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CONCEPTUAL FRAMEWORK OF THE SUSTAINABLE LAND MANAGEMENT

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Abstract. The main purpose of the paper is to explore the influencing factors of land management and find the prerequisites for criteria development and indicator set of the sustainable land management. During the study, the analytical assessment of content of the sustainable land management concept is executed on the basis of systems and modelling approaches. Institutional arrangements that formed during last 20 years – the transition period towards developed market economy, play meaningful role in land management systems and strongly influence socio-economic circumstances at least in the Baltic countries. The various research methods are employed. Historical and logical approach, comparative analysis and synthesis methods are selected in the research. Finally, the findings of the study show the proposals for assessment of sustainable land management by developing specific criteria and selecting appropriate indicator sets. The study is considered as original and topical because of comprehensive and comparative approach exploring land management field in the light of sustainable development that is an important concept, and one that is open to a variety of interpretations.

Keywords: land use efficiency, institutional arrangements, sustainable land management, influencing factors, criteria, indicator sets

Introduction

Land management is concerned with activities for more efficient use and protection of land resources in long-run term. Land management activities are not dependent on the position of an individual or organisation, but on their interaction for the purpose to achieve the land use goals in proper territory. Legally binding regulations are carried out in the framework of land management. The regulations serve for both the governing and monitoring of land use according to stated objectives of social economic and environmental development. Thus the land management shapes as process of interrelation and collaboration of many involved parties. Institutional arrangements have meaningful role to ensure this process.

Land management concept is known worldwide already long ago, but its comprehensive summary was available in the Baltic countries because of land administration guidelines, which were carried out by Economic Commission for Europe of United Nations (UNECE) in 1996. The guidelines were provided for developing of land administration systems in the countries of transition towards market economics (CEEC). ‘Land management’ is defined rather general in the guidelines, thus ‘land management means a process by which the resources of land are put to good effect’\(^1\). This initiative of UNECE was devised for promotion of implementation of land reform by reorganising legal system of properties and relating the results of land reform with the spatial planning and territorial development. However, assessing former experience, it can be concluded that at least in the Baltic countries with similar goals and progress, the statements of the guidelines are not implemented properly. Thereto the content of guidelines has been subject to criticism among the experts and scientists in the land management field, mainly, because of several concepts, which were not proper to the cadastral and land registration systems of the countries of transition. Thus appropriate concepts and terms of the guidelines conformed to the Anglo-Saxon registration system of land units. General and precisely unsettled demarcation of the land units and distinctive jurisdiction is conformable in the countries like UK, USA, and Canada.

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Land management involves the implementation of fundamental policy decisions about the nature and extent of investments in the land. From an institutional perspective, the land management includes: formulation of land policy, legal framework, resource management, institutional arrangements, and land information management. It entails the governmental and private initiatives, as well as the contributions of a society (NGOs).

Concepts ‘land’ and ‘land use’ are described by UNECE in the light of sustainable development in the publication on development trends and main principles of land administration in 2005. Although a definition of sustainable development concept is missing in this publication, it includes a definition of land management concept supplemented with the statements about land information applications, as well as multidisciplinary and systems approach for the purpose of land resource management. Accordingly the significance of institutional arrangements is pointed out, which in many publications is acknowledged as crucial for providing the sustainable land management in the countries of UNECE region, including the Baltic countries.

The topical issues of sustainable land management (SLM) are stressed and explored in many conferences and publications. ‘Sustainable land development and land management is among major challenges of new millennium’, was reported by professor Magel in the international conference on spatial information for sustainable development in 2001. Food and Agriculture Organisation of UN (FAO) emphasizes the significance of SLM for preclusion of land degradation and promotion of optimal land use. Uppermost role of the SLM is examined by World Bank for providing the knowledge-based agricultural production and rural development, as well as for evaluation and monitoring of rural up growth. SLM concept and related to it goals and objectives are implemented into legal regulations and guidelines of various countries. Integrated approach is taken as basis for developing the Framework for Evaluation of Sustainable Land Management (FESLM). This framework is provided for substantiation of the evaluation process and efficiency growth of the operational systems of rural farmsteads.

This study focuses on conceptual framework for the purpose of analytical assessment of SLM. The research hypothesis: sustainable land management may be evaluated when analysing its influencing factors and accordingly determining the assessable criteria and developing the land use indicators. Thus the aim of the study is analytically to assess the content of the sustainable land management concept on the basis of systems and modelling approaches, exploring its influencing factors and finding the prerequisites for criteria development and indicator set.

The methodology of this study is closely related to the aim of the research, thus historical and logical approach, comparative analysis and synthesis methods are employed.

1. Results and discussion

Land use efficiency: prerequisite for the SLM

Efficiency as economic term of sustainable development prescribes necessity to use the human and environmental values in the way to promote the social economic development that

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would increase constantly the efficiency of use of available resources in the public benefit without endanger to resource renewability. Every process can be seen as efficient while it is not compared with either some similar process or some other period of time. Thus the land use efficiency is comparable indicator and applicable for increasing of the efficiency.

Generally the land use can be seen as efficient, if a society gets maximum probable benefit per land area unit. Thus the value added of landed property is created in a particular place and time. However the question arises: how can the maximum probable benefit be determined, if every individual has his own subjective attitude to the land use and its value? Thereto it is reasonable to consider that the land always can be used in more efficient way, as well as the ‘most efficient’ land use is not always possible because of various limitations. Landowner can answer the above question when he compares own activities performed with the activities of another person, at the same time, considering the available alternatives of a person.

The Land Policy Guidelines of the Republic of Latvia\(^8\) is a first normative document (adopted in 2008) in which as action directive for rational and efficient land use and land protection is prescribed a provision of the efficient land management. Following, the elaboration of Land Management Law was included into action plan. However this normative document neither contains the definition of ‘land management’ nor explains the concept of ‘efficient land use’.

The Conception of Land Management Law\(^9\) was adopted in 2010. ‘Land management’ is defined as ‘complex of activities and measures for implementation of land policy that is provided to promote sustainable land managing by ensuring the balance between the land use and its preservation’ in the conception. ‘Land’ features the environment for social economic activities of the persons and serves for existence and functioning of ecosystems, including the dimensions of resource, rights and value in the context of conception. Landed property involves both the underground and overground layers of the land plot, as well as human made improvements and naturally shaped objects, such as forests and waters. Thus the concept of ‘land use’ is related to usage of valuable traits of the land, but the concept ‘land preservation’ – to maintenance of biological diversity, protected areas and land quality, as well as to prevention of land degradation.

Previously mentioned Land Policy Guidelines contains the ‘efficiency principle’ – the best land use considering the characterising circumstances of each particular place. Practically the best land use can be described with maximum benefit per land area unit considering existing constraints of the particular land plot. However it must be admitted that the efficiency is characterised insufficiently clear in this policy planning document.

Assessing the land management process; various to land use and land protection related activities; the functional goals of governmental authorities and municipalities; the relations of entrepreneurship and households in land use; and normative regulations in the field of land use and protection, the distinctive land management levels can be determined and substantiated. The state (governmental authorities) level, municipal (local authorities) level and land users (enterprises and households) level can be identified because of both defined goals and executed functions of each level in land management.

According to the model in Fig. 1, different land management levels are involved for implementation of land use objectives. These levels are interacting mutually, taking into consideration the land use traditions. The results of interaction are provided by appropriate institutional environment, including the influence of the land use regulations on actions of particular level when enforcing its goals.

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Effect – the land use output is acquired as a consequence of interaction among the subjects, which are involved in land management system. This result can be evaluated according to previously set achievable indicators and the resources that are consumed for acquiring the effect. A feedback reflects the continuous exchange of information among the land management levels. Thus the information is used for the purpose of both the evaluation of acquired result and decision making regarding to promotion of desired development. Analysing the results of previous cooperation, it is reasonable to implement necessary adjustments in institutional environment and land use objectives, as well as to set specific objectives for future in conformity with the sustainable development principles.

2. Institutional arrangements: crucial necessity to ensure efficient land use

The relevance of institutional arrangements for the effective implementation of land management and related to it processes is stressed in publications of various researchers and organisations, including UNECE reports in 1996 and in 2005. The topical issues are regarding to raise of efficiency of the land management systems, considering the conditions of market economics in the Central and Eastern European countries (CEEC), including three Baltic countries.

Institutions are developed to reduce uncertainty by ensuring the ‘rule of law’ in the relations among varying land owners and land users. It promotes the protection of interests of an individual and society in the whole. An institution has regulating functions and is concerned with both the regulatory norms (legal framework) and the organisations (administrative framework). These functions include elaboration and improvement of the regulations, as well as implementation and supervision of the regulations by operating the organisations. Although the term ‘institution’ is widely used to refer to an organisation at least in Baltic countries, it is assumed here that properly it means ‘regulatory framework’.

Institutional environment refers to the background constraints – ‘rules of the game’ that guide individuals’ behaviour and forms the framework in which human action takes place. Institutional arrangements, by contrast, are specific guidelines what Williamson (1975) who originated the term ‘new institutional economics’ calls ‘governance structures’ that are designed by partners to mediate particular economic relationships. Business firms, long-term contracts, public bureaucracies, non-profit organizations and other contractual agreements are examples of institutional arrangements. The study of governance is more prosaic than the study of the institutional environment. Mundane

questions of whether to make or buy particular maps to be used as background information for making spatial planning or whether to organize the land-use planning offices at each local municipality or more centralized are ones that arise at the governance level.

Land use is administrated in the framework of governmental land policy, which prescribes: how the land should be used and protected in compliance with settled social economic goals. Hence the land administration is not only the realisation of technical processes, but also related to activities in social and political environment. The good practices of European countries shows that the land administration contains information about land resources and real properties: its value and use, as well as acquisition (registration) and transaction processes.

UNECE points out that there is no unambiguous solution for land administration system that would fit to all countries, however, it is important to study the international tendencies and be ready for wider multinational collaboration and development of global real property market.

Assessing various available approaches and identifying the best experiences, it can be understood that land policy implementation needs: multidisciplinary and systems approach; effective legal system and actual information resources, which are usable for land administration and land management. However the main attention is paid to the co-operation and coordination of land management institutions in the framework of good land management and implementation of set land use goals. Thus the land policy is realised within particular institutional environment by operating of land administration system and co-operating among organisational structures that are involved in land management process.

It is showed in practice that the increase of land management effectiveness is related to smart decentralisation of land management process, as a result of which the local governments (municipalities) have rights and competences to make biding decisions on land use and development.

Institutional arrangements have an essential importance in allocation of responsibilities for maintenance of the land administration system. Different approaches exist for providing both the partnership and the involvement of the public and private sectors into land management. The institutional structure of land management is established by land policy and appropriate to it normative regulations in the country. ‘Land policy has to ensure the processes of land management and land administration by regulatory framework, considering the situation in a country, as well as respecting and guaranteeing ownership protection and human rights’, was reported by former FIG president, professor Magel in HABITAT Forum in 2001.

As common benefits from arrangements of the land management institutions can be seen such effects:

- security of property rights and real property transactions;
- promotion of planned territorial development and appropriate infrastructure;
- improvement of real property taxation;
- reduction of land use disputes and violations;
- rational use and improvement of land infrastructure;
- development of real property market;
- accessibility to financial resources;
- ensuring of regular environmental and land use monitoring;
- provision of actual and objective information and statistical data.

3. Principles and goals of SLM

The goals and objectives of SLM have to be realised: globally and in local – national level; in urban areas and in rural areas; in developed countries, in the countries of transition, and in developing countries. For instance, there is enforced formulation in the regional planning of Germany: ‘Sustainability exists where a fair weighing up of all interests has taken place’.

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Accordingly the SLM is related to the society needs that are weighed and balanced enough. It can be concluded from above mentioned that adaptation of sustainability concept in various contexts is reasonable, if the appropriate criteria and measurable indicators of sustainable land use are determined. In addition, ‘all interests’ must include global interests to preserve the ability of resources’ renewing.

FAO indicates that the ‘SLM is crucial to minimizing land degradation, rehabilitating degraded areas and ensuring the optimal use of land resources for the benefit of present and future generations’. Thus the problem of land degradation and necessity for determination of optimal use of the land resources are stressed. FAO defines four general principles of SLM\textsuperscript{14}:

- land-user-driven and participatory approaches;
- integrated use of natural resources at ecosystem and farming systems levels;
- multilevel and multistakeholder involvement; and
- targeted policy and institutional support, including development of incentive mechanisms for SLM adoption and income generation at the local level.

It follows that the mutual and targeted co-operation among the participating individuals is needed for implementation of SLM in the light of awareness of common goals at all land management levels. Hence the problems can be identified and the corrective actions developed for solving these problems, as well as the management methods should be constantly provided by enforced institutional environment.

SLM is defined as ‘a knowledge-based procedure that helps integrate land, water, biodiversity, and environmental management (including input and output externalities) to meet rising food and fiber demands while sustaining ecosystem services and livelihoods’ in the publication of World Bank on agricultural and rural development\textsuperscript{15}.

Thus the SLM is characterised as a knowledge-based process, which has to provide simultaneously either needs of growing communities and renewability of land resources. However it must be admitted that the notion ‘a knowledge-based’ may designate any settled process of a social economic system and is unmeaning and needless without certain requirements.

World Bank contributed to development of major indicators for both the assessment and supervision of rural growth\textsuperscript{16}. Accordingly the sustainable management of natural resources is recognised as one of the key criteria, in the context of which the assessment of land quality is made, offering such outputs:

1) increased efficiency of the usage of natural resources;
2) provided preservation of significant natural resources, simultaneously setting the particular indicators.

Usable indicators are appropriate to data that are available in the national account systems. For instance, assessing the ratio of both the quantity of the available resources and value added of using these resources or – the percentage of both the renewed amount of particular resources during the year and total amount of these resources (area to area).

Such integrated approach is taken for developing the Framework for Evaluation of Sustainable Land Management (FESLM)\textsuperscript{17}. In the context of this framework ‘SLM combines technologies, policies and activities aimed at integrating socio-economic principles with environmental concerns so as to simultaneously:

- maintain or enhance production / services;
- reduce the level of production risk;
- protect the potential of natural resources and prevent degradation of soil and water quality;
- be economically viable; and
- socially acceptable.’

\textsuperscript{14} UNFAO. \textit{Sustainable Land Management}, \textit{supra} note 4.
\textsuperscript{15} World Bank. 2006, \textit{supra} note 5.
\textsuperscript{17} Smyth, A. J., Dumanski, J., \textit{supra} note 7.
FESLM is carried out for evaluation and efficiency growth of the operational systems of rural farm-steads, thus the five pillars are set for promotion of sustainable agriculture. However it can be concluded that such approach can be developed assessing also other economic sectors, in which the efficient use and preservation of renewability of land resources is topical. The system of SLM goals according to the FESLM is included in Fig.2.

![Diagram of Sustainable Land Management System](image)

**Figure 2** The system of objectives of SLM (developed by authors according to the FESLM)

Productivity features the return of sustainable use of land area unit in the broadest sense of this concept. Thus, apart of the material wealth from land use according to set aims, the positive externalities of land preservation and esthetic use should be taken into account. This very substantial provision prevents the use of land resources to perceive ‘pure economically’ – taking into consideration only satisfaction of material needs – the outcome of business activities, providing goods and services, as well as ensuring public services and functions of households. It is reflected also in Fig.1, where the users’ level aggregates both the enterprises and the households.

Security considerations include the usage of the methods that promote balanced use of land resources and environmental dominant. Thus the production risks may be reduced because of predictability of possibilities to use the land resources in the effect of mentioned balance. The significance of this provision can be explained by bewaring of either unreasonable acquisition of land resources or overdone implementation of environmental protection measures.

Protection is concerned with the usage of the methods, which ensure both quantitative and qualitative preservation of renewable land resources. This provision is topical for the purpose of addressing the issues that are related to the most suitable territories for renewal of land resources and extension of proper areas, as well as for allocation of infrastructure that is necessary for more efficient management of land resources.

The methods of sustainable use of land resources may be seen as ineffectual, if they are not employed in favour of a local society during some period of time. Thus acceptability is entitled with the influence of social economic interests and necessity to balance these interests that concerns mostly the planning issues of the usage and protection of land resources.

The viability of appropriate land resources is impossible where there are no possibilities for provision of appropriate raising conditions, thus the areas of land resources are related to suitability and accessibility considerations. Insufficient evaluation of these considerations may lead to practically unsatisfactory both the land use and the renewability of land resources.

Evaluating previously mentioned definitions of SLM and approaches, and taking into account not only the land resources, such as soils, stands, waters, but also related to them infrastructure, including amelioration systems, roads, utilities, dams, and other constructions that is needed for effective management, the authors of this publication propose to define the SLM as ‘managerial system, in which a land and infrastructure that is needed for its use comprise joint creative resource, which is used in compliance with nationally set sustainable development criteria in order to constantly ensure the varying needs of individuals, balancing the use of land resources and preserving its renewability in certain territory’.

Thus the systems approach is introduced into SLM concept, as well as it is explained that the accessibility of the land resources during foreseeable time period is not conceivable without proper
infrastructure and is provided by national policy planning documents. The balance of use of land resources has to be found in both the limited usage of particular resources and the constant preservation of renewability potential of natural resources.

4. Influencing factors and criteria of SLM

According to the previously mentioned in this study, a land is managed for the purpose of obtaining many-sided and socially notable benefits: production of goods; preservation of biodiversity; and other aims in order to provide a human being to a great extent. Referring to the 'Brundtland model', the parties that are involved into land management activities have to consider social, economic and environmental factors, when providing a long-term development and sustainable use of land resources. The content of the model may be seen as classical and undisputable. However many areas are influenced by mentioned factors apart of sustainable development and land management. Moreover, the integrated approach and the interaction of set pillars (trade-offs) is emphasised in both reports the Brundtland report and the FESLM report. Hence for an assessment of proper criteria and set particular indicators, using respective and available data administration systems, accordingly it would be necessary to identify also influencing factors. In general, the factors influence particular processes through participating parties. The model of the influencing factors of land management and interrelated land management levels are reflected by the authors of this publication in Fig.3.

The influencing factors of the land management are manifold and may be investigated considering different aspects. As assessable components of the influence of social economic factors can be seen:

- accessibility of land resources;
- employment and entrepreneurship;
- development of economic sectors and territories;
- habitat environment and population;
- environment and infrastructure;
- usage of land resources;
- availability of credit and investments;
- productivity of land resources;
- promotion of competitiveness;

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implementation of innovative technologies; and
usage of renewable energy resources.

Both social and economic aspects are often analysed separately in publications. However it is not reasonable to subdivide the social and economic factors, considering the featuring components of the influence of these factors and the influence to the SLM. Such approach can be substantiated by possible mutual interaction (trade-off). Economic aspects are directed more to the growth of a society, but the social aspects – more to the security and protection of a society. Both aspects influence the level of well-being and the quality of life of the individuals within a society. Referring to the ‘Brundtland model’, the integrating part of both aspects shapes the equity, which is difficult to identify.

Different data systems exist in various countries. For instance, national account systems are provided in conformity with the resolution of the UN since 1993. The Maastricht criteria are determined for EU countries as prerequisite for an accession to the European monetary community since 1992. Regional development index as synthesised composite indicator is introduced for an evaluation of the planning regions and local municipalities in Latvia. The Swedbank Baltic See Index is provided just recently for an assessment of environment of the foreign investments. This new index describes the competitiveness and economic environment of the selected countries. The index consists of indicators in 10 areas: entrepreneurship, labour market, tax policy, financial sector, foreign trade, logistics, education, innovations, management, and infrastructure. It can be concluded that the clearly recognisable delineation between economic and social aspects does not exist, when assessing these areas. Thus the determinative aspect of the analysis is a context.

Assessing the influence of environmental factors to the land management, the case of Australian environmental policy can be mentioned. The environmental policy that is adopted by Australian government and realised by the Environmental department, defines the SLM as ‘managing land without damaging ecological processes or reducing biological diversity’. Accordingly it requires the maintenance of the following key components of the environment:

- biodiversity: the variety of species, populations, habitats and ecosystems;
- ecological integrity: the general health and resilience of natural life-support systems, including their ability to assimilate wastes and withstand stresses such as climate change and ozone depletion; and
- natural capital: the stock of productive soil, fresh water, forests, clean air, ocean, and other renewable resources that underpin the survival, health and prosperity of human communities.

Above mentioned formulation of the environmental aspects and the key components reflect rather precisely the ecological substance: interaction of both organisms and environment. However, analysing the SLM in the context of environmental protection, it is important to recognise that the sustainable development concept in its terms cannot be implemented in the framework of one single country. The realisation of this concept can be considered as senseless and deceptive, when postulating the sustainable development in the policy planning documents without carrying out the set criteria and specific accessible indicators.

Various authors, including the researchers from the Riga Technical University, indicate to the possibilities to ensure the sustainable development due systems approach in their publications, thus perceiving the whole Earth as joint ecological system. Quite a lot negative examples exist in a global scale, expressing the attitude of several – mainly economically well-developed countries, when implementing domestic sustainable development at the costs of other countries. For instance, in the framework of governmental sustainable development policy, the entrepreneurs buy either

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palm-oil for producing a biofuel or grains for producing a bioethanol in other country. Accordingly the tropical rain forests are cut and wet areas drained for the purpose of growing the palms and sowing the crops. Following, the population in well-developed countries even do not recognise that their over consumption frequently comes up at the costs of the cheaply bought resources from the less developed countries. It also reduces the possibilities of survival for inhabitants of these countries because of existence of inadequate international trade, considering regeneration of the land resources.

Sustainable development criteria could be carried out and set for each country, taking into account the ecological footprint\textsuperscript{22} that is caused by its inhabitants, as well as the efficiency of resource usage. For elaboration of the criteria, the price that is set by UN can relieve in purchasing the land resources from the countries with lower level of living. These criteria may be set in macro-level and related to the land use within either the country or the specific region, instead of particular land user.

The substance, meaning and dominance of institutions, as well as the main benefits of institutional arrangements are described previously in this study. As a result of it, the institutional factors reasonably can be selected among influencing factors of the SLM. The influence of institutional factors is characterised by interaction of both regulations and organisations, i.e. legally-administrative framework, accordingly to the regulating functions of an institution. Thus, for the purpose of implementing SLM policy, this legally-administrative framework has to provide a decision taking process that would promote efficient land management, and so – optimal realisation of management functions and services. As assessable components of the influence of institutional factors can be seen:

- precisely defined and undoubting regulations;
- simple, clear and transparent procedures;
- strategically substantiated and planned development of the processes;
- taking of responsible, competent and clear to a society decisions;
- implementation of accepted decisions in set place and time;
- using of new technologies and integrated information systems;
- optimisation and development of capable to cooperation managerial structures;
- ensuring of actual, equitable and accessible to a society information; and
- constant increasing of the efficiency of institutional performance.

Looking from the SLM point of view to the institutional performance, the functioning of both regulations and organisations has to be considered as interdependent relationship. Hence, on the one hand, the regulations govern the land management process and activities of the participating organisations, but, on the other hand, the organisations operate within the regulatory framework and participate in developing of legislation and in decision taking.

Institutional factors influence the SLM system through land management process, development of proper infrastructure, real property transactions and market, as well as gathering, maintenance and dissemination of data about land resources. Here the level of decentralisation of decision taking process is substantial, considering the subsidiarity principle\textsuperscript{23}, i.e. preparation, discussion, approval and implementation of the binding decisions in the local municipal level.

\textsuperscript{22} Ecological Footprint (EF) tracks the area of biologically productive land and water required to provide the renewable resources people use, and includes the space needed for infrastructure and vegetation to absorb waste carbon dioxide (CO2) (Living Planet Report 2010). EF reflects the biologically productive landed and sea area needed for provision of resources that in average uses one global inhabitant when acquiring necessary goods and services. Global hectare is a measure unit of EF. This unit is calculated taking into account the utilised resources during the year and productive areas of lands and waters needed for production of these resources (Vanags, Geipele, Mote, 2010).

\textsuperscript{23} Subsidiarity principle – to guarantee a degree of independence for a lower authority in relation to a higher body or for a local authority in respect of a central authority. It therefore involves the sharing of powers between several levels of authority, a principle which forms the institutional basis for federal States (European Parliament, 2000). The principle is adopted by various countries and introduced in proper legislation.
All above described assessable components of the influence of discussed factors can be used to develop specific criteria and set of appropriate indicators for the purpose of making territorial comparisons.

Direct interrelation among the land management levels – national level, municipal level and land users level can be recognised, when studying the hierarchy in Fig.3. Relation between both national level and land users level is indirect and determined by institutional environment, including the influence of land use regulations to the activities of proper level for execution of set functional goals. Feedback indicates to the goals of each level. It lets to draw the conclusions: if households are able to manage self-consumption and make savings, when selling the labour, but enterprises are able to provide business and consequently profit, then they both are able to pay taxes and other payments. Accordingly a municipality can ensure stable income level and maintain sufficient local budget to promote the development of a local society. Comprehensive development of the local municipalities promotes the upgrowth of a state on the whole, thus increasing a GDP and optimising the usage of land resources. Consequently there is a potentiality for the inhabitants to increase the level of well-being in the country. The expression of the feedback to the achievement of functional goals and the increase of land use efficiency is determinable, when evaluating the reached output indicators.

Best and most efficient land use reflects the land use effect. Such land use is practicable, legal, substantiated, planned, and financially implementable, consequently, the total benefit for the society is at most and the land value highest.

Conclusions

Land use efficiency measures such as usage of the human and environmental values are vital issues to provide SLM for the purpose of a social economic development at the costs of rational use of land resources in the public benefits without endanger to resource renewability. Accordingly the varying needs of individuals constantly can be ensured, as well as use of valuable land resources and preservation of its renewability can be balanced.

Implementation of land use objectives according to previously anticipated land use results through the interaction of land management levels and assessment of achieved effect (land use output) leads to promotion of desired land development – adjusted land use objectives and planning process, improved collaboration among involved parties and institutional environment in general, and set specific objectives for SLM in future.

Institutional arrangements play a significant role in improvements of social economic environment and provision of SLM in order to attract investments and promote competitiveness of the country on the whole. However, considering the influence of global changes, it would be necessary to pay more attention to the mutually beneficial and effective collaboration among various organisations and countries.

SLM definition is proposed by authors as a result of exploring the system of SLM objectives on the basis of systems approach. Thus the SLM is recognised as a managerial system, comprising both land and needed infrastructure as joint creative resource. This resource has to be used according to nationally set priorities and criteria for sustainable consumption, at the same time, the balance between use and preservation of land resources must be ensured.

Proposed model of SLM system creates the conceptual framework in which the SLM can be assessed. Assessable components of the influence of discussed factors can be used to develop specific criteria and set of appropriate indicators for the purpose of making territorial comparisons.

The sustainability of land management discloses the social economic and ecological content of the land management concept. The sustainability of land management can be assessed when analysing its influencing factors and applying the FESLM methodology, thereby determining assessable criteria, its characterising land use indicators, and assumptive frontiers and impacts – thresholds. Uniform methodology has to be developed within the country for the purpose of evaluation of SLM. However unified approach and appraisal methodology should be prescribed for
international comparability in the framework of proper confederacy.

Appropriate indicator sets and land use indicators can be developed regarding to specific context of the analysis that would reflect best land use objectives.

References
EVALUATION OF MANUFACTURING DYNAMICS AND STRUCTURAL CHANGES OF THE EU IN 2008-2011

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Abstract. The study investigates the reaction of manufacturing sector to recent economic slowdown and current economic recovery that is accompanied with a sharp increase in exports of goods. Dynamics of manufacturing output, employment, exports and sales as well as structural changes regarding output, employment and sales structure are examined. As mainstream view of economists suggests that the current economic recovery is due to sharp increase in exports of goods that are, as a rule, mainly produced in manufacturing sector, hence the study examines the dependence of manufacturing on global demand changes. In the study, the export dependency ratio is used to evaluate the range of dependency on export markets. The research is focused on manufacturing sector in Latvia, Lithuania, and Estonia that are analysed and evaluated in more detail, as well as the EU-27 data are covered in order to reveal general trends in the common market. The study investigates the time period of 2008-2011. It is found that manufacturing dependence on export markets has increased in economic crisis and post-crisis period. In conclusion, the paper contains recommendation to policy makers.

Keywords: manufacturing, exports, turnover index, new order index, economic crisis, post-crisis

Introduction

Performance of manufacturing sector significantly influences output in any economy, especially in conditions when economic turbulence takes place in domestic and global markets and demand for services is unstable; and, in result, manufacturing is one of key sectors in any economy as exports of goods in recent times is major driving force in numerous economies. It is believed that the recent economic slowdown (crisis) is ended and current economic recovery (post-crisis) is mainly due to sharp growth of exports sales. Hence it is important to analyse and evaluate in detail the volume and structural changes of manufacturing in recent years to assess the actual economic conditions.

Economic policy of European Union (EU) is focused on sustaining and strengthening the positions in the global economy. In 2010, European Commission launched a 10-year strategy, Europe 2020 (A European Strategy for smart, sustainable and inclusive growth)\(^1\), to go out of the crisis and prepare EU economy for the next decade. One of Europe 2020 flagship is An Industrial Policy for the Globalisation Era that stresses the importance of industry, including manufacturing, in order to strengthen the EU positions in intra-EU and extra-EU market. Regarding the current plan period of 2007-2013 national strategic reference frameworks elaborated by national institutions had industry (including manufacturing) and export promotion in a focus. For instance, in National Strategic Reference Frameworks 2007-2013 of Latvia\(^2\) it is pointed out that export propensity and export potential is one of significant factors to improve competitiveness.

A considerably large number of scientific publications and researches in recent years have been devoted to industrial development, including manufacturing, export performance and as well

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\(^{1}\) Europe 2020. A European Strategy for smart, sustainable and inclusive growth [accessed 2011-09-10] 

export promotion. For instance, Leonidou et al.\(^3\) have conducted study among indigenous manufacturing firms based in the United Kingdom and argue that adoption of specific national export-promotion program positively strengthens the firm’s export-related resources and capabilities, at the same time the authors conclude that in turn improves export performance. The authors stress that association between use of national export-promotion programs and firm’s export performance is not direct but indirect. It indicates that national export-promotion programs in reality improve performance of firms and then these firms increase export sales. Sequentially, Wagner argues that good firms (meaning firms that are more productive and have higher productivity growth rates) go abroad\(^4\), but Wagner specifies that exporting does not necessarily improve firms\(^5\). The author adds on the basis of special study of German exporters that firms that stop exporting in year \(t\) were in \(t-1\) less productive than companies that continue to export in \(t\)\(^6\). It indicates that national export-promotion programs should primarily focus on already more productive companies and stimulate improvement of companies performance and then encourage to go abroad to gain higher results of program implementing.

Nevertheless, Roper et.al.\(^7\) argue that larger plants or firms tend to export larger proportion of their sales. It indicates that is more efficient to aim national export-promotion activities on larger firms rather than focus on large number of relatively smaller firms. At the same time, the authors point out that externally owned firms export a larger proportion of their sales than similar indigenously owned firms\(^8\). This perspective predicts that national programs should be elaborated taking into account the aspect that export-promotion programs can result only in increase of employment and labour taxes, but actual incomes and profits can flow out of country.

Correspond to these findings are the research results of Lee et.al.\(^9\), as the authors specially examined how sudden economic market shirkages can push firms to increase their level of export using as a context Korean firms before and after the Asian economic crisis, and they argue that domestic market leaders have a greater incentive to increase their level of export because they lost the most from the domestic market shrinkage. This conclusion indicates that large firms already have stronger initiative to focus more on export market and increase exports during and after economic crisis, so national economic policy makers can expect the same results with smaller inputs comparing with results of small and medium-sized firms.

The results of another research devoted to determinants of export propensity of foreign firms relative to domestic companies in Estonia and Slovenia in manufacturing sector argue that differences in export propensity between foreign and domestic companies are significant\(^10\). These results correspond to finding of other authors as well and it indicates that policy makers should include this aspect as well in export-promotion program.

The study by Banister and Cook devoted to assessment of actual labour costs in China’s manufacturing, argue that China’s manufacturing sector remained only 4% of those labour costs in the United States and about 3% of those in the Euro Area in 2008\(^11\). Taking into account that China


\(^5\) Ibid.


\(^8\) Ibid.


is leading manufacturer in many spheres and despite gradual annual increase of labour costs, manufacturing in China still maintains costs advantage in comparison with the EU and economic policy makers should take it into consideration.

Recent economic crisis have encouraged authors to examine the general impact of crisis on manufacturing and its wage share in economy. For instance, Onaran on the basis of study on Korea, Mexico, and Turkey argues that manufacturing is affected more intensely by openness compared to non-tradable sectors, however, manufacturing plays the role of a wage setting leader for other sectors. This finding, in turn, once again emphasizes the complexity of role of manufacturing in economy and its direct and indirect impact on other sectors. However, each research emphasises a specific issue that is frequently neglected by others. Several researches examine relatively rare and quite specific factors that influence export propensity (for instance, one study examines relation between gender and export propensity, which results argue that differences by gender exist in exporting on the basis of large-scale survey of Canadian small and medium-sized firms; another study presents a methodology for identifying product categories that, if they were subject of specified export promotions, would be most efficient to meet various need of interested organisations and institutions).

On the basis of the review of literature on manufacturing, export propensity and export promotion, the author argues that mainly previous studies are using data on individual manufacturing plants (as surveys) rather than aggregated data released by national or international statistical offices according to most widely used classification, NACE Rev.2 or Rev.1.1, so one could compare the results and perform further studies using alternative research methodology. It is also observable that only few researches and publications are devoted to Latvia, Lithuania, and Estonia, but the largest economic decreases were in these countries.

Consequently, the aim of the research is to analyse manufacturing in Latvia, Lithuania, and Estonia as well in the rest of the EU in order to reveal and evaluate dynamics and structural changes in 2008-2011. The research contains several tasks, as elaboration of methodology, selection of indicators, statistical and analytic data processing, forming conclusions and recommendations to policy makers.

1. Method

The research covers the time period of 2008-2011 that can be subdivided into two periods – 2008-2010 (crisis) and since 2011 (post-crisis), (annual data for 2008-2010 or 2008-2009 used if data on 2010 are unavailable in the data source; and quarterly and monthly data used for 2011). In some cases, indices are used and analysed since 2000 (2000=100) or 2005 (2005=100) to identify long-term trends and process international comparison. As a data source is used Eurostat data base as it publishes the indicators according to unified methodology for all countries examined in research and the data can be compared (with other countries included in the data base; and with previous periods). The research is focused on Latvia, Lithuania, and Estonia manufacturing sector that are analysed and evaluated in more detail. However, the statistics on EU countries is applied if needed to perform comparison or analysis.

The object of research is manufacturing, its dynamics and structural changes. In the research, industry is NACE Rev. 2 Sections B and C, and manufacturing is NACE Rev. 2 Section C unless provided otherwise. However, according to legal requirements so far the data on value added by

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16 NACE Rev. 2 structure and correspondences with NACE Rev 1.1 and ISIC Rev. 4.
branches have been published and are available regarding NACE Rev.1.1, then manufacturing is NACE Rev.1.1 Sector D.

As quantitative and qualitative data analyses methods as well as analytic method have been used in the research, in that case, on the basis of analysis of applicable and available indicators in the data base used in the research, several indicators have been selected and are used as an analytic tool to evaluate the dynamics and structural changes in 2008-2011.

In the research, the following indicators have been used:
1) Share of manufacturing in the economy (% of value added) – in order to reveal the importance in the economy and topicality of research;
2) Structure of manufacturing (% or value added) – in order to detect major branches of manufacturing;
3) Volume index of production (2005=100) – in order to analyse production volume changes (compared to base year or compared to corresponding period of the previous year);
4) Turnover index [in domestic and non-domestic market] (2005=100) – in order to analyse turnover changes compared to base year or compared to corresponding period of the previous year) in domestic market and in exports sales;
5) New orders index [in domestic and non-domestic market] (2005=100) – in order to analyse how the number of new orders in manufacturing has changed compared to base year or compared to corresponding period of the previous year in domestic market and in export markets;
6) Share of manufacturing (% of employment) – in order to reveal the importance in the labour market and detect recent changes;
7) Employment rate (%, age group 15-64) – in order to reveal recent general trends and compare with data of manufacturing sector;
8) Export volume index (2000=100) – in order to analyse export sales changes in comparison with the base year and compared to the previous year;
9) Exports (in billions of euros) – in order to perform international comparison and use in computations of ratio of export exposure;
10) Gross domestic product (at market prices; in billions of euros) – in order to compute the ratio of export exposure;

In the research, the ratio of export exposure is selected as special indicators due to the fact that it reveals existing tendencies from a different point of view. It is argued that this ratio offers additional and useful information for various applications, as well in formation and elaboration of economic policy.

2. Data analysis and research results

Despite the recent overall economic recession in almost all sectors and in majority of the EU countries, industry and manufacturing within it generally maintains the positions. Industry (including mining, manufacturing, and energy; excluding construction) accounted for 18.8%\(^\text{17}\) of the European Union 27 countries (EU-27) economy in 2010 (18.1% in 2009). Manufacturing is the major sector in industry, and it accounted for 14.9% in 2009. The share of manufacturing was 9.9% in Latvia, Lithuania – 16.4%, Estonia – 14.3%.

It should be stressed that manufacturing experienced a dramatic real output decrease in 2009 (-13.3%) in the EU-27. In some countries manufacturing output decreased even more, for instance, in Estonia -25.3%, Slovakia -21.3%. Even the Nordic industrialized countries as Finland and Sweden had significant decline (respectively, -19.9% and -18.0%). Germany that is the largest EU-27 economy and its share of manufacturing is above the EU-27 average level had noteworthy decline (-18.1%). Comparing the selected countries, it is observable that the largest decline was in Estonia (by 25.3%), in Latvia – by 19.2%, in Lithuania – by 15.0%. However, within the common

\(^{17}\text{Data source in this chapter (including figures and tables) is Eurostat data base.}\)
market in some countries manufacturing increased its output, for instance, 4.6% in Greece, 2.0% in Poland.

Manufacturing is complex sector that consists of variety of branches. Five branches out of 14 branches (according to sectoral classification of NACE Rev.1.1. Sector D) accounts for almost ¾ of value added in manufacturing in the EU-27. Manufacture of basic metals and fabricated metal products accounts for close to 14%, but Manufacture of food products, beverages and tobacco, Manufacture of machinery and equipment n.e.c., Manufacture of electrical and optical equipment, Manufacture of transport equipment account for 10-13% each. However, the evidence of Latvia, Lithuania, and Estonia indicates that the average structure of manufacturing is far from individual national data. In Latvia, the leading branches are Manufacture of food products, beverages and tobacco (its share increased from 21.5% in 2008 to 23.4% in 2009), Manufacture of wood and wood products (from 16.4% to 19.0), and Manufacture of basic metals and fabricated metal products (felt from 12.1% to 9.9%). In Lithuania, the key branches are Manufacture of food products, beverages and tobacco (grew from 18.8% to 24.3%), Manufacture of chemicals, chemical products and man-made fibres (felt from 12.1% to 10.5%). In Estonia, the principal branches are Manufacture of food products, beverages and tobacco (from 12.7% to 15.5%), Manufacture of electrical and optical equipment (from 12.4% to 13.4%), and Manufacture of wood and wood products (from 11.5% to 12.4%). The recent data on structure of manufacturing indicates that in most cases the leading branches (See Table 1; grey highlight) have strengthened the positions in the economy. A considerably specific branch as Manufacture of coke, refined petroleum products and nuclear fuel forms noteworthy share only in Lithuania (3.5% in 2008 and 2009).

Despite gradual economic recovery in the EU, nevertheless, in June 2011, manufacturing volume index of production (2005=100) in eight countries indicates that production volume is still below the level of 2005. These eight countries are the following: Greece (82.7), Luxemburg (84.6), Spain (86.6), Portugal (93.0), Italy (94.7), Cyprus (96.3), France (98.1), and United Kingdom (99.8). But index data indicate that some countries have exceeded the level of 2005 in 2011. For example, Denmark production index was 89.0 in January 2011, but it reached 100.0 in June; Finland production index was 76.4 in January 2011, but it reached 106.9 in June; Sweden production index was 87.3.0 in January in 2011, but it reached 104.3 in June; and Latvia production index was 82.0 in January in 2011, but it reached 113.3 in June. Lithuania and Estonia manufacturing have significantly higher production volume than in 2005 – Estonia exceeded by 25% in June in 2011, but Lithuania - by 26%.

The analysis of manufacturing turnover indices in domestic and non-domestic markets argues that export holds and strengthens its positions and manufacturing branches focus on non-domestic rather than domestic market. Non-domestic turnover in the EU-27 countries and Latvia, Lithuania, and Estonia exceed the level of 2005, but, in turn, domestic turnover fall behind non-domestic turnover and is considerably closer to level of 2005. For instance, manufacturing non-domestic turnover index (2005=100) of Estonia was 228.6 (domestic turnover index – 108.7) in May 2011, Lithuania – 193.4 (143.2), Latvia – 173.0 (126.2), and EU-27 – only 135.1 (115.1). Estonia’s manufacturing data indicates that in recent years it fiercely concentrates on exports; and within the EU only Romania has similar outcome - 238.5.

In contrast, in 2011, the number of new orders in domestic market has increased in majority of EU countries. The only exceptions are Greece, Czech Republic, and Malta where number of new orders have decreased at least three months in the first half of 2011. Meanwhile, on average new orders in domestic market has increased by 36% in Estonia, by 35% in Latvia, and 29.1% in Lithuania compared to corresponding period of the previous year in the first half of 2011.
Table 1 Structure of manufacturing in 2008 and 2009 (% of value added)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>100</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td>100</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Manufacture of food products, beverages and tobacco</td>
<td>11.9</td>
<td>21.5</td>
<td>18.8</td>
<td>12.7</td>
<td>13.1</td>
<td>23.8</td>
<td>24.3</td>
<td>15.5</td>
</tr>
<tr>
<td>Manufacture of textiles and textile products</td>
<td>3.2</td>
<td>5.7</td>
<td>7.2</td>
<td>6.6</td>
<td>3.4</td>
<td>5.2</td>
<td>7.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Manufacture of leather and leather products</td>
<td>0.8</td>
<td>0.1</td>
<td>0.2</td>
<td>0.6</td>
<td>0.8</td>
<td>0.2</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Manufacture of wood and wood products</td>
<td>2.2</td>
<td>16.4</td>
<td>6.5</td>
<td>11.5</td>
<td>2.2</td>
<td>19.0</td>
<td>7.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Manufacture of pulp, paper and paper products; publishing and printing</td>
<td>7.9</td>
<td>9.0</td>
<td>5.6</td>
<td>7.3</td>
<td>8.2</td>
<td>9.1</td>
<td>6.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Manufacture of chemicals, chemical products and man-made fibres</td>
<td>10.3</td>
<td>4.8</td>
<td>12.1</td>
<td>5.8</td>
<td>11.0</td>
<td>6.4</td>
<td>10.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Manufacture of rubber and plastic products</td>
<td>4.4</td>
<td>3.4</td>
<td>5.1</td>
<td>3.2</td>
<td>4.5</td>
<td>2.9</td>
<td>4.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Manufacture of other non-metallic mineral products</td>
<td>4.5</td>
<td>6.7</td>
<td>5.0</td>
<td>7.1</td>
<td>4.4</td>
<td>4.8</td>
<td>3.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Manufacture of basic metals and fabricated metal products</td>
<td>14.8</td>
<td>12.1</td>
<td>6.0</td>
<td>12.3</td>
<td>13.8</td>
<td>9.9</td>
<td>4.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Manufacture of machinery and equipment n.e.c.</td>
<td>12.2</td>
<td>3.7</td>
<td>3.6</td>
<td>5.5</td>
<td>11.8</td>
<td>2.8</td>
<td>3.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Manufacture of electrical and optical equipment</td>
<td>11.5</td>
<td>5.9</td>
<td>5.2</td>
<td>12.4</td>
<td>11.1</td>
<td>6.5</td>
<td>5.0</td>
<td>13.4</td>
</tr>
<tr>
<td>Manufacture of transport equipment</td>
<td>10.2</td>
<td>5.1</td>
<td>5.2</td>
<td>4.9</td>
<td>10.1</td>
<td>3.8</td>
<td>5.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Manufacturing n.e.c.</td>
<td>4.1</td>
<td>5.6</td>
<td>9.7</td>
<td>6.7</td>
<td>4.2</td>
<td>5.9</td>
<td>10.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Prior research has examined the employment rate (age group of 15-64) in the EU, and the evidence indicates that employment rate had decreased in overwhelming majority of member states in 2008-2010 (the only exceptions are Germany, Poland, Malta, and Luxembourg). The sharpest decline of employment rate was observed in Latvia (from 68.9 to 59.3), Estonia (from 69.8 to 61.0), Ireland (from 67.6 to 60.0), Lithuania (from 64.3 to 57.8), and Spain (from 64.3 to 58.6). Demand for labour in manufacturing as well has reacted in a negative manner by various reasons. In result, the share of manufacturing in total employment has declined by 1.4 percentage point on average (from 17.3 in 2008 to 15.9 in 2010) in age group of 15-64 (see detailed data in Figure 1). Nevertheless, according to the evidence based on data of the first quarter of 2011 compared to the first quarter of 2010 it is observable that in 18 countries (including Estonia, Latvia, and Lithuania) out of 27 member states the number of employed persons in manufacturing has increased.
The global market and intra-EU market have experienced significant fluctuations regarding demand (private, government, and corporate) in recent years; in result, the exports of goods have fluctuated within large amplitude. Exports of the EU-27 increases by 5.6% in 2008, decreased by 16.2% in 2009, however it rocketed by 22.9% in 2010. In Lithuania, exports grew by 17.7%, then fell by 14.5%, but then again rose by 19.0%. In Latvia, the same trend was observable – respectively, 9.2%, -10.8% and 19.6%. However, in Estonia, export volume in 2008 was almost as in previous year (0.9%), then severe decline by 17.3% in 2009 and sharp increase by 25.1% in 2010 that was the sharpest increase of exports within the EU-27 (see Figure 2).

Exports volume have grew significantly faster in the new member states (for instance, exports volume index (2000=100 ) of Slovakia was 322, Lithuania - 321), at the same time, exports volume in some member states in 2010 have been even below the level of 2000 (for instance, in Malta – 69, United Kingdom – 82, France – 92). It is observable that exports volume in Latvia, Lithuania, and Estonia exceeded the previously highest point in 2008 and the exporters had managed to overcome the dramatic fall of 2009.
Germany, the Netherlands, France, Italy, and Belgium are the leading exporters of the EU-27 that export to other EU-countries (intra-EU export) and to the rest of the world (extra-EU export) (See Table 2). Lithuania exported as Latvia and Estonia together – respectively, 15.7, 8.8 and 7.2 billions of Euros in 2010.

Table 2 Exports of EU-27 by countries (billions of euros)

<table>
<thead>
<tr>
<th>Country</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>983</td>
<td>803</td>
<td>957</td>
</tr>
<tr>
<td>Netherlands</td>
<td>434</td>
<td>357</td>
<td>432</td>
</tr>
<tr>
<td>France</td>
<td>419</td>
<td>347</td>
<td>393</td>
</tr>
<tr>
<td>Italy</td>
<td>369</td>
<td>292</td>
<td>338</td>
</tr>
<tr>
<td>Belgium</td>
<td>321</td>
<td>265</td>
<td>311</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>313</td>
<td>253</td>
<td>306</td>
</tr>
<tr>
<td>Spain</td>
<td>191</td>
<td>163</td>
<td>185</td>
</tr>
<tr>
<td>Sweden</td>
<td>125</td>
<td>94</td>
<td>119</td>
</tr>
<tr>
<td>Poland</td>
<td>116</td>
<td>98</td>
<td>117</td>
</tr>
<tr>
<td>Austria</td>
<td>123</td>
<td>98</td>
<td>115</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>100</td>
<td>81</td>
<td>100</td>
</tr>
<tr>
<td>Ireland</td>
<td>85</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>Denmark</td>
<td>79</td>
<td>67</td>
<td>74</td>
</tr>
<tr>
<td>Hungary</td>
<td>74</td>
<td>60</td>
<td>72</td>
</tr>
<tr>
<td>Finland</td>
<td>66</td>
<td>45</td>
<td>53</td>
</tr>
<tr>
<td>Slovakia</td>
<td>48</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td>Romania</td>
<td>34</td>
<td>29</td>
<td>37</td>
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<tr>
<td>Portugal</td>
<td>39</td>
<td>32</td>
<td>37</td>
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<tr>
<td>Slovenia</td>
<td>23</td>
<td>19</td>
<td>22</td>
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<tr>
<td>Greece</td>
<td>18</td>
<td>15</td>
<td>16</td>
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<tr>
<td>Lithuania</td>
<td>16</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>15</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>17</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Estonia</td>
<td>8</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Latvia</td>
<td>7</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Malta</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>

In order to reveal actual impact of exports on national economy taking into account the size of the economy, the ratio of exports on gross domestic product (GDP) (both indicators at market prices) is computed. This indicator enable to analyse exports from a different point of view, in a result, it gives lots of information. The average level of this ratio in the EU-27 was 0.4 in 2008, 0.35 in 2009, and 0.4 in 2010. Though, the values of ratio significantly fluctuate with in a large range (0.1-0.88) (See Figure 4). In some countries the ratio is significantly higher (in seven countries it was above 0.6 in 2010 - Belgium (0.88), Slovakia (0.75), Hungary (0.73), the Netherlands (0.73), Czech Republic (0.63), Slovenia (0.63), and Estonia (0.6)). However, the lowest ratio exports to GDP were in Cyprus and Greece (0.1), Spain (0.17), United Kingdom (0.18), and France (0.2). It is identified that ratio of the leading exporters is close to average or below the average level or considerably higher.

Germany is major exporter (957 billions of euros in 2010), but at the same time exports to GDP forms only 0.39, France (393 billions of euros) – 0.2, Italy (338 billions of euros) – 0.22, but the Netherlands (432 billions of euros) – 0.73 and Belgium (311 billions of euros) – 0.88. On the basis of computations and analysis carried out it is argued that exports importance in certain economy is varying, and results of research does not verify a general and prevalent unified trend. Research results argue that importance of exports in economy has established positions and even in economic crisis it only slightly decreases, however it regains its positions in post-crisis period (See Figure 3). For example, in Lithuania, the export exposure ratio was 0.5 in 2008, decreased to 0.45 in 2009, but in 2010 grew to 0.57; in contrast, in Latvia – 0.3, 0.3, and 0.4, but in Estonia – 0.53, 0.47, and 0.6.
Results verify that in all countries exports and consequently manufacturing, as major source of goods exported, importance in economy have increased in post-crisis period and the economic recovery strongly depends on foreign demand and exports. The evidence indicates that manufacturing holds its positions and is a major economic driver to regain previous level of economy that was lost during the economic crisis.

Taking into account the carried out theoretical analysis and data analysis, the author proposes the following recommendations to economic policy makers in export-promotion program elaboration:

• It is advisable to detect manufacturing branches with highest labour productivity, capital efficiency and to elaborate instruments in order to stimulate increase of export of these branches;
• It is advisable to detect leading firms in certain branch with above-average level of efficiency and to elaborate instruments in order to stimulate increase of export of these firms;
• It is advisable to detect branches with such a level of efficiency that can be considerably easier and by less means improved and to elaborate instruments in order to stimulate increase of export of these branches;
• It is advisable to elaborate tools to encourage merging of domestic firms forming larger firms or concerns as larger market players have stronger initiative to go abroad and increase overall exports.

It should be stressed that the recommendations are elaborated on the basis of theoretical study and data analysis and are general; hence they demand approbation at national level in order to gain maximal results and meet stated national export goals.

Conclusions

The findings about the dynamics of volume and structural changes in the EU in 2008-2011 show that despite economic instability since 2008, manufacturing maintains its positions and even in some aspects has strengthened positions. The evidence of data analysis and the findings show that in the EU the importance of exports increases – the ratio of exports to GDP has increased in majority of countries within the period of analysis.

It is concluded that in the EU (especially, in the small open economies as Latvia, Lithuania, and Estonia) export is a major economic driver force. Consequently, it is with up most importance to perform effective and clearly targeted export-promotion activities, particularly, in the countries with high export exposure rate and relative small domestic market.
The four general recommendations are elaborated in order to facilitate export activity on national level and sustain current economic recovery pace. However, it should be stressed that the recommendations are general and demand sincere and unadulterated determination and financial funds to reach noteworthy result; however, they are as simple as they can be integrated and used as road map by policy makers in various government institutions and non-government organisations.

References

COMPARATIVE ANALYSIS OF MACROECONOMICS PROCESSES IN THE BALTIC COUNTRIES DURING THE GLOBAL CRISIS

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Abstract. The article deals with the main reasons of today’s global crisis and its influence to the economics of Lithuania and other Baltic countries. The concrete factors that caused the economic crisis in the Lithuania are analyzed. The means of the government economic policy in Lithuania and other Baltic countries are discussed in the context of the global crisis. The analysis of the indices of macroeconomic processes in the Baltic countries showed that economic processes were similar without essential differences in all Baltic countries with exception the spheres of public finances and foreign investment where Estonia had obvious advantage in comparison with Lithuania and Latvia.

Keywords: economic cycles, globalization, macroeconomic processes, real estate, securities, global finance crisis.

Introduction

The onset of the current financial crisis is considered to be 2007, when the Federal Reserve System of the USA had to interfere and grant liquidity to the bank system. Economic cycles are on immanent feature of the market economy, because the evolution of the market economy is uneven and there is no other mechanism to equalize disproportions of uneven evolution than periodical shocks – crises. Thus, although crises entail great losses, both economic and social, they are inevitable. On the other hand, the proper economic policy is able to reduce the after-effects of crises. Despite that no economic cycle is apt to repeat, the analysis of its causes has a sense for the sole purpose of avoiding the economic policy errors made. The available experience today enabled us to control the global crises much more expeditiously and faster than in 1929-1933. Though we have to accept the fact that today the world experiences less an economic depression on a no smaller scale indeed than that in the years of the Great Depression.

In the article, the main causes of the global financial crises as well as its effect on the Baltic countries economics are analyzed. The dynamics of the main macroeconomic indices (the GDP, the budget deficit, the state debt, the inflation rate, the unemployment rate, the volume of import and export) are analyzed in the period 2004-2010 using data of Eurostat database. The dynamics of these indices shows the main macroeconomic tendencies in the Baltic countries. Measures of the state economic policy in the USA, the EU and the Baltic countries are discussed in the aspect of global crisis.

1. The Main Causes of the Worldwide Financial Crisis.

The current global crisis is not the only worldwide crisis in the new history of humanity. We are aware of such economic crises that have affected more than one state and therefore they can be called as worldwide crises. The current global crisis stands out from the previous ones by its

measures. It affected the majority of world countries. In this respect it surpassed even the Great depression of 1929-1933. On the other hand, both the crises have got common features. Actually, both crises arose due to some troubles in the USA financial markets. Their major features are vast credit expansion and financial novelty. The truth in that the current crisis stand out by application of very complicated derivative financial measures and insufficient assessment of risk, though theses derivative measures were created namely to diversity and diminish the risk. It should be stressed, that the severe lessons of the Great Depression were not in vain and the governmental response to economic recession was much more expeditions than in 1929. The Great Depression impelled to create the economy regulatory theory the methods of which allowed us to manage the time challenge3.

As for back as 2005 the journal “The economist” warned about the so-called real estate bubble in progress in USA and it possible consequences. Namely the processes in the real estate market were the detonator that invoked the world crisis of finance and economy. Real estate was always treated as a safe investment, the price as which will never fall down4. A great demand for real estate raised its price and that in its turn, increased investments into real estate. Side by side with the expansion of the real estate market, mortgage credits increased as well. Having noticed that the value of their credit mortgage (houses under construction) was growing, decreasing thereby the risk of borrowing, banks also decreased the requirements on credit distribution. Thus, the credit and real estate markets were in full swing. Banks grouped the newly given credits and turned them into the so-called collateralized debt obligations and sold them to various investment banks and companies. These turned later the securities bought into secondary debt securities and sold them in the markets of securities.

However, the growth of prices of real estate has limits. As the real estate marked was saturated and its demand began to decrease, its price sank as well. With a decrease of the value of mortgage the amount of bad credits of banks is increasing which entailed thereby liquidity problems of banks. The latter fact pushed banks into a complicated situation. Borrowing becomes risky which, in its turn, entails the growth of credit interest. On the other hand, with a decrease of the value of mortgage, security of obligations also decreases which turns derivative financial means into worthless papers. Thus, the liquidity problems and decline of the value of securities led even big banks and investment companies to bankruptcy. It means the onset of global crisis.

Famous American economists – Larry Summers, Paul Krugman, Joseph Stiglitz wrote about a possible financial crisis in the USA before its onset. J. Stiglitz (2006)5 paid attention to a deteriorating economic situation of the country and criticized the Central Bank of the USA with regard to their inflationary policy in progress. Rather long before 2007 indicators of the American economics such as price of real estate, a high long-term deficiency of the current account and decreasing rates of economic growth of the country showed that the country is on the verge of financial crisis6. The global crisis, though to a lesser extent than in the USA, had a bad effect on the EU countries as well.

However, both the USA and EU institutions took anti-crisis measures rather resolutely. The Federal Reserve System of the USA, later the Bank of Great Britain and the Central European bank began to decrease the basic interest norm with a view to stop the growth of the market interest

3 Stiglitz J. E. Making globalization work: The economics and social review. USA. Columbia university. 2006.
norm. However, during a depression, even a very low size amount of basic interest does not help to vivify the economic activity\(^7\).

Therefore the financial system of USA was subsidized in large sums to support bank liquidity and later the major share of state expenditure was assigned to stimulate consumer’s expenses and social programs. In 2008, the European Commission prepared a restoration plan of economics\(^8\) which implies the increase of demand by enlarging the purchasing capacity of population and restoring the confidence of investors. However, only largest states of EU can afford the necessary resources for restoring its economics.

2. The Concrete Reasons of Economics Crisis in Lithuania

The main reasons of economic crisis in Lithuania were the negative tendencies in the real estate market, irresponsible economic policy of Government and adverse situation in the international markets. 2004-2007 were the years of the fast economic growth in Lithuania as well as in other Baltic countries. Decreasing unemployment, increasing income, hard currency and financial support of EU were the main factors of the growth which, according the Rosenberg, (2008)\(^9\) were unprecedented in post-war Europe. These factors laid the basis, as it is evident at present, to cherish grounded hopes as to the future of the country. Guided by these hopes, both enterprises and households began borrowing for consumption and business ever more and all the more that the banks granted loans with engaging interests. The largest share of loans received by a household was aimed at the real estate market. According to the data of the Bank of Lithuania, the volume of loans to acquire lodgings has grown from 50 million Lt in 2004 up to 720 million Lt in 2007. Such an expansion of credit had a decisive influence to form a ‘bubble’ in the Lithuanian real estate market.

In the period before crisis Lithuanian economics was growing due to the growth of domestic demand which stimulates import growth, too. However the import increase was not equivalent to an adequate export increase and the balance foreign trade was in deficit up till 2009. In such a situation, the economic growth was feasible only by borrowing in the international finance market. A constant foreign trade deficit also determined the growth of the current account deficit of the account. In line with the data of the Bank of Lithuania, the current account deficit in Lithuania has grown from 2004 to 2007 almost 300% and exceeded 14 billion Lt.

Despite rather high growth rates of GDP of the country, year after year budget expenditure exceeded receipts income. Though the budget deficit before crisis was not so high, under the conditions of fast economic growth, it increased a possibility of economy overheating. On the other hand, the constant budget deficit increased the country’s debt which is unacceptable under the conditions of the economic growth\(^10\).

Due to the global crisis, increased interests stopped the flow of foreign credits and shook the economic growth basis of the country. As the data base of Eurostat shows\(^11\), the rate of country’s GDP growth in 2007 amounting almost up to 10%, in 2008 fell down up to 3%, and in 2009 it slowed down up to 15% pushing Lithuania among the countries that suffered from the crisis most of all. Lithuania was not ready for such situation, because its strategies for economic development, as Rakauskiene (2009)\(^12\) noted, were based on the premises of the macroeconomic stability and


continuous economic growth. It shows that such strategies were created in a formal and unqualified manner.

After the burst of the “bubble” in the real estate market of Lithuania, the credit interest, given by the banks acting in Lithuania, have grown as well. That affected negatively the subjects of Lithuanian economy. Only the processes in the county’s real estate market could invoke economic depression, however, mostly the outside factors have affected our economics. The global crisis predetermined slowdown of economic growth and consumption decrease of many world countries. Decreasing consumption of foreign countries restricted the chances of Lithuanian export and that was one of the most important factors which determined the country’s economic depression. With the revival of markets of foreign countries, Lithuanian possibilities have made better as well. In the opinion of the same authors, improvement of business conditions in such export – oriented sectors as industry and tourism help so small countries as Lithuania to revive.13

3. Anti-Crisis Measure in Lithuania and Other Baltic Countries

It should be admitted that Lithuania met the crisis quite unprepared to that, though the seen of the global crisis reached Lithuania. This fact was determined by both political reasons and governmental in competence as well as the lack of responsibility. For motion of a budget in deficit under the condition of a rapid economic growth contradicts economic principles. Meanwhile the excess surplus budget would prevent ‘overheat’ of economics and establish conditions to mitigate the consequences of the crisis. Meanwhile the Estonian political forces showed much better responsibility in making coordinated decisions.14

According to the anti-crisis program of Government (Lietuvos Respublikos Seimas, 2008) at the end of 2008, decision were made to increase the rate of value-added taxes up to 19% (later on it was increased up to 21%), income-tax, excise duty on fuel, cigarettes and alcohol, as well as to eliminate the majority of reduced tariffs of the value-added tax. The tax reform has come into force effect since January 7, 2009. On purpose to decrease the state budget deficit the government decided to pursue the so-called retrenchment policy, i.e., to diminish government expenses by lowering the salaries, pensions, and social pays. On the one hand, it allows diminishing government expenses, on the other hand, it decreases income of the population and thereby consumers demand. The decrease in demand weakens the home market even more. The domestic market will revive only if income of the population starts growing and consumers demand increasing.

At the end of 2008 Latvian Saima approved the program of stabilization and revival of Latvian economics.15 The program obliged the government to pursue a strict fiscal policy decreasing the state budget deficit, to establish the stabilization reserve into which money could be transmitted in case of the budget is balanced and the growth of GDP exceeds 2%. The structural reforms were provided in the plan in order to decrease the expenses of the public management by 15%, while financing of social protection measures would not be decreased. In line with the program the government of Latvia plans to decrease the tariff of income tax of inhabitant from 2009 by 2%, to increase the rate of the value-added tax by 3%, to eliminate the majority of reduced tariffs of the value-added tax, to increase the excise duty of fuel, coffee and alcohol as well as to tax dwelling apartment of habitants from 2010.

Thus, anti-crisis measures are similar both in Latvia and Lithuania. The revival of economics is grounded on the strict fiscal policy and saving in both countries.


Despite that Estonia did not have a formal anti-crisis plan, because it hoped to overcome the economic difficulties in the natural manner, Estonia was forced to apply the saving mode, too. Estonian government has also made decisions to decrease the state expenditure, especially, in the sphere of health protection and education, pensions and salaries (by 15%), to increase the rate of value-added tax from 18 to 20%, the excise duty on tobacco products and alcohol and to introduce new taxes. Therefore the accumulated finance reserves permitted to gain obviously advantages for Estonia in comparison with other Baltic countries. Despite the fact that Estonia pursued an expedient fiscal policy before the crisis and accumulated fiscal reserves, the character of macroeconomics processes in the all the Baltic countries was very similar and differed insignificantly. True, the accumulated financial reserves permitted Estonia to avoid additional difficulties in the sphere of public finances that the Lithuanian and Latvian economies confronted.

4. Macroeconomic Situation in the Baltic Countries During the Crisis

The analysis of macroeconomic situation in the Baltic countries is make using data of Eurostat database. As was mentioned above for a number of years the Baltic countries were marked by a considerably faster economic growth than other EU states. The maximal rate of GDP growth before crisis amounted almost 10% in Lithuania, almost 8% in Estonia and exceed of 12% in Latvia. However, as the global trade shrank as a result of world economic crisis, the export-oriented economics of the Baltic countries plummeted to an all-time low: in 2009 real GDP of these countries decreased by 14-18 % (14% in Estonia, 17% in Lithuania and 18% in Latvia) as compared to 2008 data. In 2010 the Baltic countries have already shown some signs of recovery in their economies (Eurostat database)\(^{16}\).

Like many other EU countries, the Latvia and Lithuania are facing the budget deficit problem: proportion of fiscal deficits to GDP largely exceeds the limit of 3 % prescribed by the Treaty of Maastricht. According to date of the Eurostat database\(^{17}\) in 2009 this figure amounted to 9.2 % in Lithuania and 10.2 % in Latvia, but in 2010 their fiscal deficits decreased up to 7-8 % of GDP. Information regarding government debt is not satisfying either. On July 1\(^{st}\), 2010 the proportion of government debt to GDP was equal to 43% in Latvia and 34% in Lithuania and these figures satisfy the Maastricht criterion, i.e. not exceeded 60% of GDP, but they were increasing very fast in the last two years. So the Lithuania and Latvia will have to face a difficult task, i.e. reduce their fiscal deficits to the permissible limit.

The situation in these spheres in Estonia is much better. Estonia has not any problems with budget deficit due to accumulated reserves. However, one must admit here that Estonia did manage to maintain its financial discipline at the level likely to be envied by other countries with much more economic power. According to data of the Eurostat database\(^{17}\) in 2009 Estonian budget deficit stayed as low as 1.7 % of GDP. Even though the Estonian budget deficit amounted to 2.2 % of GDP in 2010, it still did not exceed the limit of 3 % of GDP, in this way satisfying the Maastricht criterion. Moreover, Estonian foreign debt, though it constantly increased during the crisis, constituted only 7 % of GDP, which is substantially less than is required for a country to be accepted to the euro zone. Therefore, Estonia is single state from all of EU states satisfying the Maastricht criteria. It allowed the country to join the European Monetary Union from 1 January of 2011.

All the three countries – Lithuania, Latvia and Estonia – are coping with the problem of emigration. If emigration processes are not suppressed in these countries, they will face serious economic problems in the future. Moreover, in spite of intensive emigration unemployment has become a serious and large scale problem in the Baltic countries. According to date of the Eurostat database\(^{17}\), unemployment rate in these countries has reached unprecedented heights during the crisis and amounts to 14-18 % (14% in Lithuania and Estonia and 18% in Latvia). It is not likely

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that any considerable changes would take place in labour markets of all countries concerned in this year either.

According to date of the Eurostat database\(^\text{17}\) in 2004-2008 inflation constantly increased in all three Baltic countries: from 1.2% in 2004 to 11.1% in 2008 in Lithuania, from 3% in 2004 to 10.6 in 2008 in Estonia and from 6.2% in 2004 to 15.3 in 2008 in Latvia. During 2008 level of inflation sharply fell down i.e. to 4.2% in Lithuania, to 0.2% in Estonia, and to 3.3% in Latvia. In 2010 the Baltic countries underwent inflationary pressures from abroad determined by the growth of prices of raw materials, energy supplies and grain in world exchanges. Bearing in mind the fact that, in comparison with the EU average, common price level in the Baltic states is quite low (75% in Latvia, 68% in Lithuania), it might be presumed that inflation in the Baltic states will be faster than in the euro zone. Therefore, in order to introduce euro these countries will have to cope with another serious problem and take steps to reduce inflation rate.

Estonia is likely to be the most attractive to foreign investment among the Baltic countries. According to date of the Eurostat database\(^\text{17}\) direct foreign investment in Estonia was increasing even during the years of recession and in 2009 it reached almost 9% of GDP. Despite the slight decrease in direct foreign investment in Estonia in 2010, it still exceeded 8% of GDP. Meanwhile, direct foreign investment into the Latvian and Lithuanian economy was likely to decline (from 3.8% of GDP in 2008 to 0.3% of GDP in 2009 in Latvia and from 3.9% of GDP in 2008 to 0.9% of GDP in 2009 in Lithuania) and in 2010 reached negative values.

The situation in the sphere of foreign trade on principle was similar in all Baltic countries. According to date of the Eurostat database\(^\text{17}\) import and export of these countries increased to 2007 or to 2008. But in 2009 volumes of export and import sharply decreased in all Baltic countries. The decrease of export amounted to 30.7, 18.1 and 20.3 percent of GDP in Lithuania, Latvia and Estonia, respectively. The decrease of import amounted to 41.8, 36.3 and 30.2 percent of GDP in Lithuania, Latvia and Estonia, respectively. In 2010 the situation in all Baltic countries improved – both export and import increased slightly. Thus the tendencies in sphere of foreign trade in all Baltic countries were similar because processes were influenced by the same factors.

The situation in Lithuania and Latvia is similar– recession of economics is very severe, internal market is poorly developed, budget deficit is high and emigration is reaching a large scale. Though Lithuania has a little advantage in almost all spheres analyzed, however, the gap between Latvia and Lithuania can be surmounted and filled in. Latvia’s advantage is that it pays much less interest for the loans granted by the International Monetary Fund as compared to Lithuania.

With reference to the above, Estonia is in a markedly better position than Lithuania and Latvia according to the key indicators. Among the Baltic states Estonia is most attractive to investment, it has the most effective public sector, the situation of public finances does not face any problems and its economic policy is coherent. From other points of view Estonia only slightly differs from the other Baltic countries.

**Conclusions**

Such small countries of open economics as Baltic ones had no chance of avoiding the effect of the global crisis on its economics. Thus, the domestic and external reasons caused the economics crisis in the Baltic countries. The analysis of macroeconomic processes in the Baltic countries showed that economic processes were similar without essential differences in all Baltic countries with exception the spheres of public finances and foreign investment where Estonia had obvious advantage in comparison with Lithuania and Latvia. All Baltic countries are coping with the problems of production decrease, of emigration, of unemployment, of inflation, of foreign investment (with exception of Estonia), with state budget deficit (for Lithuania and Latvia only). It must be noted that the measures taken to stabilize the states finances had a negative influence on the development of the domestic markets in all Baltic countries.

References


DEVELOPMENT OF COMPETITIVENESS OF GEORGIA ECONOMY

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Abstract. Upheaval of economics competitiveness is the most important task of any state. One of determinant role belongs to economic policy.

Georgia must have priorities not only in traditional fields but also in high quality, high-tech and high productive spheres as well. Only in this way is possible increase of competitive long-term, irreversible growth, boosting of revenues and salaries and improvement of population living conditions. We may name, for example, manufacturing of pharmaceutical products, telecommunication devices, gadgets and instalments.

While the last period in a whole world has been especially boosted demands for preparations of plant origin. Accordingly has been increased demands for medicinal plants. The medicinal plants which plays one of the most important part in pharmacological research industry and in creation of medicinal preparations, at present are widely spread. Natural preparations represent significant part in a whole medicinal trade capacity. Georgia’s flora is rich with medicinal plants from ancient times. Georgia has ability to occupy honourable part in manufacturing-realization of medicinal plants in the international market. The state should promote production of ecologically pure preparations and drawing of investors with care in this field.

Creation of competitive status of Georgia in a world market is highly depended upon competitive fields of the service sphere like hotels and restaurant businesses and insurance.

One of the priorities of Georgia is its transit functions which together with natural-climatic conditions, intellectual recourses and other factors should provide business development in the state and upgrade of economics competitiveness.

Keywords: Global Crisis, GDP, Investments, Foreign Exchange Market, economics competitiveness.

Introduction

Upheaval of economics competitiveness is the most important task of any state. One of determinant role belongs to economic policy.

Economic policy is the gadget of the economic interests’ realization. In globalization era the national business is the main factor of the national competitive strategy directed to modern technologies and innovations. In view of obtaining competitive priority is very important to take into account as how expanded and transnationalized is the private business in the country. Information technologies strengthen political and economic power of developed states and quality of other state dependence. Exactly these states are the most competitive in the international marker. In contemporary conditions with limited resource almost no state can be competitive in all positions.

1. Global crisis and GDP Georgia

Global crisis impact on Georgia and other countries is different from the exposure. If you look at Georgia and its neighbours, as well as other former Soviet republics, the economic growth indicators, clearly we see that the Baltic states (which had already in 2008 observed economic growth is negative rates), Armenia, Russia and Ukraine, in comparison with the Georgia crisis and the impact is much less painful.

In 2009, Armenia’s economic decline was observed in 14.4% - up, Moldova (7.9%), Ukraine (15,1%), Russia (7.9%), Georgia (3,9%) (www.worldbank.org) these data confirm that the
Georgia’s economy and other economies in comparison with the crisis is characterized by stability. But, unfortunately, the relative stability of the main factors is the economic system or correct functionality of the anti-crisis policy. Empirical data confirms the view that the crisis is largely of foreign involvement is caused by the relative stability of growth.

Since 1994, the growth of the economy is an irreversible process has started, the economy, including Liberal reforms are consistent with the safeguarding had been achieved. In the fall of 2007 on the condition of the economy has changed substantially. If in the years 2003-2007 the economic growth is always positive and quite high, the picture has changed dramatically since 2008. Since 1995 the economy in a negative economic growth rates will not display. None of the quarter, according to National Statistics Office (www.geostat.ge). During the 5 quarter from the second half of 2008 (the 2008 second quarter from the third quarter of 2009 including) the economic growth was negative, while in 2009 only 0.3% in the 4th quarter of the economy – grew.

In 2008, the volume of production decreased 4.4% - increase in agriculture, 1.5% - increase in the processing industry, 11.1% - increase in construction, 9.5% - increase in traffic. During 2009 the production volume decreased 5.7% in agriculture – up, 8.4% in Manufacturing, Construction of 2% - increased, in trade – 17.8%, hotels and restaurants – 6.9%.

In the first half of 2010, despite the growth, negative growth rates and maintains agriculture and households. See half of the period 2007-2011(I-II), gross domestic product dynamics (Table1).

<table>
<thead>
<tr>
<th>Table 1 Gross Domestic Product (GDP)¹</th>
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<tbody>
<tr>
<td>2007</td>
</tr>
<tr>
<td>GDP at current prices, mil. GEL</td>
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<tr>
<td>GDP at constant 2003 prices, mil. GEL</td>
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<tr>
<td>GDP real growth, percent</td>
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<td>GDP deflator, percent</td>
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<td>GDP per capita (at current prices), GEL</td>
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<td>GDP per capita (at current prices), USA $</td>
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<td>GDP at current prices, mil. USA $</td>
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2. Investments in Georgia

In 2007, Georgia was in fact the “Dutch disease” Danger (Papava 2007). The privatization of the increased amount of foreign investments, liberalization, effective PR campaign and the

¹ www.geostat.ge, (1 USA $ = 1.65 Gel)
geopolitical location of a number of investments in 2007 exceeded 2 billion dollars, of which approximately 40% of transport, telecommunications and energy on coming. War, the global financial crisis, inconsistent economic policies, including Property rights had been violated, since 2008, and 2010, investment began to decline in the first nine months of its volume was reduced to $433 million. In the period 2007-2010, foreign direct investment is the quarterly dynamics of the half (Table 2).

Table 2 Foreign Direct Investments

<table>
<thead>
<tr>
<th>Year</th>
<th>Mil. USD</th>
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<tbody>
<tr>
<td>2005</td>
<td>449.8</td>
</tr>
<tr>
<td>2006</td>
<td>1,190.4</td>
</tr>
<tr>
<td>2007</td>
<td>2,014.8</td>
</tr>
<tr>
<td>2008</td>
<td>1,564.0</td>
</tr>
<tr>
<td>2009</td>
<td>658.4</td>
</tr>
<tr>
<td>2010 Q I</td>
<td>166.5</td>
</tr>
<tr>
<td>2010 Q II</td>
<td>208.3</td>
</tr>
<tr>
<td>2010 Q III</td>
<td>225.6</td>
</tr>
<tr>
<td>2010 Q IV</td>
<td>214.1</td>
</tr>
<tr>
<td>2010</td>
<td>814.5</td>
</tr>
<tr>
<td>2011 Q I*</td>
<td>173.7</td>
</tr>
<tr>
<td>2011 Q II*</td>
<td>203.4</td>
</tr>
</tbody>
</table>

3. Foreign Exchange Market in Georgia

From 2004 until the summer of 2008 the foreign exchange market and the demand for Lari exchange rate rise, in August 2008 after the demand has decreased in GEL. The National Bank's data is the subject of an interesting discussion. During 2007, the Tbilisi Interbank Currency Exchange (www.nbg.gov.ge) 1,347 billion deal was signed, where the central bank has sold only 260 million dollars, bought in exchange for 918 million dollars. However, the exchange rate sharply maghldeboda and if the "Rose Revolution", 1 USD = 2.25 lari, in the course of the summer of 2008, amounting to 1.35 reduced (ie, there has been a nominal price). Already in 2008 the volume of transactions on the exchange increased to $2.3 billion, out of which the central bank sold 1.2 billion dollars. It is interesting that the amount of $800 million in August after the National Bank has sold, but only in October - December, the central bank sold by the sum of $600 million exceeded.

It seems that the global crisis and, most importantly, the Russian aggression in Georgian currency, and most seriously affected the confidence of an adequate policy. The population of the accounts in the savings of urgency in the dollar began to move.

National Bank's reserves are significantly decreased (only in August, nearly 300 million dollars) (www.geostat.ge), due on November 7, 2008, on Friday adopted a decision establishing a new balance between the exchange rate, particularly if prior to 1 dollar 1,4-1,45 lari, was an instant rate increase amounting to 1.65. Prof.Papava called this day the "Green Friday" (www.papava.info). An interesting point is that such decisions are usually taken on Friday, the foreign exchange market holidays and leaves uncertainty in the speculative price formation makes it possible. Unfortunately, November 7, 2008 was not an exception; a similar decision was adopted in 2010 invests.

Deterioration of the balance of payments current account deficits if it was in 2007 and 2 billion dollars in 2008 to 2.9 billion dollars has been raised.

It followed that the national currency in circulation decreased. If the beginning of 2007, approximately 840 million were in circulation, the rate is the beginning of 2008 to 1.2 billion dollars, and, in July 2008 increased to 1.48 billion dollars, and the beginning of 2009 was 1.17 billion dollars has been reduced.

1 www.geostat.ge
If the beginning of 2008 the volume of deposits more than 3 billion GEL, which was placed in 66% of the dollar, in August, its volume was reduced to 2.7 billion dollars. In 2008, the deposit dollarization ratio is 77% - has increased the money-changing rotational speed. If the beginning of 2008 this indicator (M2) 7.91 was the end of 2008 it was 10.87 - up (www.nbg.gov.ge).

4. Georgia and competitiveness

The Georgian rating in the world economic forums 2009-2010 reports like other states is represented in the indexes of global competitiveness (GCI) and business competitiveness (BGI).

According if the global competitiveness index, in survey periods, our country among 133 occupies 90 place. The leading states in 2010 is Switzerland, index 5,60; USA – 5,59; Singapore – 5,55; Sweden – 5,51; A Denmark – 5,46; Finland – 5,43; Germany – 5,37; Japan – 5,37; Canada – 5,33; Netherlands – 5,32; Among former soviet states the most competitive is Estonia (35 – place in 2010, 32 place in 2009, index-4,56); the worst ration has Tajikistan (122 place in 2010, 166 in 2009, index 3,38) and Kyrgyz (123 place in 2010; 122 in 2009, index – 3,36) 1.

Rather low rating obtained by Russia, so huge state (63 place) despite having so vast natural recourses. The scientific capacities are rather high such are production of aerospace and military equipment. The competitiveness of mentioned states are low for no having nomenclature for those services which may be more competitive in the international market. The only one real product that may be offered to the West by Russia is oil and gas.

State competitive priority is conditioned scientific and information technologies gained successes, the stable business environment and the strategy oriented to the export. Moreover, the education level is of more priority matter and the lower priority is given to the natural recourses. For example, Japan. While process of obtaining and retention of competitive priority the active role belongs to the state economic policy.

In order to have the high education level the state care is necessary, financing of scientific-research works, drawing of foreign investments mostly in the fields of the scientific capacity, adaptation with the world scientific achievements and deepening of scientific-technical cooperation.

What kind of situation in conformity with business development in Georgia and is it possible to be one of the world most competitive 55 states? As we could observe even small states are in the list.


The last period export structure (2001-2009) in some way reflects the priority spheres. The biggest export productive groups of Georgia is as follows: alloys (17,8%), black iron scrap (8,6%), copper deposits and concentrates (7,9%), cars (7,6%), nitric fertilizers (7,0%), dressed and semi-dressed gold (6,7%), cement (5,3%), alcohol and alcohol drinks (4,9%), natural wines from grapes (2,5%), chest nut and wall nuts (2,1%). In comparison with 2004 in 2008 especially increased the export of cement (by-17), alloys (by 6,3), gold (6,0), copper ores and concentrates (by 3,7), nitric fertilizers (by 3,7), alcohol and alcohol drinks (by 3,0). Comparatively less export was observed – grapes natural wines (by 2), chest nuts and wall nuts (1,8). In 2005 the wine export was sharply reduced with the big importer state Russia. In 2001-2003 the wine products export comprised 10,3% of the whole export, at present only 2,5% 3.

Therefore in the export is important the industrial production share that makes us to think that it is possible for the state the rating priority in industrial sector and this will promote development of other sectors (agriculture, construction, trade). According of opinion of foreign experts and

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3 www.geostat.ge.
Georgian specialists Georgia belong to those countries which have the biggest potential in production of agricultural and food products.

In international distribution of labour Georgia may take successful part at the expense of agricultural manufacturing and food industry traditional sectors development.

From traditional fields of the country into international market usually pass the production which is manufactured by local and foreign entrepreneurs together. The most popular form of inclusion to the local enterprise together with foreign is the joint venture, though we may face also another forms of inclusion. In difference from other forms the joint venture has one priority that is the risks distribution is carried out between foreign investor and local entrepreneur. Furthermore existence of the local partner facilitates activities of foreign partner and release from many problems conditioned by local peculiarities.

For manufacturing of competitive production the interesting form has franchising system application. It is widely used in retail trade, in service sphere and less used in enterprising. It should be also noted that while enterprise franchising in difference with other ones, franchising remains as autonomy. In Georgian food industry usage of franchising system will be especially useful in tea and cans manufacturing.

In a whole world is ultimately increasing demands for water. Almost in no state of world the water is not applicable for usage and Georgia is the rich in water recourses. Georgia has ability to meet the demands of the whole world. The most beneficial business may become water business. In this way it is necessary to develop advertising activities and organization of electronic trade.

Georgia must have priorities not only in traditional fields but also in high quality, high-tech and high productive spheres as well. Only in this way is possible increase of competitive long-term, irreversible growth, boosting of revenues and salaries and improvement of population living conditions. We may name, for example, manufacturing of pharmaceutical products, telecommunication devices, gadgets and instalments. The focus should be made towards high technological and valuable products. This will give the opportunity to the state in substitute of export production to receive import products in comparatively actual capacities.

While the last period in a whole world has been especially boosted demands for preparations of plant origin. Accordingly have been increased demands for medicinal plants. The medical plants which play one of the most important part in pharmacological research industry and in creation of medicinal preparations, at present are widely spread. Natural preparations represent significant part in a whole medicinal trade capacity. Georgia's flora is rich with medicinal plants from ancient times. Georgia has ability to occupy honourable part in manufacturing-realization of medicinal plants in the international market. The state should promote production of ecologically pure preparations and drawing of investors with care in this field. Reasonable application of medicinal plants will facilitate recreation of the state economy, boosting of export revenues, and creation of jobs and reduction of population quantity being on the verge of poverty.

Creation of competitive status of Georgia in a world market is highly depended upon competitive fields of the service sphere like hotels and restaurant businesses and insurance. At the end of 2008 and beginning of 2009 several famous international hotels nets started operation. Among them are presented by – “Marriott”, “Hilton”, “Radisson”, Camping and so on.

It was conditioned by fast increase of tourists, yearly 70-80% in years 2005-2007. Positive balance of tourism service in 2007 has been up-surged by 44%1. Although in war of August, 2008 this index has been significantly reduced. Practically has been got down the seaside season where the tourists were expected. The tourist companies were trying to increase the quantity of tourists by lowering of prices (10% - 40% discounts).

For tourism development it is necessary to pursue the liberal policy. For instance such approach in Turkey facilitated development of tourism. The state for the entrepreneurs engaged in tourism had made discounts for a few years: presented them loans without interest rates and credits

1 www.geostat.ge.
with tiny interest rates, relieved them from tax and etc. All these made Turkey one of the leading states in world tourism entered in the first top-ten.

The state support should be reflected in provision of legal base and elaboration of correct policy. The state policy of tourism development should be directed into sector of support of existed liberalization and investments. If the state will create corresponding situation for investors, they will invest their capital in tourism, the local and foreign investors as well.

As it is well-known one of the important factors is direct drawing of foreign investors and reasonable usage of investments.

Rather high investments were implemented in Georgia, in bank, insurance, telecommunication, transport, hotel, energetic and other spheres. The investments were mainly directed into creation of infrastructure and not for promotion of the sectors like agriculture, weaving in which Georgia has some priorities. They are less targeted towards creation of jobs and upgrade of productivity, however provide recreation and economic development while long period.

In order to improve the investment climate in Georgia it is necessary: to study tendencies of international business development; to define existed opportunities in Georgia, their impact on drawn investments; completion of legal base; simplicity and transparency of court process; material interests for foreign investors whereupon the certain discounts are necessary for tax and less restrictions; development of investment activities.

The ground for competitiveness of the state is its export competitive ability. The strategy directed to export has become the most important factor of development of numerous states economy. The clear example of all these the successes achieved of South-Asia new industrial states which have chosen the strategy directed exactly towards export and obtained upgrade quality in the international arena. Here may be mentioned Switzerland where the cheaper prices are fixed for export products than for inside the state. The difference in prices will be compensated by the state.

As to Georgia, it has quite catastrophically negative trade balance; import exceeds export by 4 times. According of foreign trade turnover by 2009 data, the biggest partner of Georgia is Turkey (15,1%), then Azerbaijan (10,7%, Ukraine (10,1%), Germany (6,8%), Russia (6,0%), USA (4,8%) and so on. The stable development and rising of competitiveness will be impossible in case the export share will not be increased.

Conclusions

One of the priorities of Georgia is its transit functions which together with natural-climatic conditions, intellectual resources and other factors should provide business development in the state and upgrade of economics competitiveness.

References:

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1 www.geostat.ge.
ICT DEVELOPMENT AND ITS EFFECT ON GDP IN THE CZECH REPUBLIC REGIONS

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Abstract. The article focuses on analyzing the development of Information and Communication Technology (ICT) and its impact on the economic growth of the Czech Republic regions. The authors’ aim is to decide whether ICT significantly affects the economy of the Czech Republic. In order to get a relevant answer to this question, the authors performed analyses using descriptive statistics and statistical analyses methods, including cluster analysis of data. There was proposed and subsequently applied a special indicator in statistical analysis for the evaluation of the ICT level in the Czech Republic regions. A statistics and analytics software product, Statistica 9, was used for data analysis.

Keywords: ICT, GDP, statistics, cluster analysis, statistical analysis, descriptive statistics.

Introduction

The field of Information and Communication Technology (ICT) is important to ensure competitiveness of the Czech Republic. This sector represents an open space for development in the conditions of the Czech Republic, and, possibly, for a successful expansion to foreign markets. It is relatively easy to enter this market with a good capital background (e.g. in the form of an experienced development team, sufficient investment capital, etc.) and company strategy (in the form of a quality vision and strategy).

1. Current Situation in ICT in the Czech Republic

The domestic market in the area of ICT can be characterized as unsaturated and unsatisfying for expanding companies. This branch of business may be ranked as international in its reach, having low export barriers.

According to the Czech Statistical Office it follows from international comparisons that the expenses of the Czech economy on the ICT area are at a standard level within the framework of Europe, and a little above the average of EU.15 and EU.27.

Long-term growth is typical for the Czech ICT market, which is, however, quicker than the effectiveness of the national economy as a whole. The reason for this condition is an unsatisfied demand on the one side, Czech crown exchange rate that is favorable for import on the other side, and, to a certain extent, a fashionable factor, which is in particular apparent in household consumption. Concurrently, this situation is a consequence of the fact that Czech companies do not take sufficient advantage of informatics in order to increase own productivity and profitability. ICT goods and services are being purchased, but not effectively and purposefully used. Long-term impact may represent quite a big risk for this area, which leads the sellers and manufacturers in this field to focus on complementary services and extensive education of clients.

The importance of ICT for economic entities and the measurement of the effectiveness of resources invested into ICT continue to be hot topics.

In each ICT project it is possible to identify certain basic questions: Does the company want to invest in ICT in order to get the edge over competitors? Does it have to invest into the project in order to survive in the competition with companies that have already implemented a suitable ICT project, and have gained competitive advantage? Or is the project only a necessity we have to do to
be able to ensure the basic operation efficiency of the company? Or is the money invested in the project just wasted? A lot of experts and managers ask themselves these questions. Their answers and related viewpoints and methodologies for the measurement of ICT effectiveness considerably differ, which is documented in various studies: see e.g. (Carr, 2005; Nevens, 2002; Kamel, 2007).

Another discussed issue is the influence of ICT on economies of individual countries, and on the global economy. Some say that the importance of ICT for economic entities and national economies decreases (see e.g. Carr, 2003), others say that the importance will increase further under certain circumstances (see e.g. Voříšek, 2006).

The development of ICT has been so far considered as a factor of economic growth, and not as its consequence, as it is stated by Tchen (2007). This opinion is explained by three properties of information and communication technologies:

(i) information and communication technologies are present in most sectors;
(ii) ICT tends to keep improving on a continuous basis, thus decreasing the users’ costs; and
(iii) information and communication technologies contribute to innovation and development of new products and processes.

The impact of information and communication technologies on the economic growth and development was examined in several studies. These studies were performed in Taiwan (Wang, 1999) and China (Meng, Li, 2002) by the Organization for Economic Co-operation and Development (OECD) (Colecchia, Schreyer, 2002), and even in Great Britain (Dolton, Makepeace, 2004) or Asia (Jussawalla, 1999).

The aim was to determine the role played by the areas of information and communication technologies in economic growth.

The study from China (Yi, 2010) is very interesting, in which the authors examine the relation between information and communication technologies (ICT), investments and economic growth. In the (Haacker, 2010) study the author states that the impacts of productivity growth in the manufacture of ICT on the economy are weak, which he substantiates by the fact that technical equipment is often imported.

In order to test the validity of the assumption that economic growth is led by investments into ICT, the study (Nasab, 2009) used Generalized Method of Moments (GMM) within the framework of a dynamic panel data approach and applies it to the economy of OPEC member countries over the time span of 1990-2007.

The questions whether and how ICT influence the economy, in what manner ICT develop, and in what manner the society should approach them, have been asked by economists (but also representatives of different branches of science) all over the world for a long time. Nevertheless, it cannot be expected that a region that is not provided with a sufficient number of specialists, will be competitive in ICT and will invest significantly into ICT.

2. Purpose of Article

The article focuses on answering the question whether, in the conditions of the Czech Republic, it can be declared that with an increasing number of companies in the ICT sector (per one million of the population of the region) the gross regional product per capita will be increasing as well.

3. Data

For the assessment of the ICT development in the Czech Republic from the regional point of view, the data acquired from the Czech Statistical Office web pages were used [CZECH STATISTICAL OFFICE, 2011]. The software products Statistica 9 and MS Excel were used for

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the assessment. When assessing the ICT development from the regional point of view, the authors had to deal with a problem that, for certain indicators, the most current data were available only for 2006. However, this should not be a hindrance, as an interregional comparison must be made in order to achieve the goal of the work, therefore the authors start from the assumption that old data can have sufficient informative value in this respect.

In order to find the answer to the above-mentioned question, an analysis using descriptive statistics was used at first, subsequently a statistical analysis was performed, which was complemented with the process that converted the used indicators into one number for each region. It was further found out, when reviewing the fulfilment of the required conditions for statistical analysis and making other related calculations, that the values determined for the capital of Prague, which is a region entirely municipal in its nature, affected the output of the statistical calculations. For the purpose of eliminating the extreme values for the capital of Prague, the Central Bohemian Region (into which the capital of Prague is incorporated from the territorial point of view) and capital of Prague were merged.

4. Descriptive Analysis

The ICT sector is defined as a combination of economic activities producing products (technologies) and providing services that are primarily intended for information processing, communication and distribution via electronic form, including their capture, recording, transfer and visualization. In the analysis there were included the numbers of entities from ICT branches in the processing industry, and ICT branches in the field of services. Basic characteristics - Regions of the Czech Republic is in the Table 1. Values represent the average number of enterprises in different regions in 2006.

Table 1 Characteristics - Regions of Czech Republic (source: Czech Statistical Office)²

<table>
<thead>
<tr>
<th>Region</th>
<th>ICT companies</th>
<th>Inhabitant</th>
<th>Gross salary</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>1097,2048</td>
<td>304573</td>
<td>19367</td>
<td>10,20%</td>
</tr>
<tr>
<td>Central Bohemian + Prague</td>
<td>20670,7751</td>
<td>1183576</td>
<td>29029</td>
<td>4,00%</td>
</tr>
<tr>
<td>Hradec Kralove</td>
<td>3391,4026</td>
<td>549122</td>
<td>20196</td>
<td>7,10%</td>
</tr>
<tr>
<td>Liberec</td>
<td>1539,3514</td>
<td>429803</td>
<td>20953</td>
<td>10,00%</td>
</tr>
<tr>
<td>Moravian and Silesian</td>
<td>3665,1599</td>
<td>1249909</td>
<td>21137</td>
<td>11,50%</td>
</tr>
<tr>
<td>Olomouc</td>
<td>1214,6365</td>
<td>639423</td>
<td>19788</td>
<td>10,60%</td>
</tr>
<tr>
<td>Pardubice</td>
<td>1739,4436</td>
<td>506808</td>
<td>19771</td>
<td>8,20%</td>
</tr>
<tr>
<td>Plzen</td>
<td>3237,892</td>
<td>552898</td>
<td>21711</td>
<td>7,30%</td>
</tr>
<tr>
<td>South Bohemian</td>
<td>2218,33</td>
<td>637723</td>
<td>20053</td>
<td>6,70%</td>
</tr>
<tr>
<td>South Moravian</td>
<td>4824,0206</td>
<td>1130990</td>
<td>21305</td>
<td>9,50%</td>
</tr>
<tr>
<td>Usti</td>
<td>2421,3049</td>
<td>823493</td>
<td>20718</td>
<td>12,90%</td>
</tr>
<tr>
<td>Vysocina</td>
<td>925,6271</td>
<td>511114</td>
<td>20199</td>
<td>8,60%</td>
</tr>
<tr>
<td>Zlin</td>
<td>1543,1112</td>
<td>589869</td>
<td>19767</td>
<td>9,70%</td>
</tr>
</tbody>
</table>

The highest values within the framework of the indicator ICT companies were achieved in the Central Bohemian Region (including Prague), South Moravian and Moravian and Silesian Regions. However, if we express them as per capita (Graph 1), the Central Bohemian Region remains the region with the highest value, but the Hradec Kralove Region and Plzen Region would occupy second and third positions, respectively.

The next two indicators, relating to the number of employees in the ICT sector, are expressed per hundred thousand of the population. The first indicator includes the number of employees in “ICT production: number of employees per hundred thousand of the population”, and “ICT production: number of companies per million of the population”. Again, the highest values within the framework of this indicator were achieved in the Central Bohemian Region, followed by the Pardubice and South Moravian Regions.

The other indicator refers to the number of specialists in ICT. In order to define the term “computer specialist” (IT specialist), the Czech Statistical Office use the Eurostat definition according to which computer specialists are divided into two main groups: scientists and specialists in the field of computer technology, and technical staff in the field of computer technology. Again, as regards this indicator, the Central Bohemian Region was at the top position, followed by the Plzen and South Bohemian Regions, respectively.
The indicator “Export of ICT goods: CZK/inhabitant” puts the Pardubice Region to the first position, and the Central Bohemian Region as far as to the third position. The second position belongs to the Plzen Region.

Investments into ICT are presented as the gross fixed capital formation in CZK per inhabitant. The regions in which the highest investments per capita in the fields producing ICT in 2006 were found were the Central Bohemian, Plzen and South Moravian Regions.
5. Statistical Analysis

The data for the statistical analysis of the ICT sector in companies were picked from the data shown in Table 1, where the values are given in CZK million, population, or numbers. These values could thus be influenced by the size of the region in question. Therefore further analyses were expressed per population of the region in question.

In this stage, a cluster analysis was performed for each sector at first; the data were picked from those that were described in the descriptive analysis.

For the purposes of statistical analysis, the following indicators were selected because of the independence requirements, etc.:

- Number of ICT employees per population in the region
- Total investments in ICT in CZK per population in the region
- Export of ICT goods from the Czech Republic in CZK per population in the region

The aim of the cluster analysis is to classify $n$ objects (in this case regions), out of which each is described with $p$ attributes (in this case indicators) into several, preferably homogeneous, groups (clusters). We require the objects in the clusters to be as similar as possible, while the objects from different clusters as dissimilar as possible. The precise number of clusters is usually not known. A cluster analysis is an investigation method; it should serve as a certain guide for further data processing (Budíková, 2010).

Having fulfilled the above-mentioned conditions, it is possible to proceed to the creation of a graphical output of the cluster analysis, so-called dendrogram. Dendrograms are usually used to illustrate the results of the agglomerative hierarchic clustering procedure (Řezanková, 2010). A dendrogram therefore shows the individual steps of the calculation of cluster analysis. In the case of regional assessment of ICT development, the regions will be shown on the vertical axis, while the horizontal axis will show the distance (differentiation) between clusters.

For the dendrogram construction procedure both the single and complete linkage clustering was applied as the clustering rule and Euclidean distance as the metric used. At the first sight it is apparent from the dendrograms that within the framework of the selected indicators there are regions that strikingly differ from the others. They include the Central Bohemian, Plzen and Pardubice Regions. Their privileged position is confirmed by the table showing comprehensive indicators of ICT indicators. The other regions show a relatively.
strong similarity, forming one bigger cluster.

The next step in answering the question whether it can be verified in the conditions of the Czech Republic that with the increasing number of companies in the ICT sector (as per one million population of the region) the gross regional product per capita is increasing as well. The data shown in Table 1 were used, to be specific, the following indicators: “Number of companies in the ICT sector” and “Gross domestic product per capita”.

Based on data processing using the Statistica 9 software package, the following scatter diagram resulted:
It is obvious from the diagram that though the values found for the capital of Prague were refined by incorporating the capital of Prague into the Central Bohemian Region, the values found for the Central Bohemian Region + Prague are markedly above the average. The correlation coefficient also indicates strong dependency. In order to verify that the data used do not meet the condition of normality, the Spearman’s correlation coefficient was used for dependency verification, whose value also indicates dependency (0.68). Even this value indicates dependency, though only mean. It may be therefore stated that there is a direct dependency between the number of companies in the ICT sector per one million of the population of the region and the gross regional product per capita. Therefore the answer to the question whether there is a dependency between the number of companies in the ICT sector and the volume of regional GDP may be affirmative.

Conclusions

For each indicator described, the descriptive analysis showed regions that acquired the highest values within the framework of the given indicator. The regions that were the most frequently mentioned, included the capital of Prague, Plzen and South Moravian Region.

A cluster analysis was performed within the statistical analysis, and a special indicator was calculated assigning one value to each region. It is necessary to draw attention to the fact that the results of the statistical analysis might be strikingly affected by the choice of indicators used. One of the great problems when applying the methodology for assessment of the development of ICT on the regions of the Czech Republic was the lack of indicators that could be used.

However, based on the analyses performed, we may arrive at a conclusion that with the increasing number of companies in the ICT sector the gross regional product per capita in the region rises as well.

References


THE IMPACT OF THE RECENT ECONOMIC RECESSION ON THE LONG-TERM UNEMPLOYMENT IN THE EUROPEAN UNION

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Abstract. The labour market in some Member States of the European Union has traditionally been characterized by high levels of long-term unemployment or in other words by unemployment lasting longer than one year. Particularly some specific groups of workers are vulnerable to long-term unemployment. This paper deals with the impact of recent economic recession on the incidence of long-term unemployment in the Member States of the European Union.

Keywords: economic recession, duration of unemployment, incidence of long-term unemployment, labour market, long-term unemployment, unemployment rate.

Introduction

One of the basic characteristics of the labour market in most Member States of the European Union is a high proportion of unemployed people who are unemployed for longer than one year.

Considerable attention to the long-term unemployment is devoted in the economic literature. The reason is that long-term unemployment brings significant costs not only to the individuals but also to the whole society. It is important to realize that long-term unemployment particularly affects some specific population groups. These include persons at the beginning and the end of working age, and also those with lower levels of education. A key contribution, that concerned the impact of long-term unemployment, is an article by Blanchard and Summers, which highlighted the risk of the existence of hysteresis in the labour market1.

In his second article2, Professor Blanchard investigates how the rise in unemployment in the 1970’s impacted amount and duration of unemployment in the subsequent period. In this article, Blanchard mentioned the impact of unemployment on the natural rate of unemployment in the European Union, whose amount was influenced among other things, by the hysteresis effect. Long-term unemployment through the natural rate of unemployment also affects the potential output of the country. This problem is discussed, for example, in publications of OECD3 and the European Central Bank4. Generally, a number of other professional essays are devoted to the labour market and the existence of unemployment in the European Union. Some of them are trying to find the causes of the European Union’s high incidence of long-term unemployment in the existence of strong employment protection5. In this context, an interesting comparison of three countries, Spain, France and Great Britain, can be found in the article by Petrongolo and Pissarides6.

4 OECD. Adjustments to the OECD’s method of projecting the NAIRU. 2009b.
5 OECD. The long-term unemployed and measures to assist them. Labour market and social policy occasional papers No 7, Paris: OECD, 1992.
Some scholarly articles deal directly with the impact of the economic cycle on unemployment and its duration. The sharp decline in unemployment inflow in the period before the economic crisis was associated with an increase in the incidence of long-term unemployment\(^7\). And at the end of the economic crisis there was also a significant increase in the incidence of long-term unemployment, which increased the risk of hysteresis\(^8\). Or in other words, the average duration of unemployment behaves counter cyclically\(^9\).

The purpose of this paper is to analyse how the recent economic recession impacted the existence of long-term unemployment in the European Union. This paper compares the data for the period between 2007 and 2010. The year 2007 was a year of high economic growth. In 2009 the European Union reached its economic bottom, and in 2010 we could see signs of recovery. All data in this paper that are related to unemployment are taken from the Eurostat database and come from Labour survey\(^10\).

1. Recent economic development

Unemployment and of course long-term unemployment is closely connected with the economic cycle. Therefore it is necessary to briefly mention the development of the gross domestic product during the reference period. In 2007, European Union member states had a 3% growth of real gross domestic product. The three countries, Lithuania, Latvia and Slovakia had a highest growth, about 10%. In 2008, real gross domestic product throughout the European Union only grew by 0.5%. Most member states reported a modest but positive growth. But eight Member States have already reported declines in real gross domestic product. The largest drop was recorded in Estonia, namely -5.1%. The global economic recession hit the European Union fully in 2009. Real gross domestic product in the European Union as a whole fell by 4.3%. The only country in which real gross domestic product increased in 2009 was Poland. The global recession especially hit the Baltic States this year. In Latvia real gross domestic product fell by 18%, in Lithuania by 14.7% and in Estonia by 13.9%. In 2010, the real gross domestic product in the European Union as a whole increased by 1.8%. A decline in real gross domestic product occurred in five countries this year: Greece (-4.5%), Romania (-1.3%), Ireland (-0.4%), Latvia (-0.3%) and Spain (-0.1%).

2. Total unemployment and long-term unemployment

2.1 Development of unemployment and incidence of long-term unemployment

Table 1 shows the data about the overall unemployment rate and incidence of long-term unemployment in the EU Member States between 2007 and 2010. The incidence of long-term unemployment indicates the percentage share of long-term unemployment in total unemployment.

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\(^6\) Eurostat. Employment and unemployment database. [accessed 2011-09-01].
Table 1 Total unemployment rate and incidence of long-term unemployment

<table>
<thead>
<tr>
<th></th>
<th>2007 Total UR</th>
<th>LTU incidence</th>
<th>2008 Total UR</th>
<th>LTU incidence</th>
<th>2009 Total UR</th>
<th>LTU incidence</th>
<th>2010 Total UR</th>
<th>LTU incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>7.5</td>
<td>50.4</td>
<td>7.0</td>
<td>47.6</td>
<td>7.9</td>
<td>44.2</td>
<td>8.3</td>
<td>48.8</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>6.9</td>
<td>58.8</td>
<td>5.6</td>
<td>51.7</td>
<td>6.8</td>
<td>43.3</td>
<td>10.2</td>
<td>46.4</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>5.3</td>
<td>52.2</td>
<td>4.4</td>
<td>49.2</td>
<td>6.7</td>
<td>30.0</td>
<td>7.3</td>
<td>40.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>3.8</td>
<td>16.2</td>
<td>3.3</td>
<td>13.1</td>
<td>6.0</td>
<td>9.1</td>
<td>7.4</td>
<td>19.1</td>
</tr>
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<td>8.6</td>
<td>56.6</td>
<td>7.5</td>
<td>52.6</td>
<td>7.7</td>
<td>45.5</td>
<td>7.1</td>
<td>47.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>4.7</td>
<td>49.5</td>
<td>5.5</td>
<td>30.9</td>
<td>13.8</td>
<td>27.4</td>
<td>16.9</td>
<td>45.4</td>
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<tr>
<td>Ireland</td>
<td>4.6</td>
<td>29.5</td>
<td>6.0</td>
<td>27.1</td>
<td>11.8</td>
<td>29.0</td>
<td>13.5</td>
<td>49.0</td>
</tr>
<tr>
<td>Greece</td>
<td>8.3</td>
<td>50.0</td>
<td>7.7</td>
<td>47.5</td>
<td>9.5</td>
<td>40.8</td>
<td>12.6</td>
<td>45.0</td>
</tr>
<tr>
<td>Spain</td>
<td>8.3</td>
<td>20.4</td>
<td>11.3</td>
<td>17.9</td>
<td>18.0</td>
<td>23.7</td>
<td>20.1</td>
<td>36.6</td>
</tr>
<tr>
<td>France</td>
<td>8.0</td>
<td>40.3</td>
<td>7.4</td>
<td>37.5</td>
<td>9.1</td>
<td>35.2</td>
<td>9.3</td>
<td>40.1</td>
</tr>
<tr>
<td>Italy</td>
<td>6.1</td>
<td>47.4</td>
<td>6.8</td>
<td>45.7</td>
<td>7.8</td>
<td>44.4</td>
<td>8.4</td>
<td>48.5</td>
</tr>
<tr>
<td>Cyprus</td>
<td>3.9</td>
<td>18.6</td>
<td>3.7</td>
<td>13.6</td>
<td>5.3</td>
<td>10.4</td>
<td>6.2</td>
<td>20.4</td>
</tr>
<tr>
<td>Latvia</td>
<td>6.0</td>
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<td>7.6</td>
<td>24.5</td>
<td>7.8</td>
<td>32.7</td>
</tr>
<tr>
<td>EU - total</td>
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<td>42.7</td>
<td>7.0</td>
<td>37.0</td>
<td>8.9</td>
<td>33.2</td>
<td>9.6</td>
<td>39.9</td>
</tr>
</tbody>
</table>


In 2007, the unemployment rate in the European Union was 7.1%. The highest unemployment rates were in Slovakia (11.1%) and Poland (9.6%). The lowest unemployment rates this year in the Netherlands (3.2%), Denmark (3.8%) and Cyprus (3.9%). The highest proportion of long-term unemployment, 74.2%, was found in Slovakia. In seven countries the proportion of long-term unemployment in total unemployment has exceeded 50%.

The slowdown in economic growth was not substantially reflected in the unemployment rate of 2008. It is well known that unemployment responds to product development with some delay. The unemployment rate in the European Union as a whole declined by 0.1 percentage points to 7.0% in 2008. In seventeen countries the unemployment rate decreased this year. The largest decline occurred in Poland, by 2.5 percentage points. Conversely, the biggest increase occurred in Spain, by 3 percentage points. The incidence of long-term unemployment fell by 5.7 percentage points to 37% in 2008. Out of the twenty-seven EU member states, incidence of long-term unemployment grew in 2008 only in four of them. These were Luxembourg, Malta, Portugal and the United Kingdom. In Luxembourg there was a rise in the incidence of long-term unemployment by 3.7 percentage points, while there was also an increase in the overall unemployment rate by 1 percentage point. This suggests that the number of long-term unemployed in Luxembourg this year
grew faster than the number of all unemployed person. It should be noted that Luxembourg showed a lower unemployment rate this year and also a lower incidence of long-term unemployment than the average European Union as a whole. The largest annual decline in the incidence of long-term unemployment occurred in Estonia, Latvia and Poland in 2008. While in the case of Estonia and Latvia overall unemployment rates increased this year too, in the case of Poland, the decline of long-term unemployment occurred with a decline of the overall unemployment rate.

In 2009, the year when the European economy was fully hit by the global economic recession, the unemployment rate was 8.9% in the European Union as a whole, which represented an annual increase by 1.9 percentage points. The unemployment rate this year increased in all Member States of the European Union. The highest annual increase was evident in the Baltic States, Latvia, Estonia and Lithuania. In seven states of the European Union the unemployment rate reached double-digit numbers. In total, the highest unemployment rate was in Spain (18%), followed by Latvia (17.1%). The lowest increase in the unemployment rate occurred in the case of Germany (annual growth by 0.2 percentage points). The lowest unemployment rate however was, as in the previous two years, in the Netherlands. Although the unemployment rate rose in 2009, the incidence of long-term unemployment fell. The explanation for this is obvious. Although the absolute number of long-term unemployed increased, there was a significantly faster growth of the short-term unemployment. The incidence of long-term unemployment in the European Union as a whole was 33.2%. In twenty EU member countries the share of long-term unemployment in total unemployment decreased, while in the remaining seven countries it increased. In five of these seven countries, there was an increase in the overall unemployment rate in the previous year. In 2009, the largest reduction in the proportion of long-term unemployment occurred in the Czech Republic (-19.2 percentage points) and Slovakia (-15.6 percentage points).

![Figure 1 Relationship between the incidence of long-term unemployment and total unemployment rate (average 2007 – 2010).](http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/data/database, own calculation.)

In 2010, there was a partial recovery of the economies of the Member States of the European Union, but a positive impact on the labour market has not yet come. Companies were still cautious. In general, companies reduced the number of their employees. The overall unemployment rate rose by 0.7 percentage points and reached 9.6%. Only three countries had a decrease of the
unemployment rate, Germany (-0.6 percentage points), Luxembourg (-0.7 percentage points) and Austria (-0.4 percentage points). In Sweden, the unemployment rate did not change. The highest increase of the unemployment rate was in Lithuania, Estonia and Spain. The share of long-term unemployment in total unemployment rose significantly to almost 40%. The data from this year demonstrate the fact that some people, who became unemployed in 2009, did not find a new job during the year and so they moved into the category of long-term unemployed. The highest increase of the proportion of long-term unemployment occurred in Ireland (by 20 percentage points) and in all three Baltic States Estonia, Latvia and Lithuania (by about 18 percentage points).

2.2 Relation between incidence of long term unemployment and total unemployment rate

There are data about the total unemployment rate and extent of the incidence of long-term unemployment in the EU Member States between 2007 and 2010 in the Figure 1. This figure can be used for expression of the relationship between the overall unemployment rate and the incidence of long-term unemployment in the EU Member States. Both quantities are average values for the period 2007 - 2010.

From Figure 1 a generally valid statement about the relationship between total unemployment rate and the proportion of long-term unemployment in total unemployment cannot be derived. However, some partial conclusions can be reached. Slovakia in the reference period showed a high average unemployment rate (11.8%), which was associated with a high proportion of long-term unemployment (65.5%). In other words it can be said that in the Slovak Republic from 100 unemployed persons more than 65 people were unemployed for longer than one year. It can be therefore argued that the Slovak labour market policy is not able to effectively fight long-term unemployment. The highest unemployment rate was in Spain (14.4%). The incidence of long-term unemployment in this period was only 24.7%. It would therefore seem that employment policy is effective in Spain, because it managed to find jobs for unemployed persons already in the first year. With a closer look at Table 1, however, we can find that this claim is not correct. From table 1 it is evident that the total unemployment rate in Spain was growing significantly throughout the whole reference period. The rapid growth of new unemployed persons reduced a share of long-term unemployment in total unemployment.

To examine the relationship between the incidence of long-term unemployment and the total unemployment rate regression analysis can be used. We compared the annual changes of the incidence of long-term unemployment and annual changes in the total unemployment rate for all member countries of the European Union, for the last two years. Since long-term unemployed are unemployed who are jobless for longer than one year, we compared the data of the change of incidence of long-term unemployment with one year delay against annual change in the total unemployment rate. Table 2 shows the results of this regression analysis.

Our analysis is quite simplified, since it includes the annual data only for two reporting periods. However, we can note that if the overall unemployment rate changes by 1 percentage point, the incidence of long-term unemployment changes by 2.8 percentage points with a year's delay.

Considerable attention in the economic literature is given to the dependence between the total unemployment rate and long-term unemployment rate. E.g. De Lucia for the analysis of data for the Eurozone member countries used a simple dynamic equation:

\[
LNU_t = \sum_{i=1}^{n} \alpha_i LNU_{t-i} + \sum_{i=1}^{n} \beta_i UN_{t-i} + s_t
\]

(1)

Where LUN is long-term unemployment and the UN is current unemployment rate. De Lucia states that after the permanent shock in unemployment 60% of the unemployed became long term unemployed in the Euro area. Similarly, the OECD states that there is a positive correlation

between the rate of long-term unemployment and total unemployment rate. More precisely, the
OECD says that in Europe up to 70% of unemployed people became long term unemployed\textsuperscript{12}.

Table 2 Dependence of changes in incidence of long-term unemployment on total unemployment change

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>T Statistic</th>
<th>P-Value</th>
</tr>
</thead>
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<tr>
<td>Intercept</td>
<td>-1.69675</td>
<td>0.758285</td>
<td>-2.23762</td>
<td>0.0296</td>
</tr>
<tr>
<td>Slope</td>
<td>2.84402</td>
<td>0.280875</td>
<td>10.1256</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The StatAdvisor

The output shows the results of fitting a linear model to describe
the relationship between Y and X. The equation of the fitted model is

\[ Y = -1.69675 + 2.84402X \]

Source: own calculation

3. Long-term unemployment by age group

In addition to long-term unemployment as a whole, attention should be paid to the structure of
long-term unemployment too. What is important for example is a structure of long-term
unemployment by age. Some age groups are affected by the occurrence of long-term unemployment
more, some less. In this regard, we can consider three age groups. The first age group consists of
young people aged from 15 to 24 years. In this age group a high incidence of long-term
unemployment is high risk, because these young unemployed often never had a job. They do not
create work habits, and some of them even think that "no work is normal." Some of them often
attended high school and so costs for the society as a whole are very high. These young people are
frustrated by their situation and there is the danger of their radicalization. The second group are
people aged from 25 to 49 years, i.e. people in the main working age. And the last group are the
elderly, or persons aged from 55 to 74 years. These people are at the end of their productive age.
There is a risk of social exclusion and the associated risk of falling into poverty for these elderly
people.

\textsuperscript{12} OECD. Adjustments to the OECD’s method of projecting the NAIRU. 2009b, p. 4.
Table 3 contains data about how the long-term unemployed of a particular age group participate in the total number of the unemployed in this age group. Or in other words it is incidence of long-term unemployment for each particular age group.

<table>
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<tr>
<th>Age Group</th>
<th>2007</th>
<th>2008</th>
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<td>15-24</td>
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<td>51.9</td>
<td>80.3</td>
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<td>39.8</td>
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<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Ireland</td>
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<td>31.8</td>
<td></td>
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<tr>
<td>Greece</td>
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In 2007, at a time when the economic situation of member countries improved, the average incidence of long-term unemployment in the European Union as a whole was 42.7%. The greatest incidence of long-term unemployment was seen in older workers. Nearly 63% of all unemployed people aged 55-74 years were unemployed for longer than 12 months.

Slovakia and Belgium had more than 80% incidence of long-term unemployment among the oldest persons. The lowest incidence of long-term unemployment was shown by the young, only
26.1%. With closer look at individual countries we can find that the highest incidence of long-term unemployment was in the oldest group of workers in all countries surveyed in 2007, with one exception, namely the Czech Republic. The Czech Republic had the higher rate of long-term unemployment in the group 25-49 years. However, the highest long-term unemployment in the age group 25-49 years was in Slovakia.

In 2008 the overall unemployment rate fell slightly and the incidence of long-term unemployment decreased to 37%. The decline of long-term unemployment in the European Union as a whole occurred in all observed age groups. The order of age groups in terms of incidence of long-term unemployment has not changed. Also in 2008 the highest incidence of long-term unemployment was in the oldest group of people, while the lowest in the group of the youngest people.

In 2009, the overall unemployment rate in the European Union increased to 8.9% and partly due to this, the incidence of long-term unemployment decreased to 33.2%. The incidence of long-term unemployment has decreased in age groups 25-49 and 55-74 years. In the group of young persons, the incidence of long-term unemployment increased slightly, despite the fact that the overall unemployment rate in this age group increased by more than 4 percentage points. It seems therefore that the situation of younger workers in relation to the economic crisis worsened. The number of long-term unemployed younger workers was increasing faster than the total number of unemployed in this age group already in 2009.

In 2010 the overall unemployment rate in the European Union further increased to 9.6%, but the incidence of long-term unemployment increased to almost 40%. We can see the increasing incidence of long-term unemployment in all three age groups. The largest annual incidence of long-term unemployment occurred in the age group 55-74 years. Increasing incidence of long-term unemployment in all three age groups was associated with an increase in the overall rate of unemployment in these groups. In other words, the number of long-term unemployed in all three groups increased more than was total increase of number of unemployed in these groups. Slovakia in 2010 showed the highest incidence of long-term unemployment in the first two age groups. Belgium had the highest incidence of long-term unemployment in the group of oldest. It is worth noting that the lowest incidence of long-term unemployment of young persons for the entire period was in the Nordic countries, Denmark, Finland and Sweden.

**Conclusion**

Long-term unemployment is a major problem for the European Union as a whole and especially for some of its Member States. Long-term unemployment was strongly influenced by the recent economic recession. At the time before the economic crisis, the total number of unemployed declined, but the incidence of long-term unemployment increased. In several EU countries, the incidence of long-term unemployment exceeded 50% before recession. The fall in gross domestic product affected with some time delay the labour market. The rapid increase of new unemployed people was associated with a decrease of the incidence of long-term unemployment. Last year, although there was a slight economic recovery, employers were still cautious in recruiting new employees. Many people who became unemployed in the time of economic decline remained unemployed and moved into the category of long-term unemployed. Long-term unemployment affects with varying intensity different age groups. The highest incidence of long-term unemployment could be found in the group of older workers.

Because of the large economic and non-economic costs caused by long-term unemployment, it is necessary that the employment policy focused just on this group of people. There is no one general measure that is effective at all times and everywhere. It depends especially on the situation on the labour market, or precisely, whether there is greater supply or demand. In the case of excess of demand, it is necessary to increase the motivation of long-term unemployed to find work. In the case of excess supply, it is necessary to activate the demand for labour.
Finally, it should be noted that the reported statistics of long-term unemployment are not always completely informative. Long-term unemployment has to be put into the context with other labour market characteristics, such as unemployment frequency and the development of economically inactive population.

References

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PRODUCTION BRANCH DEVELOPMENT AND GOVERNMENT'S ECONOMIC POLICY

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Abstract. This paper analyses the impact of several types of government’s policies on the process of production branch growth, reviews the effects of government policy on economic development. Several economic growth models are analysed. Paper describes the role of government policy on economic growth, specifically on production branch. Paper begins with the empirical relationship between general economic development and government policy. The paper presents a model of development that offers possible explanations to the relationship presented.

Keywords: government policy, production branch, economic modelling, government spending, economic growth

Introduction

The economic situation in the Baltic countries has been more positive than in most other advanced economies over the last year. The Baltic countries have successfully managed to return to growth after a recession. After significant growth during the first half of the year, GDP forecasts improved for 2011, to 4.3% and 4.2% in Latvia, and to 6.3% and 6.7% in Lithuania and in Estonia, respectively. (see Table 1)¹

Table 1 Macroeconomic indicators, 2010-2013

<table>
<thead>
<tr>
<th>Macroeconomic indicators, 2010-2013</th>
<th>2010</th>
<th>2011f</th>
<th>2012f</th>
<th>2013f</th>
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<tr>
<td>Real GDP growth, annual change in %</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden (calendar adjusted)</td>
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<td>2.2</td>
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<td>4.3</td>
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<td></td>
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<td>Consumer price index, annual change in %</td>
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<td></td>
<td></td>
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<td>4.5</td>
<td>2.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1.3</td>
<td>4.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Current account, % of GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
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<td>7.3</td>
<td>7.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Estonia (incl. capital account)</td>
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<td>6.8</td>
<td>3.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Latvia</td>
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<td>1.5</td>
<td>-0.1</td>
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</tr>
<tr>
<td>Lithuania</td>
<td>1.8</td>
<td>-1.6</td>
<td>-2.5</td>
<td>-2.7</td>
</tr>
</tbody>
</table>

Sources: National statistics authorities and Swedbank.

Although Latvia’s economy has grown slower than Estonia and Lithuania during the recovery, in the second quarter growth accelerated. The euro introduction in 2014 is still included in government main scenario; however, there are considerable risks for the euro introduction, such as defeating inflation while cutting the deficit. In a worse global scenario, it may become more difficult to cut the deficit but easier to fulfil the inflation criterion. Even if there is a political goal to fulfil the euro criteria, challenges for Latvian economy will appear. The general elections in September will raise uncertainties with regard to the budget and the structural reforms. As well as

new government policy vectors remain unknown. The unemployment rate is falling, thus slowly improving the situation of households.

In the second quarter of 2011, the Latvian GDP grew by 5.3% in annual terms investments, and consumption all contributing. The first-quarter growth was based on strong increase in export, improving the contribution of net exports to GDP growth this due to positive feedback from international demand. The situation with budget balance in Latvia looks rather confident in comparison to other world economies (see Figure 1). In 2010 the general government budget deficit was determined by the deficit in the central government budget and local governments budget the social insurance budget has run at a surplus in the previous years, though in 2009 the deficit has appeared in it.

Similarly, the average level of the budget deficit in the EU Member Governments continued to grow in 2009. As it can be seen from the Figure 1, in EU Member Governments the budget deficit was registered in 2010.

![Figure 1 General government budget balance and debt in 2010 as % of GDP](Source: Eurostat)

Although domestic consumption is gradually recovering and thus allowed increase of turnover in the local market. Industrial growth in Latvia mostly depends on exports, including the increase of prices for the exported products. (Figure 2).

![Figure 2 Exports and Imports of Latvian Goods, mln Ls](Source: CSB)

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In March exports of goods made another record exceeding the mark of 500 million. Compared with March 2010, exports have risen by 38.5% to 502.9 million lats. Even faster growth of 39% has been registered in imports. Consequently, in March foreign trade balance deteriorated and a deficit of 122.3 million Ls appeared. Significant growth was observed in manufacture of metal where exports rose by 72.6% compared with March 2010, previous years data are presented in Figure 3. In the coming months the export growth rate will gradually slow down apart from separate monthly peak performances.

![Figure 3 Latvian manufacturing branch structure 2008-2010](image)

It should be noted that Latvia’s export volumes still lag far behind those of the other two Baltic Governments. For example, Estonia in March broke another record by reaching the export volume of 773 million lats. As in Latvia’s exports mostly the goods with low added value are dominating (see Figure 4).

![Figure 4 Export by products 2009 million Ls](image)

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1. Manufacturing branch

Looking at manufacturing branch itself, in March 2011 industrial output rose 1.4% compared with February. Manufacturing showed the increase of 3.7% achieved in manufacture of computers and electronic equipment, metal products, wood and wood products, pharmaceutical and chemical products, which in March reported growth by more than 6%. Due to a lower base effect in annual terms industrial output in March grew by 9.8%, of which manufacturing industry posted an increase by 12.5%. In the first quarter of 2011, year on year, according to the seasonally adjusted data, the industry had dropped by 2%, of which manufacturing was 3.1% down. Besides, in the second half of the year the base effect disappeared. The large production falls at the end of 2008 and during the first two quarters of 2009 has led to a record low capacity utilization rate in the manufacturing sector, thus new investments were delayed.(see Figure 5) Therefore the growth of industrial output in annual terms will decrease.

![Figure 5 Industry indicators 2005-2009](image)

The price growth indicated over the last year in a number of manufacturing industries has allowed raising the profits without increasing output. For example, in 2011 Q1, excluding the impact of pricing – in constant prices, exports grew by 21.1%, and imports – by 23.9%. The biggest growth was observed in the group of intermediate consumption goods. However, the price increase strategy cannot be exploited permanently and will have to be replaced with rising of competitiveness by increasing the production capacity and boosting of productiveness.

![Figure 6 Productivity and wages in production sector (annual growth)](image)
Latvia meanwhile is following the proven path of increasing the quantity of existing goods and raising the prices. The growth of manufacturing industry will depend on the ability of businesses to increase the sales of their products in the foreign markets, the demand in which is steadily rising; in 2011 the manufacturing volume may increase by 8-10%.

Accelerating wage growth creates extra pressures for increasing production prices, which, in turn, eventually affect investments. Production prices have been growing since the last quarter of 2010, founded heavily on a pickup in labour costs, while other inputs (machinery and material) have grown only marginally. (see figure 6, 7 and 8)

If price growth accelerates again to unsustainable levels, this will inevitably create imbalances and have a restraining impact on investment and construction volumes.

2. Government policy

As soon as Latvia defined its economy and welfare system in a distinctly neoliberal way, this have not changed due to any crisis measures (e. g. some protectional measures. Due to strict neoliberal policy, some authors declare that the neoliberal construction of the Maastricht Treaty has brought the Euro area to the brink of collapse. (a monetary union without a political union - see Klaus Busch and Dierk Hirschel 2011) In other hand the neoliberal Baltic governments (Estonia, Latvia, and Lithuania) lag behind the other CEE countries in important indicators of economic development and social inclusion. In the absence of significant protection by industrial policy and social welfare institutions, both private businesses and other social groups are “disembedded” and exposed to world market pressures. However, the Baltic economies achieved superior stability in macroeconomic measures, due to the dominance of monetary and fiscal institutions in guiding their economic life.

Andre Gunder Frank described the term ‘development of underdevelopment’ to underline a situation where an underdeveloped country integrated in the international economic system will be always a ‘developing’ country. The process of development of underdevelopment begun in Latvia as result of the process of transition from socialism to capitalism, mainly neoclassical policies were

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5 Fiscal Crisis in Europe or a Crisis of Distribution? Özlem Onaran Middlesex University PERI june 2010 working paper series Nr. 226
applied; government placed on the financial system’s the role of promoting economic development.

This is especially relevant, as since the end of both Gold Standard and Bretton Woods’s system; the financial system has split in two: one part continues to have contact with the real economy, but the other established itself as a separate and autonomous entity with no contact with the real economy. This means the subordination of development, this of economic policies, to the financial market’s interests.

Latvia lacks goods and services with high added value. The basis for further successful economic development lies in the model of Latvia’s innovative development, which is an important competitiveness factor in the times of crisis. In this regard, the question of funding of this direction arises.

During the period of 2004 and 2006 Latvia had the first opportunity to gain the support of the EU structural funds. The Cabinet of Ministers of Latvia has approved legislative program "Entrepreneurship and Innovation", as well as the National Program of innovation, which was merged into the Program of Competitiveness and Innovation 2007-2013. The program continues the legally signed Lisbon treaty, which includes the main areas of economic development of Latvia.

A number of legislative documents, based on this study, is aimed at improving the legislative procedures and reducing the administrative barriers, has been adopted in the form of legislative actions in 2010. At the moment there is a change to the basic strategy of the EU 2020 on "INNOVATION UNION". EU directive - SEC (2010) 1161 is taken into account, which basic principle is based on a strategic approach to innovation, aimed at simplifying of legislation acts and administrative barriers to innovation.

Requirements that are necessary for cooperation are implemented quickly; nevertheless planned changes in the industry are fragmented and declarative. Goals do not become effective policies. To ensure successful sustainable development the government needs to keep speed tempo in the planning process of existing policies; to expand branch understanding of sustainable development and establish cooperation networks on both international and local levels.

Since the restoration of government hood, Latvian government has gradually moved from short, intuitive ad hoc decision-making to understanding that making decisions must be a deliberate process, predicting future scenarios, weighing the benefits and costs in the short, medium and long term.

As well as a long-term perspective, the concept of competitiveness and sustainable development entered in the Latvian system of planning under the influence of international commitments and planning practices. The concept of sustainable development in the Latvian public space appeared only around 1995 and its increased use is observed only since 2000. Sustainable development is most often seen declarative as a question of environment and natural resources quality; as a problem of a single ministry, not reflecting in planning policies of other branches. Short-term interests and desired solutions do not correlate with the dynamics of the government budget. In general, a reflection of sustained development in the current practice of planning policy can be viewed as a tribute to the initiatives of international politics, which do not have actual enough content for Latvia.

In the foundation of Latvian national economy growth lies an unstable, traditional and reacting to consumption, model of economic development, rather than the desire to go past ahead of trends, modelling alternatives, the choice of sustainable growth and consumption. Existing competition and unequal position between the competitiveness of economy, social inclusion and environmental sustainability goals, leads to the fact that experience of policy planning, arguments applied; government placed on the financial system’s the role of promoting economic development.

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of economic competitiveness prevail over the principles of sustainable development [Sustainable Development: EU Strategy, 2009].

The current public administration's view of sustainable development's sectorial nature and mutual autonomy in spheres of planning and policy implementing, does not contribute to the governments leadership in the transformation of the economy. Therefore, the government at the local level, as one of the leading creators of services, and contractor must establish a precedent of sustainable development that creates and promotes the culture of sustainable national economy and consumption that are not only words, but also practice. If the government's policy of sustainable development is equally demanding in relation to its social order and in relation to business models and lifestyles, that this sequence will promote loyalty in those sectors of society, where consumption, which corresponds to sustainable development is only associated with "unnecessary costs". Currently Latvia has no interest and is not ready to receive economic benefits from the rapid development of countries in Asia. Among other EU countries, Latvia sees its future economic competitiveness in the development of the knowledge economy, where the main role is assigned to science and technology. Therefore, along with economic orientation towards the East, it is necessary to estimate Latvia's opportunities for development and implementation of technology, human resources as also collective capabilities of the EU's competition with China and India.

In cooperation with employers and other social institutions, the government needs to estimate, which of competitive market's niche Latvia could hold in relation to EU and Asia. Taking into account current trends of development and proportional risks, the government could share some risks with entrepreneurs and educational institutions, trying to become a part of the Asian market in service product and talent preparation.

**Figure 3: Level of public spending (1996, 2006) as percentage of GDP**

![Figure 3](image)

*Source: Eurostat*

As fiscal policy in Latvia in the years after EU accession was procyclical, the necessary reserves were not created. Consequently, the fall in tax revenues due to the recession, the

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government’s need to lead out the largest domestically owned bank, forced Latvia to turn to the IMF and the EC for financing its expanding budget deficit. Latvia must now undertake a challenging fiscal consolidation to put its budget on a sustainable growth and to obtain further funding. The most important goal for the government is to return to a situation in which government revenues compensate expenditures. \(^1\) Unfortunately, too often the most attention is given to specific consolidation numbers, not to the specific result.

There are several empirical connections between economic development and fiscal policy. First, the relative size of government trends upward as an economy develops a phenomenon that is known as Wagner’s Law. This feature is exhibited in Figure 9, which gives the historical ratio of government purchases to GDP, averaged over 27 currently developed countries.\(^1\)

**Different taxes, % of total tax revenues (2007)**

![Figure 10 Different taxes, percentage of total tax revenues (2007)](image)

Second, economic growth rates have typically risen, or at least remained constant, in the face of strong upward trends in taxation and government expenditures. Finally, the relative size of economy differs significantly across countries at similar levels of development. Tax rates and government expenditure level in today’s developing countries are not much below those of today’s developed countries (see Figure 10).

Tax policy worldwide is influenced by the globalization process and the greater international mobility of economic activity, as capital and labour are now easier to move across the borders (see, e.g., Hines and Summers, 2009; Norregaard and Khan, 2007). The general trend worldwide is thus to use expenditure taxes (e.g., value-added tax (VAT), excise) more than income taxes (see, e.g., Myles, 2009). The latest OECD study of possible tax responses to the financial crisis (OECD, 2009) argues that the focus should be shifted to property and general consumption taxation (the taxes least harmful for growth). The general suggestion is to set the tax that is less vulnerable to tax evasion relatively higher (see, e.g., Gordon and Nielsen, 1997). Costs of tax evasion from VAT are smaller than those of income taxes. The key problem with the current tax system in Latvia is that, although the total tax burden is relatively light (ca 30% of GDP vs. an average of ca 40% in the EU25), it is not well-balanced, and distorts the economic structure and the motivation to pay taxes. There is a relatively high tax on wage income, which is subject to tax evasion due to difficulties in collection. The personal income tax rate is flat at 23%, although due to tax allowances the effective tax rate is progressive in its essence. Comparing tax revenues in Latvia with the average EU level, it can be seen that capital taxes currently constitute a much smaller part of government revenues, while the shares of labour and consumption taxes are closer to the EU average. At the same time, the implicit tax rate on labour in Latvia is only 31% (36% in the EU25).\(^2\) In order to receive further funding,

\(^1\) According to the EU Stability and Growth Pact, the objective is to fiscal deficit below 3% of GDP is permissible; see http://ec.europa.eu/economy_finance/other_pages/other_pages12638_en.htm.

\(^2\) On Wagner’s Law, see Weil (2005, Figure 12.3, p.342). He shows the pattern of rising government shares for the UK, US, Japan, France, and Sweden during the 20th century.

\(^3\) Signed on 13 July 2009 (http://www.fm.gov.lv/?eng/news/49417)
the Latvian government needs to fulfil the obligations to which it has committed. The general government budget deficits are capped at 10% of GDP (ESA basis) in 2009, 8.5% in 2010, 6% in 2011, and 3% in 2012.\footnote{According to the Eurostat definition, the implicit tax rate is computed as the ratio of total tax revenues to a proxy of the potential tax base for each economic function.}

This difference between the underlying tax burden and government revenues points to tax evasion.

3. Methodology

There are three types of economic agents in the model. First, households that supply labour to each sector. Second, landowners hire labour and operate the traditional technology to produce goods. Finally, a Government sets fiscal policy to maximize its own welfare and the welfare of the two types of private sector households. It has also been shown that the fiscal performance of countries is affected by the way budgetary processes are structured (e.g., Von Hagen and Harden (1995), Hallerberg, Strauch and von Hagen (2001)).\footnote{Halleberg, M., Strauch, R., von Hagen, J. (2001) “The use and effectiveness of budgetary rules and norms in EU Member Governments,” Report prepared for the dutch Ministry of Finance by the Institute of European Integration Studies.}

On the early stages of growth government spending is dominated by purchases of both consumption and investment goods. In the model, the government chooses an income tax rate and decides how much of the tax revenue to consume itself, how many consumption services to provide to the private sector, and how much to invest in public infrastructure. Modern and traditional private sectors of the economy are affected differently by the government. The traditional sector is harder to tax. Typically, large fractions of the labour employed in the traditional sector receive wages and much of the traditional sector’s output is consumed without being traded and recorded on a regular basis (see Alston, Hatton 1991).\footnote{Alston, L. and Hatton, T., 1991, “The Earnings Gap Between Agriculture and Manufacturing Laborers, Government expenditure and economic growth in the EU: long-run tendencies and short-term adjustment. Alfonso Arpaia* and Alessandro Turrini European Economy. Economic papers 300. February 2008. http://ec.europa.eu/economy_finance/publications/publication12024_en.pdf}

A second strand of literature examines the link between expenditure and economic growth over time. Some work aims at describing long-term tendencies in history (Tanzi, Scuckencht 2000). Other work is more specifically focused at the empirical estimation of elasticity of government expenditure with respect to output, often with the aim of providing an empirical test of “Wagner law”, i.e., the hypothesis that government expenditure increases more than proportionally with economic activity. The underlying idea is that goods and services generally provided by the government sector, including redistribution via transfers and the activities of public enterprises, have an income elastic greater then one, i.e., are superior goods. This last strand of studies includes the empirical analyses most closely related to that provided in this paper.\footnote{Government expenditure and economic growth in the EU: long-run tendencies and short-term adjustment. Alfonso Arpaia* and Alessandro Turrini European Economy. Economic papers 300. February 2008. http://ec.europa.eu/economy_finance/publications/publication12024_en.pdf}

Since the impact of government expenditure on GDP is associated with the composition rather than with the size of government expenditure, as the economy grows, governments need to face growing demand for public goods and services, adapt wages and salaries of government employees to meet higher revenues in the private sector, revise the degree of generosity of transfers. This process of adaptation of government expenditure to changing potential output may take time. The possibility of distinguishing the long-run from the short-run impact of potential GDP on government expenditure permits to measure the speed at which this process of adaptation of government expenditure to a new value for potential output takes place.

The traditional sector also benefits less from the government purchases because traditional production relies less on public infrastructure, and because traditional producers typically reside in rural areas where government consumption services are harder to deliver.

4. The relationship
The aim of paper is to establish dynamic relationship between government expenditures and GDP in the EU-15 countries over the 1996-2008 periods. In the absence of any ‘active’ policy intervention, the public budget moves automatically with the economic cycle. Government transfers, such as unemployment benefits, increase as the economy slows down and unemployment rises, while at the same time tax revenues on labour, capital income and consumption fall. The opposite happens when the business cycle is improving. These automatic movements of the government budget resulting from the business cycle are referred to as the cyclical component of the budget. The structural component of the public budget is obtained by subtracting the automatic cyclical component from the actual budget balance. However, this structural component may also be systematically linked to the economic cycle. For example, the government may reduce tax rates whenever activity falls below potential.

Investigating the effects of an increase in government purchases depend on other factors, such as the degree of openness.

\[
\left( NT_i^{NA} - G_i \right)/Y_i = \left( NT_i^{NA}/Y \right) \left[ \left( \hat{N} T_i + \hat{Y}_i \right) - \hat{Y}_i \right] - (G/Y) \left( \hat{G}_i - \hat{Y}_i \right),
\]

where:

\( NT_i^{NA}, G \) and \( Y \) are, respectively, the anti-logs of \( n_i^{NA} \) (unadjusted or non-cyclically-adjusted net taxes (real and in natural logarithm)), \( g \) and \( y \), while a hat denotes the percentage deviation from the initial value (the impulse response) and \( \varepsilon \) is the average elasticity of net taxes with respect to real output (calculated in Van den Noord, 2000; and OECD, 2005).

Rather than exploring the relation between economic activity and various definitions of subcategories of government expenditure as in other papers, current model analyses overall primary expenditure. Government expenditure reacts to changing potential output as a result of the adaptation of the public sector to a modified size of the economy. However, it also true that government expenditure translated into aggregate demand and then changes GDP levels, so it is difficult to determine whether the relation between government expenditure and GDP goes from the latter to the former. Using cyclically-adjusted variables implies that the temporary deviations from the long-run relationships do not reflect the evolution of the business cycles, but rather temporary deviations due to a lagged response of fiscal authorities in adjusting expenditure to changes in potential output. The purpose of the model is to show how economic growth, in particular the economic transformation from traditional to modern production methods, interacts with a country’s fiscal policy. The same good is produced in the traditional sector. Production in the traditional sector is based on methods that depend on land and not on physical capital. Each traditional producer owns a fixed plot of land.

5. Results

The direct benefit of a higher tax rate is mediated by a reduction in the tax base, as workers reduce their labor supply to the modern sector when it is taxed more heavily than the traditional sector and as private physical capital intensity falls with taxation. If the traditional sector is taxed as heavily as the modern sector, then this expression vanishes, since labour costs in the traditional sector will not be lowered by a rise in taxes.

The rise in government and taxation are associated with rising or constant economic growth rates. Today’s developing countries have larger government sectors than did today’s developed countries at similar stages of development.

The model of the previous section to offer possible explanations for each fact. In particular, if the pace of technology in the modern sector exceeds that in the traditional sector, i.e. decreases over time, then the income tax rate rises over time. This offers a possible explanation for the first fact - the amount by which the tax base falls, as tax rates rise, is increasing in the size of the traditional sector. The marginal cost of increasing the tax rate is high when the traditional sector is
large, and declines over time as the traditional sector shrinks. Thus, during the structural transformation from traditional to modern production, the economy experiences rising tax rates. Combined with the fact that the share of labour in the modern sector rises, the relative size of government unambiguously increases.

The second development fact, governments that there is a rise in the size of government and taxation over periods when economic growth rates are increasing or at least constant. The presence of a traditional sector that is hard to tax is also important in explaining this fact.

Now both the tax base and the tax rate grow over the course of development. This causes government investment, which is a constant fraction of the tax revenue, to grow as a fraction of total output and income. The increasing rate of government investment works against the diminishing returns to investment, and may result in a constant or even rising growth rate. Thus, fact may also simply be a by-product of the economic transformation. The economic transformation increases the tax base, leading to a rise in tax rates. The rise in both the tax base and tax rates increase the rate of government investment over time, which helps to offset or mediate the diminishing returns associated with a growing stock of public capital.

A third explanation for fact is discussed. First, governments that place less weight on the private sector’s welfare will set higher tax rates. As noted by Glaeser, LaPorta, Lopes de-Silanes, and Schliefer (2004), almost all developing countries after World War II were dictatorships. A lack of institutional constraint on executive power is likely to be correlated, although not perfectly so, with relatively low regard for private sector welfare. Acemoglu, Johnson, and Robinson (2005) and Acemoglu, Johnson, Robinson, and Yared (2006) provide evidence that Europe and its Western offshoots had institutions that placed constraints on executive power early on in their development, where currently developing countries do not.18

Thus, the relatively high tax rates of currently developing countries could stem from a government with relatively few institutional constraints on its power.

Thus, high tax rates may appear in developing countries with concentrated landownership and political regimes that fail to limit the disproportionate influence of the wealthy. To the extent that this combination is commonplace among developing countries.

Conclusion

Nowadays currently developing countries have high tax rates and government shares relative to their government of development. The analysis also shows that high tax rates and government consumption at early stages of development can slow the structural transformation and economic growth. The size of government expands as an economy develops over time. Paper results suggest that this tendency is, in part, a natural consequence of the structural transformation. During the structural transformation, an economy shifts from traditional to modern production methods. Paper proposes that this causes the marginal cost of taxation to fall and tax rates to rise. Rising tax revenues, allow the government to increase the level of public investment over time. Increasing levels of investment help to offset the diminishing returns associated with public capital accumulation. Thus, as the public sector expands, the economy’s growth rates do not necessarily decline. Rising tax rates and government shares are a natural outcome of the structural transformation associated with development. There is a positive effect on output with a economy multiplier. The real exchange rate appreciates and the public budget deteriorates. Positive output suggests good responses of private consumption and investments on spending, while increasing taxation imports rise and exports fall, implying a deterioration of the trade balance, which indicates that for this group a substantial part of the fiscal stimulus leaks abroad. Government expenditures tend to migrate on other EU countries, in particular the main trading partners.

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WHITHER LITHUANIAN ECONOMY?
BALANCED OUTCOME OF ITS PROGRESSES AND REGRESSES

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Abstract. Market economy is a mighty and well-proven accelerator of any economic development. Independence of Lithuania and its transition to a market economy provided the basis for such accelerating development of this country. Therefore, after regaining of independence, it was commonly expected that such a long-term, mighty and accelerating economic grow will be the leading trend in the development of our country. This belief was especially intensified by common contrasting of the new market economy with the old planed one. The transition of the country from the planed to market economy has been seen as the transition from stagnation and poverty to impetuous, active, multisided, persistent, long-term economic grow and lasting wealth.

The report analysis data representing the long-term trends in Lithuanian economy and shows that there is no ground to continue holding this view and that the opposite conception of long-term stagnation is much more appropriate characteristic of this economy. It is shown that the prevailing belief in the long-term grow of country’s economy distorts general perception of economical processes in this country. It produces the one-side view, according to which all positive, rising fluctuations are seen as manifestations of the long-term grow and all negative, drop fluctuation – as incidental short time events. The role of this distorted view on country’s development in causing non-realistic economic expectations and, what follows, irresponsible investment policy has been discussed.

Keywords: long-term trends, market economy, stagnation economy.

1. Problem

Market economy is a mighty and well-proven accelerator of any economic development. Independence of Lithuania and its transition to a market economy provided the basis for such accelerating development of this country. Therefore, after regaining of independence, it was commonly expected that such a long-term, mighty and accelerating economic grow will be the leading trend in the development of our country.

This belief was especially intensified by common contrasting of the new market economy with the old planed one. The transition of the country from the planed to market economy has been seen as the transition from stagnation and poverty to impetuous, active, multisided, persistent, long-term economic grow and lasting wealth. The highly efficient market economy was seen both as a mighty engine of this intensive economic development. Highly developed West European countries with market economies seemed to provide a strong support for such a belief. The regaining of independence has been tightly connected with the idea of persistent long-term economic advance of this country. The idea of the long-term economic grow has been prevailing during all years of independence. All further events in our economical development have been seen just in terms of this long-term grow. All economic increases were seen as manifestations of this

grow all multiple drops and depressions as only irregularities, short–term drops, exceptions of the general trend. The most important consequence of this prevailing “rose-colored” myth on long-term development was distortion in the perception of quite different economic processes and events in our country.6,7

All shadows and recessions were seen as frustrating but rather deviant events, caused by “bad guys” or outside incidental influences. They were supposed to be only notorious exceptions that (as all exceptions) only support the general rule – the belief on long-term grow of Lithuanian economy.

A dissonance to this common believes brought the data of long – term development of Lithuanian economy provided by G.Černiauskas, N.Černiauskas and I.Panov8. These data showed unbelievable slow progress of Lithuanian economy. According to their data, during the 20 years of independence the GDP in this country increased only 5 %. Of course, it is not the expected persistent and intensive grow. Even if we could qualify the 5 % in 20 years as some grow, it is rather snail's pace grow, not very different from the grow in the socialist planned economy.

Our report tries to go further. We will review the prospects of the total rejection the belief in any long-term development of Lithuanian economy and we investigate the opposite concept. According to it the leading long-term trend of the country’s economy is stagnation. We intend to show the feasibility of this opposite view.

We analyse data representing the long – term trends in Lithuanian economy and we will try to show that they urge us to refuse seeing economical development of the country only through rose-colored spectacles and to ask ourselves a crucial question - what is going on in reality? Is it true that the leading process is the persistent, dynamic market economy stimulated grows? Or the truth is long-term ever increasing recession?

Our general suggestion is that our economic shows many signs of long-term fundamental stagnation or, at least, of highly delayed, decelerated and this way totally irrelevant for market economy snail's pace- development.

In following reports we will analyse the different theoretical approaches to the explanation of the stagnation of Lithuanian economy.

2. Long term grow or stagnation? Data on the long-term progress of Lithuanian economy

As told, prevailing ways of collection and processing economical data favours the prevailing idea on long-term grow. Thus, in this part of our report we re-consider both the economical data and the ways in which they are analysed.

We will focus on the most general characteristic of the economic development – its general GDP and GDP per capita. Based upon official statistical data we can see following. The development of both indexes cannot be characterized as significant. GDP shows increase in 2010 in comparison with 1990 only on 16 %. Thus its extreme minimum and maximum values have for 1994 and for the 2008 which have made 77 % and 177 % from base 2000 accordingly. In the current prices we have GDP 134,1 LTL million in 1990 and 94 641,9 LTL million in 2010.

However it is not the whole story. However these prices don't consider inflation which the Lithuanian statistics gives in a file as chain-linked volume. In the prices excluding inflation we see that GDP doesn't hold out to those parameters which characterize it in a plane of real growth of the Lithuanian economy. So GDP in 2010 has made in a context chain-linked volume only 70 102 LTL million against 94 642 LTL million in the current prices. Differently GDP in 2010 in the prices of base 2000 was lower officially declared on 26 %. It means that for the given period it is necessary to correlate GDP per capita towards its reduction by the corresponding size.

(In above resulted linear diagrams No 1-3 for base is taken 2000 when figure GDP in 2000 for diagrams No 2 and 3 coincides and is equal - to 45 885,766 LTL million). However here it is necessary to notice that in other cases it is difficult to ordinary user to compare data files given by the Lithuanian statistics as they have various base for possible comparison.

Very few the open data on the period from 1990 till 1994 when the economy was on recession. After 1994 and since 1995 of the data already much more as the economy up to 2008 was on lifting. Further in accessible databases distinctions on reference points also are noticed. This all statistical confusion complicates to do operative correct comparisons of real state of the economy and can become object of manipulation. Depending on objects in view it is possible to choose the periods of short-term recessions or economy growth, ignoring thus as the long-term period, for example with 1990 for 2011 and real incomes per capita at purchasing power parity.
When we compare indexes annual GDP (Graph 4) it to the same indexes GDP (Graph 5) per capita we will receive almost identical picture of dependence. This identical dependence together with figures of schedule No.6 grants us the right on correlation to real GDP per capita in context GDP chain-linked volume.

As in the early nineties the last century litas hasn't been entered yet, and its purchasing capacity in relation to roubles and intermediate money (called among the peasants “animals” or “vagnorkes”) was defined from calculation 1 litas – 10 roubles to estimate real GDP Lithuania on a boundary 1990 is inconveniently.

Proceeding from the data in 1987 GDP per capita was in the USSR 8363 $ against 18180 $ in the USA that made 46 %. Here however it is necessary to make a number of correlations. The first of them consists that the standard of living in the Lithuanian Soviet Socialist Republic was above, than on the average about the country. By different estimations this excess fluctuated on the average limits about 8-10 %.

In the statistics of gross national product considered in the developed countries, for example, repair of apartments and cars, reception of incomes by many services of a private sector, as for example tutoring or by renting rooms in a vocation, etc., and also the goods made within the limits of a subsistence economy, for example, vegetables and fruit from personal plots and in-home within the limits of "shadow" economy and sold then in the markets, were in the USSR statistics not consider.

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Further in Gregory and Stuart's calculation weren't considered artificial cut prices in the USSR on energy carriers. Other goods and services getting to statistics for example, building materials, transport, utilities, hotel accommodation, services and the goods entering into the state consumption - were got at much lower prices, than in the Western countries.

Failure of reflection of some first factors in the official statistics and the low prices for the second factors underestimated nominal gross national product and the size of real gross national product per capita.

All this number of examples urged to show that real gross national product in the Lithuanian Soviet Socialist Republic per capita made by different estimations of 55-60 % from level of the USA.

According to the Lithuanian statistics\(^{10}\), in Lithuania in 1993 GDP per capita was $ 770 and in 2010 – $ 11045, that makes only 23 % from 2010 level of the USA (2010 - $ 47,200)\(^{11}\).

If to count given GDP per capita in context GDP chain-linked volume which has made only 74 % from nominal GDP, real GDP per capita in 2010 will make $ 8394 , that only on $ 31 exceeds an indicator for all the USSR in 1987. Thus we can ascertain reduction of the Lithuanian relative well-being in comparison with the end of 80th years of the last century approximately in 2,5 times and stagnation on PPP (purchasing power parity) in absolute nominal figures (Graph 6).

![Graph 6 Gross domestic products per capita at current prices, USD](image)

In the given research we yet didn't estimate influence on GDP a rate of inflation which for all consumer goods and services has made since economy growth, i.e. since 1994 till September, 2011 of 335 %. And its growth for separate kinds of consumption of the goods and the services providing base well-being of the population has appeared unprecedented in contemporary history of Lithuania (Graph 7).

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\(^{10}\) Statistikos departamentas prie Lietuvos Respublikos Vyriausybės  
\(^{11}\) CIA the world factbook 2010
So the prices for the same period on food and non-alcoholic beverages and health have grown approximately in 5 times or on 500 %, on housing, water, electricity, gas and other fuels more than in 9 times or 900 %, on gas more than seven times. And if the increase in a consumer price index at goods and services in comparison with base 2005 for September, 2011 has made about 34 % (and on the beginning of 2010 almost 30 %), at risk of poverty threshold by type of household and year has grown for single person from 335 litas in 2005 to 701 litas in 2010, and for a family of 2 adults with 2 children younger than 14 years from 746 litas to in 2010, and for a family of 2 adults with 2 children younger than 14 years from 746 litas to 1472 litas accordingly or more than in 2 times that fixes more in 3 times life deterioration, than in the Graphic No.7, and consequently also reduction real GDP per capita.
Not going into the details of other theoretical surveys of economic development which we will consider in the following article, we can ascertain only that in Lithuania the model of economic growth known as growth of economy at the expense of credits prevailed. Here it is necessary to note at least four important parameters of such Lithuanian growth, or injection of money in the Lithuanian economic space, namely, presence of a public debt which has made for I.Q 2011 about 37,1 billion litas; plus about 6,3 billion litas debt of social security funds, and also foreign direct investments 35,1 billion litas and transfers of emigrants from abroad which have made for 2004 - 2010 19,2 billion litas, plus of 23,497 billion litas purely received means of euro funds for 2004-2011 (It is received 30,635 billion litas, it is paid 7,138 billion litas).

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12 Statistikos departamentas prie Lietuvos Respublikos Vyriausybė
13 Veidas, 2010 11 18
Thus, the general external monetary injections in the Lithuanian economic space throughout last 20 years (37,1 billion litas a public debt, 35,1 billion litas foreign investments, about 20,0 billion litas transfers of emigrants, 23,5 billion litas the received money from EU) have made approximately 116 billion litas, having combined all Lithuanian budgets with 1990 for 2010.

The current prices we receive about 1040 billion litas or on the average about 52 billion litas a year. Thus all external injections average approximately 11 % from annual nominal gross national products throughout 20 years. Therefore, if not to consider effect from external injections real nominal Lithuanian average gross national product would be for last 20 years on the average about 46,8 billion litas a year or approximately in 2 times less than in 2010 (94,6 billion litas – 2010).
For creation of fuller picture of development of the Lithuanian economy it is necessary to enter still parameter of level of emigration. In total according to Statistics Lithuania the number of emigrants with 2011 on 2011 has made 336,4 thousand persons, and the absolute peak has had for 2010 - 83,2 thousand people basically is young men of the able-bodied age which departure reduces and so a small amount of the able-bodied population creating a surplus value.

In economy development one of dominant roles is played by economic future expectations. If expectations are good – the economy is on lifting, if isn't present – that on the contrary. And to real factors of development are added also speculative which in many respects to promote acceleration or growth delay. Emigration is one their factors, which is supported by these future expectations. And that factor that an emigration problem becomes all more sharply, and the government is not in a condition to break a course of future expectations, speaking to language of the stockbrokers, holds all the time a situation in a red zone. That fact that these actions of expectations undergo constant falls of a rating and easier collapse, speaks about inability or about incompetence or about unwillingness for any reasons, including pure compradorism and commercialism, of the government and parliament.
to break this negative tendency. There is an impression that the parliament and the governmental sheaf lives not only in itself in a separation from a real economic situation, but also reports about successes for itself too. Rates of emigration don't decrease, and since 2008 tend to sharp increase. So in emigration level in 2009 according to Statistics Lithuania has increased in comparison with 2008 by 146 %, and in 2010 – on 351 %. Development of such situation in a macroeconomic cut means permanent reduction of receipts in the budget and absence of a potential surplus value from not made production and not rendered services. In the microeconomic plan shortage both the qualified labour, and labour ready to work for offered payment that can lead to undesirable shifts in a demographic situation and to social excitements more and more starts to affect.

Thus it is possible to sum up a 20-year-old condition of the Lithuanian economy. Parameters of gross national product and gross national product per capita as the aggregated condition of growth or economy recession specify in growth in nominal figures, shows out on insignificant growth (16 % for 20 years or 0.8 % per anno) in a context chain-linked volume for gross national product and real stagnation on PPP (purchasing power parity) for gross national product per capita taking into account CPI. Re-structuring of economy and its liberalization practically meant curling of capacities in the industry and agriculture and promoted sharp increase in unemployment that has put more than 20 % of the population on a side of absolute or relative poverty\textsuperscript{16} and has impulses an emigration wave. Many key points, the branches which were in the property of the state, - power, gas - and oil refining, transport, bank and municipal sector were privatized, using including institute of destructive entrepreneurship management, are finished to bankruptcy or liquidated. As a result more and more able-bodied population it appeared out of a labour market that negatively influenced both growths of real gross national product, and on gross national product growth per capita.

**Conclusions**

The long-term development of the Lithuanian economy has refuted the myth on a long-term grow which supposed to be driven by country’s transition to marked economy. 2. The real leading trend in this economy is its long-term stagnation.

The prevailing belief in the long-term grow of country’s economy distorts general perception of economical processes in this country. It produces the one-side view, according to which all positive, rising fluctuations are seen as manifestations of the long-term grow and all negative, drop fluctuation – as incidental short time events.

There is a good basis to insist that this distorted view on country’s development played a significant role in causing of unreal expectations for future and, what follows, irresponsible finance and economy policy, which, in turn, contributed to crisis events in the country’s economy.

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ECONOMIC EXPECTATIONS IN RUSSIA AFTER 1990TH AND RESULTS OF 2011TH

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Abstract. It is not easy to find any other country which economical development meets so contrast evaluations in the native and foreign publications. Some economists see Russia as one of the most dynamic world economies. They provide convincing facts on unprecedented economic grow, extensive investments, mighty finance deposits. Other economists insist that Russia continues to stay one of the most backward world economies. They also provide facts showing persistence of socialistic forms and methods in economy, its bureaucratic and totally corrupted regulation, deep dependence of this economy from prices of raw products, intensive resistance against modern economic activities. Contrasting views of Russian economic bring quite contrasting predictions on the further development of this country. Prospects of economic development in this country range from highly optimistic till the most pessimistic. The aim of this paper is double: to specify leading trends in Russia’s economy and to show sources of so contradictory assessment of the economic development of this country. Our suggestion is that the latest economic development of Russia is not any consistent process. There does not exist any overall or at least leading direction in development of Russian economy. In fact, the economic development of the country is a chain of consecutive, but very different trends. There does not such a phenomenon as Russia’s economic development during the last two decades. Instead there are several shorter periods, each with its own leading trend and different dynamic.

Key words: economic reforms, transition period expectations, inequality of distribution, income inequality, formation of market relations.

Introduction

There is no doubt that one of the main causes of post-socialist revolutions in Central and Eastern Europe stemmed from the belief of people of the injustice and inequities in the distribution of income, as opposed to political statements and the system of ideological propaganda.

There were, of course, other factors contributing to the aspirations of these countries to market economies. And the human factor played a triple role here. As a manufacturer of men were unhappy that their efforts do not work because of mismanagement, lack of competition, as consumers, they were irritated by the growing inefficiency of the distribution system and time-consuming to carry out purchases of goods and, finally, as citizens people were dissatisfied with their inability to influence them economic, social and political processes.

Most of the contemporary researches in this field are still based on the naive idea that the market would bring higher returns, which would be more fairly shared. The ongoing political debate and exaggerated successes industrialized countries feeling unrealistic expectations. A new political class does not take into account the history of these countries. Ordinary citizens were even less realistic. They were told that as soon as they abandon the old system, so the distribution of income will be more responsive to their interests. A good example here is the so-called populism of "Solidarity" in Poland. Not only participants of this political movement but even involved scientists believed that the gap between their countries and industrialized countries, they can be overcome in 10 years. But the gap is so great that to overcome it in one generation will not succeed. The main goal of the article is to highlight the concept that much faster to rebuild the institutions, rather than get the economy works. Here we are using the tools of quantitative analysis applied to different national economics and defined
statistic background to investigate the correlation between expectations dynamics and objective economic development\(^1\).

1. **Transition period expectations**

   Political leaders have assumed that price liberalization and reduction of the deficit will contribute to a more equitable distribution of income. In some countries, such as the Czech Republic and Russia placed their hopes on privatization as a regulator of the income distribution. But probably the pension reform will help to overcome inequality. But everything turned out the opposite.

   Expectations were associated with level of living in backward regions and rich a country as a result of market reforms. Rich regions believed that they have to share with the poor, and they were not very happy this perspective, which heightened tensions in the society.

   Transients led to unprecedented differentiation in income distribution. The most significant changes occurred in the early stages of transformation, where real income has fallen significantly. However, the reduction rates were different.

   During the transition period model of income distribution is qualitatively different. Important developments have occurred as a result of eliminating a number of fundamental features of the planned economy\(^2\).

   It is particularly important that the majority of grants and subsidies previously granted by the state to certain groups of people to maintain their level of consumption were significantly restricted or completely eliminated. Since the beginning of transformation removal of subsidies was seen by various international organizations, especially the IMF, as an absolutely necessary measure. The Fund showed a desire to maintain only such structural policies that led to the elimination of subsidies. Such external pressure is passed, mixed with internal struggles between political extremists.

   Depending on the political and social situation, as well as the chosen way of price liberalization, removal of subsidies on different affect on the distribution of income. The more radical subsidies were eliminated, the more turned out to be a jump in income distribution. While the deficit has disappeared really quickly, real income and money balances of households declined even faster.

   Transparency of laws of the free market, the efficiency of market pricing and their impact on resource allocation, as well as distribution and elimination of pathologies associated with the syndrome of repressed inflation as a result of shortages, contributed to increased competition. Not right now, so in the foreseeable future, these reforms will bear fruit for all people in transitional economies and make these countries more competitive on the world stage.

   Now, however, an inevitable component of the reforms - price liberalization, together with the reduction of subsidies - has caused high inflation. Most often, first price increase for essential goods - food, shelter, utilities and public transport. Then there is the commercialization of other basic services, including health care, which leads to even higher costs of households.

   Inflationary redistribution of income - via the differential decline in real incomes in different population groups - greatly increased income inequality in the early 1990s\(^3\).

   Under conditions of high inflation, real income redistribution depended on the procedure of indexing. The real index has always been a political compromise, not a logical consequence of the economic arguments. Because of the uneven index inequality continues to heat up social tension.

   The purchasing power of money balances, including those that were in the banks was not fully protected by partial indexation. The degree of indexation depends on the stabilization program and, of

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course, takes into account the situation in the banking sector. Indexing was clumsy, and when a difficult situation in the financial sector and the budget does not allow for full compensation. Thus, the savings of the population is considerably impaired. Only the most flexible, well-informed and enterprising households have been able to protect their assets. These savings are, at best, became the basis for future business.

Economic reforms have contributed to the establishment of a free wage in the public sector. While under socialism because of ideological and political obstacles to variations in the wage was limited, in transition economies was made of significant differentiation. So, earnings are more closely tied to the level of qualifications, experience, responsibilities and performance.

The transition period marked a stronger link between past investment in individual human capital and the current reward, leading to wide variation in wage levels. Since the quality of human capital are more varied than the reward for it, the subsequent revision of salary levels in order to better anchor it to the quality of human capital, increased income inequality 4.

More striking point in the amplification of income inequality has been the redistribution of labour between the public and private sectors.

The transition from a planned economy to market the most significant changes taking place in property relations. As a result, the share of wages in total income of the individual is reduced and the share of capital income - for example, profits, dividends, interest and rent - is increasing. This leads to more injustice of the distribution 5.

The main change in property relations, its transition from state to private hands has led to the displacement of the proceeds of the property in the same direction. Obviously, these changes increased the inequity of distribution and income inequality. Therefore, you must decide how to carry out the redistribution of property rights and how to manage this process? There might be two options. First, the sale of state property, especially strategic in nature, any investor at market price. Second, utopian distribution of all property between the populations. Of course, the real model, you need some combination of these two extremes.

More unjust privatization - sale to strategic investors - favours the emergence of competition and, consequently, higher levels of income, while a more egalitarian distribution of property contributes to the equitable distribution of income, but not necessarily increase efficiency.

Populist trend in the economy and politics has proposed mass privatization through the free distribution of shares, which would reward people for the hardships of restructuring, particularly rising unemployment and falling real incomes and pensions. However, this is only true to some extent and only as compensation for loss of income for a very short time. But taking into account only income stream, you can not exactly answer the question of the extent, direction and growth of inequality. The rich can declare a very small amount as income, while someone else - the poorer people - are paying the highest possible taxes. To accurately determine the degree of inequality should be analyzed not spread the revenue stream, and then, as distributed income and equities businesses denationalized. Unfortunately, there is even approximate statistics for this assessment.

2. Formation of Market Relations in Russia: ambiguity of statistic measurement

Formation of Market Relations in Russia accompanied by rapid growth of inequality in the distribution income. Of course, inequality of wealth in certain dimensionless form was characteristic of

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5 Теслюк, Э.; Овчарова Л. 2007. Бедность и неравенство в России: зависимость статистических показателей бедности и неравенства от метода измерения благосостояния домашних хозяйств. Иллюстрация на основе данных НОБУС. С. 17–19.
Soviet society and, like any another. However, in the USSR is not of a mass character. It is safe to say that is just too much equation in the standard of living adversely impacted on the effectiveness of efficiency of the Soviet economy. From a statistical point of view it is important to the next. Here we are talking about average income, expenditure or consumption, implying that these indicators are characteristic of well-being, we have in mind that the distribution of households in each of these signs is subject to the normal law, found-obtaining trends is the characteristic of most members of society properties. In other words, the quantitative characteristics of the level welfare in the classical case are determined by quantitative governmental performance level of the middle class. If not, if the inequality is too large and average statistics are not welfare are typical for most households that such averages seems to be approximate and extremely sceptical in public opinion. According to official data from Rosstat (official statistic research centre)⁶.

In 2008, the share of 60% of the population with the lowest incomes accounted for only 29.6% of revenues, while the share of 10% the richest 31.1% of all доходов. With this distribution is not surprising that the majority Russian population perceives official data on average income and consumption as fiction involuntary conscientious statisticians. Negative subjective perception of the statistical averages performance relates not only to the level of performance welfare, but also to the dynamics of change in these indicators. Of course, inequality of wealth is not only Russian phenomenon. Researchers attributed the growth of inequality and poverty for major socio-economic risks posed by globalization. But the growth differentiation in Russia was much higher than similar indicators for Eastern European countries with economies in transition.

For example, in Hungary, the Gini coefficient for 20 years, beginning with cross-fray of the 1980s, rose 0.018 points, while in Russia during the same period it rose by 0.149 points, with inequality in Russia on the eve of the reforms was lower. At the moment, the level of inequality in Russia is higher than in all EU countries and countries OECD and can be compared to the indicators of Turkey and Mexico.

The problem of income inequality is closely adjacent problem of poverty. To understand what happened to poverty in Russia since the early 1990s, refer to the dynamics of poverty, its depth and profile.

In Russia, the poverty rate measured by the share of population with incomes below the subsistence minimum (SM), which set at the minimum consumer basket, calculated by normative method. For the lowest possible life level applies approach of the concept of absolute poverty, oriented toward consumption norms for critical goods and services at minimum acceptable level. A fundamentally different approach oriented toward the prevailing community standards consumption is used in European countries. There's a line Poverty is at the level of 40-60% of median income. During the period of market reforms as level of income and the poverty level were subject to considerable fluctuations. In 1992, one third of the population were below the poverty-STI, and revenue deficit at that time amounted to 6% of total cash incomes. The gradual reduction of poverty and lack of cash income for x-fray House of the economic crisis in 1998 gave way to rising dynamics. However, since 2001 has been a steady decrease of considered parameters: the period from 2000 to 2007 the proportion of poor declined by more than 2 times⁷. The recent crisis 2008 is less significant impact on poverty than crisis of 1998 when compared to data for the first six months of 2008 and 2009 the poverty rate rose from 14.7 to 15.0%. Obviously, that the II quarter of 2010 poverty rate significantly decreased and returned to pre-crisis levels⁸. Annual data suggest that in 2009 the level of poverty industries accounted for a minimum value in the history of post-soviet period.

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⁸ Симонов, В.; Комаров, Д. 2009. Особенности антикризисной политики в России. Экономист., №7.
The first decade has won a transformational crisis, which began market-oriented reforms and ending the financial crisis 1998(4). During this period, GDP declined by 40%, industrial products - 55% investment - 80%. Then, during the next 10 years, the scale of the economy was restored. In 2008, GDP amounted to about 108% from 1990 levels9. From 1990 to 2008 the average level of the current market consumption at the expense of households in Russia, grew by 45%. The composite index of welfare, which in addition to current consumption of the market takes into account changes in the current affordable housing (i.e., the essential elements of accumulations of households), as well as individual non-market services (health, education and social security) gives a more modest result - an increase of 32%10. Thus we have found that the decline of average welfare level in today’s Russia compared to pre-reform period level does not exist. In contrast, after the significant crisis of the economy it is generally restored and the level of life in general significantly increased. Anticipation of wealth compared with GDP growth is due, in particular, increasing the share of consumption and a reduction in the share of savings in GDP of about10 pp.11.

Though continue to increase economic growth increases the accumulation of at least 25% of GDP is highly desirable, yet these structural changes should not be taken into account unambiguously negative, such as "eating away" people of their future - as one put it, the authority international experts. In contrast, during the Soviet period of the proposed for my product consumption was determined not demand, and plan. Produced by machines or fighters could not be to offer the public, especially since foreign trade was focused primarily on close imbalances, rather than balance of the consumer market or an increase in the effective efficiency. Then the formula of the investment regime assumed to highest maximizing of the investments accompanied by their low efficiency: growth stocks were the main factors rum growth. Market reforms should lead to the replacement of the formula to the opposite: the maximum efficiency with limited capital expenditures12.

We can not say that such a change has occurred. But costs have fallen at least in the investments are largely private, and it is better to believe13. As for efficiency, the persuasive evidence of its significant growth yet not enough with what should be dealt separately. But the obvious changes towards second formula are available. This is one of the most important outcomes of market-oriented reforms which are fundamentally positive, from which people win but might at the expense of growth. The market demand is more oriented at people than a plan. Today is also expressed doubts whether there is a market economy in Russia. This example proves us that the reforms have achieved their goal in the country and during the past 20 years, deep and fruitful changes have taken place. They were not always friendly to people, proceeded through the redistribution of rents, criminalization, corruption, raiding, arbitrariness of officials and law enforcement agencies, and many other negative phenomena, which rye has not only not ceased, but often continue are expressed to grow.

Conclusions

In a macroeconomic sense, economic expectations in Russia are primarily adaptive rather than rational, that is, they focus on the past, but not for the future. Also there is vividly seen necessity to overcome the gap between economy of distribution identified to be humanitarian in post-soviet mentality and market economy identified as hostile and anti-humanitarian. And in this sense is of

9 Социальное положение..., supra note 6.
10 Социальное положение..., supra note 7.
11 Теслюк, Э.; Овчарова Л., supra note 5.
13 Доходы и социальные услуги..., supra note 12.
particular importance need innovative breakthrough in the economy. The innovation should reinforce free competition of market forces but deny their contradiction with social institutions have to survive in the conditions of market uncertainty. This breakthrough would change the structure of the economic expectations of all subjects of the Russian economy and provide opportunity to its positive development.

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EURO REGIONAL CO-OPERATION OF UKRAINE IN THE AGE OF GLOBALIZATION

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EXTENDED ABSTRACT

The age of globalization sees an important role of geopolitical, economic and geographical position of Ukraine due to its competitive benefits: advantageous location, mutual borders with the countries of the European Union and Russia, proximity to major markets and transit transport routes.

However, modern analysis of Ukrainian regional development shows negative tendencies, namely increasing of inter-regional conflicts, disproportions and exacerbation of economic and social problems. Taking into consideration obvious advantages, it is a perspective orientation to involve Ukraine as a powerful European country into cross-border co-operation. Development of inter-regional and frontier co-operation is a world-wide modern tendency and objective necessity directed toward improvement of conditions of depressive territory, level equalization of regional development and competitive maintenance.

Cross-border territories are considered by modern economic science as potential “poles of growth” that have perspectives and conditions for intensive development. Implementation of market reforms in Ukraine is a practical confirmation of this fact. As a result, national economy is more open due to activization of external economic relations with other countries. Under such circumstances, contiguous territories of neighbour countries are turning into specific enclaves where mutual investment projects in different activity spheres are put into effect.

According to European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities, “cross-border co-operation” means any common actions intended for strengthening and extension of good neighbourly relations between Territorial Communities or Authorities that are under the jurisdiction of two or several Negotiated Parties; it is also aimed at execution of any necessary contracts or agreements. Cross-border co-operation is carried out within the competence of Territorial Communities determined by domestic legislation [1]. Modern cross-border co-operation of the countries that have a mutual border has been shown in the creation of Euro regions. Ukraine possesses all the necessary potential for Euro regional collaboration, for example, land borders with seven countries. 19 out of 27 regions in Ukraine are frontier. On such contiguous territories as Volyn, Transcarpathia, Ivano-Frankivs’k, L’viv, Luhans’k, Odessa, Sumy, Kharkiv, Chernivtsi, Chernihiv Region eight Euroregions have been created: the Bug, the Upper Prut, the Dnieper, the Carpathian, the Lower Danube, the Sloboda Ukraine and the Yaroslavna [2]. It is planned to create the San Euro region in cooperation with Ukrainian frontier regions and Polish provinces which objective is to adapt Ukraine to economic conditions and social standards of the European Union. Prospective orientation in realization of European regional policy of the Black Sea region in Ukraine that is dynamically developing has significant perspectives in using of transit and energy-efficient potential. The European Union initiates creating of the Black Sea Euroregion to which Odessa region will be included. The Adriatic region will be taken as a model. Unfortunately, Euro regions created by Ukraine haven’t become poles of faster economic development and still remain declarative foundation. To make them effective in the implementation of regional economic policy, it is necessary to elaborate conceptual principles of their development drawing on experience of Euro integration of developed countries.

European countries have a considerable experience in creation of Euro regions where the integration process of national economies has already started in the middle of the XX century. In
the countries of West, Central and East Europe there are more than 150 Euro regions [3] where
cross-border and inter-territorial co-operation is on the stage of stable development. Legislative
framework for creation and functioning of Euro regions consists of such contracts set up by
international organizations, Council of Europe, Association of Border Regions, as: European
Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities
(1980); European Charter for Frontier and Cross-border Regions (1981); European Charter for

Cross-border co-operation is intensively supported by the European Union to achieve such
strategic goals as creation of new markets, safeguarding security, political stability in Europe,
improvement of hind ward country development and rapid development of national economies in
post-socialist countries. Financial assistance by the European Union plays an important role in
Euroregional co-operation with the help of such initiatives, programmes and projects as:
INTERREG, PHARE, CBC, TACIS CBC, PHARE CREDO, MEDA, CARDS, LACE. Each
programme has an approved budget in different spheres of cross-border co-operation: collaboration
on energy network, communicative and transport development, regional and territorial planning.
In particular, the European Union finances international co-operation of more than 80
programmes on Community INTERREG initiative that averages 2 billion 400 million Eur from
1994 till 1999; 5 billion Eur from 2000 till 2006; for the period 2007-2013 it is planned to invest 7
billion 750 million Eur [4]. In the 90s of the XX century the European Union started cross-border
collaboration on environment protection, transport infrastructure development and organized
crime control. As a rule, institutions of the European Union pay much attention to financing
of frontier co-operation between the EU countries or the future EU member states. It is necessary to
emphasize that in 2011 Slovakia has started a project directed toward European integration of
Ukraine. Within this project the European Union will give financial support for regional
development of non-member state of the EU.

Financial and economic assistance of cross-border co-operation on the modern stage of
strengthening of European integration includes such an important element as a framework of the
European Neighbourhood Policy (ENP) within the European Union. According to the ENP, a new
budget cycle of the European Union 2007-2013 has been launched since 2007. The European
Commission has changed approaches as for financial and technical assistance to neighbour
countries of the EU. This time Ukraine will get the Europe Aid within the European Neighbourhood
and Partnership Instrument (ENPI) and not by means of the previous programme TACIS [5]. Such a
change will contribute to simplification of financial assistance process.

Successful functioning of Euro regions in West Europe lies in fixing of an exact cross-
cooperation objective. For example, there was built an international airport to service contiguous
territories of France, Germany and Switzerland. Euro regional co-operation has improved the
economic situation in frontier regions of France, Belgium and Luxemburg after steel production
was limited at the metallurgical enterprises. Cross-border co-operation of Italy and Portugal was
aimed at better development of rural territories where the gross domestic product per capita was
lower by 44-72% of the average volume. The main goal of Euro region with France and Spain as
participants was to build a tunnel which would unite both countries.

Goals of Euro regions and Ukraine as a participant are more general, for example:
development of friendly and partner relations; stimulation of regional economic and social
development; improvement of environment state; settlement of outcomes caused by natural
disasters. But these Euro regions haven’t succeeded yet and no project of the high level has been
realized. Besides, restrictive factors in Euro regional co-operation are the following: essential
changes in customs and taxation legislation of neighbour countries; deficiency of united
scientifically proved conception of Euro regional co-operation; limited vision of central and local
authorities on the questions of strategic perspectives of Euro regional development; big difference in level development of Euro regional participated countries; different level of development of frontier infrastructure; absence of financial resources and non-coordination in decisions as for financing of cross-border programmes and projects; absence of clear function distribution between cross-border co-operation administrations.

Taking into consideration aforesaid information, we can define such main objectives of the further Euro regional development:

− implementation of measures aimed at gradual liquidation of administrative and legal obstacles that restrain cross-border co-operation;
− correspondence of Ukrainian legislation with international standards and development of bills that have to regulate activity of Euro regional administration;
− development of complex state programmes of Euro regional co-operation and their appropriate financing;
− creation of information base in order to make Euro regions function since lack of cross-border statistics doesn’t show their development level.

Solution of these tasks will provide stable social and economic development of Ukrainian regions, improve investment and innovation territory appeal, modernize frontier infrastructure, overcome negative tendencies in foreign trade as fast as possible, intensify territorial division of labour, decrease product costs and improve social standards of living. Due to these tasks Euro regional co-operation will be an important element in realization of regional economic policy that will cause better development of frontier territories and state as a whole.

References


THE PERCEPTION OF TURKISH FOREIGN POLICY IN NEIGHBOURING COUNTRIES OF TURKEY

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ABSTRACT

Turkey's interest and impact on the Middle East not only has increased but also changed dimension over the last years. Ankara intends to turn the Middle East into one of its main policy areas within which multilateralism would dominate. Those who regard Turkey's active policy toward the East as a 'change of axis,' prioritize Turkey's rapprochement with the Western axis and membership to the European Union. Turkey's foreign policy has been going through a radical change which aims at adaptation to the new multilateral global structure. Accordingly, within the government's foreign policy approach, the Middle East and the Middle East policies has as much priority and weight as European Union full-membership policies. However, how the Turkish foreign policy is being perceived by the neighbouring countries, who are the addressees of 'zero-problem' policy that Ankara pursues with respect to its neighbours, has been ignored. As a result, studying and analyzing how these developments have been perceived by the neighbouring countries is a major field of research.

While the reasons and the consequences of Turkey's foreign policy orientations can be analyzed by economic data, how the foreign policy is perceived can only be understood by 'elite surveys.' In that regard, the intended project, titled "Perceptions of Turkish foreign policy by the neighbouring countries," aims at measuring and tracking how Ankara is being perceived by the countries which border Turkey on land. The methods to be used will be similar to those employed by a research unit within the Heidelberg University, which measures and tracks the conflicts in the world. In that context, the project focuses on the following fields: How is Turkey's desire to become a new power-centre in the larger Middle East perceived by the experts and elites of the societies? Is the intensive transformation process that Turkey goes through been read in the Middle East as 'Westernization,' or is it perceived as the increased interest of a partner, which also gains strength in the West. The Turkish foreign policy literature has shortcomings with regard to the field of 'foreign policy' perception. In a similar vein, how Turkey is being perceived by the neighbouring countries, which are the addresses of Turkey's foreign policy based on the 'zero-problem' approach, has not been adequately studies within the literature. In that regard, the intended project aims at filling a major gap in the foreign policy literature. The intended study can cover Iraq, Iran, Syria, Armenia, Georgia, Bulgaria and Greece. The research can be conducted in the form of 'elite surveys', which can be conducted, in the form of both online and face-to-face interviews, only with those scholars, researchers, graduate students, media editors/writers who specialize on Turkey, and also those economic actors who have trade relations with Turkey. It is intended to survey at least 50 individuals per country. While the survey questionnaire can be collaboratively written by the scholars and research assistant involved in the project, to carry out the surveys we intend to employ foreign student studying in the International Relations department of Fatih University.

Finally, the data obtained and the conclusions drawn from those surveys can be published in the form of a report. Due to the fact that the project intends to bring light to a hot and controversial subject, it is also intended to contribute to the literature in the form of articles, presentations, and booklets. The main aim of the project, in the long-run, is to periodically repeat similar perception analyses, and hence, to establish a centre where the subject of "foreign policy perception" would be closely followed and analyzed.

Keywords: Turkish Foreign Policy, the Neighbouring Countries of Turkey, the Perception of Foreign Policy
ABSTRACT

With the globalisation, trade relations have changed especially after 80s. Trade borders are removing via regional trade agreements, bilateral agreements, etc. Some new strategies are created according to improve trade relations, for instance the EU neighbourhood policy. One of the major objectives of the EU neighbourhood policy is to develop trade integration between the enlarged EU and its neighbours. This paper is focuses on Euro - Mediterranean partnership from the scope of trade and energy. It is consisted of three main sections. In the first section it defines Euro-Mediterranean relation. In the second section it analyses intra and inter trade. We try seeing which commodity is the main argument in the trade, where energy is taken place and is this partnership is accelerated the Mediterranean economies. Section three concludes.