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FOREWORD

We are living in a globalized world, hence the need to reconsider the way in which we are interacting and working both locally and internationally.

The Fourth Industrial Revolution not only brings us new technologies, but requires a new leadership approach. It is about responsive and responsible leadership that could allow us to keep up with the major changes likely to occur due to new technologies in place.

"The convergence of new technologies is creating unprecedented opportunities in all aspects, from business-to-business commerce to humanitarian intervention. The melding of artificial intelligence (AI) with big data capabilities – not to mention the actual exponential accumulation of data itself – has created a fascinating world of communications, collaboration and interaction, not just between people but also between machines and between people and machines"¹.

In this context, the potential employees are expected to display a new set of skills and competences. "Businesses have a role to play in lifelong learning and re-skilling. People are just not prepared for the digital future." said Fransvan Houten, President and Chief Officer, Royal Philips.

One challenge in particular is drawing the world leaders' attention, namely expanding social participation in the process and benefits of economic growth. Over the past few years, a worldwide consensus has emerged on the need of a more socially inclusive approach to creating economic growth, but inclusive growth remains an aspiration, not only for the EU but also for the rest of the world. A systemic framework to guide policy and practice towards achieving the inclusive growth target has yet not been developed.

The ultimate objective of the national economic performance is broad-based and sustained progress in living standards, a concept that encompasses wage and non-wage income (e.g. pension benefits) as well as economic opportunity, security and the quality of life. This is the bottom line basis on which a society evaluates the economic dimension of its country's leadership. Many countries have had difficulties in meeting the social expectations in this regard. For example,

¹ World Economic Forum-Annual Meeting Report, 2017



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in the last five years, annual median incomes have dropped by 2.4% in advanced economies, while GDP per capita growth has averaged less than 1%.²

The current issue includes papers discussing the role of growth poles in the European economic integration, the factors that may affect the financial sustainability of the pension system in Romania, the banking systems in two different worlds – Romania and Iceland but having similar development, problems and the importance of the audit of the quality control systems and the company level, with major implications on competitiveness. Communication is really important nowadays and using English seems to be not only common sense in the business world, but it has become a universal language of communication in today's digital world.

JEDEP's editorial team is in the process of developing a special section of each JEDEP's issue, dedicated to young researchers, those "raising stars", the tomorrow's outstanding professionals that might contribute significantly to the change of the world.

Editor-in-chief, Prof. Manuela Epure, PhD

² WEF- The Inclusive Growth and Development Report, 2017, vii



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Theories Regarding the Role of the Growth Poles in the European Economic Integration

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Abstract. The specialized literature stressed scarcely the role of the growth poles in the economic integration, although the development of the national economies depend on connecting the major urban centers in the regional economic system, continental and global levels. Conversely, integration and globalization of the economic, socio-political, cultural and the transition to a knowledge economy seem to be major factors in the transformation and restructuring of the growth poles and the urban systems dependent on them.

Keywords: Growth poles: economics, growth poles, economic integration, multi-polarity, regional integration

JEL Codes: F00

1. Introduction

Until now, the experts in Economics were unanimous in assessing the role of the growth poles in the economic development. The growth poles are considered the most dynamic elements of the economic growth, being the real locomotive of integration on the multiple levels: economic, technological, ideological, moral and spiritual in the development at the regional, continental and global levels.

If the growth poles achieved their integrative vocation as best as possible and implementing innovatively the collaborative networks in a polycentric territory, then they create conditions that allow people to use better valences of the economic integration for developing of those areas. Also, the growth poles use the integrative cooperation between respective integrative areas and among the small and medium-sized towns, both at internal borders and beyond the external borders of the respective integrative area.

When the emitted theories mainly by economists and sociologists, in the theory of the first, second and third generation and based on them, are grouped together, the study demonstrates the postulate that economic growth poles stimulates and potentiates the economic integration in those areas, constituting the true centre of economic integration alongside the free economic zones.





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2. Theories of the first generation

Johan Henrich von Thünen is considered the founder of the theory of the activities location, who, through his work, published in 1826, studied the location of the agricultural crops depending on the production costs and the distance to the market. Von Thünen's theory examines the allocation of the agricultural land among the multiple competitors' growth poles, considering that the agricultural product must be transported from the place of production to that of consumption.

Followers of the theory of Wilhelm von Thünen were: Wilhelm Launhardt, considered a pioneer of mathematical economics, and Alfred Weber, underlying the theory of location publishing in 1909 his "Theory of industrial location". Main interest of Weber was to define the location of the industrial enterprises on the mathematical basis regardless of their activity profile, switching from the microeconomic limited framework of a single company to a mezzo economic framework offering clues on the locations of areas of activity (economic branches).

3. Theories of the second generation

Theory of location was enhanced by other important contributions made by the German Wilhelm Roscher, the Englishman Ernest Ross and the Italian AchilleLoria. They focused on studying the role of the profit on the production process with the lowest cost in an industrial factory. Then Mark Blaug showed that the theory of the location failed to assert it in the mainstream of economics, being absorbed by socalled the regional science. Currently a special place in the location field of the industrial activity is occupied by the corporate behaviour study that demonstrated their tendency to group in space as clusters like the industrial parks, small or large cities etc.

In his article "La notion de pole de croissance", François Perroux developed the theory of unbalanced growth of sectors or regions, known as polarized development theory or theory of the growth poles¹. The theory begins from the fact that development is simultaneously an unbalanced and hierarchical process and that only certain business units act as engine of development. These units are designed poles of economic growth. The growth poles can become parts of territory or infrastructure. In the free market economy, there are relied on the spontaneous attenuation of gaps because of progress wave generated by the growth poles. Diffusion of the economic phenomena can sometimes lead to increase the gaps as the assimilative capacity of the wave of progress is higher in the centres of the growth poles, giving rise to other innovations that will strengthen the position of the growth poles. In addition, there are occurred the filter processes of the development broadcast activities, whereby more developed regions retaining the positive economic elements, dissipating the inconveniences towards the periphery.

John Friedmann, Stuart Holland and Gunnar Myrdal have created so-called theories of uneven development in the centre-periphery relationship stressing that regional imbalances are based on the chronological gaps that appear inherent in the integration processes, the gaps that result in the imperfect mobility of production factors.

¹ Francois Perroux, (1982, pp.307-320) *Dialogue des monopoles et des nations: équilibre ou dynamique des unités actives?* Grenoble, Presses Universitaires de Grenoble, (selective)





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In Romania, the concerns studying the problems of the regional integration dates to the early part of the twentieth century, especially after 1925, when the sociologist Dimitrie Gusti, the Bucharest Monographic School founder, has created and coordinated multidisciplinary team of specialists who drafted after thorough field research, the impressive rural monographs; the villages and settlements analyzed, being at that time, the real growth poles for respective rural areas. Very interesting to underline is that Gusti drafted one of the first studies on the phenomenon entitled *the United States of Europe*. The method of the sociological monograph proved that the results obtained from the field investigations may underpin the design of some viable development programs of the growth poles that were studied rural communities.

In the 80s of the last century, Paul Nijkamp and Jean Paelinick focused on the theory of long cycles of the regional development, proposing the model of the interregional fluctuations, whereby the space is partitioned between growth poles, poles of attraction and intermediate regions. "The economic attractiveness" of an integrative region depends on the capital, infrastructure and stock information owned by that geographical area. In turn, the capital is generated by the performed investments and by the condition of the economic factors in that integrative area.

In our country, Ion Blaga, an economist, elaborates his work "The territorial distribution of the productive forces in Romania". His contribution stresses that rational territorial distribution of the productive forces is required to solve simultaneously two problems: the economic efficiency and the population growth as well as its judicious distribution in the territory. The author supports the idea of the balanced development of the counties to stop the migration from less developed counties to wealthy counties, especially towards the larger towns, making it difficult to solve the economic and social future raising problem of the lagging areas.

In 1993, the Swiss D. Maillat, M. Quévit and L. Senn analyses the growth poles constituted in the innovation networks and their effects². In 1994, the Canadian B. Vachon refers to the partners' synergy in the local economic development, theorizing the relationship between entrepreneurship and the local production systems³. Then, in 1996, the French C. Fourcade and G. Garofoli talking about small companies' access to the technologies adapted for development, with emphasis on the role of the localized productive systems, respectively on the diffuse industrialization and local production systems - a difficult model to transfer to the developing countries; also in 1994 for the first time since our knowledge is presented by G. Paquet, Y. Belanger and A. Gaganon the Quebecois model of economic development⁴. Quebec can be considered as a growth pole model. After only two years, in 1996, the growth pole

⁴Paquet, G., (1994, pp.22-28) *Québec Inc: Mythe set réalités,* in Y. Belanger et A. Gaganon (coordinator), *Québec Inc: la dérive d'un modèle? Le modèle québécois de développement économique,* Montréal: Éditions Québec-Amérique, (selective)



²Maillat, D., Quévit, M. et Senn L., (1993, pp.1-13) *Réseaux d'innovation et milieu innovateurs,* in Maillat, D., Quévit M. and Senn, L. (coordinator), *Réseauxd' innovation et milieu innovateurs: un pari pour le développement régional*, Neuchâtel, EDES,(selective)

³Vachon, B., (1994, pp. 191-219) La synergie des partenaire sen développement économique local: entrepreneurship et systems productifs locaux, in M. U. Proulx (coordinator), Développement économique: clé de l'autonomie locale, Montréal, Les Éditions Transcontinental / Fondation de l'Entrepreneurship, (selective)



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represented by the Canadian Quebec conurbation is analysed as the core model of specific economic integration 5 .

In 1998, the Frenchman Leon Alain analyses the phenomenon of multi polarization global economy, quoting here the poles of North American, European and Chinese in opposition to the marginalization of African pole, marked by the weakness of the interregional exchanges, by the insufficient development of the internal markets and by the weak diversification of the agricultural and industrial phenomenon⁶. The theory of polarization refers specifically at the interregional transfer phenomena and those of the regional or trans-regional feedback.

In addition, there are the specific integration phenomenon manifested in the most countries in Asia, characterized by the early public policy, the existence of commercial and financial regional networks, the quick accumulation of the financial and human capital, the sectoral changes of capitalist production, and opening of these markets to the economy world.

In the last decade of the 20th century, first in the association perspective and then the integration of Romania into the European structures, there were concerns for drawing up studies on integrated regional development based on the growth poles. Such studies were realised by the economic and sociological research institutes of the Romanian Academy, by the members of faculties and departments of ASE Bucharest and other universities from Bucharest and other important cities by the European Institute of Romania, under the auspices of EU funds and grants approved (by the World Bank, Switzerland, Liechtenstein and Norway etc.). Thus, under a PHARE program, the appointed councillors by the European Union together with representatives of the Romanian Government ministries have prepared in 1997 a set of important principles for regional development of our country.

4. Theories of the third generation

These theories come to complete the harmonious mode on the first two generations above. Theories of the third generation refers specifically to the cores of economic growth, existing both in the developed capitalist countries and in the developing ones (so-called emerging countries) or in underdeveloped countries.

It seems that Quebec pole of growth and economic integration has caused the liveliest analyses of specialists: In 2001, M.U. Proulx, analyses the "tectonic" of Quebecoise territories⁷, then in 2003, M. Polèse and R. Shearrnur resume the concept of the development pole closely with the economic development strategies implemented in the Quebecois region⁸. Then, in 2005, the Brazilian J. Ferrera de Lima, draws some considerations on the growth poles and territorial strategies in Québec⁹. Analysis of the

⁹Ferrera de Lima, J., (2005, pp. 161-171), *Notes sur les pôles de croissance et les strategies territoriales au Québec*, in Canadian Journal of Regional Science / Revue canadienne des sciences régionales, no. 1, (selective)



⁵Hamel, P. et Klein, L., (1996, pp.293 -296)Le développement régional au Québec: enjeu de pouvoir et discours politique, in M. U. Proulx (coordinator), Le phénomène régional au Québec, Québec, PUQ, (selective)

⁶ Alain, Leon, (1998, pp 623-645) Poles de croissance regionaux et integration mondiale: Afrique australe / aire economique chinoise, in Tiers Monde, vol. 39, (selective)

⁷ Proulx, M. U., (2001, pp.15-22) *La tectonique des territoires québécois: Sommaireexécutif,* Québec, Centre Québécois de Recherche et de Développement des Territoires (CQRDT), (selective)

⁸ Polèse, M. et Shearrnur, R., (2003, pp.34-37), À propos du concept de pôle de développement et des stratégies de développement économique des régions québécoises, Hartmann Publishing House, (selective)



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Quebec experience demonstrates that the structure for occupying the space and the territorial strategies are mainly based on the demographic issues. According to the executive summary of polarization theory, developed by François Perroux (in his studies in 1955 and 1982, already quoted), the essence of the theory of economic development is limited to three postulates, which have, according to this thinking no relation to the economic integration: 1. Growth is located, not disseminated in space or in the productive system; 2. Economic growth is always in the imbalance. It has a variable intensity and transmitted along all the various channels with different effects for the whole economy in question; 3. The existence of driving units or assembly of driving units, which takes related effect on other activities distributed in the same geographic area. We ask ourselves why a thinker as François Perroux did not see the link between growth poles and the phenomenon of economic integration, but instead he refers to the integration of the people into the labour market¹⁰.

Two Frenchmen Gervasio Semedo and Laurent Gautier and the Algerian Kamel Malik Bensafta described in 2012 the integrating European experience beginning with creating a single market and until to sign the Treaty of Maastricht, the three researchers highlight the political pragmatism and adopting the transparent rules are ways to reduce the structural fractures between countries¹¹. However, EU enlargement with new members, the relaxation of budgetary discipline, asymmetry of countries to the shocks, the pressure of the markets, the differentiated budgetary policies of the EU countries showed that without a clear direction in coordination of the economic policy and a single currency can bring limits of the economic and monetary integration process.

Based on the rules of the Maastricht Treaty and the theory of optimum currency areas, combined and applied to the growth poles, three specialists have built a grid for analysing the structural heterogeneities countries belonging to the Economic Community of West Africa (CEAV). According to this grid, there were identified homogeneous sub-groups across countries wishing to form a monetary union or to constitute in a real pole of convergence. In the perspective of monetary integration, these poles can, first, be based the payment and clearing agreements, and to extend the experience to applying a common currency in a monetary unification. Structural approaches between CEAV countries were determined by applying the grid analysis, their regrouping on the development similar zones to circulate a single currency. Gervasio Semedo, Laurent Gautier and Kamel Malik Bensafta proposed the economic policy recommendations for each of the identified growth poles.

Between the experiments orientated to relationship of the growth poles with the phenomenon of economic integration, we quote an example: "Integrated growth poles (PIC)" - a project of the Government of Madagascar, which has as main objective to support the economic growth on a broadened social basis for identified poles as a driving force of growth¹². It is the first project of its kind that was implemented around the world with the World Bank support. The PIC originality lies in the multiplicity of issues that are approached beside the traditional mono sectoral projects. Also, PIC aims to create a favorable framework for the private sector development, construction and rehabilitation of the key infrastructure of the growth poles, strengthening the capacity of the local communities, given the social and environmental aspects.

¹⁰Ferrera de Lima, J., (2005) *Notes sur les pôles de croissance et les strategies territoriales au Québec,* in Canadian Journal of Regional Science / Revue canadienne des sciences régionales, no. 1, (selective)

¹¹Semedo, Gervasio; Gautier, Laurent et Kamel Malik Bensafta, (2012, pp.37-85) *Pôles de convergence, gains dynamiques de l'intégration économique et monétaire en Afrique de l'Ouest: une approche en termes declusters,* in L'Actualitééconomique, vol.88, no.1, (selective)

¹²Le ProjetPôlesIntégrés de Croissance, on the <u>www.pic.mg</u>, 2013



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5. Multi-polarity - the new global economy

The growth poles on the emerging markets are reshaping the global economic structure¹³. In 2025, more than half of the world growth will be concentrated in six large emerging economies (Brazil, China, India, Indonesia, South Korea and Russia), and the international monetary system will not still be dominated by a single currency, according the World Bank Report. On the new economic chessboard, these wealthy countries will contribute to the enhancing growth in the poor countries through trade and financial transboundary transactions. The group of six emerging countries will experience an average annual growth of 4.7% between 2011 and 2025. The growth forecast for industrialized countries, where the economic growth poles have long played their role integrator, are only 2.3% for the same period, but these countries will continue to dominate the global economy; thus, the Euro-zone, Japan, the United Kingdom and the United States remain the main engines of the global growth. "The rapid expansion of emerging countries has changed the distribution of the economic growth poles between developed countries and developing countries, creating a truly multipolar world" Justin Yifu Lin said, World Bank Chief Economist.

The report describes new challenges that will be revealed by the developing countries made over the next 20 years in a multipolar world economy. The authors used indicator based on empirical data to review countries with strong economic growth based on human capital and technological innovation. This increase will have a positive effect through trade, investment and cross-border migration will lead to the technology transfer and stimulate demand for export products. The report points out that many emerging countries could become growth poles such as China and South Korea - that rely heavily on exports or as Brazil and Mexico - which plays a big role in their consumption inside

Theory of unbalanced growth, theory of location and the theory of growth poles are examples of the first, second and the third generation who explained to the economic thought of those periods - nineteenth century, the twentieth century, respectively, current century – the intrinsic relationship germs, biunique, between the poles of growth and economic integration.

These theories demonstrate the postulate which can better achieve through the growth poles the phenomenon of economic integration at the regional level, drawing on the best way the five freedoms of the specific movement of the integration phenomenon: economic goods (goods and services), workers, financial capital, a common currency and information. The network of urban development poles with the network of the growth poles forming urban polycentric systems that can counteract the negative spatial effects of the concentration and excessive economic development. Multi-polarity is the hallmark of the new world order.

Focusing the public investment in a limited number of towns has a strong impact on the development of the regional economies. Support of the network of the growth poles (rural and urban areas, by targeting a portion of the funds allocated by the local development to the poles in question, further strengthen their integrative position in the geography area, ensuring the integrated impact of the made investments. The growth poles can induce the rapid economic growth, to create jobs and boost labour productivity in the area. Thus, the phenomena of economic integration and cooperation are extended to small and medium towns and the adjacent rural areas, thus contributing to the integration and economic development of the entire region.

¹³ * * * Global Development Horizons 2011—Multipolarity: The New Global Economy(Perspectives du développement mondial 2011 – Multipolarité: la nouvelle économie mondiale), Rapport de la Banque Mondiale, Washington, 17 May 2011; The full report, projections of the growth poles and other information can be found at: www.worldbank.org/gdh2011





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6. Conclusions

Growth pole is a generator of economic activity, and its role is to amplify these activities. At the continental level or on the integrating large areas, the growth pole is a state, a country. Regionally a growth pole can be considered an economic activity, an industry or a settlement (urban or rural). At the microeconomic level we have proposed to consider the metropolitan urban area as a growth pole.

The engine of the regional diversification is provided by the technical progress, which maintains and activates the collaboration between different branches or activities, reducing the fluctuations in the economy at the region level.

Growth poles in the emerging markets are reshaping the global economic structure. In 2025, more than half of world growth will be concentrated in six large emerging economies (Brazil, China, India, Indonesia, South Korea and Russia), and the international monetary system will not be still dominated by a single currency, according to the World Bank Report. On the new economic chessboard, these wealthy countries will contribute to enhancing growth in the poor countries by the level of the commercial and financial cross-border transactions. The group of six emerging countries will have an average annual growth of 4.7% between 2011 and 2025. The growth forecast for the economically developed countries, in which the economic growth poles have long played their integrator role, are only 2.3% for the same period, but these countries will continue to dominate the global economy; thus, the Euro zone, Japan, the United Kingdom and the United States remain the main engines of the global growth. "The fast rise of emerging economies has driven a shift whereby the centres of economic growth are distributed across developed and developing economies – it's a truly multipolar world," said Justin Yifu Lin, the World Bank's chief economist.

We consider that in the next two or three decades, the global economy will experience changes of the growth poles level and polarization power and will grow larger and larger, predominantly generated by the economies of the emerging countries. While many high-income countries will recover only part from the financial crisis, the most developing countries will recover fast and will have a tendency to increase faster than before the crisis. Thus, China has already become the second economy in the world and recorded success after success. India is the second strong after China economically and financial-banking, and its government implement a new strategy for growth and sustainable development, with policies and better investment programs to maintain the economic growth. Brazil and Russia are new growth poles whose potential is currently intuited by the few specialists. Thus, it is expected to profoundly change the global balance of the economic power represented by the growth poles.

All these analyses highlight the expression of the sustainable growth with the prospect that enrolment growth pole on the path of the progress and civilization, at the levels of increasingly high, specific to the aspirations and expectations of the respectively people.

7. References

- Adams-Kane, J. & Lim, J. J., 2011. Growth Poles and Multipolarity, in World Bank in Development Economics, Policy Research Working Papers
- [2] Aldensi J., Boland P. (eds.), 1996. Regional Development Strategies: A European Perspective, Jessica Langley Eds., London
- [3] Amerenne, Schoumaker, 1996. La localisation des industries, Nathan Press, Paris
- [4] *** 2014. Anuarul statistic al României 1990-2013, National Institute of Statistics, Bucharest,
- [5] Perroux, F., 1982. Dialogue des monopoles et des nations: équilibre ou dynamique des unités actives? Grenoble, Presses Universitaires de Grenoble
- [6] Pop, Napoleon; Fugaru, Amalia and Ioan Franc, Valeriu, 2010. *Despre criză fără mânie și cu discernământ*, Bucharest, Expert Publishing House



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

- [7] Proulx, M. U., 2001. *La tectonique des territories qué bécois,* Québec, Centre Québécois de Recherche et de Développement des Territoires,
- [8] Vanhove, N., 1999. Regional Policy: A European Approach, third edition, Asgate,
- [9] <u>www.pic.mg</u>

[10] www.worldbank.org/gdh2011



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Factors that Could Affect the Financial Sustainability of the Pension System in Romania

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Abstract. In Romania, the Social State Security Budget spending exceeds the revenues, and this situation leads to a growing deficit of the public budget. This evolution is the result of many factors, more or less difficult to be managed, which we analyze in this article. The phenomenon of ageing has a significant role in increasing the pressure on the social protection systems, in general, and on the pension system, in particular. Also, the labour market related factors and the economic factors have an important impact on the sustainability of the pension system. The design of the pension system is equally important.

Keywords: pension systems, ageing, financial sustainability

JEL Codes: H55, J26

1. Introduction

The aim of this study is to analyse the factors that could threat the sustainability of the Romanian pension system. European projections on demographic evolution raise concerns regarding the ageing of population for the next 20-30 years. It is well known that such a phenomenon will have a significant impact and will increase the pressure on social protection systems in general, and on the pension system in particular.

Romania, similarly to other European countries, has implemented a number of legislative changes in pensions's field in order to adapt it to demographic and economic changes. Because Romania's demographic and economic development takes place in an international context, but also in order to understand the influences exercised in the national legal and economic sphere, a comparative approach, pointing the place occupied by Romania among the EU countries, is the most comprehensive.

When it comes to the sustainability of pension systems, it is important not only the financial stability, but also objectives like of poverty alleviation in old age by providing an adequate income after retirement[1].

The factors considered to have a significant influence on the sustainability of the pension system, are:

- Demographic factors;
- Labour market related factors;
- Economic factors;
- Factors related to the design of the pension system.



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In Romania, the State Social Security Budget (BASS) spending exceeds the revenues, and this situation leads to a growing deficit of the public budget. It can easily be noticed that the problems in providing the necessary resources for the payment of pensions and other expenditures of the BASS appeared in 1995. During 1995-2005, the budget recorded deficits, more or less accentuated. It is only in 2006 that the situation recovered and, for two consecutive years, the BASS showed surpluses. As a result of the growth of the pension point from 32% to 45% of the average salary in 2008, the BASS pressure started to increase, followed by substantial annual transfers from the state budget, necessary for the public pensions. In addition, since Pillar II became operational in 2008, some of the contributions to the public pension system were redirected to the mandatory private pension scheme. As the contribution to the second pillar increased (from 2% in 2008 to 5.1% in 2016 and 2017) and the number of participants in this pension scheme rise, the public deficit grew from 0.44% of GDP in 2008 to a maximum of 2.55% of GDP in 2015. In 2016, the deficit slightly reduced to 1.95% of GDP.

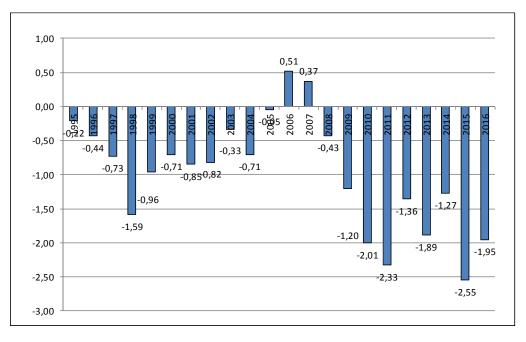


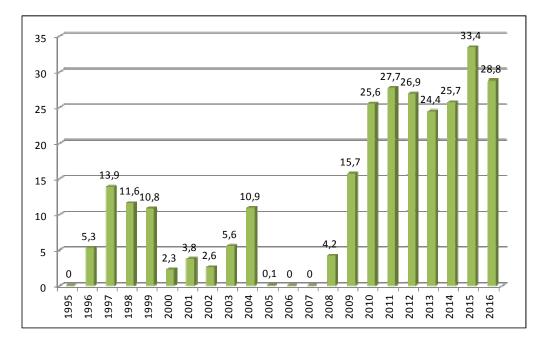
Fig. 1: BASS deficits as percentage of GDP, 1995-2016

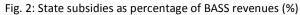
Source: calculated by authors based on INS, on-line database (1995-2015)and Ministry of Public Finances(2016)

The following picture shows an important expansion of state subsidies necessary to balance the BASS.



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Source: calculated by authors based on INS, on-line database (1995-2015) and Ministry of Public Finances (2016)

The impact of the government's decisions towards the end of 2008 has reflected in the level of BASS expenditures as a share of GDP. These expenditures grew sharply from 5.5% in 2007 to 8.5% in 2011. During 2012-2016, the public expenditures on pensions have oscillated but have not exceeded 8% of GDP. The correspondence coefficient between the increase in BASS expenditure and the GDP growth for the whole analysed period (1995-2016) is 1.28, underlying a faster increase in BASS expenditure relative to GDP growth.

At this stage we have analysed both the factors that have led to deficits of the state social insurance budget, as well as the factors that have a potential impact on the future sustainability of the Romanian pension system.

2. Demographic factors

At national level, the share of the overall population aged 65 years and over in total population, followed an upward trend during 2007-2016. The total increase was 2.7 p.p. (from 14.7% in 2007 to 17.4% in 2016), with a higher increase for women - 3.4 p.p. than the growth accounted for males - 2 p.p. Although the specific proportion of this population increases, it remains below the EU28 average of 19.2% (for year 2016). However, the growth rate is higher in Romania.





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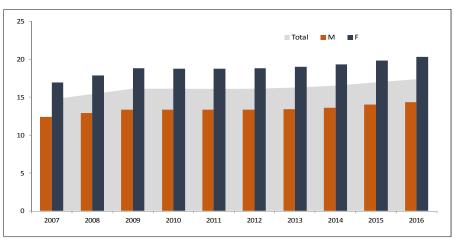


Fig.3: Share of the population aged 65 and over in the total population, in Romania (%)

Source: Eurostat, online data code [demo_pjanbroad]

Projections regarding the evolution of the population aged 65 and above are pessimistic for all European countries. By 2050, the most significant growths are expected in countries such as Greece, Italy, and Lithuania. The share of Romanian population aged 65 and over will reach 29.8% of total population in 2050, above the EU 28 average of 28.5%. Therefore, the elderly will represent almost one third of Romania's population in 2050.

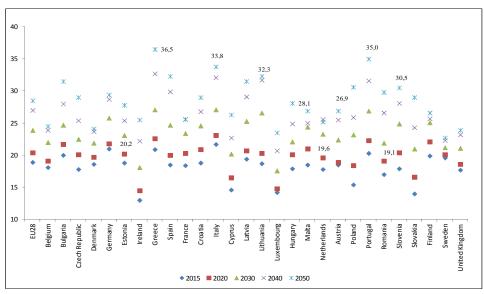


Fig.4: Evolution of the share of population aged 65 and over, 2015-2050 (%)

Source: Eurostat, online data code [proj_15ndbims]



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These demographic changes are the consequence of two factors. The first factor is the increase in life expectancy, and the second is linked to the strong decline in birth rates.

Life expectancy at birth has been following an upward trend in recent years, with a maximum of 75.1 years reached in Romania, in 2013. Although, life expectancy at birth has steadily stood below the EU average during 2007-2015, at a difference ranging from 5.4 to 6.2 years. Compared to other former communist East European countries, Romania recorded one of the smallest increases in the life expectancy at birth during 2007-2015, of only 1.9 years. Significant rises in the life expectancy at birth occurred in the case of Baltic countries: Estonia (registered an increase of 4.8 years), Latvia (an increase in life expectancy of 4 years) and Lithuania (an increase of 3.9 years).

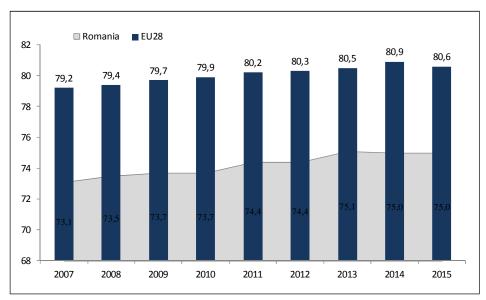


Fig.5: Life expectancy at birth (years)

Source: Eurostat, online data code [demo_mlexpec]

For the sustainability of the pension systems, life expectancy at 65 years old is an important indicator from the perspective of the standard retirement age. There are still considerable differences between women and men in terms of life expectancy at age 65. At national level, life expectancy at the age of 65 has risen during 2007-2015, in a greater extent for women, with approximately 3-3.5 years, compared to the estimated life expectancy for men aged 65. Between 2015 and 2050, projections of life expectancy at age 65 for Romania, indicate a growth of 5 years in the case of men and 4.9 years for women. In 2050, life expectancy at 65 years for men is projected to reach 19.5 years, and 22.8 years for women. In the case of Romania, increases in life expectancy at birth and life expectancy at the age of 65 did not necessarily correlate with a similar increase in healthy life expectancy. Our country is part of the group of countries that have experienced reductions of healthy life expectancy during 2007 and 2015, both in the case of women (by 2.1 years) and men (by 1.3 years).





		2007	2008	2009	2010	2011	2012	2013	2014	2015
Life expectancy at birth	М	69,5	69,7	69,8	70,0	70,8	70,9	71,6	71,4	71,5
	F	76,8	77,5	77,7	77,7	78,2	78,1	78,7	78,7	78,7
Life expectancy at 65	М	13,9	14,2	14,3	14,2	14,5	14,4	14,7	14,7	14,5
	F	16,9	17,7	17,8	17,6	17,8	17,7	18,1	18,1	18,0
Healthy life years in	М	7,6	7,9	7,2	5,9	5,4	5,9	5 <i>,</i> 8	5,9	6,3
absolute value at 65	F	7,8	8,0	7,1	5,1	4,7	5,1	5,2	5,7	5,7

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Table 1: Evolution of the life expectancy (years)

Source: Eurostat, online data code [demo_mlexpec]; [hlth_hlye]

Birth rate has followed a downward trend in Romania, dropping from 9.5 live births to one thousand inhabitants in 2007 to only 9 live births per thousand inhabitants in 2015. These levels are well below the level recorded in 1990, of 13.6 live births per thousand inhabitants. The natural growth of the population as a result of the birth rate and the general mortality trend has been declining. In 1990 the rate of natural increase was positive, of 3 per 1000 inhabitants and by 1992 it has become negative and has remained so until today. In 2015, the last year of the series, the natural increase rate was -2.8.

The old-age dependency ratio (the ratio of population aged 65 to over to the population aged 15-64) reached 25.9% in Romania in 2016, being slightly below the average EU 28 of 29.3%. Compared to 2007, the increase accounted 4.4 p.p. in the case of Romania, compared to an increase of 4.1 p.p. of the EU average.

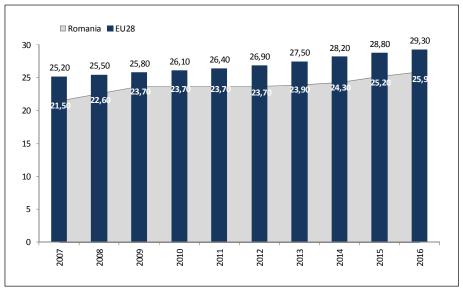


Fig.6: Old dependency ratio (population 65 and over to population 15 to64 years) (%)

Source: Eurostat, online data code [demo pjanind]



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The old-age dependency ratio is expected to sharply rise in all EU Member States but, compared to the EU 28 average, it will increase at a faster pace in the Central and Eastern European countries. For the next 15 to 30 years, the estimates of the indicators evolution are pessimistic. For the first 15 years, the growth of the old-age dependency ratio at European level will reach a growth of 10.3 p.p. compared with 2015, and will almost double in 30 years (an increase of 21.5 p.p.). In Romania, the situation is even more dramatic, the value of this indicator rises by 28.7 p.p. (from 25.2% in 2015 to 53.9% in 2050). In this case, the effect of the demographic ageing will be felt very strongly after 2030, when more numerous generations, born during 1967-1990, will begin to retire. In this context, the budgets of pension systems have to bear the pension payments for a larger number of pensioners, beneficiaries of the public pension system, with a smaller number of taxpayers, employees and social security contributors. Statistical data already shows that this redistributive system can no longer operate on a sustainable basis in the face of the demographic problems.

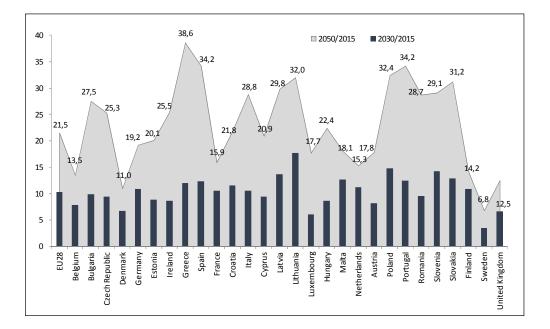


Fig.7: The dynamics of the elderly old dependency ratio (%)

Source: Eurostat, online data code [demo_pjanind]

The demographic aging has also been accompanied by another trend, the early exit of older workers from the labour market, increasing the ratio of pensioners to contributors, with negative consequences on the sustainability of the system.

Demographic ageing may affect not only the public pension system but also the private pensions. Ageing societies may reduce the potential growth rate of the economy, which would translate in lower real investment returns with effects on the price of the financial assets. Any reduction in placements returns



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made through pension funds may lead to an increase in contributions, a cut in pensions or risk-taking to a greater extent.

3. Labour market related factors

In recent years, the labour market has undergone many fundamental changes that make it necessary to reflect on their consequences on the social protection system in general and on the pension system in particular. Changes of the labour market with a major impact on pension systems are related to free movement of labour, increased flexibility of employment contracts, and the large share of self-employed workers. There are also a number of transformations produced by the phenomenon of globalization. Unemployment itself is a challenge for pension systems, with both individual and macroeconomic effects. High unemployment means fewer contributors to the pension system, having a negative impact on the financial sustainability of the system and also on the adequacy of future pensions as long as their level is correlated with the contributions paid during the active life.

In Romania, the activity rates are well below the EU28 average. In 2016, the total activity rate in our country was 65.6%, while the EU28 average rate was 72.9%. The activity rate of the male population is clearly higher than that of the female population in our country (74.8% vs. 56.2%) and at the EU28 level (78.5% compared to 67.3%). The employment rates for the working age population (15-64 years) are lower in Romania compared to the EU28 average rate in all of the years of the analyzed period. In 2016, the total employment rate in our country reached only 61.6%, 5 p.p. lower than that of the EU28, but the increase registered compared to 2007 is 2.8 p.p., while at the EU28 average level is only 1.3 p.p. Major differences arise between employment rates by gender and by age groups. In 2016, in Romania the male employment rate was 69.7% compared to 53.3% which represents the female employment rate, resulting in a difference of 16.4 pp. Also at EU28 level, men are favoured, but the difference is lower, of 10.4 p.p., the male employment rate being 71.8% and the one of the females 61.4%. Analyzing occupancy rates by age groups, there are small values for the 55-64 age group (55.3% for EU28 and 42.8% for Romania) compared to the 25-54 age group (78.7% for EU28 and 77.6% for Romania) at the level of 2016.

A tendency with many negative consequences on the social and budgetary level is the lower share of employees in the employed population in Romania compared to the average of the European countries (in 2016, 75.7% compared to 85.0%). Such a socio-professional structure is reflected in the decline of the income security, of the saving capacity, of the investment in education and training, and last but not least the reduction in the coverage of the pension system. This development has also resulted in a higher level of labour taxes.

Regarding the evolution of the employed population in the main sectors of activity, there is a general trend in decreasing the employment rate in agriculture and industry and an increase in services. In our country, however, still remains a considerable surplus of labour resources in agriculture, a sector with low added value. Increasing employment in the service sector significantly changes the nature of work, labour relations and organization of work. Flexible organization of work and working hours characterizes this development. Such a change in the occupational structure implies the emergence of less paid jobs, often part-time and temporary.



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4. Economic factors

The state's economy directly influences the financial sustainability of the pension systems. The GDP is the total output available for consumption for all inhabitants of a country in a calendar year. The benefits paid to the elderly come from the current GDP and the larger the share of the GDP that the retirees have, the more limited will be the consumption opportunities for the other population categories. The risk to the financial sustainability of the pension system comes from the fluctuations and negative shocks in the evolution of the GDP, these having an immediate impact on available resources that can be distributed to the society, including to pensioners[2].

The recently overcome crisis has and will also have a major impact on public expenditure on pensions. In addition to the immediate effects produced by the reduction of the base for social security contributions due to economic contraction and rising unemployment, it should also be taken into account the future consequences of the increase in debt stock that will lead to an increase of the public service debt level.

The crisis has demonstrated the need to balance the PAYG system with the private pension systems, even though both types of pension systems are affected by the economic crises. These phenomena generally have a strong impact on financial markets. The decrease in interest rates and the value of financial assets affects the yields/returns and the solvency of funded pension schemes.

The shadow economy and the poor collection of contributions are another factor that can affect on long-term the sustainability of the pension system. In Romania there is a shadow economy in which about 1-2 million people work. Often, employers refuse to register the entire salary of employees, thus the declared base for calculating insurance contributions is greatly diminished compared to the real one. There are also situations when no contributions are paid at all, since the workers are not registered with the labour inspectorate. This leads to poorer resources for state social insurance budget.

The size of the shadow economy in Romania and other countries of the European Union is revealed by Schneider et all[3]. According to these authors, the estimation of the shadow economy size is made in relation to the GDP, as the share held in the GDP by the economic activities related to the black economy.

	2007	2008	2009	2010	2011	2012	2013	2014
RO	30,2	29,4	29,4	29,8	29,6	29,1	28,4	28,1
UE	20,3	19,6	20,1	19,9	19,6	19,3	18,8	18,6

Table 2: The size of the shadow economy in % of GDP over the period 2007-2014

Source: Schneider, F., Raczkowski, K., Mroz, B., 2015, pp. 45.

In the year 2014, Romania ranks second in the European Union, in terms of the size of the black economy as a percentage of the GDP, just after Bulgaria (31%).





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5. Factors related to the design of the pension system

The introduction of mandatory private pensions and the redirection of a part of the social security contributions to Pillar II is a challenge for the State Social Security Budget. Since 2008, some of the employee contributions have supplied individual pension funds, the initial contribution rate being of 2% and rising to 6% by 2018. In this situation, the resources that the social state insurance budget will have available will be greatly diminished.

The size of the statutory retirement ages for both men and women, the size of the minimum contribution period for obtaining the old age pension, the pension calculation method and the correlation between the pension level and the salary earnings over the entire active period, the eligibility requirements for early retirement pensions and for invalidity, the pension indexation formula are other factors that have an impact on the sustainability of the pension system.

6. Conclusions

The sustainability of the pension systems is important, since the pension revenues are the main source of income for the elderly. Like other European countries, Romania faces the need to secure long-term stability of the public pension system in order to be able to absorb the impact of the demographic aging phenomenon. From this perspective, the sustainability of the pension system implies an achievement of a balance between the number of contributors and beneficiaries. In addition, with the fall in employment rates and the rise in public pension costs, the national pension system may not be able to provide the social protection needed for future generations of retirees. In order to avoid such a situation, it is recommended to implement policies that have the effect of increasing labour productivity, but also increasing employment among the active population.

7. Acknowledgements

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8. References

- [1] A. G.Grech. Assessing the sustainability of pension reforms in Europe, 2010. Available online at http://sticerd.lse.ac.uk/dps/case/cp/CASEpaper140.pdf
- [2] B. Mattil. *Pension Systems: sustainability and distributional effects in Germany and the United Kingdom*, Springer Science & Business, 2006.
- [3] F.Schneider, K. Raczkowski, B.Mroz. Shadow Economy and tax evasion in the EU. *Journal of Money Laundering Control*, Vol. 18(1), 2015, 34-51.



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Banking Systems in Romania and Iceland: Two Different Worlds

but Similar Development

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Abstract. The novelty of this article is the comparative analysis of the Romanian and Icelandic banking systems. The study results reveal that despite the fact that Romania and Iceland are two different worlds, there are several similarities between the banking systems of these countries. They include a late development of banking systems, foreigners contributing a great deal to the development of the banking systems in the early stage of evolution. After the Second World War until the 1990s specialized banks operated in both countries. The banking systems of both countries prior to the 1990s were dominated by politics. Liberalization of banking and capital occurred both in Romania and Iceland after 1990; the bank privatization process took place during a similar period (1999-2006, Romania; 1998-2002, Iceland). Before privatization, banks in both countries lacked experience in a new banking "arena". The global financial crisis greatly affected the two banking systems. Despite similarities, the evolution of the two banking systems was also marked by differences, notably the ownership origin of banks after privatization (foreign dominance in Romania; domestic owners in Iceland) and different business models developed by banks in the pre-crisis period.

Keywords: Romanian banking system, Icelandic banking system, global financial crisis, Romania, Iceland.

JEL Codes: G21, G28, O11

1. Introduction

Starting from the important role that banking systems in the two countries have in financial intermediation, we structure the paper in three sections.

The first section is devoted to geographically and historically landmarks of Romania and Iceland. In the second section, we present the main stages in the development of banking systems in the two countries. In that presentation, we emphasize the differences between before and after 1990. This delimitation takes into account the fact that the Romanian banking and financial system started to develop on a modern base after 1990 and the Icelandic financial system began transforming rapidly during the 1990s.

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Another point of reference in presenting the two banking systems was the global financial crisis, pointing to the banking expansion in the pre-crisis period, the impact of the crisis and further developments.

We compare in the third section the two banking systems. Our discussions highlight the similarities and differences between them.

Over the time, due to the importance of banking system, the specialty literature in both countries devoted great attention to this topic. Concerning the evolution of the Romanian banking system, the periodical publications of the central bank – The National Bank of Romania (NBR) – offer official data on the Romanian banking system. These publications include the *Annual Reports* and the *Financial Stability Reports*. The history of the Romanian banking system was presented in many studies like: Ionescu (coordinator, 1996); Kiritescu (1997); Mauri, Baicu (2002); Murgescu, Constantinescu (ed., 1960); Pintea, Ruşcanu (1995); Slăvescu (1925). The development of the Romanian banking system in recent years was highly debated in the specialty literature. To this regard the following studies could be mentioned: Zaman, Georgescu (2015); Zaman, Goschina (2015); Zaman (2013); Baicu, State (2012). The Central Bank of Iceland and the Financial Supervisory Authority of Iceland provide valuable information on the evolution of the Icelandic banking system in the pre-crisis period and the impact of the global financial crisis. In this regard, the following publications could be mentioned: Sigurjonsson (2010); Special Investigation Commission (2010, 2014); Halldorsson & Zoega (2010); Bagus & Howden (2009); Sigurjonsson & Mixa (2009); Mixa (2016).

2. Romania and Iceland – Geographically and Historically Landmarks

Romania is a country located in the Southeastern part of Central Europe, with an area of 238,391 sq. km (INS, 2015, p. 5). According to the latest census of population and housing in 2011, provided by the National Statistics Institute, on 20 October 2011, Romania had a stable population of 20,121,641 people (INS, 2011). On 1 January 2016, Bucharest - the capital of Romania - had a population of 2,106,144 people (INS, 2016).

After the Second World War, Romania entered under the Soviet Union sphere of influence and the communist regime within the country was established. From the economic point of view, the communist regime involved implementation of the command economy, which included the abolition of private property and introduction of economic planning through development plans approved by the communist leadership.

Due to the limitations of the communist regime that led to the sharp deterioration in living standards, the dictatorial regime of Nicolae Ceausescu, the Romania president at that time, was in 1989 removed.

After 1990, democratic regime was established and the transition from the command economy to the market economy began.

In 2007, Romania joined the European Union (EU). The accession process involved transposing the Community law into the Romanian legislation.

Iceland is located in the northern part of the Atlantic Ocean, with an area of 103,000 sq. km, meaning that Iceland is a bit less than half of the size of Romania. While Romania has a population of around 20 million people, Icelanders only count 340,000 people (Statistics Iceland, not dated). Compared to Romania, Iceland is much more rural. This is somewhat misleading because large parts of Iceland are not habitual since a large part of the country consists of mountains and glaciers. In the capital area of Iceland leave only



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approximately 200,000 people, while Romania's capital, Bucharest, inhabits about 10 times the amount of people. Iceland gained full independence from Denmark in 1944. The country is generally considered to be similar to other Nordic countries but still showing elements of American cultural values with a market economy but a strong emphasis on social benefits, mainly poverty alleviation (Olafsson, 2003).

3. STRUCTURE of the FINANCIAL and BANKING SYSTEM in ROMANIA and ICELAND

The evolution of the Romanian banking system has been influenced by a lot of factors where the political one played a decisive role. There are two distinct periods that were different in terms of organization and operation of the financial systems: the communist period and the period after 1990.

The Icelandic financial system experienced a similar development, being prior to 1990s restricted in a politicalized environment, with banks mostly servicing certain groups. It began quickly transforming from the mid-1990s and growing massively during the Manic Millennium Years (Mixa, 2009).

3.1. The Romanian financial and banking system prior to 1990

The first bank that operated on the Romanian territory was Banca Națională a Moldovei (The National Bank of Moldova), founded in 1856 (Ionescu coordinator, 1996, p. 18). The establishment of the public institutions - Casa de Depuneri și Consemnațiuni (The Deposits and Consignments House) in 1864 and Casa de Economii (The Savings House) in 1880 – marked a major stage for the Romanian banking system (Gusti, 1943, p. 581-589).

The issuing Bank of Romania - The National Bank of Romania (NBR) was established by the Law no. 17/29 of April 1880 (Kiritescu, 1997, p. 304-305). The NBR played an important role in Romanian banking system creation and development.

The number of banks grew rapidly: from 1, in 1874 to 222, in 1918 (Gusti, 1943, p. 561).

The 1929-1933 crises had severe impact on the Romanian banking system. Prior to the crisis the number of banks increased and the banking system developed. However, the lack of maturity of the Romanian banking system and the undercapitalization of many banks caused many problems (Mauri and Baicu, 2002, p. 47-48).

The transition towards the communist regime profoundly affected the Romanian banking system through the administrative measures taken in that era, among which very important were:

- the passage of The National Bank of Romania as a state ownership January 1st, 1947;
- the establishment of the monobank system, involving the accumulating of banking operations within a single institution, which fulfilled both the functions of a central bank and commercial banks. This process involved the liquidation or dissolution of most commercial banks that existed in Romania prior to 1948;
- restriction of foreign bank capital; with only four banks operating with foreign capital or joint capital (Romanian and foreign capital) in Romania (Chemical Bank, Société Générale, Banca Franco-Română and Frankfurt Bucharest Bank).

Another measure that was taken was the creation of some specialized banks to fund various economic sectors or to attract savings from the population:

- Banca de Investiții (The Investment Bank), specialized in investment finance;
- Banca pentru Agricultură și Industrie Alimentară (The Bank for Agriculture and Food Industry), specialized in financing the agricultural sector;



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- Banca Română de Comerț Exterior (The Romanian Bank for Foreign Trade), specialized in trade finance;
- Casa de Economii și Consemnațiuni (The Savings House), detained monopoly in terms of savings from the population (Ionescu coordinator, 1996, p. 20-22).

Stock exchange activity in Romania does not have a long tradition. The Bucharest Stock exchange was opened in December 1882, but at the first stage of functioning, the activity was reduced (Popa, 1993, p. 259). During the communist regime, the stock exchange did not operate anymore. The political changes affecting Romania at end-1989 created the premises for capital market development. Therefore, The Bucharest Stock Exchange was re-established in 1995 (Anghelache, 2004, p. 25-29).

3.2. The Romanian financial system after 1990

After 1990, the Romanian banking system has been restructured and modernized. In the first stage of transition, the new legislative framework was adopted. The monobank system was abolished and the two-tier banking system was implemented.

As a result, during 1991-1998, the number of banks increased from 8 to 36 banks, of which 27 were Romanian legal entities, and 9 branches of foreign banks (the number of banks increased approximately 7 times). Nevertheless, at end-1998, the Romania's banking system was dominated by four banks with majority state capital (Bancorex, Banca Română de Dezvoltare, Banca Comercială Română, Banca Agricolă) that accounted for 62 percent of total banking assets. In addition, Casa de Economii şi Consemnațiuni (CEC - The Savings House), entirely detained by the state, accounted for 9.8 percent of total banking assets (BNR, *Rapoarte anuale* 1996-2000, p. 297-298).

Despite this progress, the Romanian banking system has faced many problems. Amid the disruptions at economic level that accompanied the transition process, the large state-owned banks lacked the experience and expertise within the new framework. The central bank in a similar manner also lacked experience in the supervision process during the early stages of transition. This led to some state-owned banks experiencing the problem of non-performing loans.

Banca Agricola (The Agriculture Bank) and Bancorex were among the most affected banks. They had sectoral exposures towards enterprises in the energy sector and farming sector, respectively. At end-1998, the non-performing loans in the Romanian banking system accounted for more than 54 percent of total (NBR, *Annual Report* 1998, p. 78-79).

In this context, the restructuring of state-owned banks began. In 1998, The Bank Asset Recovery Agency was established in order to take over the non-performing loans of state-owned banks to prepare the privatization process (Guvernul României, 1998).

In 1999, Bancorex – the largest state-owned bank – was merged with Banca Comercială Română (The Romanian Commercial Bank). The cost the government bore of the restructuring of the Romanian banking sector accounted for 10 percent of GDP during 1990-2003(NBR, *Financial Stability Report* 2006, p. 49).

The actions of restructuring state banks and the adoption of necessary legislative framework have laid the groundwork for starting the privatization of state banks, either by establishing new banks or having other banks entering the Romanian banking sector.

The privatization of state owned banks began in 1999. This process has boosted the penetration of foreign capital in the Romanian banking system. Examples include the French bank Société Générale buying the majority stake of Banca Română de Dezvoltare (The Romanian Bank for Development) and Generale



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Electric Capital Corporation and the Banco Portugues de Investimento buying the controlling stake in The Banc Post (BNR, *Rapoarte anuale* 1996-2000, p. 393-394).

Therefore, at end-2000 foreign-owned banks held 50.88 percent of the domestic markets compared to the state-owned banks that held 46.1 percent (NBR, *Annual report* 2000, p. 99).

In 2001 the privatization of Banca Agricola followed and the state equity holding was sold to a consortium made up of Raiffeisen Zentralbank Österreich A.G. (93.13 percent) and the Romanian-American Enterprise Fund (5.7 percent) (NBR, *Annual Report* 2001, p. 80). Banca Comercială Română was privatized and taken over by the Erste Bank (Austria) în 2006.

Currently, the Romanian banking system is characterized by the dominant presence of foreign capital. At end-2015, credit institutions with a majority foreign capital (including branches of foreign credit institutions) detained 90.4 percent of aggregate net assets. Credit institutions with majority state-owned capital hold 8.3 percent of aggregate assets. Regarding the country of origin of foreign capital, the top-three countries are:

- Austria, 33.3 percent of net assets;
- France, 13.5 percent of net assets;
- Greece, 10.6 percent of net assets.

At end-2015, there were 36 credit institutions, thereof 29 credit institutions Romanian legal entities and 7 branches foreign credit institutions. Following the privatization process, only two fully or majority stateowned capital credit institutions were still operating (NBR, *Annual Report* 2015, p. 93-94).

The private pension funds in Romania are relatively new. They were introduced in 2008. By comparison, the private pension system (the mandatory private pensions) was introduced in Hungary in 1998, in Poland in 1999, in Lithuania in 2004, in the Slovak Republic in 2005 (The World Bank, 2013, p. 4). Currently, the insurance and private pension system are regulated and supervised by the Financial Supervisory Authority. This authority was established to integrate supervision of non-bank financial markets (with exception of non-bank financial institutions) in order to increase the efficiency of the financial supervision (Guvernul României, 2012).

The shadow banking sector in Romania is not well represented compared to some developed countries. Shadow banking sector accounts for 15.5 percent of total financial assets and includes non-banks financial institutions, investment funds and money-market funds (NBR, *Financial stability report* 2015, p. 105). Both non-banks financial institutions and investment funds are regulated and supervised: non-banks financial institutions are regulated and supervised by the National Bank of Romania and investment funds, by the Financial Supervisory Authority.



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3.3. The impact of the global financial crisis on the Romanian banking system

The Romanian banking system was severely affected by the global financial crisis despite the business model adopted by the Romanian banks being the traditional one:

- unlike other banking systems, the balance sheets of the Romanian banks did not contain "toxic" assets;
- the shadow banking in the Romanian system was not well represented;
- securitization was not used in the Romanian banking system;
- the most important liabilities of the Romanian banking system were the traditional deposits from non-bank sector (in 2007, non-bank sector deposits accounted for 52.6 percent of total liabilities see table 1);
- different bonuses in the remuneration system did not play a significant role in the Romanian banking system compared to developed countries (for more details see Baicu and State, 2012).

Besides, after triggering the crisis, unlike other countries, the Romanian state did not allocate funds to capitalize banks.

Despite these differences, in some aspects, the behavior of the Romanian banks in the pre-crisis period was similar to the behavior of banks in other countries. The expansion of the credit activity is one example. In order to improve their profitability, many banks relaxed the credit conditions that profoundly affected the quality of credit portfolios once the crisis hit international markets.

Remuneration based on short-term results was also present in the Romanian banking system with a negative impact on the quality assets on medium and long term, as also strongly noticed after the triggering of the global crisis.

Other characteristic of the Romanian banking system that could be included in the pre-crisis global trends was financing the credit expansion in great part through wholesale market, namely through funding received from parent banks in origin countries. Therefore, foreign liabilities grew from 15.9 percent in 2004 to 31.7 percent in November 2008 (see table 1).

Nevertheless, in a global world, the Romanian banking system could not be immune to the crisis that propagated in Romania latter. The global crisis affected the Romanian banking system in multiple ways and foreign banks played an important role in crisis propagation.

Against the immediate liquidity problem at an international level and the pressure to meet the level of capital adequacy according to the new regulatory framework, parent banks diminished the funding of their subsidiaries in Romania. In this context, foreign liabilities of credit institutions operating in Romania decreased gradually from 31.7 percent of total liabilities in November 2008 (NBR, *Financial Stability Report* 2009, p. 22) to 15.5 percent of the balance sheet in December 2015 (NBR, *Financial Stability Report* April 2016, p. 48), meaning that this percentage went down by half. The diminishing of credit lines from parent banks was offset by the increase of private sector deposits – which were 60.8 percent of bank liabilities in December 2015 (NBR, *Financial Stability Report* April 2016, p. 48).



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									percent of total liabilities			
	2004	2005	2006	<mark>200</mark> 7	Sep. 2008	Oct. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009	
Domestic liabilities, of which:	84.1	79.1	77.5	71.7	70.2	69.4	68.3	69,3	70,0	70.9	71.2	
Interbank deposits Non-bank sector	3.0	2.5	3.6	3.8	2.7	4.0	2.2	2.1	4.2	5.2	6.0	
deposits, of which: - Government sector	64.9	61.0	58.1	52,6	49.0	46.8	47.0	47.8	46.1	46.1	45.8	
deposits - Corporate and	2.6	3.5	3.1	2.9	2.9	2.9	2.9	3.1	2.8	2.9	2.8	
household deposits	62.3	57.5	55.0	49.7	46.1	43,9	44.1	44.6	43.3	43.2	42.9	
Capital and reserves	11.7	12.2	11.8	9.9	10,4	10.7	11.0	10.7	10,3	10.5	10.7	
Other liabilities	4.5	3.4	4.0	5.4	8.1	7.8	8,1	8.8	9.3	9.7	8.7	
Foreign liabilities	15.9	20,9	22.5	28.3	29.8	30.6	31.7	30.7	30.0	29.1	28.8	

Table 1 Liability structure of credit institutions operating in Romania

Source: NBR, Financial Stability Report 2009, p. 22.

A characteristic of Romania is the low level of financial intermediation with the share of bank assets being 56.0 percent of GDP in September 2016 compared to 66.0 percent of GDP in December 2008 (NBR, *Financial Stability Report* December 2016, p. 53).

Currently, one of the most important vulnerability of the Romanian banking system is the high non-performing loan ratio. According to the NBR *Financial Stability Report* December 2016 (p. 57-58), the non-performing loan ratio reached 10 percent (September 2016), which is well above the EU average (5.5 percent, June 2016). However, due to the balance sheet clean-up process, the non-performing loan ratio decreased from 22.0 percent, as was in December 2012 (NBR, *Financial Stability Report* 2013, p. 54). This high level of non-performing loan ratio is a direct consequence of the aggressive and unsustainable lending policy promoted in the pre-crisis period.

Despite the issue of non-performing loans, other prudential indicators have comfortable levels. For example, the Romanian banking system is characterized by high level of capital adequacy indicators (the total capital ratio accounted for 18.8 percent in September 2016 – NBR, *Financial Stability Report* December 2016, p. 67). In line with the European and international tendency, after the global crisis, the banking regulatory framework has been improved in Romania too.

3.4. The Icelandic financial system prior to the 1990

The Icelandic banking system was practically non-existent before 1885 when The National Bank of Iceland was established by the government following Iceland's financial independence from Denmark 10



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years earlier. Savings banks were established during the same period (Jonsson G., 2004). Danish business persons established another bank in 1904 named Islandsbanki (Jonsson A., 2009). The Icelandic government established the Agricultural bank in 1929 (Jonsson G., 2004) and the following year, during the start of the Great Depression, Islandsbanki became bankrupt, with the government establishing from its ruins another bank specifically aiming at servicing another sector, called The Bank of Iceland's Fisheries (Agnarsson, 2004). While serving those specific groups, these moves were viewed as being part of transferring Iceland as a modern and independent nation, which up to that point was almost entirely dependent on agriculture (Finsen & Skulason, 1938; Jonsson G., 1995).

This trend of servicing special interest groups of borrowers continued during the next decades. Specific interest groups began establishing banks that reflected the name of the groups they mainly served (Johannesson, S. 2004). Examples include The Industrial Bank (1953), The Icelandic Bank of Commerce (1963) and The People's Bank (1971), which was some sort of a union bank (Jonsson A., 2009). All of these three banks merged with the Bank of Fisheries in 1989, with the new bank re-named the old familiar name of Islandsbanki. During the period from 1930 until 1990s, the Icelandic banking environment can be characterized as being restrictive, with capital controls in full effect where political connections and governmental policies, in a similar manner as other Nordic banking systems during most of that era dictated the allocation to industries. The government did not own the smaller but the interest groups that owned them all had strong political ties.

Real interest rates were often negative, meaning that access to money was an asset in itself, with demand constantly higher than supply, meaning that such allocation could easily be described as preferential treatment (Sigurjonsson & Mixa, 2011; Jonung, 2008; Englund, 1999). Foreign currency restrictions were the norm in Iceland, with special permissions needed for foreign currency to import, invest or even to cover travelling expenses.

3.5. The Icelandic financial system after 1990

While the Icelandic financial system began transforming rapidly during the 1990s, signs of changes had begun a few years earlier. This included the establishment of a stock exchange in 1985, which was little used the first years of operations, and the liberalization of domestic bank rates in 1985 that became fully liberalized in 1987.

This slow process towards a more market oriented banking system took a major turn in 1994 when lceland joined the European Economic Area (EEA), opening the doors to the free flow of capital and hence foreign direct investment. Iceland was, in effect, forced to follow the parameters of the EEA agreement (Sigurjonsson & Mixa, 2011), abolishing currency restrictions and connecting the country's economy in a global manner, leading to restrictions on capital movements being fully abolished the year after. This also opened the door to financial liberalization that had not been in effect since the fall of Islandsbanki (the first version, not the re-named bank) in 1930. These changes aimed at making the Icelandic banking system more efficient, for it was generally accepted that had been bloated and inefficient for many years. Capital movements increased even more and efficiently with the creation of the Interbank Money Market in 1998 followed by the Interbank FX Swap Market in 2002 (Central Bank of Iceland, 2006).

Iceland followed the trend in international banking with added liberalization, meaning that the differences between traditional banking and investment banking became ever less clear. Services related to



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brokerage and investment bank services quickly spread within the industry. Mutual funds, trading for customers and on behalf of the banks became common features of all banks within the 1995-2000 period.

By 2002 the Icelandic banking system was operating mostly as a completely modernized system with the Financial Supervisory Authority though still catching up to the new environment. Simple regulatory functions such as the separation of bankers dealing with the bank's proprietary investments and investments on behalf of their clients had only been enacted 2002 (Financial Supervisory Authority of Iceland, 2002) with further separation between the operation of banks and mutual funds enacted in 2003 (Financial Supervisory Authority of Iceland, 2003). Although some concerns were already being raised regarding the increase in lending (Morgunbladid, 2004; Central Bank of Iceland, 2004), such concerns were (still) shrugged off due to the restrictive lending practices that had been common place for such a long time, causing a pent up demand for such loans.

A privatization process, started in 1992, began to affect the banking system in 1997 and went into full steam 2002 when the government wholly privatized 2 of the 3 main Icelandic major banks. Islandsbanki had risen from the ashes of the combined fragile banks in the early 1990s and in 2000 was merged with an investment bank that had been privatized by the government 2 years earlier. The other two banks, The National Bank of Iceland and The Agricultural Bank were initially partially privatized in 1998, with a large amount of people investing in them. A controlling stake in The National Bank of Iceland was bought by business tycoons that had no prior experience in banking (Sigurjonsson, 2010) while The Agricultural Bank was overtaken by Kaupthing Bank, an investment bank that The Agricultural Bank ironically owned a 50% stake in until 1996 (Special Investigation Commission, 2014). This development can be seen in table 2.

Event	Year
Financial Indexation permitted	1979
Liberalization of domestic bank rates	1984-1986
Iceland Stock Exchange established	1985
Interest Rate Act: Interest rates fully liberalized	1987
Stepwise liberalization of capital movement begins	1990
Treasury overdraft facility in the Central Bank closed	1992-1993
New foreign exchange regulations marks the beginning of the liberalization of cross-border capital movements	1992
Privatization process launched	1992
Interbank market for foreign exchange established	1993
Iceland becomes a founding member of the EEA	1994
Long term capital movements fully liberalized	1994
Short term capital movements fully liberalized	1995

Table 2 Financial Evolution in Iceland



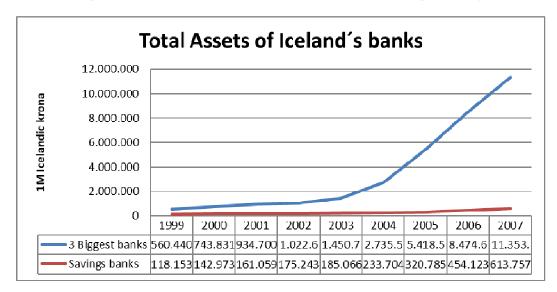
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Foreign direct investment liberalized in accordance with EEA agreement	1995
Privatization process of the Icelandic banks begins	1998
Interbank money market	1998
Interbank FX swap market	2001
Privatization of state owned banks completed	2003

Source: Central Bank of Iceland, 2006 and Sigurjónsson & Mixa, 2011.

Following the privatization of the Icelandic public banks in 2002, they multiplied their size by capitalized money market funding, which included opening branches abroad and acquiring foreign financial institutions in large numbers (Sigurjonsson, 2010). While an explanation of such concerns at that time could have been explained by years of restrictive banking, as can be seen in figure 1, the total assets of the Icelandic banking system continued to increase rapidly, way beyond what a prior restrictive banking environment could explain away.

Figure 1 Total Assets of Iceland's 3 Main Banks and the Savings Banks System



Source: Annual Reports of Iceland's 3 main banks, Kaupthing bank, Islandsbanki and Landsbankinn, Special Investigation Commission (2014) and calculations done by the authors

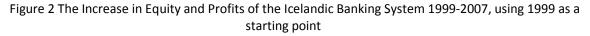
The combined total assets of Iceland's main three banks were less than Iceland's GDP in 1999. The total assets had gone a long way to three times the GDP in 2003 when concerns of overheating in lending were beginning to be heard. That was, however, just beginning. The combined balance sheets of the banking system, which was approximately the same as the amount of Iceland's gross domestic product (GDP) in a

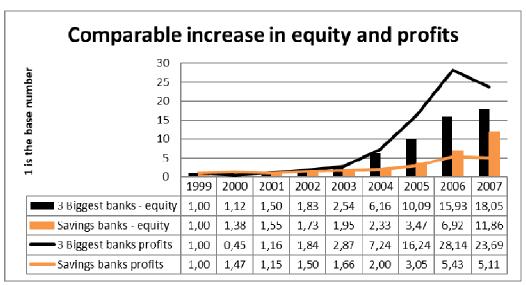


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single year around the 2000, had grown to around 7-8 times that figure in 2007 (Halldorsson & Zoega, 2010).

By swelling the total assets of the Icelandic banking and putting a more emphasis on investment banking, profits in the friendly investment banking environment in the world were in few places as apparent as in Iceland. Figure 2 shows the increase in equity and profits, using 1 as the base point in 1999.





Source: Annual Reports of Iceland's 3 main banks, Kaupthing bank, Islandsbanki and Landsbanki, Special Investigation Commission (2014) and calculations done by the authors

As figure 2 shows, the profits began in earnest swelling and equity increasing in 2003 and onwards. This was not a coincidence. The privatization of the Icelandic banking system was concluded those years. While the overvaluation of technology stocks leading to great losses, events like 9/11 and the bankruptcy of major companies like WorldCom and Enron had had very negative effects on financial markets, the Icelandic banking system rode the tails of fantastic years in the stock market the following years more than practically any banking system in the world.

This rapid growth of the Icelandic banking system opened doors to risky loans and financing methods. The Icelandic banks had financed their obligations on a very short-term basis, for example through newly formed subsidiary Internet banks. Debt, mainly short-term debt maturing in three to five years, had increased a great deal during the years of expansion (Special Investigation Commission, 2010, 3). This was the means to finance the rapid speed of expansion following the privatization of the 3 main banks. Bagus &



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Howden (2009) maintain that this made them more vulnerable to the liquidity crisis during the 2007-2009 period, resulting in Iceland's 3 main banks' failure to refinance their short-term debt following a run on deposits in the UK and Netherlands.

The fall of Lehman Brothers in September 2008 demonstrated that a large financial firm could go bankrupt without nation state assistance. With international money markets completely frozen, liquid resources vanished and assets became untradeable. A bank run began on the complete Icelandic financial system. The government took over Glitnir bank's operations on October 6. Due in part to the interconnectedness of the Icelandic banking system, both Landsbanki and Kaupthing bank followed in the following days.

The losses were enormous. The Icelandic economy went into a tailspin with a combination of the Icelandic krona losing half of its value (Central Bank of Iceland database, not dated), the stock market practically losing all of its value and the pension fund system losing around 25% of its assets (Icelandic Pension Funds Association, 2012). Many Icelanders lost their homes, jobs and security with unemployment reaching levels not seen in decades (Sigurjonsson & Mixa, 2011). While the Icelandic nation lost a great deal, it could have been worse. The credit losses were unheard of, with foreigners losing what amounted to two times the amount of Iceland's entire real estate value (Mixa, 2011), with the Icelandic banks combined losses only less than Lehman Brothers when it comes to credit default the entire 1920-2008 period (Moodys, 2009).

While those losses were enormous, the Icelandic government has managed to re-build the banking system. New banks were formed with the assets from the old banks transferred to newly established banks. Arion bank was formed with the Icelandic government owning 13% of the bank, Islandsbanki became wholly owned by the Icelandic government in 2015 following negotiations with creditors (Ministry of Finance and Economic Affairs, 2017b) with Landsbanki also wholly owned by the Icelandic government in 2009.

Laws and regulations have been tightened. A major issue revolves around the "Too Big to Fail" concept, i.e., banks that entail systematic financial risks. During the 2008 financial crisis, it became obvious how intertwined the Icelandic banks were with each other and how their operations affected the Icelandic economy and hence society. With this in mind, the minimum equity ratio for the three big commercial banks rose from 8% (Financial Supervisory Authority of Iceland, 2014) to 16.5%; with banks that may pose systematic financial risks having an additional 2% combined capital buffer compared to other less systematically important banks (Financial Supervisory Authority of Iceland, 2016). This was done to ensure that the Icelandic banking system is more immune towards domino effects during a banking crisis. Icelandic banks have been responding to this scenario. By looking at the ratio of equity against total liabilities, the ratio has been increasing in recent years, although in small degrees.

When one looks at the equity ratio, i.e., the amount of equity compared to total assets, one can see that it is relatively high. While total assets have increased around 14% during the last five years, the equity



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of banks has increased 27% during the same period. Looking at the equity/total assets ratio, the banks are less leveraged now than they used to be shortly after the crisis.

Icelandic krona M	2016	2015	2014	2013	2012
Total Equity	641.556	668.658	598.490	553.577	503.726
Total Assets	3.194.711	3.175.427	2.943.398	2.956.425	2.808.862
Equity/Assets ratio	20%	21%	20%	19%	18%

Table 3 The Combined, Assets, Equity and Equity/Assets ratios of the Three Main Icelandic Banks

Source: 2016 Annual Reports of Arion Bank, Landsbanki and Islandsbanki (2017)

This may be surprising since the stableness of the Icelandic banking system has increased a great deal. While the ratio of non performing loans was high following the crash, it has for example gone from 31.4% at Landsbanki in 2012 down to only 2.4% in 2016 (Landsbanki, 2017). The same bank, actually the whole Icelandic banking system, had for a short while a rating of AAA in 2007, but even at that time was controversial (Globe and Mail, 2007). Following the crash, Landsbanki received a junk-bond rating of BB+, which could be considered being a speculative investment grade, but has now followed in the footsteps of the Icelandic government by having better investment ratings, which is today up to BBB, which is an investment grade rating.

Iceland's GDP in 2016 was approximately 2,400,000M Icelandic krona (Statistics Iceland, not dated) which means that the total assets of the Icelandic banks compared to Iceland's GDP is slightly higher than 1.2 fold. The main systematic risk for the Icelandic government has today more relevance due to its ownership in the banks, which price-to-book value today is close to 500,000M Icelandic krona, or over 20% of Iceland's GDP (Ministry of Finance and Economic Affairs, 2017b; Landsbanki, 2017; Arion bank, 2017; Islandsbanki, 2017; Statistics Iceland, not dated & authors' calculations). If the Icelandic banking system would suffer another crisis, there would be a double blow, with both an economic crisis and taxpayers at the same time, possibly having to finance a crumbling banking system.

There is thus a great deal of talk of making the Icelandic banking system smaller, possibly selling part of Iceland's ownership back to private investors with the current government looking into possibilities of selling its stake in the Icelandic banks. Doing that would, however, take many years using merely the domestic market. Also, many people oppose such a sale, pointing out how badly the former privatization ended. There is also much talk about separating the investment side of banking and commercial banking. It has actually become an annual theme in Parliament to introduce legislation to separate such units, with many pointing out the inherent dangers of allowing banks to participate in investment banking backed with government assistance in the form of for example deposit insurance (Mixa, 2015). It does not mean that banking can be safe simply by concentrating on commercial banking (Admati & Hellwig, 2013) but the risk level of banking does without doubt increase once banks are allowed into the investment-banking arena.



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4. Discussions on Comparative Study of the Romanian and Icelandic Banking Systems

4.1. Similarities between the two banking systems

If we are looking superficial, Romania and Iceland might seem to have witnessed a development of very different banking systems. A closer inspection, however, reveals many similarities.

Both banking systems were characterized by late development. In Romania, the bank that issues currency – The National Bank of Romania - was founded in 1880, only five years before The National Bank Iceland, founded in 1885. Also, the savings banks were established in the two countries in about the same period of time. Both in Romania and Iceland, foreigners have contributed to the creation and development of banking systems. One can mention Danish traders in Iceland or French and German capital in Romania (see Murgescu, Constantinescu ed., 1960) and also those Icelandic banks were to a great extent funded through European banks during the 1999-2008 period.

Prior to the 1990s, both countries had banking systems dominated by politics. In Romania, the Communist party controlled the system centrally. In Iceland, the political ties concealed to some extent that while different banks existed, those banks were mostly tools for pressure groups to gain access to money, which often was to some extent free due to negative interest rates. It can thus be said that both countries only started during the 1990s to develop banking systems that can be described in varying portions as modernized.

A common feature of both banking systems prior to the 1990s was the presence of specialized banks. The names of these banks reflected the sector they served. There were the following specialized banks in Romania:

- Banca de Investiții (The Investment Bank);

- Banca pentru Agricultură și Industria Alimentară (The Bank for Agriculture and Food Industry);

- Banca Română de Comerț Exterior (The Romanian Bank for Foreign Trade);

- Casa de Economii și Consemnațiuni (The Savings House).

The specialized banks that operated in Iceland:

- The Industrial Bank;
- The Icelandic Bank of Commerce;
- The Bank of Fisheries.

As one can notice, the names of these specialized banks in both countries were similar, the sectors served by specialize banks being the same (commerce, industry, agriculture).

In Romania, the liberalization of banking and capital began after 1990. There were few banks at the beginning of the transition process towards the market economy. In a similar fashion, the liberalization of capital began for real in Iceland after 1995.

The accession to the European Union, respectively the European Economic Area, played an important role for internationalization of both Romania and Iceland. The Agreement for Romania's Association to the EU was signed in 1993 and the official application for EU membership was presented in 1995. Romania joined the EU in 2007 (Ministerul Afacerilor Externe, *Chronology of Romania-EU relations*, available at https://www.mae.ro/sites/default/files/file/userfiles/file/pdf/chronology_romania_ue.pdf). To this end, the Romanian legislation has been aligned with the EU legislation by adopting the acquis communautaire. Iceland joined the European Economic Area in 1995.



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Other similarities regarding the privatization process of banking system. Until privatization process began, there were big state Romanian banks without experience and expertise in "new" banking. The first state owned bank was privatized in 1999. Subsequently, the privatization of Banca Comercială Română in 2006 almost completed the privatization process of the Romanian banking system. In Iceland, the bank privatization was realized during 1998-2002. Like the banks in Romania, prior to the privatization process, Icelandic banks had also almost no experience and definitely no knowledge to handle any financial crisis following such rapid expansion.

In the pre-crisis period, both banking systems expanded activity. The expansion of credit activity in both countries occurred after periods of restrictive banking. The global financial crisis greatly affected both banking systems, even if the business model developed by banks in the two countries were different. Nevertheless, during the pre-crisis period, banks in both countries expanded rapidly that yielded short-term profits without taking into considerations the impact on long term situations.

The global financial crisis greatly affected the two banking systems and consequently both countries have taken measures to improve the banking regulatory framework, in line with the regulatory developments at the international level.

4.2. Differences between the two banking systems in recent years

In the pre-crisis period, the Romanian banks developed the traditional business model. The balance sheets of the Romanian banks did not contain "toxic" assets. Securitization was not used and the shadow banking system was not well represented. After the crisis, the Romanian state did not allocate funds to capitalize banks. On the other hand, in Iceland investment banking expanded rapidly within the banks.

Following the privatization process, the inflow of money for the Romanian banking system came almost entirely from abroad but the banking system in Iceland was to the most extent financed with domestic ownership that relied on a great degree on foreign loans.¹

This had positive effects on the Romanian banking system in regards to experience in banking and increase competition. There is, however, a downside. Foreign owners of the banks have been reluctant to write off bad loans or face in any meaningful way the non performing loans, which are still so high. Besides, a potential disadvantage of a massive foreign capital contribution in a banking system is the possibility to withdraw rapidly from the local market, with negative effects on the financial system and national economy. In this respect, very important to prevent the withdrawal in disordered manner of cross-border banks groups from both Romania and other countries in Central and Eastern Europe was the Vienna initiative launched in 2009 (see ECBI, Vienna Initiative 1.0 – Overview, available at http://vienna-initiative.com/vienna-initiative-part-1/overview/).

Apart the uncertainty related to ceasing operating in Romania, Zaman (2013) underlines the fact that the subsidiaries of foreign banks in Romania pursued firstly the parent-banks interests and then the interests of the Romanian economy.

While the Icelandic government was (rightly) criticized for its reluctance in having foreigners invest in its banking system, meaning that instead they were financed more by foreign creditors, it was easier for the

¹ The financing is beyond of this paper but much of the financing of the Icelandic banking system appears to have been through investment schemes in which money was basically printed by banks and some of their best business partners.



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Icelandic government to take over the operations of those banks, with foreign creditors picking up most of the losses during the financial crisis. This has enabled the Icelandic banking system to work with creditors in re-scheduling their debt payment plans and, as the example of Landsbanki shows, the non performing loans have gone down to very low levels.²

Due to the limited possibilities to develop at an internal level (as we mentioned, Icelanders only count 340,000 people) and eager to generate profits, the Icelandic banks choose to expand oversee and opened offices abroad. Instead, in Romania, foreign banks opened subsidiaries and branches to exploit the growth potential and lack of experience of this market with about 20 million people.

Following a similar discussion regarding the source of money, the ownership nationality shows that problems can emerge regarding agency issues. In Iceland, the domestic owners of banks were accused of various sorts of crony capitalism (Special Investigation Commission, 2010). Such practices utilized, for example, nationalistic themes to have the Icelandic nation accept the risky behavior of the banks' expansion and their rapid growth, which had to entail some risks (Loftsdottir & Mixa, 2014). While many deemed such behavior as reckless and even stupid, the (domestic) owners of those banks might have had an incentive to take those risks because they did pocket (very) large bonuses while the going was good (Mixa, 2016). While such ownership contributed to the reckless behavior, it also enabled the Icelandic government to tackle the situation much better. After agreements with foreign creditors in 2015, it has even been suggested that the financial (not emotional) damaged from the 2008 crisis by the government has been retrieved (Jonsson & Sigurgeirsson, 2016).

This was the reverse situation in Romania. While foreign owners were maybe more prudent in their practices, their investments in Romania have been kept to a minimum and the government has limited powers to re-store the banking system in a manner that it begins lending again and thus bringing the Romanian economic growth back on a path of economic growth.

Therefore, due to the vulnerabilities the subsidiaries of foreign banks pose to the Romanian economy, especially in the crisis period, Zaman (2013) considers that a priority of Romania is the development of a banking system with domestic capital to finance the national economy in a sustainable way.

5. Conclusions

The comparative analysis of the Romanian and Icelandic banking systems reveals, surprisingly, a multitude of similarities in terms of historical evolution, despite the fact that between the two countries were big differences from many points of view - economic, political or social. Even geographically, the two countries are located at great distance, with large differences regarding the number of inhabitants.

However, both banking systems began to develop relatively late in the second half of the nineteenth century, with foreign capital playing an important role. The crisis of 1929-1933 affected both banking systems.

After the Second World War, Romania came under Soviet influence and the monobank system was implemented. Even though Iceland did not have the same political evolution, the Icelandic banking system was until the 1990s subject to restrictive controls, with the political factor also playing an important role.

² The tourist industry boom in Iceland that began in 2010 has also had a great effect in assisting people finding new jobs, making Iceland's GDP growth among the highest in the world in recent years.



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After 1990, both banking systems began the process liberalization. Romania's accession to the EU and Iceland's accession to the EEA have been key moments in the development of the two banking systems.

In the late 1990s and early 2000s, the two banking systems were subjected to the privatization process. A notable difference between the two banking systems is the buyers' country of origin for the privatized banks. Foreign capital dominates the Romanian banking system, while in Iceland foreign capital financed the rapid growth to a large degree but the ownership was mostly domestic.

In the pre-crisis period, both banking systems expanded activity. The global financial crisis greatly impacted both banking system, despite the business models developed by banks in the two countries were different.

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More details on the EEA grants for Higher Education: http://eeagrants.org and www.see-burse.ro.

7. References

- [1] Admati, A. & Hellwig, M., 2013. *The bankers' new clothes: What's wrong with banking and what to do about it.* Princeton University Press, Oxfordshire, 46-59.
- [2] Agnarsson, S., 2004. Fjármagnið og útgerðin. Í Eggert Þór Bernharðsson (Ritstjóri), *Rætur Íslandsbanka 100 ára fjármálasaga*, Reykjavík: Íslandsbanki, 95-132.
- [3] Anghelache, G., 2004. Piata de capital. Bucharest: Editura Economică.
- [4] Arion bank, 2017. Annual Report 2016.
- [5] Bagus, P. & Howden, J.D., 2009. *Iceland's banking crisis: The meltdown of an interventionist financial system*. Available at Ludwig von Mises Institute website http://mises.org./story/3499 accessed 26 May 2017.
- [6] Baicu, C. G. & State, O., 2012. Banking models under the impact of the post-crisis organizational changes apt to confer sustainable financial stability Romanian experience. *Amfiteatru Economic*, Vol. XIV, N. 32 (June).
- [7] Bibler, J., 2010. *Hversu mikið var fall íslensku bankanna á heimsmælikvarða*? [How extensive was the fall of the Icelandic banks internationally?]. Available at http://fme.is/?PageID=14&NewsID=521.
- [8] BNR (Banca Nationala a Romaniei), Rapoarte anuale 1996-2000.
- [9] Central Bank of Iceland, 2004. Ræða formanns bankastjórnar Seðlabanka Íslands 23. mars, 2004. Available at http://www.sedlabanki.is/uploads/files/%C3%81varp%20BIG%2023.3.04.pdf accessed 5 June 2017.
- [10] Central Bank of Iceland, 2006. *The economy of Iceland*. Available at http://www.sedlabanki.is/lisalib/getfile.aspx?itemid=4689 accessed 28 December 2008.
- [11] Central Bank of Iceland database, not dated.
- [12] ECBI, Vienna Initiative 1.0 Overview. Available at http://vienna-initiative.com/vienna-initiative-part-1/overview/ accessed 27 May 2017.



- [13] Englund, P., 1999. The Swedish banking crisis: Roots and consequences. Oxford Review of Economic Policy, 15(3), 80-97.
- [14] Financial Supervisory Authority of Iceland, 2002. *Leiðbeinandi tilmæli um innra eftirlit og áhættustýringu hjá fjármálafyrirtækjum nr. 1/2002.* Available at <u>http://www.fme.is/log-og-tilmaeli/leidbeinandi-tilmaeli/nr/908</u> accessed 7 June 2017.
- [15] Financial Supervisory Authority of Iceland, 2003. Leiðbeinandi tilmæli um aðskilnað reksturs og vörslu og óhæði rekstrarfélaga verðbréfasjóða skv. 15. gr. laga nr. 30/2003, um verðbréfasjóði og fjárfestingarsjóði. nr. 5/2003. Available at http://www.fme.is/log-og-tilmaeli/leidbeinandi-tilmaeli/nr/930 accessed 7 June 2017.
- [16] Financial Supervisory Authority of Iceland, 2014. *Nýjar eiginfjárreglur á grunni CRDIV/CRR*. Available at https://www.fme.is/media/frettir/Nyjar-eiginfjarreglur-1.pdf accessed 28 May 2017.
- [17] Financial Supervisory Authority of Iceland, 2016. Ákvörðun Fjármálaeftirlitsins um álagningu eiginfjárauka. Available at http://www.fme.is/media/akvardanir/Akvordun-FME-um-alagningu-eiginfjarauka.pdf accessed 28 May 2017.
- [18] Finsen and Skulason, 1938. Nutidens Island I tekst og billeder. I anledning af tyveaarsdagen for Islands selvstændighed. Fálkinn, Reykjavík.
- [19] Globe and Mail, 2007. A Moody's new take on bank rating has markets crying foul. Available at https://www.theglobeandmail.com/report-on-business/moodys-new-take-on-bank-ratings-has-markets-cryingfoul/article721892/ access 28 May 2017.
- [20] Gusti, P.D., 1943. Enciclopedia Romaniei, vol. IV. Bucharest: Imprimeria Nationala.
- [21] Guvernul Romaniei, 2012. Ordonanta de urgenta nr. 93/2012 privind infiintarea, organizarea si functionarea Autoritatii de Supraveghere Financiara. *Monitorul Oficial*, Partea I nr. 874 din 21/12/2012.
- [22] Guvernul Romaniei, 1998. Ordonanta de urgenta nr. 51/15 decembrie 1998. Monitorul Oficial, Partea I nr. 482 din 15/12/1998.
- [23] Halldorsson, O. & Zoega, G., 2010. Iceland's Financial Crisis in an International Perspective. Institute of Economic Studies Working Paper Series. University of Iceland. Reykjavik. Available at http://hhi.hi.is/sites/hhi.hi.is/files/Wseries/2010/WP1002.pdf accessed 8 July 2014.
- [24] Icelandic Pension Funds Association, 2012. Úttekt á fjárfestingarstefnu, ákvarðanatöku og lagalegu umhverfilífeyrissjóðannaíaðdragandabankahrunsins.Availableathttps://rafhladan.is/bitstream/handle/10802/7310/Slides.pdf?sequence=5 accessed June 14 2017.
- [25] INS (Institutul National de Statistica), 2016. Populatia Romaniei pe localitati (January).
- [26] INS (Institutul National de Statistica), 2015. Romania in cifre.
- [27] INS (Institutul National de Statistica), 2011. Rezultate definitive ale Recensamantului Populatiei şi al Locuintelor 2011 (caracteristici demografice ale populatiei). Available at http://www.recensamantromania.ro/wpcontent/uploads/2013/07/REZULTATE-DEFINITIVE-RPL_2011.pdf) accessed 10 January 2017.
- [28] Ionescu, L. (coordinator), 1996. *Bancile si operatiunile bancare*. Bucharest: Editura Economica, Institutul Bancar Roman.
- [29] Islandsbanki, 1999-2007 & 2017. Annual Reports dated the years 2000-2008 and 2016 but published the year after.



- [30] Johannesson, S., 2004. Frelsi á fjármagnsmarkaði eftir 1980. Eggert Þór Bernharðsson (editor), *Rætur Íslandsbanka 100 ára fjármálasaga*. Reykjavík: Íslandsbanki, 185-211.
- [31] Jonsson, A., 2009. Why Iceland? New York: McGraw Hill.
- [32] Jonsson, A. & Sigurgeirsson, H., 2016. Kostnaður og endurheimtur ríkissjóðs af falli bankanna. Ministry of Finance and Economic Affairs, Reykjavik. Available at https://www.fjarmalaraduneyti.is/media/frettatengt2016/Kostnadur-og-endurheimturri%CC%81kissjo%CC%81ds-af-falli-bankanna-skyrsla.pdf accessed 20 May 2017.
- [33] Jonsson, G., 1995. Þjóðernisstefna, hagþróun og sjálfstæðisbarátta. Skírnir 169(vor):65-93.
- [34] Jonsson, G., 2004. "Myndun fjármálakerfis á Íslandi", *Rætur Íslandsbanka. 100 ára fjármálasaga*. Ritstjóri Eggert Þór Bernharðsson. Íslandsbanki (Reykjavík 2004), 9–54.
- [35] Jonung, L., 2008. Lessons from financial liberalization in Scandinavia. Comparative Economic Studies, 50, 564-598.
- [36] Kaupthing bank, 2002-2007. Annual Reports.
- [37] Kiritescu, C., 1997. Sistemul banesc al leului si precursorii lui (vol. I-III). Bucharest: Editura Enciclopedica.
- [38] Landsbanki, 2002-2007 & 2017. Annual Reports dated the years 2003-2008 and 2016 but published the year after.
- [39] Loftsdottir, K. & Mixa, M.W., 2014. Bankar í ljóma þjóðernishyggju. Skírnir, vorhefti.
- [40] Mauri, A. & Baicu, C. G., 2002. Storia della banca in Romania Parte Prima. *Working Paper n. 18.* Dipartimento di Economia Politica e Aziendale, Università degli Studi di Milano (luglio).
- [41] Ministerul Afacerilor Externe. Chronology of Romania-EU relations. Available at https://www.mae.ro/sites/default/files/file/userfiles/file/pdf/chronology_romania_ue.pdf accessed 27 May 2017.
- [42] Ministry of Finance and Economic Affairs, 2017a. Samantekt um skuldir og vaxtagjöld ríkissjóðs. Available at https://www.fjarmalaraduneyti.is/frettir/samantekt-um-skuldir-og-vaxtagjold-rikissjods accessed 24 May 2017.
- [43] Ministry of Finance and Economic Affairs, 2017b. Drög að eigendastefnu fyrir fjármálafyrirtæki birt til umsagnar. Available at https://www.fjarmalaraduneyti.is/frettir/drog-ad-eigandastefnu-fyrir-fjarmalafyrirtaeki-birt-tilumsagnar accessed 24 May 2017.
- [44] Mixa, M. W., 2009. Once in khaki suits Socioeconomically Features of the Icelandic Collapse. Ingjaldur Hannibalsson (Ed.), *Rannsóknir í Félagsvísindum X*, 435-447. Reykjavík: Félagsvísindastofnun Háskóla Ísland.
- [45] Mixa, M. W., 2011. Hrun, íbúðarhúsnæði og Facebook [Crash, private property and facebook]. Available at https://www.slideshare.net/marmixa/20110126-hrun-ibudarhusnaedi-og-facebook accessed May 23 2017.
- [46] Mixa, M.W., 2015. Aðskilnaður banka núna er rétti tíminn. Available at http://www.mbl.is/vidskipti/pistlar/marmixa/2159988/ accessed May 22 2017.
- [47] Mixa, M.W., 2016. *The Icelandic bubble and beyond: Investment lessons from history and cultural effects*. Thesis for the degree of doctor of finance. Reykjavik University, Reykjavik.
- [48] Moody's, 2009. Corporate Default and Recovery Rates, 1920-2008, 8-19. Available at https://www.moodys.com/sites/products/DefaultResearch/2007400000578875.pdf accessed 22 May 2017.



- [49] Morgunbladid, 2004. *"Viðvörun til allra bankanna"*, 24 March 2004. Available at http://mbl.is/greinasafn/grein/788668/ accessed 24 May 2017.
- [50] Murgescu, C., Constantinescu, N.N. (ed.), 1960. Contributii la istoria capitalului strain in Romania: de la sfirsitul primului razboi mondial pina la iesirea din criza economica din 1929-1933. Bucharest: Editura Academiei Republicii Populare Romane.
- [51] NBR (National Bank of Romania), Dec. 2016, April 2016, 2015, 2013, 2009 and 2006. Financial Stability Report.
- [52] NBR (National Bank of Romania), 2015, 2001, 2000 and 1998. Annual Report.
- [53] Olafsson, S., 2003. The identity of Icelanders: Scandinavian or American? *Scandinavian Review*, 91(1). Retrieved from https://borg.hi.is/IcelandID.pdf.
- [54] Pintea, A., Ruscanu, G., 1995. Bancile in economia romaneasca 1774-1995. Bucharest: Editura Economica.
- [55] Popa, I., 1993. Bursa, vol. I. Bucharest: Editura Adevarul S.A.
- [56] Sigurjonsson, T.O., 2010. Privatization and Deregulation: A Chronology of Events. In *Documents on the Asset Price bubble in Iceland*, R. Aliber (Ed). Hampshire: Palgrave.
- [57] Sigurjonsson, T.O. & Mixa, M.W., 2011. Learning from the "worst behaved": Iceland's financial crisis and the Nordic comparison. *Thunderbird International Business Review*, 53(2), 209–223.
- [58] Slavescu, V., 1925. Istoricul Bancii Nationale a Romaniei:1880 1924. Bucharest: Cultura Nationala.
- [59] Special Investigation Commission, 2010. *Skýrsla rannsóknarnefndar Alþingis* [Report of the Special Investigation Commission regarding the events and causes leading to the fall of the Icelandic banks]. Available at http://sic.althingi.is/ accessed 22 May 2017.
- [60] Special Investigation Commission, 2014. Skýrsla rannsóknarnefndar Alþingis um aðdraganda og orsökum, erfiðleika og falls sparisjóðanna [Report of the Special Investigation Commission regarding the events and causes leading to the fall of the Icelandic savings banks system]. Available at https://www.rna.is/media/skjol/RNAsp_Bindi2_K6-10.pdf accessed 22 May 2017.
- [61] Statistics Iceland, not dated. Retrieved from the database, accessed 24.5.2017 at http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar_mannfjoldi_1_yfirlit_yfirlit_mannfjolda/MAN00000.px/tab le/tableViewLayout1/?rxid=e0e181ea-08c9-40f7-8ffe-593d5c6ed648.
- [62] The World Bank, 2013. Reversal and Reduction, Resolution and Reform: Lessons from the Financial Crisis in Europe and Central Asia to Improve Outcomes from Mandatory Private Pensions (May).
- [63] Zaman, Gh., Georgescu, G., 2015. Challenges of bank lending in Romania on short, medium and long term. Procedia Economics and Finance 22. Elsevier 88-94.
- [64] Zaman, Gh., Goschina, Z., 2015. Romania's sustainable development requirement from the viewpoint of regional economic bank's crediting. *Procedia Economics and Finance 32*. Elsevier, 125-130.
- [65] Zaman, Gh., 2013. Aspects and Trends of crediting the Romanian Economy in Lei and Foreign Currency During the Pre- and Post-Accession Periods. *Romanian Journal of Economics*, Volume 36, Issue 1(45) (June).



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The Audit of the Quality Control System within the Information Technology Field

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Abstract. The present paper speaks about the audit of the quality control system. First we exposed the general framework; the importance of information technology field under the actual development and challenges of the informatics systems. Then, we presented the national and international laws which regulate the audit of the informatics systems. Thirdly, we exposed the methodology of the audit for the quality system control in IT domain, describing its stages and flux diagram. In the end we jumped at the conclusions.

Keywords: informatics systems, information technology, company management, audit system

JEL Codes: M15, M42

1. Introduction

The development and exploitation of the informatics systems within the information technology have a very dynamic rhythm of development, due to the hardware performance brought by nanotechnology on one hand and software exigencies on the other hand.

Under these circumstances, the field of information technology became one of the strategic importances; it has been regulated by international laws and agreements. The products in the field of information technology exposes the technology suppliers to wide scientific research so as the future characteristics of the new products fulfill the requirements and the needs of the market. So, one of the most important concept is quality. The evolution dynamics of a product quality is connected to the product characteristics and lack of deficiencies^{*i*}. The evaluation of the informatics system is a very important research field. Quality became a major problem for the present day's company management^{*ii*}.

The evaluation of the informatics system performances is a very important research issue. Quality has become a major problem of the company management. So, one imposes the defining of the performance evaluation models, in order to establish the measure so as the report between cost and quality allows both the increase of the users and the guaranty for return on investments.

2. The law framework

The audit of the informatics system develops itself within the context of the following national and international laws:



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- COBIT (Control Objectives for Information and related Technology) is a set of good practice for the information technology management, created by ISACA
- (Information Systems Audit and Control Association) and IT Governance Institute;
- Quality standards ISO 9126, ISO 9000-4:2000 regulate the national and international law framework of the products and informatics services quality;
- Guides and procedures as concern the risks and the implementation of the informatics systems control are realized by ISACA (Information Systems Audit and Control Association);
- IT Governance Institute published a series of standards for defining and implementation of the informatics systems control objectives;
- SAC System Audit ability and Control published by IIARF (Institute of Internal Auditors Research Foundation);
- Internal Control Integrated Framework published by COSO (Committee of Sponsoring Organizations of the Tread way Commission);
- SAS55 with its further amendment SAS78 (Consideration of the Internal Control Structure in Financial Statement Audit), published by ICPA (American Institute of Certified Public Accountants);
- Chamber of Romania Financial Auditors assimilated totally the International Intern Audit Standards, including the ones for informatics systems media CIS (Computerized Information Systems);
- ISO/IEC 177799 audit standard for information technology;
- INTOSAI requirements for accepted international audit, International Organization of Supreme Audit Institutions;
- CAATs (Computer Assisted Audit Techniques), techniques of computer assisted audit;
- Guide of the informatics systems, Court of Auditors;
- Manual for Informatics Systems Audit, Court of Auditors.
- Law no. 672/2002 concerning the intern public audit
- Public Finance Ministry Order no. 38/2003
- ISO/IEC 27001:2005 Information technology Securities techniques Information security management systems
- Resolution no. 67/2016 to amend and supplement the Decision of the Board of the ASF no. 76/2015
- ISO 14000 EMS Audits. The Audit
- ISO 19011 Guidelines for quality and/or environmental management systems Information Technology Control and Audit, second edition – F. Gallegos, S. Senft, D. Manson, C. Gonzales, Ed. Auerbach Publications, 2004.
- IT Sandards, Guidelines, and Tools and Techniques for Audit and Assurance and Control Professionals ISACA, 2010

3. Methodology of the audit for the quality system control in IT domain

The informatics audit, under all its aspects, occupies a well-defined place in informatics society. It represents an essential element for building both complex hardware and software architectures. There are numerous elements that identify the purpose of auditing control systems, such as:





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- Evaluation for quality control system conformity in concordance with the specified producers recommendations;
- Evaluation of the quality control system efficiency as concern the established objectives;
- Increasing of the quality control system performances of the company;
- The observing of the rules and also the satisfaction of the company needs;
- Certification of the company quality control system.
- AICPA (American Institute of Certified Public Accountants)ⁱⁱⁱ recently launched the initiative of audit quality by consolidating some rules that help the practitioners in reaching the excellence level in auditing process. The audit of the quality control system proposes to measure the companies' system efficiency.

Within the field of information technology, the audit can be analyzed by observing the following main stages: 1. audit initiation, 2. documents analysis, 3. preparation for the specific audit at a certain place, 4. audit activities specific to the place, 5. the report of the audit results, 6. audit ending and 7. optionally, the following audit, as they are represented in figure no. 1.

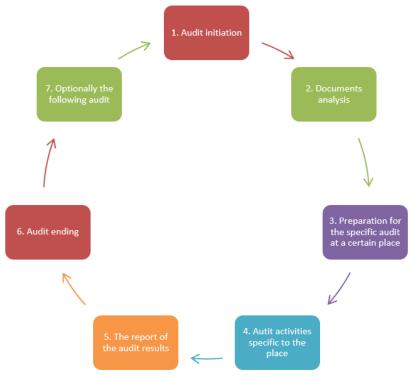


Fig.1: Stages of audit process – processing after ISO/FDIS 19011:2002 standard Each and every audit stage of the quality control system has specific features, exemplified as follows:



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The stage of *audit initiation*

Audit initiation

- Establishing the objectives and criteria
- Audit impact
- Establishing the audit team
- Starting the audit process at a certain place

The influential factors at this stage are:

- Customization with the company specifications;
- The unanimous acceptance of the identified objectives; these are contractually assumed;
- The communication of the requirements connected to: exploitation reliability, usage availability, optimization of the execution process;
- Methods for products projection and facts that influence them;
- Technology used for IT components production;
- Clear communication of the content of the audit process;
- Avoiding all incompatibility situations;
- Notification about the starting of the audit procedure;

The role of this stage is an important one, because the success or the failure of the audit process depends on how well this activity is planned and founded.

The stage of *documents analysis*

Documents analysis

- Solicitation of the documents reflecting the IT products quality management system
- Disponibility of the documents reflecting recordings of the real situations
- Establishing the way of conformities determination

This stage comprises the following aspects:

- Analysis of the documentation conformity with the company field of action;
- Establishing the competences of the personnel involved in the quality control activity;
- Verifying the documents, recordings and decisions for every hierarchic level;
- Information phase requires collecting specific documents connected to tasks and responsibilities;
- The analysis of the documentation for the quality control system reflects effects as concern the communication with clients, defining the life cycle, continuous adapting of development, products testing, related processes to IT products configuration;
- Presenting the centralized lists with auditable objects;



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- Risk evaluation and internal control.

The audit program is elaborated respecting the risks planning and evaluation and also the internal control, when the auditor has a clearer image on the system to be audited. This program represents a guide for the procedures to be realized during the picking prove stage^{iv}.

Collecting and processing data represents the stage of picking information for risk analysis and also for reaching the objectives of audit mission. The activities realized during this stage have a substantial contribution to the knowing of the auditable domain; these help the auditor to familiarize with the company to be audited^v.

Stage preparation for the specific audit

Preparation for the specific audit

- Detailed audit planning (graphic)
- Tasks allocation of the audit team
- Working documents allocation

The specific audit at a certain place is regulated by the standard ISO 19011. Within this stage, we can mention:

- Input data for audit planning (general information about the company, its specific activity, its web page, the identified market segment, hardware and software company capacity, prior audit reports, plans for developing and testing IT products);
- Audit planning (has co comprise proper visibility for all activities, types of projects and used methods for producing IT components and their quality control; a more detailed examination can be solicited by the chief auditor for better and real results)
- Establishing the audit techniques have to be adapted for reaching the purposed aim. The auditing of the activity conformity against its quality control system imposes the auditors' objectivity and sampling capacity.

Stage specific audit activities

Specific audit activities

- Open session of the audit activity
- Verifying information by confronting the registrations
- Auditor opinions
- Communication with the beneficiary
- Ending session

This stage of specific audit at a certain place is the most complex one; it requires the most consistent resources allocation. It can be realized through interviews with the deciders and the executants, documents examination, the products quality, noticing the specific activities for projection and production, the conditions of production activity.

In order to be taken into consideration, information has to fulfill the following requirements: be proved, be sure and demandable, relevant for audit activity, lead to a measurable result.



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The audit of means of realizing the IT products can be done through three techniques:

- Choosing a sample of products and follow their evolution, from the projection to delivery, in order to verify the accuracy of all stages;
- ✓ The second technique is the reverse way, from delivery to projection; here we analyze the outputs at every level;
- ✓ The auditing of every phase of projection, for several implemented projects.

One way to objectively present the reality at a certain place is reflected by the flux diagram for the audit stages, as presented below:

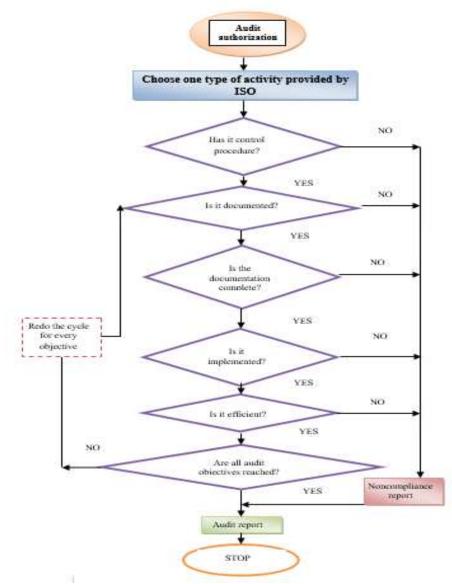


Fig.2: Flux diagram for audit stages





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The flux diagram of audit stages will direct the auditor towards the process of collecting and verifying information, in order to establish the audit conclusions. This process evolves continuously, until all the objectives planned in the Audit Plan and Audit Questionnaire are fulfilled.

The audit observations are based on the gathered proves are reflected in conformities and noncompliance of the quality control system. The sources for obtaining pertinent proves are^{vi}:

Prior audit reports;

•A beneficiary complaint, reception refusal, complains during guarantee period;

•Quality recordings;

• Documents;

•Flaws, remedial;

•Prior corrective actions;

•Activity observation during the audit process;

•Interviews with the employees involved in quality activities.

Stage *audit report*

Audit report contains:

- Quality control system conformity
- Eficiency of implementing quality control system
- Deciders capacity of assuring quality control system
- conformity and efficiency

In this stage we have to focus all conclusions and establish all necessary measures that lead to noncompliance correction. Every physic and also functional noncompliance has its specific and punctual correction measure; the process of technological flux has to be corrected only by strict interventions. The base for corrections respects the standard ISO 10007 and MIL STD 1521B. The report will present aspects such as:

- Level of knowledge and their relevance of the employees involved in process of production and quality control system



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- The way of fulfillment of individual and collective tasks
- Degree of activity conformity
- Documents accuracy
- Company qualified personnel
- Verifying the way in which the internal audit is done

Stage audit ending

Audit ending consists in:

- Management notification about the control of quality assuring system
- Beneficiary awareness of corrective measures impact

The ending audit meeting is rather short; usually it lasts no more than two hours and presents the following documents:

- \checkmark presentation material;
- ✓ audit team proves;
- ✓ partial and final conclusions of the audit process.
- ✓ This meeting is presided by the chief auditor who has to focus on:
- ✓ presenting the audit team and the manner this collaborated with beneficiary employees
- ✓ the audit scope is that of assuring the IT products quality control
- ✓ the resume of the audit report
- ✓ graphs of audit products and processes are presented
- ✓ audit limits
- ✓ noncompliance are presented and also the way this affects the quality control system
- ✓ an honest auditor can admit that there can be undiscovered noncompliance
- ✓ report signing and final conclusion

Stage following audit

Following audit focus on:

- Noncompliance
- Noncompliance resolving
- Noncompliance correction



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The IT products noncompliance of the quality control system is specified by the standard SR EN ISO 9001/2008. The chief auditor presents them. These can be seen as major or minor and simple observations. All these are to be presented in the audit reports and signed by the beneficiary. The role of the auditor is to explain and propose the beneficiary to program the following audit and certification audit.

4. Case study: The analysis of the operation of the software testing systems

The software testing measures the quality of the informatics systems and informatics applications developed by programmers, taking into considerations the code writing, the complete solutions to system requirements and security; it may also include technical requirements described by quality standard ISO 9126, such as: capability, reliability, efficiency, portability, maintainability, compatibility, usability.

- ✓ Testing levels represent the rank of the testing procedures. It can be realized at the level of component or module, it can be an integrated testing, testing at the level of the whole informatics system, testing the system integration, testing the acceptability.
- ✓ Testing at the level of informatics system components verifies the minimal component parts of the system or of the software modules.
- ✓ The integrated testing identifies the drawbacks of the user interface and of the integrated modules interactions.
- ✓ Testing the informatics system represents the requirements accomplishment by the informatics system.
- ✓ *Testing the system integration* assumes the verification of the implementing procedures.
- ✓ *Testing the acceptability* can be requested by the final user, client or buyer.
- ✓ Testing the alfa version is a simulated testing or an operational testing done by the possible clients or users, in order to verify the system functionality.
- ✓ Testing beta-versions are offered to a limited number of people, in order to identify possible errors in function.

After the software modifiers, in order to remedy drawbacks, regression tests are to be done for relaunching the initial tests.

5. Conclusions

The audit activity of quality control system in the field of IT technology is the responsibility of each company which adopted standard ISO 9001/2000. This specific audit activity better quantifies the quality control of an informatics system, by using analysis techniques. Specialized tests will be applied to a sample and depending on their relevance they can be resized in order to lead to pertinent and evident conclusions. One can notice elements belonging to produced systems, analyze and test components of the informatics systems architecture and determine quantitative and qualitative measurement.

The interviews, discussions and questionnaires propose to reflect the quality of the whole execution process; they are based on complex mechanisms of identifying the noncompliance, so that their corrections lead to quality certification.



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The basic rule of the audit process is following the activities in their usual succession, such as: contracting, projection, homologation, execution, delivery.

The zone auditing requires every interview to comprise four basic aspects connected to:

- ✓ persons responsibility and authority, education;
- ✓ procedures availability, the fulfillment degree of the audit activity, application;
- ✓ equipments if they are those specified in the procedures , if they require manuals for usage, if those are available;
- ✓ products and materials if they are those specified in the procedures, if they are identified.

The relevance of the quality system audit consists in: the system competence, the system conformity and performance.

If a premature presentation of some particular details of the audit plan can compromise objective proves, these are not to be communicated to the beneficiary, but only at their time.

Minor noncompliance has to be correctly administrated, so that is treated in a proper way; major noncompliance is that which identifies the lack of quality system or its improper function.

The effect of the proposed and assumed corrective measures is an efficient and performance company, with IT products of a superior quality.

6. References

[1] Eden, Ali, Auditul sistemelor informatice, Editura Dual Tech, Bucuresti, 2001

[2] Buligiu I, Soava G, *Quality research by using performance evaluation metrics for software systems and components*, Revista de Informatica, Editura Inforec, Bucuresti, 2006

[3] Ivan, Ion, BojaCătălin, Ciurea Cristian - Metrici ale sistemelor colaborative, Editura ASE, Bucuresti, 2007

[4] Fatemeh, Z, Quality Information Systems, Thomson Publishing, USA, 1995

[5] Russel, J.P., Auditing ISO 9001:2000, in "Quality Progress", iulie 2001

[6] Titu, M., Statistica tehnica si proiectarea experimentelor – Controlul statistic al calitatii si fiabilitatii, Ed Universitatii "Lucian Blaga", Sibiu, 2005

[7] Withrow, C., Error density and size in software, IEEE Software, McGraw Hill, 1999

ⁱJ.M. Juran, *Planificarea calității*, Editura Teora, București, 2000

ⁱⁱ<u>http://revistaie.ase.ro/content/15/Pocatilu.pdf</u> 01.11.2016 - Revista Informatica Economica, nr. 3 (15)/2000

ⁱⁱⁱ<u>https://www.aicpa.org/Research/Standards/AuditAttest/Pages/SQCS.aspx</u> 05.11.2016

^{iv}http://documents.tips/documents/auditarea-sistemului-informatic.html 30.10.2016

^vhttp://discutii.mfinante.ro/static/10/Mfp/audit/Ghid_IT_ed_II.pdf 01.11.2016

www.aicopa.org

www.theiia.org

www.isaca.org www.ifac.org

www.aitp.org

vihtter (/project

http://projects.aft.hist.no/files/1/5/M5-ABT-QA.pdf on 06.11.2016





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Theory and Practice in Teaching English Economics Vocabulary

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Abstract. The present paper proposes to speak about teaching English economics vocabulary. So, at first, we make references to the key points and the issues which are raised by teaching and learning specific vocabulary: learners usually select the words they want to acquire; once learned, words move from active to passive status; one of teachers' activities is to help students remember the acquired vocabulary; teachers should provide the correct exposure to words and opportunities for learners to practice them.

Secondly, we will study examples of economics vocabulary teaching and show how discovery techniques can aid vocabulary acquisition.

In the end we draw the conclusions, showing the importance and the active role of the discovery techniques in teaching English vocabulary.

Keywords: teacher, student, learning process, teaching activities

JEL Codes: A20

1. Introduction

There is a great variety of answers to the questions: why do people want to learn a foreign language / English? Probably the most of them do it because it is on the school curriculum; some of the students and their parents also, really want to study it; others feel neutral or even negative about the study of languages; some students consider that they increase their chances for a better job knowing English or another foreign language. English has a premium position since it is considered the international language of communication.

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2. Literature review

As it is recognized by all pedagogues and teachers, Doris A. Santoro asserts that the teaching process represents an intellectual and moral practice full of contradictions, impediments and challenges, having two major characteristics: quotidian and extraordinary (1).

Nowadays, linguists have turned their attention to vocabulary, focusing on its importance in language teaching. Thus, Gairns and Redman (2) stressed the work with words, a significant book for language teachers. Carter and McCarthy (3) explore more theoretically some of the issues behind how words work and the way they are learned by pupils. McCarthy (4) speaks about vocabulary, how this is treated in teaching materials and practice.

As concerns the vocabulary effectiveness issues, several aspects have been established. Thus, direct instructions of vocabulary should entail: the usage of a contextual base, multiple and repetitive exposure to new words; the usage of multiple context for direct instruction of new words; actively engaged students in the learning process; the usage of more than one type of instruction (5).

Michael O King makes references to two main topics: principles of rich vocabulary instruction and the theoretical rationale behind recommendations for teaching vocabulary words in groups that make semantic/thematic relationships apparent to students. (6)

3. Selecting Vocabulary

In connection to vocabulary, the question *what do students need to know?* raises a lot of commentaries. The first remarkable thing about vocabulary items is that they frequently have more than one meaning. For example, the word *land* (7) has the following meanings:

- more than five as a noun: a politically organized body of people under a single government, the territory occupied by a nation, territory over which rule or control is exercised, the solid part of the earth's surface, material in the top layer of the surface of the earth in which plants can grow (especially with reference to its quality or use) and

- six as a verb: bring into a different state, reach or come to rest, cause to come to the ground, shoot at and force to come down, arrive on shore, deliver (a blow). When we meet a word, we try to decipher its meaning. In order to manage this, we look at the context in which it is used.

Another aspect connected to meaning is that sometimes words have meanings in relation with other words (8, p. 156). Thus, students know that revenue means income. Revenue has a general meaning, while commission, wage, salary, fees, royalty, grant, pension, dividend are more specific.

We understand the meaning of a word like blue collar in the context of a word like white collar; domestic/home trade in the context of foreign/overseas trade. Words have opposites or antonyms, but they also have synonyms. Here we have to mention that words rarely have absolute synonyms; context may make them synonymous on particular cases. Thus, the students have to know about two other concepts: meaning in context and sense relations.

Another concept that governs words meaning is collocation that is which words go with each other. Thus, we have chief accounting officer as a "controller responsible for maintaining the records of the company operations, interprets the results of the operations, plans and recommends future actions" (9, p. 180), but we cannot have "director accounting officer".

The action of selecting vocabulary is of great importance and faces many questions. Generally speaking, we reached a consensus as concerns the grammatical structures that are to be taught. As



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concerns the vocabulary teaching, the problem is to select the words. Most dictionaries for upper intermediate level contain about 55,000 words. This number, on the one hand, is a small fraction of the words in a language, but, on the other hand, is an enormous list that has to be reduced to smaller proportions, in order to be learned by the students.

The main principles in selecting specific vocabulary are frequency and coverage (8, p. 153-154). Thus, the most used words are to be taught first. The principle of coverage, in its turn, states that a word with more meanings is more useful than a word with a specific meaning.

The most remarkable work in order to establish which are the most frequent words was done by Michael West (10), Hindmarsh (11). Many universities have corpuses based on computer. Nowadays the young people use technology in ways we could never imagine. Instead of passively watching television, the "F Generation" is actively participating in the distribution of entertainment and information. For the first time in history, youth are the authorities on something really important (12). To sustain the opinion above, we mention that there are on line applications that can count the number of characters and words, like in the example below (13).

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🖷 Acasa	⊜π	Tech	Blogging	🕹 Down	load	🕼 Sugerează subiecte	🛓 Despre			
Contor cuvinte si caractere online Afla cate cuvinte si caractere sunt intr-un text folosind formularul de mai jos - acesta va incep numerotarea cuvintelor, caracterelor si spatilior odata cu apasarea butonului "Calculeaza".										
Caractere:	125	Caractere fara	spatiu: 104	Cuvinte:	22	Calculeaza				

Fig. 1: Application for counting words in a text

Nowadays it is accepted to build vocabulary syllabuses with the help of computers and computerized information. The decision about what is the suitable vocabulary is influenced by information about its frequency and use. We also have to take into consideration other clues: topic, function, structure, needs and wants (8, p. 156).

4. Teaching Vocabulary through Different Techniques

The specialists consider the language structures as being the skeleton of any language. As a consequence, vocabulary is the flesh. To deal well with grammatical structures represents a significant ability, but it cannot express meaning without using words, proper words. In classes, the structural accuracy is the central issue, the most important interesting point.



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It is obvious the need to teach language structures, if we want to utter sentences, meanings, to express something. Vocabulary is not only incidental to the aim of language teaching; students learn structures and these are to be used, developed, applied to a rich and specific vocabulary, depending on the life situation one faces with.

Nowadays, teachers recognize the interdependency between vocabulary and grammar acquisition.

The activity of teaching vocabulary is more than just presenting students the new words. This action, of presenting new words is only one constituent part of the activity, but there are other issues.

The specialists speak about active and passive vocabulary in a foreign language. The former means that part of the vocabulary the students are able to use, once they have been taught to, while the latter includes the words the students recognize when they meet them, but probably they are not able to produce those words.

Sometimes students know some words better than other words, but no one can demonstrate that these are the words taught by teachers: some words are learned through other routes, not through the learning process, other words may be looked for by the students, because they wanted to use them or simply came across them.

After the primary level, at the intermediate level and above it, other techniques for presenting words can be used for the students; one of them is the discovery technique. That is the teacher does not give everything, the students work out rules and meanings for themselves. Thus, they find out what a word means and why it is used.

At the intermediate level students handle a significant store of vocabulary. They are shown examples of words in action.

In order to achieve high yield, teachers have to engage their students in learning activities. (8, p. 160)

5. Examples of vocabulary teaching

There is a wide variety of activities which help teachers teach and practice words and their uses. Interaction and discovery are useful techniques, but they cannot be always applied. There are situations when teacher presentation or explanation is more useful or effective. We present a few examples:

1. Realia. That means to bring the things they represent into the classroom.

2. Pictures. These can be board drawings, wall pictures, charts, cards, magazine pictures and other visual representations.

3. Mime, action and gesture. Actions are usually better explained by mime.

4. Contrast. The words relation can be used to teach meaning: foreign trade – home trade, white collar – blue collar, net – gross profit.

5. Enumeration. Teachers can use general and specific words in presenting meaning. Thus, we say "means of revenue" and explain it by enumerating different items: commission, salary, wage, royalty, grant, pension, dividend.

6. Explanation. The action of explaining the words meaning can be difficult at first level, but it can be successfully used at intermediate and upper levels.

7. Translation. It is one of the quickest and easiest ways to present the words meaning. This way has also its drawbacks: it is not always easy to translate words.



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Another teacher activity is to assure that students know how the words they have just learned are said. With intermediate and upper levels, one way of doing this is through phonetic symbols. It is obvious that knowledge of the symbols will help the students to access pronunciation from dictionaries.

The following activity expands the concept of general and specific words. The activity uses the mind map technique to help students put a list of words into different groups.

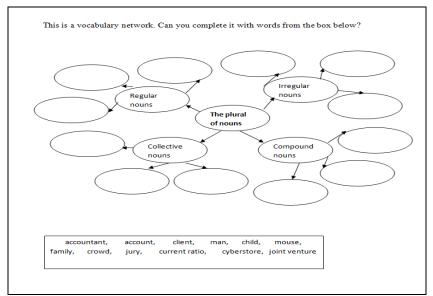


Fig. 2: Map technique

The following activity requires students to match the economics concepts with their meaning. They have to put a cross in the right box, as it is given in the model. Previously the students have read different passages to see the words in context.

In financial accounting, an asset is an economic resource. Anything tangible or intangible that can be owned or controlled to produce value and that is held by a company to produce positive economic value is an asset. Simply stated, assets represent value of ownership that can be converted into cash (although cash itself is also considered an asset). (14)

Gifts of money or other items of value which are otherwise available to everyone on an equivalent basis, and not for dishonest purposes, are not bribery. Offering a discount or a refund to all purchasers is a legal rebate and is not bribery. (15)

Cash is coming in from customers or clients who are buying your products or services. If customers don't pay at time of purchase, some of your cash flow is coming from collections of accounts receivable. (16)

In 1931, Friedrich A. Hayek, the Austrian economist at the London School of Economics, created a diagram known as Hayek's triangles as a theoretical measure of the stages of production. Hayek's triangles formed the basis of gross output, before GNP or GDP were invented. However, Hayek's work was strictly theoretical, and no attempt was developed to statistically measure gross output. (17)



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According to the United Nations Statistics Division, wholesale is the resale (sale without transformation) of new and used goods to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or involves acting as an agent or broker in buying merchandise

"For the other variables they were introduced into a general xxxxx, since the method from general to specific was adopted, then we preferred not to keep them for a better xxxxxx of the model. In the absence of the common economic theory of banking crises, the initial choice of variables was based on empirical and theoretical studies on financial xxxxx. On the contrary, the final choice of the model was made after several xxxxx and the introduction of several variabilities, to choose the best specification which highlights the variables, likely to lead to or point out the happening of a banking crisis."

for, or selling merchandise to, such persons or companies. Wholesalers frequently physically assemble sort and grade goods in large lots, break bulk, repack and redistribute in smaller lots. (18)

	assets	bribe	cash flow	output	wholesale
the things of value owned by a					
company					
money that is paid secretly and		х			
dishonestly to obtain someone help					
the movement of cash in and out of a					
business					
quantity of goods produced					
buying and selling in large quantities					

The next example can be used with advanced students, although its principle – usage of a modified fillin passage – can be adapted to be used to almost all levels. Students have to read a text on economics theme; they are told that some words have been blocked out in the text by the symbol xxxxx. Each of them have to think of as many words as possible; then they have to compare their options in pairs and groups, till they have reached the consensus. The text may be the following (19):

The purpose of this type of activity is to reinforce the point about meaning in context. The best choices are: model, quality, crises and estimates.

6. Conclusions

In this paper we specified the problems of selection vocabulary and showed that counting the frequency alone is not enough to determine what words should be taught.

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We saw that to know a word is more than to know its meaning; this implies to know about its use, its formation, its grammar behaviour.

We stressed the idea that students have to interact with words, not only to learn them, but to manipulate them; one successful method of doing this is the direct method we have presented. This method was considered a reaction to the restrictions of grammar-translations method used before. The direct method abandons translations and brings together teachers and students in speaking and relating the grammatical forms they are studying. The method suffered transformations; it uses the stimulus-response-reinforcement model and thus, through a permanent process of reinforcement, it succeeds in offering good habits in language learners.

We presented different types of activities designated to present and practice vocabulary. All the above presented examples aim to encourage students to work out meanings for them. This involvement of the students with words is, as a matter of fact, a provocation which helps students remember the new words at least for a while. Teachers have to encourage students to practice using the words so that they become more familiar.

The direct and communicative activities have the following characteristics:

- a desire to communicate;
- communicative purpose;
- content not form; variety of language;
- no teacher intervention; no materials control (8).

The traditional methods and techniques have their advantages, also. If we put into balance the modern techniques and the traditional ones, we can say that both have strong and weak points. A good teacher must have the inspiration and pedagogical feeling of choosing the most appropriate method for the specific of his/her class, at a certain moment. He/she has to answer the following questions: how, why and where is he/she teaching? By analysing these features he/she can choose from the multitude of procedures and techniques.

7. References

- Doris A. Santoro, Good Teaching in Difficult Times: Demoralization in the *Pursuit of Good Work, American Journal of Education*, Vol. 118, No. 1 (November 2011), pp. 1-23 Published by: The University of Chicago Press Stable URL: http://www.jstor.org/stable/10.1086/662010
- [2] Gairns, R., Redman, S., Working with Words, Cambridge University Press, 1986.
- [3] Carter, R., McCarthy, M., Vocabulary and Language Teaching, Longman, 1988.
- [4] McCarthy, M., Vocabulary, Oxford University Press, 1991.
- [5] Heather Lynn Washburn Batchelder, An investigation of the efficacy of the text talk strategy on pre-school students' vocabulary acquisition, A dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Education in the Department of Child, Family, and Community Sciences in the College of Education at the University of Central Florida Orlando, Florida, Summer Term 2008,

http://etd.fcla.edu/CF/CFE0002345/Batchelder_Heather_L_200808_PhD.pdf

[6] https://etd.auburn.edu/bitstream/handle/10415/2618/Michael-King_Final%20Dissertation-2.pdf?sequence=2



- [7] Doris A. Santoro, Good Teaching in Difficult Times: Demoralization in the Pursuit of Good Work, American Journal of Education, Vol. 118, No. 1 (November 2011), pp. 1-23 Published by: The University of Chicago Press Stable URL: http://www.jstor.org/stable/10.1086/662010
- [8] Harmer, Jeremy, The Practice of English Language Teaching, New edition, Longman, London and New York, 1991.
- [9] Niculescu Andrei, coordinator, Marcoci Sanda, Crișan Cristina, Vlad Călin, *The Language of Business Accounting, Banking Finance*, Ed. Fundației România de Mâine, București, 2007.
- [10] West, Michael, A General Service List of English Words, Longman, 1953.
- [11] Hindmarsh Robert, Cambridge English Lexicon, Cambridge University Press, 1980.
- [12] Viorica Jelev, *The Future of Education into a Digital World*, Journal of Economic Development, Environment and People, vol. 4, issue 4 2015.
- [13] http://www.adibarbu.ro/p/contor-cuvinte-si-caractere-online.html
- [14] https://en.wikipedia.org/wiki/Asset
- [15] https://en.wikipedia.org/wiki/Bribery
- [16] https://www.thebalance.com/cash-flow-how-it-works-to-keep-your-business-afloat-398180
- [17] https://en.wikipedia.org/wiki/Gross_output
- [18] https://en.wikipedia.org/wiki/Wholesaling
- [19] Adnen Chockri, Zied Akrout, Banking Deregulation and Financial Stability in Emerging Market Economy, in *Review* of *Economic and Business Studies*, 8, vol. 4, issue 2 (VII)/ December 2011, Iași, p. 110.



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Knowledge management as a strategic business resource

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Abstract. The development of a knowledge-based economy means that today's businesses face many of the new challenges of adapting to the changing environment. Since the early 1990s, *knowledge management* became not only an academic discipline, but more than that, an effective way to assure the continuous improvement of the organization. Seeking advantages that make them more competitive led companies to focus on the complex philosophy of *intellectual capital* and its connected concepts: human capital, structural capital, organizational capital, intellectual property, and last but not least, relational capital. The present article puts forward a short insight into the complexity of the ever changing and evolving system of knowledge management various concepts.

Keywords: knowledge management, intangible assets, intellectual capital, intellectual property, structural capital, customer capital

JEL Codes: D83; E22, J24

Introduction

Intellectual property is closely related to the process of acquiring, developing and using knowledge in the enterprise. By analyzing the definition of intellectual property one can conclude that it is the result of human work, skills, competences and attitudes such as creativity, ingenuity, inventiveness. It arises as a result of human creativity and is the fruit of his mental work.

The key factor to success in a business is human. He is the subject of all action. He creates, builds, and performs tasks in an enterprise using his knowledge.

Knowledge is closely linked to the human factor, which is defined in the organization as *human capital*. On knowledge is based the whole of human civilization. As a man is a thinking being, he has the ability to accumulate process and transmit knowledge.

Knowledge it was a human attribute since the origin of mankind. Almost every moment of his life a person has to deal with it and participate in its creation, flow and exploitation.

By analyzing the genesis of knowledge in an organization, one can conclude that knowledge has always been used in an enterprise. As a matter of fact, for hundreds of years the owners of the organization have relayed their knowledge to their successors. The master communicating the knowledge to the journeyman, and the journeyman to the student, were managing the resources of knowledge.



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The first scholar who appreciated the importance of knowledge in the economy was Peter Drucker. He introduced the terms *knowledge work* and *knowledge worker*. Drucker also deemed that the era of *knowledge society* has started to reign, in which knowledge and knowledge worker are the overriding resources, and resources previously considered as traditional, such as capital, land and work, are losing their importance.

Peter Druker recognizes the important role of knowledge, pointing out that "knowledge has become a major economic asset and the most important and perhaps the only source of competitive advantage". In addition to such resources as land, work and capital, knowledge has grown over the last few years to become a key resource for organizations. Many scientific analyzes, as well as practical experience, show that it has become a strategic resource for the organization. Today, we speak of the capital of knowledge that contributes to the growth and strategic market success of the enterprise [1].

The business world has come to realize the establishment of a new age, whose main wealth is knowledge, and a new "knowledge workers" elite whose capital is all in the head. Each company has its own individual and competent knowledge, located in the heads of employees.

No man has enough knowledge to build by himself a modern computer or plane. It requires versatile knowledge in various fields, which transcends human capabilities as individuals. The organizations, however, can transcend the capabilities of man as an individual, with the knowledge of many people associated therein, so-called human capital.

The effect of human capital is innovation. Innovation is one of the important elements of building competitive advantage among enterprises operating in the economy based on knowledge. Hence, it is increasingly necessary to focus the organization's attention on the process of creating knowledge, since modern conditions require knowledge to be acquired by the company at a certain place and time so that it can operate effectively and be competitive on the market. [2].

1. THE INTELLECTUAL PROPERTY IN ENTERPRISE

Intellectual property is closely linked to a knowledge-based economy, inventiveness and innovation are one of the most valuable assets of a company.

The development of a knowledge-based economy means that today's businesses face many of the new challenges of adapting to the changing environment. Waldemar Walczak includes, among others, the acquisition of knowledge and intellectual capital as a source of competitive advantage, development of entrepreneurship, implementation of new technological solutions, creation of innovative undertakings. He believes that the intellectual property is a specific type of intangible asset of an enterprise with a special legal status, requiring in many cases the specific financial outlays associated with their preservation and protection. It is a component of organizational capital, which is one of the components that creates a comprehensive image of the organization's intellectual capital. Intellectual capital is built on the use of valuable knowledge and unique intangible assets to generate future benefits by which a company can gain a competitive advantage by contributing significantly to building market value.[3]

2. THE CONCEPT OF INTELLECTUAL CAPITAL

The nature of intellectual capital is not yet fully understood and described, so it is difficult to grasp it with clear terms and unambiguous terms. On the other hand, the struggles of the representatives of the



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interested circles to find a uniform definition resulted in numerous descriptions, but none of them has been recognized so far and was therefore not universally accepted.[4].

The attempt to identify the essence of intellectual capital lies in the difference between the market value and the accounting value of an enterprise. However, until the difference was small, it was not considered. As the market value of the company began to decide primarily on intangible assets, the role of intellectual capital increased [5].

Skandia is a precursor in the field of intellectual capital research in the insurance sector, founded 150 years ago in Sweden. Therefore, the most widespread definition of intellectual capital is the definition that is the result of research conducted in this enterprise. These studies have allowed the definition of intellectual capital as the sum of human capital and structural capital. In the early 1990s, a reporting system was developed to show the state of the company's intellectual values. In 1995, Skandia released the world's first public annual report on intellectual capital, which is an addition to the financial report. This company was the first to introduce the position of director of intellectual capital in its organizational structure. Skinner AFS's intellectual capital director, Leif Edvinsson, described intellectual capital as "knowledge that can be transformed into value."[6].

Collectively defined definition by Leif Edvinsson and Michael Malone identifies intellectual capital as having the knowledge, experience, organizational technology, customer relationships, and professional skills that allow a company to gain competitive advantage. These authors use interchangeably terms such as knowledge capital, non-financial assets, intangible assets, hidden assets, invisible assets, and means of achieving the goal.[7].

It is worth to mention similar definitions developed by people working with Skandia or inspired by the Edvinson idea. Tom Stewart defines this concept as "*the sum of everything everyone knows in the organization, which gives it a competitive advantage.*" By presenting intellectual capital as intellectual material, i.e. knowledge, information, intellectual property and experience that can be used to create wealth, Stewart shows the components of intellectual capital: patents, processes, managerial skills, technology, consumer and supplier information, and experience[8].

Patrick Sullivan defines intellectual capital saying: "*it is all it comes out with when you finish working out the door of your business. It is also the sum of knowledge and everything that can be transformed into real business profits*". [9]

Defining intellectual capital, Klark E Sveiby closely ties it with the notion of knowledge management. Claiming that "*intellectual capital and knowledge management are twin concepts - two trunks of the same tree*", the author points out that the main difference is the degree of dynamics of both concepts, namely, intellectual capital is a static concept and it is necessary to use a verb for intellectual capital activities. On the other hand, knowledge management is an active term and can be defined as the art of creating value from the intangible assets that an organization has. [10].

In turn, Anna Brooking describes intellectual capital as a complex concept, that incorporates components such as market assets, human factor assets, infrastructure assets, and intellectual property. The author presents the view that "intellectual capital is the result of the interaction of several subprocesses, e.g.



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the formulation of market strategy, knowledge management, selection of appropriate instruments for organization and management of intellectual property". [11]

According to the definition given by Goran Roos and Janne Roos the intellectual capital is "the sum of hidden assets of a business not included in its balance sheet, but including both what's inside the employees and what's left after they leave." [12]

Gordon Petrash from Dow Chemical describes intellectual capital as "*knowledge that has the potential to transform into value*"[13].

Recently, the OECD definition of intellectual capital proposed by the Organization for Economic Cooperation and Development is quite often used. It describes intellectual capital as "the economic value of two categories of intangible assets of an enterprise: organizational (structural) capital and human capital["]. [14]

In his book, *Knowledge Management in Enterprise*, Kazimierz Perechuda finds that the definition of intellectual capital is also defined as the difference between the market value of an enterprise and the cost of exchanging its assets, which, according to the author, means the combination of intangible assets that allow a company to operate and prosper, because they have been formalized, captured, forced to act, and are constantly being checked to create a higher value proposition for customers and stakeholders. The author, looking for a relationship between knowledge and intellectual capital, appeals to the definition of Karl Wiig, in which intellectual capital is defined as: knowledge, practical experience, technology, good customer relations and all the skills that enable the company to gain competitive advantage. Perechuda also draws attention to Mariusz Strojny's definition in which intellectual capital "consists of intellectual property, extending from acquiring new knowledge (learning) through inventions to creating valuable relationships with others."[15]

Kazimierz Perechuda also quotes the views of Mariusz Bratnicki and Jan Strużyna, stating that the total value of an enterprise consists of material capital, that is, material, financial and intellectual capital. These authors describe intellectual capital as "the sum of knowledge held by the people who form the corporate community and the practical transformation of that knowledge into the values of the enterprise. It encompasses all the irrelevant elements that shape the difference between the total value of an enterprise and its financial value". [16]

Agnieszka Sopińska has the vision that intellectual capital creates non-financial "invisible" assets of an enterprise, usually not recognized in balance sheet reporting, as a way to reach future goals as enterprise knowledge. Knowledge, experience, organizational technology, customer relationships and professional skills indicate that they cover both the minds of the members of the organization and what remains of the organization when they leave. In addition, it is important to point out the value of the company, its organizational culture and its philosophy of action (so-called human capital), as well as everything that supports you, i.e. employee productivity, such as computer hardware, databases, organizational structures, patents, and trademarks. (So-called *structural capital*) [17]

Bogusław Kaczmarek and Waldemar Walczak in the book *Knowledge Management in Contemporary Enterprises* cite the view of Grzegorz Urbanek, who notes that "intellectual capital is an invisible resource that creates visible effects. Intellectual capital is knowledge in itself and the result of its transformation into intangible assets". [18]



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Based on the numerous definitions found in dedicated literature, Agnieszka Sopińska, in her book *Knowledge as a Strategic Resource of Enterprise*, has tried to formulate common features characterizing the essence of intellectual capital. By specifying that it consists of different categories, it is knowledge-based and bridges the gap between market value and accounting, encompassing all the irrational elements that make up the difference between the total value of an enterprise and its financial value. Proper use of it provides the company the basis for gaining competitive advantage on the market and managing it improves the value of the company. [19]

2.1. DIFFERENCES IN PERCEIVING THE INTELLECTUAL CAPITAL

In economic practice as well as in theoretical studies in this field, the concept of intellectual capital is often used interchangeably with the terms "knowledge capital", "intellectual property", "intangible assets", "intangible assets", "intellectual assets". [20]

Agnieszka Sopińska points out that "intellectual property" and "knowledge capital" are not synonymous with the term "intellectual capital." The author explains the conceptual scope of these terms by pointing out that the notion of intellectual property includes the ownership of patents, trademarks, copyright, and is therefore the result (resultant) of transforming the knowledge resources in the organization. The concept of *knowledge capital* includes the knowledge held by the organization without the effects of their transformation, while *intellectual capital* is both knowledge acquired as a resource and the result of transforming this knowledge into the form of *intellectual property*. [21]

According to Agnieszka Szczygielska, intellectual capital and intangible assets are very similar concepts, but intellectual capital takes into account and treats intangible assets from the point of view and on the base of knowledge and its management. At the same time, the author points out that capital comes from resources, is closely linked to them. [22]

Bogusław Kaczmarek and Waldemar Walczak, while analyzing the conceptual scope of intangible assets, argue that this is a concept presented in broad terms and means "all non-physical elements that have no physical form but are capable of generating future benefits for the enterprise." The authors point out that the term "intangible resources", considered broadly, constitutes the knowledge resources of human capital, which cannot be considered as a separate property of an enterprise, while the "intangible assets" are the property of an organization.

Kaczmarek and Walczak indicate that intangible assets and intellectual property terms are treated as ambiguous terms. According to the authors, the term "intangible" refers to non-physical factors, and the term "intellectual" refers to human factors. These authors, by defining the term "intangible assets", indicate that "*it includes non-physical or financial factors that are owned by the business that will be of benefit to it in the future*." By analyzing the concept of "intellectual assets", Kaczmarek and Walczak recall the view of Grzegorz Urbanek, who believes that they can be defined as "*knowledge-based, open source of the future benefits of the company*." He then adds that "*the concept of intangible assets should not be identified with the concept of intellectual assets, because not all intangible assets are intellectual, so not all are part of intellectual capital, but when intellectual assets are protected by law they are intellectual property." [23]*



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According to Kazimierz Perechuda, intellectual assets are those knowledge-based assets that are considered property of the company and which in the future will be the source of benefit to the enterprise. [24]

This heterogeneous terminology, among other things, has made the concept of intellectual capital still unclearly defined. The variety of definitions and ambiguity in the description of intellectual capital causes the ambiguity of the categorization of its components. [25]

2.2.1. COMPONENTS OF THE INTELLECTUAL CAPITAL

By analyzing the quoted definitions of intellectual capital, it can be seen that, due to the broad scope of this term, different definitions are used for its description. The general significance of these definitions do not make much difference, but to be able to manage the intellectual capital, protect and measure it, it is important to identify the range of assets that will be considered as intangible assets. It is therefore necessary to determine what is covered by this concept, i.e. what categories and constituents it covers. Also, there is no uniqueness in the literature in this field, and different authors propose different approaches.

Today, several leading concepts can be extracted. By analyzing them, it can be seen that although each author emphasizes the role of other components, all classification systems make a fairly clear distinction between: human capital, structural capital, and relational capital called "customer capital". It should be added that the original Skandia model assumed two forms of intellectual capital: human capital and structural capital. [26] Nowadays, Skandia's structured capital is further subdivided into internal and external structural capital-relational, which is defined by Skandia as capital in the form of "customers". [27]

It is worth emphasizing here that the classification proposed by Leif Edvinsson and Michael Malone in 1997 was a source of inspiration for many researchers and strongly influenced the future shape of the components of this area, as the various classifications of intellectual capital appearing in the literature are modifications proposed by these authors of the division. [28]

2.2.2. HUMAN CAPITAL

First, from the specified areas, human capital consists of: qualifications, knowledge, experience, skills, competences and intellectual and interpersonal skills of all employees and managers of the organization. This capital also includes people's attitudes and behaviours such as honesty, loyalty, commitment to work, employee motivation to share knowledge and information, pursuit of goals, focus on results, creativity, openness to innovation. [29]

As noted by Walczak, these attitudes are not only shaped by internal motives and their own system of values but are strongly influenced by the power of organizational culture. [30]

In the Scandinavian model, human capital is understood as capital "*in an inseparable way integrated* with man, his knowledge, experience, presence and possibilities of action in the enterprise". [31]

By analyzing the conceptual term *human capital*, Kazimierz Perechuda perceives it as "collective competence of the company to extract the best solutions from the knowledge of its employees". [32]

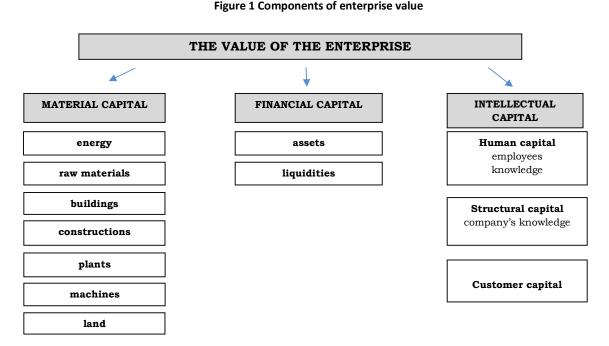


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It is worth stressing that this is a very specific type of capital, as it is the most important and, at the same time, the least sustainable category of intellectual capital. It is not owned by the organization, it can only be leased to it. Leaving of one of the employees means losing some skills, experience, and specific mechanisms of action, informal relationships with customers, suppliers, and other employees. As a result, the organization becomes poorer about its abilities, experience, skills, or some informal relationships that the employee has created with the other employees, which were translated into the efficiency of the organization's functioning. [33]

2.2.3. THE STRUCTURAL CAPITAL

Structural capital is "the result of targeted human actions." [34] It is the property of an organization and therefore the organization is free to dispose of it, often making it an object of trading. [35] It is created by: technologies, methods and processes, or so-called organizational knowledge, which allow the company to function. In addition, this capital includes organizational culture, organization history, risk assessment methodology, management methods, databases containing market or customer information, communication systems, computer systems, patents, conception, models, business secrets, copyright, design laws, trademarks and service marks, enterprise innovation, inventions, organizational learning, processes of strategy formation. [36]



Source: Own (Adam Grzegorczyk) elaboration based on: W Kotarba, Ochrona własności intelektualnej, [Protection of the intellectual property] Oficyna wydawnicza Politechniki Warszawskiej, Warszawa 2012, p. 110



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Rafał Haffer notes that structured capital consists of three components: organizational capital, innovation capital and process capital. Organizational capital consists of management processes, investments in systems and tools, organizational culture and a philosophy that fosters the flow of knowledge both within the organization and outside, databases, patents, trademarks and copyrights. [37] Skandia's organizational capital is primarily the investment of a strategic enterprise in systems and tools that accelerate the flow of knowledge within the enterprise and its surroundings. [38]

Innovation capital is the ability of an enterprise to renew itself through innovation in the form of protected intellectual property rights, commercial rights and other intangible assets such as the theory that the company is operating, talents, abilities and competences, allowing the company to respond quickly to economic progress to create and market new products and services. [39]

Process capital is a type of practical knowledge for continuous value creation - including work processes, organizational processes, work procedures, techniques, and employee programs that enhance organizational effectiveness. [40]

2.2.3. RELATIONAL CAPITAL – COSTUMER CAPITAL

Relational capital is the customer capital often found in the literature as *the market capital*. This includes the business potential associated with the intangible market asset. It concerns the relationship with customers. It is generally about connections and relations with clients, mainly those based on loyalty, price sensitivity, or the period of cooperation with the customer. It consists of: trademarks, various contracts and agreements, e.g.: licensing, concession, marketing strategies, including: development of product quality, pricing strategies, distribution channels, the means of promotion, reputation and corporate image, formal and informal relationships with suppliers, with shareholders, partners or other stakeholders in the company environment. [41]

2.2.4. RELATIONSHIP OF THE INDIVIDUAL ELEMENTS OF THE INTELLECTUAL CAPITAL

All elements of intellectual capital are interconnected and interrelated, so they should not be separated. [42] Separation of human capital into structural and market capital makes it impossible to create an enterprise's intellectual capital. Its strength is due to the links between the individual elements.

People create an image of the organization they work with and their attitudes and behaviour build relationships with the clients and influence them. The acquired customer capital contributes to the strengthening of market capital, and consequently directly affects the acquisition of new customer groups. [43]

Human capital needs structural capital. Also, market capitalization without the rest of the elements will not contribute to intellectual capital growth, since even the best product brand alone will not provide the company with success. If employees cease to develop their skills, the product offered can quickly become obsolete technologically. [44]

Conclusions

Intellectual property is an important part of an organization's intellectual capital, which together with the material capital and financial capital decides the market value of the organization. [45]



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Nowadays, the market value of an enterprise increasingly exceeds its book value. This difference is due to the presence of intellectual capital which includes all non-material elements. Intellectual capital, in addition to knowledge, includes, but is not limited to, corporate image, information systems and administrative procedures, process efficiency, experience, staff potential, know-how, patents, organizational culture, creative atmosphere, customer relations and other external factors. The shape of the above elements of intellectual capital is often directly or indirectly influenced by knowledge. [47]

References

- A. Błaszczuk, J. Brdulak, M. Guzik, A. Pawlaczuk, Zarządzanie wiedzą w polskich przedsiębiorstwach [Knowledge Management in Polish Companies], Szkoła Główna Handlowa, Warszawa 2003 p. 13.
- [2] A. Kowalczyk, B. Nogalski, Zarządzanie wiedzą: koncepcja i narzędzia, Dyfin, Warszawa 2007, p.24-25, A. Knap-Stefaniuk, Ludzie-bezcenny kapitał, "Zarządzanie Zmianami", 2004, nr 1 p. 23.
- [3] Walczak W., "Własność intelektualna cenne niematerialne aktywa organizacji", E-mentor nr. 2 (39)/2011.
- [4] A. Sopińska, Wiedza jako strategiczny zasób przedsiębiorstwa. Analiza i pomiar kapitału intelektualnego przedsiębiorstwa SGH, Warszawa 2008, p. 101-104.
- [5] P. Wachowiak (red.), Pomiar kapitału intelektualnego przedsiębiorstwa, Szkoła Główna Handlowa, Warszawa 2005, p. 43-44.
- [6] Ibidem, p. 43-44.
- [7] E. Skrzypek (red.), Zarządzanie kapitałem ludzkim w gospodarce opartej na wiedzy, Instytut Wiedzy i Innowacji, Warszawa 2009, p. 101.
- [8] A. Błaszczuk [et al.], op. cit., p. 73.
- [9] Ibidem.
- [10] A. Sopińska, op. cit., p. 102; K. Perechuda (red.), Zarządzanie wiedzą w przedsiębiorstwie, PWN, Warszawa 2005, p. 132.
- [11] A. Sopińska, op. cit., p. 102; K. Perechuda (red.), op. cit., p. 133.
- [12] A. Sopińska, op. cit., p. 101; E. Skrzypek (red.), op. cit., p. 184.
- [13] A. Sopińska, op. cit., p. 102; K. Perechuda (red.), op. cit., p. 132.
- [14] K. Perechuda (red.), op. cit., p. 133.
- [15] *Ibidem*, p. 130, 132.
- [16] Ibidem, p. 133.
- [17] P. Wachowiak (red.), op. cit., p. 43-44.
- [18] B. Kaczmarek, W. Walczak, *Zarządzanie wiedzą we współczesnych przedsiębiorstwach*, Uniwersytet Łódzki, Łódź 2009 p. 233.
- [19] A. Sopińska, op. cit., p. 103.
- [20] K. Perechuda (red.), op. cit., p. 134; A. Sopińska, op. cit., p 103-104.
- [21] A. Sopińska, op. cit., p. 103-104.



- [22] A. Szczygielska, *Kapitał intelektualny w gospodarce opartej na wiedzy*, Uniwersytet Ekonomiczny we Wrocławiu, Wrocław 200., p. 13.
- [23] B. Kaczmarek, W. Walczak, op. cit., p. 243.
- [24] K. Perechuda (red.), op. cit., p. 134.
- [25] A. Sopińska, op. cit., p. 104.
- [26] K. Perechuda (red.), op. cit., p. 136; M. Juchnowicz (red.), Elastyczne zarządzanie kapitałem ludzkim w organizacji wiedzy; Difin, Warszawa 2007, p. 31. S. Kasiewicz, W. Rogowski, M. Kicińska, Kapitał intelektualny: spojrzenie z perspektywy interesariuszy, Oficyna Ekonomiczna, Kraków 2006 [et al.], p. 82.
- [27] P. Wachowiak (red.), *op. cit.*, p. 45; K. Leja (red.), *Zarządzanie wiedzą: wybrane problemy*, Politechnika Gdańska, Gdańsk 2006, p. 103; K. Perechuda (red.), *op. cit.*, p. 136.
- [28] D. Jemielniak, A. K. Koźmiński (red.), op. cit., p 277-278.
- [29] B. Kaczmarek, W. Walczak, op. cit., p. 250; S. Kasiewicz [et al.], op. cit., p 82-83; K. Perechuda (red.), op. cit., p. 136.
- [30] B. Kaczmarek, W. Walczak, op. cit., p. 250.
- [31] K. Leja (red.), op. cit., p. 103.
- [32] K. Perechuda (red.), op. cit., p. 136.
- [33] S. Kasiewicz [et al.], op. cit., p 82-83; P. Wachowiak, op. cit., p. 45; K. Perechuda (red.), op. cit., p. 136-137.
- [34] K. Leja (red.), op. cit., p. 103.
- [35] P. Wachowiak (red.), op. cit.
- [36] K. Perechuda (red.), op. cit., p. 136.
- [37] M.J. Stankiewicz (red.), Zarządzanie wiedzą jako kluczowy czynnik międzynarodowej konkurencyjności przedsiębiorstwa, Towarzystwo Naukowe Organizacji i Kierownictwa "Dom Organizatora" Toruń 2006, p. 151.
- [38] K. Leja (red.), op. cit., P. Wachowiak (red.), op. cit.
- [39] P. Wachowiak (red.), op. cit.; K. Leja (red.), op. cit.; A. Błaszczuk [et al.], op. cit., p 74-75.
- [40] Ibidem.
- [41] *Ibidem*.
- [42] K. Perechuda (red.), op. cit.
- [43] B. Kaczmarek, W. Walczak, op. cit., p. 2
- [44] P. Wachowiak (red.), op. cit. p. 123
- [45] W. Kotarba, Ochrona własności intelektualnej, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2012, p.110
- [46] M. Nycz, M.L. Owoc, (red.), *Pozyskiwanie wiedzy i zarządzanie wiedzą*, Akademia Ekonomiczna im. Oskara Langego we Wrocławiu, Wrocław 2004, p. 67..



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ARCHITECTURE OF CHOICE – ADVICES OF BEHAVIOURAL ECONOMICS THE NEW BOOK BY PROFESSOR DIMITAR KANEV

A book review by Venelin Terziev

Dimitar Kanev is Ph.D in economics. He is one of the most renowned Bulgarian scientists, whose major interests are connected with the general economic theory, behavioural theory, economics and management of education and economics of labour. He is professor at Nikola Vaptsarov Higher Naval School in Varna and at Chernorizets Hrabar Varna Free University.

This book is inspired by the traditional scientific works of Prof. Dimitar Kanev. Here he seeks explanations from various science aspects, where he expresses his attitude and grounds specifically and clearly his particular position. This achievement would not have been possible without his daily and scientific experience; it could not only result in scientific research, without a basis in real life. Far from philosophical rations that inevitably come to each reader, we have to note and pay special attention to the human behaviour interpretation in particular situations.

The goal of the present work is to help the reader understand human behaviour and human choices in more details, the way we think and what the system deformations in our thinking are, to get to know and avoid behavioural mistakes and delusions in the self decisions and actions; to improve self-control and consistency between intentions and actions; to identify somebody else's influences on oneself and to prevent from the ones that are not of self-interest; to take ethically advantage of the decisions and actions of the others and to help them in achieving their own goals; to comprehend what state policy of intervention in the individual decisions is most appropriate for maximizing individual wealth and achieving public goals. This, beyond any doubt, would improve personal life and professional relations as well as the possibilities for career progress, as well as the way one views the environment and the people in general. All that would help us in establishing a better world.

In order to achieve that goal, the author analyses human behaviour and actions, enriching the view of the social sciences' "queen" – economics, by upgrading the understanding about the "economical person" (homo economicus), who, by definition is rational and possesses unlimited possibilities to acquire and process necessary information, learns from his mistakes and thus is never systematically wrong and reacts an expected way to the incentives created by market and public institutions, is ego-centric and has the will to realize his aims. Here he leans on the achievements of all behavioural sciences and will put in the limelight not the idealized picture of



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the "economical person" (homo economicus), but the "normal person" (homo sapiens), who is limited within his egoism, rationality and will.

The work is divided structurally into five chapters.

The first chapter lays the foundation of the further analysis. Here, human decisions are presented as product of two mental systems – automatic and rational. It reveals the characteristics and tasks of each system and assesses how effectively they manage the problems, why they fail and why their failures cannot be easily prevented. It also presents the main possibilities for influencing both systems – the paternal approach, the libertarian conception and the compromise between them – the "libertarian paternalism" and the connected tools for "jogging" towards the "correct" behaviour and decisions through appropriate "architecture" of the environment of choice.

The second chapter observes the deformations in the assessment of the probability for the occurrence of various outcomes that are connected with the heuristic way we take decisions in the conditions of cognitive limitations, uncertainty and time deficit. Heuristics are irreplaceable in achieving the quested satisfying sufficiency of decisions and have significant advantages compared to the analytical and statistical methods. However, they may lead to systematic mistakes in the probabilities assessment. The emphasis in this chapter is on the deformations caused by the heuristics of representativeness and accessibility, anchoring, over-optimism, over-confidence, the heuristics of known, conservatism, the tendency for confirming, egoistic distortion etc.

The third chapter studies the deformations connected with the assessments of decision's benefits and losses. They lead to distorted assessments about the actions' consequences.

Among the examples is the exceptive sensibility towards the losses, the tendency for status quo maintenance, not recognizing the sunk and the alternative expenses, the effect of possessing, the putting of frames, the mental reckonings, reading the relative instead the absolute assessments. This chapter presents also the basic theoretical model of behavioural economics that explains choice – theory of perspectives. It also gives examples for its application.

The fourth chapter examines the limited egoism and focuses on the social preferences' influence and the understanding for justice, the social relations (family, friends, colleagues, community) and the social norms (social and moral values). It studies in more details the social environment factors influence upon the choices and the consecutive irrational behaviour. Illustration of these is the gregarious behaviour, the effects of environment and the relative position, the commitment and consistency, inequality avoidance, the reciprocity, the quest for social proofs, conflicts avoidance, etc. The possibilities of inner and outer motivation are also presented. Each one of them in what cases has priority is also cleared and what is the interrelation



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between market and social stimuli.

In the fifth chapter attention is drawn to the deformations of assessments regarding how present day decisions influence the future. These deformations lead to exceptive emphasis upon the present, mistakes in the prognosis of future preferences and present day decision's consequences, limited will and self-control defects. The main problem here is underestimating the future benefits and damages, hyperbolic discounting, the projection and the accessibility influence upon behaviour. The issue of how we going to change it is also explored and the answer is found in the change of the preferences for time (development of orientation to the future and patience) and the perception of strategies for preliminary binding and consistency.

The conclusion summarizes the principles of good "architecture of choice", its distinguishing features and major tools – the implicit options, the simplification and structuring of choices, the putting into frames, the dividing, etc. Evaluation of the relation between behavioural economy and neoclassical pyramid is also given. The main critics and perspectives in the development of the "behavioural policy" are outlined.

The founding works in this field are followed through all this – Daniel Kahneman's "Thinking", Richard Thaler and Cass Sunstain's "Nudge", Dan Ariely's "Predictably Irrational" and "The Influence", "Psychology of Persuasion" and "Pre-suasion" by Robert Cialdini. They are irreplaceable in achieving the main task of the work – to find which are and how to take the correct decisions as well as what to be done in order decisions to be better for both, the decisionmakers and the rest. Following the methodology of behavioural economics, the main results from the empiric studies in the field are presented as well as the ones from own inquiry studies.

This work raises the interest of scientists and researchers as well as of everybody, who is engaged in the management processes and looks for decisions, while getting into various situations.

Behavioural economics completes in original way the line of prof. Dimitar Kanev, who is popular for applying traditional economic approaches, which turns him into "attractive" researcher and outlines him for his precision, his exact and clear definition of problems and for the true approaches for their solving.

Himself says: "If you succeed following me through the trip in the labyrinth of behavioural economics, which I offer by the present book, you'd undoubtedly broaden your understandings and you'd find valuable and useful answers. I hope your way to give you also the pleasure I had gotten by it".

In conclusion, I'd like to emphasize that following one of the prominent Bulgarian minds is not only a pleasure, but also a challenge in this dynamically changing time.



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References:

[1] Kanev, D. Arhitektura na izbora – saveti na povedencheskata ikonomika, ISBN 978-954-2912-57-6, 2016.



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SOCIAL INTEGRATION OF DISCHARGED MILITARY IN BULGARIA

A book review by

Colonel Assoc. Prof. Neno Hristov, Ph.D. D.Sc. Rakovski National Defense Academy, Sofia, Bulgaria

Analyzing the significance of the changes that have occurred in the social, political and economic development of Bulgaria after 1989, the author draws our attention to a monograph on the social integration of discharged military in Bulgaria. The monograph analyzes the role of social policy in the economic development, the theoretical foundations of social programming and its effectiveness. The author presents in detail the foreign experience in establishing criteria of social development and makes an attempt to analyze the effectiveness of social programming in the system of social protection of the population in Bulgaria.

The main part of the research is related to the triad *socialization-upbringing-identity*, as a basis of social adaptation. The author presents: social integration and education as a process; socialization of the personality and its identity; social adaptation and its aspects; social adaptation and socialization process.

Making a theoretical study, the author provides practical model of the social adaptation of servicemen discharged from military service and the members of their families. He examines the theoretical and methodological foundations of the socio-psychological adaptation and the ways of implementing the process of social adaptation of servicemen discharged from military service and the members of their families. Professor Dipl.Eng. Venelin Terziev, Ph.D, D.Sc. makes a rigorous analysis of the Bulgarian experience in the development of social adaptation of this social category.

One of the major contributions of this monograph is a pattern of increasing efficiency of the social integration and adaptation of discharged military and the members of their families, by developing an integrated model for social and psychological support and, at the same time, a version of a competency schedule.

Understanding the depth and importance of the problem, the author, based on research and analysis of social programming and social programs, poses as a dissertation thesis the



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development of a reliable and viable model of a national strategy or a national program for successful social adaptation of discharged from the army servicemen and the members of their families. He examines traditional and specific approaches and models in order to execute this process in the most effective and efficient manner and also to find appropriate methods for evaluating its effectiveness- economic, social etc.

The author achieves the aim of his research as a result of creating and verifying a theory of effective social adaptation of servicemen discharged from military service and the members of their families - a theory, which serves as the basis of the practical implementation of a complex model of social adaptation of the analysed social category, in which models for social-psychological and social-pedagogical adaptation will be adapted and also to develop and justify a competence pattern for increasing the efficiency of the process of adaptation in a dynamic social environment.

Creating a competence model for increasing the efficiency of the social adaptation of discharged military, the author provides an opportunity to people at high risk of social exclusion (as the above mentioned category) by improving their basic skills and thus using lifelong learning to build a path to a sustainable income and a meaningful life.

The direct beneficiaries of the model are, generally speaking, these servicemen discharged from military service and the members of their families. The results of the project are indirectly beneficial to the providers of adult education (centers for adult education, service training, initial vocational training and its continuation, trainers, teachers and managers of educational institutions) and all those institutions related to the provision of social services, services related to the implementation of recruitment etc.

The main result of the application of this pattern is the establishment of a specific methodology and key teaching skills training. This may include: a set of teaching modules for training in the eight key competencies for lifelong learning, methodology of combined teaching, learning tools for internal and external evaluation of the training, web portals and on-line training, tools for information exchange and results dissemination, news, links etc. Also includes an innovative method of learning, addressing the issues, common to the majority of the target users. These includes: insufficient education and learning motivation and lack of cognitive abilities. The methodology enables flexible training such that, both young people and adults can start, stop and restart their own career path in order to achieve an improvement in the learning process and their career development.

The created and verified theory of effective social adaptation of servicemen discharged from military service and their families in a dynamic social environment can find application in:



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• goal setting, planning, programming, budgeting, analysis and control of the program "Social adaptation and economic integration of the military personnel discharged from the armed forces in civil society";

• development, approval and updating of departmental regulations relating to the rationalization of management decisions regarding the social adaptation of servicemen discharged from the BA and their families;

 development of efficient, complete and feasible models for effective social adaptation of servicemen and their families;

• development and improvement of the competence pattern upon the selection for a free job position as part of the program of social adaptation of servicemen discharged from the army.

The research results can be successfully probated in the implementation of a national strategic or policy documents on the social adaptation of servicemen discharged from the army and the members of their families, and the specific developed models can be implemented as separate social projects.

REFERENCES

[1]VenelinTerziev, SOCIALI NTEGRATION OF DISCHARGED MILITARY SERVICE MEN IN BULGARIA, Institute of Management and Knowledge, Skopje, 2017.