (as it has been mentioned above, the cost of organic food production today is in times higher than that of conventional agriculture). Those gastarbeiters who succeeded in accumulation of financial resources, are willing and able to invest in this domain or are ready for cost-sharing, have complained about bureaucratic and corruption hampers as well as nepotism, those challenges being so severe that some of them were ruined in business at the beginning, others pushed to follow highly unfavorable conditions.

Sharp competition in domain comes from foreign investors who enjoy more support from Moldovan government side, compared with local producers in ecoagro-food industry, because the general policy of the state is reversed protectionism and attraction of the FDI as much as possible—the latter is being set too much hopes on. The third sort of complains was about lack of transparent or complete information regarding governmental and international programs and grants for supporting green entrepreneurship. It was not rare when information was provided in delay (but quick for relatives—nepotism), but the documents to be presented for application had to be numerous (bureaucratic hampers).

One more category of challenges regarding the development of green business in agriculture refers to certification of goods. The interviewed economic agents which contribute to the development of eco-agribusiness have emphasized that certification of goods oriented to the EU market is not only costly, but often provoke the recognition problem, because the laboratories of Moldova have not always the substances needed for extended analyses required by the EU side or even if the substances are, the laboratories should be, in their own turn, recognized by the EU. The confirmation procedure significantly increases the costs.

Having addressed to these and other issues revealed, it becomes vitally important the development of international cooperation, including that with the EU, on the basis of Programs and projects. For instance, due to Jean Monnet program (owing to which this publication has become possible too) the circulation of the information, including research results between governmental structures and universities, becomes more intensive. Universities work with youth, for example, Academy of Economic Studies – with potential businessmen and governmental officers. What is difficult to obtain (information, loans etc.) for their parents can become easier for their children if students, because of other possibilities and conditions of participation in Programs. The perspective role can play the EU contact points (information centers) opened in the main Universities of R.

Moldova. The problematic issue here is the sharp decrease in number of students, the trend that persists.

Encouraging is number of Programs and Projects developed in Moldova within Ecologization. As far as ecological agriculture is concerned, it is worthy to mention the Program on Ecologization of Economy in Eastern Partnership (EaP Green) for 2013-2017 with general budget of €12.5 (for all participants). Moldova participates in it through its Ministry of Economy. It is chance to develop further its eco-agriculture as the focus of the program is put on eco-agro-promotion, evaluation of the respective legislation, and its further adaptation to the EU eco standards. In the very context, it is worthy to notice that in October 2014, Moldavian government approved a special national mark for organic goods (see figure 3).

Figure 3. The Republic of Moldova mark for organic goods



Source: Ecoportal.md31

The associated with this mark brand "Ecologic Agriculture – Republic of Moldova" is considered to be the official sign of confirming the production as being controlled by the respective bodies, and the goods being corresponded to the requirements set to organic countryside products.

It is a good step forward, especially if taken into account that the situation in Moldovan food sector is not the perfect one. As it has been emphasized within a study of September 2014 – August 2015 conducted within the Program "Harmonization of Policies in Sanitary domain of the Republic of Moldova and Georgia with those of European Union", food security in the Republic of Moldova is not at the level it should be.<sup>32</sup> To address the consumers' complains and to solve the problems in the domain, there have been created, owing to the Program, three

URL: www.eeas.europa.eu

<sup>&</sup>lt;sup>31</sup> Catalogul No. 1 al produselor eco din Republica Moldova. URL: www.ecoportal.md

<sup>&</sup>lt;sup>32</sup> Workshop on the Harmonization of Policies in Sanitary domain of the Republic of Moldova and Georgia with those of European Union, March 25, 2015.

Centers for Consumer Assistance in Sanitary and Phytosanitary domain, located in Chisinau, Balt and Cahul.

The realized study has become a good feedback to the Strategy in domain of Food Security (2011-2015) that is a component of more general Strategy for the Development of Agriculture and Rural Environment of the Republic of Moldova (2014-2020).<sup>33</sup>

Due to the signing of the Association Agreement (AA) between the R. of Moldova and the European Union, number of challenges for Ecologization in Moldova has been addressing. Within the implementation of Deep and Comprehensive Free Trade Area Agreement (the component of the AA), Moldova has to adopt 240 EU Directives in Sanitary and Phytosanitary domains. One of the actual projects, in this context, is that of TWINING on Capacity Consolidation in domain of Standardization and Metrology for 2015-2016 (€1,1 mln.), implemented by the Ministry of Economy. The efforts are being contributed to the accreditation of the Centers for eco-certification, modernization of laboratories with accordance to the EU standards to facilitate Moldovan export to the EU market.³⁴ The most of attention is paid to deep analyses of exporting goods what is quite logic from the EU point of view as it is interested in protection of its customers. The import destination remains to be the care of Moldovan government.

Another significant trend in the response of the Republic of Moldova to Ecologization is Bio-energy sector. One of the significant studies in domain was "Bioenergy in Moldova" realized in 2009 by the Academy of Sciences of RM in collaboration with the International Center for Science and High Technology (ICS) and UN Industrial Development Organization (UNIDO). The study has reflected achievements and opportunities in domain. Among those in the mainstream with the EU cooperation are as follows:

1. Energy production from alternative sources, focus being put on biomass. In

<sup>&</sup>lt;sup>33</sup> Ministry of Agriculture and Food Industry (2013), Strategia de dezvoltare a agriculturii şi mediului rural din Moldova 2014-2020 din 03.06.2013.

URL: www.maia.gov.md/public/biles/proiecte/Proiect Strategia Agricultura Dezvoltarea Rurala". pdf

<sup>&</sup>lt;sup>34</sup> The main actual bodies in this respect are: Organism for Inspection and Certification of Eco agro food Goods (CRPA Inspect). The Institute for Ethic and Ambient Certification (ICEA Group), both authorized by the Ministry of Agriculture and Food-Industry of Moldova (MAIA), and develop their activities on the basis of European Regulation CE 834/2007, Regulations USDA/NOP (USA) and CAG (Quebec, Canada). Since 2009 both institutions have closely been collaborating. The third basic body is "Certificar – Eco" SRL, the Organism for Inspection and Certification of eco agro food production. It has got its accreditation at the Center on Accreditation in domain of Conformity Evaluation of the Goods from Moldova with accordance to the international standards SM EN45011: 2003 and SM SR EN ISO/CEI 17020: 2006. On the way there is an appearance of some private laboratories.

<sup>&</sup>lt;sup>35</sup> See for more details: Duca, G., Timofte, I., Timofte, S. (2009), Bioenergy in Moldova, Academy of Sciences of Moldova. URL: www.asm.md/

1999 Moldova implemented the first experimental installation of brochettes production from agricultural wastes. It was supported by Holland Government and implemented by Agrobioenergy Company.

2.It has been pointed out as an opportuning for Moldova biogas production. This opportunity should be carefully analyzed on the basis of system approach, according to which all the elements in the system are considered in inter correlation. Producing biogas from agricultural products (potato, beat root, wheat, corn etc.) is not an economic perspective opportunity for Moldova. Country is small and its agricultural surface is limited. Having taken into account the necessity to develop eco agriculture for export and local needs, and the fact that it can become one of the basic competitive advantages of Moldova, the usage of surfaces just for cheap agro plants (GMOs-based etc.) for biogas production is not economically justified for a long-run. Besides, biogas emissions in atmosphere provoke "green-house" effect which can result in losing the main competitive advantage of the R.M. in cooperation with the EU under Ecologization – relatively ecologic resources of the country.

At the same time, it can become real economic opportunity if implementing the projects directed to producing biogas from wastes of communalities, and further transforming the biogas in electric energy (such project was realized in Tintireni Village, Anenii Noi District). Producing biogas and electricity from wastes of animal farms or wine industry has been realized on the basis of international, including European, grants (for ex. Avicola Co., Vadu-lui-Voda). The special "Moldova Energy and Biomass" Project was implemented over the period of 2011-2014 with total budget of 14.56 mln (14 mln being provided by the EU and 560.000 co-funded by the UNDP–Moldova). Project continues. The second phase is for 2015-2017.<sup>36</sup>

The European Bank for Reconstruction and Development (EBRD) launched in 2009 the Sustainable Energy Financing Project (MOSEFF) to support energy efficiency investments in Moldovan enterprises.<sup>37</sup>

The list of projects and opportunities of the EU-RM cooperation under Ecologization is far to be complete. The idea here is that on the way to European integration Moldova has various opportunities not only to respond to Ecologization but also to benefit from it. In the very context, it is worthy to draw attention to the fact that the EU is interested in constitution and expansion of the pan-european ecologic network (PEEN) which is concentrated upon the consolidation of green infrastructure for both sustainable human development and green entrepreneurship.<sup>38</sup> This is the opportunity for Moldova that it should definitely use

See for more details: Green infrastructure, European Commission. URL: www.ec.europa.eu/environment/nature/ecosystems/

<sup>&</sup>lt;sup>36</sup> See for more details: Energy and Biomass Project, UNDP – Moldova. URL: www.undp.org/andEU Delegation to Moldova. URL: www.eeas.europa.eu/

<sup>&</sup>lt;sup>37</sup> See for more details: www.moseff.org

at macro-level through Programs and Projects in the mainstream of AA Implementation, and at micro-level through collaboration among economic agents, what should be facilitating again by the AA Implementation.

#### **Conclusions:**

The Ecologization is powerful socio-economic megatrend which produces deep shifts in human lifestyle and socio-economic activities. It has been manifesting itself in several dimensions. It has been concretizing in world economy as its specific megatrend which also is diverse in its forms of manifestation. Ecologization was closely linked with industrialization megatrend which has been acting throughout centuries (beginning with 16-17 century and up to the present). Unlike industrialization which is gradually fading away, Ecologization is "a young" megatrend directed to the future, owing to the fact that it is based on the conception of sustainable human and socio-economic development, and due to its high flexibility in manifestation. Another reason is that it is actively used in the marketing practices.

The Republic of Moldova is active in its response to Ecologization. The EU integration opens opportunity, especially in the forms of Programs and Projects, but also challenges for Moldova's eco-development (high competition, clash of interests of promotors of Ecologization in different dimensions of its manifestation etc.). In order to benefit the most from Ecologization, the Republic of Moldova should develop the complex specialized strategy for eco-economy that is lacking now, in order to consolidate the various occasional responses to Ecologization at macro- and micro-levels. Such a strategy will allow concentrating the effort and resources of Moldova in proper direction of sustainable development, positive synergy effect in international, including European, partnership and sound, durable, competitive advantage of Moldova at European and global markets.

The article has reflected the outcomes of the first phase of research on the topic. This is the main reason, besides volume requirements, why many aspects related to Ecologization has got to be just sketched, while number of issues regarding this megatrend as well as the response of the Republic of Moldova to it has not been addressed at all. The second phase of the research is on the way, the outcomes of which will be presented in the next article.

## **Bybliography:**

- Banuri, T., Hyden, G., Iuma, C., Rivera, M. (1994), Defining and Operationalizing Sustainable Human Development: A. Guide for the Practitioner. New York: UNDP.
- Duca, G., Timofte, I., Timofte, S. (2009), Bioenergy in Moldova, Academy of Sciences of Moldova. URL: www.asm.md/Naisbitt, J. (1982), Megatrends: Ten New Directions Transforming our Lives, Warner Books.

European Commission (2007), Regulamentul (CE) Nr. 834/2007 al Consiliului din 28 iunie 2007. URL: www.justice.gov.md/.../32007R0834-Ro.pdf

Ministry of Agriculture and Food Industry (2010), Program pentru promovarea producerii și comercializării ecologice pentru anii 2010-2015 (HVA).

URL: www.maia.md/

Ministry of Agriculture and Food Industry (2013), Strategia de dezvoltare a agriculturii şi mediului rural din Moldova 2014-2020 din 03.06.2013.

URL: www.maia.gov.md/public/biles/proiecte/Proiect Strategia Agricultura Dezvoltarea Rurala".pdf

Research Institute of Organic Ariculture, FiBL (2015), The World of Organic Agriculture. Statistics and Emerging Trends 2015.

URL: www.organic-world.net/yearbook-2015.html

Şişcan, Z. (2009), Fundamentarea de noi abordări ale managementului strategic şi cros-cultural în contextul megatendințelor socio-economice, Chişinău.

Schroeder, J. (2015). Organic Marketing Report 2015.

URL: www.organicnetwork.biz/organic-marketing-report-2015/.

Transparency Market Research (2015), Organic Food Market – Global Industry Size, Share, Trends, Analysis and Forecasts 2012-2018.

URL: www.transparencymarketresearch.com/organic-food-market.html

# Relationship between rural tourism and environment

Cristina Cosciug\*

#### **Abstract**

The article reveals both positive and negative effects of interaction between rural tourism and the environment, enumerates basic normative acts which regulate these relations in the Republic of Moldova and emphasizes the dependence of tourism resources on the preferred forms of tourism. There are described various kinds of tourism activities in rural areas in terms of their effect on the environment, as well as various environment components that influence greatly human health. We have also provided some activities of a number of Moldovan rural complexes and examples of the resulting interdependence of environmental quality and the demand for recreation in the region.

Key-words: rural tourism, environment, tourism resources, forms and types of tourism.

#### Introduction

Rural tourism is more closely associated with the environment than any other type of tourism. When tourists choose the rural type of recreation, living in the lap of a beautiful landscape away from cities, privacy, clean air, natural and healthy food, presence of water bodies or woods are the most important factors.

Thus, successful development of rural tourism depends greatly on environmental quality.

There are many definitions of environment: some of them define environment as the entire complex of natural resources which surrounds the humanity. According to the others, it is the whole world that surrounds us, including both natural and anthropogenic environment.

The most frequently used definition that can be met in international agreements is the following:

The environment is a concept that applies to all natural conditions on the Earth or in its region, where living beings or things evolve. Atmosphere, temperature, light, landscape, water, soil, etc., and living beings are among these conditions.

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Since the development of rural tourism, which includes a wide range of different types of tourism, is based on the use of the natural resources mentioned above, its impact on the environment is undoubted.

#### Material and methods

From the methodological and theoretical points of view this study is based on provisions of essential laws that regulate organization and development of tourism business of the Republic of Moldova "Act of organization and implementation of tourism activity on the territory of the Republic of Moldova 352-XVI" of November 24, 2006, Land Code No. 828 of December 25, 1991, Law on Environmental Protection of the Republic of Moldova No. 1515-XII of June 16, 1993.

We have used systematic analysis to examine the relationship between rural tourism as a combination of elements and the environment, as well as an overview and the empirical method that allows explaining the cause-effect dependence of demands for recreation in rural areas on environmental quality.

#### Results and discussions

In the last twenty years rural tourism has become an independent highly profitable tourism industry in Western Europe and the USA. According to the ITO estimates, rural tourism is one of five main strategic directions of tourism development in the world until 2020. This fact proves that the impact of tourism activities on the environment will have both positive and negative consequences. Moreover, they will be noticed at different levels: at the level of natural resources and legislation, at the social level, etc., which can be clearly seen in the following table:

Table 1. Positive and negative effects of rural tourism activities on the environment

| Effect          | Positive                                      | Negative  |
|-----------------|---|---|
| On the          | Growing                                       | Abandoned or                                      |
| environment     | awareness about the                           | destroyed crops                                   |
|                 | environment and its                           | Disturbances in flora                             |
|                 | elements                                      | and fauna of the                                  |
|                 |   | region  |
|                 |   | All forms of pollution                            |
| On legis lation | Developing<br>legislation on rural<br>tourism | Farmers' responsibility for the services provided |

|                | Compensation / aid to farmers for modernization and maintenance of environmental conservation activities |                       |
|----------------|--|-----------------------|
| On the society | Changes in   | Different             |
|                | residents' mentality   | tourists' and locals' |
|                | Rura 1-urban   | attitude              |
|                | interaction  | Stress for            |
|                | Existence of "refuges"   | farmers due to the    |
|                | for urban dwellers   | increased number of   |
|                | Involvement of   | crowded areas         |
|                | local / regional   | Changes in lifestyle  |
|                | authorities in various   | Certain seasonal      |
|                | activities   | activities            |

*Source:* Butler, R., Hall M., Jenkis J. – Tourism and recreation in rural areas, John Wiley and Sons, London, 1997

The basic premise that motivates rural tourism entrepreneurs to pay more attention to the need to preserve the environment is the fact that tourists are increasingly looking for attractive and unpolluted places to visit. The countryside is undoubtedly among these places. Authorities and economic entities engaged in entrepreneurial activities in rural areas are aware of the need:

- to maintain natural resources, flora and fauna in order to improve the cognitive and aesthetic value of rural areas for tourists:
- to maintain landscape areas;
- to maintain land plots in order to provide residents of rural pensions with ecologically pure food products;
- to preserve favourable conditions of lakes, streams, small rivers, groundwater and natural biota in order to create good conditions for tourists;
- to reduce negative environmental effects of too intense activities at popular tourist centres due to the outflow of tourists into the country.

As the environment of high quality is the key component needed for the development of rural tourism, it can be the factor that has additional political and economic influence on environmental protection.

Thus, relations between people and the environment are regulated by the Constitution, the Law on Environmental Protection of the Republic of Moldova 1515-XII of June 16, 1993 and other laws and legislative acts that take into account the issue of environmental protection and rational use of natural resources.

According to the Law on Environmental Protection of the Republic of Moldova 1515-XII of June 16, 1993, environmental protection is a national priority that directly concerns living conditions and health of the population, social and economic interests and sustainable development capabilities of the society in the future.

Knowledge in the field of environmental protection and rational use of natural resources is a qualifying condition required for executive positions in all public bodies.

Economic entities engaged in reception, accommodation and food catering for tourists in rural areas need to know the legal framework that regulates the use of natural resources.

The activity of rural tourism complexes should be carried out within the legislation framework, which corresponds to the services that are provided. For example, rural pensions, specialized in holidays near water bodies must be guided by the Law on Water Resources of the Republic of Moldova No. L 327/1 of December 22, 2000. Camping sites, specialized in hiking, when the following activities are provided: halts, overnight stops, rural pensions concentrated on such activities as picking berries and mushrooms, medicinal herbs, horse riding, etc. should be guided by Forest Code No. 887 of June 21,1996 and Land Code No. 828 of December 25,1991, etc.

There are also a number of moments when rural tourism can contribute to the improvement of the environment, mainly due to its socio-economic impact. These include the following:

a)Providing a direct source of income needed for environmental conservation. National parks and reserves do not get sufficient financial support from the state in many countries and they are largely dependent on the income received from visitors in the form of entrance fees and other incomes, so that they can be engaged in environmental conservation. Donations made by visitors and sponsors from the industry sector play their role here too;

b)Providing a source of revenue for rural communities, for instance it concerns the area of food catering, accommodation in rural guesthouses, guides' work and sale of handicrafts, which cause less environmental damage than other sources of income, such as slash and burn agriculture, extractive industries and the industries that pollute the environment;

c)Providing a more complete awareness of visitors and host villages regarding the quality of the environment and its social, cultural and economic impact, which should increase interest and extend the support that is provided.

The conclusion is that rural tourism is one of the factors, which contributes to the environmental conservation and harmonious relationships between the humanity and nature.

Rural tourism, despite its closeness to nature and demands on environmental quality, is an industry, which makes extensive use of various kinds of resources, depending on the proposed forms of tourism, carried out in rural areas. The

following table presents American scientists' research results. You can easily see the dependence of various tourism resources on the preferred forms of tourism (ranked and expressed as a percentage).

Table 2. Preferred forms of tourism and natural resources in rural areas

| No. | Preferred tour forms                 | Rating (percentage), % | Natural resources   |  |
|-----|--------------------------------------|------------------------|---|--|
| 1.  | Visiting parks                       | 55.8                   | Parks, forests  |  |
| 2.  | Hiking                               | 55.0                   | Forests, steppe landscapes, land, geological formations   |  |
| 3.  | Visiting areas of special protection | 47.8                   | Forests, steppe landscapes, land, geological formations, conservation areas, ecosystems, water bodies and water resources, etc. |  |
| 4.  | Birds watching                       | 19.5                   | Forests, steppe landscapes, land, geological formations, conservation areas, ecosystems, water bodies                           |  |
| 5.  | Bicycle tours                        | 18.7                   | Forests, steppe landscapes  |  |
| 6.  | Freshwater fishing                   | 17.9                   | Lakes, rivers   |  |
| 7.  | Visiting wetlands and marshes        | 12.0                   | Wetlands, ecosystems  |  |
| 8.  | Mountain and rock climbing           | 11.6                   | Geological formations   |  |
| 9.  | Canoeing, kayaking, rafting          | 9.2                    | Lakes, rivers   |  |
| 10. | Living at farms                      | 4.0                    | Land, forest, steppe, geological and water resources  |  |
| 11. | Camping                              | 2.0                    | Land, forest, steppe, geological and water resources  |  |
| 12. | Visiting natural sights              | 1.2                    | Forests, steppe landscapes, land, geological formations,  |  |

|  | conservat  | ion  | areas, |
|--|------------|------|--------|
|  | ecosysten  | ıs,  | water  |
|  | bodies     | and  | water  |
|  | resources. | etc. |        |

(Note: the total sum exceeds 100%, because they could give more than one answer) *Source:* Александрова А. География туризма. М.: КНОРУС, 2009, - 592 р., р. 530-531

As one can see in the table, the majority of tourists prefer to visit national parks and other conservation areas. The use of natural objects (along with the absence of proper planning and management) is not always beneficial for the environment.

We can distinguish the following types of negative impacts of rural tourism on the environment:

- ·Sewage and garbage pollution in the areas with high concentration of tourists;
  - ·Coast (beach) erosion because of levelling;
  - ·Overuse of natural areas (forests, hillsides, lakes);
  - ·Destruction of natural areas because of new objects of rural tourism;
  - ·Violation of natural links in the chain: air, water, land and living organisms;
  - ·Impact on the local people's culture;
  - ·Loss of historical and architectural heritage;
  - ·One-time increase of the population density in recreation areas;
  - · Worsened economic and social tensions:
  - ·Increased child labour.

This is just an incomplete list of negative effects of rural tourism. You can often improve a situation or diminish a problem. Thus, you can find different types of negative effects of tourism activities in the countryside on the environment in the table below, which also include information regarding the measures of environmental protection.

Table 3. Influence of rural tourism on the environment

| The discussed issue | Connection with rural tourism | Connection with major ecological problems |  |
|---------------------|-------------------------------|---|--|
|                     | Category A                    |   |  |
| Hunting and         | Increased tourist activity in | Loss of biodiversity                      |  |
| fishing             | some rural areas              |   |  |
| Energy              | Tourism will lead to the use  | Green house effect                        |  |
| production and      | of an increased number of     | Destruction of the                        |  |
| consumption         | vehicles in the countryside   | ozone layer                               |  |
|                     |                               | Air pollution                             |  |

| Use of water for human activities | Increased consumn tion of rare resources during travel     | Lack of resources    |
|-----------------------------------|--|----------------------|
|                                   | seasons  |                      |
| Land use and                      | Construction of tourist                                    | Loss of biodiversity |
| environmental                     | reception structures in rural                              | and humus, soil      |
| restructuring                     | areas, campfires, access                                   | erosion              |
|                                   | roads and other  |                      |
|                                   | infrastructure objects                                     |                      |
| Flora and fauna                   | Soil compaction and  | Loss of biodiversity |
|                                   | excessive hunting will have                                |                      |
|                                   | negative effects, but they                                 |                      |
|                                   | can also lead to better                                    |                      |
|                                   | management of resources                                    |                      |
| Gases in the                      | Increased number of people                                 | Air, water and soil  |
| atmosphere,                       | in tourist pla ces implies                                 | pollution            |
| water and soil                    | increased gas emission                                     |                      |
|                                   | Category B   |                      |
| Modified                          | Hunting, fishing, land use                                 | Loss of biodiversity |
| biological                        | environmental restructuring                                | Soil pollution       |
| resources                         | can lead to assaults on                                    |                      |
|                                   | ecosystems and species                                     |                      |
| Air p ollution                    | Increased number of  | Greenhouse effect    |
|                                   | vehicles can lead to the                                   | Destruction of the   |
|                                   | increased amount of  | ozone layer          |
|                                   | emitted gases and other air                                | Air pollution        |
|                                   | pollutants   |                      |
| Water quality                     | Increased number of people                                 | Water pollution      |
|                                   | in a certain area can lead to                              |                      |
|                                   | sewer i nfiltration  |                      |
| Soil quality                      | Increased number of people                                 | Soil pollution and   |
|                                   | in a certain area can lead to                              | erosion              |
|                                   | the increased number of                                    |                      |
|                                   | pollutants and soil erosion                                |                      |
|                                   | by compaction and  |                      |
|                                   | construction of new  |                      |
|                                   | buildings  |                      |
| Human health                      | Noise and gas emissions                                    | Noise and air        |
| and ecological disasters          | because of traffic will affect<br>human health and lead to | pollution            |
| 41545015                          | mannan manan ana maa to                                    |                      |

|                 | .1 1 01 111                     |                      |
|-----------------|---------------------------------|----------------------|
|                 | the destruction of buildings    |                      |
|                 | of cultural value               |                      |
| Category C      |                                 |                      |
| Resource        | Increased revenues from         | Loss of biodiversity |
| management      | hunting and fishing can         | Soil pollution and   |
|                 | lead to better resource         | erosion              |
|                 | management.                     | Lack of resources    |
|                 | The visitors' interest in flora |                      |
|                 | and fauna in protected areas    |                      |
|                 | may increase.                   |                      |
| Pollution       | Need for water of high          | Air, water and noise |
| monitoring and  | quality may lead to a better    | pollution            |
| control         | monitor ing                     |                      |
| Category D      |                                 |                      |
| Flora and fauna | Soil compaction and             | Loss of biodiversity |
|                 | excessive hunting will have     |                      |
|                 | negative effects, but they      |                      |
|                 | can also lead to better         |                      |
|                 | management of resources         |                      |
| Hydrologic      | Amount of precipitations        | Soil erosion         |
| systems         | may influence tourism           | Lack of resources    |
|                 | demand                          |                      |
| Atmospheric     | Temperature and air             | Air pollution        |
| systems         | pollution can influence         |                      |
|                 | tourism demand                  |                      |
| Lithospheric    | Topology and soil types can     | Soil erosion         |
| systems         | influence tourism demand        |                      |
| Ecosystems      | Such ecosystems as forests,     | Lack of resources    |
|                 | marshes, mountains, etc.        | Loss of biodiversity |
|                 | can influence tourism           |                      |
|                 | demand                          |                      |

Category A describes different types of effect on the environment

Category B describes changes in quality parameters of environmental elements

Category C includes information about environmental protection

Category D includes information about climatic conditions and biological resources, etc.

*Source:* developed by the author according to the data from http://www.rasfoiesc.com/business/afaceri/turism/Impactul-socioeconomic-al-turi13.php. (visited on December 20, 2015)

According to the table mentioned above, rural tourism is an industry that depends on biodiversity, and it, as such, is also affected by climate changes and the environment. The following are the examples of how climate changes may affect tourism and leisure time: extremely high temperatures (as it was in Europe in summer 2010) or abundant rainfall; deterioration of key tourism resources such as dried forest and steppe lands; forest fires (for example, as it was in Portugal in 2005); the lack of snow cover in mountains; restrictions on water consumption (as it is now in the region of Odessa, Ukraine).

Thus, successful development of rural tourism depends on the environmental health.

Water and water resources are the most exploited elements of the environment in rural tourism of the Republic of Moldova. This is due to the fact that the greatest flow of tourists going on vacation in the countryside is observed in summer, when the demand for water and water bodies is highly increased.

According to Article 46a of the Law on Environmental Protection of the Republic of Moldova No.1515-XII of June 16, 1993 and the Law on Water Resources No. L 327/1 of December 22, 2000, local authorities and economic agents in rural areas have to permanently monitor the state of springs, streams, small rivers, groundwater, their natural biota and adjacent areas, to apply measures in order to prevent their pollution and degradation and to restore affected biosystems.

Careful attitude to water resources of the Republic of Moldova is also due to the fact that there are only 472 km<sup>2</sup> of surface water resources of the total surface of 33,842 km<sup>2</sup>, which are used in tourist activity.

The Nistru, Prut and Raut are the main rivers of the Republic of Moldova. These rivers contribute to the development of the following forms of tourism: beach, sports and recreation tourism, fishing, etc.

There are only few natural lakes in the Republic of Moldova: Beleu, Manta, Antonesti in the lower course of the Prut and Bac, Crasnoe in Valea Nistrului), they are small and people use them for fishing.

The Republic of Moldova has a network of over 1,600 man-made (artificial) lakes. The biggest ones are located in Costesti on the Prut (7,700 ha), at Dubasari Hydroelectric Power Station (6,750 ha) and Cuciurgan Thermal Power Station (2,800 ha), in Taraclia (1,129 ha), Ghidighici (900 ha) and Ialoveni (708 ha). Fishes of high quality are grown in many of these lakes, for example silver carp, which is demanded everywhere. Sometimes yields reach up to 50 quintals per hectare. Valea Iazului (district of Straseni, village of Greblesti) is an example of a rural tourism complex, where fishing is the main service provided for tourists.

Over 3,000 springs are of great importance for recreation, particularly those with mineral water. Mineral waters that are mostly valuable for health care include about 20 water bodies, for example those located in Cahul, Harjauca, Kamenka and Vulcanesti. Water from Chisinau and Varnita springs is marketed as drinking water. Many water bodies are commonly used as resting areas along tourist routes; some

of them (over 30) are protected by the state.

Tourism development in rural areas of the Republic of Moldova can have a negative impact on water resources without proper supervision and administration. Thus, unsystematic fishing can lead to the overfishing of water bodies that specialize in this kind of activity. Excessive use of water resources in tourist pensions, swimming pools, fountains, lawn irrigation, etc. often leads to the depletion of water resources and overloading of sewer systems. Waste treatment plants do not always cope with a large volume of wastewater in the middle of the season and wastewater is discharged into rivers and lakes, causing a negative effect on flora and fauna.

The use of motor boats in recreational activities promotes coastal erosion, dispersion (spreading) of water weeds and chemical contaminants, turbidity in shallow waters. It is not by accident that according to Art. 49 of the Law on Environmental Protection of the Republic of Moldova No.1515-XII of June 16, 1993, economic agents who own ships and floating platforms have to equip them with stop systems or systems to treat wastes and wastewater as well as connectors to discharge them in bank or floating installations, in accordance with international and national regulations on water pollution prevention.

Careful attitude to water resources of the Republic of Moldova is consistent with the UN General Assembly resolution recognising access to clean water, adopted in 2010, as well as the provisions of the 6th World Water Forum and the APEC CEO Summit, where the following statistical data were presented:

More than 700 million people (World Bank, 2010) lack fresh water on our planet. According to the World Health Organization (WHO), 800 million people face this problem.

The World Bank predicts that the number of the people that lack fresh water can reach three billion by 2025.

The lack of drinking water is critical in 43 countries.

- The world's population has grown by 4 times over the past 100 years, which results in increased water consumption (by 7.5 times), and these figures will grow on. In particular, it is reported that in forty years the world's population demand for drinking water will increase by at least 40%.
- Experts of the UN World Economic Forum 2008 stated that, according to their forecasts, 50% of the world's population will lack water by 2025 and 2/3 of the world's population will lack it by 2050.
- Experts believe that any person needs at least 20 litres of water per day. At the same time they use daily 200-400 litres of water in developed countries and they use only 5 litres of water per person in under-developed countries per day.
- About 1.1 billion people do not have access to clean water and sanitation on our planet.
- Every year about 5 million people die from diseases caused by the lack of clean water, half of them are children.

• Some experts have suggested that in about 15 years there will be "drinking wars" in the world. They may be both local and global, affecting a large number of countries.

The data provided above show that the need for water resources will always remain one of the basic needs of the humanity. Tourists visit the countryside, looking for unpolluted water bodies, drinking water, recreation at lakes and rivers, so it is necessary to do our best in order to neutralize the negative effect of human activity on the environment.

Land resources are an important element of the environment, used in the organization of tourist activity in the countryside. These include agricultural lands, which provide tourists with ecological food; forests that are rich in flora and fauna, landscapes, conservations and national parks, where they organize (except conservations) such activities as hiking and hunting, adventure, sports, and other types of tourism.

In the Republic of Moldova protection of land resources is provided by numerous legislative acts, the most important of them are Land Code No. 828 of December 25, 1991, Forest Code No. 887 of June 21, 1996, Law of the Republic of Moldova on environmental protection No.1515-XII of June 16, 1993.

In accordance with the Law on Natural Areas Protected by the State No. 1538 of February 25, 1998, in the Republic of Moldova these areas are presented as scientific reserves, national parks, natural monuments (geological, paleontological and botanical), nature, landscape and biosphere reserves, botanical gardens, zoos, etc.

In the Republic of Moldova there are 5 scientific reserves (with the total area of about 19,400 ha), 63 natural forest, medicinal herbs and mixed reserves (over 8,009 ha), 41 landscape reserves (34,200 ha), 13 resource reserves (523 ha), 288 natural geological, paleontological, hydrological and botanical monuments (2,906 ha). Moreover, there are 433 ancient trees taken under state protection and 269 animal and plant species included in the Red Book of the Republic of Moldova.

Forest plantations, according to researchers, do not exceed 9% of the country's territory, 5% of which are under state protection.

Land resources mentioned above are good to use as the basis for the development of different types of rural tourism, included in tourist tours, elements of environmental and general education, promotion of healthy lifestyles.

The strongest effect of tourism on wildlife is associated with hunting and fishing, which reduce populations of certain animal and fish species. However, it is known that the mere presence of people is also able to destroy wildlife habitats, especially birds and large mammals. Animals often feel inconvenient because of both people themselves and the equipment they use being on vacation. Thus, animals are highly disturbed by the noise made by radios and car engines, which affects their reproduction.

Recreational activities can also influence the composition of plant species. This is especially true for the surface layer affected by trampling in areas of

intensive recreation, which results in the vegetation degradation. People get used to trampled forests, bare sand, damaged trees, and thereby their attitude to nature and its protection is distorted, and, consequently, the quality of recreation and its social impact is reduced.

Collecting plants in herbaria and bunches leads to extinction of some plant species, as they are often uprooted. Tourism vehicles harm plants too. Thus, unsystematic fires associated with insufficient recreation infrastructure damages black soil, while one needs hundreds of years to restore several centimetres of it.

Engineering structures (for example, speleological equipment in Emil Racovita and Pester Minunilor caves), intensive construction of rural tourism complexes, roads, related to tourism and recreation, and use of soil as a building material to construct housing infrastructure directly influences natural resources and leads to their depletion and degradation. This applies to both renewable and non-renewable resources. Forests often suffer from tourism activities associated with collecting firewood and land clearing.

Erosion is another important problem of interaction of rural tourism and the environment, as it is the result of irrational household activity and construction of rural pensions very close to water bodies, which changes the natural state of soil and often leads to erosion. In the Republic of Moldova there are erosion formations, called Gyrtopy. Some of them are so large that they are able to host villages with the same name "Gyrtop Mare" and "Gyrtop Mic"

Healthy food is one of the most attractive recreation elements in the countryside. Production of organic food is becoming part of rural tourism in many countries. Retail prices for such products are quite high in urban areas; tourists can purchase them at a lower price in the country. "Casa Fermierului" rural tourism complex (village of Braviceni, district of Orhei) offers fresh fruit and vegetables that can be picked up by any tourist right in the garden/orchard; "Costesti" rural tourism complex (district of Ialoveni) offers polenta with grilled fish caught by tourists from the lake as well as salads made with vegetables from their own beds. They entertain their guests with zama cooked with chickens raised on their own farm at "Butuceni" agricultural pension, etc. There are a great number of examples like these. Moreover, most rural complexes of the Republic of Moldova provide their tourists with delicious dishes cooked in furnaces according to old technologies. Therefore, one can easily explain the demand for recreation in the countryside. One of the important tasks of entrepreneurs in rural areas is the rational use of land resources in order to grow ecological vegetables, fruits and forage.

Thus, land resources that, first of all, allow providing the world's population with food, require our careful attitude. This can be confirmed by the following statistical data:

- At present 0.5 billion people starve and about 1 billion people are regularly malnourished.
- The world's population daily lacks 230 billion calories for a balanced diet, which is equivalent to the lack of 37 million tons of wheat per year.

- Annual population growth rate is about 80 million people. Even if we preserve the current level of food supply, global agriculture should annually increase its production by 24-30 million tons.
- Each new inhabitant of the planet requires on average 0.3 hectares for food production and 0.07-0.09 ha for life.

## Conclusions

These data highlight a need to have careful attitude to land resources of our country, which provide both us and our tourists with food.

The quality of recreation in rural areas is influenced by the following environmental elements: climate, atmosphere, temperature, light, etc., which have a significant impact on human health.

The entrepreneurs who are interested in attracting tourists to the countryside should be aware that the demand for recreation in the region depends on the environmental quality. Sometimes it is not easy to achieve. The following funds may ease the financial burden in order to ensure environmental quality:

- European Regional Development Fund (ERDF) http://ec.europa.eu/regional policy/thefunds/regional/index ro.cfm
- European Social Fund (ESF) http://ec.europa.eu/esf/home.jsp?langId=ro
- Social Cohesion Fund (SCF) http://ec.europa.eu/regional policy/thefunds/cohesion/index ro.cfm
- European Agricultural Fund for Rural Development (EAFRD)
   Cristina Cosciug 117
   http://europa.eu/legislation\_summaries/agriculture/general\_framework/l60
   032 ro.htm
- Agency for Payments and Intervention in Agriculture (APIA) http://www.apia.org.ro/ro/despre-apia/prezentare-apia
- European Fisheries Fund (EFF) http://ec.europa.eu/fisheries/cfp/eff/index\_ro.htm

Thus, if one makes efforts to improve recreational amenities, one can both increase the flow of tourists into the country and raise environmental awareness and desire for a healthy lifestyle, characterized by harmonious co-existence of people and the environment.

If tourists are aware of the fact that living in rural tourism pensions in harmony with nature, healthy food, joining certain types of agricultural activities, active ways to spend time, etc. – all these improve our health, refreshes our bodies and contributes to an increased interest in rural tourism both in our country and in the world.

## **Bibliography:**

- Raija Komppula. The role of individual entrepreneurs in the development of competitiveness for a rural tourism destination. A case study. Tourism Management 40 (2014) 361-371, ISSN 0261-5177
- Diane Jarvisa, Natalie Stoeck, Hong-Bo Liu. The impact of economic, social and environmental factors on trip satisfaction and the likelihood of visitors returning. Tourism Management 52 (2016) 1-18
- Hyungsuk Choo, James F. Petrick. Social interactions and intentions to revisit for agritourism service encounters. Tourism Management 40 (2014) 372-381, ISSN 0261-5177
- Butler, R., Hall M., Jenkis J. Tourism and recreation in rural areas, John Wiley and Sons, London, 1997 Florea S. Potentialul turistic Republicii Moldova. Chisinau: Labirint, 2005 352 p., ISBN 9975-943-38-1
- Law on Environmental Protection of the Republic of Moldova No.1515-XII of June 16, 1993

Law on Water Resources No. L 327/1 of December 22, 2000

Forest Code No. 887 of June 21, 1996

Land Code No. 828 of December 25, 1991

Александрова А. География туризма. М.: КНОРУС, 2009, - 592 с., ISBN 978-5-390-00224-7

# THE ECONOMIC IMPACT OF REFUGEES

Silvia LAZARI\*, Lilia ŞARGU\*\*, Alexandru GRIBINCEA\*\*\*

#### **Abstract**

Migration is a feature of social and economic life across many countries, but the profile of migrant populations varies considerably. In part this is because of the variety of sources of migration. In much of Europe, for example, citizens enjoy extensive rights to free movement. In Australia, Canada and New Zealand, managed labour migration plays an important role. Other sources include family and humanitarian migration. Whatever its source, migration has important impacts on our societies, and these can be controversial. The economic impact of migration is no exception.

*Key-words:* migration, refugees, remittances, financial, economic factors.

#### Introduction

In 2014, remittances of international migrants, according to preliminary estimates of the World Bank, amounted to 583 billion US dollars, of which 436 - in developing countries. In recent years, the volume of remittances of international migrants increased rapidly due to growth of the number of international migrants (including labor), so due to significantly enhance the commission of cross-border transfers. These financial flows are attracting greater attention from the private sector, national governments and international organizations.

Flows of international remittances have become an important source of external finance for developing countries. Over the last decade the growth rate of remittances exceeded the increase in the volume of private capital and officially granted international development assistance. In some countries, remittances are a major source of foreign currency, often exceed in size the volume of foreign direct investment and have significant potential for poverty alleviation and development of the national economy.

The volume flows of remittances by countries, regions of the world and in the whole world are regularly evaluated by experts the World Bank's Migration and Remittances [9] on the basis of balance of payments statistics of the International Monetary Fund (IMF), the central banks and the national statistical services the world, and the World Bank database. As remittances of international migrants is

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currently considered "personal remittances", representing the sum of the three indicators of balance of payments, "personal transfers", "net pay" and "capital transfers between households" [10]. The data for these indicators are available for all IMF member countries [11] and in the most appropriate estimation problem in remittances of international migrants. For comparability indicator values are translated into US dollars at current (nominal) exchange rate.

According to the updated assessment of the World Bank [12], in 2013 the total volume of recorded remittances of international migrants reached 557 billion US dollars against 533 in 2012 (Fig. 2). In 2014, according to preliminary estimates, remittances of international migrants increased to 583 billion US dollars, and in the next three years will exceed \$ 600 billion. [13]

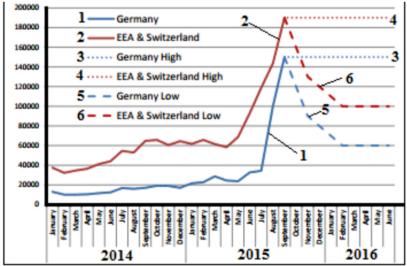
The main volume of remittances sent to developing countries, to which the World Bank classifies countries with medium and low levels of gross national income per capita. The total volume of remittances share of transfers to the developing countries is growing rapidly: in 1990 it was about 45%, at the beginning 2000s - already 65%, and in 2012-2014 - about 75%.

The total volume of recorded remittances to developing countries in 2012 amounted to 403 billion US dollars, in 2013 - 418, and in 2014, according to preliminary estimates - 436 billion US dollars. By 2017 it could rise to 479 billion US dollars. This is only officially recognized amounts of cash transfers. The true size of the recorded and unrecorded remittances made through formal and informal channels, may be more a factor of 1.5 or more.

Figure 1. Observed and anticipated asylum seeker inflows in German and the rest of the European Economic Area plus Switzerland

200000

1 Germany
2 4
2 EEA & Switzerland



Source: https://www.oecd.org/migration/How-will-the-refugee-surge-affect-the-European-economy.pdf

The volume of recorded remittances to developing countries are now more than three times the amount provided by the official international development assistance often exceeds the amount of private debt and securities portfolio (Fig. 2), and if China is excluded, then the volume of direct foreign investments. Remittances are the largest source of external financing for many of the poorest countries. However, their volume is less variable than other sources of revenue, based on the foreign currency. Even in the major emerging economies of India received remittances amount equivalent to at least a quarter of all foreign exchange reserves. For many developing economies with weak balance of payments remittances of international migrants are an important source of foreign exchange earnings.

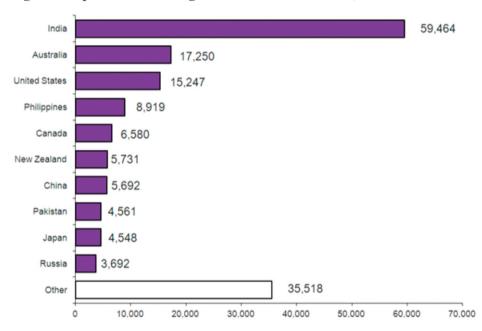


Figure 2. Top 10 nationalities granted work-related visas, 2014

Source: https://www.gov.uk/government/publications/immigration-statistics-january-to-march-2015/immigration-statistics-january-to-march-2015

In the past three years, the total volume of remittances of international migrants in the whole world according to preliminary estimates increased with little acceleration - 4.1% in 2012, 4.5% in 2013 and 4.7% in 2014 (Fig. 4). However, in 2015, it is expected to increase in remittances will drop to 0.4% (due to the advanced economies and emerging economies in Europe and Central Asia), and then rise again to the level of 4,3-4,4% per year.

In 2014, remittances of international migrants in developing countries grew by 4.4% (in 2013 - 3.7%). Growth was observed in all regions except Europe and

Central Asia, where there was a decrease of 6.3%. In 2015, we expect even greater reduction in remittance flows to developing countries of Europe and Central Asia (-12.7%) and slower growth in other regions (the lowest - in South Asia). In 2016, projected growth recovery trend of remittances in Europe and Central Asia (+7.2%) and accelerated growth in other regions.

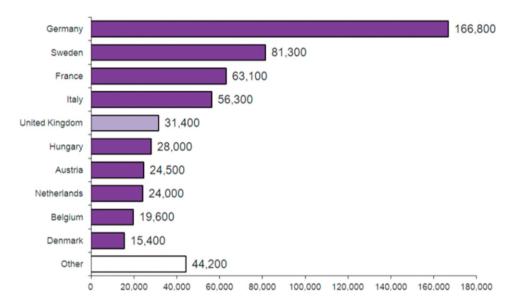


Figure 3. Top 10 EU countries receiving asylum applications, 2014

(Total number of applications 554,600, including dependants)

*Source:* Migration and Remittances: Recent Developments and Outlook / Migration and Development Brief 24. April 13, 2015. P. 4.

Significant impact on the flow of international migration and remittances in 2014 provides the following four factors:

- uneven recovery of economic growth in developed countries,
- decline in oil prices and the strengthening of the dollar against the currencies of some of the national,
- strengthening immigration controls in the countries from which leave significant amounts of remittances
- conflicts, leading to the formation of flows of forced migration.

The significant strengthening of the US economy was the impetus for the increase in remittances sent to the country. With the growth of construction and employment in the service sector, including hotels and restaurants sector, increased remittances to Mexico, El Salvador, Guatemala, Honduras and Nicaragua. In contrast, a weak economic recovery in the eurozone prevented the growth of the money from the region. The volume of remittances in some Latin American

countries was strongly influenced by the economic recession and high unemployment in Spain, which is home to a significant portion of international migrants from Latin America. Slow the growth of remittances in the Maghreb countries, for which the main source of remittances is Europe.

Lower oil prices and economic sanctions have had a significant negative impact on the Russian economy in 2014, as a result, and on the economy of countries such as Armenia, Georgia, Kyrgyzstan and Tajikistan, are heavily dependent on remittances from Russia. In addition, the weakening of the ruble against the US dollar and the currencies of most of the CIS countries has led to a decrease in the purchasing power of money transfers from Russia, which significantly reduced the standard of living of the poor in the countries of Central Asia.

On the other hand, the decline in oil prices seems to have resulted in a reduction in remittances from countries of the Cooperation Council of the Gulf to India, Bangladesh, Nepal, Pakistan and some countries in the Middle East and North Africa. Substantial financial resources and long-term plans for infrastructure development will contribute to maintaining the demand for labor migrants, however, while maintaining the low oil prices for several years, the volume of remittances from the region may be reduced.

The strengthening of the US dollar has a significant impact on the valuation of remittances. Thus, the volume of remittances from the European Union in Morocco, calculated in euro, in January 2015 increased in comparison with November 2014 by 9.6%, and translated into US dollars - down by 2.3%. Money transfers from Russia to Tajikistan, calculated in rubles increased in the IV quarter of 2014 by 7.6% compared to the same period in 2013, and in US dollars decreased by 26.7%.

The introduction in 2014 of new rules of entry to Russia (including migrants) from countries not members of the Eurasian Economic Union, led to a significant reduction in the flow of immigrants. Strengthening control measures at the southwestern border of the United States (increase in the number of patrols, air and ground systems tracking) constrains the number of migrants crossing the border from Mexico, including unaccompanied minors from Central America.

Tougher immigration rules in other parts of the world. In particular, an open immigration policy of Singapore that caused a public outcry led to an increase in the number of international migrants has more than 31% in 2004-2014. In accordance with the new rules, employers when hiring employees should first consider candidates from among the citizens of Singapore and only then the number of foreign nationals. Disproportionately low percentage of citizens of Singapore among employed workers will lead to a thorough examination of the firm.

Europe is also looking for a new immigration policy, able to contain the rising tide of migrants coming across the Mediterranean. In 2014, the European Union illegally arrived 276 000 people, including 220 thousand - in the Mediterranean Sea (in 2013 - 60 thousand).

Conflicts disrupt the usual peaceful life of the population, giving rise to

massive flows of refugees and internally displaced persons. The Middle East and North Africa region has become a major exodus of refugees. The number of refugees from Syria has increased to 3.9 million. The civil war in Libya has led to numerous attempts of illegal migration to Europe through the Mediterranean Sea. The terrorist activities of Boko Haram organization in Nigeria, forced to flee to the north-east of the many people in the country - about a million people fled to neighboring countries, particularly in Cameroon, Chad, Niger, about 700 thousand people moved within Nigeria. As a result of the conflict in the Ukraine, the number of internally displaced persons has exceeded 1.1 million, 674.3 thousand Ukrainians have applied for asylum, the right of residence or other forms of legal stay in the neighboring countries (542,800 people in Russia, 80,700 people in Belarus). In 2014, remittances to developing countries rose by 5% to reach 435 billion US dollars Remittance flows have become a major source of external finance for developing countries, according to a regular review of the "Migration and Remittances" the World Bank. Remittance flows have become a major source of external finance for developing countries, according to a regular review of the "Migration and Remittances" the World Bank. The growth rate of remittances exceeded the increase in the volume of private capital flows and official development assistance (ODA).

The volume of remittances flows by country, region and the world as a whole over the world are regularly evaluated by experts the World Bank's Migration and Remittances based on Balance of Payments Statistics of the IMF, central banks, national statistical offices, the World Bank database. As remittances of international migrants is currently considered "personal remittances", representing the sum of the three indicators of balance of payments, "personal remittances", "net pay" and "capital transfers between households." The data for these indicators are available for all IMF member countries and to the greatest extent meet the problem of estimating remittances of international migrants.

#### **Conclusions:**

Some analysts questioned whether the European Commission was being too optimistic in its forecast—whether because too few of the newcomers will have the right job skills or be young enough to make long-term contributions to the economy, or because too few countries are ready to absorb the migrants.

Member states have very different philosophies about how soon migrants can actually be integrated into the labor market, Germany has been willing to allow those seeking asylum to take jobs more quickly than, say, countries like France."

The commission's report acknowledged that the European recovery has been slow. And it warned against expectations of a rapid turnaround because of challenges that include the slowdown in China and regional tensions created by a standoff with Russia over Ukraine.

# **Bibliography:**

- Cebotari O. Perspectivele dezvoltării economiei mondiale în perioada post-criză și de creștere economică. Revista Economie și sociologie, 2013, nr.3, p.132-143
- Golovataia L., Brovca Gh. Economie mondială, migrația și securitatea economică. Chișinău: IRIM, 2014, 306p.
- Kozak Yu. Miedzynarodowe stosunki economiczne: teoria i politica. Wydanie drugie. Poprawione i uzupelnione. Rijow-Katowice: Centrum literatury naukowej. 2013, 360p.
- Lazari S. The convergence of migration to the European Union requirements. In: Economy and Sociology, 2014, nr. 1, p.84-91

# Major European transport corridors and their role in the Republic of Moldova development

# Vladislav MACHIDON\*

## **Abstract**

In this work, was presented the transport system from a geographical and economical point of view, as a result, the accent was placed on the spatial structure of the transport networks and on the connection between transport system and international economic relations. The objective of the Transport Corridors Project for Moldova is to improve road transport connectivity and safety on selected road sections along expressway one and the north-south transport corridor in the country. Also, were set the development priorities of these corridors and its formation to European parameters. The study was concluded with the presentation of some recommendations: supports strategic infrastructure investments to develop an improvement program for transport corridors, liberalization of national railway networks, as well as restoring effective activity of fluvial transport.

Key-words: transport, corridors, transport system, infrastructure, development.

#### Introduction

Transport corridors are receiving an increasing level of attention. Transport corridors can be seen as pillars of transportation networks - connecting major centers of articulation - and towards which freight and passenger flows converge. Usually, they lie at the intersection of economic, demographic and geographic spaces as they perform both market-serving and market-connecting functions. Therefore, the corridor as a notion is neither temporally nor spatially unchallengeable, but rather dynamic, contingent on such key factors as economic context (e.g. trade liberalization), investments in infrastructures, and technological changes (e.g. information corridors) and policies.

According to TEN-T guidelines, the development and improvement of transport corridors serve to achieve the important common goals such as the smooth operation of the single market and the reinforcement of economic and social cohesion (Šakalys A., Palšaitis R. 2006).

Corridors highlight a new aspect in the study of urbanization over an extended region. Although they have been considered as the structure behind the

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development of several urban systems, corridors must also be measured as the structure behind the regional development. Transport corridors link in a cohesive regional structure. They are extra axe supporting interactions between places, they are places of spatial accumulation. Theoretically, corridors provide an apprehension of territorial homogeneity over a heterogeneous landscape. This is particularly the case in East and Central Europe where regional economic cohesion is growing, along with international trade.

As a result of intensive construction works along main transport corridors, major motorways and trunk roads reach national borders, ensuring faster and safer transportation.

## Role of transport corridors in deepening integration

A transport corridor is a generally linear area that is defined by one or more modes of transportation like highways, railroads or public transit which share a common course.

Transport corridors—major routes that facilitate the movement of people and goods between regions and between countries—have existed for millennia. They enable regions and countries to offer high-capacity transport systems and services that reduce trade and transport costs by creating economies of scale. Regional corridors are particularly important to landlocked countries, where they are economic lifelines, often providing the only overland routes to regional and international markets.

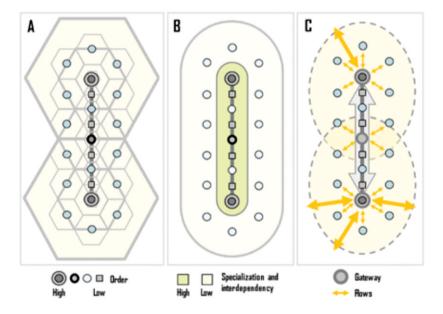
It is of conventional wisdom in development theories to consider inequalities as a structural factor of spatial accumulation (Dwyer, 1990). Transportation among other factors reinforces spatial inequality by linking a priori the most productive places. Large cities, as highly productive entities, are fundamental structures of global and regional spatial accumulation, and thus represent strong incentives to be bonded by an efficient transportation network. When a set of large cities are interacting at the regional level, they reinforce the regional spatial inequality of accessibility by their corridors of interaction; transportation corridors. From an economic perspective, transportation corridors provide two fundamental attributes for territorial development: lower distribution costs and land supply for diverse activities. Since spatial accumulation tends to occur at productive places where there are adequate land supply and accessibility, corridors are in that context an efficient regional urbanization structure. The emergence of transportation corridors, as a process, is the overlay in time and space of diverse transportation modes where they (the corridors) become the structure of urban regions. We can no longer speak of a set of interacting cities, but of a regional transactional space composed of diverse - more or less linked - specialized economic functions; a new spatial region.

Geographical and historical conditions create a basic set of regional inequalities in accessibility that the subsequent economic, demographic and

transport developments strengthen. Contemporary urban regions have their anchor points along a fluvial axe, a coastal plain, a natural harbor, or any geographical feature providing accessibility, notably an efficient maritime / land interface. This by no means implies similar landscapes, nor similar economic conditions and processes of spatial accumulation. We suggest here that corridors are the structure behind the emergence of most urban regions where transportation supports transactions and spatial accumulation along a privileged axe. By privileged, we entail an axe being serviced by different types of infrastructure, where one mode may be more present than another.

Transport corridors are commonly linking gateways to the inland. The functions of centrality and intermediacy are particularly relevant since one focuses on gateways as an origin or destination of traffic while the other focuses on gateways as intermediate locations where transshipment is performed. While central locations obviously correspond to large metropolitan areas, intermediate locations have developed a rather unique geography. Corridors themselves can be understood within three main paradigms (Figure 1).

Figure 1. Corridors and Regional Development



Source: Rodrigue, J-P (2004) "Freight, Gateways and Mega-Urban Regions: The Logistical Integration of the BostWash Corridor", Tijdschrift voor Sociale en Economische Geografie, Vol. 95, No. 2, pp. 147-161

The first paradigm is the most traditional as far as geographical theory is concerned. The central places theory mainly considers cities as structurally independent entities that compete over overlapping market areas. Under the location and accessibility paradigm an urban region is considered as a hierarchy of services and functions and the corridor a structure organizing interactions within this hierarchy. Transport costs are considered a dominant factor in the organization of the spatial structure, as the hinterland of each center is the outcome of the consumers' ability to access its range of goods and services. Because of higher levels of accessibility along the corridor, market areas are smaller and the extent of goods and services being offered are broader. Thus, differences in accessibility are the least significant along the corridor. This applies well to the consumption based functions of a corridor.

The specialization and interdependency model considers that some cities can have a level of interaction and that transportation could be more than a factor of market accessibility, but also of regional specialization and of comparative advantages. The Megalopolis concept introduced by Gottmann in 1961 acknowledges the creation of large urban corridors structured by transportation infrastructures and terminals maintaining interactions. Accessibility and economies of scale, both in production and consumption, are factors supporting the development of such entities where urban areas are increasingly specialized and interdependent. The main assumption is that the accessibility provided by the corridor reinforces territorial specialization and interdependency along its main axis, and consequently the reliance on a regional transport system. This applies well to the production based functions of the corridor.

The distribution/flow model is one where a major gateway of an urban region acts as the main interface between global, national and regional systems. Under such a paradigm, three core structural elements are defining a regional corridor: 1) Gateways regulating freight, passengers and information flows. 2) Transport corridors with a linear accumulation of transport infrastructures servicing a set of gateways. They provide for the physical capacity of distribution. 3) Flows, their spatial structure and the underlying activities of production, circulation and consumption. The corridor becomes a logistically integrated axis. (Rodrigue J-P., 2004).

The characteristics that define a strategic transport corridor include:

- A corridor of substantial length, around 30-50 kilometers, covering a variety of land uses:
- A corridor which provides connections to, from and between cities or regional centers;
- Corridors which service areas of projected high population growth;
- Corridors which carry a high volume of passengers;
- Corridors which are experiencing a sustained growth in transport demand;
- · Corridors which support major freight movements; and/or

<sup>&</sup>lt;sup>39</sup> Gottmann, J. (1987) Megalopolis Revisited: 25 Years Later. College Park: The University of Maryland, Institute for Urban Studies

• Corridors which make a substantial contribution to economic growth and development.40

Moving goods and people is the basic function of trade and transport corridors. Common objectives of corridor projects include improving infrastructure connectivity, facilitating the efficient movement of freight, and promoting economic growth by improving the competitiveness of exports and reducing the costs of imports or developing clusters of economic activity along the corridor supported by efficient logistics. (Kunaka, Charles, and Robin Carruthers, 2014, p. 13)

The main economic logic highlighting the economic efficiency of corridors is based on:

•The greater capacity of corridors in supporting trade volumes based upon the principle of economies of scale in transportation. This is likely to be the single most important factor behind the creation of corridors.

·Better integration between production and distribution due to cost and time efficiency along corridors. The corridor becomes an intermodal supply chain composed of gateways and inland ports.

·Greater reliability of distribution because of transport performance, but also because of a more coordinated governance (such as identifying critical infrastructure) and more efficient cross-border flows (for transnational corridors).

That why corridors can be classified in four modal structures; maritime, fluvial, land and air corridors.

# Moldova's integration into the major Euro-Asian transport corridors

Transport corridors in general play an important role in achieving the medium and long-term objectives of the states. The Moldovan geopolitical state offers a possibility not to remain just in the background of current changes in the transit services market, but to act as a facilitator in the increase of trade connections of the most important transportation corridors between East and West.

Aiming to prioritize and focus the efforts on upgrading and improving important transport links between Europe and Asia, are presented main Euro-Asian transport corridors:

- Ten *Pan-European transport* corridors;
- TRACECA Transport Corridor Europe-Caucasus-Asia;
- BSRH Black Sea Ring Highway;
- *TEN-T* Trans-European Transport Network.

The Pan-European Transport Corridors and Transport Areas has been developed along with three Pan-European Transport conferences. The set out of the first Pan-European Transport conference in Prague in 1991 was an appropriate concept for transport infrastructure, which became the corridor concept.

<sup>&</sup>lt;sup>40</sup> Integrating Australia's Transport Systems: A Strategy for an Efficient Transport Future

At the second Pan-European Transport conference in Crete in 1994, the countries of Western, Central and Eastern Europe identified nine long-distance transport corridors as priorities for infrastructure development.

At the third Pan-European Transport conference in Helsinki in June 1997 a tenth corridor and the Pan-European Transport Areas for maritime basins were added.

These multi-modal Corridors (Annex 1), so called Helsinki Corridors, have a total length of about 48,000 km, of which 25,000 km are rail network and 23,000 km are road network. Airports, sea- and river ports and major terminals serve as nodes between the modes along these long distance interconnections between the Central and Eastern European countries.

The concept of a Pan-European Transport Infrastructure Investment Partnership promotes the establishment of all the necessary components for a future Pan-European Transport Network on the territory of the European Union, in the candidate countries for accession, the New Independent States (NIS) and beyond.

The Pan-European Transport Network consists of the following components:

- The Trans-European Transport Network on the territory of the European Union (TEN);
- The TINA<sup>41</sup> Network, which is composed of the ten Corridors and the additional network components within the candidate countries for accession;
- The ten Pan-European Transport Corridors situated in the candidate countries for accession, in the NIS and beyond;
- The Four Pan-European Transport Areas (PETrAs) covering maritime areas; and
- The Euro-Asian Links, notably TRACECA (Transport Corridor Europe Caucasus Asia).

For most of the Corridors and Areas a Memorandum of Understanding (MoU) has been concluded amongst the participating countries, at the level of Ministers of Transport and with the European Commission.

It is a voluntary commitment between the participants, and has no legal binding character, but indicates the intention of the concluding partners to undertake joint efforts in the development of the Pan-European Transport Network.

These Memoranda of Understanding recommended, among others, to establish a Steering Committee, which promoted and monitored the progress and stimulated the action needed.<sup>42</sup>

Particularly important from economic cooperation point of view for Moldova, in the area will be executed by sectors, such as:

Improvement of Road and Roadside Services on the section Leuseni -

-

<sup>&</sup>lt;sup>41</sup> TINA - Transport Infrastructure Needs Assessment

<sup>&</sup>lt;sup>42</sup> "Status of the Pan-European Transport Corridors and Transport Areas" by The European Commission

Chisinau – Dubăsari – Border with Ukraine - Project cost: \$18.2 million.

For the rail sections (Cristesti-Jijia) – Ungheni – Chisinau – Bender – (Kuciurgan), route infrastructure rehabilitation, upgrading and electrification are foreseen with aim of increasing maximum train speed up to 140 km/h with transition from diesel locomotive traction to electric one. For sections Bender – Cimislia – (Carabuteni) – Basarabeasca – Taraclia (Bolgrad) – Greceni – Etulia – (Reni) - Giurgiulesti - (Galati) reconstruction and technical re-equipment of railway stations and track facilities are foreseen (the cost of works is estimated to \$ 5.8 million).

**TRACECA** is an ambitious interstate programme aimed at supporting the political and economic development in Black Sea Region, Caucasus and Central Asia by means of improvement of the international transport.

The regional EU-assistance in transport benefitting our eastern neighbors is channeled under the TRACECA-programme, an acronym referring to Transport Corridor Europe-Caucasus-Asia. This EU programme was launched in 1993 to develop a transport corridor from Europe to China, via the Black Sea, the Caucasus, the Caspian Sea and Central Asia.

TRACECA aims at supporting political and economic independence of the Republics by enhancing their capacity to access European and World markets through alternative transport routes, encouraging further regional co-operation among the partner countries and increasingly being a catalyst to attract the support of International Financial Institutions (IFIs) and private investors.

The beneficiary countries of the programme are: Azerbaijan, Armenia, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

In parallel to the EU assistance programme, most of the participating countries have also engaged in a political process to strengthen regional cooperation in transport, by signing the "Basic Multilateral Agreement on International Transport for Development of the Europe-the Caucasus-Asia Corridor" (MLA) in 1998. The implementation of this MLA is done through the Intergovernmental Commission (IGC) and the TRACECA Permanent Secretariat of the IGC, based in Baku. The countries who signed the MLA are Armenia, Azerbaijan, Bulgaria, Georgia, Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Uzbekistan and Ukraine. The EU participates as an observer.

The strategic framework of the IGC TRACECA comprises a number of pillars in order to achieve the desired objective of delivering a sustainable, efficient and integrated multimodal transport system at both the EU and TRACECA levels:

- Assisting in the development of economic relations, trade and transport communications in Europe, Black Sea region and Asia
- Ensuring access to the world market of road, rail transport and commercial navigation
- Ensuring traffic security, cargo safety and environment protection
- Harmonization of transport policy and legal structure in the field of transport

• Creation of equal conditions of competition for transport operations.

The EU-support for this programme amounts to over € 180 million, via more than 80 projects in the areas of infrastructure development, legal harmonization, safety and security in transport as well as trade facilitation and logistics. In recent years there is an increasing focus on more sustainable modes of transport.

EU projects on safety and security in transport have resulted in the adoption by the countries of a TRACECA Regional Action Strategy on Maritime Safety and Security and Environmental Protection in November 2011, and a Regional Road Safety Action Plan also in November 2011. Projects supporting trade facilitation and logistics have resulted in the selection of potential hubs and pilot projects for logistics centers and Motorways of the Seas on the Black and Caspian Seas.

# On-going TRACECA programme projects

1. Logistics Processes and Motorways of the Seas (2011 – 2014)

This project will enhance the development and implementation of coherent strategies for establishment of intermodal integrated transport and logistics chains underpinned by Motorways of the Seas. An important delivery of the project is the Master Plan. This Plan should indicate the priority projects, hard infrastructure as well as soft (trade facilitation) measures, on the medium term that can contribute to improved cargo sea and hinterland connections, in full compatibility with the revised TEN-T guidelines. The (political) commitment of the individual involved countries is crucial for success.

2. Civil aviation safety and security (2012 – 2015)

Activities cover the main aspects of civil aviation regulation and oversight, including in the areas of licensing and organization of market access, safety, security, air traffic management and environmental protection. For the ENP-countries support aims to ensure that beneficiaries which have signed a comprehensive civil aviation agreement with the EU or for which such negotiations are planned or in progress can participate effectively in the Pan-European civil aviation system.

3. Transport Dialogue and Networks Interoperability II (2012-2015)

This project will contribute to the achievement of the policy objectives defined in the Commission Communication on transport relations with the European Neighborhood Policy countries. Particular emphasis is to be put on improving coordination with and involvement of IFIs and participation of the private sector in transport projects.

4. Maritime Safety and Security II (2012-2015)

The objective is to support the further ratification and implementation of international maritime safety and security conventions as well as improving the level of quality of maritime administrations in the Black Sea and Caspian Sea partner countries with the overall objective of making shipping safer, more secure and environment friendly. This should promote the further alignment of the

maritime safety and security legislation with the relevant EU "acquis" in the field and especially with the EU's Third Maritime Safety Package.

Black Sea Ring Highway. (Annex 2) In April 2007, the Ministers of Foreign Affairs of the member states of the Organization for Economic Cooperation of the Black Sea signed, in Beograd, a Memorandum of Understanding for the construction (unification) of the above mentioned motorway.

The main target is to create an international road artery, through maintenance, reconstruction, rehabilitation, upgrading and construction of nonexisting connections of the main and secondary road infrastructure.

The Black Sea Ring Highway will promote co-operation in the development of multimodal transport infrastructure, in order to have adequate road interconnections with the:

- Trans-European
- Pan-European and
- Euro-Asian Transport Networks.

Once the alignment of the highway is finalized, several of its sections will coincide with parts of the established European axis. That is why it is crucial to ensure well coordinated planning of road construction and restoration work, in order to strengthen links among the EU, Asian and Black Sea countries, who are invited to comply with the future international traffic requirements and standards.

According to the decisions of the Steering Committee and within the framework of its responsibilities, the BSRH JPTS is developing a series of actions with a view to promote the project:

- Identification of Existing Status Definition of the BSRH alignment (main route and connections)
- Information Management
- New studies
- Financing
- Technical standards and interoperability
- Border crossing and customs co-operation. Operational aspects
- of transport
- Active communication with third parties.

The Trans-European Transport Networks (TEN-T, Annex 3) are a planned set of road, rail, air and water transport networks in the European Union. The TEN-T networks are part of a wider system of Trans-European Networks (TENs), including a telecommunications network (eTEN) and a proposed energy network (TEN-E or Ten-Energy). The European Commission adopted the first action plans on trans-European networks in 1990.

TEN-T envisages coordinated improvements to primary roads, railways, inland waterways, airports, seaports, inland ports and traffic management systems, providing integrated and intermodal long-distance, high-speed routes. A decision to adopt TEN-T was made by the European Parliament and Council in July 1996. The EU works to promote the networks by a combination of leadership, coordination, issuance of guidelines and funding aspects of development.

These projects are technically and financially managed by the Trans-European Transport Network Executive Agency (TEN-T EA), which was established for this purpose by the European Commission in October 2006.

TEN-T promotes:

- Economic and social integration;
- Free movement of people, goods and services;
- Development in less favoured regions;
- Limiting environmental impacts;
- Contacts with neighbouring countries;
- Competitive energy production and supply;
- Renewable energy production;
- Efficient and secure energy supply.

A significant step forward towards creating a common transport network between the EU and its Eastern partners in the neighborhood was made in 2013 October, in Luxembourg at the Eastern Partnership Transport Ministerial Meeting, which aimed to increase integration between the EU and its Eastern European partner countries—Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

The partner countries have started reforms to align their transport systems with EU standards. The association agreements that the EU has negotiated with several partner countries envisage more regulatory convergence in transport. The most significant achievements of market integration are the signature and implementation of comprehensive aviation agreements that the EU has negotiated with Georgia and Moldova.

#### **Conclusions:**

Moldova is a strategic border between the EU and Eastern Europe and can become a transport hub for the region. Its existing road and rail network structure is generally well-suited to cope with traffic demand and the objectives of domestic and international connectivity. Lack of maintenance of the transport infrastructure and high logistics costs however hinder the development of the transport industry in Moldova.

The development of the Moldovan transport system and its integration into the EU transport system is directly connected with the development of transport corridors. This integration is highlighted by one serious problem – an inadequate technical level of separate links of transport infrastructure. Similarly, integration would expedite the implementation of EU standards, rules and requirements for all countries in order to ensure the adequate quality of transportation services.

Two vital European transport corridors pass through Moldova, providing unparalleled access to all parts of Europe, including major European ports and the fast-growing CIS market.

In order to exploit these benefits, Moldova is determined not only to

preserve, but also to enhance its infrastructural network and to improve its integration into the European network.

# Bibliography:

Dwyer, D.J. (ed) (1990) Southeast Asian Development: Geographical Perspectives, Esses, England: Longman.

Kunaka, Charles, and Robin Carruthers. (2014). Trade and Transport Corridor Management Toolkit. Washington, DC: World Bank.

Šakalys A., Palšaitis R. 2006. Development of intermodal transport in new European Union states. Journal of Vilnius Gediminas Technical University and Lithuanian Academy of Science 21(2): 148–153p.

Rodrigue, J-P (2004) "Freight, Gateways and Mega-Urban Regions: The Logistical Integration of the BostWash Corridor", Tijdschrift voor Sociale en Economische Geografie, Vol. 95, No. 2, pp. 147-161

European Commission, "Status of the Pan-European Transport Corridors and Transport Areas"

Concept on creation and development of the national network of international transport corridors

(http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=301 398)

http://eur-lex.europa.eu/

http://ec.europa.eu/transport/themes/infrastructure/index en.htm

http://www.internationaltransportforum.org/statistics/investment/Countryresponses/Moldova.pdf

http://www.blacksearing.org/index.php?id=28

http://www.traceca-org.org/en/routes/

# Annex 1. Pan-European transport corridors

| I    | (North-South) Helsinki - Tallinn - Riga - Kaunas and Klaipeda - Warsaw and Gdansk  |  |  |
|------|--|--|--|
|      | • Branch A (Via/Rail Hanseatica) - St. Petersburg to Riga to Kaliningrad to Gdansk to Lübeck   |  |  |
|      | Branch B (Via Baltica/E 67) - Helsinki to Warsaw.  |  |  |
| II   | (East-West) Berlin - Poznań - Warsaw - Brest - Minsk - Smolensk - Moscow - Nizhny Novgorod   |  |  |
| III  | Brussels - Aachen - Cologne - Dresden - Wrocław - Katowice - Kraków - Lviv - Kiev  |  |  |
|      | Branch A - Berlin - Wrocław  |  |  |
| IV   | Dresden/Nuremberg - Prague - Vienna - Bratislava - Győr - Budapest - Arad - Bucharest - Constanța / Craiova -Sofia - Thessaloniki / Plovdiv - Istanbul.    |  |  |
| V    | (East-West) Venice - Trieste/Koper - Ljubljana - Maribor - Budapest - Uzhhorod - Lviv - Kiev. 1,600 km (994 mi) long.                                      |  |  |
|      | Branch A - Bratislava - Žilina - Košice - Uzhhorod   |  |  |
|      | Branch B - Rijeka - Zagreb – Budapest  |  |  |
|      | Branch C - Ploče - Sarajevo - Osijek - Budapest  |  |  |
| VI   | (North-South) Gdańsk - Katowice - Žilina, with a western branch Katowice-Brno.   |  |  |
| VII  | (The Danube River) (Northwest-Southeast) - 2,300 km (1,429 mi) long.   |  |  |
| VIII | Durrës - Elbasan - Skopje - Sofia - Plovdiv - Burgas - Varna. 1,500 km (932 mi) long.  |  |  |
| IX   | Helsinki - Vyborg - St. Petersburg - Pskov - Gomel - Kiev - Liubashivka - Chişinău - Bucharest - Dimitrovgrad - Alexandroupolis. 3,400 km (2,113 mi) long. |  |  |
|      | Major sub-alignment: St. Petersburg - Moscow - Kiev.   |  |  |

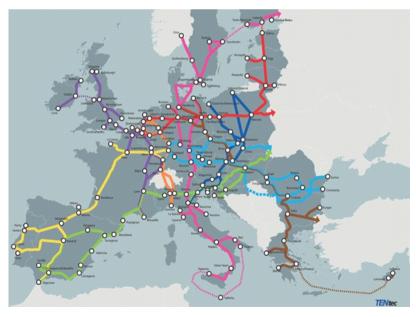
Source: www.wikipedia.org

Annex 2. Black Sea Ring Highway



Source: http://www.blacksearing.org

Annex 3. Trans-European Transport Networks



Source: https://driveeuropenews.files.wordpress.com/2013/10/tent-network-ninecorridors.jpg

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