



Innovations and Sustainable Development

Actual Research Problems in Eastern Europe

edited by
Maciej Laskowski
Petr Šauer

MONOGRAFIE

Innovations and Sustainable Development

Actual Research Problems
in Eastern Europe

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Politechnika Lubelska
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SUMMARY

Over fifteen years have elapsed since the transition from the centrally planned economic system started in the early 1990s. During this time the countries of Central and Eastern Europe have undergone profound structural changes with wide variations in the degree of transformation and in the rate of success in creating a competitive and private ownership based market. The chapters in this book highlight the role of innovations and sustainable development, especially in transition countries including the use of the countryside for tourism purposes as a new kind of innovation. It presents results of international cooperation of scientists from Hungary, Poland, Ukraine, Kazakhstan and Canada.

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Foreword

In the 21st century, sustainable development remains fundamental to economic growth and poverty alleviation. Despite the global urban population now outnumbering the rural population, about seventy-five per cent of the world's poor live in rural areas, still mostly involved in agriculture.

And, as the latest DHL Global Connectedness Index concludes, the world is less integrated in 2012 than it was back in 2007. With 1 billion of the world population 'starved', another 1.3 billion 'stuffed' and 1 billion 'malnourished', it is clear that globalisation may not provide out-of-the-box solutions to all of the world's problems.

Rather than a production challenge, the problem therefore lies with the corporate dominated food system itself which has managed to graft pseudo-scarcity and volatility onto a situation where food supplies are sufficient to feed the world's population one and half times over.

Yet this reality is mystified by the twin narratives of modernisation and globalisation. These reifying tropes have continually sought to marginalise alternatives to large-scale, commercial, industrial mono-cropping agriculture by propagating images of neo-Malthusian catastrophes, unproblematic agrarian transitions, 'saving' land through the efficiencies brought about by economies of scale, and most recently, through the language of 'win-win' scenarios, 'reserve agricultural land', and production challenges. The result has been 'jobless depeasantization', environmental destruction and a massive 'squeeze' on agriculture. When one appreciates that these are a consequence of the current course of development rather than a lack of it, the argument in favour of alternatives is overwhelming.

One of the highest development priorities in the world must be to improve smallholder agricultural productivity, especially in underdeveloped regions such as Africa. Smallholder productivity is essential for reducing poverty and hunger, and more and better investment in agricultural technology, infrastructure, and market access for poor farmers is urgently needed. When done right, larger-scale farming systems can also have a place as one of many tools to promote sustainable development.

Some of the mentioned problems can be overcome by both supporting innovations and sustainable development, including relevant institutional (policy) changes. Although it should be noticed, that those also cannot be treated as a universal out-of-box panacea to all of those problems, including violent conflicts, as it can be seen from the examples of European Union.

In this book we try to highlight the role of innovations and sustainable development, especially in transition countries including the use of the countryside for tourism purposes as a new kind of innovation. Over fifteen years have elapsed since the transition from the centrally planned economic system started in the early 1990s. During this time the countries of Central and Eastern Europe have undergone profound structural changes with wide variations in the degree of transformation and in the rate of success in creating a competitive and private ownership based market.

This book, being the result of international cooperation of scientists from not only the European countries: Hungary, Poland, Ukraine, but also from Kazakhstan and Canada, is divided into five parts, focusing on different aspects of innovations and sustainable development.

The first one is dedicated to various aspects of innovations in the times of crisis, discussing especially situations in Hungary, Germany and Ukraine. The second, third and fourth part are dedicated to different aspects of sustainable development in both industry and rural areas. Despite the book title, suggesting that discussed issues are limited to Eastern Europe only, editors decided to widen the spectrum of the presented issues to sustainability problems on a global scale in the fifth part, presenting that globalisation does affect all of us, no matter where we live or do business.

We do hope that this book will help readers to understand the importance of both innovations and – especially – sustainable development in the modern world.

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Part 1:
Innovations in the times of crisis

System for public financial support of the innovation activities

INTRODUCTION

For Ukraine, the task of reforming the system of the financial impact of the initialization growth of innovations is especially urgent. The system of public financial support for innovative activity in Ukraine is archaic therefore not effective. In the context of European integration of Ukraine and as the result of the economic analysis of Ukraine, it is optimal to use the advantages of the structure similar to the system in the EU.

While innovation processes towards sustainable development have received increasing attention in the EU, the theoretical and methodological approaches to financing innovation in the economy in general and in the field of public financial support for innovation are different in each country.

Although the formation of a unified system of public financial support for innovation in the EU was under influenced and was the result of international instruments in the field of innovation, while at the same time each Member State retains the features of national financing model innovation.

This research focuses on the determination of methodological approaches to the use of the organizational structure of public financial support the innovations in EU to the reform of the similar system in Ukraine. The effectiveness of public funding the innovative scientific or scientific-technological activities will be possible only when volume of financial resources covering costs of material,-technical and staffing provision of SRW and R&D for 10 year period will be available.

In the conditions of underfunding, the minimal required volume of financial security for research institutions activities, rising of effectiveness of public administration of funding of innovations is not relevant. Without solving this problem, the whole reform is a non-sense.

The relevance of question regarding the 10 year the period, substantiates choice as the basis for research – cycles of innovation process within which the functional financial and production become the elements of the innovation development of economic systems¹.

¹ The theoretical foundation of the provisions is covered in the works: Miller OG Cyclical nature of the dynamics of innovation factors in the development of industrial enterprises. In: Manager (2009) № 4, pp. 143-155.;

ANALYSIS OF PUBLIC SYSTEM OF FINANCIAL SUPPORT FOR INNOVATION ACTIVITIES IN UKRAINE

Ukraine has virtually no institutional and organizational system of government financial support for innovation. The General directions of state policy in the field of financing the innovation activities in Ukraine is fixed by in concept by "Reform of state policy in the sphere of innovations", approved by the Government of Ukraine 10.09.2012².

As part of the conceptual directions of the government financial support system for innovational activities – the development of financial support implementation competitive in research and innovation programs and projects are entered through:

- supporting the development of innovative network of specialized non-bank financial institutions, and their rights to participate in the creation of investment funds;
- introduction of insurance risk venture capital investments in high-tech projects;
- introducing a mechanism of grant support scientists and enabling and encouraging them to form small innovative enterprises by the state and other funds.

But these actions are not enough. Development of innovations in the system of state support for innovation is defined as:

- giving the state financial support for the implementation of medium-and long-term investment projects of national importance aimed at creating a high-tech competitive productions;
- granting the financial support for protecting (e.g. by patenting) the innovative industrial technologies, especially abroad.

At the same time, building institutional environment for effective investment in structural transformation of the innovative type is not classified as strategically of important. This inevitably leads to a loss of budgetary investment.

Accordingly, a strategically important issue is to create an organizational system of state financial support for innovation and to determine in this system:

- using a program method of financial support;
- the method of priority funding;
- establishing the budget for funding innovative development of strategic enterprises and high-tech industries and other tools, which are proved to be effective in the implementation of government financial support innovation in the EU.

Another important objective of reform is to eliminate the duplication of functions in the system of state financial support for innovation through the optimization of the organizational structure:

- by defining priorities;
- use of instruments,
- the financial means to support innovative activities;

- timing synchronization, which provides a single approach for all priorities in determining the time periods of government financial subsidies for innovation projects of a different scale.

Strategy for reforming public financial support for innovation, as well as its development is determined by the method of transition from a programmatic approach to methods of financing innovative projects. This task is not performed for the following reasons:

- lack of the institutional and-organization structure of financial support for innovation in all financial system components, excluding credit institutions and all components of the innovation reproduction;
- absence of actual institutional filling content of the national innovation system by the innovation process structure, the institutional-technological structure transfer of technologies;
- lack of non-functional legislative support for state financial support of innovation;
- small scale economy, lacking financial resources.

The task of forming effective public financial support systems of innovation activities is possible on the basis of using competitive advantages of the institutional and organizational structure of similar systems of the EU.

SUGGESTIONS

The system of financial support for innovation should be formed on the basis of the distribution of the total volume in two directions:

1. by the organizational structure:
 - by the stages of the innovation process;
2. by the functional distribution:
 - by providing component;
 - by part of innovation development.

Thus, the unified structure of the system of innovation activities by direction will coincide with certain structural components, in which the greatest synergistic effect of innovation from realization of the potential effectiveness of organizational and operational efficiency of public financial support for innovation is achieved. Lack of a systematic approach to the organization of state financial support for innovation leads to dispersion of financial resources yet on the stage of providing.

A similar effect is observed in the implementation of program approach, where identifying the priority directions of innovation activity is grounded on method of competitive selection, accompanied by the initialization of a gap-time, depending on the process approval of programs, respectively, initialized and the subjective factor in decision-making. Disadvantages that were formed at this approach in public policy innovation development in Ukraine, based on the use of ensuring program as a method of financing the latter. At the same time, the use of tools as a method of public policy leads to a loss of efficiency in the use of financial resources through scattering funds due to of de-concentration of funds and financial flows from the priority ways of the state policy in the sphere of innovations, as it happens in Ukraine.

THE SYSTEM OF GOVERNMENT FINANCIAL SUPPORT FOR INNOVATION IN THE EU

The main prerequisites for taking advantage of institutional and organizational structure of state financial support in the EU are:

- the economic differences between EU –member-states is conditioned not by the structural imbalances in the regional systems, but come from different levels of development of the EU economy, including the differences in specialization;
- the variety of local (within the EU) economic systems forms rather complicated mechanism of innovative development in general and the system of public financial support for innovation activities in particular;
- choosing the appropriate EU model for using in Ukraine. Model of each state is formed on the base of scale of reproduction which is caused by potential of the national economy system. That's why using model of the USA, Canada, Japan, China for Ukraine could be effective only in certain aspects of procedures for public financial support for system-level tools. Application of leading models at a higher level, say on the level of control of formation of financial resources for supporting innovation, will possibly be under the condition of rising economy scale, that at this moment is impossible for Ukraine, also depends on of the range of derivatives of economic reasons;
- Unlike models of technological leaders, the EU model includes the elements of the adaptive environment for the economy of the smallest scale, comparable with the size of the economy of Ukraine. Also, in the international economic mechanism, as the one of EU, is objectively included in the economic systems with inhered of structural imbalances, as well as those formed as the result of a regional differences by structural imbalances. That is extremely important and, moreover technologically compatible for Ukraine at the stage of reform and development of state system for support the innovation;
- the system of state financial support for innovation in EU is characterized by two-tier organizational structure in which international and operative sector of coordination and monitoring of innovation are allocated;
- the international sector represented by the EU Structural Funds and Fund for financial support from the EU.

EU Structural Funds³ – is the Strategic Initiative (leadership) for all EU countries based on a system of strategic guidelines for communities (Community Strategic Guidelines, CSG), acting under a separate law in the national legislation of countries and establishing framework for all actions, which can be taken among with the use of funds. From CSG, each country develops a national strategy (NSRF), consisting of national priorities and operational programs of lower level for each region.

Organizational-institutional model of state financial support includes coordinating center and possible participants in the innovation process (Fig. 1).

³ The specific Regulations on the European Regional Development Fund, the European Social Fund, the European Cohesion Fund; and the National Strategic Reference Framework and Operational Programmes approved for each Member State.
http://ec.europa.eu/regional_policy/index_en.cfm

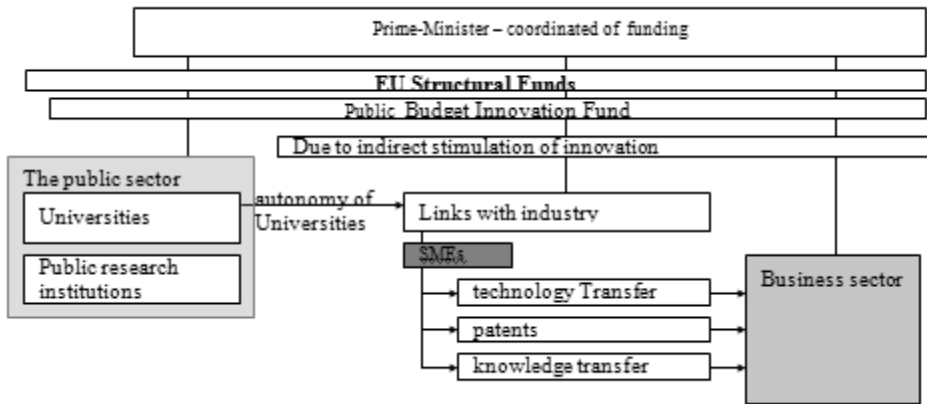


Fig. 1. Organizational-structure model of state financial support for innovation
(source: own work)

RESUME

- Structural-institutional model of system for public financial support of innovation in the developed economies is based on the using the direct and indirect methods of financial influence in areas of innovation and has its own efficiency.
- State financial support for innovation activities are concentrated over strategic areas of national economic competitiveness in the international arena through leadership in scientific and technological spheres, all of the other types of economic policies being subordinated to the general strategy.
- The functional efficiency of public system for financial support of innovational activities is achieved through a concentrated focus on the following directions:
 - financial support for R&D sector of scientific and technological activities;
 - financial support for the implementation of joint projects according to structure of the innovation process:
 - research and development – innovative production – technology transfer;
 - institutional funding for joint programs;
 - public research institutions and universities (public sector) – SMEs – industrial (business sector).

As for Ukraine, the disadvantages for building models of state support for innovation in developed countries are:

- lack of diversified economy and localized regional innovation systems;
- narrowness/insufficiency financial resources for investment for economic growth of innovative type;
- absent SME sector as an institutional unit of the innovation process (innovation development);

- no-condition repatriation/immigration "of brains", which restricts the realization of the creative personality in the field for the development in science and technology;
- absence of Ukraine in the system for collective financial support of innovation;
- lack of organizational structure for innovational/technological interaction of institutional actors of the national innovation system.

These deficiencies are systemic in nature, which can be corrected with an available base of financial support for international fund used for restructuring the economy based on the reproduction of innovation.

ANALYSIS OF THE UKRAINIAN CASE

System proportions for financial support of innovative activity in Ukraine can be determined by analyzing the investment potential of Ukraine in three areas of study:

- the innovation of industrial corporations (table 1);
- for regional programs (table 2);
- a national database technologies in Ukraine (table 3).

Total estimated initial funding for innovation, according to the scale of innovative activity of industrial enterprises in Ukraine in directions or terms of funding innovation costs, the volume of sales of innovative products, integrated assessment of the technological potential of Ukraine's regions⁴, is 213 609, 285 million in 2013.

At this volume of current funding innovation becomes possible activation of funding in all areas of consolidation of financial resources, all sources of their formation.

Table. 1 Structure of distribution of financing of innovation activity of industry of Ukraine, % [13]

General volume of the financing, mln UAH		By resources, share from general volume, %					
		Equity financing	Public budget	Local budget	Investment	Foreign investment	Credit
Total	79422,7						
Average	6818,558	73,9	1,67	0,11	1,11	7,68	18,39
Average index	1,657	1,001	1,748	1,532	1,933	2,684	1,340

Comparison of the criteria volume or demand for funding the innovation by regions are presented based on the state register for investment projects in Ukraine, in which 1142 investment projects were registered, of which 338 had innovative components and implemented innovations in areas of innovative technologies:

- Environment: implementation technologies;
- Energy: introduction of technologies;
- Wind power industry: manufacture, introduction;

⁴ The evaluation carried out on the basis of the developed methodology for the assessment of technological potential of the regions of Ukraine (source: [14] and financial analysis of innovative activity of industrial enterprises in Ukraine in 2002-2010 (source: calculated by the author based on [15])

- Bioenergetics of technologies;
- Technological modernization of production;
- Innovative products;
- Nanotechnology: research and development;
- Comic technologies: research and development;
- Implementation of technology: engineering;
- Technology of agriculture: introduction;
- Technology of agriculture: research and development;
- Biotechnology: selection.

Table 2. Volume of finance of innovation projects in Ukraine, in millions USD (own work based on data of public regional prospects of the programs of social-economic development in Ukraine)

Region	investment projects. amount	financing	required funds for investments	innovation projects, amount	financing	required of funds for innovations
Ukraine	1142	47015	34545,28	338	10857,366	4821,81
Crimea	11	1146,1	1091,6	1	45,0	45,000
Vinnys'tka	12	57,315	36,043	3	5,654	5,594
Volyns'tka	103	342,336	294,414	8	1,220	0,949
Dnipropetrovs'tka	42	3406,11	756,673	20	1352,345	1081,44
Donets'tka	143	5021,19	2040,4801	33	1995,632	777,779
Zhytomyrs'tka	38	136,383	123,509	0	0	0
Zakarpets'tka	12	2460,91	2254,687	3	206,5	206,5
Zoprizhs'tka	70	3020,11	1523,008	25	1403,256	1323,73
Ivano-Frankivs'tka	29	483,785	162,446	6	204,462	93,260
Kyivs'tka region	4	286,750	183,28	0	0	0
Kirovograds'tka	32	86,367	63,831	4	7,784	5,246
Lugans'tka	67	643,338	451,748	7	184,601	162,501
L'vivs'tka	9	11,345	5,55	3	1,145	0,295
Mykolaivs'tka	32	3166,27	3049,181	11	105,969	96,812
Odes'tka	15	4952,33	2155,243	5	449,693	82,743
Poltavs'tka	4	744,683	666,633	1	74,250	74,250
Rivnens'tka	5	222,678	171,378	1	0,300	0,260
Suns'tka	2	49,320	43,389	0	0	0

Region	investment projects. amount	financing	required funds for investments	innovation projects, amount	financing	required of funds for innovations
Ternopil's'ka	13	72,450	70,4	0	0	0
Kharkivs'ka	7	901,984	514,285	3	103,699	96,699
Khersons'ka	11	60,848	24,268	1	12,729	12,729
Khmelnys'ka	10	969,139	669,124	1	300,0	300,0
Cherkas'ka	8	69,229	63,541	2	0,61	0,541
Chernivets'ka	37	408,96	341,166	7	15,153	13,847
Chernyiv's'ka	26	895,73	384,896	11	481,449	441,641
Kyiv City*	391	17402,4	17402,439	180	3906	0
Sevastopol'	9	66,078	65,547	2	0,525	0,525
Share of general, %	100	100	73,5	29,6	23,1	44,4

Based on the content of investment proposals for the implementation of innovative projects, shaping the priorities of public financial support should be built on the priorities of the advantages in technologies, based on database technologies in Ukraine⁵.

The technological part of the investment potential of Ukraine formed on the base of the State Register of Ukraine technological is based in areas of investment evaluation of technological development projects⁶.

Table 3. Data of the state technologies register of Ukraine, in millions USD [15]

technology branch	investment projects, amount	innovation projects, amount	financing	required funds for innovations	term of projects
Aviation and cosmos	6	6	173,6	172,05	3,5
Bio tech	9	9	1868,025	1868,0225	3,25
Construction and architecture	23 (3)	3	11,45	11,45	3
Sensors and transducers	5 (4)	4	0,8	0,8	2

^{5,6} See: <http://test.uinter.kiev.ua/transfer/branches>

technology branch	investment projects, amount	innovation projects, amount	financing	required funds for innovations	term of projects
Eco	2	2	0,68	0,68	2
Electrical engineering	1	1	0,24	0,24	2
Energetics	16	16	2,212	2,212	2,75
Energy	16\15	15	6,513	6,513	2,53
Communication	2	2	1,85	1,85	5
Welding	2	2	0,52	0,52	1,5
IT	2\1	1	0,15	0,15	3
Protection against corrosion	5	5	0,139	0,139	2,6
Materials	2	2	0,6	0,6	3
Machine building	21\9	9	63,34	63,34	2,9
Medicine	33\26	26	10,35	8,955	2,9
MicroBioTech	1	1	0,06	0,06	
Metallurgical engineering	9\8	8	1,49	1,35	2,33
Mono crystals	1	1			
NanoTech	1	1			2
Semiconductors	1	1	0,3	0,2	3
Petrochemistry	1	1	0,7	0,5	3
New energy	3	3	0,74	0,74	3
Reproductive energy (solar, wind)	2	2	0,1	0,1	2
New materials and substances	14	14	9,438	5,438	2,64
Environment	8\6	6	5,161	5,161	3,33
Manufacturing	3	3	8,3	7,1	3,66
Instrument	10	10	1,85	1,85	2,7
Resource technology	31\27	27	158,408	156,09	2,95
Systems of measurement and control	1	1	0,04	0,04	4
Agro Tech	13\11	11	6,767	5,305	3
Transport and transport systems	13\9	9	23,5	23,493	3,42
Disposal of hazardous waste	11	11	3,306	3,306	2,27
Pharmacology	1	1	0,1	0,07	5

technology branch	investment projects, amount	innovation projects, amount	financing	required funds for innovations	term of projects
Physics of Semiconductors	3	3	8,545	8,545	2,66
Food	10\9	9	0,327	0,327	1,6
Chemical technology	25\23	23	122,478	55,156	1,75
Total	307	249	2492,079	2412,353	
share, %	100	81,1	100	96,8	
average	8,52	6,91	73,29644	70,951544	2,83
k innovation	0,811				

Distribution of funding innovative projects for the technology, by the structure of innovational process, reveals a well-defined pattern of financial resource needs for innovation in certain of stages/spheres of innovation, which is presented in Fig. 2.

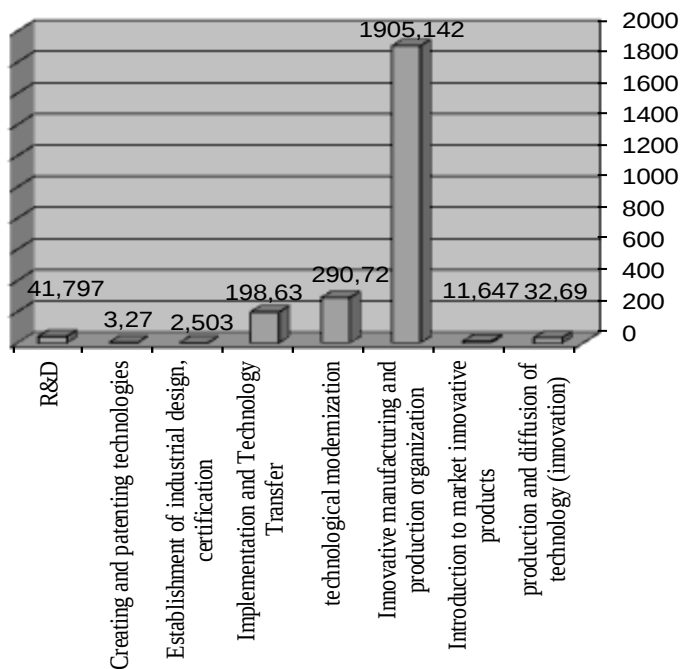


Fig. 2. Financing of innovation according of structure of innovation process, mln USD.

Source: own work based on: [16]

This data correlates with the structure of scientific environment in Ukraine, which indicates the presence and effective functioning, including of institutional filling of sphere of scientific and technological developments and activities, as well as basic science. Significant factor ($k_w = 0,94$) is the stage of organizing the innovation production together with realization of transinterrelation of phases of introduction and technology transfer and technological modernization. This indicates the absence in Ukraine of venture finance at the institutional level of the organizational structure of the economic system, system of lending some of the system innovation of enterprise on the level of institutional filling in the innovation business, actual of total absence of intellectual property market at the level of legislative support and protection of institutional and organizational structure of the intellectual property market.

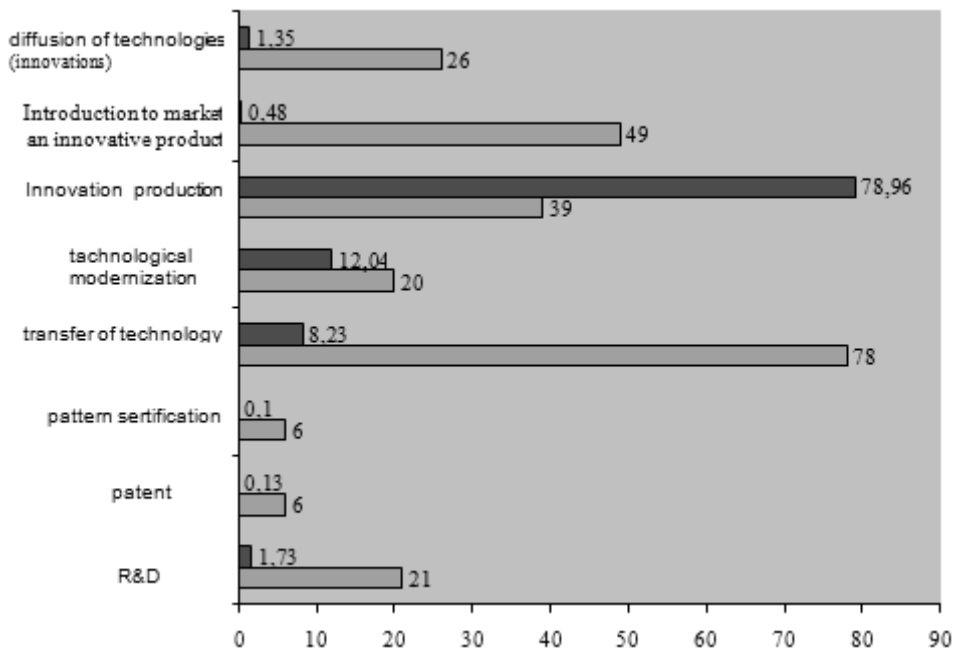


Fig. 3. Structure of distribution of required financing for innovation projects (from structure of innovation process), %. Required financing in dark, quantity of technology in light.

Source: own work based on [16]

An additional characteristic of scientific-technological sphere in Ukraine is the distribution of demand for investment in financing innovation projects by the of number of technologies, as well as phases of the innovation process (Fig. 3). Here we can see 98% coverage of financing the subjects of innovation business on the stage of the introduction to the market of an innovative product.

This model, combined with the model of financing innovative projects in the field of technology (Fig. 3) constitutes a general model of the distribution of financial support in the initialization of the development technological innovation base.

While the regional aspect of the study allows defining regional centers of innovation related to this possibility of regional policy outrunning technological development.

The implementation of cluster model concentrates on competitive technological advantage in the local technological strategy formation process of economic growth.

CONCLUSIONS AND SUGGESTIONS

The methodological basis for the formation of public financial support for innovation activities should serve as a system unity of techniques methodology of optimization for the following directions:

- accumulating financial resources in areas of innovation;
- financial support for innovation activities by stages of the innovation process;
- organizational-institutional structure of government financial support for the innovation.

The problem of synchronizing the innovation process is one of the major ones in public financial support for innovation, which can be largely solved by optimizing the organizational-institutional structure of the system.

Algorithm concentration or distribution of funds eliminates the structural imbalances tools including state financial, structural, innovation, economic policies in areas of financing public programs by-the following elements:

- updating the technologies technologically identical productions;
- utilization of technologically outdated industries: the purchase of financial assets firms;
- diversification of regional economies, localization of regional scientific and industrial complexes – funding of government programs clustering the regional economy;
- modernization of innovation infrastructure in accordance with technological change;
- public support for funding infrastructure projects.

The peculiarity is that different stages of the innovation process within the economic system (the national economy and regional economy) and within the production system (enterprise) can combined with one another and their sequence will change.

Also, the process of innovation in innovation activity can be discrete (short/long).

The innovation activity is the instrument of locating the scientific-technical innovation industrial complexes. Any effectiveness in the innovation field grounds on the technological primacy through the structure of innovation process.

Basing on structure of volume of financing of innovation activity in the industry like one of Ukraine, it should be priority of choice for the institution of model of financial subsystems: *public budget – government credit – Bank of Reconstruction and Development* for the system of financing the innovation front of the public budget – public innovation fund for the SRW. It should be done because the fund financing is in crisis and does not account to the volume in the scope of national economy.

The effectiveness of public management for funding the innovation, scientific or scientific-technological activities can only be provided when the following amounts of financial resources at least cover the costs of logistics and staffing STD and R&D for ten year period. In the underfunding, the minimum required amount of financial support for research institutions and the effectiveness of public administration funding is not relevant and – without solving – meaningless. The relevance of the ten year period of informed choice for research cycle innovation process becomes functional in case of financial and innovative elements of the economic system.

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The impact of the economic crisis on the Hungarian and German construction industry – a comparative analysis

INTRODUCTION

The construction industry sector is dynamically expanding in almost all the countries, although it is true that this sector includes not only the activities of construction and civil engineering (bridges, buildings, highways, airports, real estates, etc.) but also the development of real estate funds (public and commercial), special architecture projects (architecture products, ornaments, etc.)

It should be noted that[1]:

- Almost 10% of the world GDP comes from construction industry;
- Almost 7% of the total workforce is employed by construction industry;
- Almost two-fifth of the total energy consumption of the world is used by construction industry.

In the United States, the heavy construction industry sector had increased by 5,2%, while the residential and commercial real estate sector had grown by about 7,5% until 2006. There was, however, a drastical decline in 2006 and 2007 owing to the impacts of the crisis regarding especially the mortgage lending of residential properties.

In India, the economic boost of construction industry has been encouraged primarily by the initiatives of the government which opened wide possibilities to development. The construction industry could show a growth of 7-8% in India [2].

The other two fortresses of construction sector are China and the Arab Emirates. While China is one of the most quickly developing countries which produces enormous economic growth, the United Arab Emirates has a leading role in luxurious investments.

During the recent decades, the growth of GDP has been typical in the developed countries but this ratio has changed by our days. In 2005 China gave 5% of world GDP, by today it has reached about 10%.

Therefore, considering the tendencies up to now, the most determinant capital flows of construction industry will probably be limited to five regions: China, Russia, India, CEE region and the Middle East region.

The crisis has negatively affected most of the European countries, except for Germany which is among the most developed countries with very strong economy. Germany generated growth even during this period and reached about 5,5% expansion in construction industry just like Poland, Portugal and Romania, which recently started to develop.

Problems have arisen in Hungarian construction sector from 2001. Although the circular debt at its early stage at that time only slightly affected the whole construction industry. The production volumes increased until 2006 due to several reasons: inflow of Western capital, increased interest in shopping centres, complexes, industrial estates, etc. Getting loans in connection with building blocks of flats and other housing estates became easier which further generated the construction of condominiums.

The first decline in production volumes regarding construction industry was seen in 2006 and after this year production started to collapse. The worst year of the last ten years was in 2011 after 2007. Circular debt should be underlined here because it has become almost integral part of construction sector. Starting from 2008, larger and larger corporations have become exposed to banks, customers or state will. Their subordinate role has further deepened in the following periods. It could also be confirmed from the depressed prices going almost below flat cost.

THE PRESENT STATE OF HUNGARIAN CONSTRUCTION INDUSTRY

Hungary belongs to the countries which have been affected the most negatively by the crisis. By our days the financial crisis has extended to the whole economy and resulted recession.

Two experts from the Center for the Study of Economic and Social Affairs have set up the rank of the greatest losers of crisis on the basis of six macroeconomic indices (GDP, unemployment, internal demand, bank loans, inflation and real exchange rate). According to this, the biggest losers of crisis are Hungary, USA, Kazakhstan, Ukraine, Romania, Japan, Canada and Russia [3].

The Hungarian construction industry was hit the most in domestic economy. As regards Hungary, the devastating money market crisis in the real economy started but not from the real estate based housing mortgage loans because this type of financing was not widespread in Hungary. The austerity measures resulted by the crisis had strong negative impact on project financing [4].

There was a slow but significant decline in the sector even before the crisis, as the number of orders decreased by 15% in 2007.

The main problems of Hungarian sector are as follows:

- Delayed EU projects;
- Decreasing state investments;
- Instead of 10% own contribution the loan institutes expected much more from investors;
- The costs of enterprises have not followed inflation;
- High taxes;
- Private investors cancelled their projects;
- Future price rises of building materials;

- Not any proper legal background is set up for solving circular debt;
- Retail loans decrease;
- Lots of bankruptcy procedures and liquidation;
- Eliminating „first flat” programs;
- Suspending state interest loans;
- Lack of solvent demand.

The bad tendency of Hungarian construction industry will continue in 2012 due to the decreasing number of orders, the lack of capital which is withdrawn by banks from the country, the deficient legal regulations and the lack of government involvement. All these will lead to the total collapse of the sector.

GERMAN CONSTRUCTION INDUSTRY FROM 2000 UNTIL TODAY

In the year 2000, the German construction industry did not grow in spite of the general boom that could be seen in German economy. The order for construction works had permanently decreased from the middle of the 1990s. The money spent on investments also diminished during this period, thus a declining tendency started in German construction industry and, as a consequence, more than 380.000 persons lost their jobs. The volume of construction projects reduced by 5,9% – about 214,2 billion euro – in 2002. The value of economic investments was 63,2 billion euro, less by 5,5% compared to the previous years. In 2003, the volume of investments decreased by 4%, which meant 199,2 billion euro for the construction industry. The next years, in 2004 and 2005, further drop could be seen in the sector, first by 2,6% which was 205 billion euro, then by 1,6%.

The reasons for decline were as follows [5]:

- **Housing projects**
moderate house building projects in spite of low interest rates, people rather save their money and keep it for the future. The rents are relatively low, it is not remunerative to buy flat for profit (to let) owing to the so-called rent mirror (Mietspiegel, the median rents calculated for each settlement, the deviation from which is possible by maximum 10%)
- **Investments in the private sector**
the disposable sources are invested by the private sector mostly abroad, due to the relocation of production from Germany.
- **Public investments**
the empty state and municipal wallets do not enable substantial new investments, the money is actually enough only for the urgent and inevitable works (e.g. road repair).

Some favourable tendencies can be observed from May 2005 therefore the orders increased by 7,8% in the given year, compared to the previous month. The value of private projects grew by 2,1%, but the house building boom is still behind the other rising values. Thus there was still a decline in 2005, by almost 7,2%.

The performance of the sector has declined year by year in the last 5 years. The degree of setback – compared to the previous year as a basis was between 0,9 and 5,8%. There was a growth in 2006 resulting 6% expansion compared to the previous year.

The growth can be due to several factors:

- The volume of construction orders set by the production sector increased by 11,5% (building manufacturing and assembly halls)
- Constructing business centres
- Growth of public investments (the investments of towns, villages, the big cities of the Western provinces mean serious orders, namely – among others:
 - setting up the port city in Hamburg (HafenCity),
 - building Phoenix steel district in Dortmund
 - construction project on Freiham in Munich.
- Loans offered in the frames of CO2 building renovation program (8,1 billion euro) which enabled the reconstruction of 546.000 flats in 2009.

The impetus beyond construction industry boom was the housing project in 2010. The orders increased by 9,8% compared to 2009. There were changes regarding contract prices, too, while the Western provinces could experiences only a few % fall, the price reduction was more than 10% in the Eastern provinces.

POSITIVE IMPACT OF ELIMINATING EURO ON CONSTRUCTION INDUSTRY

At present the driving force in German construction industry is housing, which considerably increased during the year both regarding its turnover (+ 16,5%) and volume of orders (20,5%).

The housing boom was stimulated by many factors:

- income of the population increased
- interests of housing loans decreased
- people who need housing loans are offered a widening range of credit constructions by the banks
- fears that euro zone will break up
- fears that euro will be terminated.

DIFFERENT IMPACTS OF CRISIS ON CONSTRUCTION INDUSTRY

Germany on the way to expand

The crisis adversely affected the two countries. First examining the crisis from the aspect of Germany, it can be declared that the fears from economic crisis and the breaking up of euro zone encouraged the growth of construction industry. As it can be seen from the data, it meant almost 12% rise in the construction sector of the country. The growth is likely to be continued in the next years due to the following reasons:

- Growing demand for flats owing to the people or groups of people immigrating to Germany
- The German middle and upper classes regard the purchase of housing estates a long-term investment until the breaking up of the European Union and termination of euro, thus ensuring the stability of their property value.

- The German government does its best to encourage the German citizens to buy real estates. They use several means of marketing (e.g. Angela Merkel, German chancellor indicated several times that the currently 40 year-old generation cannot count on high pensions therefore they are recommended to invest their savings in real estate purchase).
- In the last 10 years the German bank system has not supported the loan projects connected with real estate purchase because they gave loans at very high interest rates. It has been radically changed from 2011 thus the banks considerably reduced the former interest rates and eased loans due to the fears of terminating euro.

Hungary, the era of rearrangement

In contrary to the above, unfortunately, Hungary should make serious progress to solve the current situation. These problems cannot be treated with some superficial therapies. The domestic politics, however, is not ready yet to make the first step and to clear construction sector in order to save the domestic entrepreneurs.

It has been indicated several times to the Hungarian political elite that this situation is intolerable and the construction industry in Hungary can get in a deep pit if no help comes from the state and the lesson can be learnt only by serious consequences.

Whether the state will let the viable and working enterprises, architect offices, building material producers and suppliers to go bankrupt or create the conditions of fair functioning according to their promises before government elections [6].

RESULTS

Comparing the production volume of German and Hungarian construction industry from 1990 until today

The production volume of the two countries is far not equal regarding the values but it is worth analysing the tendency of changes of production values year by year. Thus the interval from 1990 to 2012 was studied.

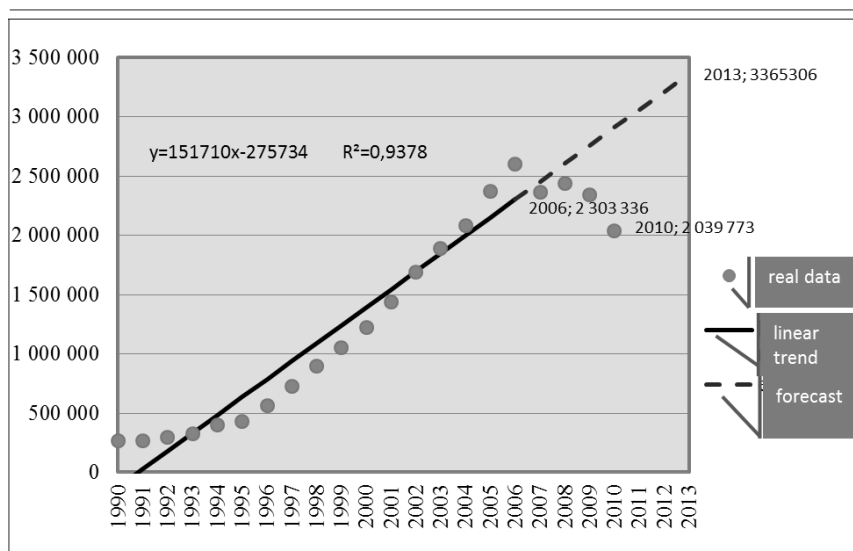


Figure 2.1. Production volume of Hungarian construction industry from 1990 to 2013

Source: own work

In the early 1990s the volume of production was around 263 thousand million HUF. There was a clear growing tendency on the diagram from the 1990s, which was linear every year until 2006. The peak value of production volume was in 2006 when the output was 2601 thousand million HUF.

The boom was due partly to the extensive utilization of social state grants, and partly to the simplified evaluation and quicker placement of loans offered by commercial banks. On the other hand, the growth was also stimulated by the incoming foreign capital with which the construction of business centres, condominiums, shopping centres substantially increased.

Table 2.1. Comparison of the forecast and real output regarding production volumes in Hungarian construction industry (own work)

Year	Forecast	Real data
2006	2 303 336	2 601 368
2007	2 445 046	2 367 686
2008	2 606 756	2 441 330
2009	2 758 466	2 345 042
2010	2 910 176	2 039 773
2011	3 061 886	n.a.
2012	3 213 596	n.a.
2013	3 365 306	n.a.

Starting from 2007, two production volumes can be distinguished: one is the forecast concluded from the previous production volume data, while the other production volume includes the real data. As it is obvious from the chart, the crisis broke the further growth of production and a strong regression could be seen in the sector.

Table 2.1 describes the impact of the crisis on the sector in details. It is clear from the table that the production value increased by 13% compared to the forecasts, but the next year the predictions were higher than the actual data. Thus the production value was modified by 3,6% in 2007, 6,3% in 2008, 15% in 2009 and 30% in 2010.

The impact of financial and economic crisis of 2007-2008 was projected on the production volume of the Hungarian construction sector. There was a slight growth of few percent in 2007 and 2008, due probably to the previously planned and started projects but from 2008, there was a clear decline in the sector. The frozen credits, stand-by constructions and the withdrawal of the bank sector caused serious damages in the construction industry. The production volume decreased to 2039 thousand million HUF by 2010, thus the production output fell by 16,4%.

In contrary to this, there was a dynamic growth in the German construction industry in the early 1990s (190,68 billion euro). It lasted until 1995 when the production reached 259,07 billion euro. As it was laid down in the introduction, the slower growth of German economy and the recession had led to the decline of construction industry. In the following periods, the crisis in the construction industry seriously drew back production, thus they did not reach even 220 billion euro by 2006, compared to the 1990s. The reasons include legal regulations, excessive tax burden, decreasing number of orders and a lot of other factors.

By contrast to the Hungarian sector, the impetus of growth in German construction industry was the fear of crisis itself, which was developing in the German citizens who had savings, enterprises, domestic or foreign investor whose capital, investment or savings were in euro. This fear encouraged them to invest in real estates which retain their value.

The German construction industry volume started to grow from 2007 thus the same figure is valid here as in Hungary, except for the direction: while in Hungary the sector had a decline of 16,4%, in Germany the growth was almost 20,6% from 2007 to 2011. Thus the data regarding 2011 are the same as in 1994, actually the production volume of the sector has not been this high in the last 14 years.

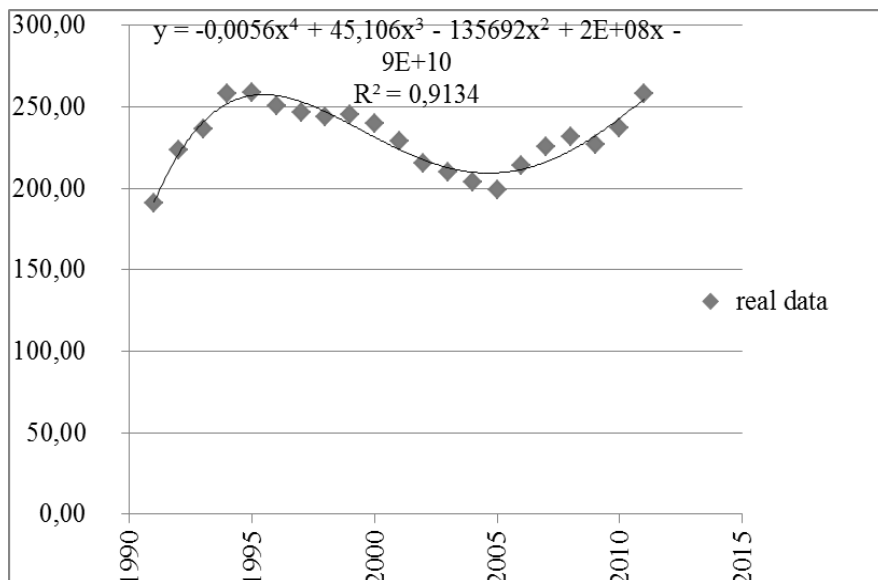


Figure 2.2. Production volume of German construction industry from 1991 to 2013

Source: own work

CONCLUSIONS

Hungary belongs to the countries which have been affected the most negatively by the crisis. By our days the financial crisis has extended to the whole economy and resulted recession. The Hungarian construction industry was hit the most in domestic economy. As regards Hungary, the devastating money market crisis in the real economy started but not from the real estate based housing mortgage loans because this type of financing was not widespread in Hungary. The austerity measures resulted by the crisis had strong negative impact on project financing. The bad tendency of Hungarian construction industry will continue in 2012 due to the decreasing number of orders, the lack of capital which is withdrawn by banks from the country, the deficient legal regulations and the lack of government involvement. All these will lead to the total collapse of the sector.

At present the driving force in German construction industry is housing, which considerably increased during the year both regarding its turnover (+ 16,5%) and volume of orders (20,5%).

The crisis adversely affected the two countries. First examining the crisis from the aspect of Germany, it can be declared that the fears from economic crisis and the breaking up of euro zone encouraged the growth of construction industry. As it can be seen from the data, it meant almost 12% rise in the construction sector of the country.

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The state management of youth employment: socio-economic analysis and prospects of development

INTRODUCTION

The employment – is the people activities, which directed to satisfy personal and social needs that are not contrary to law and, as a rule, bring income (labor income).

Taking into account the principle of labor voluntariness, full employment in the market economy does not mean the maximum possible involvement of the working population, as was in the former Soviet Union, rather the sufficiency of employment for all who have a voluntary wishing to work. Full employment is an important characteristic of social protection in employment. Nevertheless, it is a key to the effective use of labor potential of society. However, by itself, full employment does not mean the most rational, the most appropriate utilizing of labor resources. Rationality of employment determined by effectiveness of work in the broadest sense of this term: the social usefulness of the labor results; an optimum of social division; quantitative and qualitative matching of jobs and workers; economic feasibility of working places, that without harm for the health allow to the worker reaches the high productivity and has earnings, which provide a good standard of life. Full employment, that at the same time meets the requirements of rationality, called productive or effective employment. The content of these concepts are much broader and bigger that the terms of productivity and labor efficiency. Therefore, effective and voluntary employment reflects of quantitative and qualitative characteristics state of balancing among population needs in jobs and works, whereby creates favorable conditions for socio-economic progress and keep the interests of both individual workers and society as a whole.

Due to the ongoing development of individual and society needs, the scientific and technical progress are increase quantitative and qualitative parameters of the effective employment ideal, so in result it constantly should strive for, but cannot be achieved.

In economic theory and practice is developed the system of indicators that reflect of effective employment level. This system includes the following group of indicators:

- **The proportion of social work resources divided by the nature of their participation in socially useful work.**

They show what level of performance satisfied the need of the population in the workplace and ways in which achieved full employment. How is higher the labor productivity, than more prerequisites for workers' high income, for im-

provement of the workplace, the quality of working life etc. Consequently, people can have more free time without reducing of the usual standard of living. That's why the full employment with labor productivity growth achieved by reducing of the participation level of working population in the social production.

- **The participation level of working population in social economy reflects, on the one hand, the needs of people in paid employment, and, on the other – the needs of social economy in skilled workers.**

Quantitatively, it is defined as the ratio of the population amount, employed in professional work that brings income, to the total working population. In any case, the high level of employment means its low efficiency because do not provide a sufficient level of productivity and decent level of salary.

- **The structure of workers allocation by the sector of national economy is the ratio of labor capacity by type of occupation.**

The modern industrial employing structure in Ukraine reflects the low efficiency of employment and requires the fundamental changes in line with global trends, which are characterized by high rates of population growth and share of the workers in service industries and R&D activities. However, Ukraine's economy is characterized by opposite trends that might impede the country to stay with the group of scientifically developed countries.

- **Professionally-qualification structure of workers shows the breakdown of working population into professionally-qualification groups and displays the extent of personnel training balance by economic needs in the skilled workers.**

The modern professionally-qualification structure of working population in Ukraine and their regions clearly non-effective and has significant difference from the similar patterns in highly developed economies. Among employed people are high proportions of manual workers, low-skilled workers, extremely small part of technical performers, etc. This suggests the preservation of outdated technologies in economy. Considerably impairs the indicators of professionally-qualification structure the intensive emigration of high-skilled workers, specialists, scientists.

Present scorecard allows make assess of employment on macro-level from the standpoint of their effectiveness. Such assessments are important not only to identify problems but also to identify new trends in population employment. The content of these indicators demonstrates that employment has not only economic, but also great social value, and therefore it becomes an important element of social and economic state policy.

Without denying of the marked scorecard importance for the level of employment effectiveness should be noted, that regional employment problems are particularly topical for Ukraine and especially acute during the transition period to a market economy, which are caused by imbalances of material production.

The most typical ones are:

- Firstly, the structure of economy of Ukraine and its regions does not meet the needs of humans and does not provide normal living conditions. Insufficient social orientation of the economy under conditions of transition to the market economy becomes extremely unbearable;

- Secondly, under conditions of distributive economic relations violation and the transition to a market relations the structure of economy of Ukraine, as well as its regions, failed to ensure the proper functioning of production as a result of the imbalance of its separate elements;
- Thirdly, structural proportions, composed at the preliminary conditions, not meet the objectives, that facing Ukraine as an independent state;
- Fourthly, scientifically-technical backwardness of many branches of material production, intensive and mostly costly nature of manufacturing;
- Fifthly, for the ten years of existence of Uniform State Register of Enterprises and Organizations of Ukraine (EDRPOU) the amount of entities included in it grew steadily and rapidly in some years, but employment was contradictory trends and dynamics.

Among the many factors and circumstances that determine the future of any country those can be considered like the most influential that are directly related to the employment of youth. Any political, technological, social or economic objectives could not be realized in the long-term perspective without involvement in it the labor potential of young generation, which is always the bearer of the most progressive humans capital formed in educational system, family upbringing and social interaction. Must be remembered that poor management of youth employment for more or less long period of time can lead to overall socio-economic and socio-political crisis in the near future, when it is from this strata of employable person will depend the labor education of future generations and the viability of non-working population. Being needless in their time, virtually marginalized group of young professionals hardly be able to cope with such challenging tasks. So how effectively is solved the problem of youth employment, today is depend on the future of Ukraine as a whole.

The new approaches to labor potential with emphasis on its qualitative parameters significantly manifested in the middle 80th of XX century in scientific researches of regional schools of Ukraine, which are characterized by systematic, ecological, cybernetic and informational approaches to labor potential and employment in the study of labor resource problems issue.

Socio-labor trend of economic thought from the listed and other aspects is currently developed by the next research centers: Institute of Demography and Social Studies of National Academy of Sciences of Ukraine (NASU) (Kyiv); Council for Study of Productive Forces NASU (Kyiv); Institute for Regional Studies NASU (Lviv), Transcarpathian Regional Centre for Socio-Economic and Humanities Research NASU (Uzhhorod), etc.

A big contribution in the labor trend development of economic science make high-school researcher, in particular at Shevchenko Kyiv National University, Kyiv National Economic University, Franko Lviv State University, Uzhhorod National University, Transcarpathian State University and other higher educational institutions of Ukraine.

With the deepening study of this problem, there have been developed following approaches to definitions of labor potential:

- socio-economic (E. Libanova, S. Zlupko, S. Vovkanych);
- regionally-economic (D. Bohynia, E. Palyha, V. Pryimak);
- socio-demographically-economic (S. Bandura, M. Pitiulych, V. Miklovda, M. Chumachenko);

- demographically-ethnic (M. Dolishnii, S. Zlupko, S. Pyrozhev, S. Pysarenko);
- socio-medical (L. Shevchuk, L. Semiv).

These and other equally respected scientists in their works disclose the different aspects of territorial regulation of employment, exploring this issue in terms of deepening market reforms and signs of economic stabilization.

However, the current status of the labor market for the study period is characterized by a number of problems, that a barrier to normal social and economic development of the country and its individual regions. Remain acute the problems of population economic, quantitatively-qualitative imbalance between supply and demand in workforces, low-skill level of employed and unemployed working population, even problems of youth and disabled people employment (especially in monofunctional cities and mining regions, rural areas), illegal foreign labor migration, unformalized internal labor migrations and informal labor market.

Came into force of new Tax Code of Ukraine (December 2, 2010) had significantly impact on the labor market. Experts believe that the introduction of Tax Code increased the shadow employment of Ukrainian citizens, including young people, which grew almost twice. Nowadays legitimate labor market becomes unprofitable for youth. Primarily this is explained by the fact that Ukraine has one of the highest levels of social contributions.

Now creating one workplace in big business needs UAH 300 thousand, in small – UAH 20 thousand. The new tax system is formed in such way that small business can generally disappear, then the number of unemployed will rise to 5 million, which will seek the employment in shadow sector or even leave the country in search of stable income. Migration processes primarily affect engineers, IT specialists and scientists, since the state for a short period of time cannot provide them a new workplaces.

The problem is illegal abroad work of Ukrainian citizens, especially among youth, inadequate social protection, risk of insurance and pension savings, the lack of reliable mechanisms to transfer funds that earned abroad, migrants return. Reducing of the negative effects of labor migration from Ukraine primarily associated with creation of attractive internal labor market for young people, concluding employment and welfare agreements for Ukrainian youth, who are abroad.

Typically, young people, having developed progressive physical and intellectual abilities, can produce material goods and provide services with greater efficiency than the members of other age groups are able. This thesis is confirmed by the practice of management, because since 1993-1994 precondition appointment for hire leading experts to office executives became their belonging to the age group "45+." And from 1998 the upper age limit of managers began to be 40 years, largely driven by the rapid development of computer and telecommunication technologies, joint ventures, liberalization of ownership relations.

Follow "optimization" of age limits has found reflection and in the national legislation. Thus, since 2011 in Ukraine the youth began consider the people aged 14-35 years [1]. Prior to adoption of the relevant draft law the Verkhovna Rada of Ukraine considered youth the people aged 14-28 years [2].

The above mentioned extension of age limits allowed at the national level to adopt a number of government programs providing material welfare of youth that, at the same time, foresaw the employment necessity of this population category to enabling implementation for approved programs.

The program of youth supports for 2008-2012 years. A program for promote a social formation and young people development in Ukraine, a Program to provide concessional long-term loans to young families and single young people for construction (reconstruction) and housing purchase etc.

In particular, the nationwide program of youth supports for 2008-2012 years, implementation of which is completed at the current year [3], assume to ensure the prerequisites of productive employment in the youth segment of the labor market. After analyzing the progress of its implementation and effectiveness in the part of youth employment, can determine which of its paragraphs found practical expression, and which require further revision. Observe that in the last five years, the provisions of § 1 of Chapter 3 [3] implemented only partially, namely in terms of development and implementation of mechanism for obtaining the first job by graduates of technically-vocational and higher educational institutions: the Parliament approved amendments to [4] article 5, paragraph 2 concerning reservation by enterprises (associations), institutions and organizations regardless of ownership and organizational forms with employing over 20 people up to 5 per cent of the total workplaces for this group of youth (including flexible forms of employment) [5]; endorsed [6] (but, on 2006-2007 years action of this law was suspended) and approved [7]. Concerning to the providing employment and business development of young people, is performed the statement about legal, financial and organization support of secondary employment of young people, the activity of youth labor groups [8].

In turn, a Program to promote social advancement and development of young people in Ukraine is focused on the creation of youth labor centers, providing the guarantees for ensuring of first workplace and employment, social partnership, the guarantees of the right for employable youth for a work, including the above-mentioned first workplace for at least two years after the expiration or termination of education in general, technically-vocational and higher educational institutions, completion of vocational training and retraining, and after release from urgent military or alternative (non-military) service, etc.

Among them the special attention is paid to the state support and encourage of entrepreneurial initiatives and youth activities development (in particular creation of youth business-centers, business incubators, providing informational consultancy, long-term loans, preferential payments for the state registration, production facilities, insurance of commercial risks).

Thus, the state on the legal level developed and endorsed the ways, that:

- Firstly, stimulate youth to legalize labor through its transfer from the shadow economy;
- Secondly, promoted to the gradual reduction of illegal foreign labor migration;
- Thirdly, equally stimulated youth to employment both intellectual and physical labor.

Thus, we can determine that Ukraine is now working to ensure increased employment of the economically active population aged 15-70 years in general and improving the working scope in the way of new workplaces creation, especially for youth. However-

er, the slowness of needed changes in youth employment scope is caused by weak institutional mechanism of legally-regulations acts implementation in administrative and economic practice.

So analyze of socio-economic prerequisites of appropriate programs development and consequences of their implementation. According to official statistic data the number both economically active and employed population in Ukraine increase with the general trend of population decline (growth – 0.68 and 3.67% respectively, the rate of reduction – 3.40%) [9]. Thus, the number of employed population aged 15-70 in 2010 was 20.16 million persons (90.93% of the economically active population, or 42.00% of the country's population) [10, p.327, 354]; in 2007 these figures were 20.90 million persons or 93.64 and 45.07% respectively [11].

In the Ukraine in general as on 01.01.2011 the highest level of economic activity and employment recorded in Kyiv – 66.5 and 64.4% respectively, the lowest levels – in Ivano-Frankivsk and Ternopil regions – 57.4 and 52.7% respectively.

Using empirical data can verify the slogan of Programs' progressive efficiency that is designed to ensure an adequate level of youth employment.

In general, the number of economically active young people in 2011 was 8.74 million persons, including urban – 6.15 million, rural – 2.59 million persons; employed young people – 7.98 million, including urban – 5.59 million, rural – 2.39 million persons [12, p.58]; and in 2012 the number of economically active people was 8.42 million persons, including urban – 5.94 million persons, rural – 2.48 million persons; employed youth – 7.41 million persons, including urban – 5.17 million persons, rural – 2.24 million persons [12, p. 132].

Figures for the economic activity rate, employment and unemployment of youth in the baseline and reporting years are shown in the Table 1a and Table 1b.

Table 1a. The economic activity rate and employment rate of youth in 2007-2011 years.

Age groups	Economic activity rate, in percent				Employment rate, in percent			
	urban		rural		urban		rural	
	2007	2011	2007	2011	2007	2011	2007	2011
Total	62.9	61.6	59.5	65.1	56.6	57.4	55.4	61.5
15-24	36.5	39.5	41.5	47.1	30.0	34.2	35.5	42.3
25-29	83	83.2	78.0	79.4	75.6	77.3	72.3	74.4
30-34	86.9	85.0	82.7	83.0	78.5	79.4	76.4	78.4

Source: own work based on [12, p. 58, 133, 136, 138].

Table 1a. The economic activity rate and unemployment rate of youth in 2007-2011 years.

Age groups	Economic activity rate, in percent				Unemployment rate, in percent			
	urban		rural		urban		rural	
	2007	2011	2007	2011	2007	2011	2007	2011
Total	62.9	61.6	59.5	65.1	9.9	6.8	7.0	5.4
15-24	36.5	39.5	41.5	47.1	17.7	13.6	14.3	10.2
25-29	83	83.2	78.0	79.4	11.3	7.1	7.4	6.2
30-34	86.9	85.0	82.7	83.0	9.7	6.6	7.6	5.5

Source: own work based on [12, p. 58, 133, 136, 138].

How we can determine according to table 1, despite a smaller proportion of rural youth both in the structure of economically active young people, and in the structure of employment, the levels of their economic activity and employment are much higher than urban (at sustainable growth in the respective activities of both groups). In the same time in the adopted laws and normatively-legislative acts are not paid the appropriate level of attention to youth employment. Therefore it is more relies on its own strength rather than on the state support. Separately, it is necessary to analyze the situation of youth employment in the informal sector of economy (Table 2).

Table 2. The population employed in informal sector of economy by the sex, place of living and age groups in 2011, million persons

Groups of population	Total	Including youth	Including youth by age groups		
		15-35	15-24	25-29	30-34
All population	4.66	1.73	0.79	0.48	0.46
Women	2.26	0.76	0.35	0.20	0.21
Men	2.40	0.98	0.45	0.28	0.25
Urban population	1.32	0.57	0.23	0.18	0.16
Rural population	3.34	1.16	0.57	0.30	0.29

Source: made by authors on the ground of [12, p. 95].

Note that the proportion of youth in the relevant age group among the population, employed in the informal sector of the economy, is: 29.3% (15-24 years), 18.5% (25-29 years) and 17.6% (30-34 years); this is mainly representative by males.

So we can determine that 37.4% of population employed in informal sector of economy is youth. This trend indicates inefficiency of developed procedures for the implementation of youth Programs, particularly in employment.

Substantial impact on the labor market has unsatisfied demand in workers of employers by the graduates with low theoretically-practical skills. Hence there is the problem of lack of support for those who are the first time came on the labor market. Under-

lying causes of unsatisfied demand of employers for the quality workforce among adult population – lack of adult people during working life or professional reorientation problem, whose solution would considerably reduce the unemployment rate in the state. The financial burden of vocational training of the company staff lies only on the employer. As the result is an economic failure to raise the qualification level of employees or employers' lack of interest in increased quality of staff.

In addition many young people are registered with the state employment service. In 2011 their shares were 23.20% of the registered unemployed or 0.15 million persons. Also among young people there is a constant massive migration outflow, which negatively reflected on demographics (eg, fertility, sex and age composition of the population, etc.).

A characteristic feature of labor market in Ukraine is the low level of employment of persons with disabilities. According to the Information and Computing Centre of the Ministry of Labor in 2011 the number of workers with disabilities was 515 thousand persons or 39% of the total number of people with disabilities in working age, while in other countries the employment rate in this category of citizens is much higher (for example, in Italy – 55% in Sweden – 60.1%, in China – almost 80%).

The main reasons which constrain of people with disabilities employment in Ukraine are:

- a relatively low level education of the people with disabilities and their training;
- a lack of workplaces in which may be involved the work of people with disabilities.

Overall, the results of conducted research revealed that the actual are the following objectives:

- providing the necessary starting opportunities for youth employment and entrepreneurship;
- to ensure a decent conditions of social formation and development of young people in Ukraine;
- to promote professional orientation and the obtaining a quality education in accordance with the requirements of the labor market;
- practical implementation of the principles of social partnership, particularly with the participation of youth public organizations;
- funding relevant programs both on the state and local levels.

The realization of these priorities of government management will create sufficient basis for overcoming problems in youth employment to facilitate institutionalization of positive trends both at macro-and microeconomic levels.

Thus, Ukraine's first priority should be the following steps to ensure a satisfactory level of youth employment:

- Actively promote the increase of efficiency of the national youth policy on employment;
- Include in the State Budget of Ukraine and local budgets expenditures for the development and implementation of youth employment programs, including considering lending procedures, subventions, subsidies, tax relief for employers that provide workplaces for young people;
- Develop of intellectual and innovative potential of youth according to trends in the labor market with simultaneously minimizing the indicator of Ukrainian young people foreign labor migration;

- Involve youth in the development and implementation the conceptual provisions of social partnership;
- Guaranteeing the conditions for business development of youth and scope of secondary employment;
- Ensure openness and availability of information on the problems of youth employment.

Taken into account above mentioned we can note that studying of youth employment should be interesting not only for individual scientists, but also managers of different levels of power pyramid.

Proposed mechanisms to be characterized by a scientific novelty, theoretical and practical importance, must find a practical application that will, on the one hand, the decent level of youth employment, and on the other – cost optimization of budgetary resources for appropriate action.

That is why these aspects require further scientific justification and will be explored by us in the future.

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Part 2:
Sustainable development in industry

Development of food industry corporative sector

INTRODUCTION

Recently were activated scientific activities of institutional direction. Also known works A. Mau [1], R. Nureyev [2], A. Radyhin, [1] made a significant contribution by Ukrainian science: B. Havrylishyn [3], V. Geets [4], V. Dementyev [5]. In the food sector and the agricultural problems of concentration and the corporate sector investigated by T. Mostenska [6], P. Sabluk [7], L. Fedulova [8].

But in the scientific literature mainly institutional components considered in the traditional political economy vision. At the macro level, the corporate sector acts as a regulator of economic relations between subjects formed in its socio-economic environment and the state.

As an object of study of corporate processes selected national food industry because of the rapidity of processes of transition to market principles, increase investment, most tax, low corporate culture and transparency in the business and others. Here is the most important quality of the communication system and the efficiency of institutions. Low quality of connections might eliminate the "efficiency" of corporate management at mic-ro levels. Food industry of Ukraine consists of more than 40 sub-sectors of production, manufacturing over 20% of total industrial output. Food industry since independence ranks first or second places in highest investments (in 2000 – 21% of all FDI, in 2010 – 25%).

Table 1. The development of corporate sector of the food industry (%) [9]

Companies	1913	1995	2000	2012
Government	4	35,2	12,4	1,1
Private	74,7	1,0	17,5	22,9
Corporate (LLC, JSC)	15,1	63,3	55,5	68,2
Foreign	6,2	0,2	4,4	7,8
Shares in production volume				
Government	–	50,8	23,8	8,9
Private	–	0,0	0,3	1,2
Corporate (LLC, JSC)	–	49,2	75,5	85,6
Foreign	–	0,0	0,4	4,5

Modern food production industry of the country has 21.216 enterprises (as of 01.01.2012) of different forms of ownership. This small size enterprises account for over 93%. The structure of the corporate sector as now here else represented group medium enterprises that make up 26.7%, in comparison: medium-sized enterprises weight in the national economy is 5.7% and in industry – 10.9%. According to the Western analysts Top 200 Ukrainian companies, collectively called the "Corporation Ukraine" [10] are able to take 38 place in the world in terms of revenue, ahead of Samsung. Among them there are companies from the food sector.

Table 2. Allocation of the most powerful companies in the domestic corporate sector (own work)

Economic activity sector	No. of companies	Sales, million, USD in 2011	Profitability %	Income, million, USD
Oil & gas	16	103883	10,2	10598
Electricity	10	136012	1,5	2159
Metallurgy	24	263210	9,6	25295
Agro Industrial Complex	18	76312	12,3	9401
Food Industry	23	95942	4,6	4452

The most profitable companies are concentrated in the production of the malt (83.3%), tobacco (80.0%), milk products and cream (71.8%), biscuits (70.9%), chocolate and confectionery (70.2%), salt extraction (66.7%), production of oils and fats (65.8%), minerals and sweet water (63.5%), beer (63.6%). The greatest numbers of unprofitable enterprises are concentrated in the manufacturing sector of ethyl alcohol (72.4%) and pasta (58.8%). Unprofitable balance achieved in the sector of fishery products (-8031.8 K UAH), Production of flour, meal (-32049.7 K UAH) And products of them (-15114.7 K UAH) Also bread and bakery products (-88320.5 K UAH).

Characteristic is that the sectors with the worst rates of return partially regulated (alcohol and sub Bakery and flour production). The low financial discipline should be considered in the first case – the budget forming, and in the second case, social factors influence.

Experts recognized that the food industry is the engine that can not only alleviate the pressure of the crisis in the national economy, but also provide significant GDP growth. But the regulatory impact of the state cannot remain only in the fiscal direction as requiring attention some negative processes that are rapidly evolving food corporate sector. First of all it is about strengthening the processes of consolidation in the middle of corporate structures and overall food market. So, the national market is divided between five companies, "Roche", "Conti", "AVK", "Biskvit-Shokolad", "Zhytomyrski lasoschi" that collectively hold 65% of the domestic market and 40% of confectionery exports, imports of fish and sea control also 5 companies: "Ukrainian Eastern Fish Company", "Scandinavia-Fish", "International Seafood Group" "Klion", "Rikon", which control 75% of deliveries to Ukraine, despite the constant rotation of the Ukraine in the market of alcoholic beverages controlled by 5 companies: NVK, "Nemiroff", "Imedzh-Holding", "Olympus", "SV", which account for over 70% of the national market (for the last 1.5 years, the company "Nemiroff" managed to become a leader and the Russian market), and 54% of exports, in oil and fat sector

leads JSC "Kernel Group" – 36% of the market, the sector milk processing and cheese production leading place is occupied "Milkiland-Ukraine", "Milk Alliance", "Hadyachsy", which cumulatively control over 65% of the domestic market and over 80% of exports, the sector juice production consists of five leaders of foreign companies subordination: "Apple gift" (Poland), "Sandora" ("Pepsi Co."), "Jaffa" ("Vitmark"), "Rich" (Coca Circles), "Biol" ("Erlan"), which occupy 90% of the juice market.

In world practice is used indicator of concentration in the sector of economic activity as an indicator of the level of monopolization and Herfindalya-Hirschman coefficient that reflects the processes of mergers and takeover. This measurement is made, for example in the U.S. since 1992 Studies concentration level in the market of food set matches between the means of measurement and the degree of development processes monopolizing food markets (Table 3).

Table 3. The level of concentration and monopolization of food markets [11]

Food industry branch	The level of concentration	The level of monopolization (coefficient Herfindalya-Hirschman)
Sugar	27,50	287,93
Cheese	29,00	293,00
Milk	37,00	557,00
Oil & fat	38,00	510,00
Macaroni	40,80	631,19
Alcoholic	47,40	828,39
Confectionery	53,24	1356,49
Tobacco	70,00	1659,70
Beverages	81,10	2255,00

The process of concentration of economic objects production sphere coincides with those in the process of ownership consolidation within the same corporate structure. An example is the behavior of the majority owner of JSC "Kernel Group" during the acquisition Vovchansk Oil Extraction Plant. Consolidation package took place in three phases: acquisition of a majority – replacing the CEO and plant asset holding merger with Prykolotnyansk Oil Extraction Plant, to raise repurchase shares up to 85% – the appointment of technical director, engineer by training, and rotation of the average branch management redemption of 99.5% percent stake. Consolidation and replacement asset owners more loyal – becoming one of the most common ways to improve the internal efficiency of business. But requires research question: can we consider as effective consolidation process to the public, and does not require this process more attention from the government.

During the study period (2001 to 2011) there were significant changes in the level of competition in the sector of food production. Note that, without exception, respondents identified the level of competition is below 100%, and some markets are even rated as low competitiveness. The highest level of competitive markets recorded between 2001

and 2004 years (95%) and 2007-2009 (86-88%), also has a reverse correlation between the level of consolidation and less competition.

The second trend is to reduce competitive pressure from developed western countries (from 54% in 2001 to 34% in 2004 and to 47% in 2008 to 36% in 2011) and enhancing it with of the CIS, including cases obtaining resident status or redemption of national firms (from 28% in 2001 to 32% in 2008 and 44% in 2011).

Thirdly, there is a tendency to reduce the competitive pressure between the residents of the national market food market growing on a food market. Conversely, increases relatively producers from neighboring countries. As in the previous case, the process occurs in waves: decrease in 2001 and 2008, increased in 2004 and 2011 years. On the other hand, the greatest level of expansion of domestic producers of food products was achieved in 2006-2009 in Russia.

According to the institute of A. Haydar during this period competitive pressure experienced 96% of Russian food markets. And in Russia competition from domestic producers felt only 82% of the food markets.

In the corporate sector, is evident trend of increasing competition in the small business sector, stable high competitive pressure in the medium business and reduce competition in the sector of powerful producers – the leading economic sectors.

Peaks and fall competition match with periods of pro-government changes, as well as the global crisis- the level of opposition from importers declined in 2008 should also be noted that almost the whole period enterprises assess the level of competition in the national market as significantly higher compared with external factors (West and CIS). The market share of imports of high pressure does not exceed 15-17%. For food market segments characterized completely controlled by domestic producers, such as Salt Industry. In the leading experts and managers interviewing process asked to assess the positive and negative impact factors of competition in their sector markets in different time periods thus forming the overall competitive card market of food production. Comparison of estimates by different expert groups and survey results allows to identify the most influential factors of competition in food markets.

Table 4. Competitive environment on food markets factors, % (own work)

Influence factors	2001	2004	2008	2011
Production consolidation	30	33	20	36
Low demand	20	20	23	18
Understanding the distribution of markets and prices	14	17	18	16
Transportation costs	2	2	2	2
Producers protection	2	4	2	4
Easy exit from the market (no possibility of refund and sale of equipment) *	8	10	15	12
Competitors pressure	18	12	18	8
Exchange rate influence	6	2	2	4
Total	100	100	100	100

**This indicator is not represented in the group of small and micro enterprises specified in 57% medium-sized businesses and 83% of big business*

Since 2008 under "other impacts" significant number of respondents noted that there was more than a normal attachment (dependence) between suppliers and customers in wholesales. Loss of freedom associated relationships, in our view, a temporary curtailment of several large manufacturers the change in ownership and redistribution markets. For example, out of a group of regular customers a twist-off cap that produces LLC "JV Molva – Fogel & Nut", LLC "Chumak" led to the loss of 28% of sales.

Poor diversification on market and supply problems, hard connections between members of the industrial chain increase with increasing trends of consolidation and development of informal agreements between economic entities. For example, in 2011 87% of the participants interviewed noted the "significant" effect mentioned position. To the significance of this factor the number of references increased by 2 times. In 2000 – only 40% of companies have paid attention to the figure in 2008, the vast majority of respondents pointed to the inability to find a new supplier and consumer (56%).

This is a typical food markets oligopolisation signs. Strategy behavior of oligopolistic markets sufficiently discussed in detail in T. Shellinha works [12]. In other words, economic agents seeking coordination in a controlled industry sector engaged in the selection and price fixing, output, quality characteristics of products and warehouse operators.

In this oligopolistic market size is observed more often in markets with similar products such as butter, cheese, sugar, vodka and others. Terms of progress and competitive conflicts occur on oligopolistic market differs from the regular shape and reminds the poker table situation. Relations between the participants can be developed by a coalition (cooperative) union or without coalition form. During deployment and escalation at least three members were involved.

In this case there are two possible scenarios of events:

- Participants do not share information and engage in alliances;
- Participants create temporary associations/coalitions in order to maximize results.

Practice shows that coalitions or agreements are often formed in an informal design, and shall be in the form "buyer's words" at meetings, associations, within the membership of the unions and in the case of "general oligopoly" in the informal meeting.

From an economic point of view – active competition requires constant exposure to changes in the market situation and, therefore, constant adjustment strategy behavior of its participants. Since the frequent change of strategy is quite expensive and tedious way, market participants subconsciously seek to achieve balance. Therefore this the process of consolidation is developing. One of the effects of the creation of oligopolistic core in this case is set strategies that are not beneficial to change any of the participants. A characteristic feature of the current competition in the oligopolistic market is that core participants can actually control the behavior of the accomplices and income competitor (Fig. 1).

However, only 5 companies in the food sector are moving to establish partnerships with the community and the state, "Obolon", "MHP", "Nemiroff", "Coca-Cola Beverages Ukraine" "AVK". Since the introduction of the concept of social responsibility on your own enterprise, corporate structure distributes it to their suppliers and users and initiates participation in social and political programs of the region, and finally transferred to the system of cooperation with society (Table 5).

A high level of concentration is typical for the market of food production. The majority markets moved in hard format oligopol Market competition is observed only in segments of small and micro business, and partly in the middle segment.

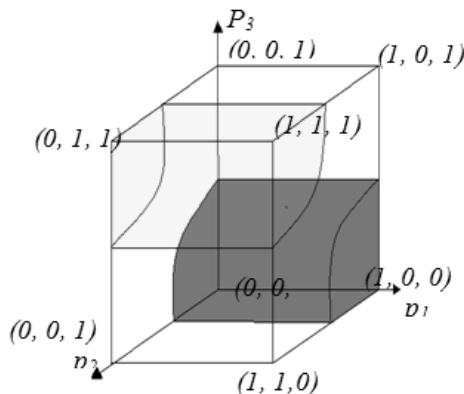


Fig. 1 Corporate behavior connection of oligopolistic core
Source: own work

Table 5. The results of the impact of responsible behavior in the "corporation-society-governance" [13, 14, 15]

Influence groups	Report entry year	2012 p.(points from 10)
Компанія «Оболонь»		
Workers	4	5
Business partners	2	3,1
Governments	1,5	2
Shareholders	4	4,5
Society	1,5	3
LTD «Coca – Cola Beverages Ukraine»		
Workers	2	6
Business partners	6	8,3
Governments	5	6,2
Shareholders	4	5
Society	2	4,8
AVK		
Workers	2	4
Business partners	4	6,3
Governments	4	4,5
Shareholders	3	3
Society	1,5	3

Dimensions of private, social and public outcome of the corporate sector are significantly differs. Ownership concentration is a direct consequence of the confidence to the business environment and institutional functioning business environment degree. In parallel tendency inherent in the latest post-market society: pronounced managerial component processes of consolidation in order to facilitate management of the company and the security of control.

The starting point of transition to the next level of corporate reform regulations and rules of the society is to achieve the next stage of institutional development. These tools have become hard and soft rules of the corporate sector. This, as we have already noted, the use of structural features of market forms of organization – public corporations for market regulation, legislative provisions relationships in joint ownership – direct action laws, codes of corporate governance, investor, merger and takeover; standards recommended actions whose implementation provides access to association in regulating corporations and agencies of development – corporate codes of conduct, rules of corporate processes and procedures with the expected regulatory power.

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Development of liberalization of trade in environmental foods

INTRODUCTION

The liberalization of trade in environmental goods (EG) has been discussed on international level for last two decades. The debate on opening of the market with EG started in late 90's by Organization for Economic Co-operation and Development (OECD) and Asia Pacific Economic Cooperation (APEC), afterwards the members of the World Trade Organization (WTO) agreed to negotiate the liberalization of trade in EG within the Doha Development Agenda in 2001. Currently the most significant step has been the APEC initiative to cut import tariffs of EG negotiated in September 2012. Goal of the above mentioned multilateral endeavors is lowering current tariff barriers of trade in EG, which would result in price reductions and would be an important benefit for domestic consumers and industries of developed, developing and least developed countries. The main promoters of EGs liberalization in multilateral scale are European Union, US, Japan, Australia, South Korea and New Zealand, newly followed by China, Mexico or Indonesia and some other developing countries which are involved in EG trade.

Demand for clean technologies and products have been increasing in both developed and developing countries for past several years. Depending on the definition and coverage, the estimated annual turnover of the world trade in EG was about USD 1 trillion in 2010. The debate on climate change and search for new environment-friendly technologies, particularly those focused on renewable energy, water and waste water management have been main triggers of the booming trade in EG. Though, the average import tariffs applied on EG are still high, some of them even exceed 20 per cents, particularly in developing and least developed countries. Further, there are some non-tariff barriers to trade in EG and some newly raised aspects of multilateral environmental politics and open questions such as technology transfers of green technologies and their relation to the Intellectual Property Rights.

From the territorial point of view the global export of the EG is not very much diversified, majority of the exports goes from developed countries (European Union, USA, Japan, South Korea, Australia, New Zealand), on the other side developing and least developed countries are in most cases importers. Though, some of emerging economies such as China, Indonesia or Mexico have recently indicated increasing trends of production and export of EG.

This chapter describes main outlines of development of the liberalization of trade in EG and potential of its further implications in multilateral scale. The aim is to elaborate on political and economic aspects of negotiations of global trade liberalization of EG.

Several international organizations (OECD, APEC, WTO, World Bank, UNCTAD) have been involved in talks on liberalization of trade in EG. Beginnings are dated to 90's, reports prepared by the OECD Industry Committee in 1992 and 1996 described market developments in the environment industry and the role of environmental policies [6]. They reported a clear need to improve information on the industry and undertake further analyses.

Numerous questions were raised:

- What was the situation for exports of environmental technologies?
- Was it possible to measure the impact on industrial competitiveness of the application of cleaner technologies?
- How could environmental and economic policy encourage and support growth, job creation and trade in goods and services of the environment industry in a global scale?

The potential benefits of tariff cuts of EG are acknowledged globally by international community. Nevertheless, there have been some problems with definition, how to define environmental goods. Several international organizations provide different EG lists/definitions depending on interests of their members (APEC, OECD, WTO, UNCTAD, World Bank). For instance, the list of EG of APEC started to be formed in 1995. Currently APEC agreed on 54 items EG list, including renewable energy goods, waste water treatment technologies or environmental monitoring and assessment equipment. Another lists were elaborated by World Bank comprises 43 items or by WTO – Core List of 26 items. Probably one of the most extensive EG lists was created by OECD which includes the environmental goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil as well as problems related to waste, noise and ecosystems [7]. One of the other definitions of EG comes from United Nations Conference on Trade and Development (UNCTAD) and defines EG as a product which causes significantly less harm at some stage of their life cycle (production/processing, consumption, waste disposal) than alternative products that serve the same purpose and contribute significantly to the preservation of the environment [9].

In general EG are usually defined as "...goods that have been produced for the purpose of preventing, reducing and eliminating pollution and any other degradation of the environment and preserving and maintaining the stock of natural resources and hence safeguarding against depletion..." [4].

The liberalization of international trade in environmental goods was raised as a separate agenda within the multilateral Doha Development Round of the World Trade Organization (DDA WTO) in 2001 [11]. The concrete provision is comprised in the Doha Development Agenda in Article 31iii, [3]. Since then, the WTO members have been trying to agree on a way how to free the trade in environmental goods and services and how to eliminate the related import tariffs.

Given that the DDA WTO agenda has not been completed yet as a whole, the negotiation on the liberalization of world trade in environmental goods still continues. The on-going debate focuses on how to define environmental goods and which approach (formula) to choose for tariffs cuts. Though, there are different groups with various interests, which make the negotiations quite hard and complicated.

Within the WTO members the import tariffs on environmental goods are very often imposed, particularly in developing and least developed countries. The tariffs range up to 40 per cent while and long-term goal is to reduce them to zero. Least developed countries impose import tariffs on 89 per cent of environmental goods defining by WTO (see Fig. 1), but zero tariffs are only related to 11 per cent of environmental goods. Developing countries reported 37 per cent free tariff EG goods and they imposed tariffs on 63 per cent of relevant items. On the contrary developed countries state 58 per cent duty free EG by WTO definition and only on 42 per cent EG items they impose import tariffs.

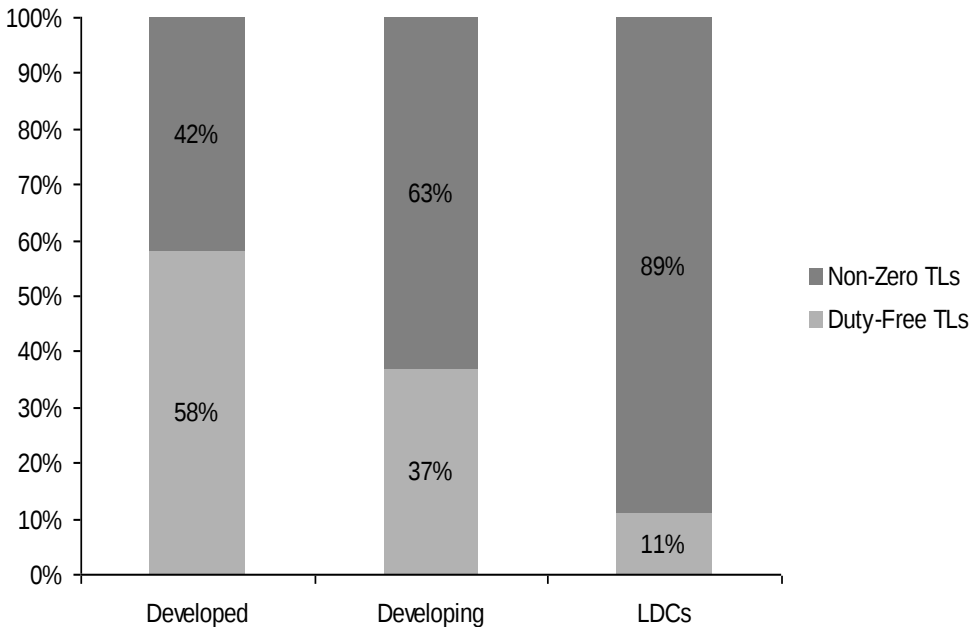


Fig. 1: Duty-Free Tariff Lines of EGs within WTO (2009)

Source: [12]

As shown in Table 1 the main turnover of environmental goods defined by the WTO Core List is created by high income members of the WTO with the biggest market share (see Table 1). On the other hand, the least developed WTO members indicate very low levels of export and import of environmental goods.

Major differences are between developing countries, some of them are in favor of liberalization of EG, because of their rising exports such as China, Mexico and some of them oppose, for instance Brazil, India.

Table 1. Export and Import of Environmental Goods from the WTO Core List in 2009 [8]

	Export-Value (mil. USD)	Import-Value (mil. USD)
World-total	177,187.1	176,877.5
WTO High Income Members	63,384.3	63,566.9
WTO Developing Members	37,190.2	42,765.3
WTO LDC Members	10,4	379,9

With continuing multilateral negotiations in the WTO some other problems related to the agenda of EG trade liberalization are on the table, such as technology transfer or intellectual property rights. With that a new political dimension came into the negotiations, some WTO members (BRIC countries – India, China, Brazil) seek to use its current economic and political force to promote their own interests saying reduction of import tariffs on environmental goods requires increasing of free technological transfers towards development countries. Less developed countries (African Group, the island states) are trying to tackle even a broader platform of technology transfer that would enable them to get free green environmental friendly technologies funded by developed countries included in the Kyoto Protocol, which was not signed United States.

The WTO is the forum in which the principal negotiators should find a compromise between developed and developing countries, as described by Eric Neumayer in *The WTO and the Environment* [5]. The World Trade Organization in many aspects is becoming another major player in terms of the international environmental institutions that could intervene in the world-wide debate on the new green technologies and thus also the global fight against negative impacts on the environment.

From the other perspective of environmental institution, globalization of trade in environmental goods can be quite paradoxical. The market is trying to repair the damage incurred by just releasing the world trade, as described by Bencheikroun, Hassan and Yildiz, Halis Murat in *Free Trade and Autarky the Sustainability* [2].

The authors contest the benefits of liberalization of world trade in environmental goods arguing that the very market system leads to environmental damage, and it is accordingly reasonable to consider that autarky is not in this respect, a friendly system.

Another important factor that slows the process of multilateral agreement on the liberalization of environmental goods are now increasingly concluded bilateral or regional free trade agreements. For example, the European Union has currently negotiated in each agreement clause on sustainable development and the related trade in green technologies. Green technologies are most essential part of exports in particular in the European Union and the Czech Republic as well. The highest priority in this respect is export of items associated with renewable energy sources and water management or energy efficiency. Import tariff cuts to environmental goods is a priority for the EU member states including the Czech Republic which is interested in the liberalization of items related mainly to the production of hydro turbines or solar energy, and last but not least water management items such as sewage treatment plants.

Despite the slow process of the DDA WTO negotiations, members agreed on a short list of about 26 items of environmental goods to be liberalized, including the items of offensive interest for the Czech Republic. However, some WTO members have been trying to put some types of goods into the list that do not generally perceived interpretation of environmental goods. For instance, the League of Arab States tried to promote oil to the list on the grounds that it is more environmentally friendly than coal.

The EU has committed itself among other things to a certain degree of technology transfer in the negotiations on climate change at the present time, though there are growing concerns about infringement of the intellectual property rights in green technologies, which would significantly harm European companies. In addition to trade liberalization is in place increase of the level of protection of the industrial property rights in developing countries that are now the subject of negotiations in the WTO DDA.

Apart from the WTO endeavors the liberalization of trade in environmental goods has been negotiated also among APEC members. In September 2012 leaders of the APEC countries endorsed the list of 54 environmental goods and committed to reduce applied tariffs to 5% or less by the end of 2015 [1]. This agreement is considered as an important milestone in the global efforts to liberalize trade in EG being the first internationally agreed list of environmental goods. Some WTO members believe that it would be to benefit not only for APEC countries but in multilateral scale since the liberalization will need to be implemented in accordance with the Most Favorite Nation (MFN) principle. Further, some WTO members see the initiative as an opportunity to refresh multilateral negotiations on EG liberalization within the WTO, to give an example the EU is currently considering to join the APEC agreement.

By this action APEC stated the importance to pursue common approaches to environmental challenges, and to take coordinated actions to address climate change, such as promoting trade and investment in goods needed to protect our environment and developing and disseminating relevant technologies [1].

Increase of trade in EG, incentives to invest in new technologies and innovations, these are the most significant well known benefits of opening the global market with EG. Current negotiations within WTO brings also on the top of the discussion some environmental and climate change related issues of global trade liberalization, for instance technology transfers and intellectual property rights, as mentioned above. Through formal procedures as well as diplomatic channels WTO members are promoting their interests in these matters.

Liberalization of world trade in environmental goods brings many questions:

- How does it affect the release of global trade in green technologies, which will increase his?
- Can it lead to the promotion of innovation in green technology?
- Who would benefit of the liberalization?

Other issues mainly arise from the relationship of industrial property rights developed countries and the potential threat of misuse of developing countries.

In this regard, other international institutions enter into the negotiation process, e.g. the World Intellectual Property Organization (WIPO). Given that in many cases it is a highly sophisticated and capital-intensive technology, as the largest exporters of environmental goods (EU, U.S., Japan) deal with the proper protection of the intellectual property rights and their potential abuse in countries importing these goods. According

to WTO experts a compromise solution must be chosen to protect the intellectual property of green technologies from advanced economies and vice versa enable their use in developing countries.

Table 2. Estimated benefits of removal of tariffs to four select clean energy technologies covering 12 environmental goods [10]

Environmental goods item (HS codes)	Increase in trade volumes (%) if tariffs removed
Clean coal (HS codes 840510, 840619, 841181, 841182, 841199)	3.6
Wind (HS codes 848340, 848360, 850230)	12.6
Solar photovoltaic (HS codes 850720, 53710, 854140)	6.4
Energy-efficient lighting (HS code 853931)	15.4

Tariff cuts on imports of environmental goods would certainly encourage trade in green technologies, which would become more affordable for developing countries. Giving the example of renewable energy technologies, according the World Bank removal of tariffs could increase the trade volumes of 12,6 per cent in case of wind energy or 6,4 per cent in case of solar photovoltaic and the biggest increase 15,4 per cent of trade volumes is presumed in items related to energy-efficient lighting (see Table 2).

It is also very likely that the liberalization of trade with environmental goods would encourage new investment in innovations. According to the WTO experts, the liberalization of environmental goods would lead to a win-win situation for both developed and developing countries [13]. Firstly, the Trade Negotiations can facilitates the reduction or elimination of tariff and non-tariff barriers (NTBs). Domestic purchasers, including business and governments at all levels, would be able to acquire environmental technologies at lower costs. In Addition, liberalization of trade in environmental goods scheme would encourage the use of environmental technologies, which could stimulate innovation and technology transfer. This could directly improve the quality of life for citizens in all countries providing a cleaner environment and better access to safe water, sanitation or clean energy. In Addition, the use of environmental Goods can reduce harmful side-effects of various activities ("negative externalities") that damage the environment and are hazardous to the human health. Finally, the liberalization of trade in environmental goods and services can be beneficial for development by assisting developing countries in obtaining the tools that address key needed environmental priorities as part of their development strategies.

Giving the facts above it can be stated that the global development in past years leads to liberalization of trade in EG on multilateral level. There have been several initiatives to open the market with EG as shown on the current APEC agreement.

In perspective of other political and economic aspects, it is clear that further liberalization of EG in multilateral level will be subject to the political decision within WTO. The WTO 9 Ministerial Conference in 2013 could be seen as a significant opportunity to take further steps and to agree strategies.

The APEC initiative to cut the import tariffs by 5 per cent till 2015 could make a ground for further talks on liberalization of trade in EG within WTO, if developing and least developed countries leading by Brazil or India would be willing to negotiate a compromise. It would definitely positively contribute to green growth and global sustainable development objectives. The analyses mentioned above suggest the benefits of opening the market with these kinds of technologies would boost trade in both developed and developing countries. Trade and investment liberalization in environmental goods would help businesses to access important environmental technologies at lower cost, which in turn would facilitate their use and benefit the environment.

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Energy resources transportation routes diversification as part of a EU energy

INTRODUCTION

The article defines the role of transit in the structure of the energy supply chain. Analyzed the basic international principles of transit services implementation and risks that determine the level of the region or country energy security. On the example of the EU the diversifying energy policy guidelines are analyzed (the opening of new markets – suppliers, implementation of new transportation routes) and the risks of their implementation are also discussed.

Security of supply is one of the three underlying objectives of the EU's new energy policy. For importing countries, the questions about relationship with exporting countries as well as diversification of the possible energy resources and supply sources are of importance in relation to the security of supply. For countries with a degree of self-sufficiency, the security of supply raises questions of the adequacy of known reserves and possible resources to cover domestic needs as well as export demands. The Europe's energy networks are no longer up to the task of providing secure energy supply in the foreseeable future. It is important to mention, that we concentrated on oil and gas supply only, without electricity. This exception was made in order to describe diversification supply routes bypassing Ukraine and their influence on the structure of energy supply chains.

The delivery of petroleum products and natural gas to final consumers requires long chains of sequences activities involving large-scale investments. In general, the product supply chain concerning oil and gas transmission includes such main stages: production; international and national transmission (high pressure), including transit; wholesale trade; large customer; distribution (low pressure); final customer [2]. But it is also worth underlying that supply chains for gas and for petroleum products differ from each other, and it is important to understand how (Table 1).

Table 1. Structure of gas and oil supply chains [8]

The gas supply chain	The oil supply chain
Exploration and production;	Exploration and production;
Delivery to connected transmission pipelines or liquefaction, sea transport, import, gasification and input to transmission pipelines;	Transport by pipeline, rail or ship;
Transmission, storage and bulk supply to large consumers directly connected to the transmission system and to distribution companies;	Refining of petroleum products;
Distribution, storage and retailing of gas to industrial, commercial and residential consumers.	Storage and distribution of products by pipeline, rail, road tanker or ship
	Retailing to final consumers

One should understand, that the oil sector differs from other energy sectors in terms of storage, transmission and distribution since oil and its products can be transported easier and cheaper than gas and electricity. In particular, transport and distribution of oil and refined products in the EU Internal Market can be assured by many different competing infrastructures: pipelines, short-sea shipping, inland waterways, and railway and road transportation.

Common rules and close cooperation among states and private companies in all stages of energy supply chains are required to secure energy flows in transit, to develop and operate energy transport facilities and to make transit of energy commercially viable. Such rules may serve the interests of all stakeholders in the energy supply chain: energy producers and consumers in securing and diversifying sales and purchases, and transit countries in increasing the attractiveness of supply routes through their territory.

Sustainable and effective realization of energy supply chains is a key issue to ensure energy security of some region or a country. Security of gas supply may be defined as "the availability of gas to users at affordable prices" [3]. A distinction is made between long-term and short-term security of gas supplies, as the risks, the ways to prevent supply problems and the possible mitigation tools are different. Defining energy security is also complicated by the variety of views of what is at stake: to some it means protecting against politically-induced supply disruptions or technically-induced supply problems, to others it is facing the challenge of terrorism or dealing with price shocks, while to many it means addressing the issue of global warming.

It is important to understand, that reliable transit of energy is a critical issue for regional and global energy security, as energy is increasingly transported across multiple borders on their way from producer to consumer.

So, there exist some general international rules on transit, which are set out in the Article V of the General Agreement on Tariffs and Trade.

The article stipulates the following principles [14]:

- Freedom of transit through the territory of a member country via the routes most convenient for international transit;
- Non-discrimination based on nationality, ownership, origin/destination, or en-tray/exit;
- Transit without any unnecessary delays or restrictions;
- Most-Favored-Nation (MFN) treatment to goods in transit;
- Transit traffic shall not be a source of fiscal revenue.

In particular, Article V sets out specific requirements regarding charges on transit. According to Paragraph 3 of the article, traffic in transit is exempt from customs duties, and except for transportation and administrative expenses no transit duties or other charges may be levied in respect of transit. All charges have to be reasonable, having regard to the conditions of the traffic (Para 4), and non-discriminatory (Para 5) [14].

One more important international legislative form of transit sphere regulation is the Transit Protocol, which was signed as a part of an Energy Charter. The main objectives of this Protocol are [9]: to ensure secure, efficient, uninterrupted and unimpeded Transit for the benefit of all Contracting Parties concerned; to promote transparent and non-discriminatory access to and use of Available Capacity in present and future Energy Transport Facilities used for Transit; to facilitate efficient use of Energy Transport Facilities used for Transit; to facilitate the construction, expansion, extension, reconstruction, and operation of Energy Transport Facilities used for Transit; to minimize harmful Environmental Impacts of Transit; to promote the prompt and effective settlement of disputes relating to Transit.

In order to ensure energy supplies in the framework of one region there is an importance to adapt the main principles of energy resources transmission to the conditions of the regions' energy market while taking into account some risks that define the energy security situation. As there is no consensus among economists, in line with the current debate on energy security of supply in Europe, the following types of risk may be identified [8]:

- **Geological risks** refer to the possible exhaustion of an energy source. Oil and gas reserves in the EU are decreasing and over 90% of world hydrocarbon reserves are controlled by state-owned companies in the Middle East and Eurasia. Not only are oil and gas difficult to access for European companies, but total hydrocarbon reserves and resources remain unknown. In addition, the increasing pace of world energy consumption is a source of concern for the future availability of resources: between 1973 and 2005 world energy consumption doubled and by 2030 a further 55% increase has been predicted, mainly because of developing countries' rapid economic growth [4].
- **Technical risks** include system failure owing to weather, lack of capital investment or the generally poor conditions of the energy system. They are of particular concern for electricity generated from renewables, coal and nuclear generation.
- **Economic risks** mainly cover erratic fluctuations in the price of energy products on markets. Price variations can be due to actual or anticipated imbalances between supply and demand, but they can also result from speculative movements and market power abuse. On the one hand, the rise in fuel prices creates monetary and trade imbalances between energy producing and consuming countries, especially harming the economy of the latter. On the other hand, decreasing prices of energy sources tends to diminish capacity-enhancing investment in energy producing countries, creating new bottlenecks to oil and gas supply. In addition, economic risks may include regulatory risks. Government-regulated policies in energy-producing countries may underplay the level of future investments, causing related effects on production and prices.

- **Geopolitical risks** concern potential government decisions to suspend deliveries because of deliberate policies, war, civil strife and terrorism. Energy industries in most supplier countries are subject to extensive government interference, and do not necessarily function in a competitive market framework. This adds to the fears that energy will increasingly be used as a political weapon. In addition, security of supply is threatened by political instability of exporting regions where civil wars, local conflicts and terrorism have often been the cause of temporary damage to energy facilities and infrastructures. Although the concept of geopolitical risk generally refers to the oil and gas sector, cross-border trade of renewables-generated electricity could also raise similar concerns.
- **Environmental risks** describe the potential damage from accidents (oil spills or nuclear accidents), or emissions such as greenhouse gas emissions. It is generally assumed that industrial countries will need to reduce emissions by 60-80% or more by 2050. Given that within the EU 80% of all emissions are related to fossil fuel burning in the energy, transport, household and industrial sectors, energy policy will increasingly be constrained by climate change objectives [7]. While near-zero carbon energy or possibly fusion will ultimately be essential to meet the climate change challenge, the present focus is on how to reduce GHG emissions from fossil fuels, which continue to dominate the EU's energy mix. The principal obstacle facing the EU is the absence of a comprehensive global climate change agreement that would provide the necessary certainties for investors.

The transportation infrastructure, including international transit transmission systems for oil and gas, plays a vital role in the relationship of interdependence between all participants of the energy supply chain. It is well known that the European Union as the major consumer and Russia as the major supplier are extremely interdependent in terms of their energy policies. The existing and projected routes are, however, subject to a great deal of political and economic power play, which potentially undermines or endangers their efficiency. Along with the Russian-Ukrainian dispute during the winter months of 2006 and 2008, the EU is becoming increasingly worried about the stability of oil and gas exports from Russia. There has been a growing concern that Russia is becoming an unreliable supplier or is using its dominant position to promote its political aims [1].

As a reaction, the EU has begun to eagerly promote the need for energy diversification aiming to improve the overall energy security level within the EU borders.

In this respect, the EU is rethinking its infrastructure policy with a global vision, including Russia, Central Asia and the Caucasus, and is linking this work to current energy forecasts. Under the new strategic energy review and the green paper for the Trans-European Energy Networks, a new pipeline strategy that links the Internal Market with third countries is defined.

As part of its policy to enhance the EU's security of energy supplies, the Commission is promoting a diversification of gas and oil supply sources. To enhance the EU's energy security, it is important to diversify both the geographical sources of energy and the transportation routes.

The EU is seeking a balanced energy partnership with Russia and is pushing for the renewal of a wide-ranging Partnership and Cooperation Agreement, which includes energy relations as part of a broader trade arrangement. The Nord Stream pipeline, which will diversify transportation routes, has been labelled a project of European interest in the

latest guidelines on TEN-E adopted in September 2006 by the Parliament and the Council [8]. High priority has also been given to the Yamal II project promoted by Poland, which would more than double the capacity of existing Yamal pipeline. The Amber project, which would pass onshore through the Baltic States to Poland rather than through Belarus, is a variation of Yamal II and is labelled as a project of common interest in the TEN-E guidelines [6]. The Nabucco project represents a new gas pipeline with a length of approximately 3,300 km connecting the Caspian region, the Middle East and Egypt via Turkey, Bulgaria, Romania, Hungary with Austria and further on with the Central and Western European gas markets [13]. The Commission takes the view that investment decisions, including optimal routing, whether underwater or on shore, have to be taken by the investors on the basis of their own commercial interests and judgments. Therefore the Commission does not express its preference for one project over the other in this context.

The following projects have begun service: Green Stream, connecting Libya and Italy through Sicily; Balgzand-Bacton between the Netherlands and the UK; The Turkey/Greece section of the Turkey-Greece-Italy pipeline (TGI) [10]. The following projects are under development: Transmed II, between Algeria, Tunisia and Italy, through Sicily; Medgas, connecting Algeria and Spain; The Greece-Italy section of the TGI Pipeline; Nord Stream, between Russia and Germany; Galsi, connecting Algeria to Italy via Sardinia with a branch to France via Corsica; Nabucco 2010 connecting the Caspian region, Middle East and Egypt via Turkey, Bulgaria, Romania, Hungary with Austria and further on with the Central and Western European gas markets [10].

These infrastructures will increase the import capacity by around 80 to 90 bcm, covering between 16% and 17% of the gas needs in 2010 [6]. New planned import points will strengthen imports to the South-Eastern region (especially Nabucco), to the Northern region (Nord Stream) and to the South-Western region (Galsi, Medgaz).

We would like to analyze some gas pipelines projects which are under EU support and which we consider as an innovative one. First of all, we talk about Trans-Caspian Gas Pipeline (Turkmenbashi-Baku) which is under Caspian gas pipeline, with initial carrying capacity of 6.25Bcm, expandable to 30.6 Bcm [15]. It aims at connecting Kazakhstan to the already present BTC pipeline in Azerbaijan (thus adding additional volumes and justifying BTC economically). Further innovative plans include onward flow of Caspian gas along the planned Nabucco pipeline. Currently at prefeasibility stage, the pipeline could carry gas from eastern Turkmenistan, and could eventually include exports from Uzbekistan and Kazakhstan. The estimated cost of the project are around \$5 billion [5]. However, due to the unresolved status of the Caspian and the opposition to any offshore pipeline by Russia and Iran, together with environmental concerns, the pipeline is not very realistic. Moreover, the current reserves at Tengiz are already exported through the CPC pipeline to Novorossiysk. To make the pipeline feasible, additional reserves must be found. Finally, the plan suffered a major blow in May 2007 when Kazakhstan, Turkmenistan and Russia agreed on the realization of the Pre-Caspian Gas pipeline. Nabucco is a planned 3,300km natural gas pipeline project through which it is intended to bring up to 31 Bcm annually of Central Asian gas from the eastern end of Turkey, across Romania, Bulgaria, and Hungary into Austria by 2020 Construction is expected to begin in 2008 and finished in 2011-13 [13]. It aims at bypassing Russia and would transport BTC gas to Central Europe. For these reasons this pipeline has a sub-

stantial geopolitical significance, and is strongly supported by the EU. However, it has encountered financial problems and lack of political will in some member states, with particular reference to Hungary, which in March 2007 announced that it had agreed to a Russian proposed extension of the Blue Stream pipeline project instead [11].

The Galsi Pipeline project, currently at feasibility study stage, envisions a creation of a 900 km natural gas pipeline between Algeria and Italy (via Sardinia). The projected capacity of the pipeline would be 9-10 Bcm/year, 2 Bcm of which would meet Sardinian needs only [3], with the rest destined for the Italian and European markets.

Southern Europe Gas Ring Project: is a two step project which the European Union included among the top five priority developments in the trans-European energy system. It aims at connecting the natural gas pipeline networks between Turkey, Greece and Italy through first, a Turkey-Greece pipeline and then a Greece-Italy pipeline. The first part of the project, the Turkey-Greece, a 296 km natural gas pipeline that begins in Karatchabep in Turkey and runs to Komotini in Greece, was already completed in September 2007 [12]. Its current capacity of 7 Bcm could be expanded to 11.5 Bcm by 2012, of which 8 Bcm will be delivered to Italy. Italy – Greece gas pipeline (IGI), is a 800 km undersea pipeline, that would allow Italy to diversify its gas sources and thus provide for extra regional energy security as well as increase the competitiveness of the energy market. Its construction would cost nearly \$1 billion, with the works planned to commence in 2008, to be completed by 2011 [11].

New pipeline projects for Crude Oil have been also proposed to bring additional Caspian oil production to the international market and the EU. The advantage of these projects is that they will permit diversification of routes and sources of supply to the EU and to the international oil market, and some of them link directly to the EU's internal network. It should be noted that the Burgas-Alexdroupolis line represents the first transport pipeline in the territory of the EU controlled by a Russian consortium [3].

EU supported an oil pipeline, which could be considered as an innovative one, that is Odessa-Brody-Płock-Gdańsk extension project: on October 10, 2007 Azerbaijan, Georgia, Ukraine, Poland and Lithuania have agreed on building a 490-kilometer extension of an existing pipeline from Brody in western Ukraine northward to the Polish port of Gdańsk on the Baltic Sea, with Azerbaijan providing for the necessary supplies of 280,000 barrels per day (14 million tons annually) [3]. The first leg of the pipeline, from Odessa to Brody, was already completed in 2004 with the aim of delivering Caspian oil to central Europe. However, since then the project has languished, with Russia using it to export oil via the Black Sea. The estimated €500 million pipeline would provide Lithuania and Latvia with direct crude, after Russia stopped its deliveries to Mazeikiu Nafta, the only refinery in the Baltics, since July 2006, citing a pipeline accident [3]. However, the main problem with the project is the state of supplies, since it is unclear whether Azerbaijan could commit enough crude as to make the project economically viable.

By 2020 it is foreseen that the North Sea production will decline and 90% of the oil products to the EU will be imported from third countries [7]. Currently, most oil is arriving via ports and tankers and this trend is expected to continue. As increased tanker traffic can be foreseen in the next decades, this raises concerns in relation to the environment: greenhouse gas emissions, air quality, oil spills and accidents. Special attention thus needs to be drawn to mitigate further environmental impacts from oil transportation. Construction of new pipelines can contribute with environmentally viable alternatives.

In particular, Eastern European countries are facing security of supply problems, which could be mitigated by a better oil pipeline infrastructure, improving the security of supply [3]. Due to the lack of regulation of the oil sector in the EU, it is left to the private sector to take initiatives to create new structures. It could be considered, however, whether it is not in the interest of the EU to take complementary political and investment initiatives due to their importance for the security of supply and the environment. The Commission is *inter alia* looking at these aspects in an upcoming study. Initiatives that could be considered in relation to oil infrastructure are [3]: to carry out investigations of the functioning of the Internal Market for crude oil and oil products in order to define possible new policy measures; to undertake an independent study of the *pro et cons* of different alternative pipeline options; to develop an oil dimension in the Energy Community; so far, only electricity and gas are included; to include oil infrastructure in Trans-European Networks; only gas and electricity are included; to investigate whether the current environmental obligations are sufficient to mitigate increased environmental pressure due to increased maritime transport of oil; to consider the climate change impacts on the oil pipelines and infrastructure in order to integrate increasing climate risks; to ensure that the EU's current energy dialogue with the major oil suppliers also pays attention to the issue of oil transportation.

Despite of progress in the EU infrastructure priority projects, there are still major future challenges facing the EU gas market, amongst others [8]: to reduce the vulnerability to gas supply shocks; to plan for increasing import dependency and the uncertainty about the availability of gas reserves; to facilitate the development of an integrated gas market, due to the EU enlargement; to handle the climate challenge where natural gas will be both a bridging and a future energy source; to prepare the coming investments for climate change impacts on the pipeline routing and other infrastructure in order to integrate increasing climate risks into investment planning.

As part of the Commission's five-point Energy Security and Solidarity action plan, the above mentioned four areas for gas will be strengthened. The development of a Baltic interconnection plan will improve the integration of the missing continental members. Development of a Southern Gas Corridor for Caspian supply source and future Middle-East sources will improve the security of supply. An LNG action plan for all Member States will improve the diversity and security of supply, especially for countries relying on sole suppliers [3].

Completion of the Mediterranean ring by connections to Italy-Greece, Algeria-Sardinia and internal Italy-strengthening projects will improve the security of supply and diversity. Development of a North-South gas interconnector in the Central/South-Eastern Europe (e.g. Poland-Slovakia-Hungary) will strengthen the supply of the countries in the region while reducing their dependency on Russian supplies. In general, one should clearly understand the following priority objectives that require special attention in the near future for the EU energy security [3]:

- Diversification of sources and routes of supply, particularly the development of a Southern gas corridor including the Nabucco, the TGI and South Stream15 projects.
- It is of great importance that supplies from other countries in the region, such as Uzbekistan and Iran, in the long term represent a further significant source of supply for the European Union.

- The development of gas and electricity interconnections through Central and South- Eastern Europe along a North-South axis is of importance.
- The networks in the Baltic Sea region should be developed and integrated into the Western European network.
- Relations and partnerships with key energy suppliers, transit countries and consumer countries are important and must be deepened. MEPs call for a trilateral agreement between the EU, Russia and Ukraine concerning the transit of gas from Russia to the EU to guarantee the security of supply in the coming years.
- Sufficient LNG capacity consisting of liquefaction facilities in the producing countries and LNG terminals and ship-based regasification in the Union should be available to all Member States, either directly or through other Member States on the basis of a solidarity mechanism.
- There is a need to include Ukraine in the European arrangements for an ongoing dialogue with Russia on account of the key role which Ukraine plays as a transit country.

As a conclusion we would like to define the key priorities of the EU energy supply policy – gas supplies diversification to a fully interconnected and flexible EU gas network; ensuring the security of oil supply [6]. The aim of the first priority is to build the infrastructure needed to allow gas from any source to be bought and sold anywhere in the EU, regardless of national boundaries. This would also ensure security of demand by providing for more choice and a bigger market for gas producers to sell their products. A number of positive examples in Member States demonstrate that diversification is key to increased competition and enhanced security of supply. Whilst on an EU level supplies are diversified along three corridors – Northern Corridor from Norway, Eastern corridor from Russia, Mediterranean Corridor from Africa – and through LNG, single source dependency still prevails in some regions. Every European region should implement infrastructure allowing physical access to at least two different sources. At the same time, the balancing role of gas for variable electricity generation and the infrastructure standards introduced in the Security of Gas Supply Regulation impose additional flexibility requirements and increase the need for bi-directional pipelines, enhanced storage capacities and flexible supply, such as LNG/CNG. In order to achieve these objectives, the following priority corridors have been identified:

1. Southern Corridor to further diversify sources at the EU level and to bring gas from the Caspian Basin, Central Asia and the Middle East to the EU.
2. Linking the Baltic, Black, Adriatic and Aegean Seas through in particular the implementation of BEMIP and the North-South Corridor in Central Eastern and South-East Europe.
3. North-South Corridor in Western Europe to remove internal bottlenecks and increase short-term deliverability, thus making full use of possible alternative external supplies, including from Africa, and optimising the existing infrastructure, notably existing LNG plants and storage facilities.

The second aim of this priority is to ensure uninterrupted crude oil supplies to landlocked EU countries in Central-Eastern Europe, currently dependent on limited supply routes, in case of lasting supply disruptions in the conventional routes. Diversification of oil supplies and interconnected pipeline networks would also help not to increase further oil transport by vessels, thus reducing the risk of environmental hazards in the particular-

ly sensitive and busy Baltic Sea and Turkish Straits. This can be largely achieved within the existing infrastructure by reinforcing the interoperability of the Central-Eastern European pipeline network by means of interconnecting the different systems and removing capacity bottlenecks and/or enabling reverse flows.

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Liquidity and Solvency Management of Oil and Gas Enterprises

INTRODUCTION

The combination of oil and gas prices recent precipitous fall and the general unavailability of credit is causing oil and gas producers to have the same difficult time finding sources of capital for their ongoing business needs as other non-oil and gas businesses.

The oil and gas industry is particularly hard-pressed today given the large amounts of capital that are required to operate an oil and gas company along with the long time gap between investment of capital and seeing returns from such investments. Commercial banks that were, until recently, structuring loans where they would give value to a company's probable and possible reserves, are starting to back away from making loans to any oil and gas company other than those with the highest credit ratings. Given this lack of liquidity, lenders and investors are looking for higher returns on their investments while, at the same time, limiting their exposure to the risk of the bankruptcy or insolvency of the oil and gas producers in which they are investing. At the same time, with their revenues falling due to the collapse in commodity prices, oil and gas producers need to find additional sources of capital in order to drill wells and develop properties that they may have acquired when commodity prices were significantly higher. Because of this divergence of interests between oil and gas producers and financing institutions and the limited capital available in the market today, oil and gas producers and investors in the oil and gas sector are being required to utilize structures outside of the conventional borrowing base revolving credit facility or similar lending vehicles and to come up with novel or non-traditional methods of investment. Even with the higher transaction costs and longer time frames needed to complete these less straightforward financing structures, producers and investors are finding it necessary to utilize these less traditional and more innovative financing techniques to satisfy the investor's requirements of higher returns and less risk and the producer's need for larger and larger amounts of capital. Because of the lack of access to the traditional commercial bank markets, there is a renewed interest in volumetric production payments by producers in order to effectively monetize proved developed producing reserves, either as part of an acquisition or from existing properties. Producers generally utilize the proceeds from the sale of a volumetric production payment to develop their probable and possible reserves. Net profits interests are also seeing renewed use as part of tax-exempt investors' portfolios, in connection with industry transactions (particularly with service providers in the energy sector receiving them in lieu of cash for providing services). These interests are

also being used as another means of investing in the oil and gas sector while limiting the investors' total exposure in the transaction. As many financing sources are requiring higher and higher returns from borrowers in the oil and gas sector (other than those with the highest credit ratings), many banks and other less traditional lending institutions have started using equity kicker financings to help raise their returns while providing debt capital to thinly-capitalized producers in the oil and gas sector. Thinly-capitalized producers believe that these investors will provide them with more capital at an accelerated rate and, while costly, this capital may be less expensive than bringing in an industry partner or venture capital funds-perhaps such producers' only other alternatives.

Business leaders make decisions amidst complex challenges in managing their enterprises. Uncertainty about the ongoing processes, insufficient and inadequate knowledge about the functioning of economic systems require new skills of leadership and new approaches to the decision-making process. Such growth requires a systematic approach to the analysis of the economic situation in the industry, market factors, financial security, and capabilities of the enterprise.

The financial analysis includes, first of all, the calculation of the values of a large number of financial ratios. In world practice, regulatory, or threshold, values of financial ratios, defined on the basis of broad and long-term practice of business analysis are widely used [1, 2, 3]. But various and multiple causes influence the economic activities of the enterprise, the single indicator. Therefore, the task of economic analysis is not only to study the existence and direction of ratios between parameters, but also to disclose the qualitative basis for the ratio between the quantitative characteristics of economic processes.

Analysis using the financial ratios requires thresholds, which are not always available or are dependent on the industrial sector. The proposed method does not require consideration of thresholds and does not rely on the industrial sector [4].

Empirical studies show that ineffective management of working capital is one of the important factors causing industrial sickness [5]. A company should choose between liquidity and profitability and decide about its working capital requirement [6]. Modern financial management aims at reducing the level of current assets without ignoring the risk of stockouts [7]. A firm should formulate certain policies to control the working capital so as to meet financial distress, which may occur in future [8]. Efficient management of working capital is, thus, an important indicator of sound health of an organization, which requires reduction of unnecessary blockage of capital in order to bring down the cost of financing.

EXISTING APPROACHES TO ESTIMATING FINANCIAL STABILITY OF AN ENTERPRISE

Solvency and availability of resources for the development of enterprise is an important sign of financial stability. The definition of financial stability is one of the most important financial issues. Lack of financial stability, as well as excessive, negative impacts on a company. Since the lack of financial stability leads to insolvency and lack of funds for further work, and excess – to excessive burden the company stocks and reserves, diverting money from circulation and freezes them.

Identification of actual financial condition of the company is important not only for the entities, but also for investors wishing to invest their funds in the development of the enterprise. For this, they need to have information on financial stability and the change of the financial condition of the company at present.

Stability of the financial situation of the company to some extent depends on its place and role in the market. Therefore, analysis of the stability of the financial position usually begins with a study of the market position of the company.

Depending on these factors, the stability of the enterprise can be external and internal. The internal stability of the company is determined by the cost structure of production, which will ensure good results of the enterprise. External stability is determined by the economic environment in which functions the enterprise. Thus, the financial stability of the company is the excess of income over expenditure.

Here are the main approaches to the analysis of financial condition:

- vertical (structural) analysis;
- horizontal (temporal) analysis;
- trend analysis;
- analysis of the indicators' ratios;
- comparative analysis;
- factor analysis.

Vertical analysis shows the structure of the enterprise and their sources. Two key features that contribute to feasibility of vertical analysis:

- Move to the relative parameters allows inter-farm comparisons of economic potential and indicators of enterprises of various sizes of used resources and other volume indicators;
- The relative parameters to some extent smoothed the negative impact of inflation, which can significantly distort the absolute levels of the financial statements, and thus hard to compare over time.

Horizontal and vertical analyses are complementary. Therefore, in practice, often build analytical tables describing both the structure of financial reporting forms, and the dynamics of its individual performance. Both of these types of analysis is particularly valuable for inter-farm comparisons, as it allows to compare the reporting completely different sort of activity and the volume of production enterprises.

With the calculation of the ratio of reported data of a particular combination of indicators analyze ratios.

A comparative analysis is conducted between aggregates reports on selected indicators of the company, subsidiaries, departments, and indicators of competitors, the industry average and the average economy-wide data.

Factor analysis identifies certain factors that affect the effective rate using deterministic and stochastic methods. Moreover, factor analysis can be both direct (analysis), the effective rate is the fragmentation of its constituent parts, and inverse (synthesis) when its components are combined in a total effective rate.

To assess the financial condition of the company must first determine what it depends on its ability to pay, which is the most important feature of financial stability.

Solvency of the company is determined not only by its free cash flow required to repay existing debt, but also largely determined by the turnover of current assets. In the absence of the necessary funds to meet obligations, the company can maintain solvency in the case when they have such assets, which can be quickly converted into cash. But since some types of assets are turning into money quickly and others more slowly, all the assets of the company are grouped according to their degree of liquidity, that is, the possibility of applying to cash.

The most important "component" in current assets turnover rate and one of the essential elements of the stability of the financial condition of the company is the inventory turnover ratio. High inventory turnover is usually a sign of effective management of assets, but this increases the risk of insufficient reserves.

METHOD FOR CALCULATING ESTIMATES OF FINANCIAL AND ECONOMIC SUSTAINABILITY

Nowadays, one of the main tasks of economic development is occupation of stable positions of the enterprises in domestic and international markets. Financial and economic sustainability of the enterprise is the company's ability to operate in a changing internal and external environment, while maintaining a constant solvency and investment attraction. Therefore, indicators of liquidity and solvency should be considered in evaluating and analyzing the financial and economic sustainability of the enterprise.

Pogostinskaya and Pogostinsky [8] show the estimation of financial and economic sustainability or the assessment of actual and normative proximity indicators' relations on rates of their growth:

$$S = \frac{\sum_{i=1}^n \sum_{j=1}^n b_{ij}}{\sum_{i=1}^n \sum_{j=1}^n |e_{ij}|} \quad (1)$$

where:

S – evaluation of economic and financial sustainability of the enterprise;

n – amount of indicators in the normative model;

i, j – numbers of indicators in the normative model;

b_{ij} – the element of the matrix of coincidence of actual and normative relations growth rates;

e_{ij} – the element of the matrix of normative relations growth rates.

Sustainability assessment varies in the range from 0 to 1. If $S = 1$, then all normative ratios of growth rates are made, which provides financial and economic sustainability of the enterprise. If $S=0$, then the actual and normative matrices directly oppose each other, and the enterprise is financially and economically unsustainable. Thus, as the estimate of resistance is closer to 1, the more normative ratios between the indicators are closer to being satisfied.

FORMATION OF A DYNAMIC NORMATIVE MODEL TO ASSESS THE FINANCIAL AND ECONOMIC SUSTAINABILITY OF THE ENTERPRISE

In [3], we see that the parameters for the calculation of liquidity and solvency ratios are:

- C&CE - Cash and Cash Equivalents
- WC - Working Capital
- ShTD - Short-Term Debt
- AR – Accounts Receivable
- I&PE – Inventories and Prepaid Expenses
- FA - Fixed Assets
- CA - Current Assets
- CL – Current Liabilities

Table 1. Normative Model for Assessing the Financial Status of the Enterprise for the Liquidity Indicators' Set (*own work*)

Indicators	C&CE	WC	ShTD	AR	I&PE	FA	CA	CL	Amount
C&CE	0	1	1	0	1	1	1	1	6
WC	-1	0	1	0	1	1	1	1	6
ShTD	-1	-1	0	-1	0	0	0	1	4
AR	0	0	1	0	0	0	0	1	2
I&PE	-1	-1	0	0	0	0	0	0	2
FA	-1	-1	0	0	0	0	0	1	3
CA	-1	-1	0	0	0	0	0	1	3
CL	-1	-1	-1	-1	0	-1	-1	0	6
									32

From the definition of absolute liquidity ratio:

Absolute Liquidity Ratio = $C\&CE / ShTD$, follows that for the effective activity of the enterprise it is necessary that the growth of cash and cash equivalents outpaced the growth of short-term debt, i.e. $t(C\&CE) > t(ShTD)$.

Given that the current liquidity ratio:

Current Liquidity Ratio = $(C\&CE + AR) / ShTD$ should increase, we can conclude that $t(AR) > t(ShTD)$.

Finally, taking into account the enterprise's solvency ratio

Solvency Ratio = WC / CL , and considering that the higher growth of working capital in relation to the growth of current liabilities is a positive trend, we obtain the following ratio $t(WC) > t(CL)$.

Consequently, we obtain the ratio among the analyzed growth rates .

The process of forming a dynamic normative model [9] consists of the following:

- Formation and analysis of targets;
- The formation of sets of financial and economic indicators and streamlining of financial and economic indicators of each set in the rate (index) of their growth or increase;
- Construction of a matrix of pairwise comparisons of financial and economic indicators using financial and operational ratios.

In [5], we can see normative model for assessing the financial status of the enterprise for the liquidity indicators' set includes eight indicators, and is as follows:

CALCULATION OF ESTIMATES OF FINANCIAL AND ECONOMIC SUSTAINABILITY IN THE EXAMPLE OF THE ENTERPRISE AND THEIR INTERPRETATION

The knowledge base in this study was taken from data on JSC "MangistauMunai-Gas", one of the largest oil and gas enterprises in Kazakhstan.

MangistauMunaiGas extracts, transports, refines and sells oil, gas and petroleum products. The Company is engaged in the exploration of oil and gas deposit sites situated in the Mangistau region of Kazakhstan.

At present JSC MangistauMunaiGas is one of the largest oil and gas companies of Kazakhstan and provides more than 8% of production in the country. MangistauMunaiGas today is developing 15 oil and gas fields with general initial 969 million tons (6.783 billion barrels). The main industrial development fields are Kalamkas and Zhetybai. Kalamkas field is developed since 1979. Its subsurface have 13 productive horizons with total balance oil reserves more than 510 million tons.

Industrial development of Zhetybai field perform at the same time with exploitation its satellite fields, they are Asar, East Zhetybai, South Zhetybai, Bekturly, Oimasha, Burmasha, North Karagiye, Alatube, Atambai-Sartube, Ashiagar, North Akkar, Airan-takyr and Pridorozhnoe. Cumulative balance oil reserves of Zhetybai group fields is amount of about 458 mln tons.

Besides, JSC "Mangistaumunaigaz" execute a number of big programs for further Mangistau region infrastructure development, to help population. Example, in 2002 in Aktau the trade-entertaining centre "Ardager" was start up, drink water factory with capacity 10 tons per hour was putted into operation, finished the construction of water-desalinating factory with productivity 40 thousand m³ of water per day. Today, the annual oil output of over 5 million tons (35 million barrels).

In Table 2, calculated the actual growth rates based on the consolidated financial statements of MangistauMunaiGas [11].

On the basis of the consolidated financial statements a matrix of actual growth rates of liquidity and solvency indicators is created (Tables 3, 4 and 5).

Table 2. The Growth Rate of Financial and Economic Indicators in the Basic and Reporting Periods (source: *The Consolidated Financial Statements of JSC "MangistauMunaiGas" for 2008, 2009 and 2010*)

Indicators	2007 (in USD)	2008 (in USD)	2009 (in USD)	2010 (in USD)	Rate 2008	Rate 2009	Rate 2010
C&CE	177411,2	81748,26	109758,7	309247,9	0,4523	1,6462	2,814
WC	913448,7	-382750	77538,41	338506	-0,4113	1,2484	4,361
ShTD	333788,4	267336,4	51760,43	59635,2	0,7862	0,2373	1,151
AR	1847112	285150,7	248558,8	308440,5	0,1515	1,0687	1,239
I&PE	170577,9	161783,3	60856,52	76367,06	0,9310	0,4612	1,253
FA	2307214	1323801	1137355	1192390	0,5632	1,0534	1,047
CA	2309316	793070	736544,8	845568,4	0,3371	1,1387	1,147
CL	754395	973843,2	301753,4	268654,8	1,2671	0,3799	0,889

Table 3. Matrix of Actual Growth Rates for the Base Period (source: *own work*)

Indicators	C&CE	WC	ShTD	AR	I&PE	FA	CA	CL
C&CE	0	1	-1	0	-1	-1	1	-1
WC	-1	0	-1	0	-1	-1	-1	-1
ShTD	1	1	0	1	0	0	0	-1
AR	0	0	-1	0	0	0	0	-1
I&PE	1	1	0	0	0	0	0	0
FA	1	1	0	0	0	0	0	-1
CA	-1	1	0	0	0	0	0	-1
CL	1	1	1	1	0	1	1	0

Table 4. Matrix of Actual Growth Rates for the First Reporting Period (source: *own work*)

Indicators	C&CE	WC	ShTD	AR	I&PE	FA	CA	CL
C&CE	0	1	1	0	1	1	1	1
WC	-1	0	1	0	1	1	1	1
ShTD	-1	-1	0	-1	0	0	0	-1
AR	0	0	1	0	0	0	0	1
I&PE	-1	-1	0	0	0	0	0	0
FA	-1	-1	0	0	0	0	0	1
CA	-1	-1	0	0	0	0	0	1
CL	-1	-1	1	-1	0	-1	-1	0

Table 5. Matrix of Actual Growth Rates for the Second Reporting Period (source: *own work*)

Indicators	C&CE	WC	ShTD	AR	I&PE	FA	CA	CL
C&CE	0	-1	1	0	1	1	1	1
WC	1	0	1	0	1	1	1	1
ShTD	-1	-1	0	-1	0	0	0	1
AR	0	0	1	0	0	0	0	1
I&PE	-1	-1	0	0	0	0	0	0
FA	-1	-1	0	0	0	0	0	1
CA	-1	-1	0	0	0	0	0	1
CL	-1	-1	-1	-1	0	-1	-1	0

Matrix matches the actual relations with the normative model for the three periods under consideration are: 4 for the base and by 30 for the first and second reporting periods.

Consequently, generalized evaluation of financial and economic condition of the company on liquidity and solvency, which characterize the degree of approximation of the actual matrix to normative, is:

- for the base period

$$S^B = 0,13$$

- for the first and second reporting periods

$$S^{R1,2} = 0,94$$

In order to determine which indicators in the reporting period had a positive or negative impact on the evaluation of a generalized economic and financial status, a factor analysis has been conducted.

Table 6. Factor analysis of financial sustainability evaluation for liquidity and solvency in the first reporting period (source: *own work*)

Indicators	№	Matches		Deviations	Impact on			
		2008	2009	2009	Increase of sustainability		Importance of sustainability	
					Absolute	%	Absolute	%
C&CE	1	2	6	0	0,1250	13,3	0,0000	0,0
WC	2	1	6	0	0,1563	16,7	0,0000	0,0
ShTD	3	0	3	1	0,0938	10	0,0313	50,0
AR	4	0	2	0	0,0625	6,6	0,0000	0,0
I&PE	5	0	2	0	0,0625	6,6	0,0000	0,0
FA	6	0	3	0	0,0938	10	0,0000	0,0
CA	7	1	3	0	0,0625	6,6	0,0000	0,0
CL	8	0	5	1	0,1563	16,7	0,0313	50,0
Total		4	30	4	0,8125	86,7	0,125	100

As it follows from the Table 6, in 2009 matches in ratios of all indicators of liquidity and solvency between actual and standard growth rates are increased. However, in 2010 the growth rates of cash and cash equivalents slowed down relatively to working capital. The same time share of short-term debt in current liabilities decreased.

Table 7. Factor analysis of financial sustainability evaluation for liquidity and solvency in the second reporting period (source: own work)

Indicators	№	Matches		Deviations	Impact on			
		2009	2010	2010	Increase of sustainability		Importance of sustainability	
					Absolute	%	Absolute	%
C&CE	1	6	5	1	-0,0313	-3,3	0,0313	25,0
WC	2	6	5	1	-0,0313	-3,3	0,0313	25,0
ShTD	3	3	4	0	0,0313	3,3	0,0313	25,0
AR	4	2	2	0	0,0000	0	0,0000	0,0
I&PE	5	2	2	0	0,0000	0	0,0000	0,0
FA	6	3	3	0	0,0000	0	0,0000	0,0
CA	7	3	3	0	0,0000	0	0,0000	0,0
CL	8	5	6	0	0,0313	3,3	0,0313	25,0
Total		30	30	2	0,0	0,0	0,125	100

RECOMMENDATIONS FOR IMPROVING THE ECONOMIC AND FINANCIAL SUSTAINABILITY OF THE ENTERPRISE

In 2008, a sharp decline in the indicators of the enterprise. One reason is the reduction of fixed assets related to asset retirement obligations and impairment of fixed assets. Volumes of 2007 to early 2011 are not met.

In general, for the period 2009-2010 the dynamics of all the indicators has improved, which impact on the overall evaluation of the liquidity and solvency was 0.81. In the first period there is a significant approach to the regulatory model for all indicators of liquidity and solvency. The dynamics of growth rates for 2008-2010 increased from 0.13 to 0.94. Overall evaluation of the liquidity and solvency for 2009-2010 was 0.94, which is high.

During the second reporting period there has been some reduction in short-term liabilities, associated primarily with a reduction in the amount of taxes payable, which in 2010 decreased by 9 times, as well as an increase in short-term payable growth rates. At the same time Table 2 shows the company has sufficient working capital and own funds, which also indicate that the company did not fully use its financial strength and raises doubts about the advisability of borrowing.

In 2010 C&CE and WC indicators growth rates relations did not match to standard. In order to satisfy regulatory indicators of the enterprise matrix is necessary to:

- Increase C&CE by 55%;
- Reduce WC by 35.5%, by reducing accounts receivable.

The timely collection of receivables and the distribution of profits will lead to strengthening financial sustainability and the stability of the enterprise.

CONCLUSIONS

This method allows to estimate the financial and economic status of a company on indicators of liquidity and solvency. Moreover, estimation of companies' status is not influenced by such factors, as branch accessory or scales of company's activity. Presented method of estimating of liquidity and solvency status of a company allows monitoring of company's financial status and, in its turn, adjusting company's policy. However, it requires a careful analysis of obtained estimation results. For full estimation of companies' financial status, use of several methods is recommended.

Results of present investigation revealed that the year 2008 was difficult for Kazakhstani MangistauMunaiGas oil and gas company. However, in 2009 the company could improve its financial status and make it stable during the year 2010.

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Part 3:
Sustainable development in rural areas

Problems of the rural employment in Hungary

Contemporary events around the world have shown increasing concerns for the 70 per cent or more people inhabiting the rural areas. This is justified by the high correlation that exists between rural living and poverty with this situation particularly exacerbated in developing countries. Poverty can be said to be determined by a number of factors including the level of economic growth, the way growth affects the poor, the pattern of government spending and the initial distribution of income.

Agriculture employs nearly one-half of the labour force in developing countries. Indeed, a high share of rural communities and especially the rural poor are directly or indirectly dependent on agriculture through farming, food processing, fishing, forestry and trade [9].

Nowadays the whole world is seeking the possibilities of how to get out of the crisis; the whole world including countries that have dominant economic influences and open and sensitive countries as well, such as Hungary – with different possibilities in different political and economic environments.

Today we have already learned that the processes applied previously cannot be carried on successfully either in the world or in Hungary. Within industry, agriculture and services novel and yet unknown tendencies and developments might mean the solution to the problems.

Beside the rational utilization of the natural resources and the application of renewable energy resources we have to be more effective in the field of human resource development than we are at present. On the basis of our judgment and recent experience the production and economy can obtain new and confirmative support through the relation system of research – innovation – corporate development, which help priorities to be properly defined and to have satisfactorily skilled labour force available for the works to be done. All of these require a new way of thinking, new educational policy and new future prospects [3].

After 1990 lot of changes has happened in Hungary which in many cases were connected with the world economy, but we can find Hungarian specialities also. In the last 10 years when we joined the EU which has changed our social and economic circumstances [8]. Analysing our natural and economic resources we will have to mention the arable land, water capacity, and labour force. In the last years the utilisation of the arable land has changed to a great extent. We can see huge decrease in the agricultural area, and at the

same time our energy dependency has increased to over than 70% nowadays, and if we consider only the crude oil and natural gas production they are more than 85%. The last drop was the economic crisis which started from the USA and moved all over the world.

The global economic tendencies, the globalization and the spatial restructuring of the European economy have led to the increasing importance of the spatial policy recently. One of the basic consequences of the globalization is the change in the role of territories and localities as well as their increasing value, resulting that the creation of the conditions for development is not merely the governments' responsibility, but also it has become the duty of the settlements and territories due to the emphasis on the endo-genous theories and building on the own resources. The endowments and potentials of the territories have come to the frontline (especially the human capital), which are available for the developments as internal resources and can be activated under appropriate circumstances [4].

Another important element is the strengthening and changing of the expression "countryside", since it has meant a totally different and new dimension of the society and the economy in the developed countries for a while. It is showed by the mass moving to the countryside, by the reducing population of the cities as well as a nicer look and the economic development of the countryside. In addition, as the major place of the raw material production in agriculture and food industry, the countryside plays important role in the EU's Common Agricultural Policy, as well. However, the general problems of the rural areas (e.g. depopulation, fewer employment opportunities, increasing social burdens, accessibility to the basic services etc.) cannot be ignored.

It is mainly caused by the fact that the importance of agriculture has gradually decreasing in the total employment. As a result of that, the unemployment causes further problems in the rural areas (see: [11, 12]).

The changes in the global economy of the past few decades were experienced by Hungary in a special way, since in addition to those changes; it had to face political and economic transition and their consequences [5, 10]. Among those there are the increasing conflict between the cities and the rural areas and generally the arrears of the rural areas and small villages [6]. The local and endogenous resources play especially important role in Hungary as well. Those factors have preferential importance, which contribute to the areas' "own" economic-social development. However, for the latter one, the basic necessary conditions are not always available, while the inherited problems greatly influence the spatial differentiation [7].

However, the slow re-evaluation of the roles and functions of rural areas can be observed also in Hungary, the promotion of the development of territories at disadvantage with economic and social arrears is very important task according to both own researches and the literature. The controversial problem of the rural policy, namely the difficulties of the agricultural economy, cannot be ignored. The land use and ownership structure of the agriculture as well as the farming structure have fundamentally changed after the transition. The sector's role in the employment has sharply dropped, which did not affected the rural areas the same way, due to the spatial structure and the change in the spatial characteristics of the economy.

The negative effects hit more those rural areas, which have agricultural traditions and unfavourable structure of the human resource and where there are only few towns. The decreasing role of agriculture is accompanied by the crowding out of former agricultural labour of the labour market and the difficulties they face while flowing into other sectors [2]. This process seems to contribute to the increase in the spatial inequalities.

After these facts I have to mention the world crisis which started in 2008 in the USA and appeared all over the world. I will focus on the effects of the crisis on the labour market. When the crisis was suddenly appeared many people lost their workplaces, and increased the ratio of the unemployment's all over the world [1]. It was not different in our country. Analysing the labour market we noticed changes like following:

- Fell in employment;
- Increase of the unemployed;
- Changes in inactivity;
- Differences by qualifications, ages and gender;
- Sectorial differences.

The specifics must be presented because in our opinion they will be help us find the solution for our problems. I have already mentioned that the crisis was perceptible in all countries which we can see in figure 1.

In 2010, the decrease in the number of employed people stopped, but restoring the level of employment before the beginning of the crisis will take probably longer. According to the data of figure 1 the average employment rate was 64,4% in the EU, when the Hungarian was only 56,0% which was one of the lowest in the EU member states. On the other hand we can find some country e.g. Austria, Denmark, Netherlands, Germany, Sweden where this index was above 70%. The target in the EU is 70%, but it will be very difficult to reach it for every countries. In our opinion that is the greatest problem in our country nowadays and we will have to solve this in the near future if we do not want to drop behind.

The average unemployment rate was 9,3% in the EU at the end of 2010. The Hungarian figure was 10,9%, but in the beginning of the following year it was over than 11%, so the annual average was hardly lower than the peak of 12.1% in 1993. The increasing unemployment along with the stagnating employment can be attributed to the following factors:

- The gradual rise in retirement age increases labour force supply;
- The modification of the unemployment provision system requires a more active presence in the labour market also from people who were considered inactive earlier;
- Fewer and fewer people losing their job are provided for by the social and social insurance system, so they become long-term jobseekers;

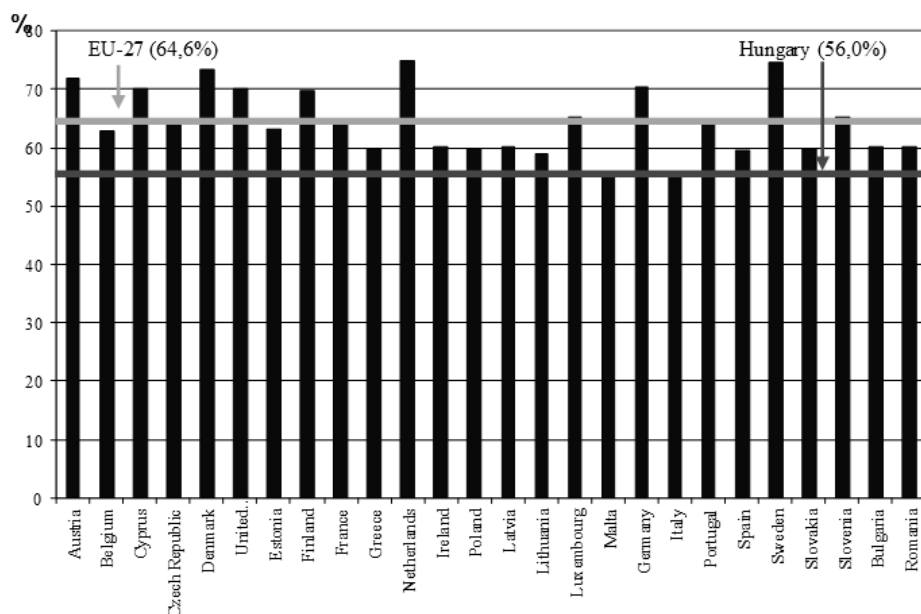


Fig.1 Employment rate of the population aged 15-64, 3rd Quarter 2010

Source: [13]

In figure 2 we can see that the highest ratio was in Spain, where the economic situation is very bad nowadays – nearly double than in Hungary. In countries where the economy is based on stable basis the unemployment rate was not as high as in countries where it is not.

We analysed the differences between the registered jobseekers and the unemployed people between 1999 and 2010 (Figure 3). During the examined period the number of unemployed was the lowest according to Labour Force Survey while the highest was among those who consider themselves unemployed. The latter one is more real, so we will have to solve the problem of nearly 700 thousand unemployed in the near future if we do not want bigger problems than we have nowadays.

The third thing is the ratio of the inactive segment of the population. In 2010, 37.1% of the population aged 15-64 was inactive in Hungary. The average rate was nearly 10% less in the EU. The number and the proportion of inactive people, along with the increase in the number of unemployed, decreased compared to the previous year.

The decrease concentrated in the categories of pensioners (-32 thousand) and of „other inactive” (-18 thousand) who are not students and not receive any personal provision. Even so, the largest group of inactive is composed of pensioners with proportion of 39%, followed by the group of full time students with 32%. The number of the so-called other inactive is invariably significant (nearly 360 thousand) as well.

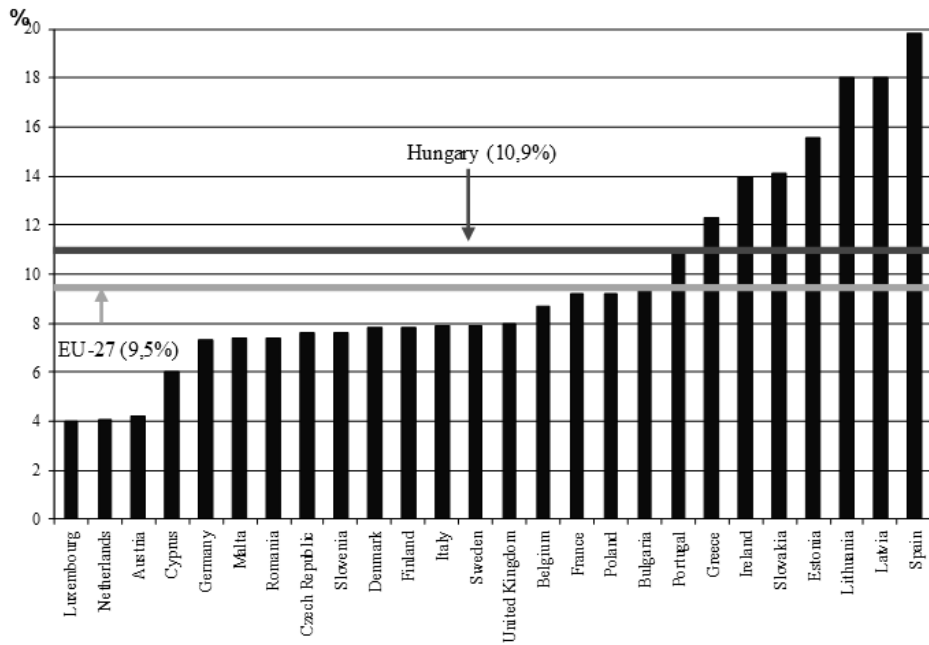


Fig.2. Unemployment rate of the population aged 15-64, 3rd Quarter 2010

Source: [13]

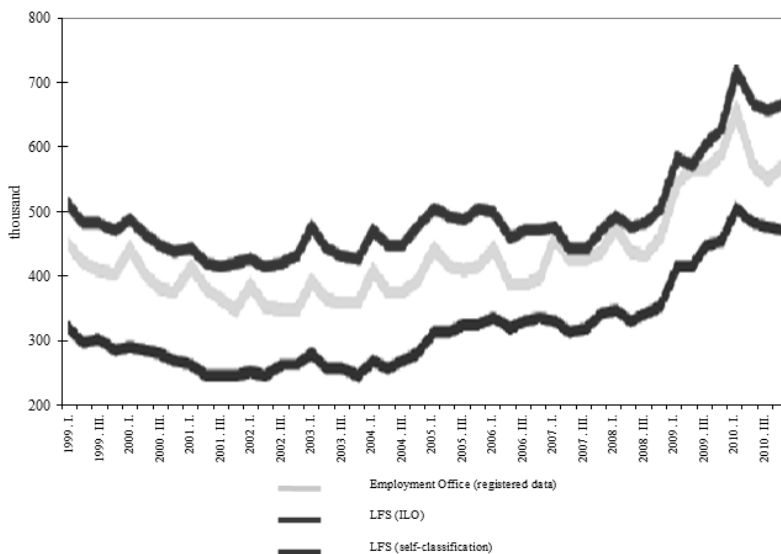


Fig. 3. Number of registered jobseekers and of unemployed people according to the Labour Force Survey, 1999-2010 (quarterly averages)

Source: [13]

In what follows I will illustrate the differences by gender and qualification. In general the ratio of unemployment amongst the less qualified employees was higher than amongst the well qualified people. That was the situation in the past and it also holds true nowadays. After the first few months of the crises we could see an increase in the number of the unemployed.

Table 1. Number of unemployed people between 2006-2010 by gender and qualification in thousands (own construction by HCSO)

Year	Elementary School, or less		Trade School		Grammar School		College, University		Total	
	W	M	W	M	W	M	W	M		
2006	47,9	54,9	41,9	65,9	39,4	32,9	13,0	10,9	152,2	164,6
2007	46,0	57,3	39,3	63,8	46,9	33,3	15,5	9,8	147,7	164,2
2008	49,9	61,3	37,6	68,6	51,6	34,6	15,8	9,8	154,9	174,3
2009	60,1	73,0	48,9	93,4	56,7	51,1	21,4	16,1	187,1	233,6
2010	64,1	79,6	51,1	106,2	71,5	57,0	23,6	21,6	210,3	264,5

The increase was higher in the industrial sector – mostly qualified workers – than in the agricultural sector where we had witnessed this process earlier. According to table 1 we can see that the number of the unemployed is more than 300 thousand in the first two categories, and we can see the lowest number who has college or university degrees.

How shall we find the way out?

This is a very simple question, but the answer is very difficult and complex. Thinking about the problem of land utilisation, energy dependency and the labour force where can we find the solution: in the industry, in the agriculture or in the service sector? When we look at Table 2 we can see huge decreases in the agricultural and industrial employment also, and an increase only in the service sector.

Table 2. Number and ratio of the employed people by economic sectors, aged 15-64 years (own construction by HCSO)

Specify	Number (thousand)			Ratio (%)		
	1990	2000	2009	1990	2000	2009
Agriculture	697.2	251.9	173.5	15.4	6.6	4.6
Industry	1,711.0	1,299.7	1,174.4	37.9	33.9	31.3
Services	2,107.9	2,280.4	2,403.4	46.7	59.5	64.1
Total	4,516.1	3,832.0	3,751.3	100.0	100.0	100.0

In 1990 the employment rate was higher – by approximately 700 thousand people – than in 2009, but the number of the population did not decrease so high in the same period. So we have free capacities in the different sectors which we will have to utilise in the future. What would the solutions be?

Our country is really lucky because it has enough arable land and water capacity. Without these two resources it would be impossible to produce anything. The third factor would be the not well qualified unemployment people. So our task in the future is to find types of utilisation possibilities which use all of these resources and help us to decrease our energy dependency. I believe we have already started something, but not in the most effective way.

If we want success in the near future we will have to combine these factors.

If the country has free – uncultivated – land one way for using it is by planting energy forest. We can employ for this work the unemployed who have not so high qualification to work in a high tech, or other industries. On the other hand we can decrease our energy dependency, because we would not have to use so many fossil minerals – crude oil, natural gas, coal. The other useful way for the utilisation would be the intensive horticulture where we can also use those resources which I have already mentioned.

Summarising our opinion generally, the current global economic crisis may well become the longest in three generations. If trust in finance and economy does not return rapidly, economic reform, socio-economic growth and political stability will suffer. While some confidence in the financial system will return in due course, a new financial architecture is required to strengthen the global economy and increase economic and financial fairness. In this connection, it is critical that the needs for global food and environmental security are taken into account.

Population growth creates a rapidly growing demand for crop products. Growing energy demand and climate change will also influence food production; agriculture will contribute to emissions into the environment and also suffer or benefit from changing climates, depending on climatic zones. Additional challenges are increasing market volatility resulting from yield and end stock fluctuations and consumer sensitivity to food quality, safety, and price.

Energy prices have seen a decline (in constant dollars) over the past 200 years. The latest fossil energy price hikes have not even brought us back to the price levels of some 30 years ago. The tragic reality is that political zeal led governments to keep fossil energy prices as low as possible, thus frustrating most attempts to increase energy productivity.

The effects of the previous things are being felt in Hungary, so we have to change it. In the Hungarian economy primarily relies on fossil fuels – crude oil, natural gas, coal, and their derivatives – which are not only used up rapidly but also pollute the environment and increase our dependency thus hinders process. That is why we must pay increased attention to renewable energy resources, which are inexhaustible considering the human scale and they pollute the Earth to a smaller extent.

We believe another vitally important task would be to tell how the lower quality agricultural areas could be utilised. The existing subsidy system encourages the utilisation of the better-than-average areas for such purposes while the less valuable areas remain unused. It is absolutely unacceptable since it affects some 600 thousand hectares in Hungary (200 thousand hectares if it is arable land below 17 Golden Crowns; and 400 thousand hectares if it is good quality pasture). As these areas require high volume of investment and are prone to unfavourable weather conditions, they are less suitable for agricultural use but are appropriate for growing energy plants perfectly. Taking all this into account it is expedient to consider the necessity of the structural modifications in agriculture so that it could adjust to new situations, offering possibilities to utilise less valuable areas, thus contributing to increased employment and to enhance the population retention ability of rural areas.

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Types of farming households and ways of commercialization in rural Ukraine

Ukraine, an Eastern European country with population of 45,6 million people and a land area of around 60,3 millions ha, and covers 5,7% of total land area in Europe. The share of rural population is 31,6 %. Almost 69% (or 41,6 millions ha) of total available land in Ukraine is classified as agriculture land, which makes the share of arable land about 78%, significantly higher compared to many developed countries.

During a long period of time economy of Ukraine had been developing as a part of Soviet Union economy. Agriculture in Ukraine played an important role both during Soviet times and after declaration of independence. In 2010, agriculture production made 8% of Gross Value Added and employed 15% of economically active population. For the last 10 years Ukraine gained considerable share of international agro-food markets as exporter of grains, rapeseed, sunflower oil and seeds.

Land privatization and further market transformations in agriculture caused creation of dual production structure with both large and extra-large corporate farms, in one side, and individual farmers and small household plots, in other side, that operate simultaneously. In 2010 there were 14,8 thousand corporate farms, that cultivate almost 40% of agricultural land. The number of individual farms in 2010 was 14700, operating on 10% of agricultural land. The household plots account for 9.4 mln, including 5.2 rural ones, that operate 15.6 mln hectares of agricultural land. 77% of households are small with less than 1 hectares, and only 3.3% of them are larger than 5 hectares.

The corporate farms supplies commercially attractive and export-oriented products, while the individual farmers and households supply mostly the domestic food market. Households' total output consists of 55% of agriculture gross product, while individual farms provide 5%.

“Subsistence and commercial farming” was one of the most researched topics of agricultural economics during the last decade, especially after the new EU members joining [2], where was a large number of small farms and households.

According to the economic literature there is no universally agreed definition of subsistence, semi-subsistence and commercial farming. In general, subsistence farming can be characterized by the following characteristics: the output consumed directly, low level of purchased inputs and output sold [1].

There are different approaches to define subsistence farming, but most of them are based on criteria of: farm size, economic size or market participation [4]. EU researchers use the EUROSTAT definition of subsistence farming that is the farm with economic size lower than 1 ESU. Considering Ukrainian definition of subsistence and commercial status, there is no general opinion too. Prokopa and Berkuta [10] have compiled most frequently used approaches of defining commercial status of farms as follows: market participation, the farm size (land area) and time spent on farming.

Analysis of commercial and subsistence farming in Ukraine according to the EURO-STAT method is difficult due to the lack of adequate statistical data. One of the comparable data source is annual Household Expenditures and Resources Survey (HERS). But there are no available data on number and type of animals and crops to calculate the standard gross margins.

Another interesting question of this scientific field is increase farm commercialization. This issue received some attention in the literature. Most of the re-searchers agree that farm enlargement (land expansion) is the most important factor to increase commercialization [6, 7]. Davidova [1] emphasized the most important role of technology and investment improvement in determining market participation and negative influence of external transitional costs. The number of adults and elder children in the households increases output sold [8]. Among factors with negative impacts researchers emphasized non-farm output and schooling too [7]. In this chapter we offer to test some of these hypotheses considering the impact of land and investment factors.

The aim of this research is to answer the next questions:

1. how many subsistence households in Ukraine?
2. how to increase the readiness of rural households to sell more and to increase the share of output sold?

Considering the first question, we employed method to define the categories of rural households by commercial status farming combining two approaches: the farm size by value of production and the market participation. The first approach defines the commercial household as a farm with minimal output to provide the own consumption and to get adequate income [9]; second one – as holdings with above 50% of output sold [1]. As a working threshold for minimal output the national poverty level¹ was implied. According to the employed method farming households can be categorized as follows:

- subsistence – households that produce only for own consumption;
- semi-subsistence – households between subsistence and commercial ones;
- commercial – households with minimal production and above 50% of output sold.

In order to answer the second question we calculate gains of factors impact on the market participation using the classification method by crossing and polling [7]. This approach is a statistical method to analyze a large set of interdependent categorical variables that jointly explain a set of outcome variables. It includes options for classification (profiling) based on conditional frequency distributions, and the calculation of treatment effects of certain factors through a method called matching.

¹ The national poverty level is 75% of median households' expenditures. It was 1062 UAH per member units in 2011 (1€=11.3 UAH).

The data used in this research were collected by means of the Household Expenditures and Resources Survey carried out in 2012 by the State Statistical Service of Ukraine (SSSU) in 27 regions. The survey included 10641 households, among which 3641 are rural ones. HERS is the Ukrainian-led series of selective household living condition surveys, which is provided from 1999 by State Statistic Service of Ukraine (SSSU) according to the international methodology.

The value of farm output was computed by adding the imputed value of self-consumption and the gifted output and the reported value of sales. Equalized household size was computed according to the national scale, where first household member equals 1 and the each other – 0.7. Family labor force was estimated according to the approach developed by Paciorkovskii.

Categories of rural households by type of farming

According to the employed method there is 40% of subsistence farming among the Ukrainian rural households, others engage in commercial sales, but only 9% we can identify as commercial ones (Fig. 1).

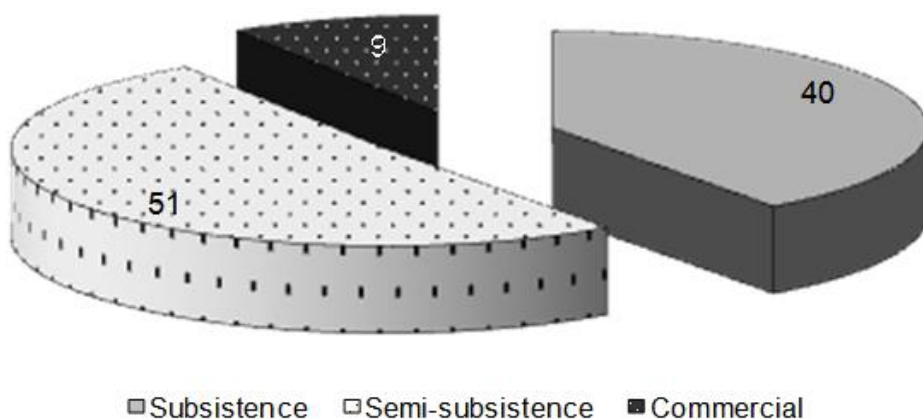


Fig. 1. Rural households distribution by commercial status, %households

Source: own estimation based on the Household Expenditures and Resources Survey 2011

The decision to sell among Ukrainian households can be explained by the analysis of the economical, social and others determinants, most important of them are present in the Table 1.

Table 1. Comparative characteristics of rural households by commercial status in Ukraine
Source: own estimation based on the *Household Expenditures and Resources Survey 2011*

Specification	Subsistence	Semi-subsistence	Commercial
Household output sold, UAH per year	-	4463	22223
Output, UAH per member units per year	2520	5967	17560
Non-farm income, UAH per member units per year	15506	13615	13682
Equalized household size, member units	1.78	2.30	1.88
Family size, persons	2.12	2.86	2.25
Family labor force, labor units	0.77	1.06	0.88
Farming land, ha	0.42	0.85	1.91
Output sold in total output, %	-	29.42	67.00
Consumption share from own production, %	23.14	37.19	42.68
Output in total income, %	14.53	32.25	61.90
Farming expenditures, UAH: – per holdings per year – per ha per year	1064 3900	2314 5300	4362 9300
Farming service, UAH per year: – per holding – per ha	288 900	573 1100	840 1200

The average land area of subsistence holdings accounts for 0.42 hectares. They produce the small value of agricultural products. It could be explained by their high level of non-farm income, that provide to satisfy their own consumption needs.

The semi-subsistence households can be found in-between subsistence and commercial ones. They are mainly households marketing only the surplus over own consumption (the share of sales does not exceed half of output) and households producing small value of agricultural products (but marketing over the half of output). Their production does not cover the sustenance of the households: the average level of farming output (5967 UAH) does not exceed 70% of the national poverty level. But they produce in two times more than subsistence households providing a large share of their total consumption (37%).

Almost 30% of their output is marketed for local proceeding enterprises (livestock products like milk and cattle) or other households in small towns and urban cities. These households have enough labor resources but limited land and financial resources for purchasing inputs. So, the most households of this group could be the potentials of development by shifting farming into the direction of commercial activities.

Only 9% of Ukrainian rural households can be identified as commercial. They are better provided by land resources (the average land is almost 2 hectares and the largest one cultivates 55 hectares) than the previous household groups. In addition, commercial house-

holds purchase much more inputs for their farming. As result, average output of the commercial households is higher in 3 and 7 times than subsistence and semi-subsistence respectively. Besides, they sell a large share of their output (67% per household on average).

In current conditions of possible introduction of agriculture land market it also important to assess the feasibility of land use by households and large-scale producers. Changes in land use and investments into favor of households can help creating “social class” of land owners, who, in addition economic functions can also carry out a number of important social and public functions [3]. Therefore, we have focused attention on the assessment of the land expansion and investment increase as a potential for growth of output sold.

COMPARATIVE ANALYSIS OF FACTOR IMPACT ON COMMERCIALIZATION

The classification method used in this article includes two steps: crossing and matching. The crossing could help to identify the factors, which are affected the market participation of the households. The difference between distribution of subsistence and commercial households by sampling factors confirmed the theoretical affects (Fig. 2).

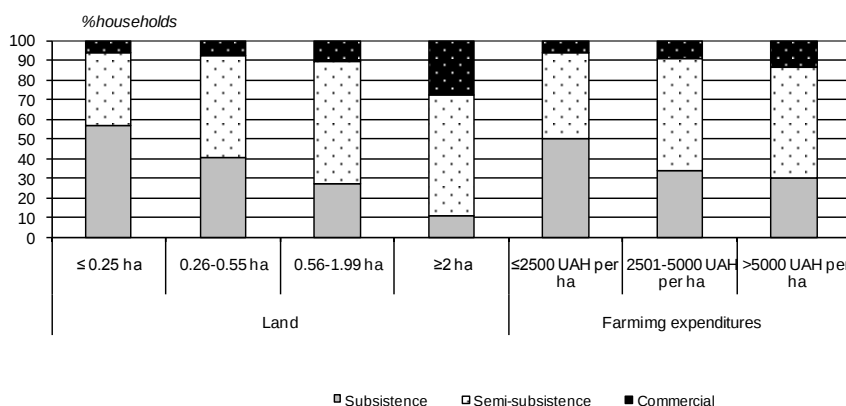


Fig.2. Households distribution by the factors

(source: own estimation based on the Household Expenditures and Resources Survey 2011)

Output figure (Fig. 1) shows that the number of commercial households increases with the growth of the both factors: the farm size and the farming expenditure. This indicates that these factors may indeed affect the increase in household sales.

But, unfortunately, the problem of eliminating subsistence farms did not solve completely. For example, even among farms with high investment of production a significant share of subsistence households was founded (30%). Besides, other factors affect the households' distribution by the sampling factors. Matching of used method can help to solve this problem. Its main advantage lies in the possibility of quantitative measurement of “net” impact (treatment affect) of a selected independent variable on a dependent variable (or set of variables) for all the specified set of independent variables. The me-

thod makes use of a stepwise variable inclusion procedure. The procedure begins with one independent variable that can affect the dependent variable according to the theoretical background. The process finishes after achieved taking into account all the variables, the effect of which may be theoretically or practically justified.

However, the opportunities taking into account all the independent variables in the calculations are often limited lack of statistical information. Therefore, the result could be defined as a “net” impact of the factor if the gains do not change significantly.

The developed model considered in this research includes the next variables:

- Continuous variables
 - Y – output sold;
 - X1 – total cultivated area (ha);
 - X2 – household labour force (labour units);
 - X3 – farming expenditures (UAH per ha per year);
 - X4 – farming service (UAH per ha per year);
 - X5 – non-farm income (UAH per member units per year)
- Dummy variables
 - S1-S6 – social dummies²;
 - L1-L25 – regions dummies (Ukraine oblasts).

Figure 3 presents the treatment affect of the land and the expenditure variables. As we might expect, the both factors positively affect the output sold. For example, on average, an increase in farming land from the smallest area (0-0.25 ha – non-treatment class) to the bigger one (0.26-0.55 ha) per household would raise the output sold by 5% per household. Larger increases (up to 0,56-1,99 ha, and over 2 ha) would result in an increase of the output sold by 13% and 30% respectively.

Considering the farming expenditure impact, it is significant for output sold too. The analysis shows that even a small increase in farming expenditure would result in a significant increase of output sold (7%) and its high level would result by 14% on an average.

This indicates that Ukrainian rural households to increase output sold more often use extensive methods thought land expansion. This is due to a high level of available land resources, and limited financial resources. Therefore, we propose to introduce special support – direct payment – for potential commercial households.

² Pensioners household – all members are retired; young – household head younger 35 years old without children; your with children; active – household head 36–60 years old without children; active with children; mixed family – all others.

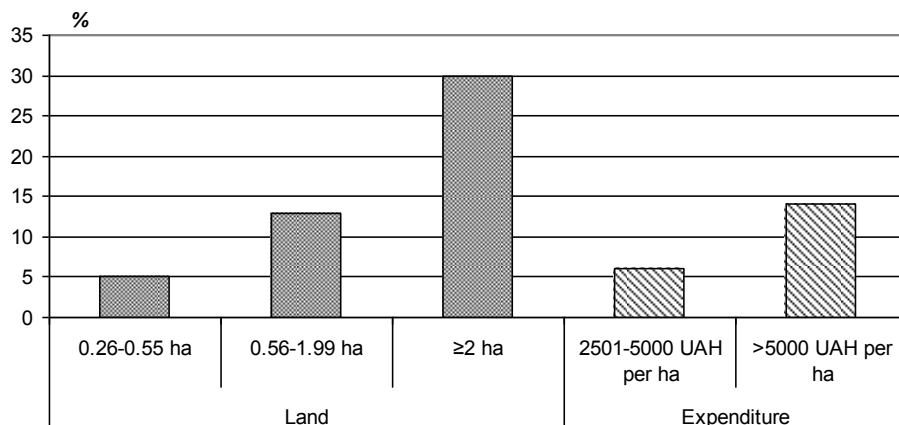


Fig.3. Output sold increase depending on increasing area of land and farming expenditure
Source: own estimation based on the Household Expenditures and Resources Survey 2011

GOVERNMENTAL SUPPORT FOR COMMERCIALIZATION

The main goal of a direct payment scheme is to act as a free help to compensate part of production costs. In general, to avoid aid dependence, such payments should be limited in time, and to be cost effective, they should be targeted to potential subsistence and semi-subsistence households, and focus on the expansion of production and the market orientation of households. Implementation of direct payment scheme requires transparent mechanisms, clear and explicit criteria of the eligibility, especially regarding land thresholds, for instance they could, just as under the CAP of the EU, only be eligible for farmers with a minimum land size.

In case of Ukraine, it is important to limit the access to the payments for the large households, which often operate as farmers without proper legal status and also use age limits on eligibility at the level of 45-60 years. The maximum limit for funding under the direct payment per beneficiary could be established according to the level that is required for FHs with high investments (in 2011 it was over 5000 UAH per hectare according to our calculations). The funding could be based on a 3+2 principle, whereby successful applicants after 3 years must demonstrate progress in the stated objectives – 15% increase of output sold at least. If household didn't succeed in meeting objectives funding cannot continue in next 2 years.

CONCLUDING REMARKS

We examined the decision of Ukrainian rural households to sell some part of produced output. Most of them were been identified as semi-subsistence and only 9% – as commercial. We found, as expected, that land endowment and farming expenditures affect the market participation positively. The most of commercial households provide their high level of output sold though the land expansion due to the lack of the internal and external financial resources.

Direct payments could significantly contribute to support potentially most effective groups of producers, increase their competitiveness and overall develop more enabling economic environment. Also state support of agricultural sector would become more benefiting for all types of producers. Transparent and clear system of direct payments could minimize losses related to corruption or lobbying groups. This will result into more effective national economy and put domestic system of state support in compliance with international best practices. Political lobby of large-scale producers, which now receive major part of state funding will try to use various approaches in order to prevent introduction of transparent and clear system of state support for households.

Also, introduction of state funding for household production may create an institutional trap for beneficiaries such as their endless dependence on governmental support.

New state support activities will require well-managed national land cadastre system and households' production and sale statistics, data on household expenditures and others which require time and funding and thus cannot be introduced in the short-term period.

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Present and future of machinery sharing arrangements in Hungarian agriculture

The social transition of the early 1990s resulted again the restructuring of agriculture in Hungary. In the structural „space”, resulted by the liquidation and transformation of the former large-scale system, a lot of heterogeneous small and medium scale farms were formed. This provided the basis for the current farm structure which is full of contradictions and problems [17, 18]. One example: according to the data of KSH (Hungarian Central Statistical Office), the farming units with less than 50-hectare area gave more than 98% of farms, but these farms owned less than 30% of the total agricultural area. Obviously, under these conditions it is very difficult to ensure the technical resources for the operation of the farming units and in an economically justified way at that [9].

By studying the tendencies in the machinery supply of Hungarian agriculture, it can be clearly proved that the specific machine capacities have almost doubled by our days compared to the era before the social transition. Our statement is proved by some data: in 1981, at that technical level, 1 kW tractor performance was needed for the cultivation of 1,48 hectares, while in 2005 this value was only 0,73 hectares. It proves that in the meantime the capacity utilization and efficiency of utilizing technical resources deteriorated in the whole sector, which significantly affects the efficiency of capital locked in them. On the basis of the related statistical data, the allocation asymmetry is another problem. This fact is also confirmed by the research of Vízák [19] on this subject. According to him there are significant differences, heterogeneity in the machinery supply of individual farms. It results that the considerable capacity surplus and capacity deficit are parallel existing phenomena in Hungarian agriculture.

The accession of Hungary to the European Union (EU) offers unique possibilities for agriculture because significant amount of development funds has been made available for the support of the sector and rural areas in the period between 2007 and 2013. However, it must be remembered that Hungarian farms begun to face some serious competitors at the same time.

Therefore, the economic competitiveness – but first of all viability – of farms is a top priority. A rational reduction of production costs requires a balanced reduction of input use. A significant portion of field crop production expenditures are machinery operation costs. Considering the outlined problems of asset supply, there are significant efficiency reserves in this field [3].

The world market developments also urge the enhancement of viability and competitiveness of agricultural farms. The strong EU protectionist policy has been a permanent subject of talks under the WTO. Some developing and some developed countries (mainly the United States, New Zealand and Australia) have actively demanded the reforms of the subsidy system. In July 2005, just prior to the summit of developed countries, the situation was so serious that the President of the United States suggested to the EU leaders to end subsidizing agricultural producers [1]. At the same time, there already has been some pressure within the EU to cut agricultural subsidies. The quick implementation of such a plan, mainly due to the complicated spheres of interest, cannot be expected, but it reminds agricultural producers to begin preparations for a decreased intervention and the growing implementation of market rules [16].

The above outlined problems and challenges require the search for solutions. The positive economic effects of cooperation agreements between farmers in agricultural production have been examined a lot by researchers in Europe [6, 13], as well as in the United States of America (e.g. [2,7]).

The results of research prove that the cooperation among farmers – including the partnership agreements concerning joint machine use – can have a very important role in the improvement of efficiency and profitability of farms and the reduction of production costs. The farmers' partnerships related to joint machine use are mentioned as so-called „virtual large-scale farms” in the literature.

CONCEPT OF “VIRTUAL LARGE-SCALE FARM”

Virtual large-scale farm is a specific form of cooperation among farmers. Within its framework, the farmer maintains his independence, but the relevant resources in the production process (primarily machinery and related technology) are used in a large-scale way improving the efficiency. Actually, the virtual large-scale farms are production partnerships concerning [5].

Many forms of cooperation can be classified as virtual large-scale farming, but the most important ones are: machinery partnerships, machinery cooperation, machinery and farm assistance rings, machinery lease service and machinery rental. Table 1 shows main features of cooperation forms.

Table 10.1. Virtual large-scale farms and their special features

Source: [10]

Machine partnerships	Machine cooperation	Machinery ring	Machinery service	Machine rent
Main points				
– Common purchase. – Common use.	– Cooperative purchases. – Members use in common.	– Specialization and individual machine purchase. – Sales of redundant capacities in closed ring.	– Machines owned by entrepreneur. – Machine work providing for money.	– Machines owned by entrepreneurs. – Machine rent for farmers.

Machine partnerships	Machine cooperation	Machinery ring	Machinery service	Machine rent
Advantage				
– Costs of machine investments and machine operation is divided according to the proportion of operation. – The expertise of members is added up.	– Advantageous in case of special machines, or production lines. – Lower investment and machine operation specific costs. – Professional machine use and operation.	– Divided investment and operation costs. – Machine can be selected for every task. – Clear settlement.	– High quality work with modern machines. – Cost saving. – Less tied up capital.	– Investment and operation cost savings. – Commitment to utilization is not required.
Disadvantage				
– Competence and use can be disputed. – Difficult to cancel partnership.	– Difficult to solve optimum exploitation. – Higher administration and organizational costs.	– Greater organizational work. – Does not work without cooperation willingness.	– Organizational and checking difficulties – Less solutions can be selected for mechanizations.	– Higher risk during machine use. – Unknown machine – changing quality.

The optimal organizational structure in agriculture is a much analyzed topic in the literature. Hereinafter these relations are reviewed on the basis of the theory of Transaction Cost Economics, focusing on joint machine use.

A BRIEF REVIEW OF TRANSACTION COST ECONOMICS (TCE)

The agricultural enterprises cooperate with different groups (e.g. other farmers, employees, processing plants, etc) and conclude oral or written agreements related to their production activities. The analysis of contracts and the related organizational structures is a much examined area of *New Institutional Economics (NIE)*. There are different theoretical approaches within NIE to explain the different aspects of contracts. Out of these theories we focus on the Transaction Cost Economics in the present paper.

By using TCE the main dimensions of transactions are identified and those organizational structures are determined, in the frames of which the transactions can be carried out the most efficiently [11]. According to the theory, a corporation will choose the organizational structure which minimizes the production and transaction costs [12]. Williamson [21] says that there are three critical factors characterizing the transaction that influences optimal institutional arrangement: asset specificity, uncertainty and frequency. Williamson [20] on the basis of MacNeil discusses three institutional arrangements considering the above three cost determinants. These are:

- classical short-term contracts, in fact market trade relations;
- neoclassical long-term contracts, so-called hybrid arrangements;
- relational contracts, which in fact mean that the transactions are made within the organizational framework.

Hereinafter the joint machine use relations of TCE are reviewed. The technical assets applied in agricultural production are regarded typically specific investments in the sense that they can be used or converted relatively inflexibly to other than original tasks. But they cannot be regarded specific investment in the sense that there are a lot of partners in the narrow environment of the investing farm with whom the transaction can be carried out. It is true vice versa, typically there are more alternatives for an enterprise to purchase the required machinery capacities. So the judgment of asset specificity is far not unambiguous, it can be strongly different in space and time.

There are two classified cases of uncertainty occurring during transactions. One of them is the so-called parametric uncertainty, that is the uncertainty connected with the outcome of the transaction, and the behavior uncertainty (adverse selection, moral hazard, hold-up problem etc.) which can be led back to opportunistic behavior. Since the agricultural production process is determined in time, the time interval which can be regarded optimal for carrying out the machine work is short, the cost of timeliness can be high, which result significant uncertainty. It is important to underline that the judgment of uncertainty in joint machine use (too) includes a lot of subjective elements.

The frequency of transactions in regards to agrotechnical work phases is typically low, because working phases connected with the several crops should be made mostly once or twice a year.

On the basis of the theory, the purchase of machine capacities (transactions) required for the agricultural enterprises is possible – strongly simplified – in the frames of three institutional arrangements. The possibility of ensuring capacities on market basis can be provided by occasional, short-term machine lease service contracts, while the so-called hybrid form is the virtual (large-scale) farm, as an alternative, where the capacities are purchased in the frames of long-term agreements. The organized institutional arrangement in this case is the individually realized machine investment in own property. Summarizing the above on the basis of Williamson [20], according to the TCE theory, the purchase of machinery capacities required for farms in Hungarian agriculture would be the most efficient in the frames of neoclassical agreements, that is “virtual large-scale farms”.

OBJECTIVES

As regards treating the anomalies in the equipment supply of farms, the viable alternative is the joint machine use (e.g. machine ring, machine cooperative, machine use association, etc., see more details in [15]) – belonging to the concept of virtual (large-scale) farm – based on the cooperation of farmers. There were some trials in Hungary in the early 1990s to introduce these forms – we have already proved their efficiency in some countries of Western Europe (Germany, Austria, Switzerland). The examinations, however, performed recently have highlighted that these efforts were much less successful than it had been hoped among professionals. The empirical research has revealed that the

initiatives for coordinating joint machine use that were started basically due to the state involvement and incentives have disappeared by today and there is no cooperation within their organizational framework [14].

On the basis of the above, the present study has three main objectives:

1. to give an evaluation about the current situation of joint machine use cooperation among farmers;
2. to examine the knowledge of farmers about the different forms of cooperation;
3. to identify those institutionalized forms of cooperation which presumably will be feasible in the future, in meeting the machine capacity needs of agricultural farms.

DEFINING DATA SOURCE AND METHODOLOGICAL QUESTIONS

Our examinations are based on primary database. In order to review the questions of joint machine use cooperation we made questionnaire survey complemented with deep interviews in the South-Eastern part of Hungary, in the Southern Great Plain region, in Békés county.

The survey about the economic year of 2007-2008 was carried out between November 2008 and October 2009. During the questionnaire survey, information was gathered about altogether 147 individual farms. During the processing of data, however, 15 farms were excluded from further examinations due to the incomplete questionnaires. Thus the outcomes described below are based in each case on the data of 132 farms ($N=132$). The questionnaire was complemented with a deep interview in case of a narrower group of farmers ($N=23$). The questions of the interview were connected with the questions in the questionnaire, they served the purposes of checking and collection of more detailed information.

DEFINING THE AREAS OF MACHINE USE COOPERATION AND MODELS OF MEASURING

Cooperation, as a term, can be regarded in wider sense – even in connection only with machine use – and it can have a lot of forms. On the basis of former research experiences, we examined three levels of machine use cooperation during the questionnaire survey, namely: machine labor on mutual basis, lending machines to each other and joint machine investment and use.

1. *Machine work on mutual basis (COOP_1)*: In our approach this solution is the most extensive form of cooperation. In this case the farmer uses own machinery or equipment to assist his fellow farmer on a mutual basis. The quantification of activity in this area was made with the following relation on the basis of information from the questionnaire:

$$COOP_1 = \sum_{i=1}^n v_i \quad i = 1, 2, 3 \dots n \quad (1.)$$

where: v_i = frequency of cooperation connected with work phase No. i [0-3 interval 0- never; 1- rarely: 1-2 times/year; 2- medium: 3-4 times/year; 3- frequent: more than 5 times/year]; n = number of work phases [pcs].

2. *Lending machinery to each other (COOP_2)*: this solution means a machine use cooperation where the farmer provides his own equipment or machinery to his fellow farmer for use. The activity can be described with the following relation:

$$COOP_2 = \sum_{i=1}^n v_i \quad i = 1, 2, 3 \dots n \quad (2.)$$

where: v_i = participation activity of agricultural machinery No. i of the farm in the cooperation [0-3 interval 0- never; 1- rarely: 1-2 occasions/year; 2- medium: 3-4 occasions/year; 3- frequent: more than 5 times/year]; n = number of machines [pcs].

3. *Joint ownership and use of machines (COOP_3)*: it is the most intensive form of cooperation regarding joint machine use. The farmers make a joint investment and use the purchased technical resources together. In this case the activity rate is determined according to the following:

$$COOP_3 = \sum_{i=1}^n v_i \quad i = 1, 2, 3 \dots n \quad (3.)$$

where: v_i = joint ownership of agricultural machine No. i of the farm [0, 1: 0-no, 1=yes]; n = number of machines [pcs].

Measuring the knowledge about and suitability of organized solutions for joint machine use

Out of the institutionalized forms of joint machine use I inquired about the knowledge and suitability of machine cooperatives, machine associations, machine and farm assistance rings. As a control, I also involved hired machine service, as quasi cooperation solution, in the examination. The knowledge about the solutions was determined with simple calculation of percentage. The suitability of individual forms, that is the degree of helping more efficient farming by the given form of cooperation, was expressed on a scale from 1 to 5 (1= no help at all, 5= significant help). The value of suitability was given by the calculation of simple mathematical average from the responses.

Determining the preferences in connection with mechanization

The preferences of farmers concerning the mechanization of their farms were measured with three questions (Table 10.2).

The respondents used a 1-7 scale to reply the questions (1= not important for me; 7 = very important for me).

- a.) How much do you consider it important to have all the necessary machinery required for production?
- b.) How much do you consider it important that you have exclusive ownership of the machinery and tools used in production?
- c.) How much do you consider it important that you are not permanently committed in those cases when machine capacities are purchased from external sources?

Table 10.2. Questions measuring the preferences of farmers in connection with mechanization

Source: own work

The surveyed farms were grouped according to economic sizes for the research. The groups formed were as follows: (1) 0 – <4 ESU; (2) 4 – <8 ESU; (3) 8 – <16 ESU; (4) 16 – <40 ESU; (5) 40 – <100 ESU; (6) $\geq$ 100 ESU.

The examinations were made with univariate statistical methods (average and dispersion calculation) and graphical boxplots built on them.

The features of cooperation activity of farmers regarding joint machine use

According to the questionnaires, almost 50% of farms participated in the machine work on mutual basis (*COOP_1*). 65 farmers declared that they provide machine services to one or more other farmers on mutual basis. The value of average activity – calculated with relation No. 1 – in the total sample was 1,47, which means low cooperation performance. The cooperation typically involves a small number of farmers, the most frequent are the groups of 2-3 persons, there are sometimes 4-5-member groups, too. Larger group of farmers was not typical in the examined sample.

Examining the activity in the given form of cooperation on the basis of economic size, it can be seen that the cooperation is the most frequent in medium-scale farms (economic size of 3 and 4), and it is significantly less frequent in the smaller and larger categories (Figure 10.1).

According to our experiences, more than one third of farms participate in the cooperations based on lending machines (*COOP_2*). 49 farmers in the sample said that at least once a year lends a machine from his farm to a fellow farmer. The average activity (on the basis of relation 2) is 2,25, which also presents a more modest cooperation activity. Similarly to the former cooperation solution, the group of farmers in this case includes only a few, typically 2-3 farmers. Larger cooperating group can be observed only in rare cases.

In case of cooperation solution *COOP_2*, it can be seen that the peak of frequency curve taking shape through group averages moves towards the smaller size categories, so it is the most frequent form of cooperation there (Figure 10.1).

In the use of technical resources, the „top” of cooperation is the joint ownership of machinery and equipment (*COOP_3*). This form of cooperation is practiced only by a small proportion of farms, altogether 12 farmers replied that they have an equipment in their farms that is in joint ownership or use with at least one fellow farmer. More than one machine in joint ownership could be found only in two cases out of the 12. According to this the average activity value of the sample (relation 3) is merely 0,11.

Examining the activities in the cooperation forms on the basis of economic size, we can conclude that this solution was more typical for the smaller farms.

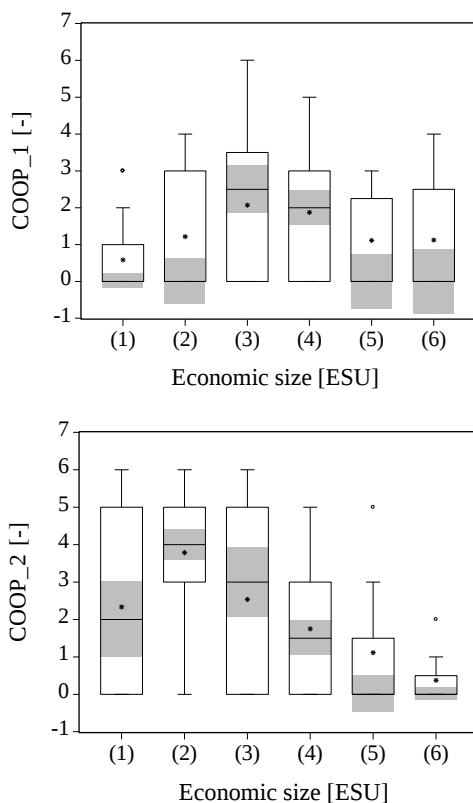


Figure 1. Boxplot analysis of activity rates of machine work on mutual basis (COOP_1) and lending machines (COO_2)
Source: own work (EViews 5 output)

The group of cooperation farmers is differentiated in the different forms of cooperation. In case of machine work on mutual basis, the simple acquaintance between farmers is enough, but this form of cooperation is also the most frequent among friends or relatives. The machine lending, which is a higher level of cooperation, clearly requires stronger relations. Apart from some exceptions, it is a cooperation mechanism among friends and relatives, similarly to the joint ownership.

Knowledge about and suitability of institutionalized forms of cooperation

It was a further area of research to explore the knowledge of farmers about different institutionalized forms of cooperation which provide organizational frames for joint machine use. We tried to explore among farmers how much these solutions are considered suitable to improve the performance of farming.

According to our results, the knowledge of farmers is rather deficient, major part of them has not even heard of all the forms of cooperation. The knowledge of hired machine services is the highest, 97,73% of respondents declared that they heard about this form of cooperation. The responding farmers considered machine rings, as organizatio-

nal form, the most suitable solution for enhancing more efficient farming. The hired machine service was only the second most useful solution (Table 3). Due to the low knowledge the results do not allow to make extensive conclusions.

Table 3. Knowledge about and suitability of institutionalized forms of cooperation

Source: own work

Title	Machine cooperatives	Machine associations	Machine rings	Hired machine service
Knowledge (%)	27,27	34,85	21,97	97,73
Suitability (-)	2,25	2,43	4,03	3,51

Preferences of farmers concerning mechanization

On the basis of former surveys we were aware of the poor knowledge about the several forms of cooperation, therefore we put some questions connected with the special features of different forms of cooperation. Our main findings are as follows:

The motivation of farmers for setting up individual machine pool, that is independent farm concerning machine supply (Table 1, question a) was stronger than medium level (4,09). This motivation is differentiated according to economic size groups. The heads of farms typically in smaller economic sizes are less concerned about such ambitions, while in case of larger farm sizes, these efforts are stronger.

Another experience was the rejection of joint ownership alternative among farmers (Table 1, question b). The 5,79 average preference value referring to the exclusive ownership of machines and equipment proves that those forms of cooperation that are based on joint ownership of technical resources will not be feasible among the farmers of the region within a short period of time.

There was one question to measure the longer-term commitment willingness of farmers regarding the purchase of technical resources from external sources (Table 1, question c). The average of replies to this question is 4,59, which means that the preservation of independence and avoiding commitment in longer term is a very strong, dominant effort.

On the basis of our research, we have come to the conclusion that there are a lot of forms of cooperation in Hungarian agriculture regarding joint machine use, the farmers do not work totally independently, separated from each other. The frequency of these relations, however, is typically low. The farmers obtain machine capacities missing for production mostly in the form of hired machine services.

The knowledge of farmers about new types of cooperations, cooperatives is very modest. It would not be correct to say that it directly hinders the development of cooperation, but the indirect effects are obvious. In Hungary, the establishment of cooperatives has a strongly negative overtone due to the cooperative movements prior to the social transition. So if the farmers have no information about the principles and philosophy of these cooperations, they regard them similar to the cooperative movements of the former times. Therefore it would be absolutely necessary – using special promotion tools – to drive the attention of those concerned to the economic advantages of solutions for joint machine use.

On the basis of the results we can conclude that in the near future none of the forms of cooperation where the dependence of farmers is strong or require long-term commitment will have a role in the responding farms. If the machine capacities required for the farm cannot be solved in the frames of individual machine investments, then they will be ensured in the form of hired machine services in the future, too.

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Part 4:
**Tourism as an example of sustainable
diversification**

Features of rural green tourism in Crimea

INTRODUCTION

Among the European states, Ukraine is determined with the most variety of landscape complexes by considerable historic-cultural, ethnic and genetic acquisition. For this reason the rational use of touristic – recreation potential of Ukraine follows to examine as one of operating facilities of decision on the problems of its economic development, stabilizing the ecological situation and providing the proper level of the quality of life.

Development of the green tourism in Ukraine began considerably later than in Europe and absolutely on other principles. First of all, in the field of green tourism the Ukrainians and foreigners (mainly Russians) come forward as the users of services, as a rule, secondly, green tourism develops as an alternative type of activity, which provides employment of population in place of agriculture which witnessed a decline. Unfortunately, for our fellow-citizens (in a bulk) green tourism so far did not become the ponderable type of rest and continues to be considered as some incomprehensible exotic things. From data of the sociological questioning only 15% Ukrainian tourists give green tourism advantage before other types of rest [1]. Together with that, for 20 years of existence of sovereign Ukraine, the proper experience which needs generalization and analysis are accumulated in the sphere of green tourism.

ANALYSIS OF THE LAST RESEARCH AND PUBLICATIONS

The topic of rural green tourism appeared in research of problems of such known foreign and domestic scientists as: V.I. Azar, L.G. Agafonov, O.O. Beydik, In. P. of Vasil'ev, B.I. Vikhristenko, I.P. Gavrilishin, B.I. Gerasimenko, L.S. Griniv, V.V. Grigor'eva, P.V. Gud'z', V.G. Gulyaev, M.I. Dolishniy, A.P. Durovich, V.K. Evdokimenko, T. Zhabinska, L.V. Zaburanna, G.V. Kazachkovska, V.D. Kalityuk, G.A. Karpova, V.I. Karsekin, V.A. Kvartal'nov, V.F. Kifyak, N.Y. Konischeva, V.S. Tailors, N.N. Kuznecova, O.O. Lyubiceva, M.P. Mal'ska, V.K. Mamutov, G.A. Papiryan, S.I. Popovich, I.L. Sazonec', T.G. Falcon, N.M. Sudova-Khom'yuk, T.I. Tkachenko, Dzh. Uoker, V.K. Fedorcheko, S.V. Khlopyak, V.V. Thinly, V.I. Cibukh, Yu. Bootmaker, I.M. School and others.

SELECTION OF UNEXPLORED PARTS OF GENERAL ISSUE

Without the regard to existent potential which, unfortunately, is more frequent so it remains untapped, in Ukraine until now the wide circle of citizens know only traditional types of tourism (international and internal resort) and resting in a village, which actively develops in the entire countries of Europe, remains on the initial stage of development.

EXPOSITION OF BASIC MATERIAL

It is generally known that Crimea owns enormous resources for development of untraditional types of tourism. A peninsula is attractive because of the landscapes: mountains, sea, forest and steppe, which allows development of practically all types of active rest: equestrian, pedestrian and bicycle-tours, diving, fishing, hunting, and many other.

Geographical position of peninsula and relative closeness to the scopes of Soviet Union allowed yet twenty years ago attracting 9 million potential tourists annually. The habitants of seashore cities a long ago learned to host the guest in the houses. But the other time came today. People already do not want to live in maladjusted (for this purpose) apartments, became the ecological problem consisting of the sea of Crimea which forces to be in earnest thoughtful about prospects and directions of development tourism in other places of region. Inhabitants of the steppe and foot-hill districts never before have been engaged in this activity, moreover they perceive tourism with watchfulness. Local authorities cannot understand in any way, that tourism, connecting with dwelling of tourists in the houses of villagers, allows them to develop this type of activity practically without any charges of state facilities.

For propaganda of Crimean rural tourism it is necessary to provide at least two functions:

1. Creating informative space, accessible to the target audiences.
2. Forming attractive image of every settlement and every farmstead or mini-hotel, taking part in this process. At the sufficient variety of such suggestions every target audience will find the interest and obligatory will arrive.

Today, there is such a possibility in age of informatization: powerful informative networks have already been created in Europe, Russia and other countries. In 2008, the European network of EEN was present in 40 countries (including 27 countries of EU) and 600 organizations – contact points of network, as consortia of national and regional organizations (centres of transfer of technologies, innovative business centres, TPP, development agencies, etc.). All of the EEN networks focus on: creation of computer-integrated network of business support, increase of synergy of services between all partners of Network, improvement of small and middle business' access to services, providing of professionalism and quality of services. This experience allowed formulating a concept of *transfer of technologies* as one of main constituents of innovative process. Interests of creators of new knowledge and its users meet here. In fact, developers of new technologies find the buyers hardly, while production firms and companies which plan to achieve competitive edges by perfection of technologies.

All of the above behaves full degree tourism. In Ukraine already there is experience and own advancement of information about an innovation and of participating in inter-networks.

For basis it is possible to take national and regional networks of transfer the technologies: National Technology Transfer Network (NTTN) constructed in accordance with the methodology and the model of the European network "relay centres" and Russian Technology Transfer Network RTTN, including experience from Belarusian network. Already implemented projects are aimed at consolidating the information resources of the state, public and private innovation structures, enterprises, institutions and organizations in a network of technology transfer and its further integration into the European network of EEN [1].

Crimean Technology Transfer Centre was created in the late 2008 at the site of Southern Institute of Intellectual Property with the support of Eastern Europe. The work of the centre is actively connected with Crimean Academy of Sciences, Commerce and Industry of Crimea, Crimean Scientific Centre of NAS of Ukraine and Ministry of Education of Ukraine, Sevastopol Regional Centre for Investment, Development and other organizations. In 2009, the Centre entered into cooperation with a number of international organizations, thereby granting status as an international centre for technology transfer.

For modern Ukraine, the development of green tourism is of the great importance because: it reduces unemployment in rural areas and create new jobs, stimulates small businesses, promotes communication, transport, social infrastructure, increases the intellectual level of the rural population and provides growth and value of the role of the local authorities, increases contributions to the local budget, acts as a factor of public diplomacy, which is especially important in this multi-ethnic region as the Crimea.

Questions of development of agro-, eco-, agroeco- and rural tourism concern many scientists, practitioners and government officials. However, little attention is paid to the development of rural tourism in the context of socio-cultural relations between the communities of the Autonomous Republic of Crimea, which is multi-ethnic being.

Historically, the rest of the city inhabitants in the countryside appeared in the Crimea at the beginning of the XIX century. When there are landlords and noble estates with the birth of Russian and Ukrainian intellectuals there "Dachny" ideology, is, the practice of leaving in the summer to rest in the countryside to the country, which is a house for seasonal residence in the resort sparsely populated the peasant place. In the Soviet period, private country vacation almost levelled.

Green tourism in the modern sense originated in the Crimea in 1995 after the Law of Ukraine "On Tourism", when environmental (green) tourism was legalized as a type of tourism. After over 15 years we can say that green tourism in Crimea is still in its infancy. This is confirmed by the situation in the tourism sector. A significant number of Ukrainian tourists (97%) do not consider Crimea as a place of green tourism. In Crimea, with the rural population of 730 thousand people with income per person at the 87% average for Ukraine [2] operates only a few rural tourism farmsteads, the majority of which is located in the central area of the Crimean peninsula (Simferopol, Bakhchisaray, Bilogirskiy and Kirov regions). North and north-western regions of the Crimea are a tourist desert – there is virtually no area of rural tourism there.

"Green" tourists on a peninsula are offered a standard set of services: accommodation in rustic house, food (mostly ethnic cuisine), bath, watching the pets and their feeding, walking or horseback riding on the outskirts of the village, hunting, fishing, harvesting, traditional classes handicrafts. However, even cooking for the holiday, not to mention the other services does not bother about a quarter of estates. Quality of service is considered by many tourists as not meeting their costs, although 95% of the tourists consider their holiday as happy [3]. This option Tourism in Crimea rather be called "village bread and salt" or village "hospitality" due to lack of tourist infrastructure (normal roads, parking lots, drainage, hot and cold water, etc.). In this case, rural hospitality could be seen as a first step for green tourism.

In 1998, in Crimea there was the first NGO to support green tourism – Union for Promotion of Rural Tourism [4]. The main goal of this organization was to promote recreation in the countryside. Achieving this goal is planned to be carried out by solving a number of problems, including: the revival and development of handicrafts Crimea, encouraging development in the village, protecting the environment and environmental problems peninsula, respect for the beauty of his native land

Since 2006 operates Crimean Association of Rural Tourism. First Republic (official) program development and support green tourism in Crimea was adopted in 2007 by the Cabinet of Ministers of Ukraine dated 03.07.2006 "On the approval of a plan of government support of rural tourism development in 2006-2010" [9]. Under this program by funding the development of eco-tourism in Crimea Republican budget would be allocated 1.28 million. [8]. For four years, planned for 250 units to increase the number of registered rural estates, which will be organized by the reception of tourists, and 150 people to increase the number of farmers registered entrepreneurs who have created a mini-hotels.

Base location. Size base placement (to receive tourists in rural areas) depends on the number of rural population and its provision of living space. Potential Crimea possible to take tourists in rural areas is extensive. Region ranks sixth among regions of the country for the rural population (730 thousand). Competitors Crimea in rural tourism in Ukraine are five regions that have a large rural population. This is the Region: Zakarpattia (782 thousand). Ivano-Frankivsk (786), Odessa (800), Vinnitsa (847) and Lviv (1006).

Among the areas of Crimea greatest potential of tourist accommodation in rural areas have Simferopol, Saki, Dzhankoisky, Krasnogvardiysky and Bakhchisarajsky areas. In these five areas is home to about 60% of the rural population of the peninsula.

Housing supply. Housing in rural areas is the main material basis for the development of TSA. The more spacious and more comfortable farmhouse, the more opportunities the owner to use the surplus area (available rooms) to provide tourists with a temporary residence. Unfortunately, in this respect, Crimea has the lowest potential for the development of TSA among all regions of Ukraine. By provision of housing in rural areas (17.3 sq.m. / ha) autonomy is last 27th place in Ukraine (Ukraine-25, 8 sq.m. / ha). Housing supply in the village in the Crimea in 1.8 times less than in areas of Ukraine, as Chernihiv (30.8), Cherkassy (31.0) or Vinnitsa (32.4).

Among the areas of Crimea biggest resource of tourist accommodation in rural areas have five areas in which housing per rural inhabitant more than the average in the Crimea. It Saki (20.0 sq.m / person), Black Sea (19.1), Bakhchisaray (18.8), Krasnogvardiysky (17.8) and Dzhankoysky (17.6) areas [5].

Comfortable housing. The modern tourist wants more than to have a "roof over head". It requires an appropriate level of comfort. And comfort in a rustic house depends on the degree of housing equipment and the level of public welfare. Today stage housing equipment in rural Crimea does not meet modern requirements. Two-thirds of rural homes have no bathrooms and hot water, more than half have no sanitation. Only 56 percent of the houses in the village have centralized water supply. Behind the modern requirements and the level of improvement of rural settlements, only 14.8% of them have a centralized sewer and only 18.8% of Crimean villages are using natural gas. [5]

Tourist infrastructure. Tourism infrastructure is mainly concentrated in urban areas, where there is a 90.3% of all hotels and 94.6% of their total capacity. Of the 14 rural hotel is only present in 4 areas – in 2008 it serviced only 3% of tourists (Table 1).

Storage service. In Crimea, the level of trading service in rural areas lags far behind urban areas. Yes, retail turnover for 1 person in urban areas in 2008 was 6,476 UAH/person, in rural areas – 1425 UAH/person, or 4.5 times less. This can cause dissatisfaction of urban residents who came to rest in the countryside. [5]

Table 1. Hotels and other places for short stay [6]

Area Number	Number of hotels	Number of seats	Number of tourists
In Crimea, only	93	14839	377374
Including in areas	9	825	11375
Among them:			
Bakhchisaray	6	757	9825
Soviet	1	32	1037
Kirov	1	25	292
Black Sea	1	11	221

Agritourism. Almost half (49.9%) of all agricultural commodities produced in ARC households, which is an important resource for development in Crimea, a form of rural tourism – agrotourism. In crop share of the population is 43.7%, livestock – 55.9%. The largest share in total agricultural production in Crimea farms occupy the following types of products (Table 2).

Table 2. The share of households in agricultural production in the Crimea in 2011 (%) [6]

Plant products	43,7	Livestock products	55,9
Including potatoes	98,3	Including milk	90,0
Vegetables	84,9	Wool	86,7
Fruits and berries	52,9	Eggs	48,4
Crops	22,2	Grains meat (slaughter weight)	41,6

The greatest potential for the development of agro-tourism have four areas (Krasnogvardeyskiy, Dzhankoysky, Simferopol and Saki), which together produce half of all agricultural products in the total output of the ARC.

An important resource for the development of agro-tourism is the presence in the areas of farms. Most farms established in Krasnogvardeysky, Saka, Pervomayskoye and Soviet areas. In these four regions account for more than half of the 1,069 farms Crimea [5].

Table 3. Number of farms (FG) in the districts of Crimea [5]

Area	FG	Area	FG
Bakhchisaray	11	Nizhnegorskiy	85
Belogorsky	7	Pervomaysky	107
Dzhankoysky	94	Razdolnensky	70
Kirov	21	Saki	186
Krasnogvardeisky	186	Simferopol	76
Krasnoperekopsky	66	Soviet	101
Leninsky	48	Black Sea	10

As the number of farms that provide hotel services in the Crimean region – most of them were concentrated in the southern area (Big Alushta, Big Yalta, Sevastopol) – 16% of the total in the region and the central region (Simferopol district, Krasnogvardiysky district, Belogorsky district) – 26% in the aggregate (Fig. 1).

The smallest number of farms that provide hotel services was recorded in the central region (Simferopol district, Krasnogvardiysky district, Belogorsky district) – 14%.

Most farms that provide hotel services in the Crimean region accounted for Soviet and Krasnogvardeysky areas (Eastern Region), namely in 2011, their number was 15 and 18 companies, respectively, in the Soviet – 15, and the smallest in the region – 14 – are in Belogorsk and Razdolnensky (Central Region) – 7 and 7, respectively.

This situation is explained by the fact that the main activity of farms located in the steppe region of Crimea, is an agricultural production and have no residual resources (labour, financial, facilities, etc.).

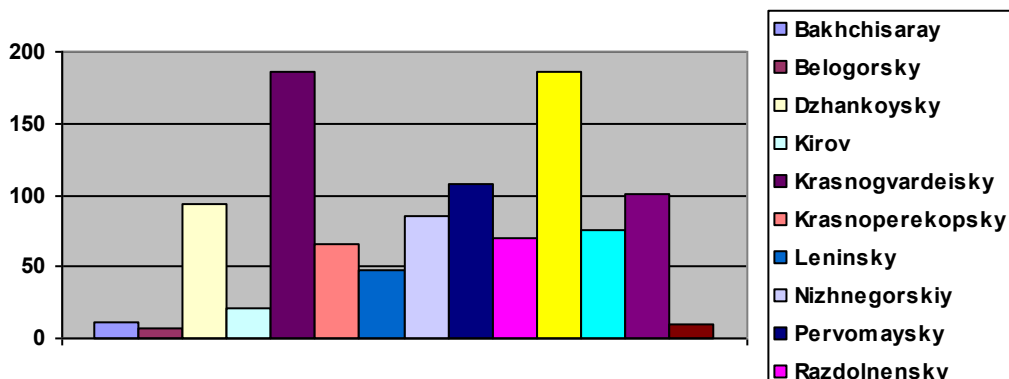


Fig.1. Number of farms, which provide hotel services in the Crimean region in 2011, % of total by region

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

Several districts of Crimea prepared their programs for green tourism. Unfortunately, for various reasons, all prescribed program activities were not fulfilled, while most of them performed extremely low (in terms of effectiveness) assessed owners of rural estates. But the mere appearance of this type of document as program support, confirms the interest of the state in the development of green tourism in Crimea.

Green tourism, besides economic and social problems, solves social and cultural problems. Among them there are: promotion of culture and national identity of the peoples of the Crimea. Green tourism provides an opportunity to convey information about the history of the Crimea, the culture of its people, their traditions, lifestyles, attitudes and values, economic and spiritual potential helps develop relationships, a positive perception of the Crimea and Ukraine in the European community.

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Use of the tourist product as a state brand

In this paper theoretical and practical approaches to forming a state brand by using the tourist product in the modern world are examined. Basic attributes and characteristics that are the components of the tourist product and prerequisites for the formation of the state brand are determined. The necessity is specified and the tasks of formation of the state brand are shaped.

RELEVANCE OF THE RESEARCH

Today tourist brand is increasingly becoming a key source of the differences guiding the client when making their order. Promises of the brand are implemented through a set of relations with customers. Strong tourist brand allows the consumer to feel satisfied with choices made, with the mere fact of purchase and further use of the purchased goods or consumption of services. In modern conditions tourist brand becomes more and more important, its influence manifests itself in business life of every person and affects all types of business activity. Brand name is a factor for success in financial markets and becomes dominant in assessing the financial stability of any company or even region. So, brand is one of the most valuable assets generating profit for the state-bearer of brand. Thus, in 2012 the most expensive brands of Europe became Eiffel Tower in Paris (434 billion euros), brand "Milan" (270 billion euros), the Tower of London (70 billion euros), Stonehenge (10.5 billion euros) [5]. These facts show the need for using tourist products to create a brand of the country.

FORMULATION OF THE PROBLEM

Formation of the tourist destination is the main prerequisite of a competitive advantage of the country on the global scale. S. Anholt defines branding of the country as a systematic process of harmonizing actions, behavior, investments, innovations and communications of the country for implementing the strategy of the competitive identity [9]. This can comprise cooperation of governmental authorities and agencies to attract investments, as well as long-term implementation of coordinated and well-planned strategies inside the country and at the international level in the sphere of culture, recreation and

tourism. And despite of numerous theoretical developments on brand management and implementation of brand strategy of the country, problems of theoretical and practical justification of approaches to the use of the tourist product during the formation and promotion of the state brand remain unsolved.

OBJECTIVE OF THE RESEARCH

Given the dynamics of contemporary global processes in the sphere of international tourism, the objective of the research is to identify approaches to the use of the tourist product during the formation of the state brand.

ANALYSIS OF THE LATEST INVESTIGATIONS AND PUBLICATIONS

Scientific works and investigations of a number of foreign scholars and practitioners are dedicated to the problems of brand definition, as well as immediately tourist brand formation, in particular, such investigators as D. Ogilvy, B. Vaneken, P. Cheverton, J. Randall, E. Rice and L. Rice, S. Godin, M. Lindstrom, J. Ritchie and R. Ritchie, S. Anholt, D. Aaker, J.W. Mandt, M. Sherrington, J. C. Holloway, T. Ambler, D. Arnold, A. Ellwood. Among Russian and Ukrainian studies on the subject, the studies of A. Zozuleva, Yu. Nestorova, A. Vlasenko, I. Manna, L. Mamleyeva and V. Pertsyia are of theoretical and practical relevance.

However, uncertainties remain in such issues as the problem of defining the essence of the sub-brand of tourist destination as a part of the tourist brand, as well as peculiarities of the use of the tourist product in the formation of the state brand. This confirms the connection between the copyright asset and important scientific and practical tasks covered by this article.

PRESENTATION OF THE BASIC MATERIAL

B. Vaneken notes that brand is a name and symbols that identify: the source of relationship with the consumer, the source of promises to the consumer; a unique source of goods and services; a single concept, which works for the future of total experience of communicating of each consumer with an enterprise [1]. In this case, it should be noted that the identification of the brand is not only an effective mechanism of differentiation of the product, but also the way to increase its subjective value. Thus, the product that is sold under a popular brand is associated with a certain set of characteristics, and with the introduction of a new project it is automatically perceived as a media of specific tangible and intangible characteristics.

According to the definition D. Ogilvy, brand is an elusive sum of the product features: its name, packaging and price, its history, reputation and method of advertising. The brand is also a combination of impressions which it produces on the consumers [4].

D. Aaker's structural model of the brand includes the following components: brand identity, which is displayed in the desired image, as well as the brand image, which rep-

resents the real image in the consumer's eyes. Thus, brand identity is a series of unique key associations that creators want to connect with the brand. These are the associations that transmit the information about the brand to the consumer [8]. In its turn, brand image is a real perception of the brand; the image, which was formed in the subconscious mind of the consumer. According to L.G. Kiryanov, the intermediary appears between brand identity and image – the positioning of the brand that represents the very advantages that distinguish the product or service from the competitors [2]. The interrelation of these components of the brand structure is represented in Figure 1.

Based on the data from Figure 1, brand is always a set of ideas introduced by the brand creators (brand identity) and which are formed in the minds of tourists (brand image).

In quantitative terms, product or service can be considered as a brand, if:

- It is physically available to 75% of potential consumers of the target audience;
- 75% of the target audience can by name of the brand describe exactly the industry it belongs to;
- At least 20% of the buyers of the target audience use it regularly;
- At least 20% of the buyers of the target audience can correctly identify the key components of the brand;
- Exists at the market for at least five years;
- The buyers are willing to pay for it a price exceeding the average on similar goods and services in the category [3].

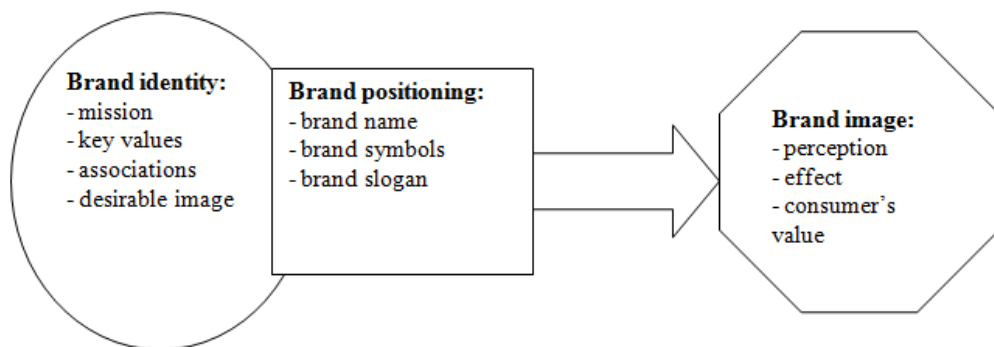


Fig.1. Correlation of brand identity, positioning and image [2]

So, in our view, brand is a set of characteristics that gives rise to association with the product or service not only in the human's mind, but also subconscious, and ensures their recognition and identification. Product branding is one of the most effective tools of the marketing complex. Now service branding is becoming more popular, allowing to provide the most distinctive and unique features of the product, which has no material body, thanks to this many tourist brands are well known.

J. Christopher Holloway defines tourist branding as the culmination of a range of activities from the entire set of marketing tools that allows you to create the image of the tourist brand that conveys the entire set of signals to the consumer about the quality, price and status of the tourist brand [7]. Choosing the tourist brand, the consumer re-

ceives a benefit: he expects a certain level of quality of the tourist product. Selecting the place of rest is a kind of indicator of the consumer's lifestyle. For example, an exclusive trip provides the consumer with a certain image by associating with him, and the budget, but branded tour, in its turn, can increase the feeling of the client's ability to find a decent value for a corresponding cost. So, the hotel chain «Accor Hotels» offers travelers a choice of 17 different brands (including «Sofitel», «Novotel», «Mercure», «Ibis»), from the four-star hotels and ending by hostels. In its turn, «Holiday Inn» focused on a single corporate brand, which is identified with all the products on the network. In the transport sector, airlines serving scheduled flights, carry out charter flights under other brands («Lufthansa» – «Thomas Cook», «Iberia» – «Aviaco»). Some resorts emphasize their brand in advertising campaigns. Thus, the Balearic Islands (Mallorca, Minorca, Ibiza and Formentera) built their marketing strategy on the use of a common brand, logo and slogan "Family of the Islands". A similar scheme is used for the promotion of the Canary Islands, which are positioned as a holistic tourist direction.

Analysis of the existing approaches to the formation of a national tourist brand shows that countries of the world according to their characteristics acquire features of corporations: they are interested in attracting foreign investments, cooperation with the media, engage in a struggle for the tourists. Respectively, we can say that the country is a trademark that through the use of marketing tools can be turned into a brand. Nonetheless the debating point remains the right of existence of such a thing as a brand of the tourist destination.

According to J. Ritchie and R. Ritchie tourist destination is the name, symbol, logo, word, mark or geographical image identifying and differentiating a particular area, they contain a promise of the unforgettable experience, closely associated with a particular place; the brand provides memories of a trip of special power and brightness [11].

In his turn, J. Mandt emphasizes that the concept of "the destination" is broad and polysemantic and therefore, it is impossible to bind it to a particular brand. This problem stems from the fact that one and the same geographical product in different seasons gets completely different properties and that is why there is a need for more than one brand [10]. However, J. Mandt admits the necessity for the brand of the objects of a given territory: alpine meadows, a Dutch park "Keukenhof", the Grand Canyon in the USA, etc.

From the point of view of the practitioners of the tourist business, tourist destination is the product. Thus, "mountain ski tours", "beach vacation", "tours to Paris" are tourist destinations and at the same time specific tourist products. Accordingly, there is a reason to consider possible the existing of the tourist destination brand.

Given the controversial nature of understanding such a phenomenon as the tourist destination brand, we believe that this brand is more of a sub-brand of the tourist brand, which we define as a set of relative characteristics forming the popularity of the tourist destination in the consumer's subconscious and conscious mind. So, from our point of view, tourist destination brand is a sub-brand, created by the consumer.

Sub-brands are the brands connected to the main brand that enhance or modify the associations with the main brand. The main brand is the basis of reference, sub-brands expand it, completing associations, brand personality, and even power. One of the main roles of the sub-brand is the expansion of the main brand to the required new segment [6].

Table 1 shows the attributes and characteristics of tourist areas, which determine the perceived image and may be components of the sub-brand.

Table 1. Attributes and characteristics of tourist areas

Natural resources	Cultural and historical resources	Socio-economic indicators
1. weather conditions including temperature, precipitation, humidity, sunny days	1. cultural and historical centers: museums, theaters, cultural and historical monuments, historical buildings	GDP, standard of living, social environment, financial stability, investment in the development of the area, inflation rate, exchange rate and its stability, banking system, etc.
2. beaches: properties of the water, presence of the sandy or rocky shore, length and level of availability of the beaches	2. national characteristics: gastronomy, folklore, traditions, customs, lifestyle, hospitality	
3. natural landscapes: protected areas, lakes, mountains, deserts	3. cultural events: festivals, concerts, exhibitions	
4. flora and fauna		

In this aspect, in our opinion, sub-brands of tourist destinations should include the following components: historical and cultural sites, natural attractions, a developed resort infrastructure, including hotel and leisure, highly qualified staff, as well as the own logo and slogan as marketing tools of promoting this sub-brand.

As the author's professional practice shows, the basis of the concept of promoting the tourist destination is the notion of the "spirit of place". It implies that in the consumer's subconscious tourist area can be associated with a specific hotel, resort, country, continent, attraction. Thus, during the formation of the sub-brand of the tourist destination it is necessary to bring tourist objects of a particular locality in line with expectations of a separate tourist. Thus, the basis of the marketing concept of starting up project "Wessex 2000" in Scotland became the fact that in public mind Wessex established itself as an area with its unique atmosphere, in spite of all the misunderstandings with the administrative borders. The kingdom was founded by the West Saxons in the VII century, and subsequently formed into a single British State. Over time, Wessex lost political autonomy, but the "spirit of place" was saved. One of its manifestations is a common tendency to use the place name in the names of thousands of commercial companies operating in four counties that made up the core of the Kingdom - Dorsetshire, Wiltshire, Somerset and Hampshire. Even more evident proof of the uniqueness of Wessex became travel literature, including major reference works, in which the ancient name was widely used [7].

The purpose of promoting Wessex as an integral tourist product was to attract foreign tourists to turn Wessex and the whole Scotland into the popular brand. The prerequisites for the formation of the brand in Scotland using Wessex area as a tourist product are the following factors:

1. In terms of the market size, Wessex is a viable product, attractive to tourists (50 million guests come for annual day trips);
2. In terms of landscape and heritage, Wessex is a sight of the world level.

As of today, the evidence of the marketing project effectiveness is a sharp increase in the number of tourists visiting Wessex directly and Scotland as a whole during the past decade and, as a result, increase in the competitiveness of the direction and promotion of the brand “Scotland”.

Based on the above idea of creating a “spirit of place” we shall identify the priorities for the formation of the tourist brand:

1. Clarification of the role of tourism for the regional economy to representatives of local authorities. The main goal is to achieve recognition of the importance of tourism industry for the development of the region. Because of this it is possible to increase customer satisfaction, improve the tourist product and improve the quality of the service;
2. Creating comfortable conditions. Providing tourists with positive experiences from staying at the resort;
3. Upgrading hotel room capacity. Reconstruction of the existing hotels and construction of new ones. Particular attention should be paid to the construction of 3-star hotels as the most popular on the market of tourist services;
4. Implementation of new standards of service by training staff on short-term training, breeding corporate culture and increasing professional level of the tourist industry in general;
5. Improvement of transport links between regions;
6. Ensuring safety of tourists;
7. Analysis of market conditions in order to study consumer demand and adaptation of the tourist product to the needs of tourists;
8. Creating visual appeal of the resorts in the country;
9. Control of the resorts contamination with consumer and production waste;
10. Implementation of PR-activities at the national and international level;
11. Implementation of aggressive marketing for positioning of tourist products as a part of the state brand.

It should be noted that the main important features of the use of the tourist product for the formation of the state brand are: first, the inability to identify the “producer”, secondly, the presence of very different products, which is why there are no uniform standards of quality of the tourist destination, thirdly, the impact of the brand on the properties of the product is low, and fourthly, the lack of legal regulation of the use of geographical names in the branding by the national legislation of the country or the EU.

The need to form the state brand through the use of the tourist product, in our opinion, is due to the following reasons: 1. Attracting tourists; 2. Opportunity for a quick sale of goods of domestic producers at higher prices; 3. Presence of the positive external image of the country; 4. Formation of the positive internal image of the country; 5. Attracting investments to the country; 6. New job formation, and, as a consequence, reduction of unemployment.

Based on the aforesaid, we believe that building the brand of the tourist destination will have the following positive results:

1. Increase of the level of confidence of the consumer (tourist) in the presence of high level of service quality provided at some brand resort;
2. Gradually increasing mass interest of tourists in recreation in this particular area (clear evidence is the emergence of mass tourist destinations – Egypt, Turkey, Thailand, United Arab Emirates);
3. Significant rise in the cost of goods and services sold within a brand tourist area and, as a result, increase of revenue to the state budget, rise of the socio-economic level of the state, leveling negative economic processes;
4. Formation of customer loyalty, which contributes to further development and consolidation of a strong tourist brand;
5. Identification of the tourist brand with the consumer's lifestyle, which will allow them to form their own identity. These visited tourist brands deliver data on the status of the tourist, their lifestyle, values, and standards of living to the society. Many territorial brands choose messages that form the identity of the tourist as the slogan. For instance, you can use the American brand «I love New York», created in 1970.

Thus, tourist branding gives the country a chance to take its positions to the new world level, as the attitude of consumers to the brand of the tourist destination is projected directly onto the image of the country. As an illustration, one can cite the experience of such countries as Turkey, Hungary, France, Spain, Poland, Maldives, Thailand, Dominican Republic, where the national tourist branding program has not only created a positive image of the country in the world, but also contributed to the formation of the national identity, single purpose, national pride, and, as a consequence, economic development of the state.

CONCLUSIONS

Summarizing, we can note that the formation of the state brand by using the tourist product is creating a certain image of the region (regional sites) and delivering information about the benefits of the product to the consumer, which give a unique character to the tourist destination and distinguish it against its analogues. Accordingly, during the formation of the tourist destination brand, be aware that a potential customer buys a “dream” and their general impression of the resort, hotel, cruise liner or flight, first of all, depends on such an intangible factor as the atmosphere or the “spirit of the journey”. However, except for the natural and cultural factors that make a positive atmosphere of the rest are modern infrastructure, transport connection and level of service. Given the complexity of the requirements for a high-quality tourist product there is a necessity for a comprehensive approach to the development and further improvement of the tourist destination brand and the state as a whole, otherwise it will lose its value and attraction in the consumer's mind.

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Health tourism in Hungary: history, its revaluation and tendencies

Apart from macro level socio-economic factors, quality of medical science and health service, there is another important relation namely the changing in the state of health to health consciousness and health connected behaviour of the population. Natural curative factors have an increasing role in the improvement and preservation of the state of health.

Authors believe that health tourism is one of the most important fields of Hungarian tourism and although it is internationally competitive it still needs development and to achieve this, a comprehensive, systemic research of scholarly character needed.

Health tourism keeps on having a more and more significant role in the economic processes of the world and in the meantime only a few other countries have the same natural conditions similar to that in Hungary.

There is a dynamic growth and expansion of health tourism and health itself is being appreciated and valued more and more throughout the world. The basis of this could be created by the thousand year old traditions, a fame gained in medicinal tourism (mainly balneology), the quantitative existence of quality resources and by the capacity – and service development of the past decade.

The long term significance of the sector is indicated by the fact that the conscious and sustainable development of health tourism was not only among the priorities of the National Tourism Development Strategy (accepted in 2005) and the New Hungary Program, but it can also be found among the priorities of the New Széchenyi Plan (2011) and furthermore the National Regional Development Conception is also dealing with the topic as an emphasized development object.

EXPLANATION AND SYSTEM OF HEALTH TOURISM

In reality health tourism unify two types of services, namely tourism and health care. There have been intentions to define it for more decades, but there isn't a unified interpretation because the subject itself is multidisciplinary and intersectoral.

It is also worth considering changes in demand in the health tourism model (Chart 1), because apart from growing health tourism demands are also constantly changing. Reasons for these transformations are primarily socio-economic mega trends that can be observed in travel customs as well.

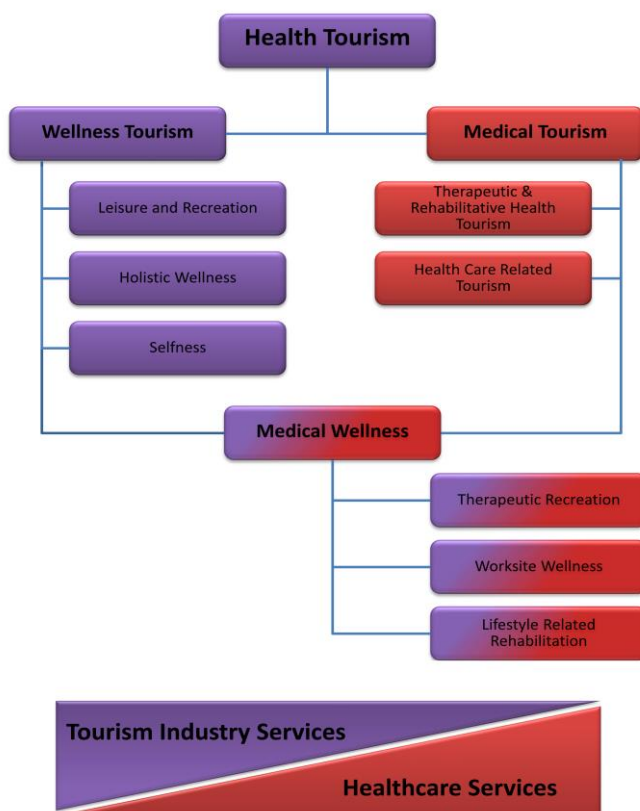


Chart 1.: Interpretation of health tourism

Source: Molnár Cs. (2011) p.:29

During examinations that considered also the principles of systemic approach (Chart 2) it became clear that determined natural potentialities bear with competitive factors and are really important in health tourism. Resources and natural elements can't be discussed separate from the resource area, for its characteristics are determinative and induce different developmental paths.

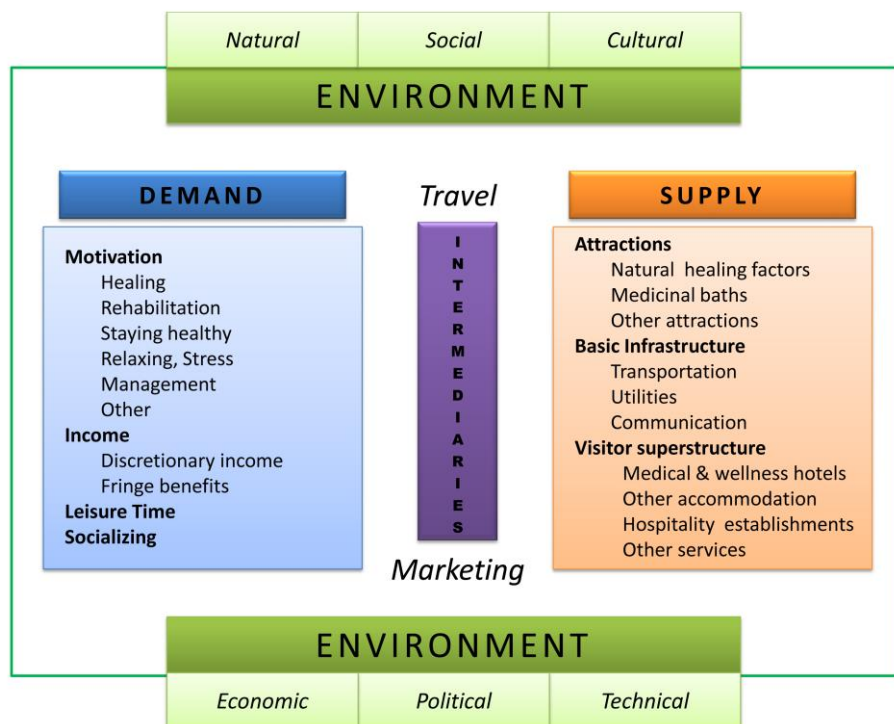


Chart 2: Model of health tourism system

Source: Molnár Cs. (2011) p.:33

HISTORY OF HEALTH TOURISM

As it may have excelled from those beforehand, tourism – and health tourism – may only be considered as a relatively new social and economic tendency in its present form and to its present degree, as even in the ancient times travel was part of people's lives.

Heritage of the Roman Empire and Middle Ages: the opening of the Hungarian spa-culture

The bases of health tourism were laid in the Roman Empire, as bathing was an important part of that lifestyle. The „thermae” and the „balnea” were on one hand serving bathing, self-cleaning purposes, on the other hand they were important scenes of social life [Hungarian Spa Association – National Széchenyi Library (2004)]. As the Roman bathing culture had its impact on the occupied territories, so in Pannonia too, 15 Roman baths were functional. Among them the most famous one was Aquincum, today found on the territory of Budapest. [Borszéki (ed) (1979)]. Nowadays, these baths establish the connection between the health-, cultural- and heritage-tourism. They also represent the lead-

ing products of the Tourism Development Strategy (2005) of Hungary. The historic monument baths found in Europe – in a great number on the territories of Hungary and Transylvania – represent special attractions and unique sales proposals (USP).

The baths of the early Middle Ages served solely for healing purposes, usually belonged to some kind of asylum hospitals, which unequivocally arose from the severe religious and social prescriptions. This approach slowly changed by the late Middle Ages due to the expansion of the Ottoman Empire, which also developed a famous bathing culture. The hamam combines the functionality and the structural elements of its predecessors in Anatolia, the Roman *thermae* and Byzantine baths, with the Central Asian Turkish tradition of steam bathing, ritual cleansing and respect of water. It is also a known fact that Arabs have built many of their own versions of the Greek-Roman baths. The ruins that weathered these times also mean the survivorship of the past within the tourism and are considered to be the most beloved development trends of baths nowadays. Budapest has four working Turkish Baths (all from the 16th century): Rudas, Király, Császár and the newly reconstructed Rácz Thermal Bath [Gerevich (ed) (1975)]. Some of new developments (for example) the Hamam of the Aquasziget Esztergom, the Arab Bath of Hotel Shiraz Egerszalók or Semira Day Spa Hotel Balaton based on elements of this culture offering not only special architecture, but also unique services.

In the 16th and 17th centuries the bathing culture spread mainly in Italy, Germany and France, but there were new baths being built in Hungary (Eger, Gyula, Pécs) as well. The analysis of healing waters started [Hungarian Spa Association – National Széchenyi Library (2004)].

The modern history

The modern history, first of all due to the new geographical discoveries (its most important start date being the discovery of America in 1492), the technological innovations (steam machine, railway, steam boat) and due to the social changes (civil societies) invoked new tendencies from the point of view of travel. More and more people took part in tourism and the new forms of tourism were formed, most important of which being the area – with today's words – health tourism.

In the 16th century the bathing culture mainly spread in Italy, Germany and France. Also in the 16th century the analysis of healing waters started. The more and more spreading syphilis meant the end of the bathing culture. The repulsion towards bathing is well known from the 17th century literature, which was ended only by Rousseau's „Back to nature” philosophical trend in the 18th century, which established the basis of the wellness tourism of nowadays. In the work „Tuition about the power of fresh water and its effects on the body and its inner and outer effects on sick people” published by the Silezian doctor Johann Siegmund Hahn in 1713 established the basis of cold water healing, which reached its peak in the 19th century. Vinzenz Priessnitz, also originating from Silezia, established an institution healing with cold water in 1826. Doctor Leo Bergmann, in 1838 evaluates diet, cold water and motion as the „three heroes” of medicine. In Germany, in the Biedermeier era, the natural medicine has swung up. In the second part of the century, the Catholic bishop Sebastian Kneipp published his work with the title „My water cure”, which was published in five issues within a few years, and its author became well known all over Europe. His success was among else due to

the fact, that opposite the natural healers so fashionable at that time, he did not attack the learned doctors, who were named „poison makers” by these healers. His main principles were built around the unity of body and soul and the harmony of its functioning. His water therapy, besides cold water, also used thermal waters taking into consideration the effect of the minerals solved in these. He held motion, healthy diet and the upbringing of children aiming a healthy life for very important. He promoted the herbs with proved curative power instead of the chemicals, as according to his religious attitude, God has created a herb for every disease.

The last quarter of the century can be considered as the birth time of the modern bathing therapy. In 1878 in Berlin, a group of well-known scholars and doctor trainees have established a balneological section, so the discipline of bathing became a special area of the modern medicine. Starting with this date, they had been organizing balneological conferences every year, the aim of which was to scientifically determine the effect of the healing springs, sea water and climate. In the 19th century, bathing is considered as the pillar of hygiene and public health. The mass fashion to attend baths emerges, most of the well-known bath resorts being found on the territory of the Austro-Hungarian Monarchy (Balatonfüred, Pöstyén, Herkulesfürdő, Balf, Tarcsafürdő, Nagyvárád, Harkány, Buziás for example). It became more and more fashionable to spend vacations at the favourite places of the imperial house. Entertainment facilities, catering, promenades, theatrical performances, casinos¹ countermarked those places. One of the most popular health-resorts was Balatonfüred. The investments by state grant became typical mainly in Hungarian and Czech territories and resulted in internationally known and acknowledged services [Kósa (1999)].

HEALTH TOURISM OF NOWADAYS

In the 20th century mass-tourism evolved. Europe is the biggest market of tourism and due to its excellent facilities and natural resources it boasts the largest health tourism as well. Hungary has an important role in this process.

The last decade brought about a revaluation of the industry. The developments of the past decade aimed to improve capacity and service quality as well. Considering Hungary's exceptional reserves of thermal water, the “*Ten Year Development Program of Health Tourism*” (2000) adopted by the Hungarian Government aimed at moulding health tourism into the determining sector of domestic tourism. The program also laid down the strategy on how to transform Hungary from a depository of huge amounts of thermal spring water into a health and thermal tourist powerhouse capable of becoming the market leader of European health tourism by the end of the decade. In line with the general efforts of tourism development formulated in the “*Széchenyi Terv*” (2001-2004), the ten-year program has served as a guideline to achieve multiple objectives:

- increase revenue generated by the tourism sector;
- increase the number of visitors and visit related spending;
- adding new target groups;

¹ Interesting to mention, that casino culture of the country was revived by the largest spa-hotel company (Danubius) of Hungary in 1981.

- space and time decrease of the concentration of tourism;
- growth of the share of domestic tourism;
- improvement of the health of the Hungarian population.

In order to achieve these objectives the following main tasks were identified:

- development of complex products marketable on an international level and the infrastructure necessary for this;
- promotion of quality and exclusive investments;
- increase the efficiency of marketing work;
- development of human resources
- modernization of the regulations.

The funding appropriated for the program - about 32 billion HUF (approx. 11.5 million EUR) in financial assistance – was distributed mostly in form of grants to finance about 100 projects and tripled the investment value of the involved health tourism establishments. The number of funded projects in a given geographic area is in correlation with thermal water occurrence (Table 1). The mostly successful regions were Northern Great Plain Western-Transdanubia and Central Hungary.

Table 1. Natural resources and healing factors of Hungary by region

Region	Mineral-waters	Medicinal-waters	Health-resorts	Health-caves	Mofetta	Thermal-mud
Central Hungary	42	32	0	1	0	0
Central-Transdanubia	32	19	1	1	0	0
Western-Transdanubia	29	35	4	0	0	2
Southern-Transdanubia	25	27	1	1	0	0
Northern-Hungary	19	17	4	2	1	0
Northern Great Plain	34	69	2	0	0	2
Southern Great Plain	40	45	1	0	0	1
Altogether	221	244	13	5	1	5

Source: own edition based on OGYFI records, 2012

As a result of the investments of this period, the number of functioning pools has risen by 62%, the yearly volume capacity of spas by 75% (from 37,2 to 64,9 million people), the yearly guest turnover by 46% (from 15 to 22 million) by the end of 2004. The income amounts of the subsidized spas have risen to double. The capacity of therapeutic and wellness hotels has doubled, the guest turnover and income indexes have reached the appointed results by the end of 2005. More remarkable results can be noticed in the 2005-2007 period. Scanning the returns of spa and wellness hotels an increasing market share can be laid down and a well marked growth of the share of domestic tourism can be proved (Table 2).

Table 2. Change between 2005-2007, in per cent

Index	Hotel total	In	
		Spa hotels	Wellness hotels
Number of visitors	111,2	110,5	159,3
Number of guest nights	110,5	109,9	163,1
Income	132,5	151,2	261,4
REVPAR ²	111,1	129,4	122,4

Source: based on KSH records, own calculation and edition

Within the *New Hungary Development Plan* (2007-2013), the primary resources of tourism development are the Regional Operative Programs. Further subsidy possibilities appear in other operative programs, such as the support of enterprise development (GOP), traffic development (KÖZOP), e-administration (EKOP), the strengthening of trainings connected to tourism (TAMOP), the development of human infrastructure and services (TIOP) and of the environment and energy (KEOP). The support intensity of health tourism projects is between 30-50%, the maximum subsidy amount for one project is 200 million HUF. The so called emphasized projects, which receive subsidies on the basis of unique procedures. They are characteristically related to the above mentioned national level priorities of touristic product development. The therapeutical development of Hajdúszoboszló, the development of the Újszegedi Fürdőkomplexum spa resort and the Bük spa, the Új Fürdő bath from Hévíz and the establishment of a Therapeutical Centre, as well as the further development of the Zalakaros bath with a total subsidy amount of 8,781,772 thousand HUF were the most important.

The strategic document "New Széchenyi Plan" (2011) is focusing on 7 explosion-points of the economy among them the health-industry ("*Curative Hungary*") as a pulling sector. This part of the strategy contains curative-, preventive-, and rehabilitee services, attending and background branches, foundational researches and manufacturing products joining with health-consciousness life-style. The main aim of the progresses is to create a new, uncial Hungarian national-industry confirming advantage to international competition.

The objectives are:

- joining the underdeveloped destinations;
- complex exploitation of geothermic energy;
- quality assurance of curative destinations and services;
- protection of natural facilities (water-basis protection, up-to-date water appropriation and re-exploitation);
- expansion of curative places with international significance harmonizing expectations of tourism and public health;

² revenue for one rentable room

- reconstruction, expansion and modernization of medical and thermal bathes and reception-ability of advantaged tourism destinations (Sárvár, Harkány, Zala-karos, Miskolc-tapolca, Hajdúszoboszló, Gyula etc.);
- “Budapest medical city” program with reconstruction and modernizing the monument spas of the capital (Gellért, Széchenyi, Rudas, Lukács);
- modernizing education system of connecting specialties (tourism, balneology, engineering) and gearing it to market demand;

There are a number of other reasons why health tourism should be placed in the focus.

- Health tourism is a complex tourism product. The new tendencies in health tourism, the creation of diversified but unique supply provides good opportunities for niche marketing;
- The achievements of the past years – including the period of the economic crisis starting at the end of 2008 – show that people are reluctant to neglect their health;
- Health tourism is characterised by longer average stay, higher spending, and lower seasonality. Due to its multiplier effects its economic and social effects are significant;

THE IMPORTANCE OF HEALTH TOURISM DEVELOPMENTS: IMPACTS AND RESULTS OF INVESTMENTS

The results of the investments and efforts are in many directions. As a starting point we can declare, that the appearance of visitors induce economic-, environmental- and social impacts in tourism destinations. The impacts are divers and twofold, so the aim of conscious and system-view and sustainable investment have to focus on positive dimensions.

In the '60-s the researchers accept the tourism development without reservation (*Krapf, Waters, Galeotti, Peters*) highlighted only the positive economic impacts of the sector. In the '70s and '80s the so called scepticals (*Young, Harrington, Jafari, Matthews, Boissevain, Erisman, Smith*) examined the social- and natural scientific focusing rather the negative economic influences. From the middle of the '80s the trend based on scientific cognition search the tourism as science (*Mill-Morrisson, D.G. Jafari, Lengyel M., Pearce, Inskeep*) [Putzkó-Rátz (1998)] consider it as a subject of interdisciplinary research [Pearce-Butler (1993)]

The economic influences (Figure 3) are likely the most important and provable with data at the project and local authorities' level (Figure 4).

A survey of Molnár (2010) about the effects of spa-investments and developments in Eastern Hungary pointed out that the regional influence cannot be seen characteristically, and is incidental.

The aforementioned survey also points out that the role of the space is provable in different relations and makes the difference of the destinations and establishments. Let's think only about the ethno cultural space, which appears in architectural style of the spas (v.s. the difference of Roman, Turkish, Far-Eastern or European spas). Utilization of symbolic spaces [Michalkó (2007)] happens when mentioning Budapest as “*Spa capital*” in communication. The space is one of the most important cost-elements [Lengyel I. (1999)]. Costs and prices lead to differentiation of market, the difference of destinations

influence the order of competition why the localization of an investment can make an advantage in competition (vs. the difference between East- and West-Hungary).

The stereoscopic standards of health-tourism are described with three important features. About the intensity of mobilization we can say, that most of the visitors try to find a destination close to their homes, except of the fact, when it has unique fundamentals (curative effect, good price-cost proportion, architectural rarity etc.) About the regional character of stereoscopic structure we can declare, that there are sender- and receiving health-destinations (Hungary belong to this group). The third trait is the asymmetry of health-tourism map of the world. The clusters [Porter (1998)] and networks can help to take advantages of local potentialities.

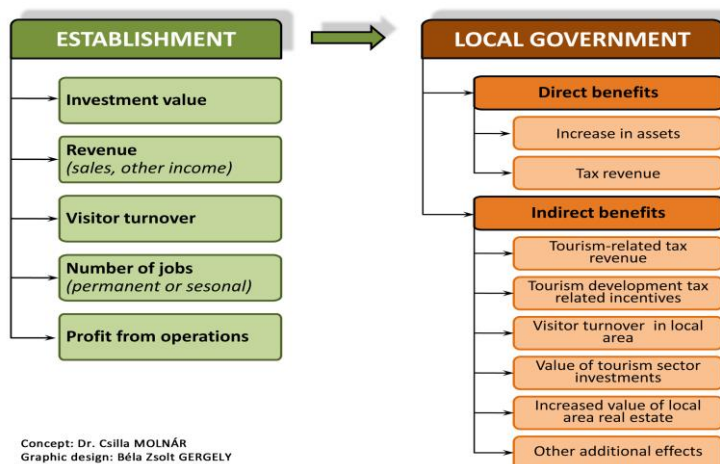


Figure 3: Economic results of health tourism investments
Source: Molnár (2011) p. 58.

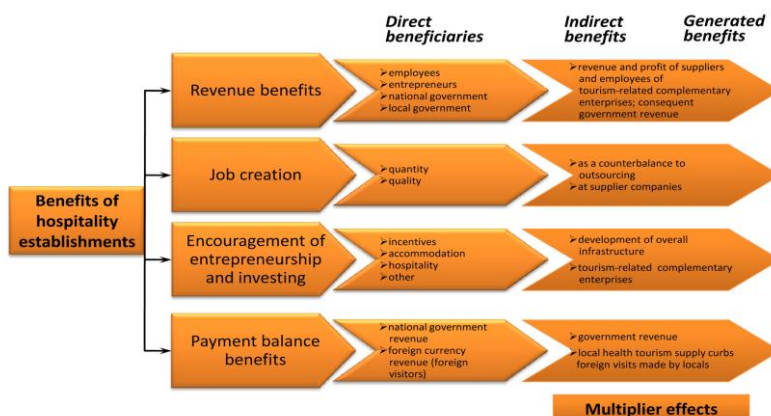


Figure 4: Economic influences of health tourism
Source: Molnár Cs. (2011) p.:57

Examining the output data of health tourism and effects of investments is not easy and can be based only on data submitted by hotels to the Hungarian Central Statistical Office (KSH). The statistical data of spas are not recorded officially, so collecting information starts with earning their trust and co-operation, which makes the process difficult at the most. The category of wellness hotel was initiated in method only in 2004³. As Table 3 shows, the share of spa and wellness hotels from hotels total increased dramatically in the last decade.

Table 3. Share of spa and wellness hotels from hotels, 2001-2011, in per cent

	2001	2003	2005	2007	2009	2011
Number of accommodation	8,2	11,4	21,6	24,4	25,5	27,3
Number of guests (person)	9,5	13,0	19,9	25,2	27,2	30,0
Foreign guests	9,5	11,9	13,7	15,5	16,1	16,5
Domestic guests	9,4	14,4	29,1	36,4	39,5	46,3
Number of guest nights	12,1	18,4	25,2	29,6	31,8	33,2
Foreign guests	12,2	18,0	21,1	22,4	23,5	22,41
Domestic guests	11,8	17,7	32,0	40,0	42,1	47,1
Income	12,7	17,0	21,1	24,8	29,0	34,8

Source: data from Hungarian Central Statistical Office (KSH), own calculation and edition

In the top 10 destinations of Hungary there are 8 health resorts: Budapest, Hévíz, Hajdúszoboszló, Balatonfüred, Bük, Sopron, Zalakaros and Sárovar. The first 3 have been unchanged for several years.

TENDENCIES AND TRENDS OF HEALTH TOURISM: THE FUTURE

The expected development of tourism depends on the economical and social processes, changes, as we can interpret it as an open and interdependent system (Lengyel 1994). International organizations of tourism as UNWTO or ETC and also OECD have dealt with all these⁴. Their researches draw the attention in the coming decade on many such processes and trends, which also have an impact on the sector [Molnár (2010)]. The most important are the following:

³ 54/2003. (VIII.29.) GKM decree

⁴ Travel and Tourism, a world of opportunity – Travel and Tourism Economic Research. WTTC. 2003.
Tourism Market Trends. UNWTO. 2003.
European Tourism Insights. 2006. ETC.

The **demographical and social changes** will alter the structure of travel and result appearance of new target groups. The share of elderly people is growing within the population (especially in Europe). The present share of *senior travellers* 17% of those above 65 years can reach 28-30% by 2040. They are a very important target group of traditional health tourism but at the same time – due to the fact that the healthy lifestyle can result a better life and health state – we can count on the growth of their share in wellness and medical-wellness too. Besides the traditional therapeutical services, they seek more and more services and programs – of course, corresponding to their age and health state.

Within the social changes, perhaps the most important is the *split up of the traditional family model*. Women are entering the labour market, and appearing in business in ever growing numbers. They travel alone quite often, so they require special and secure services. The “only women hotels and floors” are majored in serving their demand (Luthan Hotel & Spa in Saudi Arabia for example).

At the same time the so called singles and one person households have been on the rise and carving out a big piece of the market, making them a group that has to be considered by servicing enterprises, too. New services and programs emerge to cater to these groups (such as personal training, anti-aging, anti-carrier or art-therapy programs). Besides carrier health and appearance is especially important value for singles. They have money to spend for it but not have leisure time, so they prefer short but very complex and high quality packages and person-dominant services including beauty and trendy sport programs such as tennis, golf or skiing. Getting experiences is curiously important for them and is an expectation against communication already. They like creative, unique, funny but elegant advertisements and require well known brands. They don't like unrequested commercial proposals through internet, but ready to book online [Stifter (2011)]. There is a special and worth to highlight group of singles, who live alone from necessity but long to be in relationship. Identifying the difficulty of making the acquaintance they became the main target group of some wellness hotels (Rogner hotel chain for example).

People between the ages 18-35 are travelling more and more. This age group is also representing an ever growing share in the health tourism and belongs to the buyer groups of the active wellness. Sporting facilities, entertaining programs are expected by them.

Further more, the share of the couples in their 30s without children is also growing. This target group has very special claims with the demand and establishment of accommodation (connectable rooms, safety appliances of windows, electricity, baby cot etc.), catering (child menu, feed chair, playing corner for example) and bath (children's pool and bathroom, playground etc.). They are looking for baby-sitting upon request options, animated programs for children and also family. They travel mainly on weekends or at time of school vacations several times a year. The development of the so called three generation services observed nowadays is being continued.

Among the singles disposing of a high solvency and demanding high quality, person tailored services and special care, the number of women is significantly high. They dispose of higher qualifications and income than the average. Thus, the offers within health tourism is diversifying, the combination of health care services with other tourist products (such as cultural and heritage tourism, MICE, active or ecotourism etc.) is more and

more frequent. The appearance of the new demand segments causes turnover growth. The efficiency of the treatments and methods has an accentuated role, as well as the expertise and well-equipment.

The **high fuel prices** and the **changes in life styles** cause the acceleration of the structural changes. The demand within the region will increase (it will shortly reach the $\frac{3}{4}$ of all travels), and the pressure on the long term travels characterized by relatively high transport costs will grow. Due to the growth of the number of travels in the region within health tourism those countries will gain a market advantage, which bear a well-known and recognized health factor offer, medical background and high standard qualities which can satisfy in a complex way the demands of the era and which dispose of distinguished qualification systems.

With **the spread of the health- and environmental-conscious approach** within the tourist destinations those held to be healthy are more valued. Beside the classical beach-vacations (4S), the demand growth for the active and “healthy” vacations can be noticed. The lure of the excessively built in areas is diminishing. The significance of the sustainable development is growing.

Because of the harms of civilization and their accompanying effects, an ever greater group of people is becoming aware of the health-conscious approach, which also appears in the form of usage of means aiming the physical, mental and biological balance. People’s sensibility towards natural healing methods grows. The health responsibility consciousness of citizens is urged by the decline of the state’s social role.

That is the reason why health tourism is gaining an ever growing part within tourism, its dynamic growth can be observed, which results in many countries (even in Hungary) in a growing investment and entrepreneur tendency which exceeds the growth of demand, thus increasingly intensifying competition. The basis of competitive vantage will rather be the uniqueness and the good price-value rate.

Within the motivations for travel, the role of **the improvement of life quality** will grow. People thrive more and more to be in the possession of new knowledge, to get acquainted with new areas and cultures, to quest their roots. The developing countries can have an important role within this domain, as they dispose of comparative advantages in certain regions (eco-tourism, adventure-tourism, etc.).

As the health tourism essentially contributes to the improvement of life quality, we can count on the growth of its significance, mostly in the countries of the Continent but also in Far-East (Thailand, Japan).

The **tourist market is globalizing**, the multilateralism and the regionalism are accelerating. The borders become traversable. The globalization (regarding both parts of the market) is becoming further intensified. The significance of the cooperation between the regions is also growing.

The strengthening of the cooperation tendency can also be observed in the health tourism. The formation of thermal clusters has started in recent years. As a result, the productivity of some enterprises can increase, the position of the destinations with which they can compete in a more favourable way on the market. The clusters become an overproducing network. Due to the cross-border cooperation, the effective presence can be ensured in remote areas too.

With the expansion of the EU, the liberty rights expand including free doctor choice, or permeability of social security systems. With the strengthening of sick-mobility at the end of the 20th century, the medical services and treatments based tourism developed. The main motivation factors are the price (good price-value rate), the quality of services (different technology, reliability and repute of specialists, comfort) and accessibility (short waiting-lists, relief of regulation). The main target-destinations of medical-tourism are Asia (visitors arrive mainly from the USA, India and Russia), and the Central-East European counties (Hungary for example) from Northern- and Western-Europe and increasingly from Russia and USA.⁵

The main fields of medical-tourism concentrating on dental-, ophthalmologic-, gynaecological- and plastic treatment and surgery. Up to the statistical data of OECD [ESKI (2010) the number of medical-tourism visitors is about 15,000-25,000 per year in Hungary. The average expenditure for treatment is about 2,500-4,700 EUR completed with about 470-650 EUR for tourism costs. The point of return for guest is in direct proportion with the travelled distance.

The climate changes, according to many people, are the greatest challenge of the 21st century, and its global problematic results in the restructuring of tourism.

Winter tourism moves from the traditional areas towards areas where snowfall is more predictable. The countries have winter-sport facilities (Austria, France, Switzerland or Italy for example) often combine this type of tourism with wellness. Southern areas where heat and drought in summer (Tunisia, Spain, Turkey etc.) besides mass tourism there are efforts made for new positioning with wellness (mainly thalasso-therapy) and medical-tourism for example.

The **changes in customer behaviour** – among them the culture and subculture; social values and lifestyle; reference groups and family models; learning and observations; personality, attitude and motivation [Hofstede (1982), Töröcsik (2003), (2011)] – have to be adverted in health tourism marketing as well. For this new type of customer the health is a value and willing to spend a lot for it. The anti-aging medicine is more and more mannered and becoming a wanted product not only in the senior, but also the early middle-aged target group as well. According to the survey of IPK International 2010 the foreign travels for Europeans motivated by health in 15% which means 37 million journeys and circa 33 billion tourism expenditure pro year. So that instead of the price and discount marketing policy the high quality person-dominant practice is offered.

People (especially women) have to be successfully relevant in a lot of fields (family, carrier, social relations etc.) because of the speeded-up life and this brings on inner conflict many times. Special health-tourism products came off trying to help to dissolve those. The new but rapidly disspreading selfness products [Horx (2002)] are focusing on equipoise of body, soul and mind. Some service provider (Käppelehof Selfness Center St.Gallen Switzerland, the Zichy Park Hotel, Bikács or Kék Duna Spa Hotel, Ráckeve, Hungary for example) focusing those target groups and products.

⁵ MedGenMed. 2007; 9(4): 33. Published online 2007 November 13.,

The other consequence of the speeded-up life the growing dynamics of decision occasions. The new IT achievements (internet and common media) become the most popular communication and sales.

Nowadays consumer is experienced, individualist, egocentric and hedonist [Mitev-Horváth (2008), Töröcsik (2011)]. Besides traditional use-value the added-value is important. Instead of the the question of the quantity of basins and services the “Why it is good for me” question become important. Instead of increase of the market-share the consumer-share marketing (cross-selling and up-selling) leads to market success in health tourism as well [Molnár (2012)].

Last but not least we have to talk about the so called consumption [Schmalen-Simon 1998] which convert the segmentation. In health tourism we have to be ready to serve the guests having rest and relaxing in a spa hotel but not having healthy life (smoking areas, traditional food etc) or seniors demand juvenal facilities of amusement. Motivation becomes the main criteria of segmentation [Molnár (2012)].

SUMMARY

Health tourism is playing an ever increasing role in the economic- and social processes in Hungary. Services based on natural healing factors have an ever increasing role in the improvement and preservation of the state of health that is why health tourism has been gaining ground and its dynamic expansion can be observed within tourism. Its foundations may be based on thousand year old traditions, the international reputation gained in health tourism (mainly in balneology), the acknowledged and reputable physicians, the existence of high quality and abundant natural resources (mainly thermal and medicinal waters), as well as the developments of the past decade.

The developments followed mainly the tendencies in international and local demand, but – contrasted with Austria for example – less concentrated on special characteristic and economy-size which are important factors of competitiveness.

The competitiveness of a tourist destination is gaining more important part in the regional allocation of operating capital and in regional differentiation. The areas favoured in terms of regional developments enter for the ever growing international competition with uneven chances.

The role of the space is provable in different relations and makes the difference of the destinations and establishments. Every region has their own resources, which determine the development of different types of tourism and which enters them into competition with either an advantageous or a disadvantageous position. For a successful market appearance it is necessary to adequately emphasize the advantages and take into account the trends of tourism demand.

In the future, Hungary must focus on traditional health tourism and medical-tourism and has to diversify its supply. Instead of investing to build new establishments focus should shifted towards the extension of capacity and service supply of the existing ones.

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Multifunctionality and rural tourism: a perspective on sustainable diversification of agriculture in Hungary

Agriculture is not the only means to improve standards of living and quality of life for people living in rural territories. Although agriculture continues to be an important activity, and often the main activity, in rural economies throughout the region, new non-agricultural forms of production are starting to appear that are also based on natural resources. These include tourism (ecotourism, agritourism, beach tourism, etc., as well as recreational activities based on landscape and natural resources), the environmental services market, handicrafts and others. Rural tourism and related activities have been widely regarded as key-tools for rural development, especially in those countries – Hungary and all East European countries – where rural space and production is still a major part of economic structure, as an option to revitalize declining areas and ensure them possibilities of achieving a sustainable development. Rural tourism is usually considered like a complex plurality of multi-faced activities, contributing both to growth of other activities in rural areas and to improvement of life quality for local inhabitants, all this as part of an effective rural development integrated system. Despite the growing interest in rural tourism in rural communities, there has been little investigation of how to introduce this new activity into conventional farm management while taking advantage of multifunctionality in agriculture. Considering rural tourism as a new farming activity that transforms a positive externality of multifunctionality into an income-generating opportunity (or the internalization of an externality), this paper examines the best practices and opportunities of the Hungarian agricultural households in this field. Although descriptive analyses have been conducted on this issue, a more generalized framework is required that allows us to explore economic analyses.

INTRODUCTION

Despite the growing interest in rural tourism in rural communities, there has been little investigation of how to introduce this new activity into conventional farm management while taking advantage of multifunctionality in agriculture. Actually rural tourism as

a new farming activity that transforms a positive externality of multifunctionality into an income-generating opportunity (or the internalization of an externality). In many rural regions, tourism is accepted as a natural part of the socio-economic system connected with agriculture. It is clear that rural tourism is based on rural amenities; however, it is not clear how this relates to agriculture. Are these interrelationships of mutual benefit, in the sense that while rural tourism provides the farmer with auxiliary funding to continue his/her agricultural activity, the latter is an important or even necessary component of rural tourism? Do active farms with rural tourism enjoy economies of scope and run their businesses more efficiently than firms with only a single activity?

Rural tourism is a segment of the total tourist industry which could be particularly important in Hungary, in a country with no spectacular natural attractions, without sea-side, high mountains or rainforest. However, its attractive cultural landscapes with small villages, thermal springs, rivers and lakes, combined with the traditional hospitality, are able to offer pleasant experiences to the kind of tourist who is looking for relaxation and recreation in a calm setting.

LITERATURE REVIEW

The demarcation between farm tourism and rural tourism is somewhat hazy. Nilsson (2002), in his work on farm tourism, defines farm tourism as a subset of rural tourism. According to him, rural tourism is based on the rural environment in general whereas farm tourism is based on the farm and the farmer. This means that within the framework of rural tourism, farm tourism enterprises are more closely related to agriculture than other rural tourism operations. Clarke (1996) elaborates further and claims that there is a difference between tourism on farms and farm tourism. When accommodations are divorced from the farm environment then it is .farm tourism. while in .tourism on the farm., the farm environment and its essence are incorporated into the product. These links not only differ, they also change over time. Busby and Rendle (2000) claim that the link between farm tourism and agriculture is getting weaker. They describe the transition from tourism on the farms to farm tourism. This transition occurs as farmers who got engaged in tourism on their farms as an alternative source of income to agriculture, slowly divorced themselves from agricultural activities. According to Busby and Rendle (2000), with this transition the active farm is no longer a necessary component. Clough (1997) extends this argument further by claiming that most of the visitors would be happy not seeing the active farm. It seems that many researchers agree that the role of the farm and the farmer is to supply the background that provides farm tourism with its unique features (Pearce, 1990; Nilsson, 2002). This is strengthened by Walford (2001) findings that successful farm accommodations are located in an aesthetically pleasing, tranquil countryside environment; there is no reference to farm activities. These observations lead to the conclusion that there is a range of links between agriculture and tourism and that these links are getting weaker, especially from the visitor's point of view. If benefits do not accrue to the farmer from the demand side, then they may accrue from the supply side. That is, farmers involved in tourism and agricultural production might do it more efficiently and thus have an incentive to continue the farm's activity. Farming problems have given a big push to farmers and policymakers to seek alternative activi-

ties, tourism being one of them (Ilbery et al., 1998). The diversification of farm activities to tourism has in some cases fulfilled expectations, whereas in other regions it has not: this issue has been the predicate of many works. Fleischer and Pizam (1997) depict different cases and elaborate on the causes of their success or failure. However, the topic at issue here is not the success of tourism as an alternative activity but the level of symbiosis between tourism and agriculture from the supplier side. Only a few papers refer to this relationship, mostly contending that the coexistence is mutually beneficial. For example, reallocating farm labor results in more efficient use of this resource as tourism employs idle farm manpower, or visitors' exposure to the farm products, while on the farm, can help market those products (Hjalager, 1996).

Rural development issues

Depopulation is an increasing problem in many rural areas. Many countries therefore have the political objective of maintaining and supporting the viability of rural areas. In general, a minimum of economic activity, and there with a certain population basis, is necessary in order to secure viable rural societies. In OECD (1998, p. 57), it is found that the agro-food sector has significant economic linkages to other sectors of the economy and constitutes an important generator of employment in rural economies. Harvey (1999, p. 12) argues that the contribution of the agricultural sector to rural development can come from "(a) activities of a world-competitive farming through its supply and marketing chains; (b) activities of "re-creational" farming through its land and rural resources management, supporting the delivery of Conservation, Amenities, Recreation and Environment (CARE) goods and the associated tourism, lifestyle and living/working space demands; (c) release of capital and labour presently associated with uncompetitive farming to the local economy for other more productive and socially desirable uses". Other linkages between agriculture and the viability of rural areas occur through the pluriactivity of farm families (Bryden et al., 1993; Jervell, 1999).

Multifunctional rural economic structures

Multifunctional agriculture, although less performing from the strict point of view of production and profit, is preferred from other points of view (tourism, landscape, ecological, social, etc.). In principle, multifunctional agriculture carries out the same economic functions as the super intensive and specialized agriculture, yet it takes over new functions, such as:

- Production of energy raw materials – bioenergy, as a new and extremely important function in the areas with surplus production of agricultural raw materials with food destination;
- Increase of tourism potential by the preservation and improvement of the landscape heritage;
- Conservation of vital elements and biodiversity (soil, air, water, flora, fauna), through their sustainable use in an environment-friendly agriculture that should ensure agro-eco-system stability;
- Harmonization of the social and cultural functions of the rural area in close connection to a healthy and diverse agriculture.

Multifunctional agriculture growth presupposes the use of an increased number of people, for longer periods of time throughout the agricultural year, compared to the conventional, intensive and highly specialized agriculture.

As agriculture has multiple functions, it seems obvious that the society, as their beneficiary, should pay not only for the agri-food products, food respectively, but also for the indirect services that contribute to the improvement of habitat or landscape quality, etc. The present price system, as well as the removal of subsidies so as to produce cheaper food, without using any financial compensation forms for the subsidiary services of agriculture, will adversely impact the farmers on the medium term, and will indirectly have negative consequences with regard to food security on longer term. We consider that it is necessary to evaluate these compensations (for tourism, for maintaining the less-favoured areas into economic and social “operation” conditions, for organic production, environment protection, diminution of chemical fertilizer and pesticide application, etc.) and it is the government’s duty to find funding sources for these.

EMERGING RURAL MARKETS AND CONCEPTUAL CONSIDERATION

The recent surge in rural tourism and direct selling by farmers from stands or shops in rural areas creates a new possibility for forming other markets in addition to the markets for farm products in the cities (Figure 1).

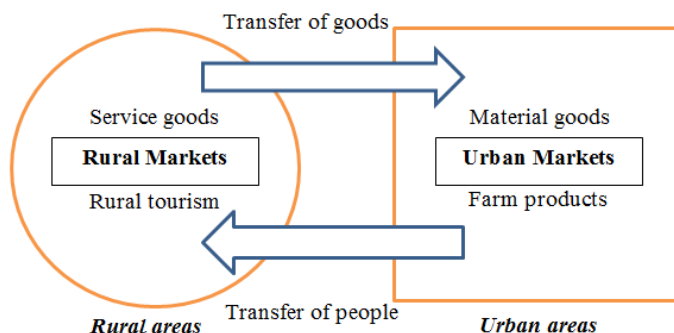


Figure 1. Rural-urban relationship between two products
(Source: Yasuo, 2007)

Figure 1 illustrates that, in addition to the traditional route of farm products from rural areas to urban markets depicted by the arrow from left to right, another arrow emerges from right to left. This arrow exists because urban dwellers have begun to purchase farm products that often have the features of service goods such as rural tourism.

Therefore, we assume that there are two spatially segregated markets in rural and urban areas, and these are termed here “urban markets” and “rural markets”, respectively. This is because prices for traditional farm products are formed in urban markets, while prices for rural tourism are formed in rural markets. In other words, the difference is based on whether or not price formation is done at the point of production. This is why we should consider

two spatially independent markets. Profiles of the two products, which we call “rural tourism goods” and “ordinary farm products”, are characterized and contrasted in Table I. The profiles show two different goods dealt in spatially different markets.

Table 1. Comparison of two different farm goods

Characteristics	Rural-tourism goods	Ordinary farm products
Location of markets	Rural areas	Urban areas
Who pays transportation costs	Consumers (visitors)	Producers
Types of demand	Recreation, purchase of local foods	Food purchase
Types of goods	Service goods	Physical goods
Types of market	Niche, up-market	Mass market
Possibility of internalising multifunctionality into farm activity	Positive	Neutral

Source: Yasuo, 2007

First, in the case of the urban market, ordinary farm products are traditionally shipped to urban markets for consumption. Generally, these products are for a mass market utilising a mass distribution system conducted by retailers or agricultural cooperatives. Transportation costs are usually borne by producers.

Conversely, in the case of rural markets, products are demanded mainly by urban inhabitants and partially by rural inhabitants. The following are included in the category of rural tourism goods: accommodation, rural cuisine, farm and farming experiences, pick-your-own, etc., and these have some of the characteristics of service goods. In addition, products from farmers' shops and ordered by telephone or e-mail and delivered through the postal service or other carriers are also included in this category. Products sold in this manner are considered to be purchased by urban consumers who pay transportation costs. A common factor with these products is that those who demand them pay the costs of coming to the rural markets or the delivery costs.

The markets for rural tourism goods are not large, and are considered to be niche markets, as is often pointed out (OECD, 1995a, OECD, 1995b). Thus, it is assumed that these characteristics result in larger income elasticity of demand compared with that for ordinary farm products such as food.

In connection with multifunctionality, a positive externality such as landscape formation, land preservation, maintenance of a rural heritage, provision of a recreational opportunity and so on caused by a farm activity can be internalized or transformed into a farm business such as rural tourism activity by farmers as described below in detail. Otherwise farmers cannot receive payment for the benefit that they provide to society.

In this sense rural tourism can take advantage of multifunctionality by internalizing an externality caused by multifunctionality. On the contrary, ordinary farm products can create multifunctionality, although they are considered to be neutral for utilizing multifunctionality by internalization into the farm business. It is presumed that these two markets are not substitutable, but are complementary to each other for farmers. When we consider the two possible markets, it is easier to extend perspectives towards farm diversification.

Internalizing multifunctionality into rural tourism

Here, we evaluate multifunctionality from the viewpoint of internalization into an on-farm activity. We summarize types and features of multifunctionality from the perspective of Japanese agriculture in Table II; yet, we recognize that there is variation in what aspects are emphasized from one country to another. With regard to the impact of agriculture on the environment from each aspect, agriculture has both naturally positive and negative impacts depending on the intensity of the agricultural activity. However, this paper focuses on positive externalities in farming activities.

Table 2. Multifunctionality and possibility of internalization as farm activity

Types of multifunctionality	Content of multifunctionality	Possibility of farm business
Environmental function	Land preservation: preventing flood water and soil erosion	Low
	Nurturing water resource: preserving underground water	Low
	Preserving natural environment: purifying water and air, ameliorating climate change, preserving bio-diversity and eco-system	Low
	Landscape formation	Low
Cultural and social function	Preserving cultural heritage	Middle
	Health and recreational function	High
	Educational function	High

Source: Yasuo, 2007

First, we classified multifunctionality into two functions: one related to the environment and another related to cultural and social aspects as shown in Table II. Concerning functions related to the environment, since externalities are widely exerted, these are not easy to entirely internalize at an individual farm level because these functions require collective efforts, for instance, at the local community level for complete internalization.

In contrast, health and recreational functions and educational functions are interpreted as social functions rather than environmental functions and can be internalized into a farm level activity more easily than other functions, as they are easier to transform into service goods such as rural tourism by a farm activity. Thus, in multifunctionality, there are functions that are easily internalized at the farm level and ones that are not. For this reason, health, recreational and educational functions have greater possibilities to be utilized as new farm activities.

To summarize, from the farm policy perspective, the significance of multifunctionality issues is the chance to enlarge the activity domain for farm diversification by taking into account environmental impacts. In this case, it should be noted that there are differences in terms of the ease in internalizing an externality into a farming activity among types of multifunctionality. Hereafter, in the following section, we focus on the recreational function to examine how a rural tourism activity was generated.

AGRO-TOURISM

The agro-tourism has the function to economically potentiate the peasant household capacity, by the “internal” agri-food consumption on the household where the respective products have been produced. In the case of foreign tourists who spend their vacation in the agro-tourism boarding houses, agro-tourism represents an “internal” form of agri-food export. As most foodstuffs consumed during the agrotourism activity come from the food production on the household, it results on one hand that the tourism activity is highly profitable and on the other hand that the prices of agro-tourism activities are lower than in other tourism forms. From the calculations made by the specialized tourism services, it results that the price of an agro-tourism dinner, in all the boarding houses, is by 40–50% lower than the price of a dinner served in a restaurant from the tourism hotel network (from the same category). The explanation for this price difference is simple. The price of agricultural products obtained and consumed on the agro-tourism household does not include VAT, excise taxes, transport and storage costs, etc. The meat, eggs, cheese, milk, butter, jam, pickles, wine, plum brandy, sherry, etc. go from the household production directly to the tourist consumer’s table, being processed according to the traditional methods from the agro-tourism farms. At the same time, the agro-tourism services (accommodation, services) are not carriers of additional indirect costs, overhead charges, commissions, etc., economic aspects that make the agro-tourism product price be much lower compared to the competition tourism product. The agrotourism policies should stimulate the rural tourism advantages, in the direction of tax and fee exemption, fiscal pressure diminution, in general, in order to reduce prices and maintain the traditional customers (town people with more modest incomes, foreigners willing to get familiar with the rural traditions of the area, town children, etc.).

Rural tourism support and development has also an educational component, which in the first place refers to knowing the cultural traditions, the landscape or historical values of the rural areas. The educational component is mainly addressed to the town children, who, we must admit, from the point of view of knowing the agricultural and natural values, suffer from the “concrete space complex”. The participation, for two weeks, to activities on the agricultural household, combined with hiking, bathing in clean waters, horse riding, etc. contributes to the enlargement of the town children’s knowledge horizon. In fact, in many EU countries, the urban schools curriculum provides for holiday periods and/or practical activities in the rural boarding houses. It is the case of Austria, Switzerland, Sweden, etc., the educational results being successful in this case.

RURAL TOURISM OPPORTUNITIES IN HUNGARY

The development of rural tourism has been included in regional development plans since the 1960’s, without too much success (Kőszegfalvi, 1991). According to Rátz and Puczkó (1998) it has to be added that the majority of the Hungarian population living in urban areas still has relatives in the countryside, so VFR (Visit Friends and Relatives) is an existing form of rural tourism, but as the motivations are different (to visit relatives, not to become familiar with farming communities’ lifestyle), on their behalf a demand for an organised supply of rural tourist products is basically nonexistent. So their need for stay-

ing in a rural environment is mostly satisfied by their relatives without any expenses, so very often they are not willing to spend any additional amount of money on similar holidays in other rural areas of the country.

Another important factor to consider is that the majority of middle-class Hungarian families have their own small holiday homes somewhere in the countryside where they can spend weekends and their summer holidays. Nowadays the domestic image of rural tourism (cheap, aimed for the least affluent, relatively boring) does not help to attract visitors to rural areas. In order to change this image, we have to create value and experience for customer. The development of rural tourism (including active nature holidays or participation in farm activities) is still in an early stage and the profitability of rural tourism is very low in Hungary (Kovács, 1993). The presupposition of the author of this paper is that the rural (village) tourism in Hungary can be competitive only if it creates value both for demand and supply side and if service providers cooperate in concern of success and the destination competitiveness.

Comparative factors for competitiveness are suitable in the Hungarian rural areas. Most of the rural areas (villages) possess various natural and cultural attractions. Among these, the most important ones are the clean natural environment, fresh air, quiet, the hospitality of the local people, the gastronomy, the rural lifestyle, and to a certain extent, the preserved traditions and heritage. On the other hand, the old architectural styles that made our villages so distinctive are disappearing, the construction boom in the '60s and '70s resulted in relatively similar village appearances all over the country, less and less young people know and practice the old traditions, and the general modernisation has changed the rural lifestyle (Rátz-Puczkó, 1998). Rural lifestyle and the closeness of nature are important factors of competitiveness of rural tourism in Hungary, our ongoing survey² certifies that the interest of rural tourists mainly looking for authentic rural experiences, for quiet, for sport activities and for nostalgia (for example vacation with grandmother). Certain attractions typical of rural tourism, like the opportunity for participation in farm activities or involvement in the hosts' everyday life, are missing in the majority of destinations. Altogether, the overall attractiveness (supply-competency) of the rural areas in Hungary is acceptable, the potential for rural tourism development seems to be existing, but there is a need for a marketing approach (communicational competency) in the development of complex tourist products, and for further diversification and development of attractions based on the needs of different tourist segments. Rural destination should acquire these 2 main parts (Piskóti et al., 2002) of competency to attract visitors. The first is the supply-competency being responsible for creatively packing the touristic products of rural area, and the second as communicational-competency which is responsible for a harmonizing communication and image building.

On the other hand, *competitive advantage* relates to tourism infrastructure, the quality of management, the skills of the workforce, government policy etc. This side of rural competitiveness is less organized still in Hungary, so it is a great problem, which is in the way of tourism success. We can see earlier that the touristic supply is rather fragmented, composed by small and medium sized touristic enterprises facing with low financial standing, and lack of marketing skills. In order to satisfy the demand of experience-chain³ and to deliver experience-based, complex touristic products are needed, the service suppliers of a destination should think and work together in different degrees of collaborative network.

According to the author, in cases like rural areas of Hungary, where the culture of co-operation has not been developed, or has been inflated in the centrally planned economy, the top-down initiation possibly with the assistance of the government is needed to raise community awareness. The solution and the right way for success are, if this coordination task can be fulfilled by the local touristic association or by the nowadays fashionable Destination Management Organization (DMO). Rural touristic associations' or DMOs' responsibility is to create the inventory analysis about the attractions of the destination, and measure the given resources and source of new ones. The product packages of the destination should be put together on the base of the inventories and demand forecasts, with the help of supplier. DMOs or associations should encourage the entrepreneurial sphere to think and work together to create complex supply packages. Building the image of the destination and finding the best way for promoting and selling the destination is vital in the steep competition. DMOs should realize the need of horizontal cooperation with other regions, to carry out cross-regional actions. DMOs' are responsible for the development in the destination. To reach a balanced and legitimate development, the relevant participants of the suppliers and representatives of the host population should be involved. The DMOs' role is to bring attention to the innovative technologies and methods which can create value for the destination and assure training and education for the participants for successful adaptation. And finally is rather useful to reach and maintain the community awareness, and to assure the stable support of the host population and the suppliers. By interactive communication, the negative effect of tourism can be prevented, and a prospering development and competitiveness maintained.

CONCLUSIONS

The study brings together the main elements of rural tourism destination competitiveness in Hungary, it provides a realistic display of the linkages between the various elements. Rural tourism in Hungary is a developing area, but there is a lack in necessary factors of success and competitiveness. The reason of the problem is mainly the lack of organizational competency and the lack of cooperative business culture. To solve this problem we should create value both for demand and supply side, but value creation is possible only with cooperation of tourism suppliers and local government and local communities in form of association or DMO. The topic is calling for further research, therefore, as a continuation of this work, further empirical study will be realized, with tools of both qualitative and quantitative methods.

Rural tourism created a personal network of people outside the local community and this network stimulated discovery of new local resources and eventually the creation of a new activity.

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Part 5:
Innovations and sustainable development:
a global approach

The Business Case and Economies of Service Modernisation in the Public Sector (A Canadian Context)

Most public sectors today are trying to balance cost containment and reductions of personnel with improving services to citizens and providing higher service levels internally. This is a difficult balance – on the one hand we need to reduce people and costs, and on the other, we need to make intelligent investments in people and processes.

Citizens, especially in Canada are electing governments we believe will protect the public purse, and make investments in areas that will show positive returns to us. We feel that our financial position in the world is well earned, and we want to preserve it.

We see many private sector organisations spending monies in upgrading systems, modernising processes, and laying off personnel while becoming more efficient, and we want to see the same from our public sectors.

The first investment made is almost always in a new Enterprise Resource Planning (ERP) package.

The ERP is designed from the ground-up to inculcate modernised business processes and workflows, and to enforce a standardisation across the enterprise.

However, ERPs can be fully implemented, or merely seen as an update to older technologies. In fact, governments seeking to merely update their technologies (often custom written) report that they are indeed happy with the result. Their old technologies are replaced, and new technologies are available with a concomitant increase in speed and productivity.

If, however, an organisation is attempting to generate large-scale efficiencies across the organisation – merely updating the technology is not sufficient to create a large return on investment.

Efficiencies are gained in a service modernisation from three sources:

1. **People:** consolidation and rationalisation of resources
2. **Processes:** transformation of end-to-end business processes and information, then service delivery modernisation
3. **Technology:** standardisation, consolidation, modernisation and then centralised management

The return on investment from technology, while significant is not the largest return. IN fact, as most public sectors largest source of expenditure is their workforce; a significant return on investment is generated by rationalising the workforce.

Process changes (modernising **how** the workforce works) and service modernisation (modernising **how** services are delivered) generate a significant return as well.

So – in order to fully realise a return on any investments in modernising, the organisation needs to make improvements in technology, change how they work, change how their services are delivered, and then rationalise and reduce the workforce. By seeking returns from all three areas, service transformations have the opportunity to garner full returns and at the same time, perhaps use returns as seed monies for the remainder of transformations.

THE PRIVATE SECTOR

The Canadian public sector often feels that making comparisons between private and public sector organisations does a disservice to both. There are many “soft skill” comparisons between the sectors, but very few hard comparisons. The private sector has a completely different risk tolerance, legislative framework, and indeed answers to a differing set of stakeholders.

In the past decade most Canadian organisations investing in new technology and ERPs have also invested in business processes, and in creating a shared services offering in their organisation.

They are reporting that while they are reducing costs and releasing employees, they are also freeing resources to spend more time and effort on high-value added activities.

In a recent survey, a large North American consulting firm found that the average organisation implementing shared services expected net cost decreases in the area of 25 percent. Although not every organisation reached this level, the majority of them believed that they had made the correct choice by implementing shared services. When asked if they would implement shared services if they started over, 98 percent indicated they would.

The question is no longer “why would public sector organisations implement shared services?” The question is now: “why would public sector organisations **not** implement shared services?”

DEFINING A “HIGH PERFORMANCE” PUBLIC SECTOR ORGANISATION

If we acknowledge that there are significant differences in the operating contexts between public and private sectors, then it is critical to define what a high performing public sector organisation is.

There are xxx factors in a high performing public sector organisation, all of which stem from the underlying principles of accountability. In the end, in Canada, all public sector organisations are designed to take in public moneys, safeguard them, and expend them on services in an accountable way with transparency to the public.

In the Canadian context a high performing public sector organisation exhibits the following behaviours:

- **Accountability** – to remain accountable the organisation must build products and services to reinforce accountability and to capture information needed for accountability
- **Transparency** – organisations must gather information and develop processes to ensure that all stages of the decision making and funds expenditure process are completely open to the decision makers, the elected government, and ultimately to citizens
- **Accessibility** – information and business processes must be accessible to all
- **Multi-channelled** – information and processes must be available in multiple channels: self-service, phone, internet, in-person, etc.
- **Balanced** – there is a balance necessary between containing costs and ultimate efficiencies and making systems and processes available and accountable
- **Risk managed** – in the Canadian government context – risky behaviours are not tolerated – but a complete zero-risk concept is highly expensive, so a risk-based approach to processes and systems is needed

The only way to implement these behaviours while containing costs is through a shared service approach to the public sector's "back office".

THE SHARED SERVICE SPECTRUM

Shared services exist in a spectrum. They range from highly centralised to highly decentralised. In an highly centralised model, shared back office services exist in one place, and are usually mandated as mandatory services to all departments or ministries.

In a highly decentralised environment – services offered and consumed in each ministry or departments.

Various models exist between these two extreme ends, as can be seen in figure 1, below.

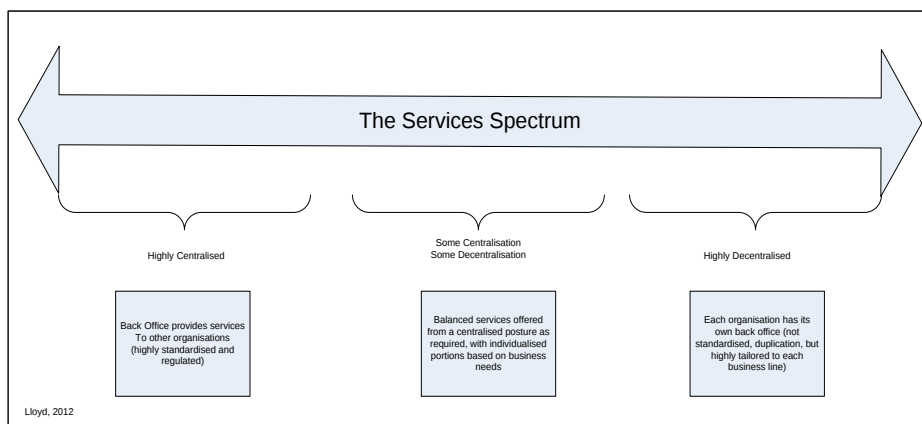


Figure 1. The Services Spectrum

The prevailing wisdom in Canada is that a balanced approach is most appropriate. The highly decentralised approach, although it reinforces accountability in the ministries, also creates a more duplicative and expensive operation.

A highly centralised approach contains costs best, but does not allow or reinforce accountabilities. As a consequence, Canadian public institutions generally make conscious decisions on what to offer as a shared service, and what to leave in the ministries. The Canadian concept of operations lies in the middle of the spectrum

If this is the case, a methodological approach to selecting what services to offer in a shared posture is needed. Often a “magic square” approach is used.

SELECTING THE SERVICES FOR SHARING

Using a standard four quadrant approach to back office services allows an organisation to determine which services can be consolidated and offered in a shared posture. In the Canadian context, planners plot economies of scale and cost against accountabilities and importance to the ministry on a single chart, as seen in figure 2



Figure 2. The magic quadrant for shared services

This decision tool is also invaluable in determining if shared services are worth the investment as it can also be used by plotting costs to implement against importance to the ministry.

This leads to another key aspect of service modernisation – performance and benchmarking

PERFORMANCE AND BENCHMARKING A TRANSFORMATION

Unless you know where you are starting, you cannot accurately predict if you got where you wanted to go. This is as true in planning a vacation as it is in planning for service modernisation in the public sector.

The best way to approach benchmarking is to think about what you are going to need to prove to show that your modernisation effort resulted in what you wanted. In other words, if you want to show that you have reduced employees, then you have to measure how many you started with.

If you want to show that you have happier citizens, then you have to measure their happiness before you start.

These measurements all collectively known as benchmarks and key performance indicators. They also indicate to you if an organisation is prepared for a service transformation. At this stage an organisation in the public sector needs to determine the following key factors:

- Are service levels satisfactory and the same across the enterprise?
- Are volumes high enough to warrant centralisation
- How much do basic operations cost
- Is the same function being performed in multiple locations
- Are highly trained personnel being dedicated to low-cost and highly repeatable transactions?

The answers to these questions are also plotted on the transformation quadrant tool seen in figure 2.

When key factors are plotted on the tool, a visual inspection will show that items in the top right quadrant are immediate candidates for service modernisation; and items in the top left are candidates for later modernisation. The lower half of the chart will likely not provide benefits as they are either particular to the organisation or not as important in economic value.

ECONOMIC VALUES AND COSTS

The standard definition of economic value is:

“Economic value is a measure of the benefit that an economic actor can gain from either a good or service. It is generally measured relative to units of currency, and the interpretation is therefore “what is the maximum amount of money a specific actor is willing and able to pay for the good or service”

In the case of public sector organisations, whose mandate is to take in funds from citizens and produce goods or services for the benefit of all citizens, this can be difficult to define.

In this case, economic value is defined as being inversely proportional to the lowering of costs of a function or programme. In the case of service transformations, that is usually a function or programme in the “back office” of the department or ministry – Finance, Human Resources, Materiel Management, Security, et cetera.

Economic value increases as well as duplicative actions cease and employee numbers are rationalised.

Full understandings of the direct and indirect costs of a function are also required. As services transform, there are opportunities to reduce both types of costs. For instance, in facilities, the costs of real estate, heating, electricity can all lower as consolidation and transformation take place.

This is not to say that economic value in the public sector is immediately produced. Often a period of injection of funding is required before the “savings” begin. In fact there are three main areas of savings:

- Facilities – co-location, sunsetting of extraneous facilities and moving to lower cost (direct and indirect cost) facilities
- Technology – System rationalisations, automating processes and workflows, implementing more IT capabilities
- Personnel – moving to low cost locations, rationalising salary mixes, better service levels, service level improvement cultures, higher specialisation in lower cost transactions.

Public sector organisations are, however, not wholly driven by economic (or *hard*) value generation. Often strategic values are part of the value proposition. Although it is another case to determine, such strategic values are employee satisfaction, new centres of expertise in the enterprise, error rate decreases, service level increases, etc.

STRATEGIC BENEFITS OF MODERNISATION

What is not included often in preparing a business case on service modernisation is this set of strategic benefits:

1. **Standardisation**
Standardisation provides common language across the enterprise, and facilitates data analysis and reporting at all levels of the enterprise
2. **Economies of Skill**
Specialised skill sets can be created for the entire enterprise
3. **Economies of Scale**
Duplicative processes and can be identified, coalesced and eliminated
4. **Flexibility**
Changes in organisational structures, programme activities, and personnel are more easily achieved and conceived.
5. **Service Level**
Standard service levels across the enterprise increase responsiveness to needs.

Within these sets of strategic and economic values in the enterprise, there are only a limited set of operational concepts or postures for a public sector to take.

CONCEPTS OF OPERATIONS

Within a modernised service using improved technology there are really only four distinct concepts: “in-sourcing”, joint sourcing, joint ventures and outsourcing.

In an in-sourcing arrangement, public sector employees staff a shared service centre in either a separate organisation, or within an existing organisation. It generally allows for easier reassignment of personnel as they are all retained as part of the public service.

In a co-sourcing arrangement there is a public-private relationship between the sectors. The public service uses a strategic business partner to deliver services to a service level standard over a longer term period. Generally, though, the public sector retains the overall management of the relationship and the services being delivered.

In a joint venture, the relationship takes on a more equal footing, and the government loses control of the relationship. Often the private sector partner will actively market the shared services to other customers, and the private sector organisation can lose their importance in the relationship.

In an outsourcing model, the employees of the public sector actually move to the private sector to continue delivering services.

LESSONS LEARNED AND SUCCESS FACTORS

Based on interviews and reports from many international modernisation efforts, the key lesson learned seems to be that organisations *always* benchmark their own function *before* they embark on any modernisation effort. In cases where this did not happen, the modernisation efforts were seen to be either failures, or only partially successful. Unless the organisation can point to specific metrics to show improvements, end-users and customers will almost always feel that they are worse off after the change.

Another lesson is that the economic value, strategic values, and actual dollar savings must be weighed against the costs of transformation. In other words, if an organisation needs to invest funds in transformation to the point that it will take 30 years to show a positive return on the investment; the investment is probably not worth making.

Change management is an area of transformation made up of both tangible and intangible benefits in almost equal measure. Organisational resistance to change is extremely hard to overcome, and it is not a problem which can be solved with money. It requires a set of “soft skills” to show customers and consumers that the change is worthwhile.

Finally, one of the largest lessons to be learned in modernisations in the Canadian context is that technology does not derive the largest savings in a transformation to shared services. The largest savings seem to come when the business owners lead the transformation, and when technology savings are blended into the overall benefit profile of the transformation. In the Canadian experience, it requires business re-engineering *and* people rationalisation and finally, technology; to make a service modernisation worth undertaking.

AREAS OF FUTURE STUDY

In further areas of study, the author is creating some standardised implementation plans and maps, and defining more precise operations postures for use in the Canadian context.

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Understanding conflicts and natural resources in Africa: Are quantitative analyses relevant?

Peace, stability and wellbeing are the overarching goals of the nations and of the world as a whole. Nevertheless, violent conflicts are permanent threats, which put at risk the achievement of those goals. Explaining the violent conflicts outbreak is a paradigm which is constantly changing; therefore it requires a continuous updating of their causes and tools to measure their dimension. Causes of conflicts have evolved from just the military and political issues to involve different types of crisis, social conditions, ethnic factors, cultural diversity and natural resources depletion and environmental degradation. The broadening of understanding of the roots of violent conflicts outbreak as a multidisciplinary topic deserves careful research discussion and policy debates.

Africa represents a set of special conditions which makes this continent a major laboratory for the improvement of theory building in the field of conflicts [18], mostly because of governance and socio-economic policy challenges. In the prevention and peaceful solving of conflicts, governance at different levels is a key element [11], since it's connected with diverse areas such as economics, law enforcement, providing security and even with promotion of overall concept of sustainable development, which are particularly important for Africa. Nevertheless, there is an additional factor of stress standing for African countries, which is the stock of natural resources that has been acknowledged as a factor influencing or prolonging some conflicts in Africa (for more details see [23]). So from conflict prevention, through management, peace-keeping and to post-conflict recovery and reconstruction, the role of natural resources and the environment must be considered [20].

Despite the volume of qualitative literature regarding natural resources and violent conflicts, there is still a lack of understanding the causes of conflicts and the burden that they represent for the countries involved, therefore statistical approaches could give hints in order to create a more comprehensive approach in this research field. The authors of this chapter discuss from the statistical perspective what are the effects of governance factors and natural resources abundance in order to extend the discussion on quantitative methodologies in the theories of conflicts outbreak.

THE DEBATE OF CONFLICT'S DRIVERS ON THE QUALITATIVE AND THE QUANTITATIVE LITERATURE

Qualitative literature on Africa is extensive and considers a wide variety of factors in the study of conflicts outbreak. Regarding natural resources, their presence in a large stock linked with climate change issues (e.g. deforestation, natural disasters, floods, desertification, deforestation) is supposed to be a driver of conflicts and to risk stability (see [19]), this phenomena affects the use and availability of resources and leads to different sorts of crisis and tensions which are potentially dangerous (for more details see [3]).

The development challenges related to the unsustainable use and management of natural resources are increasing also the tensions. They are connected with the institutional framework and efficiency of the governance structures. In African countries, inequality, income distribution and exploitation of natural resources are issues requiring complex solutions including of the crisis of governance. When governance fails, lack of agreements and rent seeking are common problems as many communities, interest groups and institutions depend on revenues from legal or illegal use of natural resources thus creating disadvantages and ultimately leading to conflicts (see [9], [14] and [2]).

This a very sensitive issue for countries stability, since Africa owns almost 10 per cent of the proven reserves of crude oil and produces almost 12.5 per cent of this fuel and also represents more than 15 per cent of their total exports or raw materials; meanwhile consumption and manufacturing capacities improve very little (more details in [16]). The case is similar for the agricultural exports commodities (e.g. coffee, cocoa beans, cotton, tea, cashew nuts, flowers, vegetables, tropical timber) which increase the pressure on the use of soil and scarce water resources, jeopardizing the social and environmental stability of rural areas [17]. The variations on the trade volume of these commodities are highly correlated to rapid economic growth or decline, which for Africa's natural resources stock have a negative impact [15].

In summary, a recipe for conflicts could be formulated: local abundance of natural resources, poverty and lack of opportunities to earn a fair salary and low quality institutions are incentives for groups and elites to violently hijack a state in order to have control over natural resources and their rents, for rent-seeking purposes leading to conflicts outbreak (for more details see [12]). Evidence of this hypothesis in the African continent is provided by UNEP [22], describing the location of the conflicts, data and which natural resources were drivers for their outbreak.

On the other hand, quantitative literature is not as extensive as the qualitative and is likely to be more reductionist, mainly due to methodological reasons. For example Collier & Hoeffler ([4], [5]) analysed exports as a cause for violent conflict outbreak, covering up to 52 civil wars between 1960 and 1990. Their findings suggested a rent-seeking problem correlated to the trade of natural resources which increased the probabilities of having violent conflicts in the following years. Fearon and Laitin [6] studied violent conflicts origins from a state-centric perspective. They found that a large share of natural resources exports on the GDP, which leads to a higher per capita income, increases bureaucracy and also represents a source of funds to finance rebellions, this weakness of the national economy proved to be as well a driver for violent conflicts outbreak. The study of Murshed [13] consists of the analyses of 91 developing countries (African

countries included) and of the relationship of commodities' exports with the democracy degree and the economic growth. His estimations which covers the period of the years 1970-2000 revealed that trade is a factor of rent seeking and that natural resources abundance are more likely to slow down an institutional development.

The wide gap between quantitative and qualitative literature is obvious, revealing that many variables considered to have a potential of leading to conflicts haven't been tested. As the establishment of a statistical link between the variables and violent conflicts outbreak can be only partially supported and still a clear explanation of the direct relation between violent conflicts and natural resources stock is missing, therefore the following study was conducted.

COMPARING NATURAL RESOURCES AND GOVERNANCE FACTORS FROM A STATISTICAL APPROACH

The study conducted by Lara et al [10] aimed to extend the discussion of the causes of violent conflicts by the assessment and ranking of several factors affecting the probabilities of violent conflicts outbreak using the case of Africa. The authors developed two statistical models; for two samples of different sizes where the first model involved as drivers of conflicts corruption, exports of natural resources, GDP growth per capita, the level of African governance and a dummy variable which regarded cultural and ethnic issues. The second model considered as causes of violent conflicts the depletion of water, energy, mineral and forest resources, and also a dummy variable to evaluate the impact of climate change response programs on the reduction/increase of the probabilities of conflicts to arise. For more details of data sources see Lara et al [10].

The rankings of the variables of the first model effects and their contribution to increase/reduce chances of conflicts are shown in Table 1:

Table 1. Ranking and contribution of the first model variables.

Variables increasing the possibilities of violent conflicts	Variables reducing the possibilities of variables conflicts
(1) Ethnical and cultural factors	(1) Governance
(2) Corruption	
(3) GDP per capita growth	
(4) Natural resources exports	

Source: [10]

The ranking of the variables of the second model effects and their contribution to increase/reduce chances of conflicts are shown in Table 2.

Table 2. Ranking and contribution of the first model variables.

Variables increasing the possibilities of violent conflicts	Variables reducing the possibilities of variables conflicts
(1) Mineral depletion resources	(1) Climate change response
(2) Forest depletion resources	(2) Water withdrawals
(3) Energy depletion resources	

Source: [10]

Comparing the explicative power of each model, the variables of the first model contributed to explain 26 per cent of the increase/decrease of violent conflicts in Africa; meanwhile the second model just contributes to understand 13 per cent of these changes.

From a statistical approach, violent conflicts are better explained by institutional and socio-cultural factors contemplated on the first model. This estimation converges to the analysis suggested in the qualitative studies for Africa. According to those studies, corruption is related to legal and illegal trade of natural resources, especially exports of energy and mineral resources and agricultural commodities, the economic burden of corruption for Africa is 148 million dollars, approximately 25 percent of the continent GDP [1]. A higher GDP per capita, natural resources exports and ethnic and cultural factors are regarded also as important drivers of conflicts, which have been analysed extensively by several authors and are related to the rent-seeking problem. According to the statistical results the governance improvement is a key factor in the reduction of violent conflicts since it is connected with the variables causing rent-seeking activities and peace keeping.

The second model provided interesting results concerning environmental priorities and methodological issues. Minerals and forest depletion turn to be the factor that most contribute to conflicts outbreak, Africa owns more than 30 per cent of the world's mineral reserves and shows an increase in their mining share on the GDP. Four of Africa's worst recent conflicts took place in Angola, Sierra Leone, Liberia and the Democratic Republic of the Congo (DRC) motivated by the competition to monopolize natural resources and trade with them. The armed conflicts were financed by the exploitation of natural resources (legal or illegal) – diamonds and timber in Sierra Leone and Liberia, oil in Angola and a wide range of mineral resources in DRC, this reflects the relevance of this type of resources for African countries. Energy proved to be also causes of conflicts, crude petroleum, natural gas, etc. represent for Africa 60 per cent of the total exports. Water withdrawals and climate change response decreases the probabilities of conflicts, which given that Africa is the second driest continent after Australia, more water withdrawals could be a signal of water abundance helping to keep peace especially considering that about 75 per cent of the population relies on groundwater as the main source, which stands only for approximately 15 per cent of the water renewable resources of Africa [22]. Regarding climate change response, these programs are more likely to improve the institutional framework.

In general terms, the statistical approach seems to converge also with the quantitative literature; however the impacts calculated by the authors were very small. This leads to a gap between both types of literatures because in this case from the statistical point of view the stock of natural resources appears not to be so significant in the explanation

of the origins of violent conflicts, although in several qualitative approaches give more weight to the natural resources abundance in the outbreak of violent conflicts. This issue is better addressed on the qualitative research conducted by Hlavacek ([7], [8]), which consist of structured interviews in several African countries and where differences and priorities are clearly visible. The interviewees considered as major environmental issues deforestation, land degradation and access to water resources and biodiversity loss; forest issues is important as well, because the forests cover one-fifth of Africa's area with the highest rate of deforestation in the world [22]. These previous factors are mostly driven by corruption, which must be address as a priority in the sustainable use of natural resources. The outcome was that if the extractive industries or other economic sectors related to natural resources are not kept under control and sustainably managed and regulated by an efficient governance system, they will destabilize economies, will increase poverty and culminate in conflicts.

CONCLUSIONS

It appears that there is not an intermediate connection between violent conflicts outbreak and availability of a large stock of natural resources in Africa. This may mean, that the relation between these two factors should be approached focusing on indirect relations, for instance the activities related to natural resources abundance and not the stock per se. Nevertheless, new methodologies and indicators must be developed in order to strengthen quantitative methodology literature and increase the convergence degree with qualitative approaches, because learning more about the weights and range of the amount in natural resources could provide inputs to the policy makers about the priorities and how to face a specific environmental problem in order to guarantee national security, peace and sustainable development. This is in particular important for African countries and in general for countries endowed with richness of natural capital when seeking long-term strategic approach to their own development paradigm.

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Environmental Dimension of the African Integration and the New Partnership for Africa's Development

The plans for political and economic integration of the African countries gained a rich history. The Pan-Africanism was declared as the basic principle for the cooperation and integration within the African continent immediately after the reaching an independence. The integration plans were intensively discussed by many official and unofficial summits and conferences of the Organisation of African Unity (OAU) and its successor the African Union (AU) and then by the number of regional and sub-regional integration mechanisms that were formally inaugurated.

Having started with the establishment of the OAU in 1963 through the Lagos Plan of Action and Final Act of Lagos of 1980, African Priorities Program of the Economic Recovery of 1985, the Treaty Establishing the African Economic Community of 1991, the Constitutive Act of the AU of 2000 up to the currently implemented New Partnership for Africa's Development of 2001, all the legally binding agreements and political and strategic decisions and documents reflected the actual political and economic development in Africa. They contained also the African response to the global developments.

Formally, the African continent adopted a large set of strategic political decisions and commitments of a high quality, officially absorbing and incorporating the latest and progressive trends of international development. Majority of these documents was prepared with the assistance of the international community, in particular the UN system. The adoption of African commitments was motivated by the intention to meet formally the minimum of international requirements and standards of political and programmatic frameworks to secure the access to the instruments of international cooperation and aid.

The significant attention has been paid to the deepening of intra-African cooperation and integration processes contributing in the long-term perspective to overcoming of economic and social underdevelopment and to establish stable democratic institutions as a pre-condition for the promotion of sustainable development and the protection of the environment. The aim of this chapter is to analyze how the African integration process is reflecting the concept of sustainable development and environmental sustainability that are internationally required to be essential part of the strategic goals and documents related to African integration.

THE ESTABLISHMENT OF THE SUB-REGIONAL NETWORK OF INTEGRATION ORGANIZATIONS COULD BE A RELIABLE CONTRIBUTION TO THE ALL-AFRICAN INTEGRATION IN 21ST CENTURY?

The programs of establishing and deepening the regional and sub-regional cooperation through the network of integration groupings of diverse scale of activities and specialization during 1970s and 1980s proved to be unsuccessful due to the political instability of individual OAU member states and negative influence of global and regional economic crises.

International development at the end of 1980s and beginning of 1990s (need of reactions to the worsening economic crisis in Africa, definition of the concept of sustainable development in 1987, preparatory process for the United Nations Conference on Environment and Development in 1992 and the plans for the establishment of new financial mechanisms for the assistance to the developing countries to tackle e.g. climate change, land degradation, biodiversity loss, water scarcity, ozone layer depletion, strengthening of the integration processes in the other parts of the world and globalization) was an impetus for the African political leaders to adopt and sign the Abuja Treaty (June 1991) on establishing the African Economic Community (AEC). The AEC was supposed to be implemented during 34 years after the entry into force of the Treaty (i.e. from May 1994) through coordination, harmonization and gradual integration using regional economic communities and the expanding the functions and mandate of the OAU, then AU.

The adoption of the Treaty Establishing the African Economic Community (AEC) aimed at the establishing the pan-African economic and monetary union in the six phases by 2038. The Treaty envisaged the African states commitments to create all the necessary conditions through systematic strengthening of the sub-regional integration and through the introducing of the sub-regional zones of free trade and customs unions by 2019 [13]. The harmonization and coordination of the development strategies and plans, sectoral policies including the area of environment, nature protection and sustainable management of natural resources should be in the center of all efforts. Therefore the pre-1994 inefficient sub-regional integration groupings were confronted with the necessity of substantial institutional and programmatic changes and transformation or were substituted with new ones with a stronger political mandate.

The engines of the African regional integration should become:

- The Common Market for Eastern and Southern Africa – COMESA starting its activities in December 1994 as a successor to the unsuccessful Preferential Trade Area (PTA) for the same region (existing in 1982-1994 with the aim to create the common market by 2000). The main goals of COMESA are the establishment of free trade zone by 2000, common market with free movement of labor force, capital, goods and services by 2005, and of customs union by 2009. The joint policies and programs of sustainable growth and development (Article 3 of the Establishing Treaty of December 1993) should contribute to the development of cooperation for the protection of wildlife, natural resources, energy and the environment (Article 4), public participation in the development under the rule of law and promotion of democratic system of governance (Article 6) [15]. The largest sub-regional community (24 member states) is not able to implement and to reach these ambitious goals according to the originally agreed timetable.

Therefore the new COMESA Strategy for the years 2011-2015 concentrates on 6 priorities – the removal of barriers to mobility, building of competitive production capacities, overcoming the shortcomings in supply infrastructure, building and stabilizing peace and security, integration of cross-cutting themes (gender, youth, socio-environmental aspects of human health, climate change, knowledge society, statistics, aid for trade) and institutional development [2])

- The Southern African Development Community – SADC, operating from September 1993 with the seat in Gaborone, Botswana, was born through the transformation of the Southern African Development Coordination Conference (SADCC – existing from 1980). SADC's goal is to contribute to the establishment of the African Economic Community. The Establishing Treaty of August 1992 [16] i.e. aims to promote sustainable development based on common self-reliance, sustainable use of natural resources through efficient environmental protection (Article 5) and the principles of democracy, human rights and the rule of law (Article 4). The Community of 14 member states is in the delay in reaching the integration's sub-regional and regional pan-African goals. This delay is caused e.g. by the long-lasting economic crises in Zimbabwe, the process of recovery and reconstruction of Mozambique, Angola and the Democratic Republic of the Congo after decades of internal civil conflicts and wars. Currently, taking into account the economic strength and leading role of the Republic of South Africa (member from 1994 with one sixth of the overall African GDP), rapidly growing economy of Angola and traditional stability in Botswana, Tanzania, Namibia, Mauritius and Seychelles and the fact that the region is the richest in mineral resources in Africa, SADC is considered as a relatively reliable partner and player in the pan-African integration. SADC Regional Indicative Strategic Development Plan for 2011-2015 includes the principles of sustainable development and environmental sustainability in order to ensure fair and sustainable use of natural resources for the development of the sub-region as well as the whole African continent [9].
- The East African Community – EAC, was newly founded by the Treaty [14] in November 1999 with the seat in Arusha, Tanzania as a renewed attempt originally of Kenya, Tanzania and Uganda to promote regional cooperation (the first unsuccessful attempt took place in 1967-1977). EAC (now having 5 member states) achieved, comparing with the other sub-regional integration communities, a more substantial progress. EAC also set up very ambitious goals: by 2010 to establish customs union (implemented), by 2010 to reach a progress in negotiation on common market (relevant Protocol signed in November 2009, entered into the force on 1 July 2010, now detailed implementation regulations are under final negotiation [PEE09]), by 2012 to establish monetary union (not implemented yet and postponed by another 3 years) and after 2015 to reach political federation (that target with certainty will not be implemented). The establishing Treaty very intensively envisages the cooperation in the field of the environment and sustainable use of natural resources (Chapters 18-19) the practical measures are taken to bring substantial results. The EAC Development Strategy for 2011/12-2015/16 defines as a priority sustainable use of natural resources, the protection of environment, climate change adaptation and sustainability of energy resources [3].

EAC could successfully contribute to the pan-African goal of the AEC thanks to the small membership - only 5 member states – originally 3 historically very inter-linked economies (Kenya, Tanzania and Uganda) and 2 new members from 2007 (Burundi and Rwanda) but under the condition of political stability and long-term stability of international markets with agricultural commodities and tourism services. The risks for reaching the goals are represented by the political aspirations of the Republic of South Sudan to become the member of EAC supported by the promises of oil supplies to the East African countries under the condition of construction of pipeline to the Kenyan port of Lamu on the coast of the Indian Ocean

- The Economic Community of West African States - ECOWAS created in May 1975 reviewed its establishing treaty in July 1993 to comply with the Abuja Treaty on AEC. The main goal of ECOWAS, assembling currently 15 member states and residing in Nigerian capital city of Abuja, is the establishment of common market and monetary union thus contributing to envisaged AEC of 2038. This goal was reconfirmed by the ECOWAS Vision 2020 „Towards a Democratic and Prosperous Community“, adopted in 2008, to have the community without borders, community of sustainable development, peace and good governance, integrated into the global market [4]. First steps have been already implemented, e.g. introduction of common currency in some ECOWAS countries – CFA (Western and Central African Franc) in the former French colonies and in Guinea Bissau linked currently to the euro. English speaking ECOWAS member states led by Nigeria and Ghana still preserve the national currencies. Rather big number of common institutions and programs were established during the existence of ECOWAS, including the joint strategy to reduce the poverty and promote sustainable development in particular in the relation to the trans-boundary issues. The Regional Strategic Plan of ECOWAS for 2011-2015 prioritizes sustainable development and regional cooperation for sustainable use of natural resources and of the environment (e.g. the joint sub-regional action programme to combat desertification was adopted in 1999 and 2011, joint environmental policy in 2008, strategic programme to reduce vulnerability and adaptation of West Africa to climate change in 2010), strengthening of peace, security and good governance [10]. The integration progress in West Africa could be successful only under the condition of stable political and economic development in the leading countries of the region, mainly Nigeria, Ghana and Senegal. The permanent danger and risks are represented by destabilization and internal crisis (e.g. Mali, Niger, Guinea Bissau). The results of the recovery and reconstruction of the countries that suffered by the long-lasting civil wars (Sierra Leone, Liberia, Côte d’Ivoire) could also significantly influence the integration process in the West Africa region.
- The other African integration and cooperation communities and organizations according to their specific mandates and economic potentials are expected to contribute to the establishment of the AEC, e.g. The Central African Monetary and Economic Community – CEMAC (founded in 1994), The Economic Community of Central African States – ECCAS (1983), The West African Economic and Monetary Union – WAEMU (1994), L’Union du Maghreb Arab – AMU (1989),

The Intergovernmental Authority on Development – IGAD (newly created in 1996), The Community of Sahel – Saharan States (CEN-SAD) of 1998, The Economic Community of the Great Lakes Countries, then Region (ECGLC), founded already in 1976 and renewed in 2007, The Indian Ocean Commission – IOC (1984). The activities of these integration and cooperation mechanisms demonstrates formally the efforts of respective countries and sub-regions to push the continent to be closer to the overarching goal – the establishment of the AEC, to strengthen the South-South and intra-African cooperation and to seek the partner in the other parts of the world, in particular in Europe (EU), South America (MERCOSUR) and Asia (ASEAN). Some of the communities, those established under the political pressure and personal ambitious wish of the heads of state only (e.g. AMU, ECGLC), are not able to perform and deliver any substantial activities that can significantly influence the development of the AEC. The member states have no sufficient capacities at expert and implementation levels to meet the expectations of the establishing treaties as well as eventual strategic documents.

NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT AS A TOOL FOR PROMOTING AFRICAN INTEGRATION PROCESS

Having used partly the experience of the European Union, the OAU was transformed in the African Union (AU). The Constitutive Act of the AU was signed in July 2000, entered into the force in May 2001 outlining the strategic goals – achievement of peace and security, improvement of the African position in the international economic and social relations, in the protection of environment [1]. The Constitutive Act defined as one of the key goals the promotion of sustainable development (Article 3, j), development of democratic principles and institutions, people's participation in the administration, management and good governance (Article 3, g) [12].

The New Partnership for Africa's Development – NEPAD became the most significant implementation instrument of pan-African integration of the AU adopted by the Lusaka Summit in July 2001 as the continent's response to the newly declared Millennium Development Goals (MDGs) of September 2000 and to the preparation of the World Summit on Sustainable Development in South African Johannesburg in 2002. The basic long-term objective of NEPAD is „to eradicate poverty in Africa and to place Africa countries, both individually and collectively, on a path of sustainable growth and development and thus halt the marginalization of Africa in the globalization process” [6]. The direction towards „good governance“, African integration and cooperation is one of principal requirements for achieving sustainable development.

The NEPAD identifies the priority sectors: development of all the fields of infrastructure, human resources, agriculture, protection of the environment, establishment of scientific and technology platforms. NEPAD appeals for the mobilization on internal African resources as well as external for the effective implementation of the relevant policies when intending to meet the MDGs and in the long-term perspective the establishment of the AEC. NEPAD could be characterized as the strategy for the Africa's survival in the globalization and economic liberalization.

The NEPAD includes „The Democracy and Political Governance Initiative” that should “contribute to strengthening the political and administrative framework of participating countries, in line with the principles of democracy, transparency, accountability, integrity, respect for human rights and promotion of the rule of law” [6]. „The Economic and Corporate Governance Initiative” should promote „a set of concrete and time-bound programmes aimed at enhancing the quality of economic and public financial management as well as corporate governance throughout the participating countries” [6].

The significant initiative and having the cross-cutting character it „The Environmental Initiative“. The member states „recognized that a healthy and productive environment is a prerequisite for the New Partnership for Africa’s Development“. They stressed that sustainable use of natural resources in large extent and greatly were contributing to the employment, social and economic growth and to reduction of poverty. The Environment Initiative has targeted 8 sub-themes for priority interventions: combating desertification, wetland conservation, prevention against invasive alien species, coastal management, global warming (i.e. climate change), cross-border conservation areas, environmental governance and financing [6].

Under the NEPAD the African Peer Review Mechanism (APRM) for the assessment and evaluation of the implementation of the commitments and the efficiency of governance system in political, economic, social and environmental areas was agreed. The positive trend is that economic and political integration under the auspices of the AU, using the existing integration mechanisms is accompanied by the recognized goal to promote sustainable development and environmental sustainability.

The NEPAD and AU efforts are complemented by the new individual national strategies, policies and action plans. The following examples could be provided:

- strategies of good governance (Tanzania National Framework of Good Governance of 1999, Cameroon National Programme of Good Governance of 2000, Mauretania Strategy to Combat the Corruption of 2011);
- strategies of economic recovery (Congolese Presidential Plan of Gradual Development of Economic Sectors based on Political Stabilization, Peace and Security of 2002 named „Good Hope“, Strategy of Economic Recovery of the Côte d’Ivoire of 2011);
- strategies of the development of individual sector (Algerian Integrated Strategy of Poverty Reduction and Rural Development for 2008-2020, Ghana Mining Policy of 2006, Tunisian Tourism Development Strategy till 2016);
- strategies of public finance reform (Guinea Program of Economic and Financial Reforms of 1992, Uganda National Investment Strategy of 2005, Nigerian Mid-Term Fiscal Framework of 2012);
- strategies of development of private sector (Botswana Privatization Policy of 2000, Gambia National Policy of Support of Medium and Small-size Business of 2009, Sierra Leone Strategy of Development of Private Sector of 2009).

Their final results depend in particular on domestic political and economic developments with the impacts of global aspects. Majority of the commitments are not fully met or the deadlines for their achievement are postponed using the argument of insufficient resources for their implementation.

NEPAD as the most respected tool of pan-African development strategy and integration became the subject of scientific research. Nigerian scientists characterize NEPAD as the most required inter-link of political and economic forces, their „dualization“, creation of coherent political system composed of two originally separated units, when the each of them is voluntarily granting its part of sovereignty to the central authority and is giving up to use its power to solve the conflict between the members (federalism). There is no more the sharing the political power between the national and super-national institutions (functionalism), but enlargement of inter-governmental cooperation and establishment of specialized administrative institution at super-national level, that will demonstrate the importance of regional integration. If it would prove to be an efficient tool, the establishment of super-national, regional body with more substantial competencies will take place (neo-functionalism as the synthesis of the former two former concepts). In spite of integration theory, in the real conditions of the African countries, there will be possible to apply many other integration's incentives, e.g. at the political level in the security and conflict resolution area, in the economic level the incentives for accelerating economic growth through the establishment of functional economic units, optimal allocation of resources, for the purpose of a better labor mobility and for minimalizing migration and repatriation [7].

Olu-Adeyemi and Ayodele argue, that the implementation of NEPAD shows many discrepancies and weaknesses in the strategic planning (inter-action and division of competencies between the AU and NEPAD leadership in relation to the balance amongst the political leadership and practical management and implementation). The NEPAD and integration processes' implementation were confronted with the reality of African state of affairs (continuing political conflicts, low level of intra-African trade, large number of interregional organizations and groupings, corruption, lack of coordination and lack of willingness to cooperate with the private sector and non-governmental organizations in the implementation of programs, weak ability to incorporate the basic objectives and goals of NEPAD into the national development plans and to enforce them and implement).

The civil society organizations evaluate NEPAD as a classical product of the high-level decision-making (‘‘top-down approach’’). The exclusion of the civil society from the preparation and discussing the program ‘‘heavily damages a legitimacy’’ of NEPAD and in fact is against the interests and needs of the individual stakeholders of the AU population as it is based on out-dated neoliberal ideology [5]. The another group of critics is using the argument that NEPAD serves to the interests of and of the big African economies (e.g. Algeria, Nigeria, Egypt, South Africa, Kenya and Senegal) in order to exploit the poor and economically underdeveloped African countries [11,15].

CONCLUSIONS

NEPAD, from the political point of view, contributed to the overcoming of marginalization of Africa. It proved the ability of African leaders flexibly and in pragmatic way to react to international, and in particular to the global challenges, in order to protect the ‘‘privileged’’ position of the continent in the system of the international official development assistance and cooperation. NEPAD formally contains the promise to involve the broad spectrum of the African population in policy making and implementations of the

own African development (see The Democracy and Political Governance Initiative) and to promote potentials for equity and social and environmental responsibility of economic sectors (see The Economic and Corporate Governance Initiative).

NEPAD together with other global and regional processes started the elaboration of new generation of national development strategies and sectoral strategies sometimes reaching the level of “inflation” of strategic and programmatic documents. The recognition of the concept of sustainable development as an overarching, long-term objective, and of the environmental protection as cross-cutting goal and prerequisite for the NEPAD should be considered as a programmatic and political success.

The implementation of the AU and NEPAD commitments towards the establishment of the AEC and sustainable development require a systematic national and regional support. The basic condition for NEPAD and present Action Plan for 2011-2015 is democratic good governance that has the greatest impact on economic, social and environmental governance and management and thus on integration process in a broad spectrum of sectors. The development partners are willing to provide the aid in particular to the improvement of economic governance at macroeconomic level and to reform for increasing the internal taxes revenues, harmonization of trade tariffs standards, liberalization of markets, to reduce the influx of illegal capital flows and to remove the protectionist measures. Until now the speed and the quality of changes are not responding to the performance of African economies in relation to the GDP growth (positive impact of the exports of natural resources – minerals and agricultural products on GDP but with the enormous negative impact on degradation of the environment) and thus to MDGs. Official development aid reached in 2011 more than 48 billion USD, but internal African resources are not still able to finance the development needs (dependence on external resources is prevailing). In spite of the fact that over-helming majority of African countries adopted principal documents on sustainable development and environmental sustainability, the implementation is not sufficient, necessary institutional capacities are not fully in place, the lack of financial resources for enforcement of documents is dominant.

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