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2015 SUMMING-UP OF BANKING FINANCIAL SECTOR OF THE REPUBLIC OF MOLDOVA

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Economic and political uncertainty in recent years has adversely affected the activity of Moldovan banks unfavoring the dynamics of the national economy. The 2015 year can be considered a "rigid" year for the Republic of Moldova, built by the liquidation of three financial institutions at the NBM decision (CB "Unibank" SA, CB "Banca Sociala" SA and BC "Banca de Economii" SA), and the tightening of the monetary policy. That has led to mistrust of the population in this sector, creating problems with bank loans and deteriorating of bank asset. However, commercial banks during 2015 remained sufficiently liquid and capitalized (exception is CB "Unibank" SA, CB "Banca Sociala" SA and BC "Banca de Economii" SA). This article aims to research the financial and banking sector from the Republic of Moldova in 2015 in terms of uncertainty. Therefore, the novelty of the article lies in the analysis of the banking sector from the Republic of Moldova under the main financial prudential indicators. The main research methods were: systemic analysis, synthesis, monographic, logic, etc. The main scientific results obtained in the article, as a conclusion of the research are the identification, analysis of the main activity of the banking sector and the proposed set of recommendations on strengthening the financial stability framework in the Republic of Moldova.

Key words: *banking sector, financial stability, loans portfolio, assets, deposits, loans, profitability and solvency.*

Incertitudinea economică şi politică din ultimii ani a afectat negativ activitatea băncilor din Republica Moldova, defavorizând dinamica economiei naţionale. Anul 2015 poate fi considerat un an „rigid" pentru Republica Moldova, încorporat cu lichidarea celor 3 instituţii financiare la decizia BNM (BC„Unibank" SA, BC „Banca Sociala" SA şi BC „Banca de Economii"SA) şi înăsprirea politicii monetare. Astfel, această situaţie a condus la neîncrederea populaţiei în sector, generând probleme la capitolul acordarea creditelor bancare şi deteriorarea activului bancar. Totuşi, băncile comerciale, pe parcursul anului 2015, au rămas lichide şi suficient de capitalizate (excepţie constituie BC „BANCA SOCIALĂ" SA, Banca de Economii SA şi BC "UNIBANK" SA). Acest articolul are ca scop central cercetarea sectorului financiar bancar din Republica Moldova în anul 2015 sub aspectul incertitudinii. Prin urmare, actualitatea prezentului articol constă în analiza sectorului bancar din Republica Moldova prin prisma principalilor indicatori prudenţiali financiari. Metodele principale de cercetare au fost: analiza sistemică, sinteza, monografică, logică etc. Principalele rezultate ştiinţifice, obţinute în articol în urma cercetării, sunt identificarea, analiza principalilor indicatori de activitate a sectorului bancar şi propunerea setului de recomandări privind consolidarea cadrului de stabilitate financiară din Republica Moldova.

Cuvinte-cheie: *sector bancar, stabilitate financiară, portofoliu de credite, active, depozite, credite, profitabilitate, solvabilitate.*

Экономическая и политическая неопределенность в последние годы негативно отразились на деятельности молдавских банков, выступающих за динамику национальной экономики. Для Республики Молдова 2015 год можно считать «жестким» годом, из-за ликвидации трех финансовых учреждений по решению НБМ (КБ "Unibank" SA, КБ "Banca Socială" SA и КБ "Banca de Economii" SA), а также ужесточения денежно-кредитной политики. Это привело к росту недоверия населения к этому сектору, одновременно создавая проблемы, связанные с

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предоставлением банковских кредитов и ухудшением банковского актива. Тем не менее, коммерческие банки в течение 2015 года оставались ликвидными и достаточно капитализированными (исключение составляют: КБ "Unibank" SA, КБ "Banca Sociala" SA и КБ "Banca de Economii" SA). Данная статья призвана исследовать финансовый и банковский сектора Республики Молдова в 2015 году в условиях неопределенности. Актуальность статьи заключается в анализе банковского сектора Республики Молдова через призму основных финансовых пруденциальных показателей. Основные методы исследования: системный анализ, синтез, монографический, логический и т. д. Основные научные результататы, полученные в результате исследования, являются: идентификация, анализ основных показателей деятельности банковского сектора и разработка рекомендаций по укреплению финансовой стабильности в Республике Молдова.

Ключевые слова: *банковский сектор, финансовая стабильность, кредитный портфель, активы, депозиты, кредиты, рентабельность, платежеспособность***.**

JEL Classification: E51, E59, G21, G28.

Introduction. During the last years the biggest threat for the stability of the financial system of the Republic of Moldova is represented by the disruptions in the banking sector. These were generated by the shady transactions of some commercial banks (B.C. „Unibank" S.A., B.C. „Banca Sociala" S.A. and B.C. „Banca de Economii" S.A.), being in liqidation procedure and able to destabilise the financial and budgetary system causing a high level of inflation and demonetization of economy.

Financial destabilisation of the banks from the Republic of Moldova remains to be immediate because on June 11, 2015, NBM established special supervision on the biggest banks from the Republic of Moldova, and namely: B.C. Moldova Agroindbank, B.C. Victoriabank and B.C. Moldindconbank. The decrease in this indicator will continue to record negative dynamics also in 2016, against the background of problems in the banking sector, which may gradually disturb the stability of the sector. Though, during 2015, the prudential indicators of the banking sector on solvability, liquidation and coverage degree of provisions recorded adequate levels. These were maintained under regulatory limits even in the precarious economic conditions.

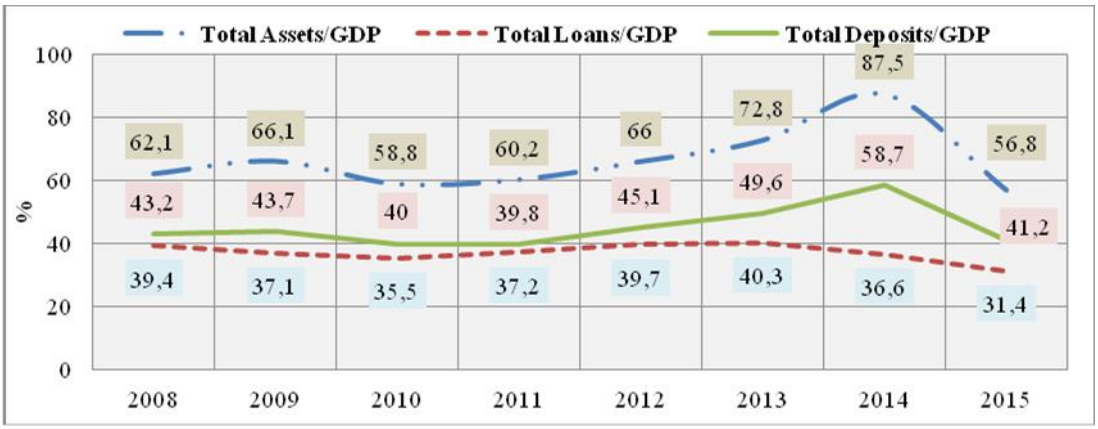


Fig. 1. Degree of financial intermediation, %

Source: Authors' calculations based on the data of the National Bank of Moldova.

Situation from the banking sector is as following:

At the end of 2015 deterioration trends of bank assets quality, affecting the entire banking sector are registered. Throughout 2015, the annual growth rate of bank assets has been on the rise (since March 2015 – 24,80% up to September 2015 – 27,27% as compared to the last year), totaling 104504,1 million MDL in bank assts on September 30, 2015. This increase is due to profit generating assets (with a weight of 57,8% in total assets). *But from September 2015, decreasing trends regarding the bank assets have been observed.* These signs of concern are reflected since October 2015 (-16,91%) and continue at the beginning of 2016 (in January 2016 (-26,72%)) compared to the last year, totaling 70351,8 million MDL in bank assets on January 31, 2016.

The deterioration of the bank assets quality can influence in future on reducing the level of the bank capitalization and could disturb the financial stability of the sector.

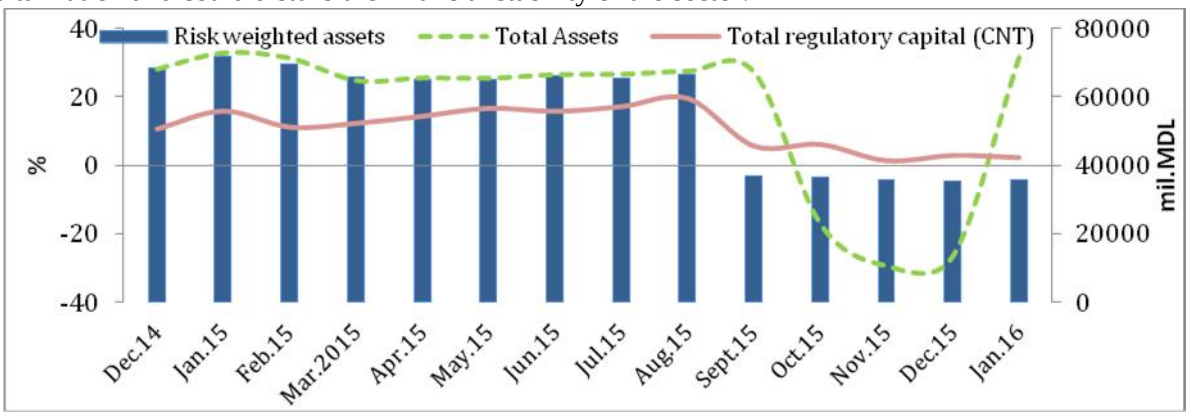


Fig. 2. Development of the bank capital quality

Source: Author's calculations based on the data of the National Bank of Moldova.

The raise in the base rate in 2015 has generated more expensive bank loans affecting the real sector and the entire national economy. At the end of 2014 there has began the slowing growth of new loans provided by banks which in 2015 have been transformed in a moderate decrease of lending. In December 2015, the gross loans portfolio provided by the commercial banks has had a negative development (-6,5% in comparison with the same time last year), and the volume of new loans provided by banks was mentained in a negative trend (-19% in comparison with the same time last year). *In a great measure this decrease was influenced by the precarious situation of those three problematic financial institutions (B.C. „Unibank" S.A., B.C. „Banca Socială" S.A. and B.C. „Banca de Economii" S.A.), and the low level of confidence of the population.* **In September, 2015, the biggest contribution to the decrease have had the loans in national currency decreasing by 32% in comparison with the same time last year**, while the loans in foreign currency increased by 9% in comparison with the same time last year.

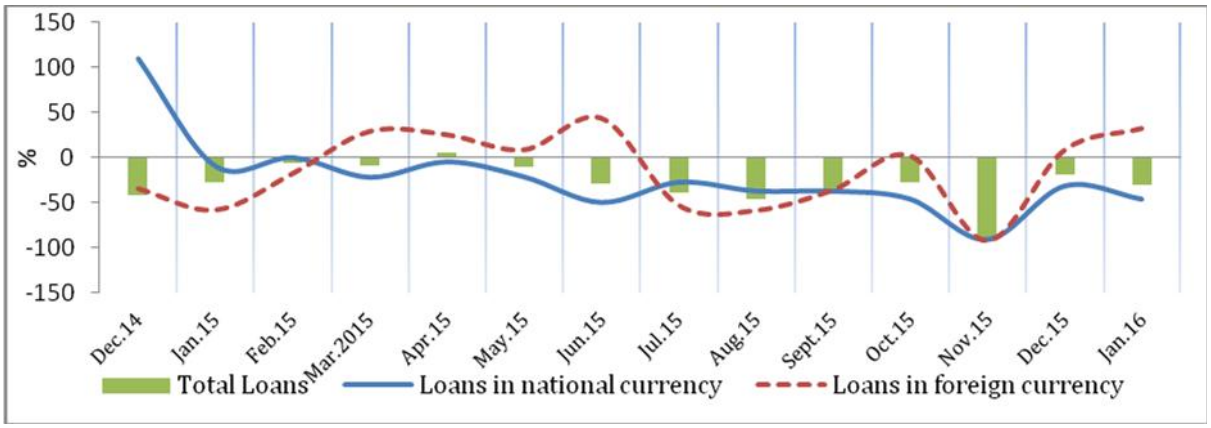


Fig. 3. Annual growth rate of loans in foreign and national currency, %

Source: According to the data of the National Bank of Moldova.

The upward trend of loans provided by banks in national currency became a major concern being reflected by the slowdown in economic activity, high level of incertitude and exchange rate risk. However, a cause which generated the reduction of loans in national currency in 2015 was also the tightening of monetary policy promoted by NBM (increase in the base rate from 17,5% in July to 19,5% in September 2015[1], and mandatory reserves).

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[4] During the meeting of August 26, 2015 the Administration Council of the National Bank of Moldova (NBM) decided to raise the base rate applied on the main short-term monetary policy operations by 2,0 p.p., from 17,5 to

In 2015, the amount of non-performing loans accounted for 3798,58 million MDL decreasing by 21% compared to December 31, 2014. On December 31, 2015 the weight of non-performing loans in total loans decreased by 1,78 p.p., compared to December 31, 2014, representing 9,95%. *The decline in indicators of the loan portfolio quality in September, October and December 2015 was due to the exclusion of the three problematic commercial banks from the calculation. Obviously, this decrease in the ratio of non-performing loans is favorable for the entire banking sector. However, lending activity is still influenced by the currency and inflationary risks, the bank's management capacity and economic crisis in the country.*

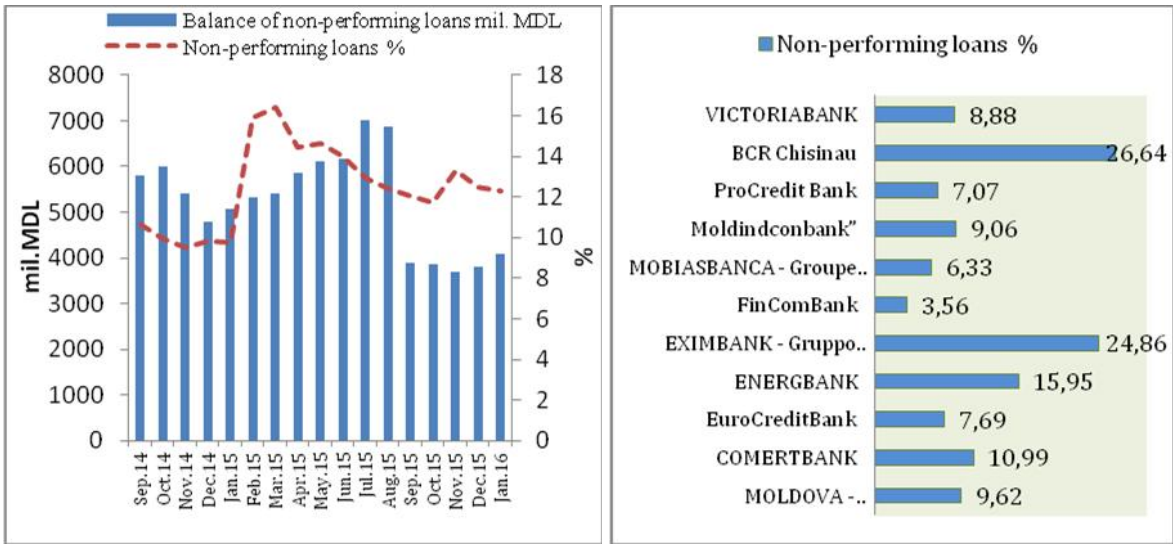


Fig. 4. Weight of non-performing loans in banking sector, %

Source: According to the data of the National Bank of Moldova.

During 2015 the commercial banks remained to be liquid and suficiently capitalized (exceptions are BC „BANCA SOCIALA" S.A., Banca de Economii S.A. and BC "UNIBANK" SA). In 2015 the liquidity indicators of the banking sector have fallen within the normative established by the National Bank of Moldova. The weight of liquid assets (liquidity principle II) accounts for 41,55%, increasing by 19,07 p.p. compared to December 31, 2014, excepting the group of problematic banks which recorded values inferior to those controled by the NBM minimum liquidity requirement (≥ 20%). The value of liquidity indicator on long term (liquidity principle I (≤1))[1]of the entire banking system was 0,72% on December 31, 2015 less by 0,82 p.p. compared to December 31, 2014, this coefficient reffers to 11

19,5% annually. Thus, the members of the Executive Committee of the NBM , at the meeting of November 26 2015, unanimously decided to maintain the monetary policy interest rate at the level of 19.5 percent annually. This decision of the Executive Committee of the NBM is argued by the fact that the monetary policy measures taken by the NBM since the beggining of the current year so far shall still actuate through different transmission channels in the national economy including by influencing the interest rates on loans and deposits in national currency, thus exerting further effects on future inflation developments. Details on: http://www.bnm.md/ro/content/26-noiembrie-2015-comunicat-al-bancii-nationale-moldovei

[5] During 2015 the NBM has come up with amendments to the draft Decision of the Council of Administration of the NBM „On amending and supplementing the Regulation on bank liquidity", approved by the Council of Administration of the NBM, minutes no. 28 of August 8, 1997, the Official Journal of the Republic of Moldova, 1997, no. 64-65, art. 105 of October 2, 1997. In this draft it has been proposed to replace the liquidity principle I which referred to the long term liquidity and foresaw that the amount of bank assets with maturity period of more than 2 years should not exceed the amount of its financial resources with the same term. Afeter the amendments the following maturity bands shall be used: up to a month; 1-3 months; 3-6 months; 6-12 months and over 12 months, expressed as a ratio between the actual liquidity and needed liquidity for each maturity band. Details on: http://www.bnm.org/ro/content/proiect-hca-al-bnm-cu-privire-la-modificarea-si-completarea-regulamentului-cu-privire-la-0

commercial banks. *Consequently we observe that the majority of commercial banks recorded a rather high coefficient leading to an excess of bank liquidity. This liquidity increase occurred in the context of tightening of the monetary policy promoted by the NBM. So, the NBM will continue to manage the liquidity excess through sterilization operations in order to support the proper functioning of the interbank money market. However, the development of monetary market from the last period highlights some barriers to storage liquidities by the commercial banks.*

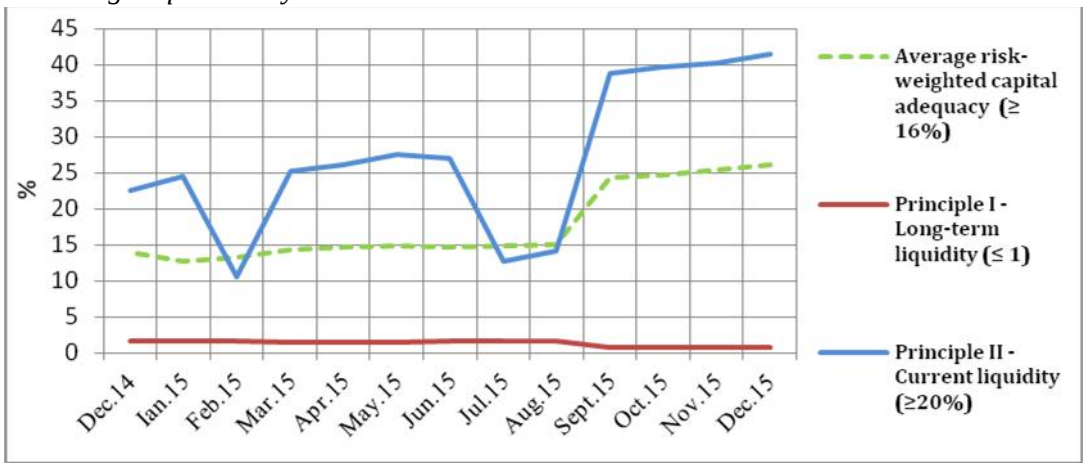


Fig. 5. Average risk weighted capital adequacy in the banking sector, liquidity principles I and II,%

Source: According to the data of the National Bank of Moldova.

In 2015 the level of capitalization[1] for 11 commercial banks from the sector recorded superior values of 26,16% (increasing by 12,24 p.p. compared to December 2014) *which indicates fair functioning conditions and a specific competitiveness climate for national banks.*

NBM shall to monitor attentively and incessantly the evolution of the banking capital considering that its volume and quality determine the absorption capacity of losses generated by the risks arising from the banking activity.

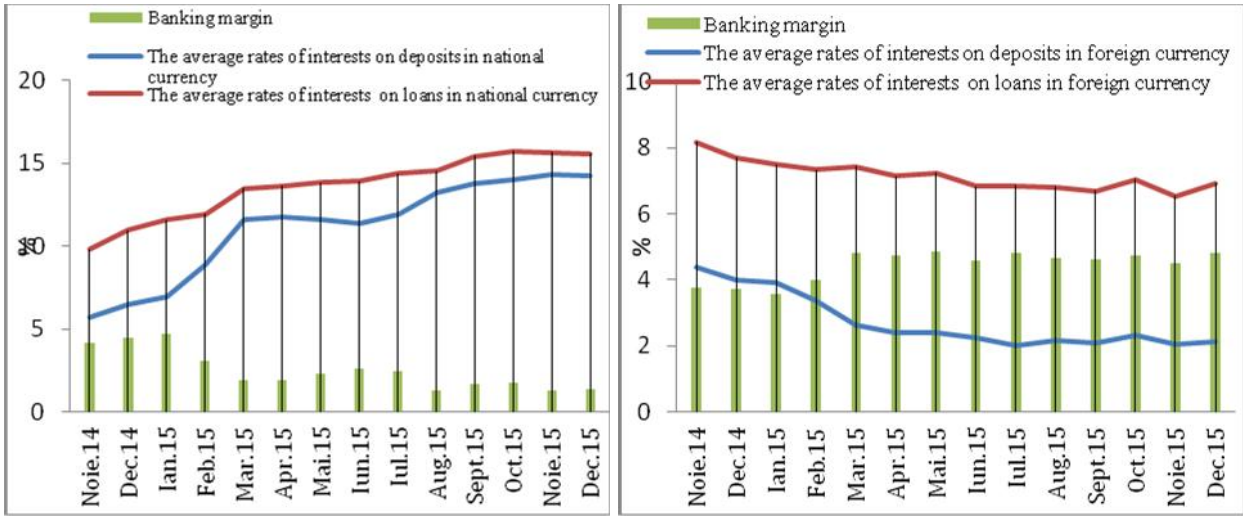


Fig. 6. Development of the banking margin*, average interest rates on deposits and loans in MDL and foreign currency, %

Source: Author's calculations according to the data of the National Bank of Moldova.

Note: Banking margin index was calculated as the difference between the average rate on loans in MDL/foreign currency and average rate on deposits in MDL/foreign currency.

[6] ***Below the minimum requirement set by NBM (≥16%)***

The increase of interest rates in the national currency was caused largely by the containment of the monetary policy generating the population unconfidence to deposits in MDL. On December 31, 2015 the balance of deposits in the banking system amounted to 50201,5 million MDL, decreasing by 23,3%, compared to December 31, 2014. This decreasing trend resulted largely from the decreasing balance of deposits in foreign currency by 22,7% and deposits balance in national currency by 24% compared to December 31, 2014. In 2015, the new term deposits registered a constant increase from 3561,02 million MDL in December 2014 to 3605,69 million MDL in December 2015. Given the depreciation of national currency from the last period, population prefers foreign currency deposits whose weight was 52,5% at the end of December 2015 while the deposits in national currency representing 45,5% of total deposits. This is explained by the fact that the average interest rate in the banking system of the deposits in foreign currency is more attractive (being– 2,12% in December 2015, decreasing by 1,81 p.p. compared to December 2014) compared to the rate in national currency (December 2015 – 14,22% increasing by 7,75 p.p. compared to December 2014).

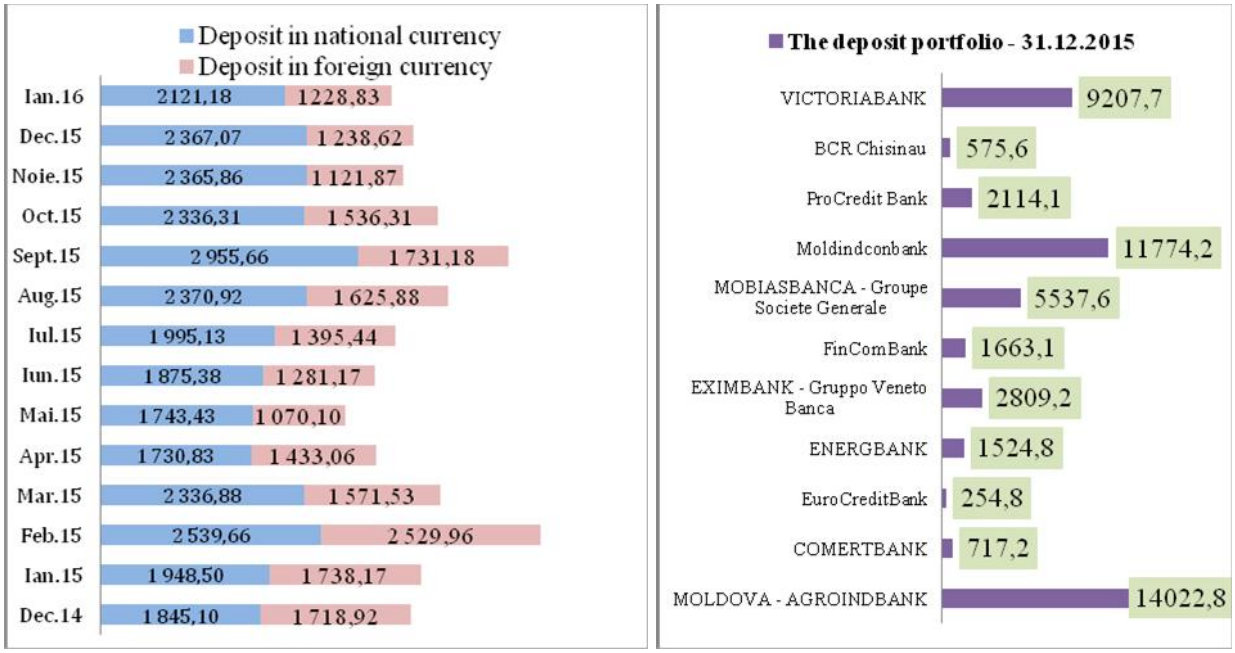


Fig. 7. Development of new deposits attracted by banks in national and foreign currency, million MDL

Source: Author's calculations according to the data of the National Bank of Moldova.

Respecting the made analysis we come with the following recommendations.

Recommendations on strengthening the financial stability framework:

1. *Redefining the role of the National Bank of Moldova (NBM)* and including in its power the objective of financial stability safeguarding by accomplishing the necessary amendments to the law on NBM (art. 5), which could increase the NBM responsibility with this objective. Enhancing the capacity to implement supervisory and regulatory actions in time.

2. *Drafting the Financial Stability Reports* (taking into account the experience of the EU member states) to identify and disclose the risks associated with the financial and banking system. Drawing up regulatory document of financial and prudence indicators which predict crisis situations and setting their threshold values.

3. *Strengthening the crisis management framework.* Enhancement the functionality of the National Committee for Financial Stability (NCFS) by intensifying the coordination between member agencies. Developing the perspective vision and comprehensive intervention plan to solve the financial crisis by NCFS by identifying the necessary changes in legislation.

4. *Strengthening the system of deposits insurance.* Strengthening the funding of the Deposit Guarantee Fund (DGF) by developing a methodology of target funds and amendment the legislation on

providing a DGF credit line from the Ministry of Finance. Amending the Law on DGF and Law on NBM regarding the inclusion of NBM as a backup additional funding source for FGD and the increase of deposit guarantee to raise the confidence in the banking system.

Recommendations on banking supervision:

1. *Active assessment of the risk profile of banks.* NBM has to assess the risk profile of the banks concerning the risks to which they are exposed, management effectiveness of risks and the risks they pose to the financial system. Making the monthly analysis of the banking system stability based on a set of financial and prudence indicators. Quarterly assessment of the system vulnerabilities to the potential credit, exchange and interest risk based on stress-tests.

2. *Application of macro-prudential aspects to tackle the systemic risks.* NBM has to determine the risk in a more ample context than that limited to the balance sheet of the individual banks. The macroeconomic environment, business trends, accumulation, and concentration of risks in the banking sector have a great impact on the risk exposure of the individual banks. The data of the individual banks, data at the sector level and aggregate trend data gathered by the supervision authorities should be included in the deliberations of the competent authorities responsible to ensure financial stability (no matter if they activate separately from the supervision authority), to contribute to the identification and analysis of the systemic risk.

Enhancement the quality of corporate governance in banks:

1. *Developing a consistent conception on corporate governance* in banks from the Republic of Moldova aligned to the recommendations of the principles of the Basel Committee on Banking Supervision BCBS and alignment of banking regulations under this conception by NBM.

2. *Property and control structures disclosure.* NBM has to bring into force firmly and efficiently the legal norms on identification and adequacy requirements of the final and control beneficiaries in banks. These actions should contribute to the improvement of the transactions monitory with the related parties and global framework of risk management in banks. The decision factors have to be established as a main priority of the regulatory framework- property and control structures disclosure, to develop an action plan, to analyze alternating approaches and ask the property and control position disclosures. The disclosure of the agreements between shareholders is also necessary.

3. *Disposal the concept of nominal property/ holder of law.* The nominal property is allowed by law and this contributes to the lack of transparency of the shareholders. In fact, only the first level of disclosure is present- that of nominal property with off-shore ghost companies frequently used to cover the identity of the real owners.

4. *Lowering the threshold for approval of big transactions by shareholders* (for example from 50% to 25% of the company's assets) especially when the sale is made to a related party. Currently, this decision is taken by the Council of Administration. AGA decides on such transactions only when its value is bigger than 50% of the total value of the company's assets.

5. *Enhancing the quality of banks councils*. The Western banking experience suggests the necessity for some regular rigorous assessment of bank council and its members' activities, the assessment report being available to the interested public. This is important to ensure that the council and its individual members discharge their duties properly and the members of the council are professional people meeting also other specific requirements submitted by the banking supervision department. The Councils of the banks should improve their skill level and competencies. The Councils have to strengthen their position by developing specific knowledge in the banking field especially insisting on the presence in the Council of experts from the field of the banking risks.

6. *Establishing the Audit Committee in banks.* The Boards of Statutory Auditors cannot be replaced by the Audit Board, constitution of which is now recommended internationally. Respecting the global trend in which the role and responsibility of Council are more and more highlighted and enhanced, the

disposal of Board of Statutory Auditors by transferring their functions to the Audit Board shall be considered as one of the policy options.

7. *Implementation of corporate governance principles.* NBM should more emphasize the promotion of good corporate governance in banks and control if banks adopted truly and implemented efficiently healthy policies of corporate governance. We recommend in this regard the drafting of a Corporate Governance Code for banks by NBM in trine to CNPF in the form of templates under which banks could develop their own code. In developing this code, should be taken into account the principles of the Basel Committee on Banking Supervision (BCBS) related to the corporate governance.

REFERENCES

1. NATIONAL BANK OF MOLDOVA. Annual Report 2015 [accesat 12 ianuarie 2016]. Disponibil: https://www.bnm.md/en/content/raport-anual-2015
2. Tendinţe în Economia Moldovei. 2015, nr. 20. ISSN 1857-3126 [accesat 21 ianuarie 2016]. Disponibil: http://ince.md/uploads/files/1461305973_met_20_ro_site.pdf
3. CATAN, P., POPA, V. The analysis of the banking sector in Moldova in 2014 through financial stability indicators. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 2, pp. 24-34. ISSN 1857-4130.

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PROBLEMS OF ATTRACTING OF FOREIGN DIRECT INVESTMENTS IN UKRAINE

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In this article there is analyzed the foreign direct investments inflows dynamics in Ukraine e. It is identified that the main investors in Ukrainian economy are offshore countries and this is the trend for the last decade. It is demonstrated that the most investment attracted spheres of Ukrainian economic activity are economically inefficient. It is presented the dynamics of international ratings estimating ease of doing business in Ukraine and the level of its financial solvency. There are also analyzed the trends in legislative field for Ukrainian economic activity stimulation

Key words: *Ukraine's investment attractiveness, investment climate, foreign investors* strategies.

În articol se analizează dinamica investițiilor străine directe în economia Ucrainei. S-a constata, că principalii investitori sunt reprezentanți ai zonelor off-shore, și această tendință este constantă în ultimul deceniu. S-a demonstrat că, în Ucraina, cele mai atractive domenii investiționale sunt cel mai puțin rentabile. Se prezintă evoluția clasamentelor internaționale cu referire la ușurința desfășurării afacerilor în Ucraina şi gradul de stabilitate financiară a acesteia. Sunt analizate tendințele modificărilor legislative pentru îmbunătățirea activității de afaceri în Ucraina.

Cuvinte cheie: *atractivitatea investițională a Ucrainei, climatul investițional, strategia investitorilor străini.*

В статье проанализирована динамика прямых иностранных инвестиций в экономику Украины. Выявлено, что основные инвесторы – это представители оффшорных зон, и данная тенденция является постоянной в течение последнего десятилетия. Продемонстрировано, что в Украине наиболее инвестиционно привлекательные сферы являются наименее экономически эффективными. Показана динамика международных рейтингов, оценивающая легкость ведения бизнеса в Украине и степень ее финансовой стабильности. Проанализированы тенденции законодательных изменений для поощрения деловой активности в Украине.

Ключевые слова: *инвестиционная привлекательность Украины, инвестиционный климат, стратегия иностранных инвесторов.*

JEL Classification: G15, N10, O16, P33, P45.

Problem formulation. The international movement of capital in the form of foreign investments is a key element of the development of modern world economic relations. Nowadays attractiveness of the foreign investment becomes one of the most important components for the economic development of the country as at the macro as well at the micro level. Additional investments provide not only organic growth of any sector of the economy in which they are invested, but also have a positive social impact reflected in the increased welfare of the recipient country.

Limitation of tangible and intangible resources, as well as a modern global financial instability cause increased competition for investment between countries. The turbulence in the economic system leads to a complication of the financial forecasts for the further development of the countries and regions, and therefore, the process of finding and attracting targeted foreign investment is becoming more difficult.

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That is why it is urgent for the state to create all the favorable investment conditions to attract international investor. Countries that do not participate in active involvement of international funding remain without additional resources for the production and trade and thus reduce the welfare of the nation.

Analysis of recent research and publications. The investigation of the FDI attractiveness issues is studied by foreign and domestic scientists: O.I. Amosha, O.M. Anisimova, S.S. Aptekar, I.T. Balabanov, I.O. Blank, I.P. Buleev, V.M. Geyets, L.J. Gitman, A.F. Goyko, V.M.Grinyova, V.V.Krasnova, V.M.Kolosok, T.V.Kulinich, L.M. Kuzmenko, K.I. Ladychenko, I.P. Moiseenko, V.P. Savchuk, T.P. Tkachenko, M.G. Chumachenko and others [1,7,13,14,16].

However, the conditions affecting the investment attractiveness of the national economy and the state's role in counteraction the negative impact of individual factors are not entirely revealed.

Aim of the article is the analysis of the recent dynamics of investment inflows in Ukraine and main obstacles for national favorable investment climate development.

Statement of the basic material. Nowadays Ukraine doesn't possess its own resources to create a competitive economy. It is caused by deep structural deformation and severe underdevelopment of the country on indicators of productivity and level of social welfare. Most domestic companies are technologically backward, energy-intensive and characterized by poor diversification of products and markets [11, 12]. Definitely, this state of the domestic production is unlikely to be attractive for foreign investors.

Changes in the methods of doing business in Ukraine can be implemented through secure funding and implementation of a series of reforms. Consequently, foreign investment is the main prerogative for national socio-economic growth at this stage. Thus, the main task of not only the government, but also society as a whole is to create a favorable investment climate for foreign investors.

Analysis of the dynamics of foreign direct investment (equity), FDI, inflows and outflows of the Ukrainian economy for 2001-2015 demonstrates that Ukraine is a net recipient of FDI (Figure 1).

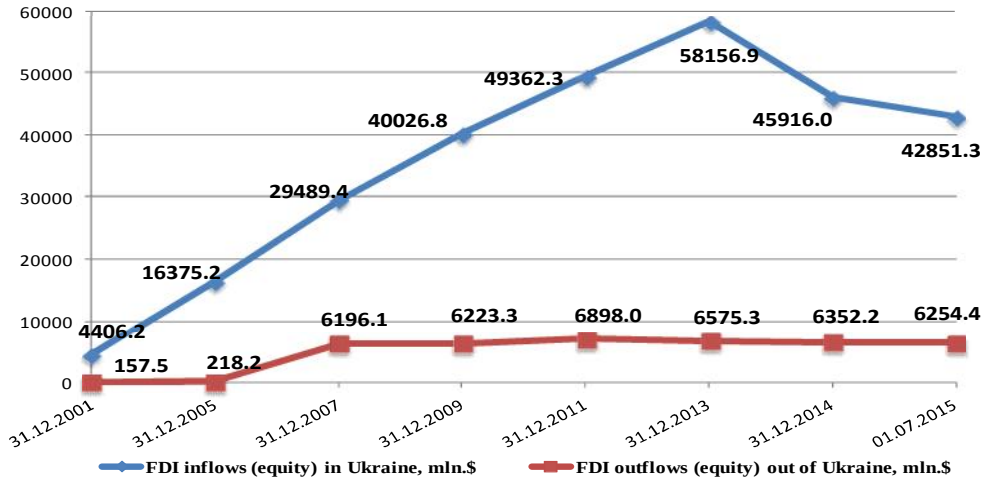


Fig. 1. Dynamics of cumulative FDI (equity) inflows and outflows in and out of Ukraine for 2001-2015, $ mln.

Source: State statistics service of Ukraine – mode of access: http://www.ukrstat.gov.ua/

***** data for 2014 and 2015 are given excluding Crimea and Sevastopol City***

The data in Figure 1 show that the peak values of FDI inflows into the economy of Ukraine in the amount of $58.2 bln. were achieved in 2013. However, the figures for 2014 and 2015 indicate a drastic decline in FDI inflows. The recession was caused by tension and deterioration of the political situation with the Russian Federation in the Eastern region of Ukraine, as well as the annexation of Crimea, the loss of key markets, increase of the imbalances risk in the balance of payments of Ukraine, decline in the credit ratings of Ukraine on the international financial markets [14].

Table 1

FDI inflows (equity) in Ukraine dynamics and structure in 2013-2015

Investor country	FDI (cumulative volume starting from the first day of investment), mln. $					Share in FDI by 01.07. 2013, %	Share in FDI by 01.07. 2014, %	Share in FDI by 01.07. 2015, %
	by 01.07. 2013	by 31.12. 2013	by 01.07. 2014	by 31.12. 2014*	by 01.07. 2015*			
Total, including	55318,2	58157,0	50021,8	45916,0	42851,3	100,0	100,0	100,0
Cyprus	17928,5	19035,9	15699,4	13710,6	12274,1	32,4	31,4	28,6
Germany	6165,3	6291,8	5943,0	5720,5	5489,0	11,1	11,9	12,8
Netherlands	5376,1	5561,5	5349,9	5111,5	5108,0	9,7	10,7	11,9
Russian Federation	3822,7	4287,4	3051,9	2724,3	2685,6	6,9	6,1	6,3
Austria	3196,3	3257,5	2782,8	2526,4	2354,3	5,8	5,6	5,5
Great Britain	2697,2	2714,1	2417,9	2145,5	1953,9	4,9	4,8	4,6
The Virgin Islands	2418,4	2493,5	2054,7	1997,7	1872,6	4,4	4,1	4,4
France	1808,4	1825,8	1741,0	1614,7	1539,2	3,3	3,5	3,6
Switzerland	1183,1	1325,4	1373,2	1390,6	1371,2	2,1	2,7	3,2
Italy	1122,7	1267,8	1082,0	999,1	966,6	2,0	2,2	2,3
Belize	1003,8	1055,6	771,0	642,4	519,7	1,8	1,5	1,2
Poland	945,3	845,4	826,7	831,2	790,8	1,7	1,7	1,8
United States	895,4	991,1	890,2	862,3	695,3	1,6	1,8	1,6
Other countries	6755,0	7204,1	6038,1	5639,2	4669,1	12,3	12,0	10,9

**** excluding Crimea and Sevastopol City***

Source: State statistics service of Ukraine – mode of access: http://www.ukrstat.gov.ua/

According to the Table 1, the main investors in Ukraine are still the European countries: they account for about 76% of all direct investment in the country. The share of the Russian Federation decreased from 6.9% to 6.3%. This fact is explained by the aggravation of political relations between Russia and Ukraine. In addition, it should be noted that about 40% of investments fell on a country with a favorable tax regime, such as Ukrainian offshore zones, for example, in Cyprus, the Virgin Islands, Belize, etc. During 2013-2015, the investments of these countries have not declined sufficiently. Other investors, such as Austria, Germany, Poland, Italy and the United States have significantly reduced the flow of capital into the national economy. According to authors of this article, the negative fact of this situation is that during the last decade the structure of foreign investors has not changed. Consequently, in recent years the economy of Ukraine haven not attracted new foreign business partners.

Data for the 2005-2015 show that there has been attracted more than $1,000 of FDI per capita. However, it should be noted that the national economy is showing a low degree of integration into the international monetary and financial flows, as the share of FDI attracted to Ukraine is only 0.2% of global FDI during the study period [2, 3] (Table 2).

Table 2

Dynamics of cumulative FDI (equity) indexes in 2005-2015

Index	by 31.12. 2005	by 31.12. 2009	by 31.12. 2011	by 31.12. 2013	by 31.12. 2014	by 01.07. 2015
Cumulative FDI inflows, $ mln.	16375.2	40026.8	49362.3	58156.9	45916.0	42851.3
FDI per capita,$	348.93	871.29	1081.71	1280.25	1069.58	1001.06
Share in global FDI, %	0.15	0.23	0.24	0.24	0.19	-

Source: State statistics service of Ukraine [Electronic source]. – mode of access: http://www.ukrstat.gov.ua/

Analysis of the FDI distribution structure by economic activity in Ukraine for 2013, which was the year of historical maximum of attracted cumulative FDI inflows in Ukraine, it should be noted that the largest amount of financial resources was obtained by spheres of processing industry and financial and insurance activities (Figure 2).

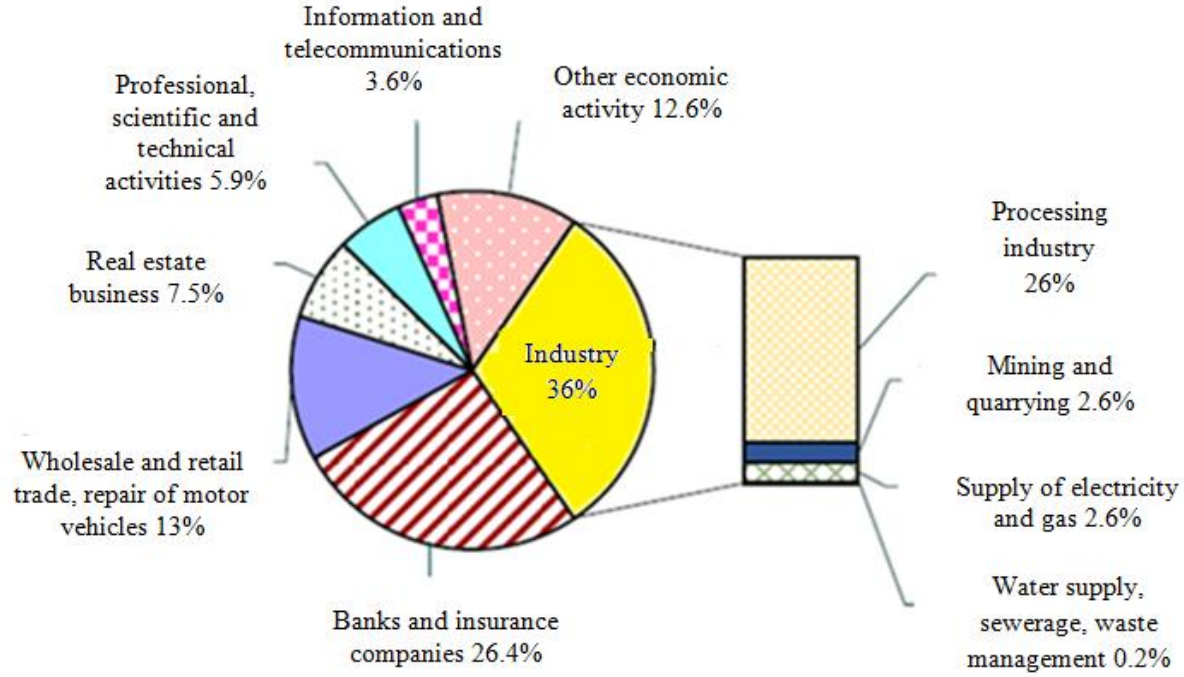


Fig. 2. Structure of FDI (equity) inflows in Ukraine by economic activity in 2013
Source: The statistical digest «Investments of foreign economic activity of Ukraine»// State statistics service of Ukraine. Kyiv. 2014. 47 p.

It should be noted that there was attracted only 1.5% of total FDI (equity) in Ukrainian agriculture, forestry and fisheries in 2013. The share of agriculture, forestry, fisheries in the GDP of Ukraine composed about 9% in 2013, the share of the processing industry - 11.2%, wholesale and retail trade 14.5%, while the share of the banks and insurance companies - 4.5% of Ukrainian GDP. Thus, the industries which attracted the largest number of foreign capital compose a small share in Ukraine's GDP and therefore they operate economical inefficiently. Such a strategically important area, as the information and telecommunications industry, produces products and services with high added value, and this industry attracted negligible investments in Ukraine. These facts demonstrate or the technological backwardness of the country or the obvious obstacles for the implementation of investment projects in Ukraine.

In recent years, the negative trends are observed not only in the dynamics and structure of FDI, but also in the assessment of the investment climate in Ukraine. According to the European Business Association, which regularly examines the investment climate in the country, the investment attractiveness of Ukraine reached its historical minimum at the end of 2013, however, focus on the reform of the present regime slightly improved the situation in the second quarter of 2015, but it still didn't allow experts to characterize the investment climate of the country as a neutral or attractive. Positive changes are explained by the definition of the key areas of development associated with the anti-corruption component and expectations of pressure reduction on business [12, 14].

In addition, the level of investment attractiveness of Ukraine decreased due to indecision of the government in the implementation of the promised reforms, the weakness of the banking system, the disastrous state of the external debt, the instability of the national currency, etc.

Results of peer reviews, applying the international rankings of doing business and of competitiveness estimation, demonstrate a low level of attractiveness of Ukraine as the host country (Table 3).

Table 3

Ukraine in the international rankings

Ranking	Assessment components	Years				
		2010	2011	2012	2013	2014
Global Competitiveness Index (the World Economic Forum)	The quality of institutions, infrastructure, macroeconomic stability, development of financial market	89 out of 133 countries	82 out of 142 countries	73 out of 144 countries	84 out of 144 countries	76 out of 144 countries
Global Competitiveness Ranking (IMD)	Economic performance, government efficiency, business efficiency and state of infrastructure	57 out of 58 countries	57 out of 58 countries	56 out of 59 countries	49 out of 59 countries	49 out of 60 countries
Ease of Doing Business (the World Bank)	The ease of launching the company, licensing, staff employment, property register, receiving a loan, protecting investors' interests	147 out of 131 countries	145 out of 117 countries	152 out of 183 countries	137 out of 185 countries	112 out of 189 countries
Corruption Perceptions index (Transparency International)	Index of corruption	134 out of 178 countries	152 out of 182 countries	144 out of 183 countries	144 out of 177 countries	no data available
Index of Economic freedom (Heritage Foundation)	Business, trade, financial, monetary, investment and labor freedom from the government, corruption, protection of property rights	162 out of 179 countries	163 out of 179 countries	163 out of 183 countries	161 out of 183 countries	155 out of 183 countries
Prosperity Index (The Legatum Institute)	Economic situation, level of entrepreneurship, management, education, health protection, security, personal freedoms, social capital	69 out of 142 countries	74 out of 142 countries	71 out of 142 countries	64 out of 142 countries	63 out of 142 countries

Source: Ladychenko K., TronkoV. Ukraine investment attractiveness in terms of social and political crisis intensification/ K.Ladychenko, V. Tronko// Theoretical and Practical aspects of Economics and Intellectual Property. - Mariupol.- 2015. – p. 59-68

Our analysis shows that under the various international ratings and indices expert Ukraine's place in the last 5 years has insignificantly changed. For example, the Global Competitiveness Index of World Economic Forum shows an increase of 13 points from 89 in 2010 to 76 in 2014. Besides, Ukraine's success in creation of a favorable business environment is reflected in all ratings, however, there is a very rapid change of country's domestic economy position in the ratings of the World Bank in terms of ease of doing business. According to this index, Ukraine took 96th place rising just 16 points in 2014-2015. This rise is caused by significant simplification procedures for the registration of ownership through reduction of the cost of operations for more than twice (in % to the value of the property). In addition, rapid changes are observed in terms of the tax system – an increase of 49 positions. Such a jump was caused by the reduction of the number of payments to 5, and the reduction of the tax rate on income to 9.7%. At the same time protection of the rights of investors is at very low level – 109 out of 189, and during the investigated period, these figures changed for 2 positions. In addition, there are low levels of such ratings: International trade – 154th position, insolvency overcoming – 142, connection to the power supply – 185 [14, 15].

Thus, the overall improvement in the rating of Ukraine is insignificant. The gap between the countries – outsiders and the leading countries has declined significantly. Today, therefore, to carry out a qualitative leap from the country of the third or second world in the first one, to significantly improve the

economic well-being of the country, it is necessary to put a lot more effort than, for example 10 years ago. Thus, in 2014, Sub-Saharan Africa has become a leader in the implementation of reforms: 74 (32%) out of 230 businesses regulatory reforms were implemented. In Senegal to start a business you need to spend 6 days for the registration procedures today, not 2 months like it was before. For example, in Norway you need to spend 5 days to start a business. Over the past 10 years, the number of countries in which you can start a business in three weeks increased from 41 to 127. Therefore, today 70% of the business can be started within 20 days. Ukraine is not in this list yet [8].

The instability of the economic and political situation in the country usually affects the level of credibility of foreign investors, which is reflected in the volume of foreign direct investment inflows into the economy. But indecisiveness in implementing reforms and their declarative manner influence more the formation of the investment image of Ukraine. More and more domestic and foreign experts point at the need for immediate change. And the Ukrainian government will have to implement it, otherwise there will be not only financial losses – in the form of the failure of investment, but also political ones – as the loss of international support.

Modern Ukrainian scientists and businesspersons emphasize the need for a more active position of the Ukrainian government to reform the socio-political and foreign economic relations. Thus, the efforts of the authorities should be focused on the implementation of effective reforms, rather than declamation of populist ideas and empty promises [1, 4, 16].

In the context of overcoming the consequences of crisis, all nations of the world, including developed economies, have moved from the liberalization of the economy to a more active implementation of its regulatory powers. In particular, they have not reduced, but rather expanded its powers in the sphere of economy, that is, strengthening the economic functions of the state. Many of them introduced two- and five-year plan of economic development and long-term program for its implementation [14].

In Ukraine foreign investors in order to minimize risks with regard to absence of the state support often resort to specific strategies. For example, Auchan Group to open new hypermarkets in the regions of Ukraine uses such methods:

- independent implementation of projects;
- participation in projects implemented by foreign and Ukrainian developers.

In order to implement the business activity in Ukraine for foreign investors it is preferable to create a strategic alliance or joint venture with a local partner. Such cooperation significantly reduces the risk and accelerates the process of entering the foreign market.

So, Auchan Group entered the Ukrainian market in 2007 through acquiring a 21% of equities of in "Furshet" (local retail operator) for $112 mln. At the same time it was a joint venture, "Auchan Hypermarket Ukraine" (Auchan possessed 66% of equity, and Furshet – 34%, respectively), with the purpose to develop hypermarkets.

This alliance allowed the "Auchan" to implement quickly the first project in 2008, and to open one of the biggest hypermarkets in Ukraine with a store area of 19 ths. m^2. The other two projects together with "Furshet" were implemented in 2009.

For 8 years "Auchan" has opened 11 hypermarkets in Ukraine, with a store area of over 10 ths. m^2 (each). Its latest project – urban supermarket with a store area of 5000 ths. m^2 was opened in Lviv in September 2015.

"Auchan" is not the only example of a foreign investor in the retail sector, which entered into an alliance with the Ukrainian company.

Thus, the Lithuanian BT Invest (Lithuanian supermarkets "Novus"), established by the former shareholder of the Ukrainian largest juice producer company "Sandora" Raimondas Tumenas, has become a major investor in the company "Capital Group" – one of the largest developers in Kiev.

For six years, "NOVUS UKRAINE" has opened 33 modern stores in various formats – with the store area of trading halls of 800 m^2 to 8000 m^2. (Novus first supermarket was opened in Ukraine in 2008).

In order to improve the investment climate in the country the Ministry of Economic Development of Ukraine plans to increase business activity for the purpose of state economic growth in 2016. The Ministry launched deregulation that provides for the abolition of excessive regulatory constraints and inefficient control procedures, abolition of excessive licensing, legacy systems certification, monitoring, implementation and other examinations restrictions on business, as one of the most effective tools for this

increase. And it is necessary to mention, that all these actions are done in terms of global strict regulatory of financial flows.

According to the Ministry of Economic Development of Ukraine, abolishing regulatory restrictions and inefficient procedures not only reduces the administrative burden on business, and therefore reduces the level of corruption, as well as gives an opportunity to businesses to concentrate on their core business.

The regulation takes place in three basic stages:

- Cancellation of key regulatory barriers to business;
- "Regulatory Guillotine" – a full review of the regulatory framework, provided that state agencies now need to prove certain constraints to doing business;
- The introduction of a preventive mechanism, which does not allow the recovery of excessive administrative pressure.

In addition, the law was adopted on the simplification of doing business, which canceled 16 inefficient regulatory restrictions, harmonized system of lease of land and created a system of "single window" for business start only for 2 days. Changes were made to the law on licensing, which abolished the licensing of 26 types of economic activity. The government decree on deregulation, which abolished the need for inefficient certificates in the agricultural sector and monitoring of subsoil use was also implemented. The law on the protection of investors led standards of Ukrainian legislation to European standards and provided protection for minority shareholders.

Next Steps of Ministry of Economic Development of Ukraine are to continue canceling another 130 inefficient regulatory constraints identified by government and business, as major "paint point" for its activity. With this purpose the Government has recently adopted the "Action Plan for deregulation" and has already begun to implement it. In addition, a second stage of reform – the "regulatory guillotine" is being prepared to begin the process of a complete revision of the regulatory framework in the near future [15, 17].

Unfortunately, the international and national statistics demonstrate the ineffectiveness of the implementation of the reforms proposed by the Ukrainian government at this stage. According to international experience, Ukraine should focus on:

• providing preferential tax treatment in the implementation of major investment in the Ukrainian economy;

• stimulation of investments in the real sectors of economy through the development of a system of state guarantees provided to investors in the priority areas of investment for Ukraine;

• increase in total public-private financing of investment projects with foreign capital;

• implementation of antitrust measures and ensure the internal competitive environment for the development of investment activities;

• organization of tenders and auctions for the provision of strategically important objects in a state concession to domestic and foreign investors [14].

We believe that without the introduction of the above proposed measures the improvement of the investment attractiveness of Ukraine would not materialize.

Conclusions. The data of statistics of Ukraine demonstrated a drastic decline in FDI inflows to national economy. This decrease was caused by instability in political issues with the Russian Federation, manufacturing reduction, foreign debt increase, inefficient use of available financial resources, etc. The detailed analysis of FDI structure demonstrated prevalence of partners in offshore countries, indicating at the return of "laundered" money, low investment attractiveness for domestic and external investors.

According to international rates of Ukrainian doing business environment national economy is still at low level of economic development and is not attracted by foreign investors.

In order to minimize and diversify risks while entering the Ukrainian market foreign investors use such strategies as an independent implementation of projects, or participation in projects implemented by foreign and Ukrainian businesses.

In order to improve the economic situation and investment environment Ukrainian government should not rely on populist recitations and should focus primarily on the provision of investment and the economic sovereignty of the country's security. This goal is particularly important because it gives guidelines for the adoption of the basic socio-economic decisions.

REFERENCES

1. ACEMOGLU, D. et al Recommendations for immediate policy actions to address financial crisis in Ukraine. 2014, 26 october [accesat 24 ianuarie 2016]. Disponibil: http://www.kyivpost.com/opinion/op-ed/recommendations-for-immediate-policy-actions-to-address-financial-criss-in-ukraine-369408.html
2. Державна Служба Статистики України [accesat 24 ianuarie 2016]. Disponibil: http://www.ukrstat.gov.ua
3. United Nations Conference on Trade and Development [accesat 11 ianuarie 2016]. Disponibil: http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx
4. SOROS, G. Wake up, Europe! 2014. 23 october [accesat 24 ianuarie 2016]. Disponibil: http://www.kyivpost.com/opinion/op-ed/george-soros-wake-up-europe-369040.html
5. ДЕРЖАВНА СЛУЖБА СТАТИСТИКИ УКРАЇНИ. *Інвестиції зовнішньоекономічної digest діяльності України*: статистичний збірник. Київ, 2014. 47 р.
6. WORLD BANK GROUP. Ukraine [accesat 12 ianuarie 2016]. Disponibil: http://www.doingbusiness.org/data/exploreeconomies/ukraine/
7. ДАНИЛИШИН, Б. Поддержит ли нас Запад во время зимней активизации Путина. В: Новое время. 2014, 9 листопада [accesat 24 ianuarie 2016]. Disponibil: http://nvua.net/opinion/danylyshyn/Podderzhit-li-nas-Zapad-vo-vremya-zimney-aktivizacii-Putina-19004.html
8. Думка експерта: Успіхи України в Doing Business не свідчать про якісні зміни. В: Економічна правда. 2014, 30 жовтня [accesat 11 februarie 2016]. Disponibil: http://www.epravda.com.ua/news/2014/10/30/501938/
9. Закон про державне прогнозування та розроблення програм економічного і соціального розвитку України: № 1602-III от 23 березня 2000. В: Відомості Верховної Ради України. 2000, № 25 [accesat 24 ianuarie 2016]. Disponibil: http://zakon2.rada.gov.ua/laws/show/1602-14
10. Закон Про державні цільові програми: № 1621-IV от 18 березня 2004. В: Відомості Верховної Ради України. 2004, № 25 [accesat 24 ianuarie 2016]. Disponibil: http://zakon2.rada.gov.ua/laws/show/1621-15
11. Індекс інвестиційної привабливості України у 4му кварталі 2015 року [accesat 21 februarie 2016]. Disponibil: http://www.eba.com.ua/uk/information-support/eba-news/item/33277-2015-12-28-1013
12. Інформаційна довідка про стан інвестування в Україні [accesat 24 ianuarie 2016]. Disponibil: http://reforms.in.ua/Content/download/Sessions/s1/11.3.pdf
13. КУЛІНІЧ, Т.В., МРИЧКО, М.А. Інвестиційна привабливість України та можливі шляхи її підвищення у сучсаних умовах. В: Вісник Національного ун-ту «Львівська політехніка». Серія Проблеми економіки та управління. 2013, № 754, сс. 34-40.
14. ЛАДИЧЕНКО, К.І., ТРОНЬКО, В.В. Інвестиційна привабливість України в умовах поглиблення соціально-політичної кризи. В: Теоретичні та практичні аспекти економіки та інтелектуальної власності. Маріуполь, 2015, вип. 1, том 1, сс. 59-68.
15. УНІАН. Порошенко оприлюднив тези «Стратегії 2020» [accesat 14 ianuarie 2016]. Disponibil: http://www.unian.ua/politics/989833-poroshenko-oprilyudniv-tezi-strategiji-2020.html
16. РЕЗНІК, Н.П. Інвестиційна привабливість України: стан та шляхи активізації. В: Сучасні питання економіки і права. 2013, № 2, сс. 29-34.
17. Постанова Верховної ради україни про направлення на повторне друге читання проекту Закону України про державне стратегічне планування: № 4219-VI 22 2011 [accesat 23 februarie 2016]. Disponibil: http://zakon2.rada.gov.ua/laws/show/4219-17
18. RAGHIMOV, M. Climatul investiţional – parte integrantă a economiei – teorie de reglementare şi realitatea practică = Investment climate on integral part of economy – regulatory theory and practical reality. In: Economie şi Sociologie = Economy and Sociology. 2012, nr. 4, pp. 190-198.

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PSEUDO-SCIENTIFIC ECONOMIC POLICIES OF MOLDOVA ASSOCIATION TO THE EU: METHODOLOGY, PROBLEMS, SOLUTIONS

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Economic policies and decisions on EU association starting with the begginig of 90's were pseudo-scientific, contradictory, incoherent because those policies have not based themselves on modern and current economic theories elaborated and promoted by the EU. Actuality. The topic is actual from the perspective of the factors' analysis which were conducting to delay the association process of Moldova to the EU. At the same time, those were increasing instability, disequilibrium in the national economy and raise of social vulnerability and constraint levels which ultimately increased the gap between the national and EU economic development levels. During the period of 2000-2015, the socio-economic policy of the Republic of Moldova is described more as small and fragmented steps on conceiving economic and financial instruments for the integration into the EU which were reflected in the Neighbourhood Partnership and Association Agreement with the EU. These processes conducted for the state incapacity to define its own objectives and social-economic priorities for the association as well as legitimated a continuous stage of transition to the market economy. The scope of the present article is to propose a real change of the development and social-economic association policies for achieving final objective on integration to EU. The proposals would consist in emphasizing and implementation of the EU economic principles reflected in the neoclassic synthesis and neo-conservative theories; the elaboration and implementation of a new Strategy on economic supervision, coordination and anticipation of the economic disequilibrium; achieve economic stability for diminishing the negative effects of the global and regional crisis on national economy and adaptation of the development policies to the national socio-economic conditions. The methods used for the elaboration and achieving the expected results of the study were analysis and synthesis of the reliable data on economic processes' trends as well as macroeconomic prognoses for designing a set of development scenarios. Results were reflected in elaboration of a system of actions which includes EU as a monitoring mechanism for preventing and anticipating the disequilibrium that may occur during the association process. Stimulation of consumption, of the research and technological progress and targeting foreign investments in the innovation development priorities are some of other actions that are recommended in the article.

***Keywords**: economic theory, imbalances and balances, crisis, recession, competition, competitiveness of the national economy, sovereign risk, internal threat, association and accession, external threat.*

Politicile şi deciziile economice de asociere cu UE, începând cu anii 90, au fost pseudo-ştiinţifice, contradictorii, fragmentare, fiindcă aceste politici nu s-au bazat pe principiile teoriilor economice moderne şi actuale, elaborate şi promovate de UE. Actualitate. Tema este actuală din perspectiva analizei factorilor, ce au dus la încetinirea procesului de asociere a R. Moldova cu UE, la distanţarea economiei naţionale de economia ţărilor membre ale UE. În acelaşi timp, aceştia au dus la creşterea instabilităţii, a dezechilibrelor în economia naţională şi a nivelului de vulnerabilitate şi constrângere de ordin social. În anii 2000-2015 politica socio-economică a R.Moldova s-a realizat, în principal, cu paşi mărunţi şi fragmentaţi în sensul creării instrumentelor economico-financiare de integrare în UE, reflectate în Parteneriatul de Vecinătate şi în Acordul de Asociere a RM cu UE. Aceste procese au dus la incapacitatea statului de a-şi defini propriile obiective şi priorităţi social-economice de asociere, precum şi au legiferat o stare continuă de tranziţie la economia de piaţă. Scopul prezentului articol este de a

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propune măsuri pentru o schimbare reală a politicilor de dezvoltare şi asociere social-economică cu UE, pentru a atinge obiectivul final de integrare. Propunerile constau în identificarea şi implementarea principiilor economice ale UE, reflectate în teoria sintezei neoclasice şi teoria neo-conservatoare; elaborarea şi implementarea unei Strategii cu privire la supravegherea, coordonarea şi anticiparea dezechilibrelor economice; obţinerea unei stabilităţi economice pentru minimizarea efectelor negative ale crizelor globale şi regionale asupra economiei naţionale şi adaptarea politicilor de dezvoltare la condiţiile social-economice naţionale. Metodele utilizate pentru elaborarea studiului şi obţinerea rezultatelor necesare sunt analiza şi sinteza datelor privind evoluţia proceselor economice, precum şi previziunea macroeconomica pentru dezvoltarea scenariilor de dezvoltare. Rezultatele sunt reflectate în elaborarea unui sistem de acţiuni, care va include Uniunea Europeana în calitate de mecanism de monitorizare, prevenire şi anticipare a dezechilibrelor, care pot avea loc pe durata procesului de asociere. Stimularea consumului, a cercetării şi a progresului tehnologic, precum şi direcţionarea investiţiilor străine spre prioritățile de dezvoltare inovaţională sunt alte acţiuni, propuse în acest articol.

Cuvinte-cheie: *teorie economică, dezechilibre şi echilibre, criză, recesiune, concurenţă, competitivitatea economiei naţionale, risc suveran, ameninţare internă, asociere şi aderare, ameninţare externă.*

Политики и экономические решения ассоциации с ЕС, начиная с 90 годов, были псевдо-научными, противоречивыми и фрагментарными, поскольку эти политики не были основаны на современных и актуальных принципах экономических теорий, разработанных и продвигаемых ЕС. Актуальность. Тематика является актуальной с точки зрения анализа факторов, которые привели к замедлению процесса ассоциации Молдовы с ЕС, отдалению национальной экономики от экономик стран членов ЕС. В то же время, они привели к росту нестабильности, дисбалансов в национальной экономике и уровня уязвимости и ограничений в социальной сфере. В 2000-2015 гг. социально-экономическая политика Молдовы реализовалась преимущественно путем осуществления мелких и фрагментированных шагов для создания экономических и финансовых инструментов интеграции в ЕС, отраженных в Партнерстве по соседству и в Соглашении об ассоциации Молдовы с ЕС. Эти процессы привели к неспособности государства определить свои собственные цели и приоритеты социально-экономической ассоциации, а также узаконили продолжающееся состояние перехода к рыночной экономике. Цель данной статьи заключается в том, чтобы предложить реальные меры изменения политики развития и социально-экономической ассоциации с ЕС для достижения конечной цели интеграции. Эти меры состоят в выявлении и внедрении экономических принципов ЕС, отражённых в теории неоклассического синтеза и нео-консервативной теории; разработке и внедрении Стратегии мониторинга, координации и предвидения экономических дисбалансов; достижении экономической стабильности для минимизации негативных последствий глобального и регионального экономического кризиса на национальную экономику и адаптации политики развития к национальным социально-экономическим условиям. Методы, используемые для осуществления исследования и получения необходимых результатов являются анализ и синтез данных о развитии экономических процессов, а также о макроэкономическом прогнозировании для создания конкретных сценариев развития. Результаты отражаются в разработке системы действий, которая будет включать Европейский Союз в качестве механизма мониторинга, прогнозирования и преодоления дисбалансов ассоциации. Стимулирование потребления, науки и технологического прогресса, а также сосредоточение иностранных инвестиций на приоритетных направлениях инновационного развития являются другие меры, предложенные в данной статье.

Ключевые слова*: экономическая теория, баланс и дисбаланс, кризис, спад, конкуренция, конкурентоспособность национальной экономики, суверенный риск, внутренняя угроза, ассоциация и интеграция, внешняя угроза.*

JEL Classification: A19, G01, G32, H12, D41.

Introduction: Theoretical and methodological foundation of the policies and decisions of the development and association of the Republic of Moldova to the EU is based on the economic pseudo-scientific theory of economic growth and the Non-European-Associative elements based on: - limiting the private property right and economic freedom; -oligarchy and monopolization of the regulatory institutions

responsible of the European course of development and integrated economic circuit; - deformation of the social and economic relations between Moldova and EU and of the market; - nonprofessional balancing between CIS and EU; - periodic change in the development vector; - consumption and fueled by remittances.

These trends have essentially compressed economic potential of local integration, because social spending and pensions significantly increased, a number of social facilities have been introduced; direct involvement of the state in the real economy has been admitted, while this economic potential has been dominated by oligarchy and monopolized, accumulation and investment in the real sector decreased, inflation increased and revenues already accumulated have been exhausted deepening imbalances and social and economic crisis, national currency have weakened essentially and low purchasing power of household incomes increased poverty and pauperism. Highlighting effective directions for overcoming the global economic recession in 2007-2009 and the prevention of economic and financial crisis swirled on regional level, implies the necessity of implementation of the Moldovan association principles developed by the EU on the basis of modern and current economic theories in the policies and decisions of development and European integration. National socio-economic policies of EU association adopted by the government have proven to be ineffective over time because they were based on the science of economic theory, including principles developed and promoted by the EU actors. Under conditions of vicious national crisis, the more acute role of science is highlighted and European economic association policy is highlighted in solving strategic problems of balancing the economic, financial system and the current structural, financial-budgetary, fiscal, credit and monetary and international trade.

Analysis of economic theories and mixed economic market systems based on these theories and European association policies does not have purely theoretical nature, but implicitly supports the implementation of a renovation or correcting system on the slowdown elements of the process of association of the actual national economic system with the EU, especially relevant measures in preventing or overcoming the social and economic inequality between Moldova and EU. The fact that the European association of economic science and policy has become at the moment the only chance and so-called "lifeline" for the policy-makers, it demonstrates new rules established on the national level comparable in some cases with the introduction of the gold as a reference standard after the Second World War. As a balancing measure for the economic system, IMF limits for financial policy or budgetary deficit can be maintained or new agreements in the framework of the Basel Convention on bank system regulation. Investigations have shown that Moldovan economy as part of the global and European integrated economic system is continuously exposed to the regional risk of economic, financial, monetary and social crisis. At the same time, slow and modest scientific, technical, and economic progress related to its specific position between two systems and geopolitical forces diametrically opposed worsens the economic situation. The policies and economic decisions that were already implemented in the national economy have not been based on the principles elaborated and promoted by the economic policies and streams of the European association and have led to the increase of economic instability and social and economic inequalities, growth in the level of vulnerability generated by the internal and external factors, continuous apparition of social constraints as a result of the decrease in the local economic potential and public structures in Moldova. The above-mentioned problems that local economic and social systems faces, determine the actuality and theoretical and practical importance of the implementation of the social and economic policies of development and EU association. In order to improve the situation regarding the stabilization and economic growth political will and urgent and radical measures from all the authorities are requested.

Basic content: Scientific policies of economic association of the Republic of Moldova to the UE under the conditions of recession have to include mechanisms for supervision, correction and forecast of the economic imbalances and to be based on the economic theories, so as to realize the balance of the economic indicators and creation of prerequisites for economic development, association and EU integration. Imbalances, social and economic disparities include and affect the most sensitive and important element of the economic system, including the real economy, the system of entrepreneurship, small and medium business, enterprise system of individual, family, etc. Permanent instability and monopolization of political, social, economic and monetary relations represent social danger that threatens national interests and state security. It is necessary to develop a strategy for monitoring the state after the EU model on macroeconomic imbalances. This strategy may include surveillance through prevention and

correction of imbalances through coordinated monetary, fiscal and structural reforms (see diagram). In economic system since the 2000s there were not any bodies on macroeconomic surveillance.

The Communist party having the constitutional power in the period 2001-2008, „chunked" the law of financial institutions, law on budgetary and fiscal process, the Government decisions and NBM, etc, in order to retain the development principles on the European path; - to monopolize the economic system and to borrow and "eat" 9 billion of lei from the National Bank of Moldova during the governance for "for social needs"; - to change the procedure on forming and execution the budget on allocation of the funds of those territories where communists were in charge;- to cancel the law on the establishment of the Counties, returning to the rayon party structure and their illegal funding;- to revise the results on privatization in order to return the Economic Bank of Moldova to state through which they could steal billions. A series of decision have been made that led to macroeconomic destabilization monopolization of the market and deepening imperfect competition (for example they took decision that imposed all the public services, taxed, pensions, governmental credits, grants, that were to be made only through the Economy Bank, in this way all the other banks were in a position of unequal conditions in relation to loyal competition

All these and other actions for monopolization of the socio-economic system paved the way for oligarchs from the Governing Alliance, in the years 2009-2015, to monopolize the economy and to steal even more through the of raiders of the commercial banks. „Reshaping" the law, oligarchs from the Governing Alliance had „released the hands" of the checking institutions to respond directly and criminally for stealing billions by oligarchic power.

Therefore since the 2009 state institutions informed each other on the ongoing activity and combinations of the theft, but nobody supervised this disastrous processes for the country and there were not any prompt and definitive mechanisms for surcease the deviation from the European development vector, to end the theft of the billion euro through the state bank of economy and to prevent economic and political capture of the state

In order to end this fatal processes it is necessary to create an **Economic Constitutional Court-ECC** within the Constitutional Court, that is dealing with the fulfillment of the legislation, supervision, prevention, correction of imbalances, primary between the Parliament, Government and Presidency, the functions of which could be the supervision and coordination of the real EU association process, economic imbalances and in case of governance deviates from the principles of the science and economic association and generating social and economic instability to urgently stop these negative activities adopting decisions of conclusive corrections. It is important that for committing the imbalances, responsible persons must be sanctioned by ECC and to be responding criminal justice and to recover the damages. For these, it is necessary to change and harmonize the Moldovan legislation with the EU.

Uneven and rapid changes in the Moldovan-European relations in the market economy conditions can cause deepening of the imbalances in the association process that requires constant monitoring and prevention by Economic Constitutional Court by accelerated and adequate changes in the legal system. Structure and supervisory functions of the Economic Constitutional Court of supervision, coordination of the Moldova-EU association and anticipation of imbalances in the EU integration process are reflected in the scheme.

On the strategic base of government and CEC coordination of the processes of EU association and supervision and anticipation of imbalances in the Moldovan-European relations may be found in modern and current economic theories which will take into account and will be achieved in practice of association of various types equilibria, including: economic doctrine and balances system between Moldova and the EU and national money markets; balances of production factor and goods markets; labor markets and their equilibrium conditions etc. Particular attention in the European integration process will be directed to the Moldovan general imbalance theory of economic equilibrium models that are performed in EU member countries. The strategy of associating R Moldova with the EU should take into account the general equilibrium theory and especially economic equilibrium models, including Walras-Wald and Arrow-Debreu-McKenzi. CEC and the government in its activities of cooperation and integration in the European social and economic field industry must be guided by the fact that in the last three decades there appeared new more complex and sophisticated currents on the imbalance and balance system including neoclassical contemporary system that includes various currents, starting with the general balance current of J.Keynes, K.Arow, monetarist current represented by the M. Fridman and S.Fisher and finishing with J.Bucheanan's reasonable expectations current; current "new macroeconomics", etc. Under theory and equilibrium policy

of Moldovan-European systems economic, it is necessary that governance and CEC to highlight and realize the components of this theory and policies, such as multiple balance and equilibrium problems; elimination of restrictive assumptions, strategic interaction between agents; game theory, etc. Imbalances or social and economic balance with impact on development and economic association, can be used by government and CEC after the report and deviations from optimum Moldovan-European aggregate supply and demand; global product and money supply which drives the product, the rate of expenditures, deficit or profit and national and European income.

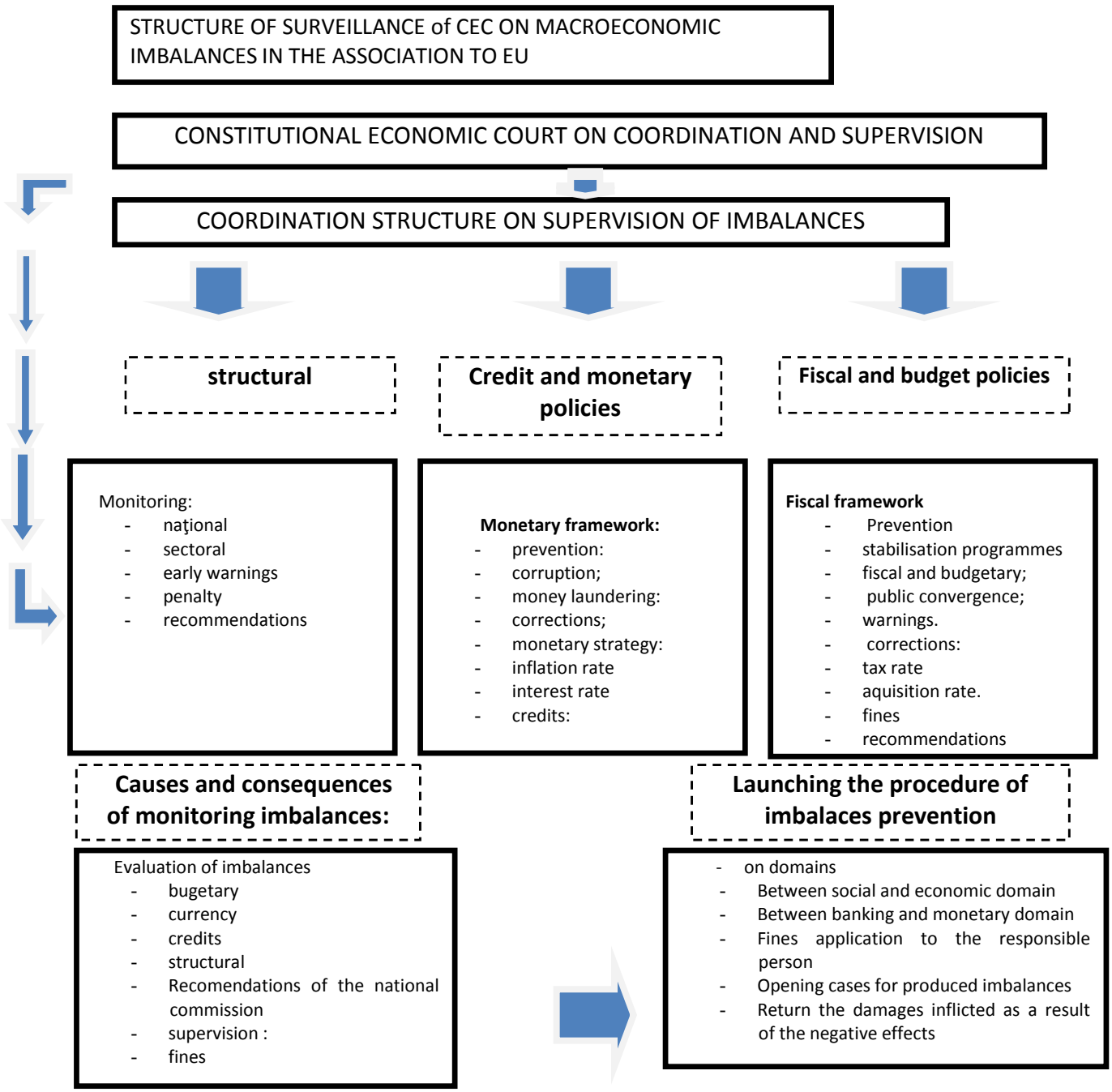


Fig. 1 Structure of surveillance of cec on macroeconomic imbalances in the association to EU
Source: Rusu Gh., Trofimova T. Stabilizarea şi creşterea economică;aspecte metodologice, probleme, soluții, Chişinău-2007,CEP USM. pag25-60

The most significant imbalances in the national economy compared to the economies of EU countries that are necessary to be taken into account, are the disproportions between the volume of Moldovan currency and the required volume of state reserves as a result of the theft of the billion, in the foreign currency, from BEM, which caused the essential devaluation of the Moldovan leu and the decrease in purchasing power of it; stagnation of the production and contraction of the real sector; inflation and sudden increase in the consumer price index on domestic origin goods, unemployment and migration of labor from the country and the sharp rise in poverty compared to living standards in the EU.

In case the Constitutional Courts and CEC do not supervise and forecast the deepening of the political, juridical, social and antisocial imbalance, social and political tensions occur (i.e. social and political events from 7-8 of April, 2009 and those periodic from 2015 and 2016 in Moldova). At present, due to the social and economic instability, political tensions and disparities between the government and civil society had reached the top and transformed in antagonist contradictions.

Usually these imbalances are characterized by the change, including the forced one of the power in the state (i.e. Maidan in Ukraine), economic recession, significant increase in the budget expenditure above the level of the budget incomes which generates the increase of social pressure on the population and economic agents, extension of monetary emission without coverage, the decrease in the purchasing power of the consumers and, respectively, diminishing of the consumption. In 2015-2016, in Moldova, imbalance in the labor market increased significantly, social instability between the supply and demand of the work and unemployment. Generally, there is an institutional instability that generates imbalances in the system of fund allocation between the central and local public institution, increase of the monopolization level and oligarch process of production, trade, banking system and insurances. CEC and the Government in the activity of EU association and integration must take into account the fact the Moldovan-European economic imbalances and balances develop, in geometrical progression in time, in relation to the levels aggregation of national economy and EU, depending on the content of the integration processes in the EU economy and the way of expressing the results of economic association. It should be taken into account that the implementation of the Association Agreement with the EU is complicated because of the essential deformation of economic interest and production relations, exchange, distribution and consumption of the various economic sectors and branches operating outside optimal functioning of economic and legal systems. The government should consider the Moldova's association to EU the strategic vision of economic currents on policies to overcome the economic imbalances realized differently in different EU countries, namely: liberal policies requiring a balanced development of the economy, based on the development of private property on mechanisms of free competition on the market, policies of supply of non-interference in private economic activity, supporting free enterprise – regulated policies or balancing policies based on actual demand, which require the indirect intervention of the state and which focuses on global demand; - Social-democratic policy of economic balance that proposes mechanisms of growth based on of social consumption through direct involvement in economic system elements of planning, reducing social inequalities through advanced social protection and facilitating social grants; - Development of the equitable policies of the economic system according to the social policies that limit activity and freedom of economic agents in times of overheating of economy, increasing influence and state's role in social and economic life, limitation of speculative economy, reform of the system of income budget distribution for vulnerable social categories.

It is useful to bear in mind that theories and models of economic equilibrium development essentially evolved over time, according to dynamics of economic reality and of development of economic analysis tools. There are two trends of theoretical and practical opinions on economic equilibrium and overcoming of the economic disproportions. The first tendency is based on researching the short-term balance and on a static background of economic processes in the EU. In this context, the problems of overcoming the disproportions are reduced to development of perfectly competitive market that will solve problems of equilibrium, while economic crises are seen as random phenomena. The second trend consists of researching problems of imminent imbalances of the EU social and economic systems. In this way, the theory of disproportions and social and economic imbalances appeared as an alternative of the economic equilibrium theory. At the head of the table of the CEC and the Government must be J.M. Keynes concept on balanced development that represents a macroeconomic model, according to which national income increases as a result of the equivalent increase of the aggregate demand. The Government and CEC must implement new Keynes concepts related to the balanced development: stimulating the consumption and investment, regulations, that had an important role in the elaboration of the balance policies. In the same

time, it must be taken into account that in the beginning of the 40s R. F. Harold I. Essay and E. Domar had developed postkeynesist models, subsequently characterized by concern for economic stability and unemployment. Harrod-Domar model is a model of balanced economic development that emphasizes the role of private investment seen as a accumulation and component of aggregated balance; incorporates a simple function of accelerating investments based on expected real income. According to this equilibrium model, EU countries maintain the expected coefficient of the capital (V) constant as a result of an assumed interest rate constant in the long term - 0.25-1.5%; economies of these countries have a constant share (s) in real income; EU labor markets increase by an exponential rate (n) determined exogenously; and the growth rate of labor productivity in the economic systems of European countries actually enhances by the technical progress (λ) which constitutes about 50 percent of EU GDP growth.

Accomplishing the conceptions of the EU association by overcoming the economic crisis, the governance and CEC will include its main final objectives and ways of supervision and implementation by applying political science to overcome the disproportions and balanced development. In the same time, exogenous factors must be taken into account such as conditions of global and regional financial and economic crisis, open and competitive markets, adjustments to the EU economy standards and to the and European level of values.

Results. The specifics of the pseudo-polices analysis of the economic growth and association to the UE are based on the synthesis of the socio-economic, monetary, budgetary and fiscal, investment, structural policies, implemented at the national level. The main feature of the economic system and EU association and integration policy consists of continuation of the economic transition and the use of double standards in establishing of a system of market economy, the deformation of the main criteria of market economy at various levels of their implementation in the national economy. Local economic system has undergone various stages of governance but the most controversial was the period of the right force/CPRM government and the other when the governance of pro-european forces came with neoliberal and social-democratic economic policies.

Based on the analysis of the macroeconomic indicators and the production function between the „labor" and „capital" factor calculated in the last decade, we state that the efforts of national economy development and association with the EU, were bigger than the achieved effects, despite the fact the EU provided significant financial support to Moldova. In 2005-2015, fixed productive capital of replacement increased by 3,8, and the nominal GDP increased at a slower pace and grew by 3,3. Decrease of the actual labor force in 2000-214 by 329 thousands people, or on average by 2,44% annually, essentially influenced the decrease in the efficiency of the economic development and association potential.

Negative migration trends, decline in economic activity rate from 60% to 40% has ,,eroded „ the GDP growth from labor and growth of capital and productivity, because this priority extensive growth is insufficient to ensure future dynamic sustainable, balanced and convergent development towards European integration. According to analysis of the results we can state that specifics of the pseudo-scientific policy of development and association with the EU based on consumption, has caused inefficient GDP growth of 4.5-5% on annual average in the last decade, using quantitative investment of replacement of the existing productive capital, that is depreciated morally and physically. More accelerated growth of the average wage and fixed capital compared to the labor productivity (average wage and productive capital raised by 7,1%, and 10%, respectively, on annual average, and the labor productivity only by 5%) in Moldova compared to EU have constrained local economic potential, „eroded" financial resources and economic agents and population accumulations, increased disproportions in the economic and social domains.

Fiscal and budgetary policies conducted in Moldova during the transitional period contradicted the association policies and were manifested through inconsistent contradictory and ineffective political conditions. In 2005-2015, the National Public Budget deficit increased significantly and peaked in 2014 with a volume of more than 2.0 billion. Lei, which constituted 4.7% of NPB revenue.

In the same time, due to the internal economic situation, Moldova was obliged to attract cheap loans from the external market, as well as those provided by the IMF. Despite of the fact that these loans are provided on concessional repayment terms, with an interest rate up to 1% and grace period more than 10 years, the effect of these loans was minimal for the real development of the economy because of the rough conditions and strict main constraints envisaged by the necessity to maintain national financial and budgetary stability. The constraint system is expressed in the limits of the financial, monetary and budgetary indicators introduced by IMF such as: a) total cash deficit limit; b) the limit on net assets of the

NBM; c) the minimum level of net international reserves of the NBM stocks; d) limit on contracting or guaranteeing of external non-concessional debts of the Government of Moldova; e) limit on limit; h) limit on payroll; i) the level of social expenditure; j) limit on the budget deficit as share from GDP; k) limits on the level of inflation. These and other factors led to the inability of adoption of the radical and effective reform on medium and long term and deprivation of resources for investment in real innovation priorities and expenditures in infrastructure and the inability to implement EU association policies.

A special feature of the national economic system that prevents actual accession to the EU is to transform this system into a market economy with essential deficit of financial resources (average share of bank credits to the economy in 2005-2015 was about a third of GDP) and with a considerable decrease in their revenue of economic agents and population. The situation is even more alarming if we consider the significant increase in interest rates and the dramatic decline of the purchasing power of these resources in 2014-2015.

The situation on intermediation and financial stabilization in 2015-2016 is even more alarming because once the interest rate increases, the volume of money supply in economy decreases significantly (particularly in the small business system) and the money "fail" to serve the real economic cycle. As a result small business bankrupts (2010-2015 bankrupted 15.5 thousands of companies). In the same time the volume of the shadow economy increase, favorable conditions for money laundering appear, expanding economic instability and reduce legal real sector. The situation in the economy will alarm, if we consider that the speed of circulation of money increases and insufficient share of cash in circulation (average of currency circulation in 2005-2014 amounted to 13.4% of GDP), which in 2015 has an essential trend of decrease. Just in the period from July 2014 to April 2015 cash in circulation decreased by 2.7 billion lei and made up 15.4 billion lei, the monetary supply decreased by 3.7 billion lei, and state reserves increased by 4% (data of the National Bank of Moldova). To achieve the target policy of association we propose immediate change in economic policy, including the monetary one, increase the volume of credits in priorities in a relatively short period by 2.5-3.0, decrease the interest rate from 20% to 5% which will allow increasing the volume of current assets to the level required for normal development of priority branches of economy and efficiency and increase, respectively, increase in real GDP. If this volume of credits for priorities will be covered by an increase in foreign currency reserves from the EU, then a significant increase in inflation and an increase in prices won't be recorded. Increasing the rate of lending of the economy, lowering the rotation speed of money and essential increase investment and remittances in key industries-all in line with the reform budgetary and policy reform and business and institutional environment, will create conditions to stop economic recession and create necessary conditions for real association with the EU.

Reducing the volume of exports and imports will result in regional trend of productivity and living standards of the population reduction and will not be based on internal factors that discourage domestic producers in express and unconscious way that is currently done. In the same time, the expected outcome of the proposed recommendation is to maintain flexible balance of the main macroeconomic indicators, such as consumer price index, inflation, monetary indicators, current account deficit and internal and external public debt. Stability is achieved in private sector activity, facilitating regulatory mechanisms in business, the growth of investment volumes in key economic sectors, eliminating bureaucracy in administrative system will lead to maintaining positive trends of macroeconomic indicators and, consequently, to limit market distortions and will increase the pace of association of Moldova to the EU.

Conclusions. National economic development policies and association to the EU adopted by the economic actors have proved to be inadequate because they were not based on principles developed and promoted by the scientific and economic trends and on the principles of Moldova Association Agreement with the EU. In order to overcome the economic recession in Moldova and the efficient process of association and integration to the EU, there is a need for implementation of the **policies of renovation** or correction of the negative elements on the basis of economic science and economic policy of EU association.

In is necessary to develop and adopt a strategy on surveillance on imbalances and socio-economic development and association to the EU that would serve as a program to overcome the period of economic instability. This recommendation involves assessing the conditions of economic recession and association that led to the previous economic crises, such as: adaptation of anti-crisis and association policies to the national socio-economic conditions; highlighting and implementing the principles of the neoconservative and neoclassical synthesis theory and EU association policies as a basis for strategy to minimize effects of

the global and regional crisis for Moldova. It is still necessary to implement a system of joint actions with the EU to stimulate productive consumption and productivity and attracting foreign investments in economic development priorities. These assumptions come from the scientific analysis of the conditions that contribute to expanding economic recession in Moldova and the need of real association to the EU.

We propose to create an Economic Constitutional Court within the Constitutional Court, for supervision, coordination of the association system of the MD-EU relations and anticipating economic imbalances. In reforming the structure and functions of the state, the main focus is put on the implementation of the Mid and Long Term Strategy, justice reform and combating of the corruption, especially in the banking system, ensuring transparency and accountability of the new structure and economy, as well as the new implemented procedures. In the same time, it is important to ensure population's trust to the democratic system and its norms, such as right to appeal and right to information.

The reforms necessary for the EU association and integration and transition to a definitive mixed market economic system whose role is to promote climate necessary to the regulatory framework for facilitation of licensing procedures, creation, bankruptcy and liquidation businesses, social-economic reform and adjustment to social welfare losses by protecting the most vulnerable population an in the same time promoting sustainable and rapid growth in the process of optimization of the proportions in social and economic domain. It is important to create a stable macroeconomic environment by redefining the role of government agencies that are concerned with economic policy, in this context, putting the NBM to exercise its functions independently of monetary policy implementation and monitoring of the currency processes. It would be necessary that the Ministry of Economy and Ministry of Finance to stop lending and the control of the exchange rate. On the other hand, it would be advisable to focus surveillance efforts on imbalances and monitoring and forecasting of the economy, to monitor the effectiveness of processes related to budgetary expenditure and revenue, strengthen tax administration.

The fulfillment of the association policy to the EU requires optimization of the fiscal pressure and directioning of the fiscal and budgetary policy towards concentration of the direct budget allocation and decrease of the facilities offered to different free zones and companies and subsidies to inefficient companies. Creation of a modern European financial system requires decentralization in provision of credits, elimination of monopoly and oligarchy of the banking market and creation of a financial transparency. Additionally, commercial banks must activate based on risk and profitability taking into account the need of the competitiveness development in the Republic of Moldova.

REFERENCES

1. DĂIANU, D. *Echilibrul economic şi moneda: keynesism şi monetarism*. Bucureşti: Ed. Humanitas, 1993. 160 p. ISBN 973-28-0318-5.
2. WALRAS, L. *Elements of Theoretical Economics: Or the Theory of Social Wealth*. Cambridge: Cambridge University Press, 2014. 588 p. ISBN 9781107064133.
3. KEYNES, J.M. *Teoria generală a ocupării forţei de muncă, a dobînzii şi a banilor*. Bucureşti: Ed. Publica, 2009. 488 p. ISBN 978-973-19-3102-9.
4. Moldova 2020 Strategia Națională de Dezvoltare: 7 soluţii pentru creşterea economică şi reducerea sărăciei [accesat 21 februarie 2016]. Disponibil: http://particip.gov.md/public/files/strategia/Moldova_2020_ROM.pdf
5. Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part. 2014 [accesat 11 februarie 2016]. Disponibil: http://gov.md/sites/default/files/document/attachments/7048451_en_acord_asociere.pdf
6. ROBU, T. Unele aspecte ale realizării principiilor economiei de piață în Republica Moldova. In: Economie și Sociologie = Economy and Sociology. 2009, nr. 3, pp. 80-85.

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WORLD ECONOMY POST-CRYSIS DEVELOPMENT

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Once the acute phases of the financial and euro crises were over, it was clear that it would take time for advanced economies to recover. The history of past financial crises gave a clear warning that recovery would typically be long and painful. The aim is to investigate the state of the world economy to make some conclusions for the less advanced countries, like Moldova. Research methodology involves analytical, comparative, foresight, induction and deduction methods. New development and planning institutions presume the rejection of forms of bureaucratic centralism and base on network forms of organization of the subject and the process of production, trade and services.

Key words: *economic growth, crisis, post-crisis, benefits, efficiency, time required.*

Odată cu trecerea fazelor acute ale crizelor euro şi financiare, a devenit clar că ţările cu economia dezvoltată vor avea nevoie de timp pentru recuperare. Istoria crizelor financiare anterioare a dat un avertisment clar că recuperarea, de regulă, poate fi lungă şi dureroasă. Scopul articolului este de a cerceta starea economiei mondiale şi a obţine unele concluzii pentru ţările mai puţin avansate, precum este şi Republica Moldova. Metodologia cercetării presupune următoarele metode: analiză, comparaţia, foresight, inducţia şi deducţia. Noile instituţii de dezvoltare şi planificare presupun respingerea formelor centralismului birocratic şi se bazează pe formele de organizare a subiectului şi procesului de producţie, a comerţului şi serviciilor în reţea.

Cuvinte-cheie: *creştere economică, criză, post-criză, avantaje, eficienţă, timp necesar.*

После того, как острые фазы финансового и евро кризисов закончились, стало ясно, что странам с развитой экономикой потребуется некоторое время для восстановления. История прошлых финансовых кризисов дала ясное предупреждение, что восстановление, как правило, может быть долгим и болезненным. Цель статьи состоит в исследовании состояния мировой экономики и получения некоторых выводов для менее развитых стран, как Молдова. Методология исследования включает следующие методы: анализ, сравнение, форсайт, индукция и дедукция. Новые институты развития и планирования предполагают отказ от форм бюрократического централизма и основываются на сетевых форм организации субъекта и процесса производства, торговли и услуг.

Ключевые слова: *экономический рост, кризис, пост-кризис, преимущества, эффективность, необходимое время.*

JEL Classification: F63, F01, G01, H12.

Introduction. For the world economy, 2016 promises to be better as the year before. A number of Asian countries restore their economies, but risk still dominates the crisis on economies. The global financial crisis as well as sustainability demands require economic adjustments on environmental protection and natural conservation and will continue to change business models, will alter or create new markets, which increase the need for a new strategic approach. Strategic response cannot be determined at random but only through a process that requires consistent strategic consulting, analysis, concentration, responsibility and determination to continue changing the way trade and exports are directed. The path to

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a new culture of export-import, economic prosperity being opened by earlier strategies, but the road to quality, innovation and creativity is long and requires a permanent resumption of strategic cycles.

The research purpose is to study the state of the world economy, global strategic trends, the vector of economic development of economically developed countries, new industrialized countries, emerging countries, etc. **Research methodology** involves analytical, comparative, foresight, induction and deduction methods.

British consulting company Economist Intelligence Unit expects that in 2016 the global GDP will grow by 2.8% in market prices, compared to 2014, and taking into account the purchasing power parity – by 3.7% (Figure 1). However, this growth is not as impressive as expected by experts back in the mid-2014. Sustainable Development Goals have replaced the Millennium Development Goals, which operated from 2000 to 2015. Previous goals were aimed primarily at solving social problems in developing countries, while the new goals of sustainable development are targeting worldwide. They presume an interconnection of the basic elements of sustainable development – the economic growth, social inclusion and environmental protection.

Sustainable Development Goals are the result of the negotiation process, involving the participation of 193 UN member states, which involved as well a wide range of civil society and other stakeholders. In particular, the work process involved representatives of national networks of the Global Compact, including Russia.

As a result, the group of experts identified 17 sustainable development goals with 169 targets (Millennium Development Goals aimed at achieving 21 targets). The current agenda represents an action plan for the humanity, the planet and for prosperity. Today we embark together on a path that leads to sustainable development, dedicating ourselves to ensure global development and mutually beneficial cooperation, which can bring great benefit to all countries and regions of the world. UN Secretary-General called the event historic and stressed that the new agenda of sustainable development requires global solidarity. Earlier events, carried under the UN auspices, have repeatedly stressed that the most important role in achieving the goals of sustainable development belongs to the business, acting in partnership with initiatives such as the UN Global Compact and other international programs and projects aimed at promoting the idea of corporate social responsibility and sustainable development.

The biggest risks persist in Europe. Japan lost as well its substantial growth impulses, although the stimulating measures of the Bank of Japan restored to some extent the luster faded "abenomics" [1]. In 2014, China has avoided the crisis, but in 2015 the country's GDP will grow "only" by 7% – an impressive figure, but lower than expected by the business community.

Ironically, the prospects for stronger economic growth in the US created a new risk – the increase of interest rate by the Federal Reserve, although this is unlikely before mid-year. The effects may cause some turmoil on global financial markets and impact investments in emerging markets. If it continues, the fall in oil prices could give further impetus to the growth of global GDP in 2015.

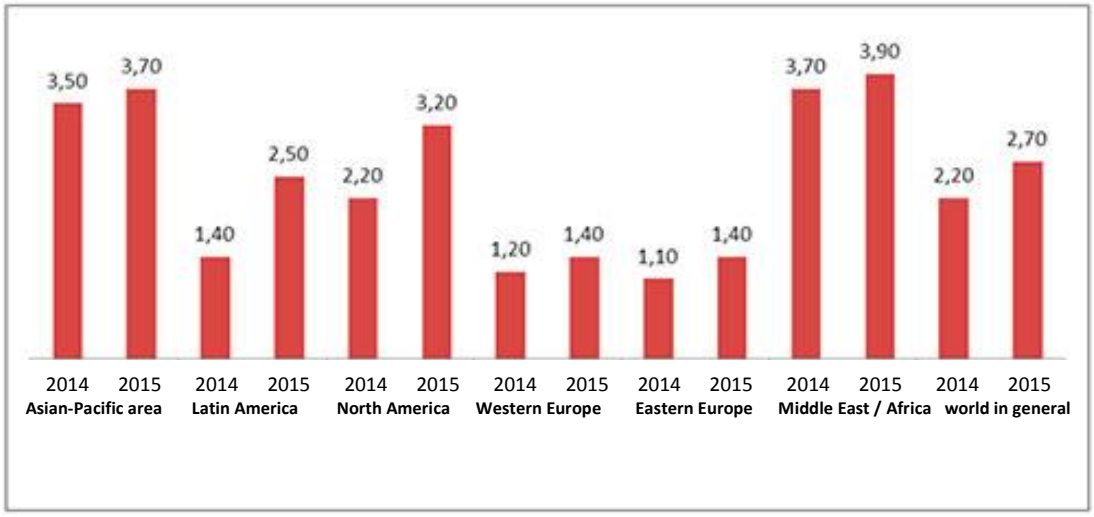


Fig.1. The rate of GDP growth,%

Source: Economist Intelligence Unit. Automotive industry.

Economic recovery in Europe will loosen the pressure on the global automotive industry; but investment in the future growth will require difficult decisions. In 2016, the competition is maintained between the Volkswagen and the Toyota Company, the world's largest car manufacturers. The German giant has already narrowed the gap between it and General Motors, and the end of 2014 narrowly approached its Japanese rival. The success of the Volkswagen Company was largely due to its leading positions on the fast-growing Chinese market; however, it was recently marked by several problems linked to harmful emissions scandal. At a time when the China's pace of development is slowing, it faces the challenge of finding new areas of growth.

Emerging markets are not predictable. Of the four largest – Brazil, Russia, India and China – only China displays some growth. In Brazil, along with Argentina, Chile and Venezuela, in 2014 production fell, although in 2015 there has been a slight growth if the industry. In Eastern Europe countries, where the expectations are that the annual sales will exceed the German ones, was registered a sharp reduction in its sales. The State recycling program has softened the fall; however, it is a heavy burden for public finances, burdened by a decrease in oil prices.

India is close to outpace Germany in terms of car sales, but this can be achieved not earlier than 2016. Following a two-year downturn in the automotive industry of the country, a planned growth was registered, due to government support. Long-term trends, in particular demographic, are also a positively influencing this process.

As for the smaller Asian markets (production and sales) – some of them (such as Indonesia and the Philippines) continue to display a steady growth. However, government measures aimed at reducing fuel subsidies and combating urban congestion indicate that the former high rates are hardly achievable once again. Thus, Asia growth rates are decreasing, Latin America has high risks, and Eastern Europe reduced sales. Against this background, the developed markets are noticeably revived. The US displays rather strong growth indicators, and Western Europe has finally overcome the sales crisis (Figure 2).

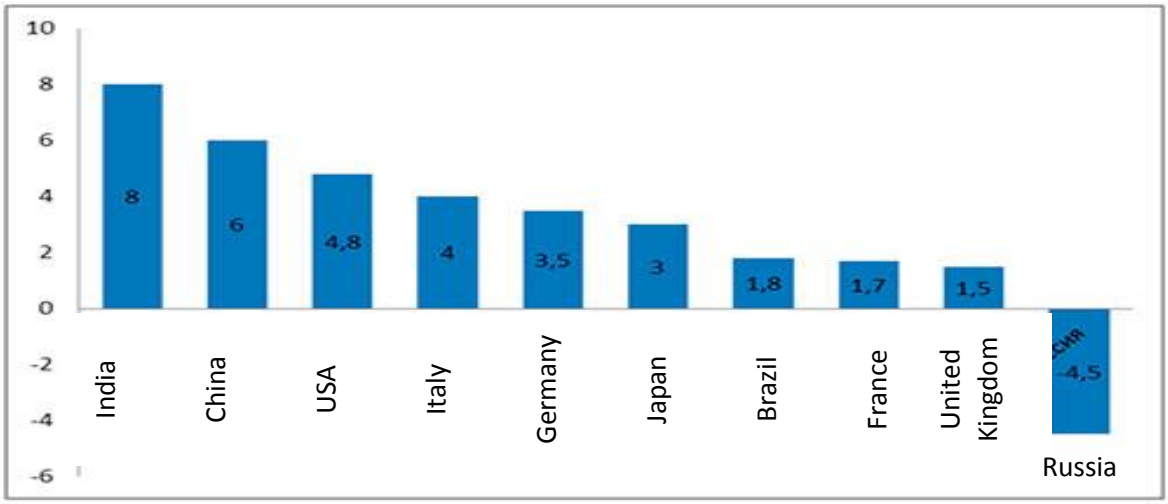


Fig. 2. Increase in new car registrations in 2015 compared to 2014, %

Source: The Economist Intelligence Unit.

Changes in the structure of global demand affected the investment decisions of the leading car manufacturers, who continue to plan investment in developing countries, but are forced to reduce their volumes. For example, in the next five years Volkswagen plans to spend 30 billion USD for its joint venture with China. General Motors, the biggest rival of the German group in China, plans to open five new plants in the country within five years.

Investments in Brazil and India seem to be more uncertain. The focus is being transferred to the ASEAN countries, especially on Thailand and Indonesia. It is expected that the Economic Union and the ASEAN Free Trade Area will start operating by the end of 2015. Mexico it's another popular area of investment, where automakers orient towards the domestic as well as towards the North American market.

Most interesting is the fact that Volkswagen plans to implement 50% of its investments in Germany. Europe is still burdened by excess capacity, but due to the suspension in 2014 of the wage growth the necessity for job cuts has declined. Economic recovery in Europe may prevent the closure of plants in 2015. The slowdown in developing countries shows that they also face the problem of excess

capacity. For example, China's production capacity in the automotive industry can reach 30 million vehicles per year, while annual sales do not reach 20 million units. In Vietnam, automobile factories also operate far from full production capacities, as well. As for Russia, in 2014 the decline in sales has led to downtime of production lines, and in the same year AvtoVAZ has cut off 15 thousand jobs. Despite the short-term increase in sales, layoffs are likely to continue until 2020.

In China, as a response to the decline in domestic demand in 2014, many local manufacturers have focused on exports. Thus, Geely actively markets its vehicles in the Middle East, Africa and Latin America, where safety standards and emissions are less stringent than in developed countries. At the same time (albeit slowly) negotiations regarding supplies of Chinese cars to developed markets are carried out. This may occur, most likely, not in 2015, still in the next five years.

Several automakers, such as Hyundai and KIA, move into higher price segments, while others speed up the process of releasing of new models unto the market. The Volkswagen and Renault-Nissan companies have to compete with their own cheaper brands. Consumers are becoming more demanding when it comes to security and entertainment, per say. Meetings such demands may lead to an increase in costs in conditions of more or less stable prices. The shift from gasoline-powered vehicles also increases production costs. The automotive industry is increasingly faced with tougher regulation of fuel efficiency. In 2015 Europe, for example, has set the CO2 emissions limit at 130 g per 1 km of track, and by 2020, this requirement will toughen even more.

In 2014, sales of electric cars have grown. However, they are likely to fall short of expectations. Electric cars now face a competitor – hydrogen engines. In the spring of 2014, Hyundai Company launched a version of its hydrogen SUV Tucson, and in 2016 Toyota plans to launch the mass production of its Mirai hydrogen model. Sales of such cars are small, but the technology has already been mastered. These programs will require huge investments. However, the prospects of the global automotive industry seem to be more optimistic than a few years ago. After diving out of one crisis into another crisis, the main automakers finally found partners that provide to them markets.

Among other important trends of 2014, there should be noted the end of the era of fuel subsidies. Their reduction has been made possible as a result of falling oil prices. Indonesia and Malaysia realized it at the end of 2014; India could make further steps towards the liberalization of prices in 2015.

Also should be mentioned the important production change of using aluminum as a structural material. Emerged in 2014, the trend of replacing steel by aluminum in the manufacture of car bodies will continue, and will probably strengthen in 2015. This will lead to a weight reduction of vehicles and facilitate the achievement of the requirements of emissions and fuel efficiency. Leading American manufacturer of rolled aluminum – the Novelis Company, predicts a five times increase in its global sales by 2020, as a result of demand from the automotive industry.

Production of consumer goods and trade

This sector of the global economy is experiencing quite difficult times. Intense competition, governmental regulation, and the dictates of the consumer are reducing sales profitability. In 2015, considering the economic turbulence of recent times, even the stability of the usual indicators will seem a boon to companies in this sector. Western Europe is experiencing a resurgence of a certain optimism and growth of sales volumes. However, the decline in prices and uncertainty concerning the Russian market (due to sanctions) weighs heavily on profitability. In Asia, North America, Africa and the Middle East, the situation is somewhat better, although these markets also face various problems. Trading Companies in North America also struggle with low profit margins. The slowdown in growth in China, the weakness of the Japanese market and a reduction in foreign multi-brand investment in India are just some of the dark clouds on the Asian sky. Latin America displays a much better situation. Following a difficult 2014 year, Mexico's prospects are quite optimistic, which justifies its inclusion, along with Indonesia, Nigeria and Turkey, in the new MINT association. Despite the slowdown in the BRIC growth, in 2015 this association has one positive exception – India.

In 2014, European markets were influenced by the aggressive and destructive price wars, scandals concerning black holes in the financial statements of the Tesco Corporation, and the slow growth of wages. Publication of materials on the basis of "Panama file" in 2016 – documents on offshore company schemes of the Panama Mossack Fonseca, whose services were provided to politicians and celebrities from many countries. The scale of the leak and the names of the protagonists have already eclipsed the sensational WikiLeaks scandal. In Germany and France markets barely escaped recession. In the US, the improved economic situation is not that considerable to compensate for the substantial losses of previous

years. Even WalMart, the world's largest trading company, faces a reduction in sales due to the transition of many consumers to online trading.

In Japan, financial incentives led to a sharp increase in investment, however, the sales tax, introduced in April 2014, reduced the volume of turnover in this sector of the economy. In China, the bubbles in real estate, as well as prohibitions on excessive consumption mean that the pace of retail growth in the 2015-2016 biennium will continue to decline. A notable increase was registered only in the booming online trade sector. This is good news for Alibaba – the largest online actor [2], which recently carried out an successful IPO, but not for traditional shopping centers.

Companies that produce consumer goods face similar problems on global markets. The smartphone and tablet markets, which turned Samsung and Apple companies into global giants, become very crowded when the Chinese Huawei and Xiaomi launched low cost alternative gadgets. New market players have cut sales of leaders in other segments of household appliances and electronics (which now is being dominated by the Chinese Haier [Haier Ranked ...]) to clothing (where the Anglo-Irish Primark is quickly conquering the North American market).

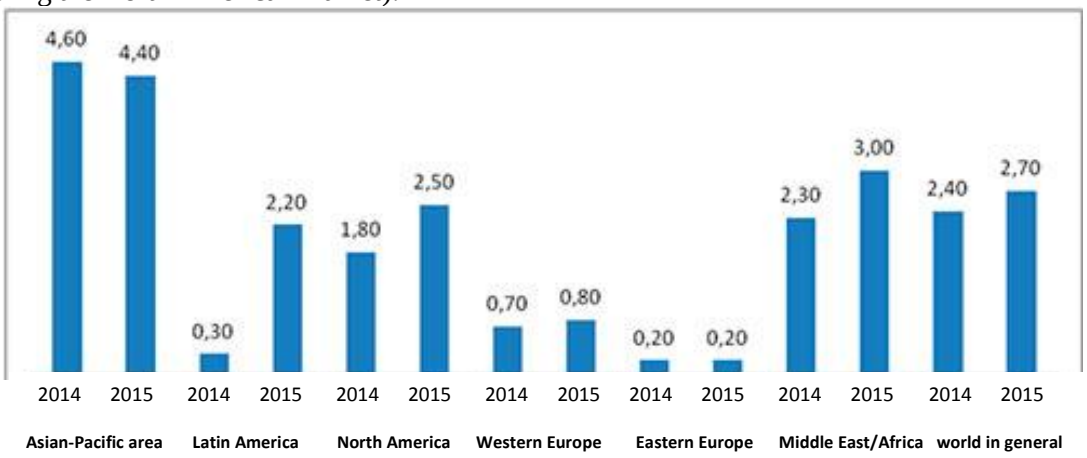


Fig. 3. The growth of retail sales by region in 2014 and 2015 (forecast) compared to the previous year, %

Source: Economist Intelligence Unit; Planet Retail.

All these factors will continue its effect in 2015-2016, causing a lower total rate of return. Companies that have invested in the "right" regions or "right" product innovation currently are positioned more favorably. Consumers alone will benefit from increasing competition and improving technology.

The next wave of innovation will include "wearable" [3] technologies, intelligent home appliances-and 3D-printers, although these technologies will not become mainstream in 2015. "Fast fashion" is gaining momentum as well [4], especially within commercial brands such as H&M, Inditex and Uniglow, which in 2015 will lead this consumption trend in the developing countries.

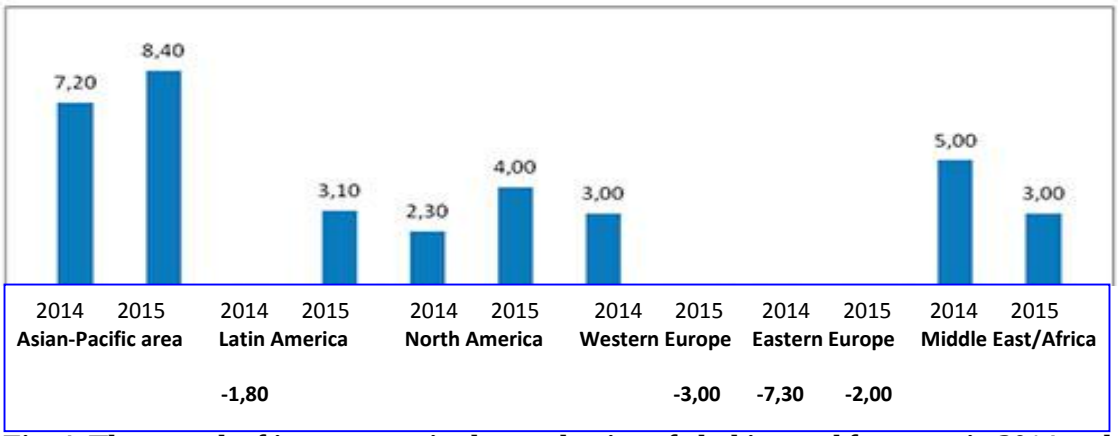


Fig. 4. The growth of investments in the production of clothing and footwear in 2014 and 2015 compared to the previous year, %

Source: Economist Intelligence Unit; United Nations; Eurostat.

Retailers are trying to develop new tools to engage consumers in the purchase process. Gadgets that combine smartphones with mobile wallets expand customer opportunities. They will be able to gain remote access to information on new offers and make purchases simply by passing by favorite outlets.

Energy: cheaper and "greener"

Energy Company in 2015 will deal with the problem of low oil prices. This will force Western oil majors to reduce capital investments following several years of investment boom. The environmental protection legislation will toughen; the central international problem will become the search of replacement options for the Kyoto Protocol. There is more optimism about this now than a few years ago, although progress in this direction creates additional risks for fossil fuel producers.

Oil prices, which fell heavily in late 2014, will remain relatively low, and in 2016 (as expected, on average, will cost 40-50 USD per barrel of Brent – against US $ 100 in 2014). The price decline was caused in part by a reduction in demand, especially in Western Europe. If demand is projected to increase by 1.3 million barrels, than the oil supply – by 2.2 million barrels (4/20/2016 prices reached 42.5-45 dollars per barrel). One can observe the reluctance of OPEC countries (at least its most influential members – Saudi Arabia, Iran) to support prices by reducing production. Despite the grumbling of oil "hawks" such as Venezuela and Algeria, low prices could undermine the US shale "revolution".

The explanation of passivity of oil cartel lies in the actions of non-OPEC countries. Iraq is not currently bound by "OPEC" quotas; its autonomous Kurdistan regional government plans to increase the export of oil in 2015 to 500 thousand barrels per day. If OPEC cuts quotas, this will not help supporting prices, but will only allow the independent oil producers to fill in additional market niches.

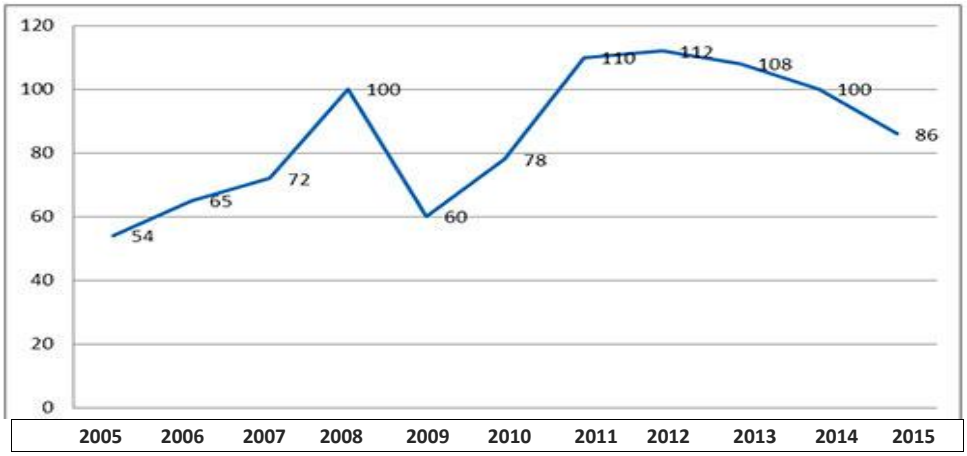


Fig. 5. Dynamics of average annual oil price of Brent crude, USD. / Bbl.

Source: The Economist Intelligence Unit.

Foreign currency exchange rate against the ruble is highly dependent on oil prices. Currently oil costs **45.58** dollars per barrel (Brent on 04/20/16 **20:15** GMT). Below there is a selection of the latest news concerning Russian black gold. Keep track of the cost of oil, and you will understand what is happening with the dollar and the euro.

Against the background of lower oil prices and the increase of interest rates in US losses of shale oil extracting companies look highly probable, due to their high debt load. Some of them will reduce investment, and the production rate in the US will decline [5]. United States is once again the focus of the natural gas market – thanks to shale deposits. Investment and production in the country will rise on expectations of increased demand for liquefied natural gas, with shipments expected to start in 2016. The global supply of liquefied gas will be replenished by Australian facilities as well, as the Chevron Corporation's Gordon American megaproject will be launched in early 2016. In addition, two new fields in Australia's Queensland province will be developed. In general, it is predicted that the export of liquefied natural gas from Australia in 2015 will reach 40 million tons, which is double compared to 2011.

Besides the US, shale gas begins to be actively extracted by China. Thus in 2015-16, it is planned to produce 6.5 billion cubic meters of gas, and by 2020 – 30 billion cubic meters (annually). Rapidly growing domestic demand, as well as a new pricing system (upward) will stimulate the own Chinese "shale revolution".

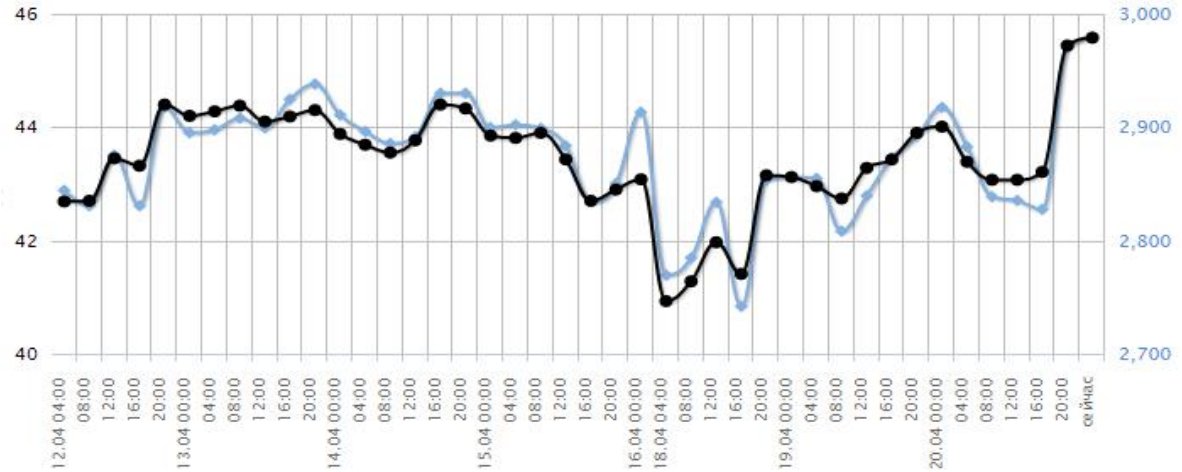


Fig. 6. Weekly oil price, rub. Barel, Brent, 12-20.04.2016

Source: http://www.sberometer.ru/brent-oil.php

Conclusions. Based on a critical analysis of development experiences and crises in the economy in the XX-XXI centuries in a number of countries in Europe and Asia, as well as on lessons of "real" economy development, the author proves the conclusion regarding the expediency of the "reset" of the world economy, since the fields did not experience any revolution or impetus based on nanotechnology, as presumed by the author. The risk of the crisis persists. As a result, it should be adequate to form new economic planning mechanisms integrating forecasting, foresights, direct and indirect selective regulation in the integrity of the program of economic development and defining vectors of development for certain limited areas of the economy, that remains overall a market economy. New development and planning institutions presume the rejection of forms of bureaucratic centralism and base on network forms of organization of the subject and the process of production, trade and services.

REFERENCES

1. ДЖИВАН, А. Стоит ли ожидать экономического роста от авторитарного режима? [accesat 16 februarie 2016]. Disponibil: http://inosmi.ru/world/20150115/225575344.html
2. БУЗГАЛИН, А., КОЛГАНОВ, А. Планирование: потенциал и роль в рыночной экономике XXI века. В: Вопросы Экономики. 2016, № 1, сс. 63-80.
3. ГРОС, Д. Дефицит квалифицированных кадров. 2010 [accesat 11 februarie 2016]. Disponibil: http://inosmi.ru/world/20100904/162670327.html
4. КОНДРАТЬЕВ, В. Глобальная экономика и ее отрасли в 2014–2015 гг. [accesat 21 ianuarie 2016]. Disponibil: http://www.perspektivy.info/print.php?ID=323544
5. Конец ОПЕК [accesat 26 februarie 2016]. Disponibil: http://ipress.ua/ru/mainmedia/konets_opek_37921.html
6. Мир после кризиса. Глобальные тенденции - 2025: меняющийся мир [accesat 11 ianuarie 2016]. Disponibil: http://www.classs.ru/library/node/3547
7. LUCHIAN, I. Globalization and financial crisis. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 3, pp. 107-111.

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CAP DIRECT PAYMENTS AS THE MAIN TOOL TO SUPPORT THE EU FARMERS: AN ANALYSIS OF THEIR IMPLEMENTATION BASED ON SPAIN EXPERIENCE

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Direct payments are the main tool of the EU Common Agricultural Policy (CAP) and the main objective is to support EU farmers incomes. They benefit from a particular attention during the new 2014-2020 reform. For the first time direct payments were introduced in 1992 after MacSharry reform and known as coupled payments (payments per hectare and animal head). In 2003 were introduced the decoupled payments focused at encouraging farmers and enhancing the competitiveness and sustainability of the EU agriculture. The aim of this paper is to analyze the application of direct payments as main support instrument to the EU farmers based on Spain experience. In Spain the new changes in the Single Payment Scheme (SPS) were first introduced in 2006, beginning with the regime of partial decoupling, until 2012, when the coupled payments disappeared, being integrated under the SPS or transformed into additional payment. In this analysis, secondary data provided by the Spanish Agrarian Guarantee Fund (FEGA), Ministry of Agriculture, Food and Environment of Spain (MAGRAMA) and Farm Accountancy Data Network (FADN. The analyzed data refers to the amount of allocated direct payments in Spain and EU countries, number of beneficiaries and its distribution on territorial aspect. So far, the distribution of direct payments in Spain, similar to other EU member states, is unequal, as a result of various factors, as the CAP development and diversity of production, the use of historical references to fix the decoupled payments per farm and others.

Key words: *agriculture, direct payments, farmers.*

Plăţile directe sunt principalul instrument al Politicii Agricole Comune (PAC), având ca obiectiv esenţial susţinerea veniturilor agricultorilor din ţările membre ale UE. Aceştia au beneficiat de o atenţie deosebită şi în cadrul reformei pentru perioada anilor 2014-2020. Pentru prima oară, plăţile directe au fost introduse în anul 1992 în rezultatul reformei MacSharry, fiind cunoscute ca subvenţii directe (subvenţii pe hectar de pământ sau pe cap de animal). În anul 2003 au fost introduse plăţile decuplate, care aveau drept scop încurajarea fermierilor şi creşterea competitivităţii şi durabilităţii agriculturii UE. Scopul acestei lucrări este analiza aplicării plăţilor directe ca principal instrument de susţinere a agricultorilor în UE, având ca bază experienţa Spaniei. În Spania noile modificări în Schema Plăţilor Unice (SPU) au fost introduse pentru prima dată în anul 2006, începând cu regimul de decuplare parţială, până în anul 2012, atunci când toate plăţile directe au dispărut, acestea fiind integrate în SPU sau transformate în plăţi suplimentare. În analiza respectivă au fost utilizate date secundare, furnizate de către Fondul European de Garantare Agricolă (FEGA), Ministerul Agriculturii, Alimentaţiei şi Mediului al Spaniei (MAGRAMA) şi Reţeaua de Date Contabile Agricole (FADN). Au fost analizate datele referitoare la volumul de plăţi directe, alocate pentru fermierii din ţările UE şi Spania, numărul de beneficiari şi distribuţia acestora în aspect teritorial. În rezultatul analizei s-a constatat, că distribuţia plăţilor directe în Spania, similar cu alte state membre ale UE, este inegală, fiind cauzată de mai mulţi factori, precum dezvoltarea PAC şi diversitatea producţiei, utilizarea referinţelor istorice pentru fixarea plăţilor decuplate la o fermă etc.

Cuvinte-cheie: *agricultură, plăţi directe, fermieri.*

Прямые выплаты являются основным инструментом Единой сельскохозяйственной политики ЕС (ЕСП), основной целью которых является поддержка доходов фермеров в ЕС. Им уделялось особое внимание и в рамках реформы на период 2014-2020 гг. Впервые, прямые выплаты были введены в 1992 году в результате реформы MacSharry, известны как прямые субсидии (субсидии на единицу площади земли и поголовье скота). В 2003 г. были введены новые

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формы субсидий, направленные на поощрение фермеров и повышение конкурентоспособности и устойчивости сельского хозяйства стран ЕС. Целью данной работы является анализ применения прямых выплат как основного инструмента поддержки фермеров в ЕС, на основе опыта Испании. В Испании, новые изменения в Схеме единых платежей (СЕП) были впервые введены в 2006 году, одновременно с частичным введением новых форм субсидий вплоть до 2012 г., когда прямые выплаты исчезли, будучи интегрированы в СЕП или преобразованы в дополнительные выплаты. В данном анализе были использованы вторичные данные, предоставленные Испанским фондом аграрного гарантирования (FEGA), Министерством сельского хозяйства, продовольствия и окружающей среды Испании (MAGRAMA) и Информационной системой сельскохозяйственной отчетности (FADN). Проанализированные данные относятся к объему прямых выплат, выделенных фермерам Испании и других стран ЕС, числу бенефициариев и их распределению в территориальном аспекте. В результате анализа было установлено, что распределение прямых выплат в Испании, как и в других странах ЕС, является неравномерным, в результате различных факторов, как развитие ЕСП и разнообразие продукции, использование исторических предпосылок, для установления размера субсидий на одно хозяйство, и т.д.

Ключевые слова: *сельское хозяйство, прямые выплаты, фермеры.*

JEL Classification: H59, H71, Q14, Q18, Q19.

Introduction. Since the beginning of 90s, direct payments had been the main instrument aimed to support the agricultural sector in the EU. At the beginning, all direct payments were coupled (linked) to area or animals and were compensating farmers for cuts in price support. Decoupled direct payments (Single Payment Scheme (SPS)) are the most important CAP instrument and account about 75% of total CAP budget or around 30% of EU budget [1].

The direct payments were first introduced with the MacSherry reform in 1992 as payments per hectare and animal head for compensating farmers for the strong cut in guaranteed prices aimed at reducing the production supply and to facilitate the agreements in the Uruguay round.

Since 2003, direct payments were decoupled from farmers production decisions and as reference was used previous supports receipts in order to decide the rate of payment that must be allocated per farmer. The new decoupled payments were aimed at encouraging farmers and enhancing the competitiveness and sustainability of the agricultural sector. There are many contradictory opinions among economists about the role of direct payments. Many of them consider that direct payments are a needed basic income support for farmers while others consider that the direct payments should provide a compensation for the public goods farmers deliver. In the same time, some economists affirm that there is no need of applying direct payments for farmers as we should not distinguish agricultural sector from other economic sectors.

Long time was considered that direct payments are an alternative transfer mechanism and an important step to mitigate the negative effects of market price support: high consumer prices and excess supply. They are also considered as best alternative to achieve farm income goals of the Common Agricultural Policy and to avoid the regressive distribution effects of output linked support [5]. Decoupled direct payments are supposed to have minimal or no allocative effects at all and thus are considered as almost pure income support [6].

Nowadays, many issues are discussed concerning the idea of better linking payments to the provision of specific objectives (e.g. environmental aspect) as well as their distribution between individual farms and Member States [1].

Despite the fact that decoupled direct payments do not depend on production level but are only based on existing demand, they also have some disadvantages as: the payments are aimed at supporting farmers' incomes but are concentrated only on few large farms while small farms benefit only from a small share in total payments; there is noticed a tendency of unequal distribution among regions and farmers; there is an inadequate feedback between levels of public goods provided by agriculture and payments received by individual farms [3].

In general, subsidies have an impact on production in several ways: by changing relative prices of inputs and outputs; through an income effect changing investment decisions and the quantity and quality of on and off-farm labor supply; through an insurance effect on risk mitigation; and through farm

growth and exit. All these mechanisms should assume changes in both economic and technical performance of farms [8].

EU direct payments to support farmers: from coupled to decoupled payments. First important step in the conception and implementation of direct payments was made with the 2003 reform. In this way were replaced the production support for a single payment per farm under the Single Payment Scheme (SPS). So was switched from coupled to decoupled payments that had as aim to cancel the link between production level and support for enhancing the competitiveness of the agricultural sector. The process of transition from coupled to decoupled payments was realized gradually, so that the first was applied toward herbaceous crops, beef cattle, dairy cattle, sheep and goats. One year later was extended towards Mediterranean production: hop, cotton, tobacco and olive oil. In 2006 to the list was added sugar and in 2007 fruits and vegetables [5].

As well, from 2009 the process of applying the single payments was different in all countries. Still in certain zones was allowed some coupled payments in order to support low productivity and to keep agricultural activities in those regions. Thus, for cereals, oleaginous, leguminous and other crops 25% coupled payments per hectare are allowed. For sheep and goats was allowed until 50%, while for cattle until 100% of the first suckler cow. Many countries used different systems of decoupled payments, particularly for livestock [2].

With the new member states was needed a new calculation mode, while the other countries were receiving the direct payments based on the historical records. Anyway, for benefitting from the payment right both had to present the eligible hectares that includes any type of crop, except fruits and vegetables, permanent crops and potatoes. The number of payment rights that a farmer was eligible had to correspond with the number of eligible hectares. The titles are transferred between the beneficiaries of each country and in some cases between regions of a country.

As well, all direct payments coupled and decoupled are subject to a number of requirements in order to receive the payments. Thus, farmers had to respect the good agricultural and environmental conditions aimed to preserve the agricultural land established by the member countries; and some legal norms towards public health, animal health, environmental protection etc.

The 2009 CAP reform also called the Health Check was the base for the future direct payments after 2010. Between 2010 and 2012 all the payments partially coupled was left to the decision of the member states, in the same way as the most of the specific payments coupled to the production were progressively integrated in the Single Payment Scheme. As result of the agricultural market crisis and the increase in prices for cereals and oleaginous crops during 2007-2008 were diminished the risk that certain agricultural areas will be abandoned. Thus, since 2012, basically, all direct payments were decoupled (except northern cows and some specific payments received by other sectors and other payment regimes) [1].

Basically, the 2009 reform had strengthened the funds transfer from first to second pillar increasing by 5% during four years the percentage of the compulsory modulation. The payments higher than 5000 Euro started to be diminished by 5% in 2008, 7% in 2009, 8% in 2010, 9% in 2011 and 10% in 2012. Moreover, for imports exceeding 300000 euro per year the percentage will increase by 4 percentage points [2]. Also, from 2009 the deducted payments in the concept integrally were kept by the member state that generated them, and were aimed to answer the new challenges of rural development policy as: the climatic change, management of water resources, renewable energy and biodiversity.

The health check will allow member states that chosen a historical system for calculation of payments to switch towards a regional system with more uniform values that would allow eliminating the differences across member states. In 2012 some countries with values of the rights based on the historical references and that chosen systems which evaluated towards uniform payments under certain regions (Germany, Finland, UK). Nevertheless, countries as France maintained the historical model and took advantages from the flexibility of the opportunities specified in the regulation for transferring a part of the payment towards vulnerable productive systems, particularly livestock [1, 2].

The decoupling process of direct payments has as result that most of payments are now decoupled. Nevertheless, the distribution of direct payments is not equal among EU countries, sectors and farmers. The great flexibility that offered the decoupled process of the payments imposed difficulties to control the direct payments and influenced the common character of CAP because there are not two countries that would operate under the same system. The old CAP system based on production-coupled payments was criticized as being unequal and creating distortions in competition for the member countries as well as at national level.

In 2012, about 80% from beneficiaries in EU are receiving about 20% from the payments, fact that shows that the larger farms are those that receive the most of CAP direct payments.

As well, a new problem were the allocations of the payments for the new member states that joined in 2004 and 2007 who could not have payments linked to the historical support levels and needed to be estimated based on historic production. Thus, a simplified area payment model (SAPS)was chosen for a transition period, were payment levels were decided with a similar method as for the regional model. Therefore, differences are observed in the distribution of the allocated payments as well as significant gaps in the payment per area among different member countries (Figure 1).

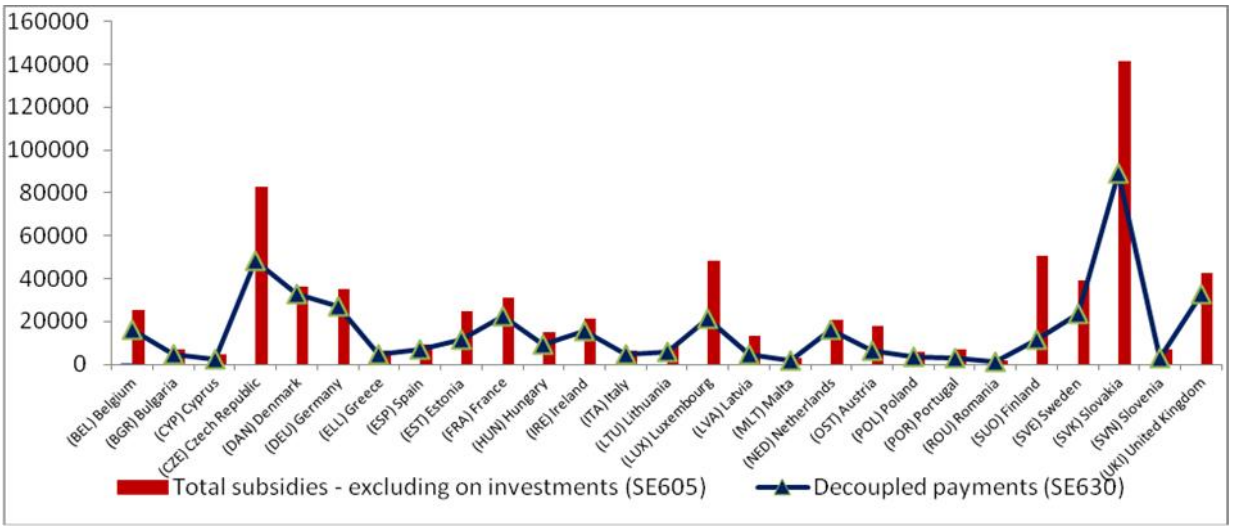


Fig. 1. Distribution of CAP direct payments among Member States

Source: Based on FADN data.

The average value for EU-12 is lower than that of EU-15 but there are exceptions to this rule, in both EU-15 and EU-12. For example, the payment level per beneficiary varies a lot between member states. A possible explanation for the high differences in the payment level per beneficiary in different member states is that the average farm size also varies considerably and is an additional determining factor for the amounts received per hectare. Countries with large average holding sizes have higher payments.

The application of direct payments in Spain

In Spain, in 2006 the Single Payment Scheme started to apply for the first time. The selected method to calculate the value of the payments was the historical model, based on the received payments by the farmers in the previous years. As well, the charge of these payments was not linked with any production level. In order to access the payment the farmer had to have the rights on a certain number of hectares that had to be maintained in good agricultural and environmental conditions. According to the type of payment received during a certain period, the rights gathered are considered normal when they have as base the areas who received direct payments, and they are considered special in the case of the livestock payments without territorial base; and withdrawal in the case of payments with compulsory withdraw of land. The 2009 CAP reform eliminated the compulsory withdrawal of arable land, thus in 2010 were normalized the withdraw rights and they started to be part of normal rights.

Nevertheless, Spain chose the regime of partial decoupling at the beginning, with the aim to maintain the payments most coupled possible. The main reason was that the abolition of coupled payments could lead to the abandon of the agricultural activity and production deployment in important areas in Spain. Thus, Spain maintained and introduced new specific payments regime which would allow keeping linked the payments to production level. As example of these are: aids for wheat durum of high quality, aid per area of crops and leguminous plants producers, specific aid for rice, aid for producing potatoes for starch, aid per area for nuts, aid for seed producers, specific aid for the cotton crop, aid for energetic crop, aid for olive growth, tobacco, aid for sugar beet and sugar cane producers, premium for the livestock sector, sheep and goats breeding, payments for cattle.

Later on, during 2006-2012 CAP reform, the payments linked to production level disappeared, being integrated under the Single Payment Scheme or transformed into additional payments (including additional payments).

Nowadays, in Spain are maintained coupled the payments for cotton, national assistance for nuts, sugar beet producers, as well as the suckler cow premium, in the case of assistance regime for cattle. Also, the specific assistance for compensating the disadvantages caused by the decoupled payments in particular sensitive sectors is covered and is encouraged specific types of agricultural production, important in aspects of environmental protection, animal welfare and the quality of the agricultural products. The funds used for financiering this assistance come from withholding 10% of maximum national limits of the single payments scheme and are not compulsory to be utilized in the sector of origin [2].

The decoupling of payments in Spain had various effects. The new system of direct payments led to a higher stability of farm incomes, and to the establishment of a more exposed and market oriented agriculture. As result, producers respond easier to prices market signals, which motivates a higher intensification and concentration of high value crops production. This production specialization and higher production diversity leads to the abandon of crops and areas less profitable. As result of the CAP reform, the area of cultivated land in Spain decreased, more in dry land than in irrigated, and decreased the extensive livestock, particularly in goats breeding and suckler cows and a deeper decrease in crop diversity. The olives and vineyards growth benefited from the reform, becoming important alternatives in Spanish dry and irrigated lands. Also, detached right for the land ownership was given, associated with the availability of the resource, that involved important distortions in the land and lease market. The change in agricultural structure (except the larger size farms and more commercial oriented) and the abolition of coupled payments in labor intensive crops like cotton or tobacco led to decline in the use of agricultural labor. This decline was not so strong in the last years as a result of the economic crisis which fostered the transfer of active population in other agricultural sectors [2].

An important challenge is the equal distribution of direct payments, because in some cases farmers that cultivate the same crop can receive different payments. Similarly, like in other member states, in Spain is present an unequal distribution of payments resulted from CAP development, diversity of production and the use of historical references to fix the decoupled payments per farm.

In Spain, the main institution responsible for the administration and coordination of Single Payment Scheme (SPS) is Spanish Agrarian Guarantee Fund (FEGA). FEGA is an autonomous organization under the Spain Ministry of Agriculture, Food and Environment (MAGRAMA) aimed to ensure that CAP subsidies are strictly applied in order to achieve the objectives of the policy, reaching the beneficiaries who have met the requirements established for their concession, within the timescales laid out in the regulatory legislation, while promoting homogenous application of CAP subsidies other the whole state territory.

According to FEGA, in 2011 the 74% of beneficiaries received only 15% of total payments. This fact demonstrates the significance of small farms, an important concentration of the payments resulted from the historical payments differences. In addition, regional differences in the support level can be noticed, as result of the Spain product diversity and specialization of agricultural sectors (Figure 2).

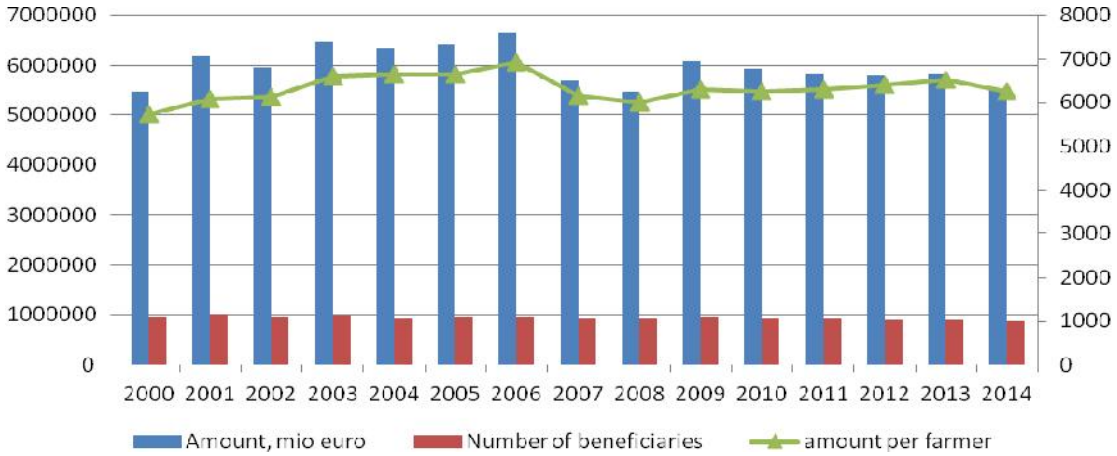


Fig. 2. Distribution of direct payments in Spain

Source: Based on FEGA data.

In the last fifteen years in Spain were allocated more than 89 billion euro as direct payments under CAP. The average amount was of 5968 mio euro per year. In 2006 for Spain as direct payments was allocated the largest amount of 6694 mio euro for 962 thousands agricultural producers. The reason was that in this year the total amount of direct payments allocated to member countries increased as well.

The average value of the single payment right (SPR) does not reach 200 euro per hectare in regions as: Madrid, Asturias, Cantabria y La Rioja, and in the CCAA (autonomous communities) with intensive irrigated crops or olives growth, like Murcia and Andalucia is over 400 euro/ha (Table 1).

Table 1

Distribution of payments in Spain in territorial aspect, 2014

Autonomous region	**Amount, Euros**	**Number of Beneficiaries**
Not territorialized	-78.026.541,03	1
Andalucía	1.594.943.969,92	267.987
Aragón	439.524.016,51	49.108
Asturias	62.096.839,8	11.081
Illes Balears	25.643.814,94	7.136
Canarias	266.868.200,96	15.623
Cantabria	40.156.216,19	5.370
Castilla-La Mancha	754.972.554,08	135.546
Castilla y León	892.216.583,82	88.286
Cataluña	294.966.839,89	55.032
Extremadura	517.077.948,73	64.858
Galicia	165.792.999,97	35.057
Madrid	43.295.781,19	6.853
Murcia	108.315.977,88	14.790
Foral de Navarra	107.382.071,09	15.804
País Vasco	55.124.170,18	10.213
La Rioja	45.383.478,1	7.882
Valencia	157.670.855,35	88.188
Total	5.493.405.777,57	878.655

Source: Based on FEGA and MAGRAMA data.

Analyzing the territorial distribution of direct payments in Spain, the leader by both amount and number of agricultural producers who benefitted is Autonomous Community of Andalucia, followed by Castilla y León and Castilla-La Mancha. Nevertheless, the amounts distributed by farm were larger in the last two regions, compared to Andalucia region were the number of beneficiaries was also higher.

Because of the high production diversity in Spain and the existence of a large area without the historical right to payment have as consequence the variability in the regional payment per hectare which is higher in Spain than in other European countries. If in Spain the average payment per hectare is 202 euro and the average real is 285 euro, in other countries as France or UK the differences are smaller. In France the average payment per hectare is 294 euro and 300 euro the average real and in UK 212 and 229 euro [2].

Conclusions. Since 1990s, direct payments had become the main tool to support EU farmers. At the beginning, all payments were coupled to area or animals and were aimed at compensating farmers for cuts in price support. Later gradually all payments became decoupled from farmers production decisions and previous supports receipts were used as reference in order to decide the rate of payment that must be allocated to each farmer.

In Spain, this process started to be applied in 2006, at the beginning with the regime of partial decoupling, maintaining the payments most coupled possible form the fear that its abolition would lead to the abandon of the agricultural activity. With the CAP reform until 2012, the coupled payments disappeared, being integrated under the Single Payment Scheme or transformed into additional payment. The new decoupled direct payments contribute to a higher stability of farm incomes and create exposed market oriented agriculture.

Unfortunately, the distribution of direct payments in Spain, similar to other member states, is unequal, being caused by CAP development and diversity of production and the use of historical references to fix the decoupled payments per farm.

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REFERENCES

1. The Future of CAP Payments. In: Agricultural Policy Perspectives Briefs. 2011, january [accesat 21 februarie 2016]. Disponibil: http://ec.europa.eu/agriculture/policy-perspectives/policy-briefs/02_en.pdf
2. BARDAJI, I. *Reflexiones en torno a la PAC*. Serie Economia. Almeria: CAJAMAR Caja Rural, 2014. ISBN 978-84-95531-63-6.
3. CONG, R-G, BRADY, M. How to Design a Targeted Agricultural Subsidy System: Efficiency or Equity? 2012, august 2 [accesat 11 februarie 2016]. Disponibil: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0041225
4. FINTINERU, G., COFAS, E. Distribution of the direct payments between EU member states. In: Management, Economic Engineering in Agriculture and Rural Development. Bucharest, 2012, vol. 12 (4), pp. 78-81.
5. SINABELL, F., SCMIDT, E., HOFREITHER, M. Exploring the distribution of direct payments of the Common Agricultural Policy. In: Empirica. 2013, vol. 40, issue 2, pp. 325-340.
6. RIZOV, M., POKRIVCAK, J., CIAIAN, P. CAP subsidies and productivity of the EU farms. In: Journal of Agricultural Economics. 2013, vol. 64 (3), pp. 537-557.
7. SCHMIDT, E., SINABELL, F., HOFREITHER, M.F. Direct payments of the CAP - distribution across farm holdings in the EU and effects on farm household incomes in Austria. Instutut fur nachhaltige Wirtschaftsentwicklung. 2006, october [accesat 28 februarie 2016]. Disponibil: https://wpr.boku.ac.at/wpr_dp/DP-19-2006.pdf
8. ZHU, X., LANSINK, A.O. Impact of CAP subsidies on technical efficiency of crop farms in Germany, the Netherlands and Sweden. In: Journal of Agricultural Economics. 2010, vol. 61, pp. 545-564.
9. PELELIENE, L. Structura loialităţii faţă de consumatori a pieţelor fermierilor în Lituania = Farmer's markets'customer loyality structure in Lithuania. In: Economie şi Sociologie = Economy and Sociology. 2014, nr. 3, pp. 105-108.

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ASSESSMENT OF SHADOW ECONOMY IN MOLDOVA USING THE INPUT-OUTPUT MODEL IN 2014

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The shadow economy is the bane of modern society. Paradoxically, as the community is poorer, the level of the shadow economy is higher, which in turn leads to lower allocations in the budget, and as a consequence reduces social benefits, reducing the real wages of public sector employees, and the decline in living standards. Therefore, evaluation of the shadow economy is actual for any country in the world. The purpose of research is assessment of the shadow economy in the Republic of Moldova for 2014. From the methodological point of view, the authors used input-output balance method to identify and assess non-observed economy. As a result, the authors had identified elements of non-observed economy for a product group, and had calculated the losses of the state budget.

Key words: *shadow economy, input-output models, uses, export, import.*

Economia neobservată este maladia societății contemporane. În mod paradoxal, cu cât comunitatea este mai săracă, cu atât nivelul economiei neobservate este mai mare, ceea ce la rândul său duce la scăderea alocărilor în buget şi, drept consecinţă, la reducerea beneficiilor sociale, la reducerea salariilor reale ale angajaților din sectorul public şi la scăderea nivelului de trai. Prin urmare, depistarea şi evaluarea economiei neobservabile este actuală pentru orice stat din lume. Scopul cercetărilor – evaluarea economiei neobservate în Republica Moldova pentru anul 2014. Din punct de vedere metodologic, autorii au utilizat balanţele interramurale naturale pentru identificarea şi evaluarea economiei neobservate. Ca rezultat, autorii au stabilit elementele economiei neobservate pentru un grup de produse şi au calculat pierderile bugetului de stat.

Cuvinte-cheie: *economie neobservată, balanţe interramurale naturale, resurse, export, import.*

Теневая экономика это болезнь современного общества. Как это ни парадоксально, чем сообщество беднее, тем уровень теневой экономики выше, что в свою очередь приводит к снижению ассигнований в бюджет, и как следствие, к снижению социальных выплат, снижению реальной заработной платы работников бюджетной сферы, а также снижению уровня жизни. Поэтому выявление, оценка и снижение теневой экономики является актуальной для любого государства в мире. Цель исследования – выявление и оценка теневой экономики в Республике Молдова в 2014 г. Авторы использовали натуральные межотраслевые балансы для выявления и оценки теневой экономики. В результате, авторы определили группу товаров с элементами теневой экономики и рассчитали потери государственного бюджета.

Ключевые слова: *теневая экономика, натуральные межотраслевые балансы, ресурсы, экспорт, импорт.*

JEL Classification: C67, H69, P28, Q34, D63.

Introduction. Moldova continues to be a country with an economy dependent on geopolitical great powers. Dependence is confirmed by the recent events: the continuous rise in the price of fuels, Russian embargoes for a number of countries, including the Republic of Moldova, economic and military conflicts

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on the territory of Ukraine. The last years are characterized by intensifying natural disasters. All this has a negative influence on the national economy development. If the main factors are of a political reason, then the last ones are of the natural order, and if there have been made the necessary investments in agriculture, then this dependence should not be so obvious.

During the forecasting process of macroeconomic indicators, authors have used macro-econometric models, and input-output models and models based on experts. In addition, the authors have adjusted the input-output model for the assessment of shadow economy.

Assessment of shadow economy using the input-output model

Originally, till the elaboration of the inter-branch macroeconomic balance, natural balances are developed; technical coefficients are estimated based on the used technologies in the current period in the Republic of Moldova. The model proposed by the authors is presented in Table 1.

Table 1

Input-output model

Products	**Resources**				**Uses**								
					Internal consumption								
					Population consumption								
						Including in							
	Balance at the beginning of the year	Production volume	Import	**Total resources**	Total	Organized trade	Unorganized trade	Intermediate consumption	Totally consumed in Republic	Export	Loses	Balance at the end of the year	**Total uses**
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Source: Developed by authors.

Resources, i.e. inputs, include the production volume during the reporting period, import volume and balance at the beginning of the reporting year. Uses, i.e. outputs include intermediate consumption, household final consumption in organized and unorganized trade, export and other outputs (including losses) and the balance at the end of the reporting year. If uses prevail over resources, there is occurred either unobservable production or unnoticed import. If resources prevail over uses resources, unnoticed export takes place. Development of the input-output balance has found lacks in the customs control and elements of shadow economy [1, pag. 126]. In most cases, the fraudulent schemes of foreign trade take place on the border with Ukraine, but the Romanian border is not an exception.

To assess shadow economy in 2014, input-output model balances have been prepared for this year. During the development, sixteen official documents presented by the National Bureau of Statistics of the Republic of Moldova have been used. For example, "Indicators on the movement of industrial production in Moldova in 2014"; "Retail trade, sale and repair of motor vehicles, repair of personal and household goods in 2014, divided by type of goods" etc.

Because data on the delivery of production in the retail sector for 2014 are presented by the National Bureau of Statistics of the Republic of Moldova in aggregate form, then at the development of input-output model balances for 2014, nonspecific methods were used such as: determining the volume of realization by product type (non-aggregated) was performed taking into account their share in aggregate indicators of 2010-2013. Besides this, the number of commodity groups for which the National Bureau of Statistics presents information on the sale of goods through a network of retail and catering network have been reduced.

Input-output model balances were developed in accordance with the System of National Accounts. To calculate the intermediate consumption volume on the main types of production, there was developed a calculation algorithm using technological coefficients, in Excel package. Unorganized market sales volume was calculated as the difference between resources (volume of production, import, and balance at the beginning of the year) and uses (intermediate consumption, sales volume in the retail networks, stock at the end of the year).

The stock at the beginning and the end of the year was evaluated as the sum of stocks both in trade networks from the statistical report "Retail trade, sale and repair of motor vehicles, repair of household and personal goods in the Republic of Moldova in 2014 structured on types of goods" and businesses deposits from the form "Indicators on the movement of industrial production in natural value in 2014".

Agro-industrial complex

Analysis of actual balance of Agro-industrial Complex (AC) for 2014 in natural expression allowed detecting significant deviations at the following items:

1. Unfermented tobacco. Development of the input-output model balance in 2014 for this kind of production showed that the resources account for 3.99 thous. tons, (in production there were used 2.91 thous. tons and the balance at the end of the year accounted for 0.1 thous. tons) and the use – 5.05 thous. tons, meaning that there were used more than there was presented with 1.064 thous. tons. This difference is explained by the fact that unnoticed import took place or that stocks at the beginning of the year were not recorded correctly or the unlawful production took place. Consolidated state budget incurred losses only from customs duties, VAT and customs services in the amount of about 6.65 mil. MDL.

2. Tobacco products. This product in 2014 recorded the following values: resources accounted for 6.16 billion pcs., and its uses in all forms of consumption were higher than the resources with 2.57 billion pcs. (which constitutes 41.7% of resources). There have been sold in retail trade 7.37 billion pcs., 0.44 billion pcs. were exported, the balance at the end of the year amounted to 0.91 billion pcs., not taking into account the unorganized market. Thus, the official import of 3.66 billion pcs. Is not accurate; shadow production or illegal import was at least 2.57 billion pcs. The state budget incurred losses of excise, VAT and missed customs taxes of about 522.86 mil. MDL. In 2014 the import of tobacco products amounted to 51.55 mil. USD (3657 mil. pcs.), representing 81.5% compared to the previous year and with 9.86% more than in 2000 (3328.9 mil. pcs. or 48 mil. USD). *Analysis showed that the measures taken by the government in previous years have led to a slight legalization of the import of tobacco.*

3. Alcohol. This product in 2014 had the following values: resources amounted to 0.907 mil. dal and its uses in all forms of consumption were higher than the resources with 0.82 mil. dal (which constitutes 90.4% of resources) and amounted to 1.73 mil. dal. So, the official import of 0.0334 mil. dal does not correspond to the reality. Actually, 0.853 mil. dal of alcohol were imported. In the result, the state budget missed receipts in the amount of 445.03 mil. MDL as VAT, excise, tax and customs services.

4. Cognac. Resources of this product were about 1.24 mil. dal. in 2014, of which there were used in the production 0.00216 mil. dal, there were consumed 0.701 mil. dal on the domestic market and exported 1.783 mil. dal. Analyzing foreign trade data of the National Bureau of Statistics of the Republic of Moldova and the data form "On the movement of industrial production indicators in natural expression in 2014" there is observed a difference in the amount of 1.794 mil. dal, but we must also take into account that there is also the unorganized market. That shows the existence of the unnoticed import in the volume of more than 1.794 mil. dal. As a result the country's budget was deprived of 656.18 mil. MDL as VAT, excise, income tax and customs services.

5. Spirits, liqueurs and other spirits. In 2014 resources of this product were about 6.35 mil. dal (of which 0.7 mil. dal are imports) and uses in all forms of consumption were 6.85 mil. dal which represents a volume higher than resources with 0.504 mil. dal (i.e. 8% of resources). Only exports in 2014 were recorded at 3.33 mil. dal, indicating that there were illegally imported 0.504 mil. dal of this product or illicit manufacture has occurred. State budget missed revenues of about 195.02 mil. MDL in the form of VAT, income tax, excise and customs services.

6. Sugar beet. The resources of this product amounted to 1356.2 thous. tons in 2014, of which 1428.23 thous. tons were used in the production. Analyzing data on foreign trade presented by the National Bureau of Statistics of the Republic of Moldova we can note that sugar beet was not imported in the reported year and the difference between resources and uses is 72.03 thous. tons. This fact shows that shadow import took place in the volume of at least 72.03 thous. tons or that there has been illegal production. Therefore, the state budget lost about 9.81 mil. MDL of VAT and custom services.

7. Processed raw wine. This product in 2014 had the following values: resources were 7.29 mil. dal and its uses in all forms of consumption were higher than the resources with 3.47 mil. dal (which constitutes 47.6% of resources) and amounted to 10.77 mil. dal (of which export is about 10.36 mil. dal). So, the official import of 0.035 mil. dal does not correspond to the reality. Actually there were imported 3.51 mil. dal of processed raw wine. As a result the country's budget has missed receipts in the amount of 104.54 mil. MDL in the form of VAT and customs services.

8. Fodders. The resources of this product amounted to 133 thous. tons in 2014, of which there were used in production 63.57 thous. tons, were exported 108.9 thous. tons and remained in stock 3.458 thous. tons. By analyzing the data of the National Bureau of Statistics of Moldova for foreign trade and form data "Indicators on the movement of industrial production in natural expression in 2014" there was detected the difference in the amount of 39.427 thous. tons, in addition to the unorganized trade. This situation shows that there has been unnoticed import in the volume more than 32.28 thous. tons. As a result, the country's budget was deprived of 96.13 mil. MDL as VAT, customs taxes and services.

9. Pasta products. The resources of this product amounted to 11.33 thous. tons in 2014, of which 0.074 thous. tons were exported, sold in retail trade – 11.08 thous. tons and remained as the balance at the end of the year – 5.79 thous. tons. Analyzing data on foreign trade of the National Bureau of Statistics of the Republic of Moldova is noted that imports of pasta product were in reality much higher than the official one of 5.37 thous. tons, and the difference between resources and uses are 5.615 thous. tons. This speaks on the shadow import in the volume of at least about 5.615 thous. tons or illegal production. This leads to the fact that state lost just to the lack of VAT, tax and customs services the amount of 25.62 mil. MDL.

10. Groats. This product in 2014 registered the following values: resources accounted for 27.27 thous. tons of which the consumption of production was 0.8 thous. tons, 1.56 thous. tons were exported, 40.3 thous. tons were sold in the retail trade and 11.2 thous. tons remained as stock at the end of the year. But its uses in all forms of consumption amounted to 53.88 thous. tons, which is more than resources with 26.61 thous. tons (which means that illegal import is about 97.6% of resources). So, data on official import of 22.54 thous. tons is not accurate. As a result the country's budget did not received receipts amounting to 86.6 mil. MDL in the form of VAT, tax and customs services.

11. Butter. In 2014 this product resources were 5.53 thous. tons of which imports accounted for 7.6% and amounted to 0.42 thous. tons. This product was used in the following directions: production consumption – 1.05 thous. tons, 3.87 thous. tons in organized trade, and balance at the end of the year accounted for 0.74 thous. tons. Analyzing data on foreign trade and production indicators of the movement as a natural expression in 2014 from the National Bureau of Statistics of the Republic of Moldova is observed that in reality, the import of butter was higher than the official (0.42 thous. tons) with 0.53 thous. tons or was produced illegally. The state lost only from the lack of VAT and customs service's the amount of 2.61 mil. MDL.

12. Beer. The resources of this product for 2014 amounted to 12.58 mil. dal of which imports accounted for 0.1916% of resources (2.41 mil. dal). Export of this product reached 0.44 mil. dal. The organized trade accounted for 10.85 mil. dal, in the year-end balance remained 1.72 mil. dal and other outputs were 0.14 mil. dal. Comparing uses (13.14 mil. dal) and product resources we notice a difference of 0.56 mil. dal speaking about the illegal import of this product or illegal production. As a result of the above mentioned, it is clear that the state budget missed revenue of about 27.8 mil. MDL as VAT, excise, tax and customs services.

13. Perfumery and cosmetics. According to the input-output model, resources of this product in 2014 amounted to 1085.3 mil. MDL (production – 30.3 mil. MDL, import – 1054.94 mil. MDL and the stock at the end of the year in retail – 467.1 mil. MDL). This product was used: in retail sector – 1577.57 mil. MDL, 303.73 mil. MDL were exported and at the end of the year were accounted in balance 467.1 mil. MDL. Analyzing data on foreign trade and production indicators on movements in natural value in 2014 from the National Bureau of Statistics of the Republic of Moldova we concluded that the import was much higher than officially with 1263.08 mil. MDL. It speaks that the state lost 338.06 mil. MDL in the VAT and customs services.

14. Fruit and vegetable juices. In 2014 it was produced juices from fruits and vegetables in Moldova accounting for 49059.08 thous. liters and there were imported 267 thous. liters that account for 5.37% of production. Total resources of this production were 68428.11 thous. liters of which in retail – 17565.68 thous. liters, 44955 thous. liters in export and the balance at the end of the year amounted 26798.26 thous. liters. Analyzing statistical data we notice that 89318.94 thous. liters were used, which is with 20891 thous. liters more than the available resources. This speaks of illegally import or illegal production of juices. It follows that the state lost 49.2 mil. MDL that could be collected as income tax and customs services.

Following the assessment of the volume of unnoticed import and export in 2014 and using the official tariffs and import and export prices for the analyzed volume production, there was estimated

the volume of loses of the state budget from the agro-industrial complex in the amount of approx. 2566.28 mil. MDL.

The complex of machinery industry and heavy industry

1. Small capacity engines. This product is not produced in Moldova being just imported. In 2014 imports amounted to 341.58 thous. pcs. The resources of this product were leveled to 341.58 thous. pcs., and uses in all forms of consumption were higher than the resources with 484.86 thous. pcs. (this is with 1.42 times higher than the resources). Only exports in 2014 were recorded at the level of 826.44 thous. pcs., indicating that there were illegal imports, and re-exportation of this product. From the re-export there are obtained significant winnings at the level of this product, while the average import price is 155.54 MDL/pcs., while export is made at an average price of 43.26 MDL/pcs., which shows a direct tax evasion. State budget missed revenue amounting to about 19.8 mil. MDL as the VAT and customs services.

2. Household electrical appliances. Unfortunately, this kind of production in recent years is no longer produced in our country, being only imported. In 2014, this product resources were 986.27 thous. pcs. of which 87.6% (864,27 thous. pcs.) are represented by import. These resources were sold in retail sector in the amount of 5310 thous. pcs., there were re-exported 3.673 thous. pcs. and the final balance amounted to 135 thous. pcs. Analyzing statistics we note that in the Republic there were used 5448.47 mil. pcs., which exceeds with 4462.2 thous. units than resources according to data. This proves that imports exceed the official data. As a result, the state lost 390.32 mil. MDL in forms of VAT, tax and customs services.

3. Non-ferrous metals. Non-ferrous metals in our Republic have never been produced, just exported. This is due to the continued theft of electricity and irrigation networks, selling of equipments as waste etc. and re-export takes place. In 2014 it was imported 10.32 thous. tons which were the basic resources of which 93.6% were exported (9.66 thous. tons) among which in the production consumption there were used 2.35 thous. tons. In total, 12.01 thous. tons of non-ferrous metals were used, which is more than resources with 1.683 thous. tons. As this product is not produced in the country, it means that unnoted import takes place, following which the state lost 9.8 mil. MDL in the form of VAT and customs services.

4. Medications. According to the input-output model, resources of this product in 2014 amounted to 4688.2 mil. MDL (production – 485.9 mil. MDL, import – 3782.2 mil. MDL and the stock at the end of the year in retail units – 477 7 mil. MDL), but there have been used goods amounted to 5034.21 mil. MDL (sold by retail units – 2800.31 mil. MDL, exported – 1756.2 mil. MDL) and the stock at the end of year at producers and in retail units amounted to 477.7 mil. MDL, which is with 346.031 mil. MDL more than resources (without unorganized market sales). Deviation analysis showed that real import was higher than the official and must reach the level of 4128.231 mil. MDL. According to our calculations, the consolidated budget missed customs duties, VAT and customs services for illegal importation of medications amounting approximately 27.96 mil. MDL.

There was made the indirect analysis of groups of strategic goods, which do not permit the use of input-output models due to lack of regulations and statistical data division. While speaking of diesel imports, there is a significant gap between import and domestic consumption. Only the agricultural sector consumption estimates made on the basis of technological use of diesel on sown areas and statistical data on diesel consumption in transport for population and other services performed, which was collected from the energy balance shows that demand for 2014 accounted for 733.61 thous. tons, for 2013 – 705.51 thous. tons and for 2012 – 674.4 thous. tons.

Even if we take into consideration that some households for purposes of economy, do not meet all technological standards, the calculations show that the necessary minimum in 2014 amounted 615.31 thous. tons, in 2013 – 594.3 thous. tons, and in 2012 – 558.3 thous. tons of diesels. Comparative analysis with real data shows that shadow economy has imported diesel worth at least 160.3 thous. tons in 2012, 139.3 thous. tons in 2013 and in 2014 – 158.31 thous. tons. Such calculations were performed for gasoline which showed that the shadow economy meant values of at least: in 2012 – 60.33 thous. tons, 2013 – 52.33 thous. tons, 2014 – 61.32 thous. tons.

The most significant deviations are presented in Figure 1.

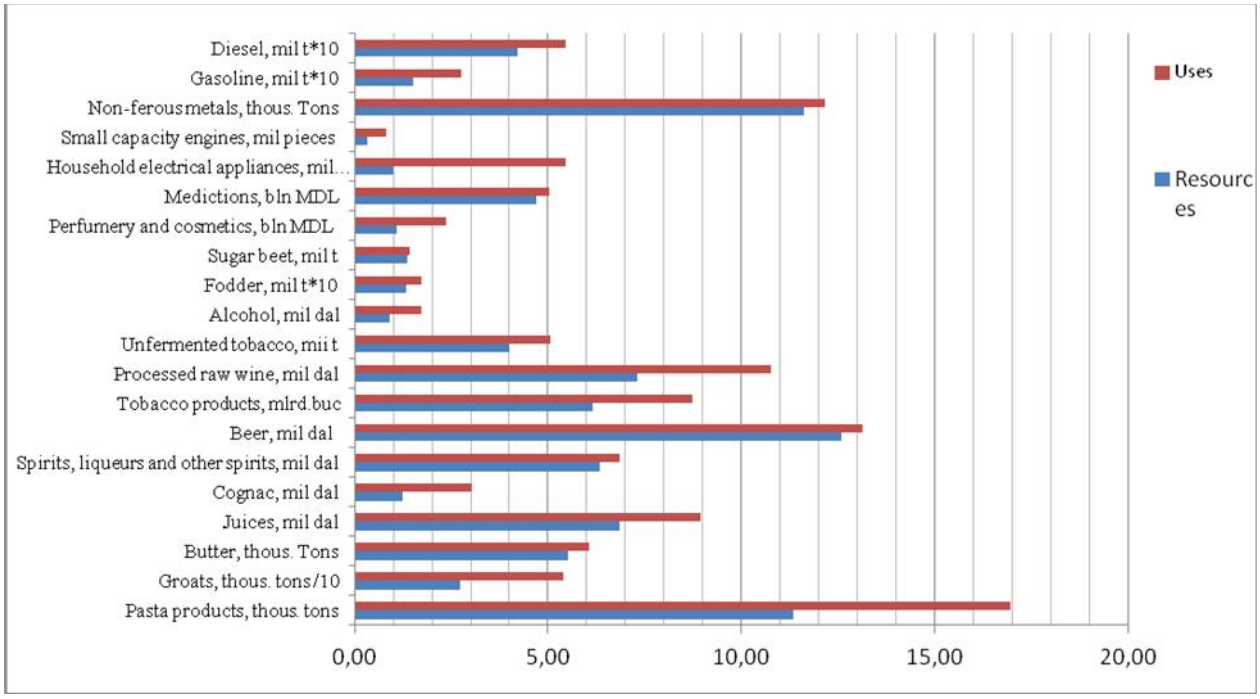


Fig. 1. A deviation of products balances

Source: Made by the authors based on calculations.

Given the situation created on the diesel market, the state budget has missed about 702.36 mil. MDL in 2014 in the form of excise, VAT and customs services because of illegal import, and on the gasoline market the state budget has lost about 447.87 mil. MDL.

Assessing the volume of unnoticed import and export in these two complexes in 2014 and using official tariffs and import and export prices for volume of production, the losses of the state budget, according to our calculations are approx. 1598.1 mil. MDL.

In conclusion, we mention that by using input-output model, there were detected state losses due to shadow economy worth 4164.39 mil. MDL.

Conclusions. The input-output model analysis for 2014 have found the following core areas of the shadow economy: illegal import, illicit production, declaration of a much lower price of the supplied goods, which sometimes constituted about 30% of the real price.

Aimed at combating the gray economy it is necessary to decreased tax burden on domestic producers, to grant a tax holiday to entrepreneurs in sectors that substitute the imported goods, to reduce the number of controlling bodies. Implementation of the last measures would have the following consequences: it reduces transactional costs of local producers, is fighting corruption, there are lowered expenses from the state budget related to the maintenance of these state bodies, etc.

Reducing the tax burden on the one hand leads to the reduction of short-term allocations in the state budget; instead leading to an increase in net profit, therefore the entrepreneur can expand his business. On the other hand, in long-term, the turnover of domestic producers increases, and the state will be paid by increasing the payments in the budget, such as from producers, so from the final consumers, as the business expansion means creating new jobs therefore increase the final consumption, increase of GDP, increase of the welfare of the people.

In the Republic of Moldova, there is a tendency to import meat and offal from the fist category at a price lower than the price of domestic producers. In 2014, it was imported 30.2 thous. tons of meat and offal, which constitutes 70% of the production. In this context, it is necessary to attract domestic and foreign investments in order to create favorable conditions for expanding the sector.

In the republic there is the potential for animal breeding, only in 2014 there were exported 108.85 thous. tons (in 2013 – 47.4 thous. tons, in 2012 – 81.2 thous. tons) of animal feed (bran, blocks sunflower seeds and crushed soybeans, etc.) at a discounted price (2.7 MDL/kg) compared to the market.

Currently, remains actual to stimulate the production of goods in the country of import substitute's goods, including *manufacture of perfumes and cosmetics, medicines, confectionery, grits, potatoes, lemon*

salt, synthetic detergent, essential oil, etc. Although Moldova is producing perfumery and cosmetics, however, imports of this product are approximately of 34.8 times greater than the volume of production. The same situation occurs in the production of medicines, where import volume is by 7.78 times higher than domestic production.

Availability of raw materials, especially of essential oils, and other products of bee keeping allow the expansion of those sectors.

In Moldova, in recent years has changed the use of mineral fertilizers from 136 kg/ha in 1991 to 19 kg/ha in 2004, then in 2013 it reached 53 kg/ha and in 2014 - 84 kg/ha.

The decrease in the use of mineral fertilizers lowers soil fertility and decrease of the crop yield by 30-50%. World practice shows that in developed countries such as Germany there are used mineral fertilizers in amount of 145 kg/ha, in EU countries – 91 kg/ha, Latvia – 41,3 kg/ha, Romania – 35.3 kg/ha and in developing countries – 10 to 25 kg per hectare are used. Therefore, for increasing the efficiency of agriculture it is necessary to extend the use of mineral fertilizers of about two times.

If the state is interested in the actual development of agricultural households, the mechanisms must be found to reduce fuel prices. The state should solve this problem since the country's energy security should not be affected.

REFERENCES

1. GANCIUCOV, V. *Analiza și elaborarea pronosticului balanțelor interramurale natural-valorice*: raport științific. Chişinău: Ed. IEFS, 2006. 168 p.
2. LEONTIEF, WASSILY, W. Input-Output Economics. In: Scientific American. 1951, vol. 185, no. 4, october, pp. 15-21. ISSN 0036-8733.
3. Hotărîrea Guvernului pentru aprobarea Regulamentul cu privire la modul de calculare a mărimii minimului de existenţă: nr. 285 din 30.04.2013. In: Monitorul Oficial al Republicii Moldova. 2013, nr. 104-108, art. 344.
4. SAVENCO, L., GANCIUCOV, V. Modelul balanţei interramurale de prognoză a dezvoltării economiei naţionale. In: Evoluţii şi politici economice: culegere de lucrări ştiinţifice. Institutul Naţional de Economie şi Informaţie. Chişinău, 2004, pp. 39-48. ISBN 9975-9654-8-2
5. MINISTERUL FINANŢELOR AL REPUBLICII MOLDOVA. Raport operativ privind executarea bugetului public naţional 2014 [accesat 27 februarie 2016]. Disponibil: http://www.mf.gov.md/files/reports/Raport%202014%20.pdf
6. BIROUL NAŢIONAL DE STATISTICĂ AL REPUBLICII MOLDOVA. *Anuarul statistic al Republicii Moldova = Статистический ежегодник Республики Молдова = Statistical yearbook of the Republic of Moldova 2014*. Chişinău: Statistică, 2014. 558 p. ISBN 978-9975-78-932-5.

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PARTICULARITIES OF PLACE BRANDING IN THE EUROPEAN COUNTRIES

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This article examines the role of place branding in the image forming of certain European countries. The relevance of the article is confirmed by an acute need to identify the factors and branding tools that should be taken into account while a country develops a brand and influences the process of image forming. The purpose of the article is to examine successful examples and failures of the branding strategies of some European countries and cities. The results have to identify similarities and differences in the approach of European countries to promote a certain area as a part of country branding; to determine the key success factors that lead a country to the recognition by the international community.

Key words: *place branding, European countries, Moldova, image promotion, world space, Public Relations (PR).*

În articol este cercetat rolul brandului teritoriilor în formarea imaginii unor ţări europene. Actualitatea articolului este confirmată de necesitatea acută în determinarea factorilor şi a instrumentelor de brand, care se iau în vedere la elaborarea brandului de ţară şi influenţează procesul de creare a imaginii teritoriilor. Scopul articolului constă în studierea exemplelor de succes şi de insucces de utilizare a strategiilor de brand de către unele oraşe şi ţări europene. Rezultatele cercetării constau în evidenţierea asemănărilor şi deosebirilor în abordarea strategiilor de brand de către ţările europene în promovarea teritoriilor şi în determinarea factorilor de succes, care contribuie la recunoaşterea ţării pe arena mondială.

Cuvinte-cheie: *brandizarea teritoriilor, ţări europene, Moldova, promovarea imaginii, spaţiu mondial, relaţii publice.*

В данной статье исследуется роль брендинга территорий в формировании имиджа определенных Европейских стран. Актуальность статьи подтверждается острой необходимостью определения факторов и инструментов брендинга, которые учитываются при разработке бренда и влияют на процесс создания имиджа территории. Цель статьи заключается в изучении успешных и неудачных примеров проведения брендинга некоторых Европейских стран и городов. Результаты работы состоят в выявлении сходств и различий в подходе Европейских стран к продвижению территорий в рамках брендинга, а также в определении факторов успеха, которые приводят страну к признанию мировым сообществом.

Ключевые слова: *брендинг территорий, европейские страны, продвижение имиджа, мировое пространство, связь с общественностью.*

JEL Classification: M37, M29, M39, O18, P25.

Introduction. Europe is not only the countries members of the European Union, but the whole European continent with the territory of 10505000 square kilometers. This is the territory from Ural to Portugal, from Rome to the Kola Peninsula. The eastern borders lie along the foot of the Urals and Kazakhstan, up to the Caspian Sea. Turkey, Cyprus, Madeira, the Canary and Azores islands are also parts

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of Europe. This huge geographic area (4340 km in length) is a market with 800 million people who speak approximately sixty different languages.

Although Europe occupies only 4% of the globe, 14% of the world population lives here. Altogether the factors comprise the greatest world market from the point of view of its purchasing power. Many investors are attracted by the economical potential of the market. Taking into consideration this definition of Europe, more than 100 thousand territorial units are taken into consideration. Every unit has its own image, problems, and possibilities for positioning [1].

Speaking of European countries and their importance nowadays it is necessary to mention that their possibilities have never been as good as they are now. Europe becomes one of the biggest markets of the world. Due to this fact, the problem of achieving dominance in European market, which is equal the global market has never been so acute. In this case, the competitors will revive and induce new partners and strong players. Star players, the strongest in the world, own those brands that find new branding tools to achieve the "first place" in the severe competition.

There is another category of places (mostly, they are from the post-Soviet territory), that do not acknowledge their national identity, which is not acceptable for the creation and promotion of the proper brand. These categories of countries need more time to achieve the goal and an absolutely different approach to the methods of creation and implementation of the branding strategy. Most of the activities to be done in order to have a positive, strong, recognizable brand will become clearly only when the country formulates its national identity and key values. This is one of the most important stages of the place branding.

Thus, every territory needs a strategic marketing plan for a changing and demanding environment to benefit from newly created situations [5]. There are specific factors which define the marketing results of the territory, functioning on the European market. First of all, there is the necessity to achieving dominance on the territory of Europe, where the strongest place brands are situated. Regardless whether we speak of tourist attractiveness of Paris, automobile power of the Southern Germany or financial virtuosity of London, the branding capital of these countries is enormous. Europe doesn't have competitors on other continents from the point of view of its historical and cultural wealth [2].

Moreover, these huge resources comprise not only tourist sightseeing places, but also qualified work forces, important industrial clusters and a wide variety of people and languages. In reality, there are thousands of places in Europe that have specific advantages in specific domains of the place branding. However, the problems of supporting the territories with existing brands and encouraging new players to reach the leadership should be solved, because the European territories become more and more responsible for their branding and marketing. Small places have already faced the necessity to look for new outstanding strategies to compete on a market full of rivals. These problems are acute for Europe due to high level of competition and support of local interests. The winners will construct their territories to maximize their marketing and brand influence. The territories already implement internal and external examinations searching for external sources for the realization of their goals, build intentional relationships between buyers and sellers, market their infrastructure and manage it, and skillfully promote their products on the market.

The amount of all factors that form the place brand and branding company, might seem to be huge for the small territories and for the territories which have just started to realize the necessity of the activities. Nevertheless, there is a great number of examples in Europe when strong leadership and systematic measures overcome the problems which appear due to the size, geographical position of the place and other factors which influence the attractiveness of the territory. Almost all territories in Europe have hard times now; some territories are in worse positions, others are in better ones. *Dying* territories or territories in the *permanent crises* are in the worst situation. The states which are at present in a critical situation or in the process of restructuring economy appeared in Europe during the last decades. There are no internal resources to start the process of improving the situation in these disadvantaged territories (the basic industry and businesses are lost; there is a high level of unemployment, etc.).

There are also territories in *a dragging out a miserable existence, but with revival potential* (in spite of all the problems they possess historical, cultural, commercial and even political potential). The renewal processes become possible if a good leader appears and a concept of perspective development is elaborated.

Other places have *signs of both prosperity and recession*. Due to specific combination of industrial enterprises and developing companies these territories are very sensitive to fluctuations of the business

cycles. Many European places are in a more favorable position as positive changes have already been fulfilled there. These territories elaborated specific effective countries with the accent on specific branding strategies in order to create conditions to increase their own attractiveness. Some territories deserved the title to be "*selected*". They have strong position; they keep attracting businessmen, new residents, tourists.

Identification of special features and estimation of the process of place branding elaboration in various situations, pursuing different goals and visioning of the strategy, involving different necessary structures into the process may serve as examples of successful or failing branding companies in European countries that are shown in this article.

Place branding case studies on the Western European countries

The first case study is dedicated to **Scotland** that belongs to category named "small countries". Nowadays, the process of globalization performs new challenges to small countries that have a big risk to become marginalized due to the world changes in economic, political, social and even cultural life. It requires being more than attentive to the country brand forming and it's supporting programs. Almost 330 companies were given the right to use this logo of Scotland for their goods, and not necessarily traditional national products like whisky or textile.

Particularly, British Telecom Scotland or Bank of Scotland place this image on their promotional materials, invoices and other documents; the Scotland label is used by the producers of electronics, software, oil products and representatives of other domains of modern technologies, Scotland wants to be associated to. A specification system for the goods, claiming to receive the logo was elaborated; the product must be produced in Scotland and meet the quality standards of the domain. More than this, there were formulated a number of requirements to the producers: perfect reputation, annual turnover not less than 50 thousand pounds, constant improvement of the quality of goods. Around 20% of the companies that have applied for Scotland the Brand license have been refused since they didn't meet the quality requirements. The companies used to pay a certain amount of money for the right to place the Scottish logotype (for example, starting from 250 up to one or ten thousand pounds plus VAT annually for the companies whose annual turnover is more than 10 million pounds), and in order to use the logo a special preliminary permission needed to be obtained [4].

As a result, big chain stores noticed that "Scottish consumers were increasingly keen to buy produce that proclaims its Scottish origins. All the major supermarkets have set up sections for Scottish foodstuffs; and most of them are buying more of their goods from Scottish sources in order to meet demand. Scotland's economic development agencies hope that this upsurge in patriotic buying can be spread to overseas markets. Scotland the Brand campaign had a big impact first of all on internal areas, forming in its turn positive components of Scottish product brands among local publics (which is important for each branding campaign) with the perspective to achieve the same recognition abroad. All the implemented initiatives haven't brought any changes in Scotland brand perception. Scotland now remains one of the most popular tourist destinations in the world. It is obvious, that this is one of the most advantageous parts of its brand. That is why it is reasonable to pay more attention at this direction and develop it properly with the help of different special events, festivals, press tours etc.

Eastern European countries place branding campaigns examples

A good example of formating own image and branding can be seen in the campaigns of the Eastern European countries which have recently joined the European Union. Nobody will deny the fact that the European Union, which has become a brand itself, has been able to create a powerful positive motivation for the neighboring countries for integration. This has been the main tool of external influence of the EU. Evaluating the possibilities of the European Union policy in Eastern Europe, it is obvious that this problem shouldn't be considered in similarity with the EU influence during the last fifteen years on the countries of the former Eastern Europe which are called the countries of the Central Europe nowadays. The difference is in the fact that the EU clearly defined the perspective of the membership referring the countries of Central Europe. This was the fact that produced a stabilizing impact on both internal political processes and relationships between the neighboring countries of an EU potential member. Internal stability, control over authoritarian tendencies and radical nationalism were also mainly determined by this factor in Central European countries and the Baltic republics.

Poland: in search of its national symbol

The initiatives of the national brand promotion can be illustrated based on the example of Poland. The development of the national brand became an acute problem for Poland when it was on the eve of

joining the EU. Immediately a question appeared: what kind of country is it for the future partners in the integration process?

The image turned out to be far from being positive. Poland was often associated with the chaos in economy, sluggishness, vodka, Catholic Church, machinations, auto theft and cheap labour force. Thus, Poland lacked positive symbols which could be recognized abroad. Nevertheless, the European community was impressed by a very specific brand promotion activity: the creation of a mythical Polish plumber (Fr. Plombier polonais, Pol. polski hydraulic). It represented a symbolic image of cheap working force from Central Europe which would migrate to the "old" EU countries as a result of their adoption. This image became popular especially in France. The "Polish plumber" became a symbol of threat to the living standards of French workers due to European integration. The image of the "Polish plumber" was "tapped" by Poland itself as the answer to the painful polonophobic reaction in the country. Hence, a billboard in French appeared which showed a plumber inviting tourists to visit Poland. "Do you live in France? Do your pipes leak? A muscular and extremely handsome Polish plumber won't come to help you! I will stay in Poland, come here if you want!" This advertising campaign is an excellent example of achieving public resonance and popularity based on trivial assets. Having shown the fear of Frenchmen from a humorous and kind point of view, the creators of the "plumber" promoted efficiently not only the product but also softened the Frenchmen's attitude making the advertisement of the Polish resorts social, since beautiful landscapes of Poland were shown on the background of the billboard. As a result, this branding initiative was considered as the "agressive" one and lead to absolute dislike from the side of the targeted publics.

It is obvious that all the initiatives that Poland will implement in the future should be coordinated and accomplished according to the European Union requirements. In addition, it would be better if these initiatives were not too aggressive in order to keep positive attitudes from the side of the other European Union members.

Estonia: the country of contrasts

Estonia faced the same problems as Poland did. It was supposed to enter EU within "the first wave" of Eastern European countries. From the point of view of Western European countries it didn't differ much from its Baltic neighbors and didn't have a positive image. For Swedes and Finns Estonia was associated with "alcoholic tourism" which didn't represent the country positively. It is obvious, that changing stereotypes was the prior objective in the branding program. The Government of Estonia directed its activity towards the creation of the Brand Estonia.

The core objective was to demonstrate the main national values and specific features of the country, to establish a new image of the state for its western and eastern neighbors. Its objectives also were to enable Estonia to achieve greater success in attracting foreign-direct investments, to expand its tourist base beyond Sweden and Finland, and to broaden the European markets for exports. Unlike Poland, Estonia set several objectives, regarding the promotion of the main country advantages. The tools for Estonia brand creation were as follows:

1) Active participation in the international level cultural competitions such as Eurovision.
2) Providing different services to Estonian businessmen who worked abroad and foreign entrepreneurs who were willing to start cooperation with Estonian companies.
3) Providing high-level travel tours in order to acquaint foreign visitors with Estonian marvelous nature.
4) Creation of a special brand logo of Estonia.

We offer a more detailed stop at the last point. A brand logo creation was an important tool to reflect the uniqueness of Estonia in comparison with other countries. Thus, the label with the text "Welcome to Estonia" was created in a shape, which slightly resembled the contour of the country on the map. Although it wasn't performed in the national color gamut, it was elaborated in red and white colors. The colors were considered to be changed depending on a particular situation (initially, the logo was using cool Nordic color schemes). At that time the slogan of the Brand Estonia promotion campaign "Positively Transforming" appeared. The slogan was supposed to symbolize the changes taking place in Estonia at that time and to emphasize the newly appeared contrasts.

With a strategic design and typeface, this logo has become widespread throughout the country, accepted by Estonia's national airline, businesses, tourism industry, and shipping docks. In addition to the logo, the campaign also has a graphic background pattern to serve as another symbol of Estonia's new brand. Small geometric shapes inspired by Estonian embroidery and knitting represent tradition, while the

vibrant color palette mixes in the contemporary – a combination which the nation intends to represent their culture. The brand was considered universal and easily understood by foreigners.

As a conclusion we can add, that the "Welcome to Estonia" brand later was criticized and even mocked in Estonia. Many companies and firms use it; however, it should be used in a more efficient way. The "Welcome to Estonia" brand logo was a core step of the branding program that opened a lot of discussions on basic colors, shape and slogan. From one side it is a positive fact because it means that this program captured public's attention. From the other side, there was a big risk of brand perception confusing. Nevertheless, it still exists till today and according to many financial and marketing specialists opinions, the country had benefitted from this brand.

Place branding case study on the European city

Lisbon – the dynamic exotic

Let us examine the case that became the example of successful branding campaign towards place branding. Lisbon, the capital of Portugal, promoted by one of the leading groups of French consulting agencies "Information et Enterprise" (I&E). This initiative was intended as a supporting action for the Portugal tourism company Turismo de Lisboa (TL). The initial objective of this project became inclusion Lisbon in the top 10 of the most desirable world tourist destinations. The targeted publics became tourist markets of France, Spain, Germany, England and Italy, the most important markets in term of visitors. Let us look at the branding campaign targeted to the French audience.

One of the most important points in each branding campaign is clear understanding of your target media. I&E applied an in-depth approach to this step and revealed the following media categories: the core media tools were the professional tourism press, general news press, general tourism press, feminine press, national dailies and national radios; the next step assumed regional dailies, TV press, National TV, senior press; the last media tools were press agencies, youth press, family press, food press, men's press, health press, cultural press, communication press, "time out" press. What is important I&E realized that dealing with target media means a big necessity of being flexible in their relations with the media. They had to be reactive and seize up all worthwhile editorial opportunities [3]. During the dealing with targeted media it has been revealed also that the audience's attention was caught by the paradox between the old and the new Lisbon and the "unseen" Lisbon.

In order to be more efficient in French media relations there was applied an original tool – the Turismo de Lisboa press office positioning in Paris as a source of information on Lisbon and the surrounding area, where the media representatives could get brochures, leaflets illustrations and videos of Lisbon and its area for immediate reaction to media request as well as potential partnership. The ongoing activities of the press office included identification of editorial features, responding to media requests, updating and creation of adapted tools and resources for effective media relations. Among these activities the attention was also focused on the press tours organization (it is one of the most effective tools in order to promote any place properly) and reporting (monthly activity report or press review and yearly report of the PR actions). Thus, the press office was an unique source of information for the French media.

An essential part of the Lisbon branding campaign was participation in existing events in Paris such as Bedouk Show the France's leading trade fair. It is an annual event for everyone involved in the sectors of incentive. The target audiences are decision makers and buyers from worldwide travel companies and agencies. Another event was MIT International) the world's largest trade fair group tourism professionals (over 90 countries represented). The target audiences were foreign tourism companies. The last step of the program became increasing visibility of the web sites. Today the TL's website is regularly mentioned in most press articles due to a dedicated space on TL's website creation for a "travel assistance" to Internet users (pages with a direct link to a personalized e-mail address) and interactive links development with specialized Lisbon Tour Operators' websites.

What is the result of the work? Lisbon started to gain its position in chronological progression. It was marked by a new perception of Lisbon in the French mass-media; the city started to be recognized as a dynamically developing European capital where "something always happened". For the representatives of the French mass-media there was organized a press-centre in Paris. To provide new and up-to-date topics for the newly edited materials the whole information about Lisbon was accumulated here. Year after year the city becomes more recognizable (especially in France) thanks to the scrupulous work with mass-media. Press and audio-visual materials became more profound, the life of the city was described from different positions that led to increasing interest of the public to this newly discovered place. Internet proved to be another effective tool of the promotion campaign. Different "useful" links to satisfy any

interest of the public connected to Lisbon were provided on various sites. Nowadays Internet is one of the most important sources of information.

Conclusion. The branding campaigns of the selected European countries reviewed in this article performed, that each place has its own particularities that depend on different factors: tasks and objectives, target audiences, inhabitants' mentality, professionalism level and budget for branding campaign. It is revealed that without professional approach the only result of such efforts is failure, because each of these points needs an in-depth audit for further dealing with it. Below are performed the main mistakes that places (in our case, countries and cities) faced in the branding process implementation:

- *National idea commercialization.* It leads, like in the case of Scotland, to false brand perception and mistrust among local inhabitants and foreign audiences.
- *One part of national brand promotion.* In case of Poland that narrowed down its tasks for its brand promotion to some of goods brands export, it also lead to a false brand perception.
- *Aggressive promotional initiatives.* Basing on the Poland's example (the aggressive promotion of the Polish Plumbing Technician in Europe) we can claim, they lead to absolute dislike from the side of the targeted publics.
- *Alternatives efforts of the country brand promotion.* The example on Estonia performs that it is impossible to promote 2 images of one country.

Hereby, it is necessary to perform another category of key success factors of places branding campaigns reflected:

- *Initial proper image forming;*
- *Concrete tasks and objectives settings;*
- *Determination of concrete key messages and national values that should be promoted;*
- *Proper visual brand logo elaboration that would reflect the main place's values;*
- *Determination of a common national idea;*
- *Partnership with a big number of different media structures that allow to perform a place brand from different sides;*
- *Clear determination of a place brand's negative sides in order to get rid of them.*

Due to the case studies, we revealed in addition that one of the most important things in each place branding campaign is to begin promotional initiatives within a certain place among local publics in order to turn the inhabitants into the main part of the place brand.

REFERENCES

1. KOTLER, P., ASPLUND, C., REIN, I., HAIDER, D. *Marketing Places Europe*. Stockholm School of Economics in Saint Petersburg. Sankt-Peterburg, 2005. 367 p. ISBN 5-315-00027-3.
2. KAVARATZIS, M. Cities and their brands: Lessons from corporate branding. In: Place Branding and Public Diplomacy. 2009, vol. 5, pp. 26-37 [accesat 23 februarie 2016]. Disponibil: http://bestplaceinstytut.org/www/wp-content/uploads/2010/09/Kavaratzis-2009-PLACE-BRANDING.pdf
3. KALANDIDES, A. Place Branding and Place Identity. An integrated approach. In: Tafter Journal. 2012, no. 43 [accesat 7 februarie 2016]. Disponibil: http://www.tafterjournal.it/2012/01/03/place-branding-and-place-identity-an-integrated-approach
4. ДИННИ, К. *Брендинг территорий. Лучшие мировые практики*. Москва, 2013. 336 с. ISBN 978-5-91657-655-9.
5. ГОДИН, А.М. *Брендинг*: учебное пособие. Москва: Дашков и К, 2006. 422 с.
6. MATEI GHERMAN, C. Communication – picture without words. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 4, pp. 78-83.

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LOANS PROVIDED BY CHINESE GOVERNMENT: OPPORTUNITIES AND RISKS FOR THE REPUBLIC OF MOLDOVA

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As external development partners have put on hold their financial support for Moldova, contracting loans from China sparks an increasing interest. Because debates on this topic take place with very little information available, in this article we have made a synthesis of official data disseminated by the Chinese authorities, estimations made by the OECD and other organizations, records from the archive of the National Bank of Moldova, documents from the state register of legal acts, as well as of data published by the press. The results show that, although loans provided by the Chinese government are not an alternative to the loans offered by the IMF and other traditional creditors for budget and balance of payments support, they have a range of peculiar advantages and can be a convenient means of financing projects in the area of energy, industry, and agriculture.

***Key words**: China, Moldova, export credits, concessional loans, international finance.*

În condiţiile suspendării suportului financiar oferit Moldovei de partenerii externi de dezvoltare, contractarea împrumuturilor din China trezeşte un interes sporit. Deoarece dezbaterile la acest subiect se desfăşoară în condiţiile unui volum foarte limitat de informaţii disponibile, în prezentul articol am realizat o sinteză a datelor oficiale, difuzate de autorităţile chineze, a estimărilor OCDE şi ale altor organizaţii, a informaţiilor din arhiva Băncii Naţionale a Moldovei, din actele incluse în registrul naţional al actelor juridice, precum şi a informaţiilor, apărute în presă. Rezultatele cercetării arată faptul că, deşi împrumuturile guvernamentale chineze nu reprezintă o alternativă la creditele oferite de FMI şi de alţi creditori tradiţionali pentru suport bugetar şi susţinerea balanţei de plăţi, acestea au avantaje specifice şi pot fi o modalitate convenabilă de finanţare a proiectelor în domeniul energeticii, industriei şi agriculturii.

***Cuvinte-cheie**: China, Moldova, credite la export, împrumuturi concesionale, finanţe internaţionale.*

В условиях приостановления финансовой поддержки для Молдовы со стороны внешних партнеров по развитию, привлечение займов от Китая вызывает повышенный интерес. Поскольку обсуждение этого вопроса происходит в условиях очень ограниченного объема информации, в настоящей статье мы обобщили официальные данные, распространяемые властями Китая, оценки ОЭСР и других организаций, информацию из архива Национального Банка Молдовы, из документов, включенных в государственный реестр правовых актов, а также информацию, появившуюся в прессе. Согласно результатам исследования, несмотря на то, что правительственные займы от Китая не являются альтернативой кредитам от МВФ и других традиционных кредиторов на поддержание бюджета и платежного баланса, они все же обладают характерными преимуществами и могут быть подходящим способом финансирования проектов в области энергетики, промышленности и сельского хозяйства.

***Ключевые слова**: Китай, Молдова, экспортные кредиты, концесионные займы, международные финансы.*

JEL Classification: F34, F35, F39, H81, H84.

Introduction. As external development partners such as the International Monetary Fund (IMF) have put on hold their financial support for Moldova, and while remittances from abroad have fallen, the government of the Republic of Moldova is facing the risk of insufficient resources to cover its current fiscal expenditures and the official reserve assets of the National Bank of Moldova are dwindling. Public

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debate in Moldova has grown about the rise of a new development partner – China, with the expectation that its loans become an alternative to funding offered by traditional creditors. Despite the growing attention this topic is getting, debates take place with very little information available. The aim of this article is to present the types of official loans offered by China, the institutions involved and contracting procedures, to assess the advantages and disadvantages of these loans, to reconstitute, from archives and other sources, the historical data on previous drawings on loans from the Chinese government by the Republic of Moldova, as well as to provide a set of recommendations for an efficient management of such initiatives in the future.

Official loans provided by China. Official loans designed to finance goods and services exports operations are financial instruments used by governments to support domestic companies in their export activities. The main traditional types of credits for export support are the export buyer's credit and the export seller's credit. The *export buyer's credit* is a financial instrument which involves offering by a financial institution in the exporter's country of a credit to the importer in order to promote exports of capital goods and services within high-value projects. The *export seller's credit*, unlike the buyer's credit, is a loan extended to the exporter when goods are supplied abroad with a delayed payment by the importer. Governments offer official export credits via Export Credit Agencies (ECA). Because the goal is to implement national trade policies rather than making profits, interest rates on loans offered by ECA are below the market level.

The Chinese government usually offers loans to other countries in the form of credits for purchasing goods and services from China, rarely in the form of unbinded liquidity. The People's Republic of China (PRC) started providing official export credits in the 1990s, and in the last decade the Chinese government export crediting activity has expanded remarkably. Thus, according to the estimates of the Export-Import Bank of the United States (consistent with the estimates made by the OECD[1]), China is today the world's largest provider of official export credits, with US$ 58 billion lent in 2014 (Table 1), which covers 2.3% of its total exports of goods and services.

Table 1

Medium- and long-term official export credit volumes, by main creditor countries (US$ bil.)

	2011	**2012**	**2013**	**2014**
China	28.3	35.4	40.6	58.0
South Korea	9.8	22.6	14.8	14.4
Germany	16.7	21.6	22.6	14.2
Other countries	95.1	89.8	70.3	74.0
TOTAL	149.9	169.4	148.3	160.6

Source: Export-Import Bank of the United States. 2014 Competitiveness Report. 06/2015, pp. 18-19.

Several Chinese banks provide export credits, in particular the large state-owned commercial banks ("the big 4"): Agricultural Bank of China, Bank of China, China Construction Bank, and Industrial and Commercial Bank of China [1]. Export credits with official support from the government are provided by the Export-Import Bank of China (China Eximbank, EIBC).

EIBC is the official export credit agency of the PRC. The bank was established in 1994 as a financial institution aimed at the implementation of public policies, whose mission is to finance external trade activities in key economic sectors, as well as foreign investment activities. EIBC is wholly owned by China's central government and is subordinated to the State Council. Besides its branches in China, EIBC has 4 offices abroad: a branch in Paris and representative offices in St Petersburg, Rabat, and Johannesburg. The main export credit form provided by EIBC is the export seller's credit (with amounts three times larger than those of buyer's credits). EIBC is the only institution offering official development aid to developing countries, provided in the form of governmental concessional loans and preferential buyer's credits.

[1] Because China is not a member of the OECD Arrangement on Officially Supported Export Credits and does not therefore report the statistics prescribed by it, the data presented here are based on estimations.

Export seller's credits are provided by EICB to Chinese companies for exports operations financing, both in domestic currency (RMB yuan) and in foreign exchange. Although EICB does not publish data on conditions and maturities of its credits, according to the estimations made by the OECD, the maturities of export seller's credits provided by this bank do not exceed 5 years. According to the EICB Annual Report for 2014, the total volume of newly signed export seller's credits in 2014 amounted to RMB 184.3 billion (cca US$ 30 billion), and the total outstanding stock of export seller's credits at year-end amounted to RMB 410.4 billion (cca US$ 67 billion) [2].

Export buyer's credits are provided by EICB to companies, public authorities and financial institutions from abroad for their imports of goods and services from China, likewise, in yuan and in foreign exchange. According to OECD estimations, the maturities of export buyer's credits provided by EIBC are longer than 10 years. The volume of newly signed export buyer's credits in 2014 amounted to RMB 53.6 billion (cca US$ 9 billion), and the total outstanding stock of export buyer's credits at year-end amounted to RMB 222.3 billion (cca US$ 36 billion).

Preferential export buyer's credits are provided on favorable terms to governments or to financial institutions or companies (with government guarantee) from countries having diplomatic ties with the PRC. It is unclear from the data officially published by EIBC which share of the total amount of export buyer's credits provided by the bank are preferential export buyer's credits or whether they are included, in general, in the total sum of export buyer's credits or in other items. Preferential export buyer's credits are denominated in US dollars and can cover up to 85% of the total amount of the commercial contract. The estimated yearly interest rates on these credits range from 3% to 6%, and maturities – from 8 to 12 years, with a grace period of 3-6 years [3, p. 19].

Concessional loans provided by the government of China are medium- and long-term financial instruments with low interest rates and grant elements, offered to developing countries that have diplomatic ties with the PRC. Concessional loans are designed to fund infrastructure construction projects, social welfare projects, manufacturing and agricultural projects. These loans are denominated in RMB yuan and can cover up to 100% of the total amount of the commercial contract. The funds are not provided by the Chinese government directly, but are instead collected by EICB in the market by issuing bonds, while the government subsidizes the gap between interest rates. According to the materials presented during the seminar on *Chinese government concessional loans*, in which the author of this article participated in 2010 by the invitation of the Ministry of Commerce of the PRC, the characteristics of these loans are as follows:

- medium and long term (up to 20 years), usually including a grace period of 5 years, in which only interest is paid (the borrower may be exempted from the payment of interest during the grace period, provided that the interest is capitalized);
- low interest rate – 2-3% (sometimes 1%);
- the amount should be not less than RMB 20 million (cca US$ 3 million);
- a Chinese company must be selected as the project contractor and not less than 50% of total procurement (materials, equipment, services, and labor force) shall be made in China.

The loan is normally provided to the government of the debtor country, represented by the Ministry of Finance. Interest and principal payments are made twice a year in US dollars. Besides these, there are some other costs: (1) a management fee (usually 1% of the loan amount), paid in one lump sum before the first drawdown; (2) a commitment fee (cca 0.75%, negotiable), calculated on the basis of the undrawn amount of the loan and paid on interest collection dates (the aim is to stimulate a rapid drawdown of the loan).

The loan contracting procedure is described below:

1. *Application*: The Government of the borrowing country proposes to the Government of China and EICB the list of projects together with the relevant documents (proposal, recommendation issued by the Commercial Counselor's Office of the Chinese Embassy in the borrowing country, technical and economic feasibility study, commercial contract signed between the Chinese contractor and the local executing agency (for example, the Ministry of Transport, if there is a road building project), environmental impact report and ecologic permit issued by the relevant authority of the debtor country, local executing agency profile, materials on the country's economic, political and social situation etc.);
2. *Appraisal*: China Eximbank conducts appraisal of candidate projects and reports appraisal results to the Ministry of Commerce of the PRC (MOFCOM);

3. *Loan agreements*: MOFCOM organizes the signing of: (1) Inter-governmental Framework Agreement specifying loan purpose, amount, maturity and interest rate; (2) Individual Loan Agreement between EIBC and the borrower (usually, the Ministry of Finance);
4. *Loan disbursement*: EIBC disburses the loan to the account of the Chinese contractor (the money does not actually reach the debtor country), in line with the project progress;
5. *Project implementation*: The borrower reports to EIBC on project progress and use of funds, periodic verifications are conducted. Upon project completion, the borrower sends a completion report to China Eximbank;
6. *Repayment of principal and payment of interest*.

The **disbursement procedure** can be represented as follows:

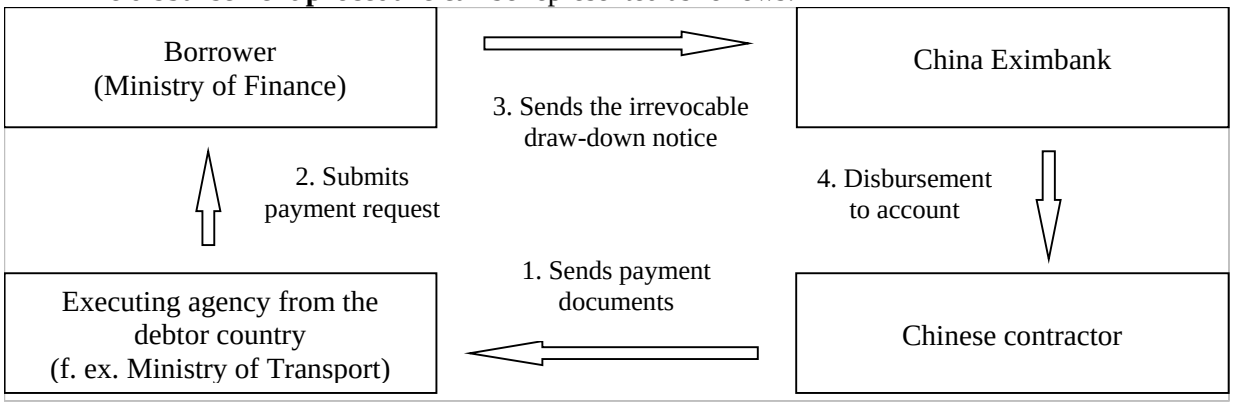


Chart 1. Disbursement procedure of concessional loans provided by the Chinese government
Source: Adapted by author based on materials presented during the seminar on Chinese government concessional loans (Beijing, 2010).

As compared to other sources of funding, loans provided by China offer opportunities, but also pose risks. The **advantages** associated with Chinese loans are:

- According to the estimations of various researchers, China Eximbank generally provides loans with better conditions than its western competitors: lower interest rates, longer maturities and grace periods [4];
- Unlike western creditors, China refrains from interfering with the internal affairs of debtor countries, providing credits with virtually no political or economic conditions. The only political condition is the recognition of One China, that is, the absence of official relations with Taiwan;
- As an alternative source of practically unconditional funding, Chinese loans can serve as leverage in negotiations with traditional creditors to obtain better terms [3];
- The fact that the money lent is not disbursed directly to the debtor country but stays in China and is managed by the Chinese contractor is a protection against embezzlement in countries with weak governance and corruption.

The **disadvantages** of official loans from China are the following:

- Unconditional provision of loans by the Chinese government can lead to the worsening of debt sustainability indicators of the borrower country. Countries may be penalized by traditional creditors who can limit concessional lending if norms stipulated in the World Bank's and the IMF's *Debt Sustainability Framework* are exceeded;
- Because China is not a member of the *OECD Arrangement on Officially Supported Export Credits*, the PRC does not comply with the OECD rules that limit lending practices (such as minimal interest rates, ceilings on maturities, mandatory disclosure of information etc.). Thus, Chinese exporters get unfair advantages [5]. Although from the borrower countries' point of view this is not a minus, but, on the contrary, an opportunity to obtain low-cost financing, they still face the risk of engaging in projects with Chinese contractors not because of the superior quality or better prices offered by the latter, but just because of the available financing. Moreover, access to unconditional cheap funds can favor the launching of projects not on the grounds of real need, but on the grounds of political patronage or foreign contractors' insistence [3];

- The flow of goods from China can become a threat to domestic manufacturers and discourage investment in productive capacity. Likewise, Chinese labor force involved in project implementation competes with local workers;
- Some researchers also argue that by providing loans to countries with weak governance, China may contribute to the slowdown of reforms, rise of corruption, and the staying in power of authoritarian regimes [3], although there is no clear evidence of that.

Moldovan-Chinese relations in the area of official loans. When the People's Republic of China was established in 1949, the USSR (of which the Moldavian SSR was part) was the first country to recognize it. In 1950, the USSR and the PRC signed an *Agreement on friendship, alliance and mutual help*, as well as an *Agreement on the provision by the USSR of a preferential loan to the RPC* amounting to US$ 300 million, later followed by other loans. With the funds of that loan, the USSR supplied to China materials and equipment for power plants, metallurgic plants, machine factories, coal mines, railway and road transportation etc. [6].

After the demise of the USSR, the roles reversed and China became a creditor of the former Soviet republics. Thus, in 1992 an agreement was signed between the government of the PRC and the government of Moldova on providing a loan amounting to RMB 30 million (US$ 5.07 million) for purchasing goods from China. The loan was denominated in Swiss francs, the interest rate was 4%, the repayment (of both principal and interest) was also denominated in Swiss francs and had to be made in kind, too, according to the following schedule: in 1994, 33% of principal had to be repaid, in 1995 – the next 33%, and in 1996 – 34%[1].

The loan was actually used by the Ministry of Industry and Trade of the RM in 1994, when goods worth US$ 3.76 million were supplied from China. Actual repayments of principal were made in 1995 – US$ 1.04 million, and in 1996 – US$ 0.36 million. No payments on interest were made[2]. In 2000, at the proposal of the Ministry of Economy and Reforms of the RM, the Government of the PRC accepted to forgive the unpaid remainder of the debt (amounting to RMB 25.5 million or US$ 2.41 million), by turning it into humanitarian aid[3].

In 2009, the Moldovan government conducted negotiations with the management of the Chinese state corporation COVEC (China National Overseas Engineering Corporation) concerning the provision of a credit line amounting to cca US$ 1 billion, on concessional terms, for the implementation of a range of projects in the area of infrastructure and industry (roads, energy, water supply, sewage treatment, agricultural sector industrialization and processing sector development). As a result of negotiations, a Memorandum of understanding was signed between the Ministry of Construction and Territorial Development of the RM and COVEC. The credit was supposed to be provided for 15 years, with a grace period of 3 years[4]. Other terms, including the interest rate, were expected to be specified later, upon the signing of the inter-governmental loan agreement (the press mentioned discussions over a 3% interest rate, as well as a 90% share of Moldovan labor force involved in projects implementation[5]).

The inter-governmental agreement was not signed, though. The reasons were not explicitly formulated, but we suppose they were connected to the commitments undertaken by Moldova towards the IMF. According to the memorandum with the IMF in force at the beginning of 2009[6], the Government of the RM had undertaken not to contract or guarantee new external non-concessional loans. To qualify as

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[1] Agreement No.1992 of 11/07/1992 between the Government of the RM and the Government of the PRC on providing a state loan for supplying goods from the PRC to Moldova. Published: 01/01/1999 in International Treaties No.18, art. 323. http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=356774 (accessed on 02/05/2016)

[2] National Bank of Moldova. Data from the Debt Management and Financial Analysis System (DMFAS).

[3] Source: Copies of interministerial correspondence from the archive of the National Bank of Moldova.

[4] Guvernare şi democraţie în Moldova. No. 142, July 16-31, 2009. http://www.e-democracy.md/e-journal/20090731/ (accessed on 02/05/2016)

[5] Нестерова О. Меморандум о взаимопонимании на сумму в миллиард долларов. Logos-press Nr. 26 (810), 24.07.2009. http://logos.press.md/node/27220 (accessed on 02/05/2016)

[6] IMF. Republic of Moldova: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding. June 30, 2008. http://www.imf.md/press/LOI-MEFP-TMU-jun2008-ENG.pdf (accessed on 02/05/2016)

concessional, a loan had to have a grant element of not less than 35% of the nominal loan value. Considering the supposed interest rate of 3%, the grant element of the Chinese governmental loan was in the range of 12-23% (according to author's calculations using the IMF's Present Value Monitoring Tool[1]), depending on assumptions about the terms that were not specified by the parties. In order to qualify as concessional, the loan in question had to have an interest rate below 1%, or other terms had to be improved significantly. Besides this, the loan amount would be the largest in the history of the Republic of Moldova and would raise the stock of public and publicly guaranteed external debt from 21% to GDP to 39% (as of the end of 2009), worsening external debt sustainability indicators.

In 2010, after the IMF's requirements on borrowing by the Moldovan government were relaxed, another agreement was signed between the Chinese company Sinohydro Group Ltd. and the Ministry of Transport and Road Infrastructure (MTRI) of the RM on providing a concessional loan via EIBC amounting to RMB 426.6 million (US$ 62.4 million) for the reconstruction of a bridge and road segments Chisinău-Hincesti-Cimislia-Basarabeasca and Chisinau-Dubasari. The loan maturity was supposed to be 20 years with a grace period of 8 years and a yearly interest rate of 2.7%. Not less than 50% of procurement for the implementation of this project had to come from China[2]. In 2012 the Government of the RM adopted the decision on the commencement of negotiations on the Agreement between the Government of the RM and the Government of the PRC on the provision of a concessional loan by the PRC to the Republic of Moldova[3]. The list of bilateral agreements published by the Ministry of Foreign Affairs and European Integration of the RM mentions the Framework agreement between the Government of the RM and the Government of the PRC on the provision of a concessional loan by the PRC to the Republic of Moldova, signed in Chisinau on 07/20/2012[4]. The agreement never came into effect, and the parties did not make any public comments on reasons. According to an official press-release of the MTRI, the rehabilitation project of the road R3 Chisinau-Hincesti-Cimislia amounting to 268 million Moldovan lei (EUR 13 million) eventually started in the summer of 2014, and was funded by a loan extended by the European Investment Bank[5] (according to the data published by the press regarding the EUR 75 million loan agreement signed with the EIB and ratified in 2011, the loan maturity was 18 years, including a 5-year grace period, and the interest rate was EURIBOR+0.68%, there was also a commitment fee of 0.1% per year[6]).

Thus, at the moment the Republic of Moldova does not have any active loan agreement with the Chinese government. Nevertheless, according to the Protocol of the VIIth meeting of the Intergovernmental Moldovan-Chinese Committee on Trade and Economic Cooperation (2014)[7], the Moldovan government is, in principle, considering the option of borrowing from EIBC.

Official loans extended by China provide certain opportunities to debtor countries and can generally be a convenient means of financing projects in the area of infrastructure, energy, industry, and agriculture,

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[1] IMF. Concessionality calculator and PV tool. http://www.imf.org/external/np/spr/2015/conc/index.htm (accessed on 02/05/2016)

[2] Infomarket news agency.

[3] Decision of the Government of the RM No. 508 of 07/18/2012 on the commencement of negotiations on the Agreement between the Government of the RM and the Government of the PRC on the provision of a concessional loan by the PRC to the Republic of Moldova. Published: Monitorul Oficial No. 149-154, art. 554, 07/20/2012. http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=344107 (accessed on 02/05/2016)

[4] MFAEI. List of bilateral treaties concluded by the Republic of Moldova. http://www.mfa.gov.md/img/docs/Lista-Tratate-Bilaterale_24_11_15.pdf (accessed on 02/05/2016)

[5] MTRI. Drumul Hînceşti-Cimişlia va fi finalizat în decembrie 2015. Comunicat de presă. 05/20/2015. http://www.mtid.gov.md/ro/content/drumul-h%C3%AEnce%C5%9Fti-cimi%C5%9Flia-va-fi-finalizat-%C3%AEn-decembrie-2015 (accessed on 02/05/2016)

[6] Law on ratification of Financing contract between the Republic of Moldova and the European Investment Bank for the implementation of the Road rehabilitation project of the Republic of Moldova. http://infoeuropa.md/rm-privind-ue/lege-privind-ratificarea-contractului-de-finantare-dintre-republica-moldova-si-banca-europeana-de-investitii-pentru-realizarea-proiectului-de-reabilitare-a-drumurilor-din-republica-moldova/ (accessed on 02/05/2016)

[7] Protocol of the VIIth meeting of the Intergovernmental Moldovan-Chinese Committee on Trade and Economic Cooperation, http://mec.gov.md/sites/default/files/protocol_china.pdf (accessed on 02/05/2016)

provided that they are well managed. This is especially true for countries with poor access to finance, such as Moldova [7, p. 90]. To minimize the risks mentioned earlier in this article, we recommend that the Moldovan government take note of the following aspects:

- In order to avoid the worsening of external debt sustainability indicators, the loans should be directed to the financing of those projects that can quickly generate GDP growth (such as projects in the area of renewable energy sources, manufacturing and agriculture). Thus, even though the absolute amount of debt will increase, its ratio to GDP will not;
- It is abnormal that in both previous attempts to contract concessional loans from the government of the PRC the specific Chinese contractor company was known from the start. The Moldovan government should make a priority projects list and, in line with it, organize competitive tenders (f. ex., Angola requires that at least three Chinese companies participate in the tender [3]). This would help obtain better deals and would ensure that credits are taken on the grounds of real needs, not under the pressure of a specific contractor;
- The Republic of Moldova has a large room for negotiating more favorable terms with the PRC. Considering the low cost of capital in China and the large amount of the PRC's official reserve assets, interest rates on Chinese loans can be very attractive. Other terms can also be negotiated, such as the participation of Moldovan subcontractors in the project, a higher share of local materials and labor force (for instance, Angola and Congo have negotiated that a certain part of project cost will be subcontracted to domestic companies, Tanzania has negotiated a ceiling on the participation of foreign labor force [3]).

Conclusions. The Chinese government provides funding to other countries usually in the form of credits designed to finance the purchasing of goods and services from China. Official credits are provided via China Eximbank and include: export seller's credits, export buyer's credits, preferential export buyer's credits, and governmental concessional loans.

Funds are normally managed by Chinese companies that execute works and supply goods, rather than disbursed directly in the accounts of the borrower country. Because funds do not leave China and have a predetermined destination, loans provided by the Chinese government are not an alternative to credits offered by the IMF and other traditional creditors for budget and balance of payments support. Nevertheless, official credits from China can compete with loans provided by traditional creditors for road rehabilitation, manufacturing and energy projects etc.

So far, only one loan has been contracted by the Republic of Moldova from the government of China in 1992, with part of the debt forgiven in 2000. Two memorandums of understanding on contracting concessional loans have been concluded: one between the Ministry of Construction and Territorial Development of the RM and the Chinese company COVEC (2009) and another between the Ministry of Transport and Road Infrastructure of the RM and the company Sinohydro Group (2010). The negotiations conducted did not result in loan disbursement and project implementation.

Although official loans provided by the PRC do not substitute the credits offered by the IMF, keeping in mind the specific advantages of the former, the government of the Republic of Moldova is considering further possibilities of financing projects from this source. The advantages include: low cost (interest rates of 3-6% on preferential export buyer's credits and 1-3% on concessional loans), long maturities and grace periods, respect for the sovereignty of debtor countries (absence of conditions related to the internal policy) etc. There are also disadvantages, such as: threats that are posed by the flows of goods and labor force from China to local manufacturers and workers, worsening of debt sustainability indicators etc. The disadvantages can be avoided or minimized if a set of measures is undertaken, such as: allocating loans to those projects that can quickly generate GDP growth, so that the debt-to-GDP ratio does not increase, advance identification of national priorities and organization of tenders with the participation of several contractor companies, participation of domestic subcontractors in projects implementation, limiting the imports and foreign labor force involved in the undertaking of works etc.

REFERENCES

1. OECD. Chinese Export Credit Policies and Programmes. 2015, 16 march [accesat 12 februarie 2016]. Disponibil: http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/ECG%282015%293&doclanguage=en

2. The Export-Import Bank of China: annual report for 2014 [accesat 12 februarie 2016]. Disponibil: http://english.eximbank.gov.cn/tm/en-AR/index_634_27420.html
3. BRÄUTIGAM, D. China, Africa and the International Aid Architecture. African Development Bank Group. Working Paper Series no. 107. 2010, april [accesat 22 februarie 2016]. Disponibil: http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/WORKING%20107%20%20PDF%20E33.pdf
4. HAROZ, D. China in Africa: symbiosis or exploitation. The Fletcher Forum of World Affairs. 2011 [accesat 12 februarie 2016]. Disponibil: http://www.fletcherforum.org/wp-content/uploads/2013/12/Haroz_FA.pdf
5. MASSA, I. *Export finance activities by the Chinese government*. European Parliament. Directorate-general for external policies of the Union briefing paper. 2011, september [accesat 16 februarie 2016]. Disponibil: http://www.europarl.europa.eu/RegData/etudes/note/join/2011/433862/EXPO-INTA_NT(2011)433862_EN.pdf
6. РАХМАНИН, О.Б. *К истории отношений России-СССР с Китаем в XX веке. Обзор и анализ основных событий*. Изд. 3-е. Москва: Памятники исторической мысли, 2002. 512 с.
7. CHISTRUGA, M., HAMURARU, M. Accesul la finanţe - constringere la cresterea economică în Republica Moldova = Access to finance - constraint to the economic growth in the Republic of Moldova. In: Economie şi Sociologie = Economy and Sociology. 2012, nr. 2, pp. 90-98.

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EVOLUTION AND DEVELOPMENT STRATEGIES REGARDING SME SECTOR IN ROMANIA AND THE REPUBLIC OF MOLDOVA

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The small and medium enterprises (SMEs) are at the top of European strategies and policies, a key factor for growth, employment and economic performance. The economic and financial crisis of 2008 has affected the SME sector in Romania and the Republic of Moldova, whose development was different from that of most European countries. Therefore, it requires a sustained effort to overcome these gaps and realistic development strategies of the SME sector in Romania and Moldova, proposed by the specialized agencies of the two countries. Following a process of critical analysis and interpretation of national and international databases, we investigated the small and medium enterprises sector in Romania and Moldova in order to identify solutions to support the SME sector in the two countries.

***Key words**: development strategies, the SME sectors of activity, economic performance.*

Întreprinderile mici şi mijlocii (IMM-urile) se situează în topul strategiilor şi politicilor europene, fiind un factor-cheie pentru dezvoltare, ocupare şi performanţă economică. Criza economico-financiară din anul 2008 a afectat sectoarele IMM din România şi din Republica Moldova, evoluţia cărora a fost diferită faţă de cea din majoritatea statelor europene. De aceea, este nevoie atât de un efort susţinut pentru a depăşi aceste decalaje, precum şi de strategii realiste de dezvoltare a sectorului IMM-urilor din România şi din Republica Moldova, strategii propuse de instituţiile specializate din cele două ţări. În urma unui proces de analiză şi interpretare critică a unor baze de date naţionale şi internaţionale, am investigat sectorul întreprinderilor mici şi mijlocii din România şi din Republica Moldova, cu scopul identificării unor soluţii pentru sprijinirea sectorului IMM-urilor din cele două ţări vizate.

***Cuvinte-cheie**: evoluţie, strategii, IMM-uri, sectoare de activitate, performanţe economice.*

Малые и средние предприятия (МСП) находятся в топе европейских стратегий и политик, являясь ключевым фактором развития, роста занятости и экономической эффективности. Финансово-экономический кризис 2008 года повлиял на сектора МСП Румынии и Республики Молдова, развитие которых отличается от большинства европейских стран. В этой связи, необходимы последовательные усилия для преодоления данных разрывов, а так же реальные стратегии развития секторов МСП Румынии и Республики Молдова, предлагаемых специализированными учреждениями обеих стран. В результате процесса критического анализа и интерпретации национальных и международных баз данных, было проведено исследование секторов малых и средних предприятий Румынии и Республики Молдова в целях выявления решений по поддержке МСП в этих двух странах.

***Ключевые слова**: эволюция, стратегии, МСП, сферы деятельности, экономическая эффективность.*

JEL Classification: M13, O10, L19, L25, L32, L53.

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Introduction. The development of SMEs in the context of a knowledge-based economy is found among the priorities of the Europe 2020 strategy, which involves ([3] cited in [1]):

- smart growth – the development of an economy based on knowledge and innovation;
- sustainable growth;
- the promotion of a more efficient economy in terms of resource use, greener and more competitive;
- inclusive growth – the promotion of an economy with a high rate of employment, measures to ensure the economic, social and territorial cohesion.

In Romania and the Republic of Moldova the SME sector had a fluctuated evolution and it was affected by the economic and financial crisis, failing to achieve so far, the production levels before the crisis[1].

Following a process of critical analysis and interpretation of national and international databases, we investigated the small and medium enterprises sector in Romania and Moldova in order to identify solutions to support the SME sector in the two countries.

The situation regarding the SMEs in Romania and Moldova

1. The main indicators on the development of SMEs in Romania (in the European context) and the Republic of Moldova

Romania

The economic results reflected in the economic performance are below the European average, as values from 2013 indicate concerning the key indicators of SMEs in Romania compared to the EU-28 ([5] cited in [1]) namely:

Table 1

The main indicators of SMEs in Romania compared to the EU 28

Class	Number of SMEs			Number of employees			Added value		
	Romania		UE-28	Romania		UE-28	Romania		UE-28
	Number	Percentage	Percentage	Number	Percentage	Percentage	Mld. euro	Percen Tage	Percentage
Micro	373944	87.40	92.40	931091	22.90	29.10	7	13.40	21.60
Small	44682	10.40	6.40	939499	22.90	20.60	9	16.30	18.20
Medium	7669	1.80	1.00	848216	20.90	17.20	10	19.70	18.30
Total SME	426295	99.70	99.80	2708806	66.70	66.90	26	49.40	58.10
Large	1455	0.30	0.20	1349456	33.30	33.10	26	50.60	41.90
Total companies	427750	100	100.00	4058262	100.00	100	52	100.00	100

Source: Country Sheet "2014 SBA Fact Sheet Romania", the European Commission.

According to the table, the percentage of micro-enterprises in Romania is lower than the EU-28, respectively 87.40% in Romania compared to 92.49% in the EU. Instead the percentage of small enterprises is higher than the EU average, 10.40% compared to 6.40% in the EU-28. Also, the share of medium-sized enterprises is higher than the EU average, 1.80% in Romania compared to 1.00% in the EU-28.

Regarding the number of employees, we observe a relatively equal distribution of employees with a total of 66.70% employees working in SMEs in Romania and in the EU the share of employees working in SMEs is 66.90%.

[1] The information and analyzes in this paper is mainly based on data provided by the European Commission of European SMEs report 2013/2014, NTC and INS statistics in Romania, Global Entrepreneurship Monitor report, reports Post Privatisation Foundation (2013-2015) SMEs in Romania and other works in the field.

We notice in the case of micro enterprises, although their share in total SMEs in Romania is 87.40% compared to 92.40% in the EU and the share of employees is 22.90% compared to 29.10% in the EU, the contribution to added value is only 13.40% in Romania compared to 21.60% in the EU.

This means that the Romanian SMEs are less competitive, efficient and less innovative compared to the SMEs in EU-28.

The Republic of Moldova

In the Republic of Moldova the share of SMEs in the total enterprises during 2009-2013 ranged from 97.4 to 97.8 percent, with a peak in 2009 and a minimum in 2013.

The number of employees in SMEs was lower in 2013 compared to 2012 and in terms of sales revenue, the SMEs have had better results in 2013 compared to 2012 respectively 77413.2 million MDL in 2013 compared to 73057.0 million MDL in 2012.

Table 2

The evolution of small and medium enterprises in all enterprises during 2009-2013 is characterized by the following indicators:

	No. of enterprises, Thousands			No. of employees, thousand people			Sales revenues, mil. MDL		
Years	Total	SME	Share of SME in total, %	Total	SME	Share of SME employees in total, %	Total	SME	SME revenues share in total, %
2009	44.60	43.70	97.8	539.2	316.2	58.7	146447.0	57480.0	39.2
2010	46.70	45.60	97.7	526.2	309.4	58.8	177503.2	65263.2	36.8
2011	48.50	47.30	97.5	510.2	294.2	57.7	207676.8	71887.6	34.6
2012	50.70	49.4	97.5	519.9	300.2	57.7	211759.3	73057.0	34.5
2013	52.20	50.9	97.4	524.5	298.4	56.9	231601.4	77413.2	33.4

Source: The National Bureau of Statistics of the Republic of Moldova.

The comparative analysis

We notice that in Romania in 2013, the share of SMEs in total enterprises is 99.70% while in Moldova this percentage is lower, namely 97.40%.

Regarding the employees working in SMEs in Romania, their share was 66.70% in 2013 while in Moldova the share of employees working in SMEs is 56.90%.

To highlight the performance of SMEs in Romania, we refer to the indicator "Added value", namely:

- the added value created by micro-enterprises is 13.40%, lower than the EU average of 21.60%; for small enterprises, although their share is higher in Romania than the EU average, the contribution of these companies to the added value is lower than in the EU, namely 18.20% in the EU to 16.30% in Romania;
- for the medium enterprises, the share of value added is 19.70% in Romania compared to 18.30% in the EU-28.

In Moldova, in an overview, the performance of the SMEs has improved in 2013 compared to 2012, in exchange the share of revenues of the SMEs in total enterprises decreased in 2013 compared to 2012.

2. Performance of SME by activity sectors

Romania

The National Council of Private, Small and Medium Enterprises in Romania conducted an extensive study[1], representative of the SME sector in Romania ([7] cited in [1]).

[1] The National Council of Private Small and Medium Enterprises in Romania conducted a field research based on a questionnaire applied to a number of 1569 SMEs from all industries. The sample is considered representative of the SME sector in Romania. This investigation aimed at creating SMEs White Paper of 2014 and contains the latest analysis and forecasts on the SME sector in Romania.

According to this study the overall performance of the SMEs in 2013 compared to 2012 were lower for 23.26% of the companies, 52.26% of them have not undergone change; 5.10% of the companies experienced inferior results, 17.21% of the companies experienced an improvement in the activity and only 2.17% of the organizations experienced very good results.

The performance of SMEs in Romania are described, by industry, in the table below:

Table 3

Classification of SME performance during 2012-2013 by industry

No.	Performance of SMEs in 2013 compared to 2012	SMEs grouped by development regions (%)					
		Industry	Construction	Commerce	Trade	Tourism	Services
1	Much improved	2.86	1.49	2.04	2.33	2.78	1.93
2	Improved	20.00	14.93	15.77	25.58	19.44	16.52
3	Similar	52.06	59.70	51.95	44.19	52.78	52.37
4	Slightly lower	19.05	17.91	26.53	23.26	22.22	23.20
5	Much lower	5.03	5.97	3.71	4.55	2.78	5.98

Source: CNIPMMR White Book of SMEs 2014.

Most SMEs with much improved results are in the industrial sector (2.86%); the SMEs that have achieved a higher efficiency compared to the previous year are those operating in the transport sector (25.58%). Approximately half of the companies operating in construction (59.70%) and transport (44.19%) industries recorded the same results in 2013 compared to 2012.

Table 4

Performance of SMEs in 2014 compared to 2013 by development regions

No.	Performance of SMEs in 2014 compared to 2013	SMEs grouped by development regions (%)							
		NE	SE	S	SV	V	NV	C	BIF
1	Decidedly improved	1.92	4.12	0.61	3.24	0.00	1.1	0.63	0.91
2	Improved	19.23	18.56	21.10	31.35	20.00	29.83	18.99	18.82
3	Same performance	50.00	47.42	51.07	44.22	50.00	61.88	72.15	60.32
4	Slightly lower	19.23	20.62	18.96	12.21	30.00	6.63	5.70	13.15
5	Inferior	9.62	9.28	8.28	2.97	0.00	0.55	2.53	6.80

Source: CNIPMMR, the White Book of SMEs, 2014.

From the analysis we can highlight a relatively positive situation in the sense that by development regions, over half of the SMEs had similar results to the previous year and about 20% of firms of almost all regions experienced a slightly improved performance. The percentage of companies with decidedly inferior performance is quite low (0 to 9 percent).

The Republic of Moldova. In the Republic of Moldova, the performance of SMEs are described in the table below:

Based on data provided by the National Bureau of Statistics of the Republic of Moldova, the industry which gets the highest sales revenues is the wholesale and retail (36333.0 million MDL) in a slight increase from 2012 and with a 46.9% share of SMEs in total enterprises in a decrease compared to the level of 2012 (48.7%) which indicates that the performance of SMEs in this industry has increased. The same trend is noticed with the SMEs in the manufacturing industry.

Table 5

The performance of SMEs by industries in the Republic of Moldova

Name of industry	Sales revenues in 2012				Sales revenues in 2013			
	Total, Mil. MDL	SME, Mil. MDL	Share of SMEs in:		Total, mil, MDL	SME, mil. MDL	Share of SME in:	
			total enterprises	total SME			total enterprises %	total SME, %
Total	**211759.3**	**73057.0**	**34.5**	**100.0**	**231601.4**	**77413.2**	**33.4**	**100.0**
Agriculture, hunting and forestry	7257.6	4930.3	67.9	6.7	8931.6	6157.8	68.9	8.0
Manufacturing industry	33265.7	9522.8	28.6	13.0	37144.2	9640.9	26.0	12.5
Electricity, gas and water	22355.2	261.8	1.2	0.4	19402.9	236.3	1.2	0.3
Construction	8439.8	5349.9	63.4	7.3	10572.3	6109.9	57.8	7.9
Wholesale and retail trade;	98590.9	36299.0	36.8	49.7	107906.2	36333.0	33.7	46.9
Hotels and restaurants	1830.5	1365.8	74.6	1.9	1998.9	1482.0	74.1	1.9
Transport and communications	19423.7	6885.1	35.4	9.4	21273.0	7700.6	36.2	9.9
Real estate, renting and services for enterprises	8021.7	5177.2	64.5	7.1	2909.3	5942.4	204.3	7.7
Other activities	12574.2	3265.0	26.0	4.5	21463.1	3810.3	17.8	4.9

Source: Data provided by the National Bureau of Statistics of the Republic of Moldova.

The development strategy of SMEs in Romania and in the Republic of Moldova

The analysis on SMEs in Romania and the reports of specialized institutions [4, p. 10], provide a number of specific issues concerning the SMEs, namely:

1. The issue of critical mass of SMEs – too few active enterprises in the economy;
2. The issue of the business/company size – too few medium-sized enterprises;
3. The issue of the sectorial structure – too many businesses operating in the areas of services and trade;
4. The issue of the business resilience – two-thirds of the new businesses go out of business in the first year of life.

In this situation, the strategy for SMEs in Romania [4, p. 12], focuses on five interrelated strands, out of which: four are oriented towards the economic operators (SMEs); one targets the public administration at central and local level:

1. The support and promotion of entrepreneurship;
2. The access of SMEs to appropriate financing;
3. Innovative SMEs;
4. The access to markets and the internationalization of SMEs;
5. The reactivity of the public administration to the needs of SMEs;

In the Republic of Moldova, the development strategy of SMEs [6] is based on numerous coordinates, namely:

1. Adjusting the regulatory framework to the needs of the SME development by:

– the improvement of the legal framework regulating the activity of SMEs;
– the reduction of the administrative barriers and regulatory costs for SMEs;
– optimizing regulations on the commercial activities practiced by SMEs.

2. The improvement of the SMEs' access to financing:
- the development of innovative financing schemes for SMEs;
- ensuring the efficient transfer of remittances;
- attracting long-term credit lines from international financial institutions;
- the development of the credit guarantee system for SMEs;
- facilitating the access of SMEs to public procurement.

3. The development of human capital by promoting skills and entrepreneurial culture through:
- the development and promotion of education and entrepreneurial culture;
- the educational training support infrastructure;
- the creation of advisory and information system for SMEs.

4. Increasing the competitiveness of SMEs through:
- the improvement and development of the building, technical and innovative capacity of SMEs;
- the facilitation of the development and grouping of SMEs in clusters, business incubators etc.;
- the promotion of the intellectual property for SMEs;
- facilitating the SMEs' access to domestic and foreign markets;
- the implementation of management systems based on international and European standards.

5. Facilitating the development of SMEs at regional level
- fostering the balanced and sustainable development of SMEs throughout the country;
- providing the support infrastructure development of SMEs in the regions;
- promoting the participation of SMEs in cross-border and regional cooperation.

6. Developing Business Partnerships
- development of public-private business partnership;
- facilitating the "business to business" partnership;
- facilitating the private sector participation in the processes of improving the regulatory and decision making framework.

Conclusions

The diagnosis of SMEs in Romania compared to SMEs in Moldova reveals a number of similarities in this area, namely:
- the similar share of SMEs in total enterprises;
- similarities in terms of priority sectors in which SMEs operate;
- regarding the performance of the SME sector, a fluctuation of the main indicators was recorded and regarding the number of SMEs, the number of employees and the added value both in Romania and Moldova.

Based upon this analysis, of the EU 2020 Strategy, the Small Business Act 2015 and the Action Plan Entrepreneurship 2020, a development strategy for SMEs proposed by the specialized agencies of the two countries, we recommend a series of measures to support and develop the SMEs in Romania and the Republic of Moldova [1]:
- the facilitation of the access to financing for SMEs through microgrants or microloans, supporting the innovation processes in SMEs and the introduction of new technologies, financed mainly through European projects;
- the support and promotion of the internationalization of SMEs by establishing direct contacts between entrepreneurs and SMEs in Romania, Moldova and groups of SMEs in Europe;
- the creation and development of a cooperation network among universities, research institutes and SMEs based on projects and contracts with a view to developing the innovative capacity of SMEs and the training of employees and managers;
- the support of the distribution and marketing of SMEs, the fostering of the distribution of local traditional products;
- the strengthening of the cooperation and exchange of experience, know-how and the transfer of technology between Romania and the Republic of Moldova.

These measures can be adapted and implemented according to the national specificity in order to support the SME sector.

REFERENCES

1. BOLDUREANU, G. Inovaţie şi performanţă în IMM-urile româneşti. In: T. PĂDURARU, G. BOLDUREANU (coord.). Inovaţie şi performanţă în societatea cunoaşterii. Bucureşti: Pro Universitaria, 2015, pp. 97-117. ISBN 978-606-26-0355-7.
2. NATIONAL BUREAU OF STATISTICS OF THE REPUBLIC OF MOLDOVA. Activity of small and medium enterprises in the Republic of Moldova in 2013 [accesat 22 februarie 2016]. Disponibil: http://www.statistica.md/newsview.php?l=en&id=4438&idc=168
3. COMISIA EUROPEANĂ. Europa 2020 O strategie europeană pentru o creştere inteligentă, ecologică şi favorabilă incluyiunii. Brussels, 2010 [accesat 29 ianuarie 2016]. Disponibil: http://www.mae.ro/sites/default/files/file/Europa2021/Strategia_Europa_2020.pdf
4. Hotărîrea Guvernului privind aprobarea Strategiei guvernamentale pentru dezvoltarea sectorului intreprinderilor mici si mijlocii si imbunatatirea mediului de afaceri din Romania - Orizont 2020: nr. 859 din 07.10.2014. In: Monitorul Oficial al României. 2014, nr. 743, partea 1.
5. FUNDAŢIA POST-PRIVATIZARE. 2015. IMM-urile româneşti în Uniunea Europeana. Bucureşti, 2015.
6. Hotărîrea Guvernului cu privire la aprobarea Strategiei de dezvoltare a sectorului întreprinderilor mici şi mijlocii pentru anii 2012-2020: nr. 685 din 13.09.2012. In: Monitorul Oficial al Republicii Moldova. 2012, nr. 198-204, art. 740.
7. NICOLESCU, O., ISAIC-MANIU, A. ş.a. *Carta Albă a IMM-urilor din România 2014.* Bucureşti: Sigma, 2014. 515 p. ISBN 978-973-649-977-7.
8. MAIER, L. Spin-off companies and their role in knowledge based economy. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 3, pp. 112-121.

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REORGANISATION OF HOSPITAL SYSTEM – A KEY FACTOR IN REFORMATION OF THE REPUBLIC OF MOLDOVA'S HEALTH SYSTEM

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Topicality. Starting with the middle of the '90s of the previous century, the Republic of Moldova started to implement a series of important reforms, aimed at improving the access and quality of the services for increasing the efficiency and the performances of the health system. The aim of the research is the analysis of the Regionalization Plan of the Hospital Services and the assessment of medical workers opinion from district and republican hospitals regarding the envisaged transformations, in order to elaborate conclusions and recommendations that will be considered at the stage of reform's implementation. The object of the research is the physicians of different profile (therapeutic, surgical, diagnostic), which work in republican and district hospitals. Methods: questioners, statistic data analyze, comparative method. Results. The logic of the regionalization suggests a reality, and namely, the need to transfer the physicians from the republican institutions to regional hospitals will be little. As a result, it will be applied only for the provision of the highly specialized services, for the solution of the associated cases or for the use of certain sophisticated methods of diagnosis and treatment (cardiac catheterization with subsequent plasty, etc). Therefore, it can be appreciated positively the fact that only 1/5 of physicians that work in the republican hospitals accept to commute or the transfer. It is more regrettable another reality, which shows that almost ½ of the specialists from the republican medical institutions generally do not want the regionalization and boycott the reform, just when they should promote the change. It results that mainly these physicians plead for the continuous maintenance of poor quality of hospital medical assistance, for the access limitation of the rural population at quality health service and, as consequence, and the financial burden to be left on patients shoulders – a fact mentioned in all the reports of foreign experts. Therefore we made the conclusion that as our society cannot get rid of the principles of health Semasko system for 25 years, so our physicians, especially the elderly and the most qualified – continue to guide themselves of stereotypes deeply rooted in the past.

Key words: *hospital system, reform, Healthcare System, opinion survey, medical workers, regional and republican hospitals.*

Actualitate. Începând cu mijlocul anilor '90 ai secolului trecut, Republica Moldova a demarat implementarea unui şir de reforme importante, îndreptate spre îmbunătățirea accesului și calității serviciilor pentru a spori eficacitatea și performanțele sistemului de sănătate. Scopul cercetării constă în analiza Planului de Regionalizare a Serviciilor Spitalicești și evaluarea opiniilor lucrătorilor medicali din spitalele raionale și republicane cu privire la transformările desfășurate, în vederea elaborării concluziilor și recomandărilor, care vor fi luate în considerare la etapa implementării reformei. Obiectul cercetării îl constituie medicii de profiluri diferite (terapeutic, chirurgical, diagnostic), care activează în spitalele republicane şi raionale. Metodele de cercetare: chestionarea, analiza datelor statistice, metoda comparativă. Rezultate. Logica regionalizării ne sugerează o realitate, şi anume, că nevoia de transfer a medicilor din instituţiile republicane în spitalele regionale va fi mai mică. Drept urmare, se va recurge la aceasta doar pentru prestarea serviciilor înalt specializate, a soluţionării cazurilor asociate sau a utilizării unor metode sofisticate de diagnostic şi tratament (cateterismul cardiac cu ulterioara plastie etc.). De aceea, chiar şi faptul, că doar 1/5 dintre medicii, care îşi desfăşoară activitatea în spitalele republicane, acceptă naveta sau transferul poate fi apreciat pozitiv. Mai regretabilă este o altă realitate, care vădeşte, că aproape ½ din specialiştii din instituţiile medicale de nivel republican nu acceptă regionalizarea şi boicotează reforma, pe când tocmai ei ar trebui să promoveze schimbarea. Rezultă, că tocmai aceşti medici pledează în continuare pentru menţinerea calităţii joase a asistenţei medicale spitaliceşti, pentru îngrădirea accesului populaţiei rurale la serviciile medicale de calitate şi, drept urmare, pentru ca povara financiară să rămână pe umerii pacienţilor – fapt menţionat în toate rapoartele

experţilor străini. Concluzia care se impune este că, timp de 25 de ani societatea noastră nu se poate debarasa de principiile sistemului de sănătate Semaşko, iar medicii noştri – în special cei mai în vârstă şi cei calificaţi – continuă să se conducă de nişte stereotipuri adânc înrădăcinate în trecut.

Cuvinte-cheie: *sistem spitalicesc, reformă, Sistem de Sănătate, sondaj de opinie, medici, spitale raionale şi republicane.*

Актуальность. Начиная с середины ‘90 годов пошлого столетия в Республике Молдова началось внедрение ряда важных реформ, направленных на улучшение доступа и качества медицинских услуг. Целью исследования является анализ Плана Регионализации Медицинских Услуг и выявление мнений медицинских работников районных и республиканских больниц по отношению к осуществленным изменеиям, в целях разработки рекомендаций, которые будут учтены на этапе внедрения реформ. Объектом исследования являются разно-профильные врачи (терапевты, хирурги), работающие в республиканских и районных больницах. Методы исследования: анкетирование, анализ статистических данных, сравнение. Результаты: Логика регионализации подсказывает, что необходимость перехода врачей из республиканских больниц в региональные, будет низкой. К этому будут прибегать только в случае необходимости предоставления узкоспециализированных услуг, связанных с ними случаев или использования сложных методов диагностики и лечения (катетеризация сердца с последующей пластикой, и т.д.). Таким образом, даже тот факт, что только 1\5 врачей, работающих в республиканских больницах, регулярно ездят или переходят в районных, можно рассматривать позитивно. К сожалению, есть и другая реальность, которая показывает, что почти 1\2 специалистов медицинских учреждений республиканского уровня не поддерживают регионализацию и бойкотируют реформы, а ведь именно они должны продвигать реформы. Отсюда следует, что именно эти врачи выступают и в дальнейшем за низкое качество медицинских услуг, за отсутствие доступа сельского населения к качественным медицинским услугам и, как следствие, за то, чтобы вся тяжесть медицинских затрат оставалась на плечах пациентов. Этот факт отмечается во всех отчётах иностранных экспертов. Вывод, который был сделан, состоит в том, что на протяжении более 25 лет с тех пор, как начались социальные преобразования, наше общество не может избавиться от принципов системы здравоохранения Семашко, таким образом, врачи, особенно самые старшие и квалифицированные, продолжают руководствоваться стереотипами, глубоко укорененными в прошлом.

Ключевые слова: *больничная система, реформа, Система Здравоохранения, опрос, врачи, районные и республиканские больницы.*

JEL Classification: J13, J15, I18, I19, H51.

Introduction. Starting with the middle of the ‘90s of the previous century, the Republic of Moldova started to implement a series of important reforms, aimed at improving the access and the quality of the services for increasing the efficiency and the performances of the health system. These changes were made primarily for prioritizing the primary health care (PHC) by the foundation of the Centers of Family Physicians, the implementation of the diseases control programs (immunizations, MHC, TB, HIV) and they were supported by the reforms of the financing system through the introduction of the mechanism of compulsory health insurance (CHI). The efficiency of the mentioned measures was proved by multiples results, appreciated by the international partners.

Meanwhile, the Government of the Republic of Moldova and the Ministry of Health confirmed the need to continue the reformation of the health system in order to improve the quality of the services and satisfaction degree of the population regarding the health services. This aim refers to different levels of inpatient services (hospitals), which have an important place in the health system due to the considerable quantity of human, financial and infrastructural resources and due to the contribution in maintaining the population’s health and social values.

There are 84 public and private hospitals in the Republic of Moldova with a number of 22 021 beds, 73 of which are public hospitals with a number of 21 817 beds. In 2010, there were allowed 50,7% from financing for the payment of current health services (basic fund) that covered 553,487 treated cases. The technical situation of the hospitals buildings is unsatisfactory and most of the medical equipment is old and worn integrally.

We can mention the fact that not all the persons benefit from quality health services because of a limited range of profiles and old technologies that do not reflect the population's needs.

There is an overcapacity and duplication of the health services in Chisinau municipality (almost 53% of beds capacity, or 42 beds from 84 are in Chisinau), fact that limited the access of the population from the rural sector. The republican specialized institutions are concentrated in the capital, including the mono-profiled institutions (for example: infectious diseases, traumatology and orthopedics, oncology, cardiology, neurology and neurosurgery, tuberculosis, dermatovenerology, etc.). It is a situation that does not allow the provision of the health services in a multidisciplinary way and doubles the utilization of the resources and highly concentrates the specialized services in capital. In the same time, 34 district hospitals (apparently general hospitals according to the types of services) provide health services for different districts on the population's number and its health needs.

Due to the fact that the hospitalization rate in the Republic of Moldova is almost equal with the average rate of the European Union, there is evidence proving that a significant number of hospitalizations is not justified according to the EU standards. Another concern is the low quality of surgical, perinatal services and of specialized health services in district hospitals, due to a reduced number of surgeries, births and complicated medical cases that cannot be solved locally.

The Government established as priority in the Program of activities for 2011-2014 – "The restructuration of public hospitals network based on the principle of economic efficiency, security and quality health services according to the General National Plan of the Hospitals". This activity corresponds to the best practices of organizing the health care in hospitals and according to it, the reformation of the hospitals will have the following objectives: 1) Adequate access (geographic, financial) to the services; 2) High quality of provided services; 3) Efficient collaboration and coordination between all levels of medical and hospital assistance and with other medical services (primary health care and emergency health care); 4) Encouraging the efficient use of the resources (financial, institutional and human); and 5) The satisfaction of the patients and the community participation.

The National Master Plan of Hospitals was elaborated by the TOP Konsult with the support of the World Bank and includes the proposal to organize the network of hospitals in 9 districts networks. These district networks will include the medical services of 1st and 2nd level with a referral system to territorial institutions/national centers of excellence for specialized health services.

In 2013, the Ministry of Health has the intention to hasten the implementation of the reform on hospital field. Plus, there is an active interest from the part of potential partners PPP to invest in the rehabilitation of the selected district hospitals.

This action aimed at supporting the Ministry of Health in the development of operating mechanisms of the health reforms and the elaboration of a more specific implementation strategy for the health services regionalization, activity included initially in the Master Plan.

The major objective of this mission was to elaborate a detailed Framework Plan for the reorganization of the specialized and highly specialized health institutions that will allow the implementation of the realization map of policies in Moldova, the establishment of a common hospital system of health management, the decentralization of the primary health care and the implementation of the quality management system in all health institutions.

However, there was not paid attention, during the elaboration of the regionalization plan, to the opinion of the medical staff, fact that would have a significant influence at the stage of the implementation.

We had the intention to highlight more deeply the aspects of the medical staff opinion from hospitals in realizing thus study, considering the abovementioned facts: the contradiction between the population's expectations on access to high performance health services closer to the place of residence and the resistance of the medical staff toward the reformation of the hospital field.

The aim of the research is the analysis of the Regionalization Plan of the Hospital Services and the assessment of medical workers opinion from district and republican hospitals regarding the envisaged transformations, in order to elaborate conclusions and recommendations that will be considered at the stage of reform's implementation. The object of the research is the physicians of different profile (therapeutic, surgical, diagnostic), which work in republican and district hospitals.

There were elaborated as objectives of the research the following points:

1. Analysis of the Regionalization Plan.
2. Determination of the information level of the physicians regarding the Regionalization Plan.

3. Assessment of the medical staff opinion form district and republican hospitals regarding the main components of the regionalization project of hospital services.
4. Determination of the key reason on which relies the opinion of the respondents and the physicians flexibility in case of implementing nationally the project.
5. Elaboration of some recommendations that should be considered at the stage of reform's implementation.
6. The realized researches, the fundamental of this work, were drawn up according to an analytical plan, i.e. there were presented descriptive hypotheses.

The achieved results confirm the initial work hypothesis, and namely, the passing from the old health system (the soc-called Semashko system) to the decentralization of the hospital field is, in the physicians perception, conditioned by the economic crisis form the country and the low possibilities of the state to fund the health system, and the rooted stereotypes, formed over the years.

The hypothesis, according to which the physicians that work in republican hospitals are more informed about the objectives of the Regionalization Plan of the Hospital Services being the consequent adepts and promoters of this reform, confirmed partially. On the contrary, the results of the research showed that there is an inverse relationship: the higher is the level of information on the regionalization project of hospital services, the lower is the support of the reform.

This result can be explained by the fact that the decision bodies from the health system paid an insufficient attention to the questions on education and, especially, the popularization of the new reformation initiatives of the hospital system.

It is regrettable the fact that the majority of those who are called to implement the Regionalization Plan, actually do not support it. Thus, 15% of those who are against the regionalization reform reasoned their position by the fear of losing the job; every tenth would refuse to work in another hospital or in another district, and the overwhelming majority of the interviewed (76%) consider generally that the idea of regionalization will not be successful.

The sociological study indicates the fact that the majority of the respondents (51,2%) overreached the age of 50, of which more than a quarter are of 60 years old, and more than a third (36,8%) work in the medical field for more than 30 years. Analyzing these figures it is shown that the issue of the medical staff rejuvenation remains actual for the future of the health system from the Republic of Moldova.

The study shows that there is a direct relationship between the qualification degree of the physicians and the information level on the regionalization of the hospital services.

Thus, over three-fourths of physicians, which confirmed that they are acquainted with the regionalization project, are part of the group with superior category and 73% of those acquainted have the qualification degree of 1st category, and 65% – of 2nd category.

The result of the study proves once again that the most informed physicians, from the republican hospitals in proportion of 86% and the less informed physicians, from the district hospitals, in proportion of 40% pronounce themselves against the reform.

Analyzing the results of the research in the light of socio-demographical criteria, we observe that the most convinced supporters of the reform are the young physicians. Thus, the respondents with the age of 30-39 years support the reform of the regionalization in proportion of 45%, in comparison with 23,8% of those with the age of 60-69 years. As a conclusion for this chapter, we can say that the reform is supported by the young people who, mostly, work in district hospital.

A specific subject is the potential beneficiaries of the regionalization reform. Here, 28% of the respondents consider that nobody will benefit of the reform, while almost every fifth (21,2%) interviewed upholds that the majority of all health system participants will benefit from it. Almost a quarter of physicians consider that the main beneficiary of the reform will be the Ministry of Health, 13% – the patients of rural areas, 11% – the physicians of the republican hospitals and only 3% – the physicians from district hospitals.

The analysis of these answers is extremely interesting, especially from the prospect of socio-demographical factors. As, four of ten physicians that work in republican hospitals uphold that nobody will benefit from the reform, whilst only 15% of physicians from districts share this point of view. 36% of physicians that work in district hospitals and only 8% of physicians employed in republican hospitals believe that the implementation of the reform will be benefic for all the participants of the medical system. The most optimistic respondents aged of 40-49, with an experience of 10-19 and those less qualified

(2nd category). The most pessimistic respondents are aged of 60-69, with a professional experience of over 40 years and those who have a higher qualification.

It is regrettable the fact that less than a quarter of physicians (27%) consider that the beneficiaries of the reform will be the patients and the physicians, while the majority of the interviewed (52%) were convinced that there will not be any beneficiary, or the Ministry of Health will be the only beneficiary. And only 20% answered that all benefit from it.

Those are figures, which say that the physicians, generally, do not understand clearly the advantages of the reform and the current situation suits them, without changes. Relying on these figures, we can conclude that the decisions are made without being discussed publicly and without explaining the strong and the weak points of the reform.

The fact that three-fourths of the interviewed physicians consider that the regionalization reform of hospital field will not be successful, and that almost a quarter consider that only the Ministry of Health will benefit from it, shows a generalized decrease of the efforts for realizing the reforms. Therewith, this situation shows the need to intensify the activities of explaining the benefits after the implementation of the reform.

This state of affairs shows that the promoters of the hospital reform and those that elaborate the health policies in Moldova neglected a very important thing, and namely, they did not provide the support of the system professionals – the physicians who, at their turn, have to support, promote and realize this reform, and to convince the patient of its need and efficiency. In this context, we recommend the elaboration of a separate strategy of communication in order to attract on reform's side loyal partners, which will be successful only when it will be supported by the professionals from the system, e population and political factory.

The research ascertained that 58,4% of physicians do not believe that the regionalization will relieve the republican hospitals of the cases burden that can be treated in district hospitals. The majority of the respondents do not understand or do not want to accept the fact that in the republican health institutions, in the centers of excellence where the services are more expensive, the most complicated cases have to be concentrated.

The majority of the physicians prefer preponderantly to solve simple cases. In this situation the patients will have to access the simple medical services at a long distance form their residence.

It is not understood also the fact that through the organization of the district hospitals, located at an average distance of 30 km from the patient, the people from the regions will not have to go to Chisinau and will access easier to the highly specialized, quality and efficient diagnosis services and methods. Almost 60% of physicians do not believe that this intention will be possible to realize and only 40% support it.

Only 46% of interviewed physicians consider that the new district hospitals will provide services of MRC, TC, Angiography, Neonatology of 2nd level and other specialized services, but the majority (54%) doubt about it. The most optimistic at this chapter are the physicians that work in district hospitals, who are younger, with little experience and with a low professional qualification.

This skepticism can be explained by the poor financial situation from the medical system, because every physician understands that to provide regionally such kind of services is very expensive – especially the medical equipment and supplies, and the training of the medical staff in the country and abroad. That is why, in this case, it would be ideal to be implemented the recommendations of the foreign experts: the construction of a regional hospital at Edinet, for the North region (250.000 inhabitants from districts of Edinet, Ocnita, Briceni and Donduseni) with a number of 250 beds. This district hospital – its estimative cost is about 31 million Euros – will serve as a successful example, which will be subsequently repeated in other areas of the country.

The physicians were asked if they would be willing to commute daily to the new regional hospital, which would be possibly located in the neighbor district. Only a third of the respondents that live in a certain district of the Republic of Moldova are willing to commute daily 20-30 km to work, if they are provided with a place of work in the new regional hospital, and 69% refuse to do it. We have to mention that the majority of the physicians from the district hospitals (54%) refuse to commute daily, the same position shared by the older respondents and with a higher professional qualification.

Considering the achieved results, we propose to pay a particular attention to the social package proposed to the physicians that will migrate from their native district. An obvious advantage will be the

inter-district transport offered to the regional hospital or the compensation of the fuel/public transport costs. It should not be neglected nor the idea of offering to physicians good accommodation conditions.

The options of the respondents in case the hospital, they are employed actually, transforms in the Center of Chronic Diseases(CCD) and in a daily inpatient unit, and the specialized services will be concentrated in the new regional hospital, divided as it follows: 18,4% said that they will re-profile and will remain in their district, within a CCD; almost a third (32,2%) admitted that, if they are provided with a place of work in the regional hospital, they will accept it and will commute; and almost a half (49,9%) said that they do not want regionalization and prefer no changes.

It worth mentioning that almost a half (48,7%) of the physicians from district hospitals accept to commute in case they are provided with a place of work at the regional hospital and only every fifth physician from the republican hospitals is willing to do the same.

At this chapter, we observe that almost 2/3 of the respondents from the republican hospitals do not want changes, in comparison with 30% of the employees of district hospitals that do not want the regionalization. However, if we start from the idea that this question has tangent predominantly with the physicians from the district, the fact that 48,7% of them accept to commute is explainable and understandable, but also a great thing.

The logic of the regionalization suggests a reality, and namely, the need to transfer the physicians from the republican institutions to regional hospitals will be little. As a result, it will be applied only for the provision of the highly specialized services, for the solution of the associated cases or for the use of certain sophisticated methods of diagnosis and treatment (cardiac catheterization with subsequent plasty, etc.). Therefore, it can be appreciated positively the fact that only 1/5 of physicians that work in the republican hospitals accept to commute or the transfer.

It is more regrettable another reality, which shows that almost ½ of the specialists from the republican medical institutions generally do not want the regionalization and boycott the reform, just when they should promote the change. It results that mainly these physicians plead for the continuous maintenance of poor quality of hospital medical assistance, for the access limitation of the rural population at quality health service and, as consequence, and the financial burden to be left on patients shoulders – a fact mentioned in all the reports of foreign experts.

Within research, we proposed to find out the opinion of the physicians that work in republican hospitals about their transfer, keeping the same position, in another new and modern regional hospital, in case of the implementation of regionalization reform.

We ascertained the fact that, unfortunately, the majority of the physicians (51,4%) from the republican hospitals do not want this fact; fewer – four of ten – would accept the transfer with the condition of being provided with good social conditions; and only 7% would accept unconditionally the transfer from a medical institution of republican level to a district one.

There is a direct relationship between the experience of the physicians, their degree of qualification and the willing to transfer to a regional hospital. Thus, as bigger is the experience and the degree of physicians qualification, as smaller becomes the willing to accept the offer to work in a regional hospital.

Therefore we made the conclusion that as our society cannot get rid of the principles of health Semasko system for 25 years, so our physicians, especially the elderly and the most qualified – continue to guide themselves of stereotypes deeply rooted in the past.

Luckily, de facto, the regionalization Plan does not provide the transfer of a big number of physicians from republican institutions to the regional ones. As consequence, share of 42% of those who would accept the transfer with the condition to be provided with a satisfactory social package, is promising.

One of the objectives of the regionalization Plan is to concentrate, in the new regional hospitals, the cases with a moderate difficulty, in order to relive the republican hospitals of this burden. In conjunction with this intention, the majority of the interviewed physicians (62,3%) said that they do not believe that due to the regionalization reforms, the complicated cases will be concentrated only in the republican hospitals, cases characteristic for the third level hospitals. The most skeptic were the physicians from the republican hospitals – 78,3% toward 44,5% from district hospitals.

It is a situation that makes us think. How can you plead for the perpetuation of the current situation, when there can be admitted, without any problem, in republican institutions patients with simple appendicitis, with uncomplicated hernia, etc.? These patients should stay in regional hospitals, and not to consume the resources of the republican institutions, which are in financial difficulty. It is a reality that

proves once again that our physicians either do not realize the obvious benefits of the regionalization, or simply are against any change.

Forwards, the respondents were asked to give their opinion about the percentage of residents, willing to work in a regional hospital. Their opinions were divided as it follows: almost a half of interviewed physicians (45,7%) consider that this share consists up to 10%; almost 1/3 have the opinion that this share oscillate between 10 and 30%; 18% of physicians believe that the residents willing to work in a regional hospital are between 30 and 50%; and only 3% chose a share between 50-100%.

The most pessimistic about this prospect are the physicians that work in the republican hospitals, aged of 40-49 and with an experience of 20 and 39 years.

However, as the residents are not so numerous – 722 at the date of 1st of September 2015, such answer can be thankful for the future regional hospitals, especially that these will not be organized in the same period, but gradually, depending on their real possibilities. So, the most probable, it will be open a hospital-model, and after the physicians and the citizens will convince themselves about its benefits, this model will be replied and in other regions of the country. Plus, the attraction of the residents will depend equally on social and financial reasons.

Regarding the provision of the hospitals with physicians, the majority of the respondents (62%) believe that currently there are is a deficit of medical staff at the hospitals they work, toward 38% that have a different opinion. The opinion about the deficit of staff is shared equally by physicians of the republican hospitals (61,9%) and those from district hospitals (62,3%) and by the elderly specialists.

In this case, the answer of the interviewed persons coincides with the real situation from the country. If, several years ago, all the European experts were proving that in the Republic of Moldova there is too many medical staff, actually we are at the same level with the European countries, or even lower. There is ascertained a deficit of physicians and nurses in more important fields, as a consequence of the great exodus of specialists. Plus, those who practice the medicine are not distributed legally and equitably: they predominate in the urban area, in Chisinau municipality and manifest preponderantly in the field of surgical, obstetrical-gynecological, neurological profile. Meanwhile, there is a sharp lack of specialists in the rural area and in primary health care.

It is necessary for the rectification of this situation of a clear and realist strategy of planning, preparation and distribution of human resources, which will cope with the real needs of the field. It is not less important the motivation of the medical staff in order to attract them so they return from abroad in the local sanitary system.

The results of the study allow us to come with a series of recommendations referring to different implied actors, aiming at impelling the reform of hospital system:

1. Bringing the high specialized services closer to the patients from the rural area, by the organization of the Regional Hospitals (a regional hospital for the population served actually by three, four district hospitals). Within these regional hospitals (between three and six at national level) specialized services will be provided, services that can be accessed only in institutions from Chisinau.
2. The development of services for long term and recovery care of chronic diseases based on the current district hospitals, by their reorganization in Centers of Chronic Diseases and Daily Inpatient Units.
3. The conviction and active implication of the local public administration authorities for the change of hospital district paradigm. The support and contribution of LPA in solving the social issues of the medical staff, and of other important situations, will speed up the transformation process.
4. It recommends, for a correct distribution of medical services, the review of the provision level of provided health services (locally, district, regionally, republican) form the point of view of volume and their complexity.
5. The elaboration of certain rules, standards, strict guides for the cases of patients referral from a level of medical assistance to another, fact that will make the republican institutions to solve the cases that are really complicated and complex, not the simple ones, which have to remain at the district or regional stage.
6. The gradual introduction, in the hospital field, of activities that produce quick benefits, without big investments of capital as: mobile unities for cardiac catheterization, MRI, other mini-invasive interventions; programmed unities of investigation based on the model of daily assistance; the improvement of the coordination in the health system. All these will contribute to a provision of more quality and efficient services to the patients.

7. The identification of an area-pilot, where will be organized the first Regional Hospital, which will serve as model and example for other medical institutions. This regional hospital will prove to all actors from the system the benefits and barriers of the regionalization, and the way to act so this concept functions as better as possible. Taking into consideration the made studies, it is recommended to start with the creation of the Regional Hospital from Edinet, for the population of districts Briceni, Edinet, Ocnita and Donduseni.
8. It is necessary the elaboration of a clear and realist strategy of planning, preparation and distribution of human resources, which will cope with the real needs of the field. It is not less important the motivation of the medical staff in order to attract them so they return from abroad in the local sanitary system.
9. The legitimation of developing the residency practice in the regional hospitals.
10. The elaboration of a separate and ambitious communication strategy, through the mass information means, which will allow us to win loyal partners in promoting the reforms. The regionalization reform will be successful only when it will be supported equally by the professionals from the system, population and political factor.
11. The organization of some trainings for the journalists and communicators in order to improve the professional level of those implied in publicizing the process of hospital field reformation, particularly the sanitary system in general. The lack of information leads to ignorance, social apathy and political nihilism – phenomena that can be prevented through intensive, consequent, correct and coherent information about the change process, by the implication in it more and diverse medias – print and broadcast media, internet, multimedia, mobile phone and street advertising. Plus, it is necessary the surveillance of the information content put in the circulation through the mass-media.
12. The introduction, in the curriculum of continuous post-university training, of hours dedicated to the reformation of the health system, implicitly of the inpatient field.
13. All the directives, programs, long-term strategies that refer to the reformation of the health system to be presented to the public opinion for discussions and proposals. In this way we will avoid the situations when the physicians from the high-leveled institutions do not support the changes, so necessary to the system.

REFERENCES

1. World Health Statistics 2012. Global Health Indicators. 2012, part 3 [accesat 11 ianuarie 2016]. Disponibil: http://www.who.int/healthinfo/EN_WHS2012_Part3.pdf
2. Barriers and facilitating factors in access to health services in the Republic of Moldova. 2012 [accesat 21 februarie 2016]. Disponibil: http://www.euro.who.int/__data/assets/pdf_file/0018/183510/e96775-final.pdf
3. Evaluation of the structure and provision of primary care in the Republic of Moldova: a survey-based project. Republic of Moldova Health Policy Paper Series no. 5. 2012 [accesat 16 ianuarie 2016]. Disponibil: http://www.nivel.nl/sites/default/files/bestanden/Rapport-WHO-Moldavie.pdf
4. BIROUL NAŢIONAL DE STATISTICĂ. Accesul populației la serviciile de sănătate: rezultatele studiului în gospodării, august-octombrie 2010. Chişinău, 2011 [accesat 11 ianuarie 2016]. Disponibil: http://www.statistica.md/public/files/publicatii_electronice/acces_servicii_sanatate/Accesul_servicii_sanatate_2011.pdf
5. SHISHKIN, S., KACEVICIUS, G., CIOCANU, M. Evaluation of Moldova‘s 2004 Health Financing Reform: report to the World Health Organization European. 2008 [accesat 11 ianuarie 2016]. Disponibil: http://www.euro.who.int/__data/assets/pdf_file/0010/121132/E94266.pdf
6. TURCANU, G, DOMENTE, S, BUGA, M, RICHARDSON, E. Republic of Moldova: health system review. In: Health Systems in Transition. 2012, vol. 14, no. 7, pp. 1-151. ISSN 1817-6127.
7. CASABONNE, U., KENNY, Ch. The Best Things in Life are (Nearly) Free: Technology, Knowledge and Global Health. Centre for Global Development. Working Paper 252. 2011, may [accesat 21 ianuarie 2016]. Disponibil: http://www.cgdev.org/sites/default/files/1425144_file_Kenny__Casabonne_paper_FINAL.pdf
8. Consulting Services for the development of the regionalization plan for the Republic of Moldova: inception report. Sanigest International. 2012, october [accesat 16 ianuarie 2016]. Disponibil: http://old.ms.gov.md/_files/13223-Regionatlization_Plan_-_Inception_report.pdf

9. Consulting Services for the development of the regionalization plan for the Republic of Moldova: intermediary report. Sanigest International. 2013, april [accesat 16 ianuarie 2016]. Disponibil: http://old.ms.md/_files/14279-%25D0%2594%25D0%25BE%25D0%25BA%25D1%2583%25D0%25BC%25D0%25B5%25D0%25BD%25D1%2582.pdf
10. Consulting Services for the development of the regionalization plan for the Republic of Moldova: final report. Sanigest International. 2013, june [accesat 21 ianuarie 2016]. Disponibil: http://old.ms.gov.md/_files/14389-Regionalization%2520plan%2520-%2520Final%2520Report.pdf
11. FORNA, N.C. Estimate medical services in the Netherlands. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 4, pp. 32-38.

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MIGRATION IMPACT ON ECONOMICAL SITUATION

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This paper presents recent trends and flows of labor migration and its impact on economic and social life. Main aim of this research sets up the influence of the migration on the European economics and its competitiveness. Methods of research are: method of comparison, analysis method, method of deduction, method of statistics, modeling method. The economic impact of migration has been intensively studied but is still often driven by ill-informed perceptions, which, in turn, can lead to public antagonism towards migration. These negative views risk jeopardising efforts to adapt migration policies to the new economic and demographic challenges facing many countries. Migration Policy looks at the evidence for how immigrants affect the economy in three main areas: The labour market, public purse and economic growth. In Europe, the scope of labour mobility greatly increased within the EU/EFTA zones following the EU enlargements of 2004, 2007 and 2014-2015. This added to labour markets' adjustment capacity. Recent estimates suggest that as much as a quarter of the asymmetric labour market shock – that is occurring at different times and with different intensities across countries – may have been absorbed by migration within a year.

Key word: *migration processes, budget, taxes, statistics data.*

Această lucrare prezintă tendințele recente și fluxurile migrației forței de muncă și impactul acestora asupra vieții economice și sociale. Scopul principal al cercetării constă în determinarea impactului fluxului de imigranți asupra economiei europene și competitivității ei. În procesul cercetării au fost utilizate următoarele metode: comparația, analiza, deducția, statistica și simularea. Impactul economic al migrației este un proces intens studiat, condus, însă, de percepții prost informate, care, la rândul lor, pot determina antagonismul public față de migrație. Aceste opinii negative riscă să pună în pericol eforturile de adaptare a politicilor de migrație la noile provocări economice și demografice, cu care se confruntă multe țări. Politica de migrație analizează probele pentru modul, în care imigranții afectează economia în trei domenii principale: piața muncii, finanțele publice și creșterea economică. In Europa, domeniul de aplicare a mobilității forței de muncă, în mare măsură, a crescut în zonele UE / AELS ca urmare a extinderilor UE din perioada 2004, 2007 și 2014-2015, ceea ce a mărit capacitatea de reglementare a pieței forței de muncă. Estimările recente sugerează, că mai mult de un sfert din șocurile asimetrice de pe piața forței de muncă – care au loc în momente diferite și cu intensități diferite în toate țările – este posibil să fi fost absorbite de migrație într-un an.

Cuvinte cheie: *procese imigraționiste, buget, impozite, date statistice.*

В настоящем документе представлены последние тенденции и потоки трудовой миграции и ее влияние на экономическую и социальную жизнь. Цель исследования состоит в определение влияния потока мигрантов на европейскую экономику и её конкурентоспособность. В процессе исследования авторы использовали следующие методы: сравнение, анализ, дедукция, методы статистики, моделирования. Экономические последствия миграции – широко изученный процесс, управляемый, однако, плохо информированными восприятиями, которые, в свою очередь, могут вызвать общественный антагонизм по отношению к миграции. Эти негативные восприятия ставят под угрозу усилия по адаптации миграционной политики к новым демографическим и экономическим вызовам, с которыми сталкиваются многие страны. Миграционная политика анализирует как мигранты влияют на экономику в трех основных областях: рынок труда, государственные финансы и экономический рост. В Европе объем мобильности рабочей силы в значительной степени увеличился в зонах ЕС / ЕАСТ, в результате расширения ЕС в 2004, 2007 и 2014-2015 гг., что позволило воздействовать на регулировании рынка труда. Последние оценки

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показывают, что более чем на четверть ассиметричные шоки рынка труда – которые происходят в разное время и с разной интенсивностью в разных странах – скорее всего, были поглощены миграцией в течение года.

Ключевые слова: *миграционные процессы, бюджет, налоги, статистические данные.*

JEL Classification: C15, J21, J61, J62, J69, O15.

Introduction. Today we can certainly say that migration processes, caused by the intention of democracy forming in Middle East and Africa, called at that time Arabian Spring can not be compared neither in size nor in effects what will cause in the near future. And, I think that will be reasonable to find out the cause and the effects.

Officially only in the first half of 2015 year in Germany was submitted 195 thousand applications of asylum. The number of applications is increasing monthly about 35 thousand and continuing. Nevertheless it comprises the official applications which were taken on evidence.

According to the statistic data of Migration Department of Germany, at the end of May in Germany were 225 544 migrants, whose applications were on examination, and 536 997 migrants whose applications were rejected but although the procedure of deportation wasn't accomplished by different reasons. The number of migrants, who are in Germany by the reason of refuge is 1 114 349 people. This proportion rather good correlates with statistics data of satisfaction applications of asylum, in Germany are satisfied about 36% of applications.

What are these people doing in Germany, how they live on, without having the official statute and the right to work, - it's a puzzle for those people who don't accuse the migrants in crime increasing?

No less exciting looks the prediction about the flow of migrants expected in 2015. So, at the beginning of the year the Migration Department evaluated it maximum 300 thousand people, in June about 450 thousand, but in the middle of August in UN were talking about 750 thousand, and on the day the Federal Minister of the Interior, Thomas de Maiziere estimated it about 800 thousand people. Watching the breakthrough Macedonian border, one can certainly say that this is not the end.

At the end of 2015 year the number of new arrived migrants and those who already were in Germany will be no less two million people. Here we should mention, beforehand pointing out the fact that "refugee" is not the synonym of the word "migrant", as it has a positive connotation and the main aim is to assure his returning home after the end of the conflict. Easier saying refugees are significantly limited in rights in comparison with other groups of migrants, and their position does not imply the integration in the society.

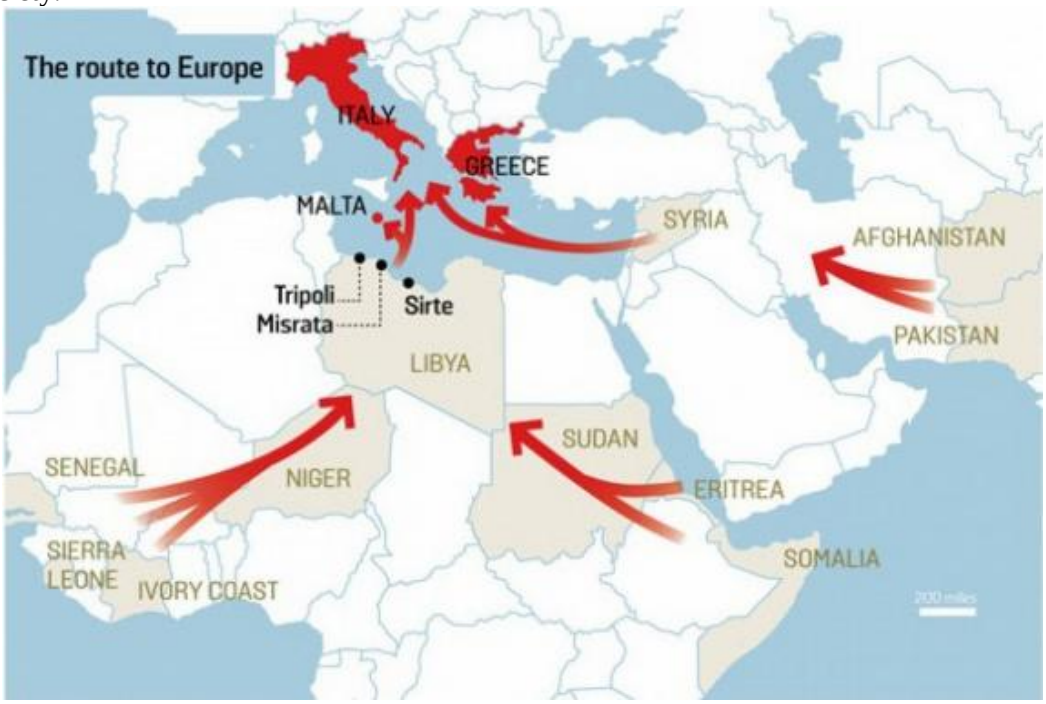


Fig. 1. Modern migration flow

Much is this or little? The previous storm of refugees in Germany also was caused by the intention of democracy forming by means of dismemberment of independent Yugoslavia, all this occurred with the active supporting of our western partners, "Effect of Bosnia".

Rescuing from democracy forming, in Germany at the beginning of 90-th years annually were arriving more than 200 thousand refugees. Their number raised the highest level in 1992 reaching almost half a million. If we compare the today situation with crisis in 1992 it got worse a lot.

Beginning with the 2000 year, EC gave about 13 million euro for security from illegal migrants which were spent on deportations, border fortification and security. As a result of these measures about 29 thousand people died trying to get in cherished Europe the most of all drowned into Mediterranean Sea. Nowadays we can state the fact that all the spent money and thousand of ruined people lives were in vain. The Arabian Spring destroyed Khadafy's regime and the main barrier on the way from Africa to Europe. According to data of some Western mass media, supporters of common values to all mankind and all sort of charity foundations being on UN maintenance offer "help" refugees from Central and Eastern Africa who reached Libya. Former population of Somalia, Niger and Sudan are given, right on the coast, an aid of about 1000 euro and they pay for the work of smugglers who help them to go to Europe through.

Mediterranean Sea. Other, not less interesting way of protecting Europe from uncontrolled flow of refugees was so called Dublin agreement; according to this agreement the countries, where the refugees arrived, should give them asylum. In such a way, the Southern countries of Europe should by themselves solve the occurred problems. Today the Dublin agreement is cancelled because the countries of Southern part of EC are not interested in and do not have possibilities to register the refugees and support the costs, it is easier to pretend that they crossed the border uncontrolled, and continuing their way for a better life to North. This situation will lead to recover the borders in near future of EC and canceling the Schengen agreement. In spite of the debating this subject in mass media the necessity of recovering becomes clearer.

Money decides everything. Ideologists think that migrants are enriching the country. Maybe we can agree but we should mention the fact that not all migrants are for any country. I can hardly imagine the economic benefits of migrants considering the fact that they do not possess the language and the right to work officially but the costs of their maintaining can be counted. On the average the cost of maintaining one migrant in Germany is about 12-13 thousand euro. But more expensive is the maintenance of minors which is 40-60 thousand euro per year. Can we wonder the fact that Germans in near future will pay the increased taxes which are considerable. We can be sure – German people will be delighted. This 10 billion – are short-term costs which should be paid in the near future. In 2014 the Bertelsmann Foundation published the researches of the economical effects of migration and came to a conclusion that, taking into account the added costs, the formed deficit is about 1800 euro in a year. So, each migrant consumes on the average 1800 euro in a year more than produces, which adds more costs for native people in amount of **79** thousand euro for his life.

Light discontent. Nothing surprises after all what was written before in Germany appears a discontent about migrant policy which sometimes runs over the penal code. Every day there are attacks on refugees and from the beginning of the year there were more than 200, weekly in receiving points break out fire for the reason of inflaming. In spite of all the discussions in the mass media about human rights and their questionnaires which show the almost total support of uncontrolled process of settlement in Germany people without past and documents, society tension increases. It is not welcome also the criticism of what is happening in the mass media. Any doubts that the massive influx of refugees – is good or even great, equal almost to the denial of the Holocaust. The controlled state media ignited the atmosphere of hatred for those who still dare to speak out critically against the migration policy.

The victims of the regime – who are they? Two-thirds of all refugees, oddly enough, the men and the greater part of them are between the ages of 18 to 34 years. That is, young men of military age, but not helpless women, children and the elderly. Most of them come from the regions covered by the civil war, Syria, Afghanistan, Iraq. The rest of the countries which won Western democracies: Kosovo, Albania, Serbia and Ukraine. Moreover, from free Kosovo are running no less than from Syria, which is under the oppression of Assad and the Islamic State. The fact that the former citizens of the countries where there is a difficult situation, does not sympathize each other, immigration authorities in Germany have understood long ago. So in 90-th years, migrants who have arrived from the former Soviet Union were divided by ethnic principle. For example, Russian Germans, Jews or Chechens, who arrived in Germany on the program of repatriation or asylum seekers, there were some receiving points and separate hostels. Unfortunately, this simple and transparent principle was completely ignored when were received refugees

from the Middle East or Africa. It is hard to imagine that the officials had no idea of the results of compact people settlement in the hostels of different faiths, and people who recently were on the opposite sides of the front line. Taking in consideration, so many refugees and the complete absence of documents, it is hard to state what these young people were employed earlier. So, it can not be surprising that some of them are Islamic radicals, who are quite possible, more recently cut off the heads of their opponents, and are ready to do it in the future. What causes uncontrolled flow of refugees from regions torn by the civil war, demonstrates a good historical example of Large Congolese war, which started just for that reason. In 1994, an attempt to build democracy in the countries of Central and Eastern Africa, particularly in Rwanda, ended in mass genocide. A large number of Tutsi people, escaping the carnage, flooded the territory of the modern Congo, and later, when, with the support of Uganda power in Rwanda changed, joined by Hutus people too, many of whom took an active part in the genocide. As a result, the war spread to neighboring states and lasted almost 10 years, taking up to 5 million lives.

It seems that in Germany no one is concerned about that there are representatives of the "Free Syrian Army" among refugees from Syria who run away the Assad forces, and those who escaped from the IG, and even the representatives of the Islamic State. So, we can expect not only a single terrorist attack, like the one that took place at the Jewish Museum in Brussels, or quite recently prevented the train attack in Belgium, but also real manifestations of civil war with battles of local importance. Sooner or later, millions of those people who would not find employment in Europe will splash the accumulated energy and all the limitless emotions for the white masters, which they certainly have accumulated. And something tells me that this is not an act of infinite gratitude.

Now what? As a rational explanation of the tolerance that European politicians show to massive and illegal border crossing it is hard to find at the first glance, it remains the only one way – to look differently at the situation. It is difficult to imagine that this strange tolerance is a sign of weakness or dullness. Check out this is easy – try to get from Russia to the EU without a passport. As minimum, you will be detained and sent back on the same day, with no right of entry to the EU. In the worst – will shoot.

But those rules, which are working against the Russians or Ukrainians, whom nobody let to pass in the EU, for some reason does not work for refugees from the Middle East or Africa, who travel through Europe as if they had Schengen visa. It is also difficult to believe that the authorities of Germany are interested about fate of refugees from Syria or Afghanistan. Example Kosovars, who escaped during the civil war in Yugoslavia and almost 20 years have lived in Germany with the statute of refugees, says the opposite. After the political objectives were achieved, they began to expel them back facing the poverty and unemployment in Kosovo. It turns out that the only purpose which is chased as a result of this rather bizarre and self-destructive policy is purely political one. In fact, it is not a secret that the German leadership is lively seeking a public support for NATO's military adventures. But the way to convince ordinary German to send their children at their own expense to fight for the unclear ideal until recently was not. So, in such a way European taxpayers were forced to watch every day, how in their disadvantaged district of Hamburg have placed thousands of young and daring guys, and asking the government and NATO partners to start the military operation against the "anti-people" regime. In the hope that after the war finishes refugees will go back where they came from. Other choice to Germans, under the pressure of the military lobby control of the media and censorship, has not been left. So that, we are dealing with one of the largest and costliest manipulation of public opinion, which mission – to reverse the attitude of European citizens against war. The massive influx of refugees in Europe has created for the EU set of social and economic problems. One of the main -the employment of migrants. After all, without a job integration in the EU is impossible. According to the German labor agency, the majority of refugees from Asia, Africa and the Middle East do not have a profession or special training, so it will be extremely difficult for them to find a job. Special studies in Germany and Austria have shown that the skills level and education of new arrived refugees is much lower than of the local population, including foreigners living in the EU. At the same time it will be difficult to raise the level even in long terms. Published data, experts think, should have had a sobering effect on politicians, including German Chancellor Angela Merkel, who never tires repeating that Europe will succeed to cope with this problem. However, it became apparently that the integration of refugees is a very complex and expensive task. German and Austrian labor hire thousands of employees to handle documents and organize labor adaptation of arrived people. The problem takes a dramatic view taking into consideration the scale of the migration. Officially, 800 thousand refugees arrived in Germany, but there is confirmation of the fact that till the end of the year their number may reach 1.5 million people. On the average, the cost of maintaining one migrant in

Germany is about one thousand euro. The financial burden on the German lands and communities due to the influx of refugees is growing steadily. According to the latest data, the costs will rise to 7 billion euro with half a million of refugees and 16 billion in the case of the arrival of 1.2 million people. The local authorities think that the money allocated for the maintenance of the refugees from the federal budget are absolutely insufficient. Until nowadays, the German politicians, economists and a number of business representatives illustrated a positive impact of migration for the German economy. They stated that the country is in a demographic crisis and the influx of labor force will have a positive impact on the labor market and consumer sector. Initially Germany responded positively to the "refugee wave", as it was believed that it will help solve a number of problems. At the level of fertility, the country occupies one of the last places in the EU, and the aging population creates an increasing burden on pension funds and the health care system. There have been published data, according to which, without the influx of migrant working population of Germany will decline by 2030 with several million people. However, practical experience shows the opposite. President of the Federation of Construction Business, Michael Knipper, sent an open letter to the head of Manufacturers Association of German BDI, in which he demanded to give up the "naive" version regarding the positive impact of migration on the labor market. He pointed out that the new migrant workers did not understand the German instructions and did not meet professional standards. According to German authorities, 75% of Syrians and 83% of Afghans have primary or lower secondary education, almost no one had received vocational training at a professional level. This is a completely different situation in comparison with the past, when people came to Germany, with certain qualifications.

For training migrant workers will be needed billions of euro, and also will be spent enormous costs for their social and medical support. Construction Business Federation believes that it would be better to invest those billions in new technologies. Germany is pointed out in the letter, does not suffer from a shortage of skilled labor and while unskilled workers – the excess.

Serious doubts about the benefit of migrants were expressed by two prominent German economists – Hans-Werner Sinn, head of the IFO Institute in Munich, and Bernd Raffelyushen, professor of economics at the University of Freiburg. They believe that the integration of refugees in the labor market will force Germany to abandon the principle of the minimum wage, as the performance of "newcomers" is much lower. This, as a result, will hit the entire low-paid categories of workers. In addition, refugees will burden for a long time the social system; in particular, they will not gain enough seniority to receive a pension. In order to cover additional social spending in Germany will have to raise taxes. According to the Federal Minister of Labor Andrea Nahles, the number of minimum social benefits recipients will increase from 460 thousand in 2016 to 1 million by 2019.

Optimists point out that 55% of refugees are under 25 years old and it is still not too late to give them vocational training. However, according to the experts from Arbeitsagentur, in the medium terms in the labor market will be able to integrate only 50% of new arrivals.

Arbeitsagentur Experts came to the conclusion that the integration of refugees in the labor market in Germany will occur very slowly. After the first year the job will find only 8%, after 5 years – 50%, and after 10 years – 60% of the refugees. The situation is similar in other European countries. For example, in Switzerland among migrants and refugees who find a job after three years are 20%, after 10 years – from 45% to 60% of the arrivals.

Recently, the head of number of the European companies (including the director of Airbus Thomas Enders) made strong statements on the need for early labor integration of migrants. Enders recommended to authorities to deregulate the labor market based on the American model, so that everyone could find a job. However, in Europe, where there are strict labor and social standards, it is impossible. Refugees can not be like the Mexican migrant workers in the United States or Central Asian migrant workers in Russia immediately to fill into the labor market and to work for less money than the local population. To this end, the Europeans need to cancel the "socialist" laws to ensure the minimum hourly wage.

In fact, European companies are not eager to employ migrants. Some labor positions (for tens of people) gave Siemens, Daimler and Telekom. At the same time companies are seeking employees with higher education, who speak German and English. In Austria, the biggest food group Rewe has allocated half a million euro for the resettlement of refugees and proposed from 20 to 30 training places for migrants. This is like a drop in the ocean on the background of tens of thousands of refugees who have arrived in the Alpine republic. In fact there are not enough jobs for the Austrians themselves. Job center reports 32 thousands of labor jobs, while job seeking are about 385 thousand people.

The conclusion of experts is clear: Germany and Europe as a whole do not need low-skilled force in such quantities. There are examples – not only in Germany, but also in France, where in the 60s-70s years arrived millions of migrants from Africa and the Middle East, and got a job in the service sector, in construction and in the auto industry. Over time, the need for this labor has disappeared, but the workers remained in Europe, going on welfare. It is among these migrants, mostly Muslims, formed the urban subculture that denies European labor and civilization values. In France, the integration of Muslims has not taken place even after 50 years – after being replaced at least three generations of migrants.

Table 1

Countries by GDP (PPP), in billions of USD			**The income per capita, USD**		
№	**Country**	**2014**	**№**	**Country**	**2014**
1	China	17617	2	Luxembourg	92049
2	USA	17419	9	Switzerland	58087
5	Germany	3722	3	Ireland	49195
9	France	2581	14	Netherlands	47355
10	UK	2549	15	Australia	46433
12	Italy	2128	16	Austria	46420
16	Spain	1566	17	Sweden	45986
17	Turkey	1508	18	Germany	45888
23	Poland	954	21	Denmark	44343
27	Netherlands	799	22	Iceland	43637
38	Belgium	481	23	Belgium	42973
39	Switzerland	473	24	France	40375
41	Sweden	448	25	Finland	40347
45	Austria	395	27	UK	39511
46	Romania	393	29	Italy	35486
51	Czech Republic	315	32	Spain	33711
52	Greece	284	33	Malta	33216
54	Portugal	280	37	Cyprus	30769
57	Denmark	250	38	Czech Republic	29925
58	Hungary	246	39	Slovenia	29658
60	Ireland	227	40	Slovakia	28175
61	Finland	221	41	Lithuania	27051
71	Slovakia	153	42	Estonia	26999
75	Bulgaria	129	43	Portugal	26975
78	Slovenia	61,1	44	Greece	25859
102	Luxembourg	51,4	46	Poland	25105
105	Latvia	48,2	48	Hungary	24942
110	Estonia	35,6	52	Latvia	23707
125	Cyprus	27,4	60	Romania	19712
141	Moldova	17,7	67	Bulgaria	17860
145	Iceland	14,2	129	Moldova	4979
146	Malta	14,1			
	Land	107921			
	European Union	18526			

Source: rapport Worldbank and IMF, 2015.

After arrival in the country you will be given:

• Free accommodation
• Free meals
• Free language courses
• Free education for children in school
• Free health insurance from the state

(Or even cash allowance up to 1000 euro per person, depending on the country, so you can afford the above benefits in the case that they were not given to you for free).

Price matter. In most EU countries the financial costs and the additional costs of national budgets are the central argument of the repressive anti-migrant rhetoric. So, how much does the humanitarian workers cost for receiving State? Social obligations to them vary greatly from country to country. The most "lean" guarantee package is provided by Hungary, Czech Republic and Poland. The most generous - Netherlands, Denmark, Sweden and Germany. For example, Sweden's social obligations to humanitarian migrants were established in 1994 and since then have never been revised. The financial component of state aid is determined by the place of migrant accommodation. Those who live in government accommodation centers which provide food, accommodation and free heating, receive as "pocket money" 720 kr (Krona-Sweden currency) (€ 76.50) per adult; 570 kr (€ 60) per person for adults, living in a partnership or marriage; 360 kr (€ 38) per child under the age of 18 years. The amount of state aid for persons located outside of the state centers, are greater. The State guarantees those benefits in the amount of 2130 kr (€ 226) per adult and 1830 kr (€ 194) per person for adults, living in a partnership or marriage. In Germany, according to the law "Guarantees for asylum seekers", changes that were made in March 2015, a refugee monthly receives 143 EUR in free disposal, usually in cash, and 216 EUR to cover the food consumptions, clothing and movement, which at the discretion of the federal land can be paid in cash or in the form of services provided. In addition, the state assumes the accommodation expenses and heating. The last payment is determined by the level of life in one or another federal land and can range from €323 for adults and from 217EUR to 283 EUR for children under the age of 18 years.

Is it possible to live on this money in a month? Probably, it is possible, but very difficult, because even unemployment pension in Germany is 399 EUR. A comparative analysis of the allowances issued by Sweden to humanitarian workers and citizens in general is incomparable. Thus, the amount of social benefits for a family of refugees, consisting of 2 adults and 4 children, will be 8160 kr (867 EUR), and the amount of social benefit for the same family Swedish citizens, consisting of 2 adults and 4 children, is 19 450 kr (2066 EUR). It should be mentioned that the burden of the financial "liability" with the host countries of humanitarian migrants EU is also ready to share. On the one hand, the European Union guarantees the payment of "compensation" for each received refugee. For example, Poland will receive € 10,000 for each humanitarian migrant arrived from the Middle East, and € 6 thousand for migrants displaced into its territory from Greece and Italy. On the other hand, the European Commission provides financial support in reforming and improving conditions for refugees from the third countries. So, in 2015, Kosovo will receive 7,1 million EUR for the creation of the refugee reception centers and for organization more effective humanitarian migration management; the size of aid to Turkey will be 469 million USD, of which 130 EUR million should be spent on the construction of accommodation, and 94 million EUR sites on any program of assistance to the Government of Turkey related to the refugees from Syria. Any person has the right to ask for refugee status in Europe no matter how she/he arrived in the EU legally or illegally. The only difference is that when waiting for a decision on their issue illegal migrants should be kept in special closed centers for refugees but those who arrived legally have the right to travel. While waiting for the decision on granting the refugee status, each person living in special centers for migrants have the opportunity to use for free the living quarters, one receives hygiene products, free health care, a one-time compensation for clothes expenses and pocket money. Here is a list of countries and the level of benefits for migrants for one adult family member per month:

- Belgium: 220 EUR
- Germany: 130-217 EUR depending on the number of family members
- United Kingdom: 185-250 EUR depending on the composition of the family.
- Sweden: 160-225 EUR depending on the number of family members.
- France: 202 EUR for a single and an additional 100 euro for subsequent family member.
- Spain - 51 EUR

- Austria - 40 EUR
- Bulgaria - 33 EUR
- Poland - 16 EUR
- Lithuania - for each refugee per month is planned to spend 600 EUR
- Latvia for each refugee per month is planned to spend 800 EUR
- Estonian monthly cost of its maintenance will amount to 400 EUR
- Germany - 359 EUR
- France -343 EUR
- Finland -316 EUR
- Cyprus -320 EUR
- United Kingdom - 213 EUR
- Czech Republic -210 EUR

Conclusions. Migrants also receive additional payments for children, for example, in Britain apart from the specified amount additionally 20-30 euro depending on the age of the child. In addition, living in these centers people are provided with food, free education for children and learning the local language.

Persons who live outside of refugee centers receive payments for housing. So in Poland such a person can count on the amount of 100 USD (if the family consists of 4 people) to 200 USD (if one) per person, while in Belgium, an applicant for refugee status will receive 800 euro.

At the same time, hoping to get refugee status people do not have the right to work. So many people live only on welfare. Illegal work can badly affect the final decision about the refugee.

But the demographic matter is resolved. Even 10 years ago, Europe was concerned about the aging nation; the Europeans do not want to breed, rarely in the pale-faced European family were more than 2 children. The question is solved, as the subject of the influx of young migrants in recent years is no longer rising, but the refugees are one of the solutions to the problem of the working population in the old Europe.

REFERENCES

1. GRIBINCEA, A., BĂDĂRĂU, E., NEGRUŢĂ, A. Procesele migraţioniste ca fenomen din spaţiul economic european. In: Analele Universităţii Libere Internaţionale din Moldova. Seria Economie. 2008, vol. 7, pp. 48-61,
2. GRIBINCEA, A., NEGRUȚĂ, A. *Problemele actuale ale migrației. Republica Moldova - provocările migrației*: culegere de lucrări științifice. Academia de Științe a Moldovei. Chișinău: ÎEP Știința, 2010. 148 p.
3. LEGRAIN, Ph. The economics of migration. 2008, september [accesat 23 ianuarie 2016]. Disponibil: http://www.centreforum.org/assets/pubs/economics-of-migration.pdf
4. OECD. Migration Policy Debates [accesat 10 ianuarie 2016]. Disponibil: http://www.oecd.org/migration/migration-policy-debates.htm
5. LAZARI, S. Migration issues and their economic impact. In: Economie şi Sociologie = Economy and Sociology. 2015, nr. 4, pp. 43-48.

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BOLIVIA'S ENERGY CONSUMPTION AND ECONOMIC GROWTH PROFILE: IS THERE A LINK?

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The fundamental importance of energy for socio-economic existence cannot be over-emphasized. With an annual average growth rate of 3.6% over the period of 1998 and 2008, the Bolivian economic statistics shows that over 60% of the country's GDP growth rate can be attributed to its export sector. However, energy consumption also grew significantly over the same period. Thus we seek to establish the directional causality between energy consumption and economic growth in Bolivia using secondary annual data for the period of 1971 to 2010. The Granger-causality tests indicate that there is an unidirectional causality that runs from economic growth to energy consumption with no feedback. The study, therefore, recommends that policies meant to manage growing energy demand can be instituted without obstructing growth in Bolivia. Energy taxation and pricing reform can help raise additional revenue for development.

Key words: *economic growth, energy, reform, energy consumption, Bolivia, taxation.*

Importanța fundamentală a energiei pentru existența socio-economică nu poate fi supra-accentuată. Cu o rată medie de creștere anuală de 3,6% în perioada anilor 1998-2008, statisticile economice boliviene arată că peste 60% din rata de creștere a PIB-ului țării poate fi atribuită sectorului său de export. Cu toate acestea, consumul de energie, de asemenea, a crescut în mod semnificativ în aceeași perioadă. Astfel, vom căuta să stabilim cauzalitatea direcțională între consumul de energie și creșterea economică în Bolivia, folosind date anuale secundare pentru perioada anilor 1971-2010. Testele de cauzalitate Granger indică asupra faptului că există o cauzalitate unidirecțională, care trece de la creșterea economică la consumul de energie, fără nici un feedback. Prin urmare, studiul recomandă că politicile, menite să gestioneze cererea crescândă de energie, pot fi instituite fără a obstrucționa creșterea în Bolivia. Impozitarea energiei și reforma de stabilire a prețurilor pot contribui la creșterea veniturilor suplimentare pentru dezvoltare.

Cuvinte-cheie: *creșterea economică, energia, reforme, consumul de energie, Bolivia, impozitare.*

Фундаментальное значение энергии для социально-экономического существования не может быть переоценена. Со средним годовым темпом роста в 3,6% за период с 1998 по 2008, боливийская экономическая статистика показывает, что более 60% от роста ВВП страны можно отнести к экспортному сектору. Тем не менее, потребление энергии, также, значительно увеличилось за тот же период. Таким образом, авторы стремятся установить причинно-следственную связь между потреблением энергии и экономическим ростом в Боливии, используя вторичные ежегодные данные за период 1971-2010 гг. Тест Грэнджера на причинность показывает, что существует однонаправленная причинность, которая идет от экономического роста к потреблению энергии без обратной связи. Таким образом, исследование рекомендует, что политика по управлению растущего спроса на энергию может быть реализована без препятствий для роста в Боливии. Налогообложение энергетики и реформа ценообразования может способствовать привлечению дополнительных доходов для развития.

Ключевые слова: *экономический рост, энергетика, реформа, потребление энергии, Боливия, налогообложение.*

JEL Classification: N76, O10, Q01, Q40, Q41.

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Introduction. That energy is a fundamental requirement for human socio economic existence is not an exaggeration. Energy is vital for sustaining national economies and a required ingredient for both human system of livelihood and continued existence. As an important instrument for social development, energy enhances living standards among population. A nation's economic development is closely connected to the amount of energy consumed such that any observed increase in economic development may be a consequence of higher energy consumption. Conversely, a higher level of energy consumption could also be consequence of an efficient energy use which will invariably lead to reduced energy consumption, sometimes refer to as economic performance gain. Therefore, as energy consumption can help to determine the economic development, so also can the level of economic development be indicated by the pattern of energy consumption.

The link between energy consumption and national development from the policy perspective remains a contestable issue till present. An agreement between scholars remains elusive because of contradictory empirical findings in several studies. For instance, a study by Stern (2000) extending an earlier effort Stern (1993) on USA post war economy discovered a multivariate co-integration tie between Gross domestic product (GDP) and energy. He concluded once more that GDP is not granger caused by energy. However, by applying a quality weighted index of energy input, it was discovered that growths do granger cause GDP. Nevertheless, the new result affirms Stern (1993) findings but sharply contrast with the outcome of a bivariate analysis by Yu and Jin (1992) on the same US economy using different methodology though.

There are four major theoretical postulates with respect to the way energy interacts with the economy in a given society. While an unidirectional causality from economic development to energy consumption suggests little dependence of a nation on energy consumption, an unidirectional causality from energy consumption to economic growth on the other hand confirms a relationship exists where economic growth depends on energy consumption. It is also possible for both causality to run both ways between energy consumption and growth. In this case, a bi – causality exists and neutrality hypothesis is where causality runs neither way.

Whatever the outcome, the ensuing causal relation between energy consumption and economy can be of immense use in terms of countries formulation of energy policy in the specific area of demand management, pricing and its reform process. As widely researched as the issue of energy – economy interdependence appear, available records point to no investigation on the causal relationship between energy consumption and economic development in Bolivia. Yet, Bolivia is perhaps the poorest country within the Latin American region with an estimated population and GDP of about 10.2 millionand $23.67 billion respectively (CIA Fact book, 2012). About 80% of Bolivia's energy consumption comes from fossil fuels and the country has been experiencing rising energy consumption in recent years which has dragged Bolivia into the league of net oil importer.

Between 2005 and 2010, Bolivia GDP and energy consumption grew at an average of about 5% and 10% respectively. These trends definitely allow for further curiosity; is Bolivia's energy consumption increase responsible for its economic growth profile and vice versa or do the variables jointly determine each other? This is the prime focus of the proposed investigation in this paper. It is believed that answers to this line of questions can assist the Bolivian authorities in the area of energy policy formulation in a country where the energy sector is of high political and economic significance.

This study shall commence henceforth with a literature review and brief account of Bolivia's energy profile, chapter three will show the analysis and chapter four will conclude.

This study shall commence henceforth with a literature review and proceed in the third section to give a brief account of Bolivia's energy and economy profile. Section four contains all the Analysis while the study is concluded in section five.

Literature review. Rigorous studies in the last quarter century have trailed causal relationship between economic development and energy consumption. As proficiency increased with time series analysis, many studies have determined the causal relationship of economic development and energy consumption by Granger causality concept. However findings have not established consensus, diverse results have emanated from both different countries and dissimilar periods in same country.

In a typical comparative study on energy use and its relationship with GDP of less developed nations, Lee (2005) utilises a panel data based error correction method and detects that both long and short run causalities points to energy consumption granger causing GDP. Lee however cautioned that different outcomes may be acquired for a single country because causality tests have been proven to be data and lag

length sensitive. Soytas and Sari (2003) established a bidirectional causality relationship between energy consumption and GDP in Argentina, a one-way causation flowing from energy consumption to economic growth in some OECD countries namely Japan, Turkey and Germany but causality in the reverse direction in Italy and Korea, i.e. from economic growth to energy consumption.

How energy consumption and economic growth correlate in India between from 1970-2005 was investigated by Mallick (2009) with granger causality method. The study's outcome implied an unidirectional granger causality flow from coal consumption to economic growth while economic growth granger was found to granger caused demand increase for electricity alongside oil consumption. The study conclusion was however vague regarding India's energy consumption and economic development nexus due to conflicting evidence from the outcome of the variance decomposition and Vector Auto-Regression analysis. Much earlier, Paul and Bhattacharya (2004) discovered a bi-directional causality between energy growth and energy consumption in India with data ranging from 1950 to 1996 whereas, Oh and Lee (2004) using vector error correction model with 1970 to 1999 data on Korea discovered long run bi-directional causality between energy and economic development but a short-run unidirectional causal relationship emanating in the reverse direction from energy to GDP.

In a study by Narayan and Smith (2007) investigating the case of G7 countries, employ a combination of Granger causality, panel unit root and co-integration framework to study the existing link among energy consumption, capital formation and real GDP. The outcome revealed that in the long run real GDP was granger caused by both energy consumption and capital formation. A percentage increase in both energy consumption and capital formation caused increase in real GDP by 0.12 to 0.39% and 0.1 to 0.28% respectively.

Odhiambo (2010) studied the causal relationship between energy consumption and GDP in three sub Saharan country namely South Africa, Kenya and Congo (DRC). The outcome displayed an unidirectional causality which flow from energy consumption to economic growth for Kenya and South Africa, while Congo produced a one way causality flowing from economic growth to energy. What this implies for energy conservation policy is that why Kenya and South Africa require guidelines which will increase supply of energy for meeting long-run demand for energy, Congo on the other hand may execute energy demand management policies without drastically disrupting its economic growth.

Shiu and Lam (2004) studying the relationship between electricity and economic growth in China used granger causality test to analyse data from 1971 to 2000 and discovered the presence of one way causality from Chinese electricity consumption to China's GDP. This gave substance to the fact that industrial sector's electricity consumption brought about growth especially from the 1970 to 2000. The author noted that about 80% of electricity consumed in this period was attributable to the industrial sector. A key economic driver of China's economy is industrial production and it is not surprising to see a growing industrial demand for electricity resulting in aggregate rise in energy consumption and consequently leading to increase in economic growth. To curb any supply shock in electricity which could potentially weaken China's economic development, the authors recommends that electricity generation capacity needs to be augmented. These findings conform remarkable well with that of Yuan et al (2007) who use data from 1978 to 2004 and found unidirectional causality from Chinese electricity consumption to china GDP.

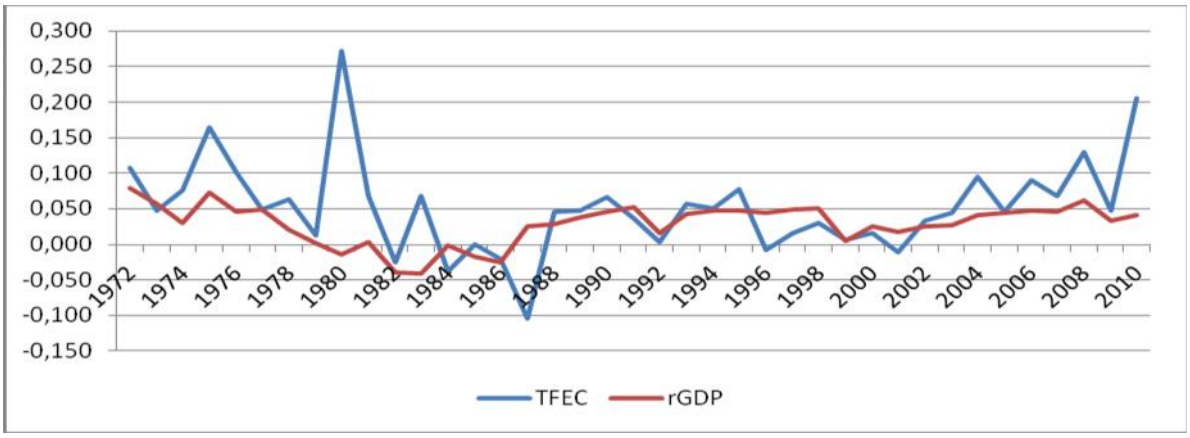


Fig. 1. Bolivia's Energy consumption and real GDP growth rates (1972-2010)
Source: Author using data from WDI.

Energy and Economic Profile of Bolivia

According to EIA 2012, Bolivia is among the poorest and least developed countries in South America. The World Bank classifies it as a low income country (World Bank 2012). Since the past twenty years, the average growth rate of Bolivia from 1998 to 2008 was 3.6%. For the last ten years however, this growth rate has been attributable to its export sector which added over 60% to the nation's GDP in 2006.

The country's GDP in 2009 was $17 billion, while the GDP per capita was $1758 (World Bank Indicator, 2012). Bolivia's GDP in terms of the purchasing power parity (PPP) equivalence and with inflation accounted for, increased by 11.3% between 1980 and 2009. Fig 1 shows the growth rates of Bolivia's total final energy consumption (TFEC) and real GDP (rGDP) from 1971 to 2010. The country's energy sector is vital to its economy and a significant source of natural gas within its region. Natural gas and other carbon minerals account for more than 6% of its GDP, 45% of its export and 30% of government revenue. Petroleum takes more than 50% of primary energy consumption while gas is responsible for most of the remainder. 15% of Bolivia's energy requirements are met by combustible renewables and waste (Fig. 2).

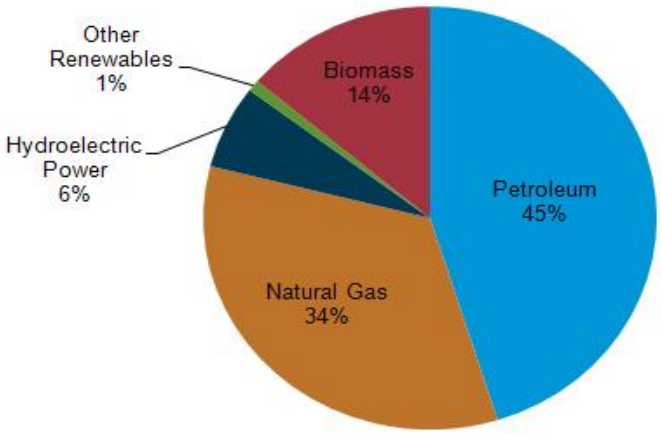


Fig. 2. Total energy consumption in Bolivia, by type, 2011

Source: EIA, 2012, Independent statistics and analysis.

Historically Bolivia was a net exporter of oil but with the sector's reorganisation, production of oil fell between 2007 and 2009 by about a quarter and it moved from a net exporter country status to a net importer of crude oil. Figure 2 indicates that there was a considerable rise in production at 2010, but it still had a production decrease. According to EIA 2012, Bolivia government officials say natural gas compensates for the shortfall in oil production. Bolivia trails behind Venezuela and Argentina in natural gas production.

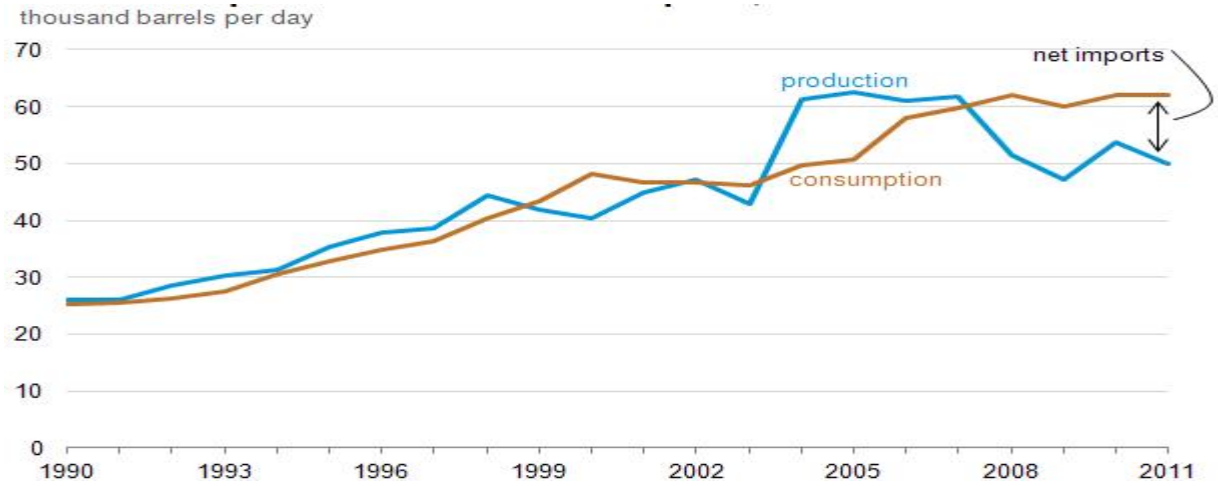


Fig. 3. Bolivia's oil production and consumption, 1990-2011

Source: EIA, 2012, Independent statistics and analysis.

Figure 4 shows that natural gas production rose since 1999. However a rise in its domestic gas market has resulted in its inability to meet contractual obligations to regional Brazil and Argentina. About one-fifth of its gas production has now been left to its domestic market with electricity demand responsible for more than 50% of gas consumption while industry and transportation are responsible for the remainder.

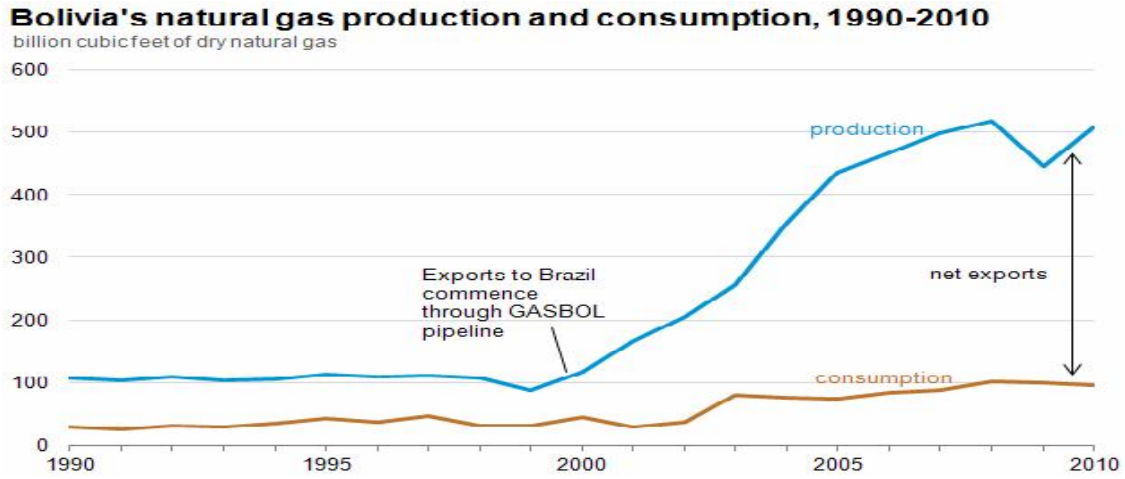


Fig. 4. Bolivia's natural gas production and consumption, 1990-2010

Source: EIA, 2012, Independent statistics and analysis.

Bolivia's Energy production started to decline recently from 2007 at a period when the country began to witness a rise in the total energy consumption. A close look at figure 4 indicates that oil and Natural gas accounted for more than three – quarter of this rise. As consumption rise faster about domestic supplies, there is no doubt that the resultant effect for Bolivia will be an increase in government expenditure for importing energy resources to meet domestic demand.

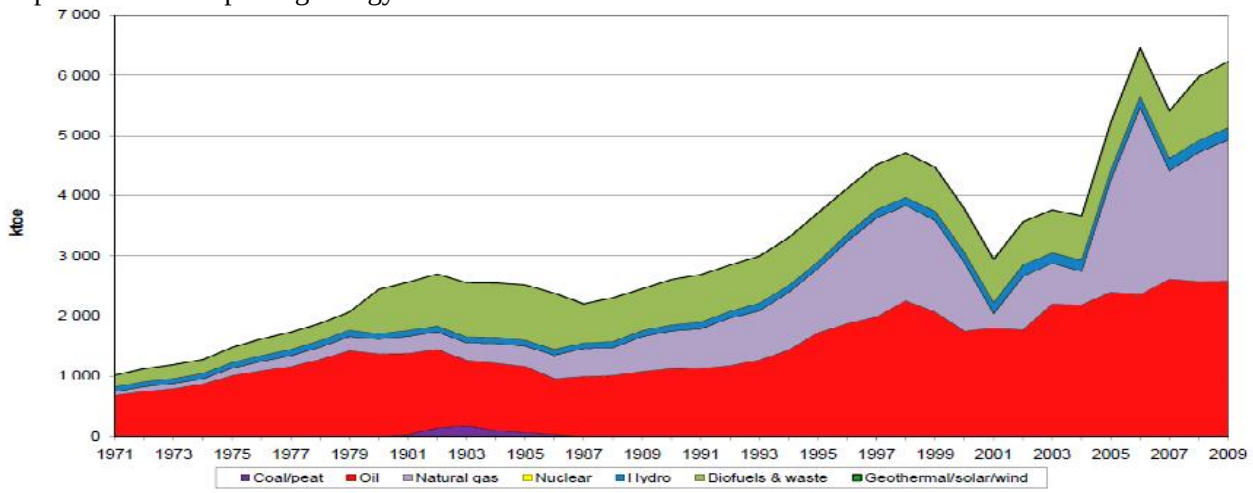


Fig. 5. Bolivia Total Primary Energy Supply

Source: IEA 2012 Energy Statistics.

Methodology. When considering the embedded relationship between energy consumption and economic growth in any economy, several issues deserve significant attention. First there are the country's energy use components at disaggregated level, the possibility of substituting one fuel for the other and the stage of economic development. Second there are the volume of economic activities, endowments of production factors and the consumption pattern of the populace. Only then the idea of a typical perfect model can be conceived. In the absence of these, it may be impossible for a model to exhaust all the possible interactions in the energy – economy relationship. Quite often, the methods and model employed by studies confines to the peculiar area of researcher's interest such that the models employed are specifically targeted at achieving the purpose of the investigation (Soile, 2012).

Tests Procedure

In order to accomplish this, the study employed the causality test relation put forward by Granger (1969) by specifying the model below to examine the nature of the causal relationships between our variables of interest. According to the model presumption, the time series property of a variable are perhaps the only relevant factors required to predict the behaviour of the said variable. This is as specified in the two regression equation below where all lower case Greek and Latin letters are used to represent fixed parameters while the time periods are proxy by the subscript (*i*) and (*t*) in the following equations.

$$Growth_t = \sum_{i=1}^{n} \alpha_i EneCon_{t-i} + \sum_{j=1}^{n} \beta_j Growth_{t-j} + \varepsilon_{1t} \dots\dots\dots\dots 1$$

$$EneCon_t = \sum_{i=1}^{n} \sigma_i EneCon_{t-i} + \sum_{j=1}^{n} \delta_j Growth_{t-j} + \varepsilon_{2t} \dots\dots\dots\dots 2$$

Where:

ε_{1t} and ε_{2t} *represent the error term of the respective equation which are assumed to be serially uncorrelated with zero mean and constant variance.*

$Growth_t$ *is the real GDP as proxy for economic growth in year t.*

$EneCon_t$ *is a proxy for energy consumption measured as total final energy consumption in kilotons of oil equivalent in year t while all t, i and j stand for time periods.*

The Hypotheses:

In conducting the Granger test for causal link between two variables (i.e. *Growth and EneCon* in the above equations), the process is to estimate the two equations above under a hypothetical assumption that the present quantity of the $Growth_t$ correlates with both the dated quantities of $Growth_{t-j}$ and $EneCon_{t-i}$ while the present level of $EneCon_t$ correlates with the past or dated values of $EneCon_{t-i}$ and $Growth_{t-j}$. As a follow up to the assumption above, the main hypothesis that the study seeks to test can be stated in the Null form as below:

The Null Hypotheses:

- ✓ $Growth$ does not Granger Cause $EneCon$
- ✓ $EneCon$ does not Granger Cause $Growth$

What the Theory Expects

The decision to reject or not either of the above two null hypotheses in accordance with statistical theory underlying the Granger causality approach are crystal clear and direct in answering the main question of the study. First, the estimates from either equation have implication for the other. For instance, there can only be a case of *unidirectional causality without feedback* running from energy to growth not just when the estimated coefficient of the lagged quantities of $EneCon$ are statistically significant as a group in equation 1 but when in addition, the estimated coefficients of the lagged $Growth$ values in equation 2 are statistically insignificant. This is because if the sets of coefficients of $EneCon$ and $Growth$ appear statistically significant in the two equations, then a *bilateral causality* running both ways exist between the two variables inferring that both energy consumption and economic growth jointly affect each other. But then, in the case that the set of the lagged $EneCon$ coefficients are not statistically significant as a group in equation 1 and the sets of the lagged $Growth$ coefficients in equation 2 is statistically significant, an *unidirectional causality* that runs from economic growth to energy consumption exists. It is not in all cases that we will observe a defined interdependence between growth and energy. Hence, there will be *no causality* between the variable if for instance, the sets of coefficients of $Growth$ and $EneCon$ in equations 1 and 2 above are statistically insignificant.

The four major relationships that exist between energy consumption and economic growth are expressed statistically below using the parameter representations in equations 1 and 2 above.

If $\sum\alpha_i \neq 0$ in equation 1 and $\sum\delta_j = 0$ in equation 2; then a one way causality exists and runs from energy consumption to economic growth

If $\sum\alpha_i = 0$ in equation 1 and $\sum \delta_j \neq 0$ in equation 2; then the one way causality runs from economic growth to energy consumption

If $\sum\alpha_i = 0$ in equation 1 and $\sum\delta_j = 0$ in equation 2; then economic growth and energy are independent.

If $\sum\alpha_i \neq 0$ in equation 1 and $\sum\delta_j \neq 0$ in equation 2; then a two way causality exists and runs both ways from energy consumption to economic growth and vice versa.

Sources of Data

The study made use of secondary data sourced from both the World Development Indicator 2012 and the EIA energy balance, 2012. Both series were sourced through the ESDS database. The data on growth for the period of 1971 to 2010 i.e. constant GDP at 2000 U.S dollars were collected from the World Bank WDI. Data on total final consumption of all energy sources were obtained from the IEA non OECD energy balance 2012, for the same period of 40 years. The growth variable is inflation adjusted having been measured in constant dollars. The study tried both energy use measured in (kilotons of oil equivalent) and total final consumption. Both variables yielded similar results so the results involving the latter were reported below.

Results. The table below contained the outcome of the estimation results of the equation 1 and 2 in section 4.2 above. From the results, the sets of the lagged *EneCon* coefficients are not statistically significant as a group i.e. ($\sum\alpha_i = 0$) in equation 1 but the sets of the lagged *Growth* coefficients in equation 2 is statistically significant i.e. ($\sum \delta_j \neq 0$), which implies that an *unidirectional causality* that runs from economic growth to energy consumption exists. From table 1, the F-test statistics of 5.96 for the null hypothesis that *Growth* does not granger – cause *EneCon* is significant at all conventional levels (1%, 5% and 10%) and hence we reject the null and conclude that economic growth granger – cause energy consumption. These findings indicate that more energy is consumed as the economy achieve greater growth and not vice versa.

Table 1

Energy – Economy Causality results for Bolivia

Pairwise Granger Causality Tests			
Date: 01/21/13 Time: 20:26			
Sample: 1971 2010			
Lags: 2			
Null Hypothesis:	Observations	F-Statistic	Prob.
GROWTH does not Granger Cause ENECON	38	5.96487	0.0061
ENECON does not Granger Cause GROWTH		0.03871	0.9621

Source: E-views estimation Output, 2013.

Conclusion. Bolivia is not just a significant contributor to the Latin American Natural gas supplies, the country exports natural gas to both Brazil and Argentina. While the country's potential to be a significant fossil fuel producer and regional energy hub remain uncertain based on the actual size of Bolivia's proved natural gas reserves, the energy sector is of both economic and political significance. With the country's endowments of fossil fuel largely concentrated in the opposition dominated southern and the eastern region, continuous agitation for increased autonomy by these regions constitute a political threats to the energy future of Bolivia. Yet energy consumption continues to surge amidst thriving economy.

As it stands, Bolivia is faced with both energy supply and demand management policies. However, energy conservation and related demand management policy is not an option if energy is found to granger cause growth. To these end, the study investigates the interdependence between energy consumption and growth in Bolivia using the Granger causality approach proposed by Granger (1969). The results find evidence to reject the null hypothesis that economic growth does not granger-cause energy consumption in Bolivia which infers that an *unidirectional causality* that runs from economic growth to energy consumption exists. This implied that policies meant to manage the growing energy demand can be instituted without obstructing growth in Bolivia. In addition, the result indicates that Bolivian government can use energy pricing and taxes to raise revenue for additional revenue for economic development.

REFERENCES

1. LEE, C. Energy consumption and GDP in developing countries: a co-integrated panel analysis. In: Energy Economics. 2005, vol. 27, issue 3, may, pp. 415-427.
2. MALLICK, H. Examining the Linkage between Energy Consumption and Economic Growth in India. In: The Journal of Developing Areas. 2009, vol. 43, no 1, pp. 249-280.
3. NARAYAN, P.K., SMYTH, R. Energy consumption and real GDP in G7 countries: New evidence from panel cointegration with structural breaks. In: Energy Economics. 2008, vol. 30, pp. 2331-2341.
4. ODHIAMBO, N.M. Energy consumption, prices and economic growth in three SSA countries: a comparative study. In: Energy Policy. 2010, vol. 38 (5), pp. 2463-2469.
5. OH, W., LEE, K. Causal relationship between energy consumption and GDP revisited: the case of Korea 1970-1999. In: Energy Economics. 2004, vol. 26, issue 1, pp. 51-59.
6. SHIU, A., LAM, L.P. Electricity Consumption and Economic Growth in China. In: Energy Policy. 2004, vol. 32 (1), pp. 47-54.
7. SHYAMAL, P., BHATTACHARYA, R.N. Causality between energy consumption and economic growth in India: a note on conflicting results. In: Energy Economics. 2004, vol. 26, issue 6, pp. 977-983.
8. SOYTAS, U., SARI, R. Energy consumption and GDP: causality relationship in G-7 countries and emerging markets. In: Energy Economics. 2003, vol. 25, pp. 33-37.
9. STERN, D.I. A multivariate cointegration analysis of the role of energy in the US macroeconomy. In: Energy Economics. 2000, vol. 22, pp. 267-283.
10. YUAN, J., ZHAO, C. Electricity consumption and economic growth in China: Cointegration and co-feature analysis. In: Energy Economics. 2007, vol. 29 (6), pp. 1179-1191.
11. THE WORLD BANK. Bolivia [accesat 15 ianuarie 2016]. Disponibil: http://data.worldbank.org/country/bolivia?cid=DEC_SS_WBGDataEmail_EXT#cp_fin
12. IEA Energy Statistics [accesat 14 ianuarie 2016]. Disponibil: http://www.iea.org/stats/index.asp
13. POPESCU, M. Consolidarea parteneriatelor pentru o energie sigură durabilă şi competitivă = The consolidation of partnerships for sustainable competitive and secure energy. In: Economie şi Sociologie = Economy and Sociology. 2014, nr. 4, pp. 64-71.

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MODELLING THE FINANCIAL PERFORMANCE OF THE INDUSTRIAL ENTERPRISES – CASE OF LIGHT, WINE AND MACHINERY INDUSTRIES

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The financial performance reflects the success in realization of financial objectives or in value creation. The evaluation of financial performance represents a stringent necessity for enterprise's development, thus the estimated level of financial performance allows establishing the directions of enterprise activity improvement. The researchers use different methods of financial performance evaluation depending on their research objects. This paper aims to adapt the econometric model of financial performance evaluation for industrial enterprises.

Keywords: *financial performance, evaluation, industrial enterprises, logistic regression.*

Performanţa financiară reflectă succesul întreprinderii în realizarea obiectivelor financiare propuse sau în crearea de valoare. Evaluarea performanţei financiare reprezintă o necesitate stringentă pentru dezvoltarea întreprinderii, deoarece nivelul estimat al performanţei financiare permite determinarea direcţiilor de perfecţionare a activităţii întreprinderii. Cercetătorii utilizează diverse metode de evaluare a performanţei financiare în dependenţă de scopul de cercetare propus. Această lucrare urmăreşte adaptarea unui model econometric de evaluare a performanţei financiare a întreprinderilor industriale, precum şi aplicarea practică a modelului obţinut.

Cuvinte-cheie: *performanţă financiară, evaluare, întreprinderi industriale, regresie logistică.*

Финансовая результативность отражает успех предприятия в достижении поставленных финансовых целей или в создании добавленной стоимости. Оценка финансовой результативности является крайне необходимой для развития предприятия, так как вычисленный уровень результативности позволяет определить направления совершенствования деятельности предприятия. Исследователи используют разные методы оценки финансовой результативности в зависимости от предполагаемой цели исследования. Цель данного исследования состоит в адаптации эконометрической модели оценки финансовой результативности промышленных предприятий на основе предыдущих эконометрических исследований, а также практическое применение полученной модели.

Ключевые слова: *финансовая результативность, оценка, промышленные предприятия, логистическая регрессия.*

JEL Classification: G39, L62, L66, L69.

Introduction. Financial performance is a complex, controversial and multidimensional economic concept that describes the past and future financial success of the enterprise, and reveals financial objectives proposed by the company in the context of satisfying the interests of stakeholders, respect for social values and sustainable development.

The evaluation of the company's financial performance holds a central place in the financial research. The ability to estimate the financial progress and assess the level of achievement of objectives is vital for enterprise strategic development.

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Financial performance is evaluated by various methods, the choice of which depends on the purpose of the research. Thus, the following types of methods for evaluating financial performance are used: the method of financial ratios, the scoring method, regression analysis methods and multi-criteria analysis methods.

Econometric techniques offer a number of advantages that convince researchers to use them in assessing financial performance, in predicting the risk of bankruptcy or developing credit rating. Among these advantages the objectivity is highlighted, because econometric methods are based on statistically significant relationships between variables, removing subjectivity, which is observed in the method of financial ratios or scoring, in which the researcher's opinion on the importance of predictors plays the basic role.

In developing the model of bankruptcy prediction, American researcher E. Altman (1968) argues that traditional analysis of financial ratios is no longer an important analytical technique in academic research (Altman, 1968), proposing a statistical method called discriminant analysis, which is used to classify an observation in a priori determined group. Discriminant analysis enables the prediction or classification of type of situation, where the dependent variable appears in qualitative form (performing or non-performing). In this respect classifying observations into two or more groups is the first step of the research. Each observation (enterprise) is determined by a set of characteristics (financial ratios). Discriminant analysis is to determine the best combination of features that will distinguish between groups [2].

Discriminant analysis has certain disadvantages, which have been described and criticized by another American scientist J. A. Ohlson, who proposes a logistic regression model to estimate the possibility of bankruptcy. In his work, it is argued that it is more advantageous to use a logistic model over the discriminant one, as the latter imposes certain statistical requirements on distributive properties of the predictors; also discriminant analysis results in a function score, which interpretation is largely subjective [8].

The researchers on estimating the bankruptcy risk drew our attention, because most of empirical research in assessing the financial performance of the company uses the simplest approach, that we do not support, identifying the financial performance with another financial concept (profitability, return, market value) as the dependent variable using a representative indicator of the selected concept (PN – net profit, ROA – return on assets, TSR – total return to shareholders). In this regard, we considered necessary to study the field of probability of bankruptcy to adapt its statistical techniques to assess the financial performance of the company.

Although some researchers confuse these concepts, using the terms "financial performance" and bankruptcy (failure, distress) to describe the two extremes of the same phenomenon [7], we believe that financial performance is a different concept than the bankruptcy. Despite the fact that these concepts have certain common points, they are seen as different areas, but interpendent. This is confirmed by empirical study conducted by a group of researchers who bound financial performance and bankruptcy, studying the connection between them, determining a statistically significant indirect relationship between financial performance and bankruptcy [1].

Content. By studying models of financial performance evaluation and of bankruptcy probability estimation, we considered the logistic regression as the most appropriate statistical technique of the determination of "the probability of failure" [9], to quantify the financial performance of industrial enterprises. Thus, in this paper, we propose a model of financial performance evaluation for industrial enterprises (beverage industry, light industry, machinery, equipment and apparatus industry), which are listed on the Stock Exchange of Moldova. The selection of this segment of industrial enterprises is primarily based on the fact that the these areas are strategically important for the national economy, both in terms of production volume, as well as a share of exports and secondly as long as the market value is considered as a dimension of financial performance, listed joint stock industrial enterprises are considered eligible.

The research purpose is to improve the current means of estimating financial performance at the enterprise level, using information available in local record system. The annual statistics for the period 2011-2014 of 43 companies (172 observations) of light industry, beverage industry and in machinery, equipment and appliances were used as the informational base for model development. Initial selection allowed the identification of 80 industrial enterprises, but imposed conditions (business continuity during the selected period, the presentation of full financial statements) have reduced the sample. Ten dimensions of financial performance were identified, based on financial literature, as the information descriptive basis:

(return, profitability, growth, capital turnover, stability, market value, added value, capacity payment, cash flow, financial equilibrium), detailed by descriptive indicators (table 1).

In this manner we identified potential variables for evaluation of financial performance of industrial enterprises. Overall 36 indicators were identified and determined. A dummy variable was defined by thoroughly analysing the results presented by enterprises according to the theoretical thresholds of performance, financial performance (PF), given the conditions: if the rate of operating cash flow (RFNO) > 0, also if the rate the own working capital (RFRP)> 1, overall borrowing rate (RIG) < 0,7 and long-term debt rate (RIT) <0.5, company is assigned to code 0 (performing company), otherwise been assigned code 1 (non-performing enterprise).

The estimation of financial performance evaluation model for industrial companies can be realized only after reducing the database to an optimal number of variables, starting from the premise that the number of predictors in a regression model may be approximately equal to the number of subjects. As Hosmer and Lemeshow said (2000) [6] the number of predictors in the logistic regressions is identified as well as in multiple regression based on the sample size (expected effect size and power of the test)[1].

The ANOVA – test was used as parametric technique of reducing the number of independent variables. This test verifies the differences between groups of subjects on variables of interest, taking into account the category to which the analysed enterprise belongs (performant or non-performant). The ANOVA test consists of identification of those financial variables for which the average levels for the two categories of analysis differ significantly. As a result, variables with improved ability to distinguish between groups that have been shown to be responsive to the enterprise category were identified.

In the next step of dimensions' analysis the initial identified variables based on ANOVA results were reviewed, also the expectations of their impact on the financial performance of the company were acknowledged. Only eight dimensions of financial performance from ten initiallly defined were shown to be sensitive to the category *performance* of the enterprise, namely:

1. The *Profitability* dimension, after preventive reviewing, was reduced to one significant indicator that differentiates businesses into performing and non-performing, which is: **gross profit (PB)**. A positive value of this indicator shows the ability of businesses to cover by the total revenue earned at least the cost of production. Expectations from this indicator are to be at least in positive area, as a low or negative level determine the diminution of the company's financial performance.

Table 1

The system of indicators for enterprinse's financial performance evalution

<table>
<tr><th>PROFITABILY</th><th>MARKET VALUE</th></tr>
<tr><td>1. Revenues from sales (VV)</td><td rowspan="2">20. Net profit per share (PNACT) = Net profit/number of shares</td></tr>
<tr><td>2.Gross profit (PB)= Revenues from sales – Cost of sales</td></tr>
<tr><td rowspan="2">3. The result from operational activity (RAO)= Gross profit + Other operational revenues – Distribution costs – administrative expenses – other operational costs</td><td>21. „Price/profit" ratio (PER)= Price of a share/ net profit per share</td></tr>
<tr><td rowspan="2">22. The market capitalization (CB)= Price of a share * number of shares</td></tr>
<tr><td rowspan="2">4. The result from other activities (RAA)= Result from investment activity + Financial result +Exceptional result</td></tr>
<tr><td rowspan="2">23. "Price to book value" ratio." (PBR) = Price of a share/ book value of a share</td></tr>
<tr><td rowspan="2">5. Net profit (PN)= Profit before taxes - Income tax expenses</td></tr>
<tr><td>PAYMENT CAPACITY</td></tr>
<tr><td>RETURN</td><td rowspan="2">24. Current liquidity (LC)= Current assets/ Current debts</td></tr>
<tr><td>6. Return over sales (ROS)= Gross profit/ Revenues from sales</td></tr>
</table>

[1] ***The online Statistics Calculators version 3.0 can be used (http://www.danielsoper.com/statcalc3/calc.aspx?id=1).***

PROFITABILY	MARKET VALUE
	25. intermediate liquidity (LI) = (Current assets - Inventory)/ Current debts
7. Return over cos (ROC)= Gross profit/ Cost of sales	26. Quick liquidity (LR)= Cash/ Current debts
8. Return over assets (ROA)= Profit before taxes / Total assets	27. The overall solvency ratio (RSG) = Total assets/ Total debts
9. Return over equity (ROE)= Net profit/ Equity	**CASH FLOW**
GROWTH	28. Operational cash flow ratio (RFNO) = net operational cash flow/ net cash flow
10. Growth of sales (CRVV)=($CRVV_1$-$CRVV_0$)/ $CRVV_0$*100%	29. The coverage ratio of debt to operating cash flow (RDFNO)= net operational cash flow/ total debts
11. Growth of assets (CRAT) =($CRAT_1$-$CRAT_0$)/ $CRAT_0$*100%	30. The coverage ratio of equity to operating cash flow (RCFNO)= net operational cash flow/ equity
12.Growth of net profit per share (CRPNACT) =($CRPNACT_1$-$CRPNACT_0$)/$CRPNACT_0$*100%	
CAPITAL TURNOVER	31. The coverage ratio of assets to operating cash flow (RAFNO)= net operational cash flow/ total assets
13. Turnover period of term assets (RAI) =Average value of term assets/ Revenues from sales * 365	**EQUILIBRIUM**
14. Turnover period of current assets (RAC) =Average value of current assets/ Revenues from sales * 365	32. Own working capital ratio (RFRP)= Own capital/ term assets
STABILITY	33. Working capital ratio (RFR)= Permanent capital/ term assets
15. Financial autonomy ratio (RAF) = Equity/ Total Assets	34. Current assets financing ratio (RFAC)= Working capital/ Current assets
16. Financial stability ratio (RSF)= Permanent capital/ Total Assets	35. Inventory financing ratio (RFS) = Working capital/ Inventory
17. Overall borrowing ratio (RIG)= Total debts/ Total Assets	**VALUE ADDED**
18. Long-term debt ratio (RIT)= Long-term debts/ Permanent capital	36. Value added (VA) = Value of sold production – Intermediate consumption
19. The leverage ratio (KLF) = Long-term debts/ equity	

Source: developed by authors.

2. The dimension *Return* is represented by the **return on equity (ROE)**, which quantifies the company's ability to efficiently use its own capital, in other words, the ability of equity to generate profits. The expectations of this indicator are at least positive, its growth will strengthen the financial performance.

3. The dimension *Stability* is represented by following variables: **financial autonomy ratio (RAF), financial stability ratio (RSF), overall borrowing ratio (RIG), and long-term debt ratio (RIT) and the leverage ratio (KLF)**. Stability indicators describe the company's financial structure. Quantitatively, these variables are proportion indicators (0-1) with optimal intervals and their assessment is made in concordance with optimal levels. Expectations from these indicators have a dual character as a level of financial autonomy rate close to the lower limit (eg. 0.4) can be appreciated as positive, if the attractions of major borrowed sources lead to expansion of production activity (optimal financial structure); or as negative if the debt is not justified by a pronounced increase in earnings, of profitability and, ultimately, of financial performance.

4. The financial performance's dimension *Equilibrium* will be presented by the following variables: **Rate of current assets financing (RFAC), rate of working capital (RFR), rate of own working capital (RFRP)**. The equilibrium's indicators show the margin of safety, revealing asset management strategy. Growth of these indicators points defensive intentions in assets financing, which, in addition to providing a safety margin, involves the increasing of funding costs. Thus, expectations regarding these indicators are dual, considering that their growth will strengthen financial performance only up to a level.

5. The dimension *Market value* will be presented through the prism of the indicators: **Net profit per share (PNACT), The "Price-to-Book-Ratio" (PBR)**. These indicators describe the company's stock performance. Expectations of net profit per share are its positive values. Also, an increased and supraunitar level for PBR is expected.

6. The dimension *Payment capacity* showed to be well played by variables: **current liquidity (LC), intermediate liquidity (LI), quick liquidity (LR) and the overall solvency ratio (RSG)**. Expectations from these indicators are that the current liquidity will record values greater than 1, and the overall solvency ratio will register values higher than the level of 1.5, while expectations of ability's to pay other indicators are not clearly defined. Overall, the enhancement of payment capacity's indicators strengthens the financial performance. However, an excessive amount of liquidity involves the increase of opportunity costs, it signifies that the growth of these indicators will enhance the financial performance only up to a certain level.

7. *Value added* dimension is described by the remaining variable: **Value added (VA)**. The positive value of this indicator reveals that the company has managed to create a surplus value in its work. The expectations to this indicator are the positive level and increasing dynamics, that will increase the financial performance.

8. The dimension *Growth* is reduced to be represented only by indicator: **Growth of total assets (CRAT)**. The positive value of this indicator highlights the quantitative aspect of the expansion strategy without disclosing qualitative aspect. Thus, expectations of this indicator are dual because growth of total assets does not guarantee an increase of financial result, nor of financial performance.

The ANOVA test significantly contributed to reduce the number of the financial performance predictors from 36 positions to 18, but not enough to get a quality simulation. An important moment in the modelling process, which should be taken into account, is the effect of correlation between independent variables. Thus based on estimated bivariate correlation matrix, we find that a statistically significant correlation is shown between some indicators of the same dimension. Based on the analysis of the correlation matrix, the matrix of possible predictors of financial performance may be reduced as a result of the relationships shown in Table 2.

The data set for this empirical research has been designed taking into account the modelling technique, which will be applied in probability modelling that represents the financial performance of enterprises and namely modelling with binary qualitative variables [6,10]. Logit and probit models were used as simulation techniques. Based on the empirical statistics and on the level of empirical prediction of the result, optimal simulation relationship of financial performance for domestic industrial enterprises was identified.

The logit model is described theoretically by:

$$F(x) = \Pr(y = 1|X) = \frac{1}{1+e^{-(\beta_0+\sum_{j=1}^{k}\beta_j x_{i,t})}} \quad (1)$$

If a logistic transformation is applied to equation (1), a linear relationship between the logit (F (x) and the explanatory variables is obtained:

$$\Pr(y = 1|X) = \log\left(\frac{F(x)}{1-F(X)}\right) = \log\left(\frac{pi}{1-pi}\right) = \beta_0 + \sum_{j=1}^{k}\beta_i x_{it} \quad (2)$$

The dependent variable in probit model is a transformation of observed probability according to distribution law. Mathematical form of this type of model is:

$$F(x) = \Pr(y = 1|X) = \int_{-\infty}^{z}\frac{1}{\sqrt{2\pi}}\exp\left(-\frac{1}{2}(x)^2\right)dx, \quad \text{where } z_i = \beta_0 + \sum_j^k \beta_j x_{ij} \quad (3)$$

Table 2

Interdimensional correlations

Dimension	Significant correlation (Sig.<0,01)	Final predictors
Profitabily	Gross profit (PB)	Gross profit (PB)
Return	Return over equity (ROE)	Return over equity (ROE)
Stability	Financial autonomy ratio (RAF)& Overall borrowing ratio (RIG) Financial autonomy ratio (RAF)& Long-term debt ratio (RIT) Financial autonomy ratio (RAF)& Financial stability ratio (RSF) Overall borrowing ratio (RIG))& Long-term debt ratio (RIT) Overall borrowing ratio (RIG) & Financial stability ratio (RSF)	Financial autonomy ratio (RAF) OR Overall borrowing ratio (RIG) OR Long-term debt ratio (RIT) OR Financial stability ratio (RSF), The leverage ratio (KLF)
Equilibrium	Working capital ratio (RFR) & Own working capital ratio (RFRP)	Working capital ratio (RFR) OR Own working capital ratio (RFRP), Current assets financing ratio (RFAC)
Market value	-	Profit net/acţiune (PNACT), Indicatorul PBR sau P/B- „Price-to-Book-Ratio" (PBR**)**
Paument capacity	Current liquidity (LC) & Intermediate liquidity (LI) Current liquidity (LC) & The overall solvency ratio (RSG) Intermediate liquidity (LI) & Quick liquidity (LR)	Current liquidity (LC) OR Intermediate liquidity (LI) OR The overall solvency ratio (RSG) OR Quick liquidity (LR)
Value added	Value added (VA)	Value added (VA)
Growth	Growth of total assets (CRAT)	Growth of total assets (CRAT)

Source: developed by authors.

A step by step method was used as a technique of introducing the variables in the model. Only variables that had significant influence on the result (<10%) were kept.

Both the logit and probit models present significant results for the following influence factors of the financial performance: financial autonomy ratio (RAF), own working capital ratio (RFRP), return on equity (ROE), Net profit /share (PNACT) ratio and the "Price-to-Book-Ratio" (PBR). But only one of these two models simulates the reality better – logit model.

The quality of binary models is verified by such estimated indicators as McFadden R2, Akaike criterion, Schwarz criterion, Hannan-Quinn criteria:

- McFadden R^2 is a statistical alternative of determination coefficient (typical linear regression model), which is calculated for models with binary qualitative variables. It is determined by maximum likelihood of estimated model correlating with empirical results. Choosing between two types of estimated model based on the same dependent variable, we argue to choose the model with maximum value of McFadden R^2, in the present case – logit model;
- comparing the quality of the models estimated by the Akaike, Schwarz and Hannan-Quinn criterias we point to the decision to accept the model that has the smaller value for these criterias. From Table 3 we find that this condition is satisfied by the logit model.

Table 3

The Results of modeling

Variabila dependentă: PF Metoda: ML - Binary Logit Perioada: 2011 2014 Număr observaţii: 172				
Variabile	Coeficienţi	Eroarea Standard (S.E.)	z-Statistic	Prob.
C	4.342582	0.826609	5.253489	0.0000***
RAF	-3.624646	0.948105	-3.823042	0.0001***
RFRP	-1.050723	0.350771	-2.995465	0.0027***
ROE	-3.099125	1.612851	-1.921519	0.0547*
PNACT	-0.110815	0.038410	-2.885057	0.0039***
PBR	-0.077785	0.038917	-1.998742	0.0456**
McFadden R^2	0.260187	Media var. dep.		0.540698
S.D. var. dep.	0.499796	S.E. a regresie		0.419770
Criteriul Akaike	1.090459	Suma pătr. resid.		29.25038
Criteriul Schwarz	1.200256	Funct. verosim		-87.77952
Criteriul Hannan-Quinn	1.135007	Restr. log likelihood		-118.6509
Restr. deviance	237.3018	Media funct. verosim		-0.510346
Statistica LR	61.74280			
Prob(statistica LR)	0.000000			
Obs cu Dep=0	79	Total obs		172
Obs cu Dep=1	93			

Variabila dependentă: PF Metoda: ML - Binary Probit Perioada: 2011 2014 Număr observaţii: 172				
Variabile	Coeficienţi	Eroarea Standard (S.E.)	z-Statistic	Prob.
C	2.511999	0.442232	5.680281	0.0000[888]
RAF	-2.134425	0.543318	-3.928497	0.0001[888]
RFRP	-0.592098	0.196793	-3.008741	0.0026[888]
ROE	-1.910783	0.962637	-1.984946	0.0472**
PNACT	-0.060854	0.021431	-2.839487	0.0045*
PBR	-0.045313	0.023146	-1.957658	0.0503*
McFadden R^2	0.258002	Media var. dep.		0.540698
S.D. var. dep.	0.499796	S.E. a regresie		0.420902
Criteriul Akaike	1.093474	Suma pătr. resid.		29.40824
Criteriul Schwarz	1.203270	Funct. verosim		-88.03878
Criteriul Hannan-Quinn	1.138021	Restr. log likelihood		-118.6509
Restr. deviance	237.3018	Media funct. verosim		-0.511853
Statistica LR	61.22428			
Prob(statistica LR)	0.000000			
	0.258002			
Obs cu Dep=0	79	Total obs		172
Obs cu Dep=1	93			

* p<0.1, ** p<0.05, *** p<0.01

Source: calculated by the authors with EViews 8.0

The application of logit model is reasonable only if it will prove/ argue the predictive power of this simulation and systematic justification of a relationship between forecasts and actual achievements. In this regard we have performed the following actions:

a) assessing the quality of prediction model (Table 4).

b) applying the Hosmer-Lemeshow and Andrews test (Table 5).

In assessing the quality of prediction model the division of businesses in performing and non-performing threshold level from 0.5 was realized (as mentioned previously, financial performance is expected in the range [0, 1]). Thus, if estimated financial performance registered a value less than 0.5, enterprise was attributed to the category of performing companies, and vice versa, a value higher than 0.5 awarded the company the nonperforming status.

Table 4

Assessing the quality of prediction model

Expectation-Prediction Evaluation for Binary Specification Equation: LOGIT nivelul de prag C = 0.5			
	Ecuaţia estimată		
	Dep=0	Dep=1	Total
P(Dep=1)<= C	63	28	91
P(Dep=1)>C	16	65	81
Total	79	93	172
Correct	63	65	128
% Correct	**79.75**	**69.89**	**74.42**
% Incorrect	20.25	30.11	25.58

Source: Calculated by the authors with EViews 8.0

As a result, identified logit model has a total prediction accuracy of 74%. Separately for simulation categories, the model projected performance correctly for 80 percent of cases and non-performance in 69 percent of cases. As the last step of the analysis the existence of a systematic relationship between forecast and actual achievements was verified. For this purpose Hosmer-Lemeshow & Andrews test was applied. Its premise verifies the existence of a systemic relation between forecasts and achievements. This test checks assumptions:

H0: there is no difference between the forecast results as a binary estimation and actual results;

H1: there is a difference between predictions and actual results.

Table 5

The χ^2 test

Goodness-of-Fit Evaluation for Binary Specification
Andrews and Hosmer-Lemeshow Tests
Equation: LOGIT
Grouping based upon predicted risk (randomize ties)

	Quantile of Risk		Dep=0		Dep=1		Total	H-L
	Low	High	Actual	Expect	Actual	Expect	Obs	Value
1	2.E-05	0.1823	15	14.8069	2	2.19309	17	0.01952
2	0.1825	0.3033	13	12.7184	4	4.28155	17	0.02475
3	0.3101	0.3566	12	11.2514	5	5.74860	17	0.14729
4	0.3584	0.4051	10	10.6175	7	6.38250	17	0.09565
5	0.4073	0.4636	10	10.1282	8	7.87182	18	0.00371
6	0.4655	0.5750	9	8.18604	8	8.81396	17	0.15610
7	0.5796	0.7235	5	5.59798	12	11.4020	17	0.09524
8	0.7279	0.8471	2	3.94636	15	13.0536	17	1.25017
9	0.8483	0.9551	2	1.72355	15	15.2764	17	0.04934
10	0.9563	1.0000	1	0.27179	17	17.7282	18	1.98100
		Total	79	79.2482	93	92.7518	172	3.82277

H-L Statistic	3.8228	Prob. Chi-Sq(8)	**0.8727**
Andrews Statistic	3.7448	Prob. Chi-Sq(10)	**0.9581**

Source: Calculated by the authors with EViews 8.0

The results of Andrews and Hosmer&Lemeshow test, shown in Table 5, argue the correspondence of forecast to reality at a significance level of 1%. Thus, the estimated logit model is considered as a safe and quality tool for evaluation of company's financial performance.

Once the relevance of the logit model for estimation of financial performance of an enterprise was demonstrated, we find that the mathematical relationship which can be used as a tool for measuring is:

$$(x) = \Pr(y = 1|X) = \frac{1}{1 + e^{-(4,34-3,62RAF-1,05RFRP-3,1ROE-0,11PNACT-0,08PBR)}}$$

where:

RAF - financial autonomy ratio; RFRP – own working capital ratio;

ROE - return on equity; PNACT – Net profit per share;

PBR - "Price to book value" ratio.

The interpretation of regression estimators' parameters does not contain a direct elasticity that allows evaluating how much the change with a unity of a predictor will influence the change of dependent variable as it is possible in linear regression models. But it is possible to determine, instead of direct influence, the marginal effects of predictors using the following mathematical apparatus:

$$\frac{\partial p}{\partial X_i} = \frac{dp}{dZ}\frac{\partial Z}{\partial X_i} = f(Z)\ _i = \frac{e^{-Z}}{(1+e^{-Z})^2}\ _i \quad (4)$$

$$\text{where} f(Z) = \frac{dp}{dZ} = \frac{e^{-Z}}{(1+e^{-Z})^2}, \quad (5)$$

and $$Z = \ _1 + \ _2X_2 + \ldots \ _kX_k \quad (6)$$

The marginal effects of independent variables on financial performance of the logit model are calculated in the presented formulas (Table 6).

Based on the data of Table 6 we find that financial performance's dimensions identified at company level show the following marginal effects:

• The financial autonomy ratio (RAF) of an average enterprise increasing by 0.1 units determines the enhancement of financial performance by 8.43%;

• The own working capital ratio (RFRP) of an average enterprise contributes by 0.1 points, increasing the growth of financial performance by 2.44%;

• The return on equity (ROE) of an average enterprise increased by 0.1 point, determines the raise of financial performance by 7.21%;

• Net profit / share (PNACT) of medium enterprises, increasing by 0.1 points, determines the enhancement of the probability of success by 0.26%;

• "Price-to-Book-Ratio" (PBR) of an average enterprise determines, increasing by 0.1 points, the enhancement of financial performance by 0.18%.

The estimation of the financial performance of industrial enterprises through financial performance index (PF) determined by logistic regression permits the quantification of current financial success and of future financial potential of the company. The financial performance index is enframed in the [0, 1] interval, and if its level approaches the lower limit "0", the probability of financial problems is much lower, meaning that the financial performance is high and vice versa.

Table 6

The marginal effect of predictors on financial performance

Predictors	Marginal effect
The financial autonomy ratio (RAF)	-0.843030
The own working capital ratio (RFRP)	-0.244380
The return on equity (ROE)	-0.720803
Net profit / share (PNACT)	-0.025774
"Price-to-Book-Ratio" (PBR)	-0.018091

Source: Estimated by the author with EViews 8.0

Depending on the level of the index estimated according to the relation of the proposed model, the following types of financial performance of industrial enterprise are distinguished:

- $0 \leq \mathbf{PF} \leq 0{,}30$ – superior financial performance;
- $0{,}30 < \mathbf{PF} \leq 0{,}50$ – average financial performance;
- $0{,}50 < \mathbf{PF} \leq 0{,}70$ – low financial performance;
- $0{,}70 < \mathbf{PF} \leq 1$ – non-financial performance.

Conclusion. The identified dimensions of enterprise's financial performance at the level of beverage industry, light industry and the machinery, equipment, apparatus industries show the importance of obtaining positive net result, optimizing financial structure, appropriate management of assets and increasing of market value. Thus, the negative effect can be minimized by increasing debt leverage, ie by increasing the financial return, and net profit growth per share. Similarly if we consider the change in the assets, which can lead to lower own working capital, while investment in fixed assets can lead to increased net profit and return on equity.

REFERENCES

1. Al-KASSAR, T.A., SOILEAU, J.S. Financial performance evaluation and bankruptcy prediction (failure). In: Arab Economics and Business Journal. 2014, no. 9, pp. 147-155.
2. ALTMAN, E.I. Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. In: Journal of Finance. 1968, vol. 23, no. 4 [accesat 11 ianuarie 2016]. Disponibil: http://www.defaultrisk.com/pa_score_01.htm
3. Biroul Naţional de Statistică a Republicii Moldova [accesat 11 ianuarie 2016]. Disponibil: http://www.statistica.md/
4. DELIU, A., BÎRCĂ, I., FRASÎNEANU, P. Managementul schimbării şi schimbarea organizaţională – premisă de sporire a performanţei întreprinderii = Change management and organizational change – a premise to increase company's performance. In: Economie şi Sociologie = Economy and Sociology. 2011, nr. 2, pp. 81-87.
5. DUHLICHER, A., Rentabilitatea – indicator cheie de măsurare a performanţei întreprinderii. In: Economie şi Sociologie. 2010, nr. 4, pp. 138-145.
6. HOSMER, D.W., LEMESHOW, Jr.S. *Applied Logistic Regression*. 2nd Edition. 2000 [accesat 11 ianuarie 2016]. Disponibil: http://onlinelibrary.wiley.com/book/10.1002/0471722146
7. NYAKIO, W.J. *Applicability of logistic regression analysis in predicting financial distress for firms listed at the Nairobi Securities Exchange*: master thesis. University of Nairobi. Nairobi, 2013. 76 p.
8. OHLSON, J. Financial Ratios and the Probabilistic Prediction of Bankruptcy. In: Journal of Accounting Research. 1980, vol. 18, no. 1, pp. 109-131.
9. SHASHUA, L., GOLDSCHMIDT, Y. An Index for Evaluating Financial Performance. In: The Journal of Finance. 1974, vol. 29, no. 3, pp. 797-814.
10. МАГНУС, Я.Р., КАТЫШЕВ, П.К., ПЕРЕСЕЦКИЙ, А.А. *Эконометрика:* начальный курс. 8-е издание. Москва: Дело, 2007. 504 с. ISBN 978-5-7749-0473-0.

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