

SUSTAINABLE GROWTH IN SMALL OPEN ECONOMIES

BOOK OF ABSTRACTS

Editors

Olja Munitlak Ivanović
Isidora Ljumović
Aleksandra Bradić-Martinović



**International Scientific Conference:
SUSTAINABLE GROWTH IN SMALL OPEN ECONOMIES**

*26th October, 2017
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PREFACE

Dear readers,

With great pleasure, we are presenting this year's *Book of Abstracts* as a result of our Annual International Scientific Conference. Having in mind the importance of the sustainability concept in modern society, the topic of this Conference is *Sustainable growth in small open Economies*. This publication gathers 75 papers, including authors from 11 countries.

Our goal was to bring academia, business representatives and policy makers together and encourage discussion on three topics which constitute the basis for sustainable growth:

1. Green Growth and the Environment: Ecological Pillar
2. Green Economy and Vulnerability of Economic Growth: Economic Pillar
3. Social Challenges of Unequal Growth: Social Pillar

Ensuring sustainable growth is one of the basic principles embedded in a large number of regulations and public policies, but also in everyday life. In today's accelerated technological revolution this is a process that is highly demanding and expensive. The needs for "greening" of the economy are becoming more frequent. There is no sustainable growth without development of three aforementioned pillars.

We are grateful to all the authors who contributed to this *Book of Abstracts* in fulfilment of our joint goal.

EDITORS

Part I.
GREEN GROWTH AND THE
ENVIRONMENT: ECOLOGICAL PILLAR

1.1. TRANSFORMATION OF THE ROMANIAN AGRICULTURAL ECONOMICS UNDER THE COMMON AGRICULTURAL POLICY NEW PARADIGM – FOOD PRICES VS. FOOD SECURITY

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OBJECTIVES

Romanian agriculture, during the last twenty-seven years, has passed a dramatic reform process, which led in developing a new economic paradigm. Analyzing the food prices vs. food security from the perspective of transformation of the Romanian agricultural economics under the Common Agricultural Policy new paradigm implies finding the resources with highly impact of inland economy. Starting with the assumption that agriculture has a determinant impact in designing Romanian economy, in the paper is analyzed only the implication of the food prices on food security. Also it is considered the component of agricultural fraud on designing the market process and prices.

METHODOLOGY

In order to achieve the main objective of the paper it will be employed specific instruments and the empirical analysis will be carried out for understanding the transformation of the Romanian agricultural economics under the Common Agricultural Policy new paradigm from a boarder perspective by using the relevant indicators as econometric variables for designing the research model. The dramatic evolution of the Romanian agricultural economics from the perspective of price evolution proves that numerous endogenous factors are involved. Taking

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into consideration the fraud interventions and mechanisms in shaping the prices levels will improve the working framework in the field. The analysis will consist in specific indicators and variables which will be combined in order to design a working model for understanding the phenomena. The methodology choice in using the variables is based on the fact that it can describe explanations in understanding Transformation of the Romanian agricultural economics under the Common Agricultural Policy new paradigm during the analyzed period.

RESULTS

The results which are expected to be obtained during the research are to confirm the argumentation that the transformations of the Romanian agricultural economics under the Common Agricultural Policy new paradigm are centered on two main components: food prices and food security. Also it is possible that the results to prove that evolution of the Romanian agricultural paradigm is circumscribes to the numerous reforms specific to post-communist economies.

IMPLICATIONS

The research has implications on understanding the paradigm of agricultural prices formation and its influence on food security. Despite of numerous literatures in the field, there is a direct connection between fraudulent component on establishing food and agricultural prices and the evolution of the agricultural economy. The policy implication on the price mechanism could consist on improvement of the specific field control.

ORIGINALITY VALUE

The paper will try to become a milestone in the field taking into consideration that for designing this study it will be employed specific research methods and instruments including the Gini coefficient which it has the greater advantage that it is easier to be used and it offers accurate results and image of domain.

KEY WORDS

Prices, food control, food security, agriculture, fraud, fiscal taxation, CAP

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1.2. CIRCULAR ECONOMY MODEL AS A RESULT OF THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT¹

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OBJECTIVES

The aim of this paper is to point out the importance of the circular economy. In order to get from a linear economy to a circular concept, it is necessary to develop ethical and ecological awareness and then shape it into legal regulation. The concept of sustainable development is the basis for the development of a circular economy. Respecting the principle of sustainability implies intragenerational and intergenerational justice. After production, the treatment of waste is a fundamental difference between the linear and the circular concept,

METHODOLOGY

Methodology used in this paper is characteristic for this type of research, especially in field of social sciences. To show the development of ethical awareness and social responsiveness by period, author used a combination of comparative and historical analysis. Descriptive analysis was used to present theoretical approach or concept (sustainable development, linear economy, circular economy). Induction and deduction were used in order to conclude how ethical and ecological awareness influence the development of an optimal economic model. In this paper, a schematic approach was used in order to clearly visualize the differences between these concepts and to point their most significant characteristics.

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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RESULTS

Although at first the model of linear economy seems to be an optimal growth model, the results showed that this model is more expensive and in long-term unsustainable, which is in line with the set hypothesis. Initially it affects the decline in raw material prices, employment growth and living standards, but in long-term it is unsustainable due to resource constraints. When it is treated after production or consumption in a circular economy, it becomes clear that after recycling waste it can re-enter the production process and influence the growth of competitiveness.

IMPLICATIONS

The research has shown that in Serbia there are indications of a more serious approach to the circular economy and its implementation in practice. This work could be useful for policy makers to intensify efforts at the local level. At the same time, the paper explains to managers the advantages of introducing the circular concept of the economy because it has a long-term impact on the growth of competitiveness of enterprises, due to the reduction of raw material and energy prices.

ORIGINALITY VALUE

Although the circular economy is beginning to talk more intensely, the general public is not familiar with its advantages and the necessity for introducing this kind of production from the micro level to more. The simplicity of displaying and comparing the current and desirable production model is the main significance and original value of this paper. By spreading awareness among the population, entrepreneurs and policymakers, this model could enter into practice, raising competitiveness at micro and macro levels.

KEY WORDS

Circular economy, linear economy, sustainable development, ecological and ethical responsibility

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1.3. ECONOMIC POLICY RESPONSES TO CLIMATE CHANGE¹

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OBJECTIVES

The relationship between climate change and economy allows policymakers to understand the environmental impact on the economy with all its' implications. The objectives of this paper are to present climate change trends, to show the history of climate change negotiations and how economic policies responded to climate change. The paper analyses ecological taxes, tradable permits, standards, subsidies and technological development as some of the economic policy responses to climate change.

METHODOLOGY

For the purposes of this paper, a methodology used for research is characteristic for social and interdisciplinary sciences. These are primarily the methods of analysis and synthesis, deduction, desktop and historical research of reports, conference briefs, scientific papers and scientific studies, with the additional analysis of quantitative and qualitative data.

RESULTS

The results clearly indicate that economic policies have significantly responded to climate change, and they still do on a daily basis. A significant number of international conferences and negotiations, from local to global level, is a clear

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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evidence of the importance of the economic policy reactions to current environmental issues. The analysis indicates that the use of economic instruments for solving environmental problems, in the broadest sense, has a positive contribution to solving climate change problems.

IMPLICATIONS

Climate negotiations have a significant impact on economic policies. Consequently, economic policies have a significant impact on the resolution of climate change problems. The importance of economic instruments designed to tackle climate change is evident and suggests that economic and environmental policy makers should continue to work and address climate change issues.

ORIGINALITY VALUE

The paper provides a systematization of climate change negotiations and how economic policies responded to climate change. Furthermore, it analyses preventive and adaptive measures that can be used to tackle climate change. Finally, the systematization of instruments derived from different economic policy decisions has been carried out, which are directly directed to solving environmental problems.

KEY WORDS

Economic policy, climate change, climate negotiations, economic instruments

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1.4. IMPACTS OF SUSTAINABILITY AND CORPORATE SOCIAL RESPONSIBILITY REPORTING

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OBJECTIVES

Based on the results of Sustainable Growth Report of a large company in Serbia, the paper aims to present the possibilities of applying sustainable growth for improving business operations of companies. Consequently, they promote global sustainability and past experience in this field, as well as the frameworks of the establishment of sustainable growth set by global organizations.

METHODOLOGY

The reports on sustainable growth of Delta Holding have been made according to the guidelines of the internationally recognized Global Reporting Initiative methodology and audited by an independent audit company KPMG at the request of the company. The report comprises business operations of Delta Holding in Serbia. It contains all the relevant information on the improvement of economic, environmental, social aspects of business that stakeholders identified as the key features to the development of the company and society in general.

To understand the expectations of stakeholders, the company conducted a survey in 2015 based on representative sample of 50 external and 30 internal stakeholders. The respondents assessed the impact of corporate and socially responsible activities of the company in relation to: economic results, legal

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regulations, internal procedures and the code of conduct, business strategy, health and safety of its employees, environment and the reputation of the company.

RESULTS

The results of the survey showed that internal stakeholders regarded quality development, the quality and safety of products and employees to be the most important aspects of sustainable growth. As for external stakeholders: development of high quality and safe products and services, appropriate marketing and support to marginalized groups. In general, there is a low level of social responsibility in Serbia, and frequently stakeholders recognize the importance of certain areas after passing laws.

IMPLICATIONS

If modern companies which operate in international market place more emphasis on sustainable growth, those companies have a better position in the market. However, the higher goals of sustainable growth, the more obstacles there are to overcome in business operations. Therefore, the expectations of external and internal stakeholders differ a lot, which is why it is necessary to analyse thoroughly the impact of corporate social responsibilities.

ORIGINALITY VALUE

Taking into account that the results should be viewed in relation to the awareness of a society regarding corporate responsibility as well as the level of market development, the paper presents the results of Delta Holding. Additionally, the assessment of the significance of the aspects of sustainable growth for the company's operations and stakeholders was analysed, based on which there is a clear outline of the areas that are recognized as strategic investments of the company.

KEY WORDS

Corporate social responsibility, Sustainable Growth Report, business improvement, global sustainability

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1.5. FIFTY SHADES OF GREEN – WHAT PALES THE FINAL COLOUR OF GREEN SOLUTIONS?

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OBJECTIVES

The purpose of the paper is to find the reason(s) of the widely observed phenomenon that some apparently environmentally friendly solutions fail to bring about the expected benefits, or at least, the benefits remain much smaller than predicted.

METHODOLOGY

The applied research method is a review of the business and environment literature combined with insights from the science and engineering literature. This combination allows us to illustrate our arguments with real-life examples. The applied data gathering method combined purposeful sampling with a snowball technique of data gathering. Data analysis drew on the method of constant comparison, implying a simultaneous collection and analysis of the qualitative data. We contrasted the findings in studies included in later stages of data gathering with the framework that emerged in the previous rounds, so as to reinforce or refine the emerging conceptual framework.

RESULTS

As a result of our inductive theory building exercise, five key concepts have been identified regarding the reasons of the pitfalls associated with environmental sustainability-oriented interventions. Ill-defined system boundaries, trade-offs, together with interconnections among resources and environmental impacts and problem shifting are among the key explanatory factors of below-the expected results. Further, false assumptions and a strong contextuality of best practices also overshadow the outcomes of sustainability-oriented interventions.

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IMPLICATIONS

The study demonstrates that sustainability-oriented interventions are often burdened with illusory beliefs. Environmental sustainability issues are multifaceted and systemic: a quest for simplification and manageability often results in problem-shifting, energy penalty and other unintended consequences. This requires caution (e.g. adoption of life cycle perspective and consideration of interconnections) both by policy-makers devising incentives and by practitioners.

ORIGINALITY VALUE

To the author's knowledge, this paper represents the first attempt to review and synthesise the pitfalls associated with a number of environmental sustainability-oriented interventions.

KEY WORDS

Environmental sustainability, systems thinking, unintended consequences, problem-shifting, trade-offs

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1.6. ECOLOGICAL AND ECONOMIC IMPORTANCE OF MULCHING WITHIN THE URBAN AREAS OF LARGE CITIES OF REPUBLIC OF SERBIA

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OBJECTIVES

Local governments and cities of the Republic of Serbia must develop the ecological-economic approach especially as imminent actual convergence of the Republic of Serbia with the EU countries. To make this work the authors used the documents public company founded by the city of Novi Sad. It has been operating in the market of Novi Sad and wider since 24.11.1962. Last bringing into line organization is done on the basis of the Decision of the City of Novi Sad, which was published in the Official Journal of the City of Novi Sad number 29/2005 and 53/2008.

METHODOLOGY

The research provides the answers to three key research questions:

Does the experience of the relevant company for landscaping, maintenance of green areas in the Republic of Serbia can be applied to a wider area of the Republic of Serbia?

Does the application of new procedures in the green areas, local governments mean new costs by taxpayers?

Does the use of mulch in urban conditions means the realization of benefit to the population?

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In this sense, the paper we use methods of investigation techniques on the basis of tests relevant top management companies in the Republic of Serbia. The focus was on acquiring acceptably general belief that the application is not a standard method of maintenance of greenery can be economically acceptably. In this paper recalculating the average value of planting and maintenance of greenery with the use of mulching and the Republic of Serbia, as, were performed at the mean rate of the National Bank of the Republic of Serbia as of 05.12.2016., compared to EUR 1 = 123.17 dinars.

RESULTS

There is a constant need for innovation of existing models of raising green areas.

Using the mulching model to a better and environmentally sound manner with small investment, we achieve better results in growing the desired plant species after planting (up to 50%). The model presented in this paper has many economic advantages compared to the classic approach. According to the classical model of greening green urban islands on boulevards and other narrow places per m² costs taxpayers about 3 €, while using the mulching per m² costs about 2 €, which represents a decrease of about 52%.

IMPLICATIONS

Finding new methods of treatment and maintenance of green areas of cities is of great importance to the residents of the state. The results of our research will be useful for future research related to the implementation of the new economic-ecological model for the maintenance of greenery in cities.

ORIGINALITY VALUE

This field of interest is becoming increasingly popular among researchers. Therefore, it is not surprising that numerous studies emphasize the importance of a multidisciplinary approach (Chan et al., 2004; Lee et al., 2007; Fisher et al., 2010; Dinu 2011; Popovic, 2014). The results in our study clearly show that the application of a new way to maintain green areas in cities has its economic justification and the positive effect by taxpayers.

KEY WORDS

Mulch, the economic and ecological impact, urban surfaces

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2. Official Journal of the City of Novi Sad number 53/08,
<http://www.skupstinans.rs/latinica/sluzbeni-list/category/15-2015> (retrieved 06.12.2016)

1.7. THE INSTITUTIONAL INVESTORS GROUP ON CLIMATE CHANGE – A CASE STUDY FOR ECOLOGICAL RESPONSIBILITY¹

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OBJECTIVES

The Institutional Investors Group on Climate Change (IIGCC) is a non-governmental organization which was formed by the group of Institutional Investors in order to collaborate on climate change. Their mission is to provide member institutions with a collaborative platform to encourage public policies, investment practices, and corporate behavior that address long-term risks and opportunities associated with climate change. Objective of this paper is to present the scope of IIGCC activities and their impact.

METHODOLOGY

Methodology used for this paper is standard for social sciences which is based on case description and qualitative research in general. Through content analysis, author examines official annual reports, journal and conference papers and other materials that is published by IIGCC, different authors relevant to the field and authors previous work.

RESULTS

Results of this study show that IIGCC is a unique organization in the field of Climate Change dedicated to Institutional Investors. The contribution of IIGCC to the fight against climate change is through guidelines created exclusively for institutional investors which related to the fight against climate change. The first set of instructions was issued in 2010, while the revision of the instructions was

¹ This paper is a part of research project III 43010 (Modulation of antioxidative metabolism in plants for improvement of plant abiotic stress tolerance and identification of new biomarkers for application in remediation and monitoring of degraded biotopes) which is financed by the Ministry of education, science and technological development of the Republic of Serbia.

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made and issued in May 2016. Future research should be based not only on information gathering but on quantifiable impact data related to the guidelines.

IMPLICATIONS

This paper is designed to help institutional investors that they, through best practice, implement IIGCC guidelines and follow tackling climate change as a rising problem. Also, academics and researchers that are connected to the sustainable development, especially in financial sector, can use these findings to help close theoretical gap that exists in this field.

ORIGINALITY VALUE

One of the most important facts about the analysis of IIGCC is that the organizations represents over 18€ trillion in assets and consists out of 140 members in Europe and that this is one of the first papers dealing with the organization and analysis of their work. High impact institutions are underrepresented in the literature and before quantitative analysis of their impact by academics and researchers it is highly important to work on qualitative analysis and to gather as much qualitative information as possible.

KEY WORDS

Institutional investors, climate change, sustainable development, finance

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1.8. SUSTAINABLE DEVELOPMENT INDEX OF THE REPUBLIC OF SERBIA

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OBJECTIVES

Sustainable development is a relatively new and emerging area of theory and practice. In addition, sustainable development has become an increasingly important topic among professionals as well as among researchers in the past few years. However, this concept still lacks a thorough and encompassing explanation across a variety of scientific disciplines and areas of business. Many people still do not have a clear understanding of this concept. This paper strives to present different indicators included in the concept of sustainable development.

METHODOLOGY

This paper provides an overview of the sustainable development indicators defined by Sustainable Society Foundation (SSF). All 21 indicators are integrated in the Sustainable Society Index (SSI). The measured indicators are divided into seven different categories, namely: Basic needs, Personal development and health, Well-balanced society, Natural resources, Climate and energy, Transition, and Economy. These categories are further grouped into three dimensions of sustainable development: Social wellbeing, Environmental wellbeing, and Economic wellbeing (Adams, 2006; Dyllick & Hockerts, 2002; Jovic & Novcic, 2106). Human wellbeing and Environmental wellbeing represent our goals, while Economic wellbeing is not a goal in itself, it is a condition to achieve Human and Environmental wellbeing (SSF, 2014).

RESULTS

The indicators of sustainable development and their value for the Republic of Serbia in 2016 are listed below (SSF, 2014): Human Wellbeing (8.2):

- Basic Needs (9.9)
- Personal Development and Health (7.8)

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- Well-balanced Society (7.1)

Environmental Wellbeing (5.2):

- Natural Resources (6.6)
- Climate and Energy (4.4)

Economic Wellbeing (2.6):

- Transition (3.5)
- Economy (2.2)

IMPLICATIONS

The presented results indicate that the Republic of Serbia has the highest score in the Human Wellbeing dimension (8.2), meaning that the people in Serbia are able to fulfill their basic needs, achieve personal development and health, and live in a well-balanced society. Also, the score of this dimension is far higher than the world score (6.4). Environmental Wellbeing dimension is at a lower level (5.2), indicating that Serbia is halfway to full sustainability in natural resources and climate and energy. This value is approximately equal to the world score (4.8). The worst situation is with the Economic Wellbeing dimension (2.6), which is a result of transition and economic issues. Also, this value is far lower than the world score (4.6), and even lower than the scores of neighboring countries such as Croatia, Montenegro, Macedonia etc. These results should provide a good basis for the Government and other relevant institutions to make further decisions and take actions to ensure Human, Environmental, and Economic Wellbeing of the Republic of Serbia.

ORIGINALITY VALUE

The SSI presents a integrative concept, that could be used in interpreting the concept of sustainable development, as well as for the assessment of nations' development towards sustainability in its broad sense: Human, Environmental and Economic Wellbeing (SSF, 2014). Also, it allows us to compare different countries, as well as change in indicators for one country over a specific time. Finally, SSI can be used to simulate the effects of different actions on human and economic growth without compromising environmental wellbeing (SSF, 2014).

KEY WORDS

Sustainable development, Sustainable Society Index, Human Wellbeing, Environmental Wellbeing, Economic Wellbeing, Republic of Serbia

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1.9. POSSIBILITIES FOR IMPROVING ECOEFFICIENCY AND GROSS REBOUND EFFECT: A CASE STUDY FOR BSEC MEMBER STATES

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OBJECTIVES

Although increased use of natural resources is important for increasing the overall efficiency of natural resources, the intensity of natural resources use is very high and it is very close to critical level. The paper examines the discrepancy between the potential decrease of natural resources use, as an effect of increased efficiency and actual use. The aim of research is to analyze the use of natural resources in the Black Sea Economic Cooperation (BSEC) member states, the environmental impact of the natural resources and factors that have impact on the use of natural resources. The analysis involves 1995 -2015 period. Through analysis direct flow of energy and materials will be discovered and also their impact on environment, which will be important in order to find proper solutions for high intensity of natural resources use.

METHODOLOGY

The analysis will begin with the short theoretical approach of the study and with literature review in order to present the problem and aims of research. After that, statistical approach will be implemented and the paper mostly relies on the statistical approach to the problem. Since there are 12 countries that are members of BSEC, panel data will be implemented with the focus on the fixed effects model. Data that were involved in research were based on Ehrlich and Holdern equation $I = PAT$, where population (P), affluence (A) and technology (T) impact on environment will be analyzed. In presented equation technology is

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important factor since it represents ecoefficiency. Due to its importance, several other factors that have impact on ecoefficiency will be analyzed in order to see how ecoefficiency can be improved in the case of BSEC member states. The analysis of ecoefficiency factors will include correlation and linear regression analysis in order to see how different kind of social-economic factors have impact on ecoefficiency. After the brief discussion of results, some recommendations will be presented in order to solve the efficiency problem.

RESULTS

Results of the research will show how different social-economic indicators have impact on environment and if natural resources are used efficiently. Since all of BSEC member states are developing countries, the use of natural resources in these states is extremely high which leaves consequences to the environment. Energy consumption is very high in all these states, as well as energy is being used very irrational with a very low investments in renewable energy although many of analyzed states have significant reserves of renewable resources. Results will implicate future direction of energy investments for BSEC member states, which is important in order to improve either energy intensity or ecoefficiency.

IMPLICATIONS

Results from paper will have significance in structuring future environmental and energy policies of BSEC member states, whose implementation is still based on fiscal aspect. It is right time for all analyzed states to turn around to the sustainable development concept in order to rearrange their current environmental policies and to be competitive on the global level. Paper will show what are the obstacles of implementing sustainable processes in developing countries and what changes can be made in order to reduce huge exploitation of the natural resources. In the future it will be important not to waste resources at every cost and their effective use will be top priority.

ORIGINALITY VALUE

In the environmental economics there are just few detailed research about environmental issues in this part of Europe, since the environment issue is still not the priority for BSEC countries. In fact there were no detailed analysis of sustainable development process in BSEC region with proper recommendation to the environmental problems. This paper provides detail analysis of the natural resources use and their impact on ecoefficiency which can help in structuring

sustainable solutions for BSEC countries. There are many factors that have impact on the ecoefficiency and it is good to be familiar with them so future strategies and analysis can provide even better solutions to the environmental problems and create much better and healthier place to live.

KEY WORDS

Ecoefficiency, natural resources, rebound effect, BSEC, energy use, sustainability concept, correlation analysis, linear regression analysis

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1.10. SUSTAINABLE DEVELOPMENT OF LOCAL COMMUNITIES: ECOLOGICALLY (IR)RESPONSIBLE APPROACH

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OBJECTIVES

This research provides an insight into negative environmental impacts of technological and industrial development causing the pollution of eco-mediums, with focus on local communities in Serbia. It delivers a critical analysis of national and international legislation pertinent to sustainable development and environment protection on local level, accompanied by suggestions to improve current state reaction to ecologically irresponsible behavior in Serbia.

METHODOLOGY

Content analysis was used to explore official reports on current state of environment in Serbia. It provided information about major environmental issues in local communities and about the entities whose ecologically irresponsible conduct caused these problems. Content analysis was also applied on the statistics about the number of reported, accused and condemned perpetrators of criminal offences against environment. It was applied in order to estimate the phenomenology, and scope of criminal offences against environment and to

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assess the quality of state reaction to ecologically irresponsible activities in Serbia. Doctrinal legal research method was used to analyse the provisions of international and national legislation relevant to the protection of environment in the context of sustainable development. Comparative legal research method was applied to examine representative international legal provisions that can be considered guidelines for the improvement of national legislation.

RESULTS

Unsustainable technological development produces negative environmental impacts affecting local communities in Serbia. National legislative framework for the prevention of ecologically irresponsible conduct is solid, but not completely harmonized with international standards. A small number of environmental criminal offences are reported and the imposed punishments are mild. There are few comprehensive reports on environmental issues in the context of sustainable development on municipal level.

IMPLICATIONS

The study suggests that policy makers, researchers and practitioners should dedicate much more attention to environmental protection when creating plans related to industrial, agricultural, and technological development and include the representatives of local communities in the entire decision-making process. It also implies that harmonization with international standards on ecologically sustainable development and more efficient enforcement of environmental legal provisions should be provided.

ORIGINALITY VALUE

The paper highlights key environmental issues emerging as the results of ecologically irresponsible and unsustainable industrial, agricultural and technological development, affecting local communities in Serbia. It analyses legal mechanism for the prevention of these problems on national and international level. It also offers suggestions for the improvement of quality and efficiency of state reaction to environmentally irresponsible acts and its harmonization with international standards.

KEY WORDS

Sustainability, environment, ecology, local community, development, environmental law, environmental crime, responsibility

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1.11. INTERDEPENDENCE BETWEEN ENVIRONMENTAL QUALITY AND ECONOMIC ASPECTS OF SUSTAINABLE TOURISM DEVELOPMENT IN TRANSITION COUNTRIES

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OBJECTIVES

The purpose of this research is to analyze the influence of tourism on ecological and economic sustainability in transition countries that are members of European Union. The objective of this paper is to quantify the interdependence between environmental quality and economic sustainability of tourism development in the observed countries.

METHODOLOGY

In the paper special attention is paid to the quality of natural environment as one of indicator that determine the value of the Travel & Tourism Competitiveness Index and the following indicators that determine level of economic tourism sustainability: Average expenditure per trip by categories, Average length of stay of tourists (nights) and Tourism flow - seasonality.

The following methods are used in the paper: multi-criteria methods such as VIKOR and FANMA method as well as correlation and cluster analysis method. VIKOR and FANMA method are used for quantify and compare the levels of economic sustainability of transition countries as tourism destinations. The correlation analysis method is used with aim of determining interdependence between the quality of natural environment and the level of economic sustainability. Using the cluster analysis the heterogeneity of the observed

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countries is examined from aspect of economic sustainability of tourism destinations and quality of their natural environment.

RESULTS

Results of the correlation analysis indicate that there is not a statistically significant correlation between the quality of natural environment and level of economic sustainability of tourism while the results of cluster analysis indicate that the countries with the lowest quality of natural environment record the lowest level of economic sustainability of tourism. Bulgaria records the lowest level of economic sustainability of tourism and the lowest level of quality of natural environment.

IMPLICATIONS

The research results indicate that transition countries such as Bulgaria, Croatia and Hungary should be implemented measures with aim to increase the economic and ecological sustainability of tourism. Increasing the economic sustainability of tourism in transition countries would contribute to increasing the quality of their environment.

ORIGINALITY VALUE

The paper presents a holistic approach of determining economic tourism sustainability in transition countries because multi-criteria methods allow quantification and comparison the levels of tourism sustainability based on a large number of indicators of sustainable tourism development.

KEY WORDS

Sustainability, transition countries, tourism development, quality of natural environment, multi-criteria method

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1.12. ENVIRONMENTAL TAX REFORM AND SUSTAINABLE DEVELOPMENT

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OBJECTIVES

The aim of the research is to draw attention to the concept of the environmental tax reform (ETR), in light of significant environmental problems that countries have faced with. ETR means the introduction of “green taxes” and the removal of environmentally damaging subsidies. Instead of introducing “green taxes” on a case-by-case basis, focused on solving particular ecological problem, “greening” the entire tax system is better way to reduce pressure on the environment and enable future generations to realize their needs in using natural resources. The main objective refers to possible contribution that taxation could make to efficient achievement of ecological policy goals.

METHODOLOGY

The basic method is in-depth analysis of the available national sources concerning legal shaping of environmental protection, primarily from the point of view of the tax policy. The comprehensive survey of existing types of environmental economic instruments, as well as cross-country analysis of the implementation of the ETR in selected countries (e.g. Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia) are undertaken, because all countries in the region of the Central and Eastern Europe have shown certain improvements in the environment protection since the end of the 1980s, also due to economic (fiscal) measures. But, different national experiences show that there is no unique “model” for the successful ETR, because of local political, economic and social conditions of each country. In the research, two approaches are co-ordinated: (1) examination of the legislation sources referring to the environmental protection, in the context of the existing tax systems, and (2) theoretical mapping of the significance of these legal solutions.

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RESULTS

ETR entails improvement of environment, raising public revenues, internalizing externalities and reducing unemployment. Pollution charges are dominant, while product taxes (on plastic bags, tires, batteries, refrigerators, etc.) are not often used, though measuring the emissions may be very difficult, in some cases even not feasible (e.g. contamination of water systems, because there is no single point of the pollution). The major function of green taxes are still raising revenues rather than providing incentives for both producers and consumers to change their behaviour towards a more eco-efficient use of resources.

IMPLICATIONS

ETR should be based on the revenue neutrality, i.e. there is a tax shift from labor and capital onto pollution and excessive use of natural resources. Thus, “double-double dividend” can be achieved, consisting of both improvement of environment and increasing employment, as well as decreasing the burden of taxes on labour and spur to innovations and sound competition. The integration of the ecological and fiscal policy should be recognized by the policy-makers. Environmental concern should be integrated into business.

ORIGINALITY VALUE

Some obstacles to implementation of the ETR have been shown in the research:

- Impact on competitiveness (i.e. reallocation of production to countries with less strong environmental policies)
- Uncertainty regarding budgetary implications
- Lack of coordination between fiscal and ecological authorities
- Strong opposition against eco taxes by polluters.
- It has been pointed out in the paper that implementation ETR strategy requires:
- Good institutional framework, i.e. close coordination among Ministries of finance, environment, transport and agriculture
- Extensive consultations with key stakeholders (local authorities, industrial enterprises and NGO sector)
- Gradual implementation
- Careful design of green taxes.

KEY WORDS

Double dividend; environmental tax reform; externalities; green taxes; pollution charges; tax shifting

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1.13. SOLVING THE PROBLEMS OF RURAL AS ENVIRONMENTALLY DESIRABLE SEGMENT OF SUSTAINABLE DEVELOPMENT

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OBJECTIVES

The paper highlights key problems of rural development in the context of economic and environmental crisis, with focus on rural areas in Serbia. It emphasizes the link between sustainable rural development and environmental protection, particularly in the fields of organic agriculture, small organic farming and agro-eco tourism. It analyses legislative and strategic documents regulating this issue on universal, European and national level, making suggestions to improve their application.

METHODOLOGY

Content analysis was applied with the purpose to define sustainable rural development and key problems that appear in this field - worldwide as well as in rural areas in Serbia. It was also applied to analyse the relation between the success and sustainability of rural development on one hand and the effective conservation of environment and its elements such as air, water and soil on the

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other. Doctrinal legal research method was used to critically examine the provisions of legal strategic documents directly or indirectly related to sustainable rural development and environmental protection. Comparative legal research method was applied to explore the approaches to this issue in documents adopted on European level (by the European Union) as well as of those adopted by the United Nations

RESULTS

Obstacles for sustainable rural development include: uncultivated agricultural lands, soil pollution, insufficient irrigation or draining, agricultural lands fragmentation, poor infrastructure, inadequate tax policy, uncompleted restitutions, long probate proceedings and financially uncertain position of land-owners. Some of them have environmental impacts and can be resolved by suitable policy and legislation, strategic planning, environmental education and financial stimuli for green agriculture.

IMPLICATIONS

The paper has implications for legislators and policy makers in the areas such as: sustainable development, taxes, agriculture, green economy and environment protection to analyse more profoundly key problems of rural (as ecologically desirable) development and their linkage to nature conservation. When it comes to practice, it suggests which legal documents should be applied in order to achieve not only successful but also sustainable and environmentally acceptable development of rural areas.

ORIGINALITY VALUE

The paper contributes to a better understanding of the relationship between sustainable rural development and environment protection, emphasizing the possibility to preserve nature and increase incomes of rural communities through green agriculture, small farm production and eco-tourism. It also states that current legislative framework provides preconditions for resolving the issues that might appear within, suggesting key steps for its future implementation.

KEY WORDS

Sustainable development, rural development, agriculture, eco-tourism, environment protection, ecology, green economy

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SUSTAINABLE GROWTH IN SMALL OPEN ECONOMIES

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1.14. SMALL ENTERPRISES AND THE DEVELOPMENT OF ECO-TOURISM AS AN OPPORTUNITY FOR ACHIEVING SUSTAINABLE ECONOMIC DEVELOPMENT - THE CASE OF THE REPUBLIC OF MACEDONIA

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OBJECTIVES

Providing evidence in the potential that the Republic of Macedonia has in the process of development of the eco-tourism and confirmation of the basic hypothesis that the representation of SMEs in the eco-tourism sector, it is a development concept that enables achieving sustainable economic development. Small enterprises can create an appropriate eco-supply and take advantage of natural conditions.

METHODOLOGY

To collect, analyse and process data, a practical research was conducted to test the implementation and development of eco-tourism as an alternative form for tourism development, whether there is an opportunity and willingness for eco-

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tourism development.

As The method of the research, a survey questionnaire was used. "Survey of the possibilities for development of eco-tourism and achieving sustainable economic development through small enterprises in the Republic of Macedonia". The questionnaire consists of 15 questions. The survey was conducted in 70 small enterprises that perform a certain tourist activity in the period from 01.01.2017. Until 30.06.2017 On the territory of the Republic of Macedonia.62 companies, out of the 70 small enterprises surveyed showed interest and answered questions from the questionnaire.

RESULTS

Research includes 62 companies. After research, conclusions are following:

1. Need for promoting eco-tourism
2. Inform enterprises about the benefits and the potential it has.
3. Enterprises responded that are not informed about the country's support for eco-tourism development.
4. Need for an institutional help and support in the process of ecotourism development.
5. Smaller portion of the respondents stated that they have the opportunity and capacity to invest in the eco-tourism sector.

IMPLICATIONS

Eco-tourism has the potential for rapid sustainable economic development; area linking environmental protection, local culture with revenue generation and job creation has high potential for expansion and achieving sustainable economic development. Its main goal is to create conditions for people to acquire knowledge about nature, historical and cultural characteristics of the region by maintaining integrity and encouraging the development of the local community.

ORIGINALITY VALUE

Prerequisite for development of eco-tourism is the existence of the entrepreneurial initiative and culture in creating the offer in this sector and the various contents that are an integral part of the tourist offer. Opportunities for development of eco-tourism are perceived through an analysis of the situation in terms of the general demand and supply in this sector. To build a sustainable concept of development, it is necessary to create an appropriate business model and competitive strategy.

KEY WORDS

Eco-tourism, small and medium enterprises, nature, sustainable economic development, tourist's needs

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1.15. WASTE ELECTRICAL & ELECTRONIC EQUIPMENT RECYCLING: SOCIOECONOMIC AND INSTITUTIONAL CHALLENGES FOR SUSTAINABLE GROWTH IN SERBIA

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OBJECTIVES

The contemporary consumer society creates a plethora of different kinds of waste. The goal is to create a modern integrated waste management system with a recycling process that provides implementation of modern Circular Economy (CE) as an alternative to current linear business model. In the area of Electrical and Electronic Equipment (EEE) product lifespan is decreasing rapidly which creates a large amount of Waste Electrical and Electronic Equipment that puts WEEE under the fastest growing waste stream in the world. The purpose of this paper is to provide an overview of institutional framework and process of implementation of financial stimulation policy for recycling WEEE in Serbia as a part of global environmental, socioeconomics & business challenges for sustainable waste management.

METHODOLOGY

This paper is based on desk research for analyzing the past and present market situation, the current issues as well as future projects in the field of WEEE recycling. On a second step, in order to evaluate financial and socioeconomics impact that WEEE recycling has on environment itself, we realize a case study, i.e. we examine a company which is dealing with WEEE recycling business in Serbia. Furthermore, a number of interviews were conducted with other companies related to the waste business, support organizations, professional associations and official bodies to gather feedback from the field.

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RESULTS

Serbia has a large comparative advantage in developing recycling industry in the field of WEEE due to large base end of life electrical and electronic equipment. Implementation of legislative system in combination with financial stimulation policy resulted in putting as much as possible WEEE into waste streams and substantial increasing of its collecting rate. That also ensures hitting the EU targets in the field of recycling e-waste mentioned in the EU Directive 2012/19/EU. Further development of the work will be towards measuring economics and social benefits from recycling WEEE which multiple overcomes pure financial profit. Main limitation lies in the fact that implementation of the new legislative system on waste management along with stimulation policy at the company perspective follows great difficulties because unlike EU, Serbian institutions are insufficiently matured and capable to adopt this regulations on expected level.

IMPLICATIONS

Practical experience in implementation of institutional framework at the company level, from which some stakeholders (policy makers, citizens, companies) will have important benefits and feedback is key added value of this paper. Implementation of the WEEE recycling process in current institutional ambient will provide precious feedback to the policy makers enabling them further developing of the legislative system. Citizens, on other hand will be more self-aware about socio-economic benefits from WEEE recycling and importance for environmental protection itself and they could active take a roll in the WEEE collecting process. Other companies will be able to overview the whole system of recycling and realize key problems in order to extend their future business in the field of WEEE recycling, and further towards sustainability.

ORIGINALITY VALUE

The paper structurally presents the area of electrical and electronic equipment waste. It offers a short insight into understanding of the e-waste problem, its threats and challenges. The results of the research are expanding existing empirical literature in the field of analysis of the relationship between national competitiveness, development WEEE recycling industry and sustainable growth in developing countries and transition economies, focusing the analysis of this relationship in Serbia, where so far, this topic is poorly known and researched.

KEY WORDS

WEEE, sustainability, circular economy, recycling, financial stimulation

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1.16. ENVIRONMENTAL TAX AND COMPETITIVENESS OF EUROPEAN COUNTRIES THROUGH THE LENS OF PORTER HYPOTHESIS

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OBJECTIVES

In accordance with Porter hypothesis (PH), the paper investigates empirical proofs of positive relation between current environmental taxes on the example of 34 European countries and their innovation capacity. The aim of the paper is to examine the connection between a) environmental taxes as one of the forms of strict ecological regulation in European countries and b) innovation capacity of the countries expressed by the values of sub-index GCI - Innovation and sophistication factors. In accordance with the proposed model this would imply testing of the so-called weak part of PH.

METHODOLOGY

In accordance with the defined objectives, the method of multiple regression analysis of panel data for European countries during the period 2006-2015 was selected. Namely, we wanted to see how a dependent variable (in this case innovation capacity of countries) changed under the influence of independent variables. (Transport taxes, Energy taxes and Other environmental taxes (Pollution, Resource etc.)).

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In order to achieve the quality research, two control binary variables, economic crisis and economic background (old market economies vs market economies after the transition period) were used in addition to independent and dependent variables

In order to obtain appropriate econometric model it is assumed that environmental taxes in one year have their positive effect on the level of innovativeness after a certain period, hence the original data are configured with the lag of dependent variable of 1 year.

RESULTS

The obtained results refer to the conclusion that environmental taxes have statistically significant but contradictory influence of the sub-index GCI - Innovation and sophistication factors in European counties during the selected time interval. While Energy taxes have a slightly negative influence, the other two independent variables a) Transport taxes and b) Other environmental taxes have somewhat stronger positive effect on the innovation component of global competitiveness as a dependent variable.

IMPLICATIONS

The results of research at this stage show that it is possible to generate the initial model for explanation of the effect of environmental taxes on the innovation potential of European countries. Nevertheless, this phase is characterised by a relatively small time series as well as a small granulation of the presented environmental taxes as independent variables. However, the results are preliminary and further research is necessary for generalisation of conclusions in accordance with PH. In addition, too wide dispersion of the variable Other environmental taxes demands additional calibration of the model in further research together with possible transformation of data. One of the main implications of this study is that the initial model can serve as a productive framework for further study of accuracy of PH at more detailed level.

ORIGINALITY VALUE

The confirmation of this hypothesis can be significant for the creators of economic policies, especially in the light of current ecological and also wider aspirations towards the sustainable development (ecological policies in EU). Also, it specifically confirms the accuracy of the so-called weak Porter hypothesis that ecological regulations positively influence innovativeness, which is the first step in

testing of strong Porter hypothesis, which assumes that the innovativeness generated in this manner will eventually have positive effect on competitiveness.

KEY WORDS

Porter hypothesis, environmental tax, environmental policy, innovation, sophistication

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1.17. SOIL QUALITY AS A FACTOR OF ORGANIC FARMING – A CHANCE FOR THE LOCAL ECONOMIC DEVELOPMENT IN THE REPUBLIC OF SERBIA

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OBJECTIVES

The objective of this paper is to show how significant the quality of soil is as a factor of organic farming, and also to point out to the effects of organic agriculture on the local economic development. After processing available data on the size and distribution of arable and non-arable agricultural land per each region in the Republic of Serbia, the cost-effective methods of organic farming will be proposed with the activities that should be carried out in order to use the non-cultivated land for organic agriculture.

METHODOLOGY

The results obtained in the previous studies of the soil suitable for organic farming and the evaluation results for the soil pollution at some localities have been used. Preparatory activities included on-site visits and recording of potential locations to be observed. Available satellite images and GPS technology have been used for geospatial identification of the sampled soil and vegetation material. Field works included sampling of soil and vegetation material found at observed sites. Collected samples have been analyzed using laboratory methods from the available scientific literature. For data processing the basic descriptive statistics have been used, together with the correlation method. Cartographic data

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processing has been carried out by using GIS Arc View 8.3 software. Case studies have also been applied, as well as comparison methods, statistical data by relevant institutions, and absolute and relative numbers. The obtained results are presented in tabular and graphical forms.

RESULTS

The Republic of Serbia has significant areas of cultivated and non-cultivated agricultural land suitable for organic farming. On this land it is necessary to develop a methodology for the preparation of the soil for organic farming. At certain sites a different level of limitations has been observed so the measures have been proposed to monitor these areas with the objective to include them in future organic farming. These activities represented the basis for identifying the economic development opportunities for the local communities.

IMPLICATIONS

Proper soil management, which implies regular soil fertility control and adherence to the basic principles of fertilizers application and agro-technical practices, may maintain the productive capacity of the soil with minimal environmental impacts. Local economic development offices should raise the farmers' level of consciousness on the economic and ecological significance of organic farming and support their activities in order to achieve higher overall economic and social development of the local communities.

ORIGINALITY VALUE

The originality value of this paper lies in its pointing out that agricultural producers and their local communities in the Republic of Serbia may with adequate farming practices applied to the soil being a factor of organic farming successfully achieve multiple goals – in productivity and ecology: development of organic crop growing and cattle breeding in such a way to preserve and improve the environment; as well as social and economic goals: to boost employment and improve the living standard of the local people.

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KEY WORDS

Organic farming, local development, soil pollution

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1.18. THE RELATIONSHIP BETWEEN INCOME AND ENVIRONMENT IN TRANSITION COUNTRIES: THE IMPORTANCE OF TAX POLICY MEASURES

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OBJECTIVES

Specifically, an attempt is made to investigate the role played by environmental policy and its specific tax policy measures in comprehending the income-environment relationship. In this paper we analyse the existence of Environmental Kuznets Curve (EKC) hypothesis in the context of transition economies.

METHODOLOGY

The empirical analysis covers ten Central and Eastern European countries in the period from 1995 to 2013. The latest data on environmental taxes are available only from 1995. We used Prais-Winsten regression with panel-corrected standard errors as estimation strategy to account for heteroscedasticity and cross-sectional dependence in the data.

RESULTS

The results of this analysis provide rather weak evidence in support of an inverted U-shaped relationship between economic growth and the environment. We find evidence on the existence of inverse-U shaped relationship only when additionally controlling for the differences in the levels of technological sophistication across countries. The results are, however, not robust to different specification method, which seems compelling.

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IMPLICATIONS

This paper advances our understanding on the underlying mechanisms that explain the relationship between income and pollution, by incorporating environmental policy factors that have not been empirically investigated in previous literature, and by reflecting econometric issues suggested to be taken into consideration in empirical investigation of the EKC hypothesis.

ORIGINALITY VALUE

We contribute to recent literature in two respects. First we study this relationship in an integrated and dynamic framework in which we take into account the effects of structural and technological change, and investigate their influence on pollution. Second, we refer to the sample of transition economies, and analyse the impact of environmental tax policy measures on CO₂ emissions. Given this, the paper advances our understanding on the effectiveness of tax policy measures in curbing CO₂ emissions, on which we have scarce empirical evidence.

KEY WORDS

Environmental Kuznets Curve (EKC) Hypothesis, environmental policy, pollution, CO₂ emissions, transition countries

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1.19. RENEWABLE ENERGY CONSUMPTION AND CO² EMISSIONS: AN EMPIRICAL ANALYSIS OF EU-28 COUNTRIES

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OBJECTIVES

The main goal of this paper is to analyse the relationship between renewable energy consumption and CO² emissions in EU-28 countries.

METHODOLOGY

The empirical analysis covered 28 European Union countries in the period from 2004 to 2012. The principal variable of interest is share of energy from renewable sources in total consumption. We used fixed-effect panel data estimates with PCSE panel-corrected standard errors.

RESULTS

The empirical results show that renewable energy consumption decreases CO₂ emissions. Overall, the empirical results support the hypothesis that there is a significant and negative effect of the use of energy gained from renewable sources and CO² emissions in European Union countries. All variables included in the models have the expected sign. The only exception is the environmental tax variable that has a positive sign. This could be because higher revenues from environmental taxes are not necessarily linked to higher tax rates and more likely with high consumption of lightly taxed goods.

IMPLICATIONS

The important policy implications that emerge from the empirical evidence of this study reflect on the importance of integrated support policy measures to enhance

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production from renewable energy resources. Public support measures in this context do seem to pay off via promoting cleaner environment.

ORIGINALITY VALUE

The results of this study reflect on the significant contribution to knowledge, since it provides econometric evidence on the relationship between renewable energy consumption and CO² emissions in EU-28 countries. To the best of our knowledge, the impact of renewable energy sources on CO² emissions on a full sample of EU28 countries has not been previously investigated.

KEY WORDS

Renewable energy consumption, pollution, CO₂ emissions, EU-28

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Part II.
GREEN ECONOMY AND
VULNERABILITY OF ECONOMIC
GROWTH: ECONOMIC PILLAR

2.1. INNER POTENTIAL AND BACKGROUND FOR SUSTAINABLE DEVELOPMENT OF SMALL CITIES

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OBJECTIVES

The object of our research is Ekaterinburg agglomeration which includes one of the biggest Russian cities and its nearest city-satellites. All these cities are different in population, industry scale and level of socio-economic development. Most of them are old industrial cities. The crisis of old industrial areas caused by technological changes of the early 21st century, has led to the bankruptcy of their enterprises and population outflow from these cities, which still have considerable technical, industrial potential and significant natural and human resources.

METHODOLOGY

Urban agglomeration is a complex multicomponent dynamic system with different economic relations, transport and cultural bonds. It is stated in many international researches that highly urbanized area consists of one or few larger cities, which have additional advantages due to increasing returns to scale (Krugman 1991). Polycentric type of agglomerations is widely spread in Europe (Lisbon, Paris). The well-known agglomerations in Russia (Moscow, St.-Petersburg) were created on the basis of a rigid monocentric model.

Empirical studies have confirmed that certain number of small cities have significant agglomeration effects as well. According to Partridge (2008) small urban areas play a key role in the explanations of urban systems' development. The focus of the present research is to study agglomeration potential of small

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cities around Ekaterinburg and determine a possible form of Ekaterinburg agglomeration. To measure the level of agglomeration economies in small cities we used the Cobb-Douglas model, which allows estimating elasticities of supply of labor and capital in the cities (Lugovskyy 2003).

RESULTS

On the basis of official statistic data on municipal development we studied the time-dependences of socio-economic development indicators for all cities of Ekaterinburg agglomeration. We used the related indicators: labor per capita, volume of retail trade per capita, built residential area per capita etc. to make a comparative analysis of the cities and calculate an integrated rating for them. According to the calculation results we divided all cities into 3 groups. The first one contains two cities: Ekaterinburg and Zarechnyi which have shown the increasing returns to scale

IMPLICATIONS

What is more important to state is that Ekaterinburg agglomeration on the whole does not show agglomeration effects in spite of big population. It is the questions for our further study, but now we can state that the agglomeration of Ekaterinburg should be polycentric. The results of the research can be used by the cities' administrative bodies to find the most appropriate and effective form of interaction between municipalities. In the case of successful realization of this project, the experience can be successfully used in other regions of Russia.

ORIGINALITY VALUE

Agglomeration effects can be observed at different levels of aggregation. Large cities provide greater opportunity for economies of scale, availability of quality human capital, cluster effects, innovation processes and knowledge spillover, but under certain conditions smaller cities can also achieve some of the effects of agglomeration and can play an important role in territory development.

KEY WORDS

Agglomeration, small cities, industrial cities, statistic analysis

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2.2. ECOLOGICAL FOOTPRINT TAX FOR THE DEVELOPMENT OF LOCAL AGRIBUSINESS

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OBJECTIVES

This paper tries to draw the outline of a new concept for product taxation (“ecological footprint tax” or EFT) whereby two of the main problems for millions of people in developed and semi-developed countries could, if not be solved, be at least mitigated: mass unemployment (especially in rural areas) and deterioration of the nature. The concept can be developed to cover the whole economy, but as a first experimental step, this paper suggests to introduce it in agriculture and food industry.

METHODOLOGY

The proposal for alleviating the above problems is based on the concept of ecological footprint, developed by UBC scholars in 1995. The essence of the concept is that it is possible to estimate how much ecologically productive land is needed for a defined population at a given technological level to support both the production of goods and services they consume and the assimilation of all their wastes sustainably. On further considering the matter and adopting a narrower version of the original concept, it is possible in theory to estimate how many global hectares are needed for the individual products (or services) to be brought throughout their entire lifecycle, from invention to degradation or recycling. Based on the above, it becomes possible for the tax system to undergo a radical change whereby the amount of the tax paid on goods and services would be proportional to their need in nature.

RESULTS

When determining the level of EFT, we have to resort to considerable simplification by considering only factors in strong correlation with ecological

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footprint. We take into account first, the geographical distance between the place of food production and consumption, by using arctan function; second, whether the product is organic or conventional, by dividing the result by a constant; and third, whether the product is transported by airplane or not, by multiplying the result by a constant.

IMPLICATIONS

The implications of the paper for policy makers are evident, as the proposed tax could boost local production and employment, reduce harm through transportation to nature, while conforming to the principle of social justice, and lowering the costs to the national health service. The new tax should be combined with the reduction of other taxes (e.g. VAT) which would enable local foodstuffs to be not only more competitive against imports, but also more affordable for customers.

ORIGINALITY VALUE

EFT would boost preference for local food production without breaking WTO rules, ensure a fair allocation of tax charges (rich big-consumers having to pay much higher tax than low-polluter average people), and allow a healthier diet (as with local production there is no more need for the food products to be stuffed with preservatives). By only one measure (EFT) could be reached multiple goals (social, rural development, employment, environmental).

KEY WORDS

Eco-tax, local economy, employment, public health

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2.3. ACHIEVING SUSTAINABLE DEVELOPMENT – THE ROLE OF GREEN MARKETING¹

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OBJECTIVES

All forms of business have (positive or negative) impacts on the environment. Companies, in addition to the rights to use renewable and non-renewable natural resources, must also have the obligations related to their use and protection of nature. Business operations should not be focused solely on profits, which means that companies have to be socially responsible and have to take care of the environment. The question is whether business can assume ecological and social responsibility and stay profitable at the same time? The aim of this paper is to show that this is feasible, and one of the ways to achieve it, and even benefit from this challenge, is to apply green marketing - a leverage that contributes to socially responsible business. The issue of sustainable development through green marketing, and generally through green economy, must be incorporated into the company's business strategy.

METHODOLOGY

Given that the paper deals with the analysis of the impact of green marketing on achieving sustainable development, the existing literature dealing with this issue is primarily analyzed. There is a significant number of articles and other papers on this topic, but they are mostly related to foreign markets. When it comes to Serbia

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and Montenegro, there are not many scientific papers in this area. There are sporadic studies of certain areas of green marketing application and activities that contribute to sustainable development, which are, in many cases, carried out by non-governmental and international organizations, and less by the scientific community. This paper aims to deepen the knowledge, as well as analyze the advantages and difficulties of implementing green marketing in achieving sustainable development. The empirical analysis in the paper is based on several aspects – where the position of the main subject in this area (consumers, companies and the state) was examined. For this purpose, the "meta" analysis was applied - that is, the results and conclusions of this paper were obtained using secondary sources of data from existing empirical researches. The aim of the paper is to give recommendations and examples of good practice of green marketing implementation in companies, and a case study analysis method.

RESULTS

Benefits of companies applying the concept of green marketing are multiple (creating a positive business image, promoting the concept of a socially responsible company, improving business efficiency, creating new market potentials and penetrating existing markets, etc.). These benefits can be viewed at a macro level as such action leads to sustainable development (e.g. through energy savings, reduced waste etc.). Compared to developed countries, consumers in developing countries have less ecological awareness, but there are also significant differences between them. For example, compared to other countries in the region, consumers from Montenegro are considerably less involved in environmentally responsible purchasing, and are not sufficiently informed how they can contribute to the preservation of the environment.

IMPLICATIONS

In spite of the global framework of the analysis, the focus of the work was on the operations of companies from Montenegro and the Western Balkans region, so that examples and recommendations can be of paramount importance for companies in Montenegro planning to incorporate an ecologically and socially responsible component into their business. The paper can also be used at faculties, in marketing and green marketing studies - theoretically and through case study analysis.

ORIGINALITY VALUE

The originality of the work is reflected in the analysis of the current literature and conducted researches in the fields of green marketing, sustainable development and their connection. A special contribution is in presenting a comparative analysis of Montenegro and the countries of the region, primarily in the area of ecological awareness of consumers. The added value is reflected in case study analysis and recommendations for green marketing application in an efficient way, which can contribute to improving business operations and sustainable development of the economy and society as a whole in the long run.

KEY WORDS

Green marketing, sustainable development, social responsibility, ecological awareness

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2.4. SUSTAINABILITY REPORTING AND GENDER DIVERSITY – EVIDENCE FROM SERBIAN POLLUTERS

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OBJECTIVES

In this research we try to correlate whether gender diversity influence CSR reporting practice of Serbian heavy polluters. We contemplate that companies with more female members of supervisory board will show more detailed CSR information in their reports and on website. This paper is important for academicians, managers of those companies and policymakers especially in the light of new EU Directive 2014/95 that requires non-financial and diversity information to be published by large entities.

METHODOLOGY

As descriptive researchers we use content analysis to capture the data for the research. Content analysis is used to examine the content of CSR and board gender information in the website of Serbian polluters and their respective CSR reports (if published). To gather the data we formulate CSR index consisting of several variables used to measure CSR practice of Serbian companies. Content analysis is applied to gather the data for each variable used in the creation of CSR index and we express data in form of Likert scale or in form of dichotomous scale. This method is reliable because similar one used for the creation of CSR index by Montecchia, Giordano, Grieco (2016) on a sample of Italian companies. The same content analysis method is used to gather the data regarding number of female in the supervisory board. This information can be found in the website or in annual report (Management report specifically). Among statistical methods for this analysis we use simple linear regression and Pearson correlation statistics. Sample is composed of Serbian company polluters from the polluters list of companies

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having some environmental conflicts (<https://ejatlas.org/country-of-company/serbia>)

RESULTS

In our research we believe that gender diversity of the Serbian polluters board of directors matters when dealing with CSR reporting issues. Other studies show that there is a high positive correlation between number of women in the board of directors and CSR. Research is not longitudinal by nature which is considered to be its primary limitation.

IMPLICATIONS

This research has implication on academicians, policymakers and managers of Serbian heavy polluters. Academicians may benefit from the research in respect that it shed some light on problem that women are more sensitive and emphatic towards sustainability issues. Policymakers may benefit in terms that imposing gender quotas to Serbian heavy polluters may enable them to show more environmental and social awareness. For the male managers, this research reveal that they can benefit from delegating CSR decisions to female members of the management team.

ORIGINALITY VALUE

This is according to our knowledge first paper correlating gender diversity issues and CSR reporting in Serbia. The uniqueness of this research is in sample itself. There are no papers trying to find the evidence of the existence of this relationship in Serbian big polluting companies. This paper shed some light on CSR issues by relating them to female board members and showing that the increase in the number of women in board will increase CSR reporting efficacy.

KEY WORDS

Gender diversity, CSR reporting

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2.5. ORGANIC PRODUCT LABELLING: CONSUMER ATTITUDES AND IMPACT ON PURCHASING DECISION

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OBJECTIVES

The objective of this paper is on one hand to analyse attitudes of the consumers towards the organic products and on the other to determine the level of confidence they have towards the legally established label for organic products. There are about 2,000 organic producers in Serbia and around 15,000 ha under organic crops with a tendency of growth due to the increasing demand on the domestic and foreign markets. In order to distinguish the organic product they must be marked with a specific label, which each country defines.

METHODOLOGY

This research uses questionnaires designed specifically to obtain customer-level data in order to evaluate their attitudes towards organic products and labelling. Having in mind identified constrains and literature review, we structured questionnaires that we used in the research. Questions included were stipulated in a way that allows statistical analysis. The questionnaire consisted of two parts. In the first part, respondents gave answers to the questions that determined their basic characteristics and identity. The second part of the questionnaire contained questions used to test their opinion about organic food and basic criteria when opting for groceries. We also tested whether consumers are willing to pay more for the organic products. Last part of the questionnaire tested the connection between organic labelling and confidence in grocery purchasing. Each question in questionnaire is given with concise explanation, in order to eliminate possible errors and ambiguities. Data analysis was performed using MS Office Excel and SPSS.

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RESULTS

Our results show that a large number of consumers (85.4%) think that the food is not safe for the consumption and they are ready to allocate more money to buy organic products due to their quality, safety and nutrition. Their basic criteria when opting for groceries is food composition, followed by recommendation and price. Only 2.5% of respondents value products based on trademark and organic labelling. This indicates a relatively small significance of organic labelling for consumers in the Republic of Serbia.

IMPLICATIONS

There is a lot of unfair competition and misuse of certain expressions in the product name that are offered on the market as healthy and organic but they have not undergone a rigorous process of control of competent institutions. This can mislead buyers in terms of quality and safety. The state has important role in the process of promoting organic products and raising awareness about it. Research in several countries has shown that trust in organic food labelling is the highest in countries with a significant state participation.

ORIGINALITY VALUE

This research extends the scope of current consumer research about organic production in Serbia and provides new insight in the analysis of attitudes towards the organic products and the level of confidence in labelling system.

KEY WORDS

Consumer attitudes, organic products, organic production, organic certification process, national organic label

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2.6. SMART INNOVATION CAPACITY: THE EXPERIENCE OF CROATIAN LARGE CITIES

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OBJECTIVES

The research studies show that key decisions in Croatian large cities (defined as urban settlements with more than 35,000 inhabitants, as well as county centres) have mostly been made without much strategic consideration, being primarily reduced to setting ad hoc goals, activities and measures for their achievement. The objective of this research is to examine the implementation of the Smart City concept and to construct good indicators that describe local innovation capacity of Croatian large cities.

METHODOLOGY

To overcome the lack of strategic orientation in Croatian large cities, this research will follow the methodology developed by Giffinger's et al. (2007) under the European Smart Cities project. We will identify the most important indicators for measuring development of economy at Croatian large cities' level. Publicly available databases do not contain indicators for such measurement. The first task will be the collection of a set of data for 25 large cities from national and local sources for database formation. We will use web scraping techniques to collect publicly available data (data obtained from the Urban Audit database, the Croatian Bureau of Statistics data at city level, local database and interviews with experts in 25 Croatian cities, etc.) to measure indicators that represent the degree of development of economy at Croatian large cities' level in several dimensions: innovation, entrepreneurship, economic image and trademarks, productivity, flexibility of labour market and international integration. Finally, we will use 19

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indicators to compare 25 Croatian large cities and to assess their comparative advantage in a wider international context.

RESULTS

Establishing a comparable dataset by cities through creation of indicators will give sources to analyse the role of Croatian large cities in smart specialization and make the comparison among Croatian large cities. We will provide an explanation for every city ranking by analysing the structure of our city-level data. All results will be available through a web application designed by authors of this research. We will also estimate city development index using principal component analysis, which will allow us to rank cities by the degree of economic development

IMPLICATIONS

The implications of this research, as a type of evaluation of local policies, should serve policy decision-makers in proposing decisions for the adoption of appropriate measures to promote smart, locally led development. This research will pave the way to future investigation through which we will measure five other dimensions of Smart City concept - smart people, smart governance, smart mobility, smart environment and smart living - aiming to emphasize the use of Smart City components for evidence-based monitoring of economic and social development of Croatian large cities.

ORIGINALITY VALUE

There are three main contributions of this paper. First, we will use web scraping techniques to collect, clean and harmonize annual data that are not usually available from national statistical institutions. Second, we will use the estimated index of economic development for every city. Third, our analysis and comparison of competitiveness of Croatian large cities will be made available through a web application that should encourage key decision-makers to use available information and apply it in preparation and implementation of their Smart City forward looking strategies.

KEY WORDS

Smart city, indicators, innovation capacity, large cities, Croatia

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2.7. AN INQUIRY INTO THE COMPETITIVENESS-RESILIENT GROWTH NEXUS

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OBJECTIVES

In this paper, we underline that a resilient economy should equally be able to prevent destabilizing forces to develop internally, as it is expected to cope with external destabilizing forces. More specifically, we address the issue of the lost international competitiveness of Southern Europe EMU countries trying to relate it to the wage-productivity developments. We also tackle the issue of the real convergence within EMU and why it seems to be lagging behind the real convergence across some other parts of the world.

METHODOLOGY

We start with differences of the concept of resiliency in natural and social systems, before we give a short review of causes of economic crises, that would help us to discuss the roots of ongoing economic crisis. Then we go on to explore theoretical and empirical regularities concerning the links between labour costs (labour productivity/compensation) and trade imbalances, with a special focus on the recent crisis in Southern Europe EMU countries. The empirical part of the paper is based on regression analysis.

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RESULTS

The empirical analysis, based on recent data and international comparisons, indicates close ties between unit labour costs and trade imbalances, with a potential to explain the lost momentum in economic growth. By decomposing unit labour costs into labour productivity and labour compensation indicators we found the wage policy a factor that contributes to the lost competitiveness of Southern EMU countries vis-à-vis a group of large exporting countries.

IMPLICATIONS

The episode that we have studied here points out some policy fallacies. The first one is that ongoing monetary integration per se helps achieving pre-conditions necessary for creating one such integration, especially in terms of relative size of output shocks and their synchronization (Karras and Stokes, 2001). Secondly, it is a pitfall that adjustment mechanism that goes through divergent price and wage trajectories, if needed, will operate well (automatically) and at costs that societies readily accept.

ORIGINALITY VALUE

The paper builds on contributions coming from the theory of economic crises and the theory of international competitiveness, within a novel framework of economic resiliency. The empirical part of the paper contains original calculations based on data from official sources (OECD). The paper also discusses main policy dilemmas and some policy options' implications.

KEY WORDS

National competitiveness, resilient growth, labour productivity, financial crises

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2.8. INVESTMENTS IN SUSTAINABLE TRANSPORT AS A GREEN ECONOMY DRIVER - CASE STUDY BOKA BAY

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OBJECTIVES

How sustainable investments in the tourism sector lead improving local and global economy and help a green economy development? Growing urbanization has very important impacts on the everyday life and cities' economies. It is very well known that the amount of money our cities spend on energy directly influence local economies. That is why touristic cities must work on protection of cultural landscape by achieving sustainable goals through its valorization and sustainable reused. Sustainable transport modes are very important for reaching sustainable urban and rural development, thus investments in sustainable transport is one of the key green economy driver in tourism sector. The case study, the pilot project for four touristic cities (Kotor, Tivat, Herceg Novi and Old Royal Capital Cetinje) is showing how different investments in sustainable transportation in tourism sector can directly contribute to economically justified sustainable development. It is not just efficient way of transforming touristic cities in sustainable developed places, but economically justified, what is a key element for green economy growth. It is important to use smartly the potential of the natural landscapes by sustainable investments. In this paper, we are discussing about a possible model of the integrated sustainable urban mobility as instrument for sustainable urban and rural development in non-developed countries who valorize its natural potential on the sustainable way. In the touristic cities, this is exactly what could help decreasing consumptions of energy, save money for local governments and improve a quality of life while attracting the large number of tourists whose impacts will strength both, the local and the global green economy.

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METHODOLOGY

This paper is result of research work done through the project Toward Low Carbon Tourism in Montenegro, implemented by UNDP Montenegro office and funded by GEF. In the framework of this project Polycentric Sustainable Urban Mobility Plan for Boka Bay and Cetinje is developed. The results of this case study, used for the research in this paper, provides some concrete measures for improvement of transport system until 2020 what we found out as sustainable and economic justified way for green economy development and reaching the sustainable urban development.

RESULTS

The results we achieved in Sustainable Urban Mobility Plan are 24 concrete measures where some concrete investments directly contribute to a green economy development. The case study is the main method used in the paper while results previously obtain through development of the Sustainable Urban Mobility Plan for Boka Bay and Cetinje were analyzed as driver for achieving sustainable goals and reaching sustainable urban development. We are showing how investments in integrated sustainable transport could be a real key green economy driver. The integrated sustainable urban and rural mobility and implementation of concrete measures especially in the tourism sector could directly support green economy.

IMPLICATIONS

On one hand, the results of this paper will show how green economy could be achieved through investments in sustainable transport but also to improve the attractiveness and quality of the urban environment in local centers and key transport corridors but also to reduce energy consumption and reduce greenhouse gas emissions, with a focus on the tourism sector, what helps local and global economy. This project will be useful to the local government decision makers and tourism sector as well in making its own green economy drivers that could be presented in their further policies and politics.

ORIGINALITY VALUE

For the development of the Sustainable Mobility Urban Plan a new EU methodology is used, but what is an originality value is that this methodology is improved with wide frameworks of analyses (surveys and measurements prepare for this pilot case) which gave some concrete investments data and numbers to be

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used for further researches. The continuation of the started research work will be reflected in the implementation of the various measures for improvement of sustainability of the transportation system of these four touristic cities which directly influence in achieving economic benefits. Measures which should be tested until 2020 are mostly connected with improvement of non-motorized existing and constructing of the new corridors and increasing usage of renewable resources for motorized transport.

KEY WORDS

Investments, sustainable transport, green economy, urban mobility, urban development, Boka Bay

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2.9. THE PRODUCTION OF INDUSTRIAL MINERALS AND ROCKS IN SERBIA-AN ECONOMETRIC INVESTIGATION¹

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OBJECTIVES

The objectives of the paper are: i) to detect major turning points in the dynamics of industrial minerals and rocks in Serbia between 1973 and 2015; ii) to assess whether, how and to what extent the dynamics of industrial minerals and rocks in Serbia was influenced by overall business cycle fluctuations; iii) to argue in favor of higher infrastructure spending in Serbia as the most effective tool for the revival of industrial minerals and rocks production

METHODOLOGY

We implement the ordinary least squares (OLS) change point regression methodology outlined in Bai and Perron (1998, 2003a, 2003b) to detect and model structural breaks in the dynamics of industrial minerals and rocks in Serbia between 1973 and 2015. In particular, we use a following 3-step algorithm to estimate linear OLS model with multiple structural changes: first, we specify the upper bound for the number of breaks M by setting the value of trimming percentage $\epsilon=15\%$; second, we test the null hypothesis of no structural break

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against the alternative of up to 5 potential breaks; 3) third, we estimate the change point regression model via OLS method by allowing for autocorrelated and heterogeneous disturbances across breaks.

RESULTS

Our multiple structural breaks tests identify 5 change points in the intercept and linear time trend of industrial minerals and rocks extraction: 1980, 1989, 1995, 2003 and 2009. The estimated break dates correspond to the major turning points of the business cycle fluctuations in Serbia between 1973 and 2015. In addition, estimated intercept and trend coefficients from an OLS model with multiple structural changes are in great accordance with major stylized facts of the business cycle in Serbia in the last 40 years. The results are preliminary, and they encompass only aggregates extraction, as in Andrić et al. (2017a, 2017b). Further investigation is in progress for other types of industrial minerals and rocks.

IMPLICATIONS

The main policy implications of our paper are: 1) the extraction of industrial minerals and rocks was largely affected by the overall economic activity in Serbia between 1973 and 2015; 2) the slowdown of activity in the extraction of industrial minerals and rocks is evident from the onset of the Great Recession; 3) the increase in infrastructure public spending can have an effect on the extraction of industrial minerals and rocks.

ORIGINALITY VALUE

We construct a novel time series data set for industrial minerals and rocks in Serbia between 1973 and 2015. Behrens et al. (2007) acknowledge how present data for industrial minerals and rocks are fragmentary and incomplete. We also present reduced form econometric estimates for the behaviour of industrial minerals and rocks, contrary to Humphreys and Biggs (1983) and Humphreys (1991). Humphreys and Biggs (1983) only provide descriptive statistical analysis in the case of UK between 1945 and 1980, while Humphreys (1991) provides the same type of analysis for the US between 1960 and 1989.

KEY WORDS

Industrial minerals and rocks, aggregates, Serbia, structural breaks, change point regression

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2.10. ILLIQUIDITY RISK OF POLLUTING ENTERPRISES IN SERBIA¹

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OBJECTIVES

The aim of this paper is to analyze the liquidity risk of selected polluting enterprises in Serbia using the accrual liquidity indicators as compared to the cash flow liquidity indicators and net working capital as a financial tool which represents corporate liquidity. The specific objective of the paper relates on the comparison of polluting medium enterprises liquidity risk with liquidity of medium enterprises sector and Serbian economy.

METHODOLOGY

Illiquidity risk assessment is determined by liquidity indicators, net working capital and cash flow statement. The accrual and cash flow approaches of liquidity analysis are used in the paper as complementary approaches. Research methodology is based on the financial, descriptive, comparative and statistical analysis. The research is conducted on the group of 48 polluting medium-sized enterprises whose plants are the major sources of environmental pollution in Serbia. The sample of the enterprises was selected from the Pollutant Release and Transfer Register in Serbia (PRTR register of large sources of pollution), reported by the Serbian Environmental Protection Agency. The liquidity analysis includes the comparison between polluting medium enterprises, the sector of medium

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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enterprises and Serbian economy over a six-year period, on annual and average level. Selected liquidity indicators are determined by financial statements information disclosed by Serbian Business Registers Agency. The quantitative and qualitative analysis covers the period from 2010 to 2015.

RESULTS

The values and trends of liquidity indicators of the polluting medium enterprises group, recorded during the period 2010-2015, represent an unfavorable assumption for their short-term financial stability. However, it is still a more favorable than liquidity indicators values and trends in the Serbian economy. The cash flow liquidity indicator shows a weaker liquidity position than is indicated by the accrual liquidity indicators. Positive net working capital shows that polluting medium enterprises are able to continue their business and they have sufficient long-term fund to cover long-term assets and the part of their inventories.

IMPLICATIONS

The results of the analysis based on the accrual liquidity indicators is best compared against the cash flow liquidity indicator before reaching any conclusions regarding the liquidity risk of enterprises. This research can be accepted in academic and industry practice. The research results can be of interest to a variety of enterprises stakeholders, including financial analysts, policy makers, and researchers.

ORIGINALITY VALUE

Illiquidity problem in Serbian economy makes it difficult for enterprises to doing business. The key originality value of this paper is in the fact that the assessment of the illiquidity risk is based on the selected liquidity indicators for medium-sized enterprises whose plants are the major sources of environmental pollution in Serbia.

KEY WORDS

Illiquidity risk, cash flow analysis, polluting enterprises, medium enterprises, Serbian economy

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2.11. MEASUREMENT AND DISCLOSURE OF ENVIRONMENTAL RESPONSIBILITY IN THE CASE OF ISLAMIC BANKS¹

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OBJECTIVES

The aim of this paper is to examine the level of disclosure among Islamic banks regarding the environmental protection. In other words, are Islamic banks environmentally responsible? Islamic banking is derived from Islamic law, Sharia, which regulates every aspect of human life including the attitude towards the environment. In that aspect, the concept of environment protection is considered as inseparable part of Islam because the public interest (Masleha) is defined as a priority which means that every financial institution that operates under the Sharia rules, must consider environment protection in their activities.

METHODOLOGY

Banks as financial institutions indirectly affect the environment through their lending activities. In that aspect the public is more interested in actions carried out by a certain financial institution because such institutions are expected and required to be socially responsible. That means the amount of data disclosed in their annual reports regarding the non-financial parameters such as environmental protection.

By using the Ethical Identity Index, developed by authors Haniffa and Hudaib (2007), it is possible to quantify the extent of Islamic banking activities in every aspect of its social inclusion, including the environment. Index is based on the principles of content analysis and uses annual reports of Islamic banks. Primarily it analysis 78 indicators grouped into 8 dimensions: vision and mission statement,

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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BOD and top management, product, Zakah, charity and benevolent loans, employees, debtors, community, Shariah Supervisory Board (SSB).

In the case of environment, according to (Darus, Yusoff & Mohd Azhari, 2013), dimensions are: Conservation of Environment; Protection of Endangered Wildlife, Mitigation of Environmental Pollution, Environmental Education, Environmental Products/Process, Environmental Audit/Independent Verification Statement and Environmental Management System (EMS)/Policy.

The Index is calculated as follows:

$$EEI Index_j = \frac{\sum_{t=1}^{n_j} X_{ijt}}{n_j}$$

Where:

EEI Index_j – Ethical Identity Index for dimension j and period t;

X_{ijt} is variable X (1,... n) for dimension j and time t and has value 1 if the item is disclosed or 0 if otherwise.

n_j is the number of variables/ statements and in this case the maximum number is seven

RESULTS

This paper is focused on theoretical background considering the measurement and disclosure practice among Islamic banks, especially in environmental protection. Research done by authors Farook, Hasan & Lanis (2011); Yahya, Abul Rahman & Tayib (2005); Darus, Yusoff & Mohd Azhari (2013); shows that practice of disclosure, including environment activities, among Islamic banks varies from region or certain country. One of the reason is that Islamic banking is still developing and it demands different reporting standards considering the basics such as prohibition of interest (Riba), prohibition of speculative activities (uncertainty or Gharar), prohibition of gambling (Maysir) and the promotion of risk sharing. On the other hand, ethical and social values, including the environment protection, are considered as one part and not separated, like in the case of conventional banking.

IMPLICATIONS

This work could be useful for researchers to investigate and compare the process of measurement and disclosure of non-financial data by comparing Islamic and conventional banks. In that aspect, an analysis of corporate responsibility, especially in the field of environmental protection, could be done among banks in a certain banking system. This would give an insight into the banking practice, including an overview of the standards and rules that banks lead when deciding whether to finance a particular project in terms of its impact on the environment.

ORIGINALITY VALUE

Although the economist and researchers began to show interest in Islamic banking, when the process of decolonization started, in the 1950s, there are many areas considering Islamic economy and its basics that are not explored enough. One such example is the area of measurement and disclosure of non-financial data including the field of environmental protection. It is also important to consider the fact that most of the banking systems in the world are based on conventional banking whose principles and rules are quite different in relation to Islamic banking. This is important because social values in terms of environmental responsibility in Islamic banking are considered obligatory as opposed to conventional banking.

KEY WORDS

Islamic banking, environment protection, disclosure, ethical identity index

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2.12. ECONOMIC ASPECTS OF THE STATE REGULATION IN THE FIELD OF EXPLOITATION, PRESERVATION AND PROTECTION OF THE NATURAL RESOURCES IN THE REPUBLIC OF SERBIA¹

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OBJECTIVES

This paper investigates economic aspects of the exploitation, preservation and protection of the natural resources that have been envisaged within the strategic documents of the Republic of Serbia. The focus will be on the economic analysis of the current regulative in the field, achieved progress and potential constraints for implementation of the current policy solutions in terms of economic costs for the economy as a whole.

METHODOLOGY

The aim of the research is to systematize economic measures and their potential effects regarding the protection and sustainable use of the environment and to verify the economic efficiency of the applied fees and charges for the use of natural resources on a sustainable basis. The research will be carried out using

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU), OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements) and TR 31005 (Modern Biotechnological Approach to Solving the Problem of Drought in Agricultural of Serbia), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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classical research methods, whereby as part of the empirical research it will be used desk research method based on the data obtained from the national statistical databases as well as data published within the Action plan of the National strategy for sustainable use of natural resources and goods. The research analysis will particularly take into account the requirements set out for Serbia for the purpose of harmonization with the EU policies regarding the environment under Chapter 27 and the national regulative - Law on Environmental Protection, The Law on the Environmental Protection Fund, Law on Waste Management, Law on Packaging and Packaging Waste, National Environmental Program for the period 2015-2019 and related Action Plan.

RESULTS

Preliminary research performed in this paper provided solid arguments in favour of change of the current regulative concerning fees currently being paid for the exploitation of natural resources. Lack of data and unavailability of the official reports on achieved results as well as undeveloped practice of the evaluation of strategic documents, limited research contribution. Further research in the field should result in proposal consisting specific corrective measures concerning the amount of fees, dynamics of using (i.e. quantities) and valuation of natural resources.

IMPLICATIONS

The research results should provide support for the improvement of economic instruments for the sustainable use of natural resources or values..

ORIGINALITY VALUE

Current economic research in the country provides lack of practical data which could be used to support formulation of the specific policy measures in the field of protection of natural resources. Contribution of this research could be to initiate debate on the efficiency of economic fees on the exploitation of the economic resources.

KEY WORDS

Sustainable development, natural resources, fees, taxes, environment, exploitation, protection

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2.13. INFORMATION, CONSUMERISM AND SUSTAINABLE FASHIONE

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OBJECTIVES

The objectives of the paper are:

- to investigate in which extent were articles regarding sustainable / green fashion represented in the electronic editions of Croatian daily newspapers with national coverage (Večernji list, Jutarnji list, 24sata, Novi list, Slobodna Dalmacija) and how this topic was elaborated in the media;
- to examine whether Croatian fashion designers (members of the Croatian Designers' Society) are familiar with the concept of sustainable fashion, what they think about this concept, and whether media coverage of this subject affects their attitudes.

METHODOLOGY

Quantitative and qualitative research methods will be used for the needs of this work. The analysis of selected Croatian electronic media will be conducted through a method of quantitative and qualitative analysis of the media content on green / sustainable fashion. It will quantify the number of articles in each publication, the length of the texts, the authors of the texts, the presence of key words and the number of mouse clicks if they are available. A qualitative analysis of the media content will be carried out by analysis of the value orientation of articles regarding topic of sustainable / green fashion, by analysis of the media context of the articles (the sections in which they are published), and by analysis of the manner in which the topic is being processed and the values it promotes, if promotes. Research of the attitudes of the fashion designers will be carried out through a qualitative method of in-depth interviews. The introduction of the work will present theoretical elaboration of the sustainable fashion and its relation to the concept of sustainable development and circular economy.

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RESULTS

The initial hypotheses are:

During 2017. Croatian media published the texts on sustainable fashion at small extent

Texts were not published in serious columns (economy or politics), but superficially in the life style rubrics

Croatian designers are not well acquainted with the concept of sustainable fashion, and those who are reduce this concept on the usage of organic materials

Media processing of this topic affects the (non)interest of designers, because no necessary public pressure is imposed on designers.

IMPLICATIONS

In view of the abovementioned, much more intensive and serious processing of the topic of sustainable fashion in the Croatian media is needed. On that way Croatian public and fashion designers will be better acquainted with the concept as well as with the social, economic and environmental effects of application of the concept. Political elites are also responsible, and it is suggested the implementation of a national public campaign regarding circular economy whose segment would be sustainable fashion.

ORIGINALITY VALUE

Given the fact that this topic is poorly represented in the academic field of the region and that empirical research (both quantitative and qualitative method) will be applied in the work, expected result is the original scientific paper.

KEY WORDS

Information, media, consumerism, sustainable fashion, circular economy

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2.14. GREEN ECONOMY AND INDICATORS OF SUSTAINABLE AND ECOLOGICAL DEVELOPMENT

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OBJECTIVES

The need for global economic growth has raised the level of living standards around the world, and following this aspiration, all countries, both developed and developing countries, look at the growth rate of gross domestic product as a critical indicator of success and prosperity. The actions aimed at continuously increasing consumption have had a devastating impact on the global environment, exploiting natural resources without sufficiently considering the consequences that this exploitation leaves in the environment.

METHODOLOGY

The method of compilation is the process of taking other people's results from scientific research work, that is, other people's perceptions, attitudes, conclusions, and cognitions. The descriptive method is applied at the initial stage of scientific research, and it represents a procedure for simple description of facts, processes and objects in nature and society and their empirical affirmation of relationships and relationships. The method of analysis is the process of scientific research and explaining reality through the breakdown of complex thought constructions (concepts, judgments, and conclusions). Method of synthesis is the process of scientific research and explanation of reality by joining simple thought constructs into complex, linking segregated elements, phenomena, processes and relationships into a unique The whole in which its parts are interconnected. Methods of analysis and synthesis are mutually assumed and supplemented, passing to each other in scientific work. The case study is a qualitative research method by which it seeks to capture comprehensive information on the determination of the group or category of phenomena, and draw conclusions from them.

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RESULTS

We can conclude that environmental protection and the provision of sufficient quantities of safe food for mankind are two major challenges of the twenty-first century. The entire world population is confronted with problems that are largely a consequence of man's activities and a desire for profit, a higher standard and a better quality of life.

Climate change, economic and energy crisis and other problems impose the need for radical socio-economic changes in the cities of the 21st century, in the direction of encouraging and developing the so-called "green economy".

IMPLICATIONS

Prerequisites for changes in national regulations, policies, subsidies and support systems, as well as changes in the international market, in international trade and development aid, represent the necessary conditions for the development of the green economy. It is clear that the existing environment is much more suited to the development of traditional and the use of energy from fossil fuel-based economies. If subsidies for fossil fuels are retained, which at a global level exceed a figure of \$ 650 billion a year, renewable energy sources within the greening of the economy will be insufficient.

ORIGINALITY VALUE

The national level, as far as the most responsible for the implementation of the Green Agenda, will have to make appropriate changes in fiscal policy, through the reform and elimination of subsidies that can be considered less favorable from the environmental aspects. A major step in this direction may be the adoption of policies and procedures for green public procurement and green accounts. At the supranational level, further efforts must be made to improve the situation on world markets, to promote the rules of free trade and the flows of international development assistance, and to further encourage international cooperation.

KEY WORDS

Green economy, sustainable development, environmental performance indicators, green economy policy, traditional economy, sustainable development indicators

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2.15. MANAGEMENT AND PROMOTION OF ENVIRONMENTAL OPPORTUNITIES IN ENTERPRISES AS A DRIVING FORCE FOR SUSTAINABLE ECONOMIC DEVELOPMENT

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OBJECTIVES

The main goal of this paper is to point out the opportunities that the enterprises have from the benefits of effective environmental management through the possibilities for reducing the costs achieved through effective initiatives for waste and energy return, the need for implementation of the ISO 14001 standard for protection, storage and improving the environment, as well as increasing the awareness of the citizens about the rational utilization of natural and limited resources.

METHODOLOGY

Within the research possibilities, and the willingness of enterprises to find the necessary services, the type of business activities, the financing of the introduction of innovations in the field of sustainable economic development, implementation of appropriate standards, training programs for the employees,

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new ways of work that will link management approach, environmental protection, and revenue generation.

The practical research in this paper was conducted to perceive the real situation in terms of informing the employees about the environmental possibilities and strategy for waste management and sustainable development.

A survey method was used to collect data on how employees in different enterprises are informed about the promotion and development of environmental opportunities through the creation of a waste management strategy, the implementation of the ISO 14001 standard and sustainable development. The survey consisted of 10 questions, in addition we elaborated the answers.

RESULTS

The obtained results confirm the basic hypothesis that the implementation of the ISO 14001 standard by the environmental protection enterprises has a positive impact since it offers many opportunities and benefits for developing their business and making profit.

Companies have implemented ISO 14001 standard because of a legal obligation and regulation, and to make it easier to perform on the international market.

Employees know how the functioning of this standard affects the environment.

IMPLICATIONS

The survey was conducted in order to perceive the real situation in terms of employee awareness of the implementation and the importance of ISO certification in the utilization of environmental opportunities and achieving long-term economic development. Managers need to understand the nature of the impact of problems, the way they have emerged, can develop a strategy to solve them, and develop the strategic direction of the organization.

ORIGINALITY VALUE

The original value of this paper is confirmed through the obtained results from the conducted research that confirmed the fact that the successful management of the environmental challenges faced by the enterprises is a modern concept that enables achieving sustainable development and achieving significant economic

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benefits, strengthening the economy at the local level, encouraging the development of the green economy and promoting environmental protection.

KEY WORDS

Economic crisis, enterprises, innovation, sustainable development, environmental management

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2.16. GREEN SUPPLY CHAIN MANAGEMENT PRACTICES IN THE REPUBLIC OF MACEDONIA

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OBJECTIVES

Negative changes in the environment represent a worldwide problem. A major factor in these changes are businesses that operate non-ethical and without paying attention to environmental pollution. This course of events are leading to the need for finding alternative types of production, replacement of materials with new environmentally friendly materials and change of views regarding the financial gain from the products.

Green supply chain management means integrating environmental issues into supply chain management. A company can differentiate itself in the eyes of their competitors and increase its chances for success by applying green supply chain management practices.

The purpose of this paper is to propose alternative ways for Macedonian companies to work, and help them to implement green supply chain management. Also, it reviews the current status in which Macedonian companies are, regarding the greening of the working process, and it provides guidance for ways to get better, faster and cheaper, while protecting the environment in which they operate.

The subject of this research is the current situation in the Macedonian companies regarding their care for the environment and the application of the environmental standards in the day-to-day functioning of the companies. On the one hand, buyers were taken as the main drivers of the process, which through their conscience and knowledge of the problem can contribute to the improvement of the general ecological situation. On the other hand, there were suppliers who had to make drastic changes in their work in order to meet their expectations. It is common knowledge for Macedonian companies that they apply Western practice

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more slowly. The goal was to determine if companies are following world trends and to what extent. The plan was to show all the spheres of daily work that can be intervened and significantly improve the results. It begins with designing the product when it is necessary to pay attention to which materials will be used for its preparation and availability. When purchasing the materials, the most favorable bidder should be selected, in addition to the price, the time and method of delivery should be the key. During production, special care must be taken in order to reduce the pollution caused by machinery, as well as the quantity of material that is produced during production. When this is complete, the product should be environmentally packaged and delivered to the final consumers with the least amount of pollution

The most important goals of this research are the following:

- Examining the need for introducing high environmental standards in the operation of companies;
- The level of knowledge of companies with the green supply chain and the mood for its application;
- Examining areas in which environmental standards can be applied;
- Analysis of the barriers to the implementation of the green supply chain;
- Examining future trends in companies' environmental performance;
- Creating strategies for implementing environmental operations in everyday processes.

METHODOLOGY

For the purpose of this research, a questionnaire as a primary research method was used. The survey questionnaire collected data that were later reviewed and interpreted.

Using the website www.kwiksurveys.com, a survey questionnaire was prepared to meet the needs of the interviewer. The site enables the creation of a questionnaire, recording the answers to the questions, reporting on the state from which the questionnaire, time, etc. of the respondent is filled in. The collected data are later stored for up to 6 months from the date of commencement of the examination. The answering of the questionnaire was anonymous.

In the introductory part of the questionnaire, it was pointed out that the persons interviewed should be persons who are in active employment, or until recently

had been employed, based on the territory of the Republic of Macedonia. It was filled in by 42 respondents who met the conditions.

Regarding the structure of the questionnaire, it was divided as follows:

- **Introductory part - General information about the organization in which you work:** The purpose of this section is to obtain information about the organization in which the surveyed works. To get more detailed information about the size, financial power, the scope of work of the company, etc. These data would later help interpret the results in terms of getting information whether larger and more powerful companies are more careful and invest in environmental performance than smaller ones.
- **Part 1 - Corporate Responsibility and Greening Your Daily Work:** The goal of this section is to see the level of employee awareness of the term corporate responsibility and the greening of day-to-day operations. It will also be possible to notice the employees' opinions on the corporate social responsibility of their company and whether it makes everyday efforts to preserve the working environment in which it operates.
- **Part 2 - Green Supplier Network:** The goal of this section is to see the level of employee awareness with the ability of green suppliers. Also, through the questions, it will be possible to see if companies use some of the benefits of the green suppliers, i.e. whether they work smart to reduce their costs and preserve the environment, or are still working in a conventional way, using dangerous, harmful and obsolete materials during the preparation of its products and packaging for the same.
- **Final part - Consumer experience:** The purpose of this section is to see the level of awareness of the people themselves, outside of the companies. In fact, this section intends to discover the habits of people who live and work in the Republic of Macedonia. Through the questions it is easy to notice how the financial situation affects their decision to buy environmentally friendly products, i.e. products with environmentally-friendly packaging, etc.

As it can be noted, the questionnaire is divided into 4 parts, that is, a total of 28 questions. It is a question mark where the respondent chooses one (and only one) answer from the offered ones. This approach was used, because my goal was to see what they first notice, that is, which answer is first selected by the respondents. The possibility of choosing just one correct answer accurately shows which information is most easily quickly reached the respondent. It also allows for no hesitation and ambiguity of the answers.

RESULTS

Thanks to modern society, the media that all connect us, the rapid access to information, people gradually become aware of the importance of planet Earth and its preservation. Large corporations are beginning to accept the advice and guidance from environmental experts. So the idea of greening the everyday business was born. In this improvement, the competitive side of companies is again coming to the fore, where now instead of big profits, they compete for better image, brand and better system for environmental operation and environmental protection. Naturally, they do all this for getting closer to buyers.

The Republic of Macedonia is a relatively young country. Such practices from the West are slowly reaching us. A large number of citizens, due to their lack of information and lack of interest, are not familiar with the problems that can arise if certain steps are not taken regarding the preservation of the environment. Research shows that too few Macedonian companies manage in any way to introduce environmentally friendly materials in their work. The main reason for this has been shown to be several key factors. The most notable is the poor information of the Macedonian companies for greening the operations. Macedonian managers are not familiar with the advantages and opportunities offered by green operations. As a second, the same important factor is the finances. Of course, for the initial implementation of greening in the operation, financial resources are needed, which Macedonian companies are most likely not ready to invest. The weak regulation of this issue in the Republic of Macedonia is the third important factor. If we have a more serious motivation system, as well as punishing the non-compliance with the standards, I think that Macedonian companies will have to "find" a way and means for green operation. In the long term, this is a worthwhile investment, both for the companies themselves and for the whole society. The goal of every Macedonian company should be to design a product according to world standards, to fulfill the standards for ecological operation, to produce it with minimal pollution, to pack the finished product in an environmentally friendly packaging, which would later be reused or recycled.

IMPLICATIONS

We are all witnesses of today's events. It would be selfish to say that we are not concerned about the problems that occur everywhere in the world, and they concern global pollution. The main driver of pollution we are people with the things we do. Pollution begins with every individual. Each of us has the opportunity to change something to improve the general situation for all of us.

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The beginnings of this issue date back to the early 1980s, and from day to day it is becoming more and more the topic of research and work. The causes of pollution and ways to deal with pollutants are becoming more and more profound. One of the reasons for the pollution can be found in products that are being manufactured and used today. Also, the very path of the product from plain raw material to processing, processing, packaging, dispatch to the customer, creates waste material that additionally pollutes the environment. By increasing the awareness of producers and buyers, we can reduce this pollution to a minimum. Green Supply Chain Management is a way for a company to differentiate itself from competition and increase its chances of success. Companies that will succeed in introducing ecological standards in their supply system and greening the whole process mean that they have set up modern working standards, and therefore deserve more respect from the environment..

ORIGINALITY VALUE

Today's globalization increases customer opportunities. If buyers focus on improving the environment, this will lead to an increase in the efforts that suppliers make in meeting their requirements, which means that they will reduce costs and risk, while improving public image for companies and at the same time the social goal for healthier environment. Manufacturers should constantly cooperate with their suppliers of raw materials to create environmentally friendly products. With the purchasing power they own, manufacturers can set new criteria with their suppliers. The ultimate goal should be the greening of the entire supply system.

The concept of green supply chain management is a relatively new concept that emerges in recent literature. Because of this, it is still poorly represented in the world and access to information about it is limited. Its main goal is to raise awareness of environmentally responsible consumption, produce environmentally friendly products, reduce poverty and achieve economic growth, by improving health, working conditions and sustainability.

KEY WORDS

Supply chain management, corporate responsibility, environment, environmentally friendly materials, green suppliers

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2.17. THE CO-CREATING OF SUSTAINABILITY-ORIENTED VALUE IN SUPPLY CHAIN MANAGEMENT

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OBJECTIVES

Co-creating of value in supply chain plays an important role for the sustainability. Focal firms, voluntarily and/or under the pressure coming from consumers, the public and other stakeholders, have embedded sustainability in their value chains, supply chains and, more broadly observed, their business as a whole. The focal firm cannot create a value on its own, so that, in the paper, an analysis is conducted of the co-creating of the value in the context of sustainability. The main objective of the paper is to present integrated framework for embedding sustainability in the supply chain.

METHODOLOGY

We have conducted the content-based literature review method. It started from searches of electronic databases, such as: Directory of Open Access Journals (DOAJ), Emerald Management Xtra (Emerald), EBSCO Academic Search Premier, EBSCO Business Source Complete, Google Scholar, Scopus & Science Direct (Elsevier), Springer/Kluwer and Wiley Online Library (Wiley) (the databases are listed in alphabetical order).

RESULTS

The paper concentrates on the co-creating of sustainability-oriented value in the supply chain as the pathway for sustainability. The result is integrated framework for embedding sustainability in the supply chain.

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IMPLICATIONS

The paper presents several solutions to co-creating of value in supply chain. Transformation from sustainable value to sustainability-oriented value is one solution. The second solution is transformation from the generic value chain to the sustainability-oriented internal value chain.

ORIGINALITY VALUE

Co-creating of value in the sustainability-oriented supply chain management is the pathway for sustainability.

KEY WORDS

Co-creating value, sustainability-oriented value, supply chain management, sustainability-oriented supply chain management

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2.18. ASSESSMENT OF ECONOMIC EFFICIENCY OF ACCEPTANCE OF ADMINISTRATIVE DECISIONS IN THE FIELD OF AN URBAN ECOLOGY

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OBJECTIVES

The current problem of society is creation of conditions for keeping development of the cities for the benefit of saving the necessary quality level of life of present and future generations of mankind. But economic expenses are required to be restricted reasonably. The purpose of the research is development of scientific bases of control of ecological safety of one of city infrastructures from the item of biospheric compatibility and progressive development of the urbanized territories.

METHODOLOGY

Most often as criterion of efficiency of functioning of the transport systems serves receiving profit and extension of scales of business, but not balance and stability of the urban environment on the basis of priorities of resource-saving, environmental friendliness and safety. As a result deterioration in ecology, growth of consuming of the non-renewable natural resources, harmful bursts and not utilized waste are stated. The analysis of the modern methods of support of ecological safety of MTS as an infrastructure component of municipal economy is made; technologies of support of ecological safety of MTS are created etc. Practical recommendations about support of ecological safety and perspective

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development of MTS are developed, methods of their implementation in programs and projects of development of the city with assessment of economic efficiency of the offered actions are justified.

RESULTS

The principles of support of ecological safety of MTS of the large cities which are based on provisions of a paradigm of biospheric compatibility are developed. The offered conceptual model of ecological safety is based on system representation of MTS of the city as the sum of technical, natural, social and economic components. The offered techniques and algorithms use models of assessment, prediction and criteria on the basis of balance of bio-, noo- and technosphere.

IMPLICATIONS

The offered principles of monitoring are intended for use by city municipalities, educational and scientific communities, practitioners, experts in the field of assessment of quality of life of the population for the purpose of overcoming the negative consequences caused by features and contradictions of process of the modern urbanization.

ORIGINALITY VALUE

The new principles of monitoring of ecological safety of MTS of the city which are based on accounting of the internal and external directions, including economic estimate are offered. Criteria for evaluation, models and algorithms of prediction and control of ecological safety of MTS are developed, the experimental and numerical studies including environmental monitoring, prediction, justification and economic assessment of efficiency of acceptance of administrative decisions are executed.

KEY WORDS

Economic efficiency, city infrastructure, transport systems, economic assessment, ecological safety, urban ecology

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2.19. SUSTAINABILITY OF ORGANIC AND CONVENTIONAL SOYBEAN PRODUCTION SYSTEMS: EVIDENCE FROM VOJVODINA

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OBJECTIVES

In Serbia, there are two systems of soybean production: organic and conventional. It is clear that the environmental performances of organic production are useful for society, but the question is whether it is economically sustainable. The use of energy is now considered as one of the key indicators of sustainable development (Bailey, A. P. et al., 2003). Therefore, greater energy efficiency means greater contribution to sustainable development. Aim of this paper is comparison of two systems of soybean production from the standpoint of economic performances and energy efficiency.

METHODOLOGY

The subject of this study is comparison of sustainability of conventional and organic soybean systems. Comparison was based on two key indicators: gross margin and energy efficiency in organic and conventional soybean production in Vojvodina. Data were collected on a sample of 12 farms in Vojvodina randomly, of which 6 in the organic production system, and 6 farms in the conventional production system. All farms are family farms and soybean production was carried out in areas of less than 10ha.

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Energy efficiency is calculated as a ratio of energy output and energy input according to the following formula (Mandal, K. G. et al., 2009):

$$\text{Energy efficiency (MJ/ha)} = \frac{\text{Energy output (MJ/ha)}}{\text{Energy input (MJ/ha)}}$$

The energy output is obtained based on the energy values of achieved yields per hectare. Total energy input is calculated as the sum of energy values for each of the inputs in the soybean production. Energy value of inputs and outputs are approximated based on energy equivalents. Gross margins (the difference between total revenue and variable costs) have been calculated as an indicator of economic sustainability

RESULTS

Average coefficient of energy efficiency in organic soybean production is 5.61, while in conventional production recorded a lower level of energy efficiency (5.27). Also, average gross margin is higher in organic soybean production. Based on these results it can be concluded that organic soybean production in Vojvodina is more sustainable than conventional.

Limitations of this study are:

- a relatively small sample,
- the results apply only to one production a year,
- the results apply only to small farms,
- questionable application of the results in the long term

IMPLICATIONS

The results of this study can be interesting for: farmers, agricultural policy makers and researchers. The study shows that small farms that produce organic soybeans realize higher gross margin than conventional. Farmers with limited resources can be reoriented to this production in order to achieve better economic results. Better economic results, as well as higher energy efficiency, may be a signal to the creators of the agricultural policy that the organic soybean production is more sustainable. Because of that, it should be subject of government support.

ORIGINALITY VALUE

The main result of this study suggests that organic soybean production is more sustainable than conventional in Vojvodina. These results are related only to small soybean producers. Limitations of this study indicate that there is room for further research to examine in detail sustainability of conventional and organic soybean production. Therefore, the results of this study can provide basic guidance to other researchers in this field. Corrective measures will be the subject of future studies.

KEY WORDS

Sustainability, soybean, organic, conventional, energy efficiency, gross margin

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2.20. THE IMPACT OF ENVIRONMENTAL AND SOCIAL COMPONENT ON THE ECONOMIC VALUE OF THE COMPANY

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OBJECTIVES

The aim of this paper is that on case of the company Titan Cement Kosjerić shows that respecting the principles of corporate social responsibility in the field of environment can help to increase operational efficiency and environmental sustainability of the company.

METHODOLOGY

The methods used in this paper are the method of analysis, synthesis, descriptive statistics and correlation analysis.

RESULTS

The obtained results show that the improvement of non-financial performances of the company Titan Cement Kosjerić is a result of the activities and commitment of the company's management towards the realization the activities in domain of the implementation of corporate social responsibility practice, particularly concerns about environmental protection, which is in the period from 2011 to 2015 reflected on the increase of the economic value of the company.

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IMPLICATIONS

Increase corporate awareness of the importance of the integration of sustainable development into business strategies, policies and processes contributed to the wide acceptance of this concept in the context of the corporate sector, policy makers, and practitioners.

ORIGINALITY VALUE

The main contribution of this paper is to highlight the importance of the realization of the project that contribute to environmental protection and improving socially responsible business dimensions of the analyzed company.

KEY WORDS

Sustainable development, environment, social responsibility, economic value

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2.21. NEW JOBS IN EUROPEAN ECONOMIES – SUSTAINABLE DEVELOPMENT POLICY PERSPECTIVE

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OBJECTIVES

We shall attempt to provide an answer to question as to what sort of jobs the application of the concept of sustainable development creates, i.e. the development of the sustainable economy at a national level. The European Union is deemed a leader in sustainable development and creation of green jobs. Therefore it is important to understand in what manner the new jobs and sources of work posts in the sustainable economy have been encompassed by the policies of sustainable development at the level of member states of the European Union.

METHODOLOGY

The analysis of the existing data and literature shall provide an overview of the jobs which support the sustainable development, whereby accentuating green and digital jobs. We shall apply the frequency qualitative analysis as the basic research method, to the contents of national strategies of sustainable development of the EU member states. Special attention shall be paid to the analysis of the Strategy of Sustainable Development of the Republic of Serbia, within a comparative context against other analyzed documents. The subject of analysis, the strategy of sustainable development, shall include the employment issues as well and the sources of new work posts within sustainable economies. The analysis of indicators of sustainable development, at a national level, shall supplement the results of this research. The research includes only sustainable

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development strategies, and not other developmental strategies, within which the issues of new work posts in the context of sustainable development have, potentially been presented.

RESULTS

The results of contents analysis indicate to significant differences in the manner in which employment issues have been included as well as sources of work posts, within the analyzed strategies. The general conclusion is that the employment issues have been relatively modestly presented in the analyzed strategies. Room for improvement of these policies has been found from the analyzed perspective, as well as good examples which should be looked upon. We have paid special attention to the applicability of recommendations, in case of small and open economies.

IMPLICATIONS

The results of this analysis can be useful for academic and professional community, both for further analysis of the labor market in the context of sustainable development and promoting long-term development policies at the national level.

ORIGINALITY VALUE

This analysis presents a comprehensive overview of the European strategies of sustainable development which deal with employment issues and the sources of new work posts, both in the current and the developmental context.

KEY WORDS

New jobs, sustainable development, sustainable development strategies, green jobs, digital jobs, Labour market

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*Additionally to the given references, we have a list of analysed National Sustainable Development Strategies and Sustainable Development Indicators lists and reports, available upon request

2.22. RECONCEPTUALISATION AND STRATEGIC ADOPTION OF SUSTAINABLE DEVELOPMENT: SERBIAN CASE – YESTERDAY, TODAY AND TOMOROW

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OBJECTIVES

Redefinitions and clarifications of the content of the concept of sustainable development. Concretization of the relationship between certain aspects of sustainability. The emergence and evolution of the idea and practices of sustainability. Redefining and operationalization of economic and technological systems of sustainable energetics. The overlap of economic and environmental objectives - intergenerational justice. The so-called three pillars and three areas of sustainable development. Institutions, Technology and Resources - additional principles and adjustments.

METHODOLOGY

This theme study is characterized by an interdisciplinary approach. Sustainable development is subject to the evolution of theory and practice which in the descriptive part of the approach is to be studied by a comparative, analytical and synthetic, deductive and inductive method. Within this approach specific and special scientific methods such as content analysis of documents and case study analysis will be applied. For the processing of empirical data statistical analysis will be used and for the applied project approach cost-benefit analysis of the economic, environmental and social feasibility of projects and measures of public interest, or private projects with strong external effects.

RESULTS

The evolution of the concept of sustainable development. Old and new controversy. Elements for innovative and integrated understanding of sustainable development in the case of Serbian energetics. The duration and evaluation of the theory of sustainable development through international and local conferences.

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The extension of the meaning, the content and the goals of sustainable development. The analysis of externalities and the use of cost-benefit analysis can help in redefining and operationalization of sustainability. Climate action and management of natural resources. The future of the concept of sustainability in small countries.

IMPLICATIONS

A better understanding of the controversies related to sustainable development contributes to defining practical environmental policy. Better perception of theoretical and practical operationalization of the concept of sustainable energetics. The application of scientific results for redefinition and operationalization of sustainability of the development policy of Serbia. Sustainability and pragmatic goals of economics and politics in a view of short and long term. Energetics and economy in the focus of sustainable development. Social and environmental implications of energy markets. Application analysis and new methodology of understanding of integral sustainability - an opportunity for quality growth and sustainable development.

ORIGINALITY VALUE

Unconventional approach. Criticism of controversy of sustainability at an early stage of the concept, an attempt to harmonize general and specific objectives and principles of sustainability. Weaknesses and overcoming of the concept based on three pillars and three areas. Economic objectives and results of short, medium and long term. Changing of the content and contemporary manifestations of (un)sustainability. The dynamics of technological change and the new postulates and principles of sustainability.

KEY WORDS

Sustainable development, sustainability pillars, indicators, energy efficiency, sustainable energy, greening economy, climate changes, cost-benefit analysis

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2.23. THE IMPACT OF FINANCIAL DEVELOPMENT ON SUSTAINABLE GROWTH

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OBJECTIVES

The purpose of this paper is to try to shed a light on the impact of financial development on sustainable economic growth during and after the 2008. Global financial crisis. The indicators of financial development such as: market capitalization of listed companies as a percent of GDP, listed domestic companies, stock traded total value as a percent of GDP and stock traded turnover ratio will be analyzed for representative group of countries. GDP growth rates and GDP per capita growth rates data for representative panel will be also analyzed as dependable variables. The aim of the paper is to try to make a modest contribution in the finance - growth research area by using panel data approach for relatively short contemporary time span.

METHODOLOGY

A cross - country panel data analysis will be used in order to make relevant conclusions. To achieve the aim of the paper, an observation of relevant growth parameters and parameters of financial development in panel will be exploited.

A cross - country data series analysis of relevant indicators is quantitative method that enables reliable comparison of finance - growth market dynamic in respective time frame. By comparison of indicators of financial market development and GDP growth rates for countries in the panel, a reliable conclusion of the impact of financial deepening on growth can be drawn

RESULTS

The key limitation of the results presented is very short time frame. This is the obstacle caused by research objective that can not be avoided. The work is planned as follows: in the first part a short observation of the implications of the

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latest financial crisis on economic activity of the panel countries will be presented. In the second part an explanation of the panel countries' division into specific groups will be given. Third part of the paper will deal with the specification of financial indicators and definition of growth rates time span. Finally, a correlation between financial market development indicators and GDP growth rates will be presented together with conclusion.

IMPLICATIONS

The latest 2008. Global financial crisis was the first global crisis that started in the financial sector. Crisis in financial sector has spread over real sector with an inevitable decline of GDP growth rates in majority of developed and developing countries. Answering the question how financial market and financial indicators contribute to GDP growth in general and during the crisis is of a great importance for the researches of finance - growth nexus, academics and policy makers. Possible answer is especially valuable for the creation of future policy measures and buffers. The paper will try to, hopefully, make the contribution for the further finance - growth nexus analysis.

ORIGINALITY VALUE

Finance growth nexus have been researched for several decades. The methodology employed in researching the problem vary from dynamic panel approach and Granger causality to cross - country and (or) historical panel data time series analysis of financial development indicators and their contribution to GDP growth. The originality of the research paper is derived from the specification of the countries in the panel as well as from the attempt to find correlation between finance - growth nexus and the latest global financial crisis. To the knowledge of the author there is no literature so far that deals with the connection of finance - growth nexus and the global financial crisis for panel that will be presented and in a way explained in this survey.

KEY WORDS

Finance – growth nexus, financial development, financial indicators, GDP growth rates, financial crisis

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2.24. COLLABORATIVE PARTNERSHIP PARADIGM IN THE SUSTAINABILITY-ORIENTED SUPPLY CHAIN AS THE WAY TO SUSTAINABILITY

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OBJECTIVES

The New Agenda for Sustainable Development emphasizes the need for “transforming our world”. Embedding sustainability into the supply chain is part of the holistic perspective of sustainability. From the aspect of sustainability, the “golden thread” connecting all actors and influencing relationships between actors in the supply chain is the sustainability orientation. The main objective of the paper is to present collaborative partnership paradigm in the sustainability-oriented supply chain as the way to sustainability.

METHODOLOGY

We have conducted the content-based literature review method. It started from searches of electronic databases, such as: Directory of Open Access Journals (DOAJ), Emerald Management Xtra (Emerald), EBSCO Academic Search Premier, EBSCO Business Source Complete, Google Scholar, Scopus & Science Direct (Elsevier), Springer/Kluwer and Wiley Online Library (Wiley) (the databases are listed in alphabetical order).

RESULTS

Sustainability results from the complementary effect of numerous actors’ behaviors, so this study suggests the sustainability-oriented collaboration paradigm as a way to sustainability. This study extends research into power in the supply chain on the basis of three “patterns”. The first one is the “pattern of

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sustainability”. The second one is the “pattern of sustainability-oriented actors”. The third one is the “pattern of sustainability-oriented collaboration”.

IMPLICATIONS

These three patterns of embedding sustainability in the supply chain can also be observed as the three stages of the transformation of the supply. In the first stage of embedding sustainability in the supply chain, actors voluntarily and/or under pressures accept some sustainability initiatives. In the second stage, the number of sustainability-oriented actors behaving sustainably increases. The sustainability-oriented supply chain and the achievement of the goals of the sustainable development require the sustainable behavior of all (or at least) the majority of actors and sustainability-oriented collaboration.

ORIGINALITY VALUE

Embedding sustainability in actors’ behavior is one part of the holistic perspective of the sustainable development. Sustainability-oriented actors in the supply chain influence the sustainability of individuals, companies and countries. For that reason, sustainability-oriented collaboration and the application of the “pattern of sustainability-oriented collaboration” are needed.

KEY WORDS

Sustainability, sustainable development, supply chain, sustainability-oriented actors, sustainability-oriented supply chain, collaborative partnership paradigm, sustainability-oriented collaboration, transformation

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2.25. CRITERIA FOR APPRAISAL OF INVESTMENT PROJECTS IN ENERGY SECTOR¹

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OBJECTIVES

The objective of the paper is to analyze the existing criteria and methodologies that are used by international financial institutions and donors for the appraisal process of investment projects in energy sector. European Investment Bank, European Commission and Joint Assistance to Support Projects in European Regions provide their guidelines, best practice examples and common mistakes. These methodologies could be the basis for preparing economic and financial analysis of energy sector investment projects in Serbia.

METHODOLOGY

By analysing the existing methodologies for investment appraisal as well as the best practice, i.e. case studies one can create solid basis for proposing, preparing and assessing energy sector projects in Serbia. This can be compared with the existing practice and regulations thereby seeking the possibilities for improvements.

RESULTS

The results include the comparison of the existing methodologies for assessing feasibility of investment projects as well as the proposed measures that could be used for improving practice in Serbia.

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IMPLICATIONS

Project proponents, regulators, ministries in charge of investment projects could benefit from the results of this paper since it would provide them with case studies and recommendations that are policy oriented and applied in practice.

ORIGINALITY VALUE

Based on the currently available information there exist no paper that compares and analysis various investment appraisal methodologies with the recommendations that would be applied in Serbia.

KEY WORDS

Investment projects, energy sector, international financial institutions

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2.26. ADOPTION OF PROCESSES-PRODUCT INNOVATION PATTERN - A COMPARATIVE, FIRM LEVEL EVIDENCE FROM EU AND NON-EU COUNTRIES

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OBJECTIVES

This paper aims to compare the impact of different dimensions of process innovation on product innovation among companies of EU and non-EU countries.

METHODOLOGY

The sample consists of 516 innovative firms randomly selected using stratified random sampling method. The sample has been divided in two subsamples; the first included 265 firms located in four non-EU countries, namely Albania, Bosnia and Herzegovina, Montenegro and Serbia; the second includes 242 firms located in EU countries, namely Italy, Greece, Slovenia and Croatia.

Three dimension of process innovation have been used in this study, namely new production methods, new logistics and distribution, new supporting activities

Product innovation is measured by a dummy variable, taking 0 value for 'the firm has not been engaged in product innovation during the last three years', and 1 'the firm has been engaged in product innovation during the last three years'.

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Binary logistic regression model is used to estimate the firm's likelihood to engage in product innovation. This model was selected considering the dichotomous nature of the dependent variable. The model has the following form:

$$\text{Ln}\left(\frac{P_i}{1-P_i}\right) = a + b_i x_i + \dots + c_i z_i + e$$

RESULTS

New or significantly improved methods of manufacturing or producing goods or services has a significant and positive effect on product innovation. Innovation in logistics and supporting activities have not a significant effect on product innovation. The effect of firm's size is statistically insignificant. Export orientation has a significant positive effect on firm's inclination to engage in product innovation. More than 1/3 of the variance for the EU subsample can be attributed to the independent variables (*Nagelkerke R Square* is 0,347).

IMPLICATIONS

Extensions: What are the factors that lead to product innovation for non-EU countries (developing countries). Do market and industry factors have a stronger effect in terms of magnitude on product innovation? More questions than answers for the non-EU subsample.

ORIGINALITY VALUE

This paper creates solid foundation for fostering researchers to dive deeper into the modeling itself which somehow explains the relationship of process innovation and product innovation for EU countries but this seems not a very good predictor for non-EU countries. Hence, this model mostly helps on raising questions rather than providing answers which creates ground for upcoming studies that researcher could explore more.

KEY WORDS

Product innovation, process innovation, manufacturing methods innovation, logistic innovation, supporting activities innovation

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2.27. POSSIBILITIES FOR DEVELOPMENT OF AGRITOURISM IN REPUBLIC OF MACEDONIA

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OBJECTIVES

The research of the paper perceived the importance of businesses related to agritourism for improvement of living standards of rural population and for increase of volume of economic activity in specific rural areas. That's why the reasons of owners/farmers for dealing with such businesses are taken into account, browsed, summarized and analyzed. Very important goal of this paper refers to identification of main barriers for agritourism development in the Republic of Macedonia.

METHODOLOGY

The methodology of research is based on conducted questionnaire and realized interviews with focus groups in selected rural areas related to agritourism at least in the last six years. The selection of businesses was based on the period that they are dealing with agritourism and for the purpose of diversification two criteria were taken into account: location and type of agritourism business. Empirical research was conducted during the period may-june 2016.

RESULTS

According to the research in this paper there are some reasons for this situation related to: luck of subsidizing agribusiness, state regulations, state taxes, luck of

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resources and capital for small business, roads and infrastructure, lack of education etc. The integrated tourist offers of the Republic of Macedonia, nor significantly contributes to improving the performance of agricultural holdings and diversification of their business. Important questions should be related to strategic approach to regional agritourism, as well as to organizational support.

IMPLICATIONS

Recommendations for development of agritourism are related to: coordination, support and other assistance in agritourism development. So, implications of the research are directed to: government, micro and macro policy makers, industry or community, practitioners that all together will provide strategic guidance and support over agritourism individual scale. Institutional support in agritourism can be summarized in 4 key motivators: marketing and market research; tourism network; clusters and links; and integration and support.

ORIGINALITY VALUE

Despite the great potential for agritourism development in Republic of Macedonia, it actualizes in the last ten years. Till now, some partial studies/researches related to this question were undertaken, but this paper is significant because of the scope of research and special complex approach of empirical research. That's why the research shows main obstacles or limitations for agritourism development in Republic of Macedonia and gives directions for influence on: government policy, business sector policies and local rural development.

KEY WORDS

Agritourism, business, diversification, rural development, rural areas, Republic of Macedonia

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2.28. THE IMPACT OF STRENGTHENING AND HAMPERING INNOVATION FACTORS ON FIRM'S PERFORMANCE - A COMPARATIVE ANALYSIS OF EU AND NON-EU COUNTRIES

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OBJECTIVES

This paper aims to compare the impact of strengthening and hampering innovation factors on firm's performance using data from innovative companies located in EU and non-EU countries. We posit that cooperation between firms and institutions and export orientation of a firm can positively impact firm's performance, whereas cost, knowledge, market barriers and lack of reason to innovate have a negative effect. Our study contributes to the innovation literature by increasing knowledge on the effects of specific factors on firm's performance in different economic contexts.

METHODOLOGY

Our sample consists of 428 innovative firms randomly selected using stratified random sampling method. The sample was randomly selected following the suggested and approved sample characteristics (50% production firms and 50% service companies and 15% micro, 35% small and 50% medium sizes) applied in similar research such as Community Innovation Survey (CIS).

Considering the comparative nature of our study, our sample has been divided in two subsamples - the first included 231 firms located in four non EU countries,

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namely Albania, Bosnia and Herzegovina, Montenegro and Serbia, while the second includes 197 firms located in EU countries, namely Italy, Greece, Slovenia and Croatia.

We tested for internal consistency and construct validity. Standardised Cronbach Alpha coefficients for all constructs meet the recommended criteria (Nunnally 1978), while item loadings exceed the acceptable standards of 0.4 proposed by Hinkin (1995).

We analysed data using multivariate regression. Following Cohen (1983), we compared the fitted regression coefficients by including all k variables for each sub-sample, regardless of their significance.

RESULTS

1. Cooperation on innovation activities between firms or institutions has a significant and positive impact on firm's performance for the EU countries sub-sample, only.
2. There is a positive significant relationship between export orientation and performance for non-EU firms, only.
3. Cost factor has a negative effect on performance for both, EU and non-EU firms.
4. Knowledge factor has a negative effect on performance for EU firms, only.
5. Market factor has a strong negative impact on the performance of non-EU firms, only.
6. The parameter estimate for lack of reasons to innovate is not statistically significant for both sub-samples.

IMPLICATIONS

Implications at a policy level

1. Policy makers of non-EU countries should support export-oriented firms and/or those aiming to target export markets.
2. Market concentration and lack of competition can create a significant obstacle to firm competitiveness and performance. Hence, improving market dynamics in these countries it is a priority.

Extentions

1. Further studies can explore relationship between EU membership and firm networks and cooperation.

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2. In depth studies can investigate the role of knowledge barriers in different industries for both EU and non-Eu countries.

ORIGINALITY VALUE

The comparative approach used in this study points out the importance of the context and its relationship with firm's performance. This study sheds some light into the differences between EU and non-EU countries at a institutional and industry level using firm's lens. As suggested by Prahalad (2012) emerging and developing market tend to be radically different from developed ones. Consequently, we can argue that strategies adopted by firms in the realm of innovation, and arguably not only, are different.

KEY WORDS

Innovation, performace, hampering innovation factors, strengthening innovation factors

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2.29. SOCIAL RESPONSIBILITY OF BANKS IN THE FUNCTION OF COMPARATIVE ADVANTAGE ON THE MARKET

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OBJECTIVES

The business operation of companies is not perceived any more in terms of profitable operations, but also in terms of whether it is beneficial for the society. Social responsibility contributes to improving relationships with key stakeholders, thus contributing to the long-term sustainability of the company. The paper points out to the positive link between corporate social responsibility (CSR) and the reputation of the bank. The aim is to point out that profit and CSR are not opposed categories and that the CSR of banks represents a strong comparative advantage on the market.

METHODOLOGY

The paper gives a theoretical and practical overview of the concept of corporate social responsibility (CSR), with a focus on the banking sector. In the theoretical part, the term CSR is defined, as well as its significance and special features regarding the application in the banking sector. The empirical part deals with the study of the characteristics of the Montenegrin banking sector, its characteristics in terms of CSR. The empirical part includes the qualitative analysis, based on the data available on the official sites of banks operating in Montenegro. Based on the collected Internet data, an analysis of the factual situation will be carried out, conclusions will be drawn and recommendations made for the implementation of the CSR concept with a view of improving the competitive position of banks on the market. Through qualitative analysis of the available data, the advantages and disadvantages of corporate social responsibility of banks in Montenegro will be

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considered, as well as which CSR activities are most represented and which still have the capacity to be improved and involved in the marketing strategies of the banks operating in this region.

RESULTS

CSR activities are often seen as non-profitable and impractical. In recent years, the CSR activities in the banking sector have a tendency of growth, which is significant for the Montenegrin economy and society. Banks carry out their CSR activities in the fields of education, health, culture, sports, etc. The CSR of banks represents a strong comparative advantage on the market and the banks which implement it (especially foreign ones) send their clients a clear message that they are ready to stay and actively engage in problem solving at the local and national level.

IMPLICATIONS

The contribution of the paper is reflected in providing the cross-section of the activities and areas obtained through the qualitative analysis where the CSR activities of banks in Montenegro are present. The paper will define what characterizes the CSR of banks in Montenegro, what are the advantages and disadvantages of the past CSR practice of banks, and in which direction the CSR activities of banks should be improved. The contribution of the paper is reflected in how many CSR activities have an impact on the reputation and generation of higher profits of certain banks in Montenegro.

ORIGINALITY VALUE

The paper will provide an overview of CSR activities that can help decision-makers in the marketing sector of banks to use CSR as one of the levers to achieve comparative advantage on the market. The contribution will also be made through the qualitative analysis of available data on the activities and their presence in certain Montenegrin banks, what characterizes them, and what are the advantages and disadvantages of the past CSR practice. The recommendations will be provided regarding what can be improved, which would have an impact on the reputation and generation of higher profit.

KEY WORDS

Social corporate responsibility, banks, reputation, marketing

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2.30. CORPORATE RESPONSIBILITY IN THE EXTRACTIVE INDUSTRY

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OBJECTIVES

Objective of the paper is to review current situation in the extractive industry from the aspect of the corporative responsibility and contribution of the corporations conducting business in extractive industry to the economic growth, social and cultural improvement and environmental protection of the host countries. The extractive industry is a very “sensitive” sector in the sense of environmental protection. Various international organizations established rules and standards for corporate behavior in exploitation and extraction of natural resources, which is important from the aspects of transparency and environmental protection.

METHODOLOGY

The paper will focus on survey of current international regulation, mainly, from the aspect of transparency and environmental protection and contribution of the extractive industry companies to the economic growth of host-countries.

RESULTS

The paper will present the international and national efforts to direct corporations operating in the extractive industry to undertake measures for environmental protection and sustainable development of the countries where doing research, exploitation and extraction.

IMPLICATIONS

The paper will be important, mainly, for academics and researchers, but also for policy makers and will be good basis for further research and thinking on possibilities to improve current national/international regulation.

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ORIGINALITY VALUE

The paper will contribute to raising awareness of the broader community (academics, researchers, policy makers) on the importance of the corporate responsibility and transparency in the sector of extractive industry. Transparency in all phases of business conduct, especially having in mind investment agreements, payment of taxes and all other payments to the host government and officials is the key factor influencing corporate responsibility and accountability to the citizens of the host country.

KEY WORDS

Extractive industry, natural resources, corporate responsibility, transparency, extractive industry transparency initiative, sustainable development

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2.31. INFLUENCE OF THE FDI INFLOWS ON ECONOMIC GROWTH IN MONTENEGRO¹

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OBJECTIVES

In a lot of empirical studies it is proved that inflows of foreign direct investments can make crowding-out effect, depressing domestic investments, which further have negative impact on economic growth. This paper examines the relationship between foreign direct investments inflows and economic growth in Montenegro, and the aim is to see if there is positive or negative correlation between these two variables. From 1998 Montenegro had average growth of FDI inflows 8% and that gave background for this research.

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METHODOLOGY

Panel data include 18-year period, variable values from 1998-2016. Using multiple linear regression analysis we constructed the model which includes GDP as a dependent variable, FDI inflows as independent and GDP annual growth, general government final consumption expenditure and GDP per capita annual growth as controlling variables. Methodology background is taken from Borensztein, Gregorio and Lee paper which is one of the most important in this field. Their findings indicate that the FDI effect on the economic growth is dependent on the level of human capital available in the host economy. As long as we could not find data for the initial-year level of average years of the male secondary schooling constructed by Barro and Lee we excluded this variable. In addition to human capital, they used national accounts data as controlling variables, such as government consumption, annual rate of per capita real GDP as measure of the growth rate, the growth rate of income and initial income.

RESULTS

Using multiple linear regression analysis we found out that there is positive influence on the economic growth in Montenegro arising from the foreign direct investments. Coefficient of determination is 0,19 so, having $\alpha < 0,05$ we conclude that our model gives statistical significant contribution to prediction of GDP along with F value greater than 4. FDI as an independent variable has $\alpha = 0,006$ which indicates that there is statistical significant influence of FDI inflows on GDP.

IMPLICATIONS

Sometimes different level of the development between countries, sector and the type of the FDI and their own efficiency have different impacts on economic growth in particular country. This paper along with recent empirical studies confirms that foreign direct investment inflows have significant impact in developing countries on economic growth. In transitional countries FDI inflows can indirectly have positive impact on competition in markets making new sales channels and enforce the economy at whole.

ORIGINALITY VALUE

Not so many papers examined the relationship between foreign direct investment inflows and economic growth in Montenegro. In addition to this, because of the lack of the data time series were short. Model used in this paper included annual data for eighteen years and gave significant results so it is recommended to use it

in order to find relationship between FDI inflows and economic growth in the countries that are in the same stage of development.

KEY WORDS

FDI, investments, economic growth

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2.32. MACROECONOMIC DETERMINANTS OF NON-PERFORMING LOANS IN CEE COUNTRIES: 2005-2015

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OBJECTIVES

The objective of the study is to analyze determinants of nonperforming loans (NPL's) in countries of Central and Eastern Europe in the period of 2005 to 2015. The importance of the study stems from the fact that deterioration in the quality of banks' loan portfolio may produce banking and economic crises. Furthermore, we have to underline that financial crisis from 2008 has left high levels of nonperforming loans in this region.

METHODOLOGY

The data used in the paper are annual data for several countries of Central and Eastern Europe (Serbia, Macedonia, Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Moldova, Montenegro and Romania) over the period 2005 to 2015. The data was obtained from World Bank databases. The model was estimated on a panel dataset using ordinary least squares and including fixed effects. The dependent variable is bank nonperforming loans to total gross loans. As independent variables, we use domestic credit to the private sector by banks (as a% of GDP), GDP growth, inflation, lending interest rate, remittances, and

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unemployment rate. Furthermore, we present the coefficients of correlation in order to test for the relationship between independent and dependent variables. The method that we used in the research is appropriate and reliable because panel data in comparison to other types of methods take into the account heterogeneity among different units, in our case different countries.

RESULTS

The findings indicate that domestic credit to the private sector by banks and unemployment rate have a positive relationship with NPLs while, GDP annual growth rate, inflation rate, lending interest rate and remittances have a negative relation with NPL. It is important to underline that according to fixed effect model all independent variables have statistically significant influence on the dependent variable.

IMPLICATIONS

Estimation results broadly confirm the postulated relationships between the chosen explanatory variables and the NPL ratio. Our findings may help policymakers in the countries of interest, in managing and reducing nonperforming loans. The model presented in this study can be used as a benchmark for verifying comparable models developed by commercial banks from these countries, which have aimed to reduce "bad" loans.

ORIGINALITY VALUE

This research is referred to the selected group of countries which are part of Central and Eastern Europe. The key contribution of this paper is that the empirical results confirm the economic theory of the significance and direction of the relationship between independent variables, that we used as determinants of nonperforming loans and dependent variable.

KEY WORDS

Non-performing loans, CEE countries, banking system, macroeconomic determinants

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2.33. CREDITING AS FINANCIAL TOOL FOR SUSTAINABLE AGRICULTURE DEVELOPMENT: RESEARCH ABOUT CREDITING OF FARMERS IN REPUBLIC OF MACEDONIA

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OBJECTIVES

Main creditors of primary farm production in Republic of Macedonia are commercial banks through agriculture credit line. Till now it's not shown that the banks are not interested in agriculture development financing because of the reasons related to risk and bad experiences with placements of agriculture products.

The main objective of the paper is to identify the problems that farmers are facing with and to give some recommendations for better promotion of crediting directed to sustainable agriculture development in Republic of Macedonia.

METHODOLOGY

For the purpose of the paper most appropriate methodology of research was conducted interview during the round table and group discussion in June 2017 at Valandovo multiplicity. There were discussed six (6) question about that how much farmers are informed for appropriate credit lines, problems that they are facing with during the application process, as well as their proposals and guidelines for better credit access.

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Specifically, for the need of research, it was organized a meeting with farmers, applicants or credit beneficiaries in order to obtain more complete information of the manner of realization of agricultural credits in the Republic of Macedonia.

RESULTS

The result show that most of the farmers doesn't know the financial institution that give credits for agricultural production, all the respondents said that the conditions are not appropriate because the interest rates are too high and the deadlines for payment are inadequate. The respondents that already applied for a credit faced with late payment, very high collateral requests for credit security and an unreal estimate of farm property. In particular, their answer is that the credits they offer are more consumers oriented than agricultural. All respondents agreed that a joint application will facilitate their access, in collaboration with all entities related to agriculture in the country.

IMPLICATIONS

The survey showed that is needed more information on the availability of credit lines for agriculture offered by financial institutions. In particular, more efficient advisory service is needed, which will provide assistance in informing, applying and preparing the documents for different credit programs. Having on mind that farmers work and live in rural areas, the best way to maintain communication is by constant meetings, organizing workshops and training on the ways of financing, specially crediting.

ORIGINALITY VALUE

The paper analyses essential issue that emphasizes the importance of crediting as financial tool for sustainable agricultural development. In addition, it is focused on crediting of farmers, which are the major functional unit of agriculture in the Republic of Macedonia. The survey showed: lack of different agriculture credit lines in Republic of Macedonia, but also the farmers' views on how to make changes on and long-term improvement.

KEY WORDS

Sustainable development, crediting, farmers, agriculture, Republic of Macedonia

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2.34. THE PROBLEM OF GUARANTEES REQUIREMENTS FOR FINANCIAL AND BANKING SYSTEM IN SMALL EMERGING ECONOMIES

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OBJECTIVES

Green growth projects and sustainable business ideas are being developed every day in small emerging economies. A lot of individuals and legal entities are aware that their governments are trying to provide alternatives to promote and fund these types of businesses, while struggling with monopolies and multinational companies. But, even though they reach for funds from commercial banks or financial firms, there are big obstacles in getting access to credit. If the idea or business has been granted good scores in the beginning, the problem of guarantees emerges.

METHODOLOGY

It is important to analyse the context and frameworks of policies and internal and external factors, than influence Green Growth Projects and Sustainable Business ideas. The methodology used in this paper is in the function of understanding the problem of guarantees requirements in order to find alternative solutions that promote the small economies advancement in Green Growth and Sustainable Projects. Methodology used is analysis and synthesis, desk research and historical analysis of frameworks of policies. More specifically:

- analysis of the context of financial and banking system promoting Green Growth Projects and policies on giving loans
- elaboration of rates on loans for Green Growth and Sustainable Business ideas vs multinational loans
- alternative funding systems
- credit lines with grace periods
- international assistance in small economies

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SUSTAINABLE GROWTH IN SMALL OPEN ECONOMIES

- development of alternative plans for funding in small economies without typical guarantees.

RESULTS

Several alternatives for funding and guarantees have been mapped that promote green growth and agriculture production and sustainable development projects in small open economies. Furthermore, a proposition of standards for policies and framework has been provided for financial and banking system to provide credit access with grace periods for small business promoting big ideas.

IMPLICATIONS

In the analysis of potential direct and/or indirect implications of the paper results, several entities have been selected, such as: Financial Institutions, Universities, Commercial Banks, Foundations, Governments, Investment Banks, NGOs, all Small and Medium size businesses dealing in green or sustainable projects and individuals.

ORIGINALITY VALUE

Originality value of this paper is in presentation of a moderately new approach to reaching funds from commercial banks or financial firms for green growth projects and sustainable business ideas. Several concepts for raising funds and guarantees have been classified, and a proposition of standards for policies and framework has been provided.

KEY WORDS

Projects, funding, banking, guarantees, credit

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2.35. IMPACT OF EXPORTS ON ECONOMIC AGGREGATES OF PAKISTAN

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OBJECTIVES

Trade openness plays an important role in the economic growth of a country. In international trade, much importance is assigned to exports because exports have a profound impact on the output of a country. Unfortunately, there have been no systematic trend in Pakistan's exports growth over the years that calls for its analysis as it can impact different economic aggregates in a significant way. This study aims to unfold the nexus between export and various economic aggregates in Pakistan.

METHODOLOGY

The study has employed CGE model designed on the pattern of Lofgren et al. (2002), on the data provided in SAM 2001-02 for Pakistan designed by Dorosh et al. (2006), to investigate the impact of Pakistan's exports on its economic aggregates. The framework of mathematical equations is based on the neo-

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classical assumptions of optimizing behaviour of economic agents: maximization of utility and output, and minimization of costs. Trade elasticities for different commodities in Pakistan have been borrowed from Ahmed et al. (2008). Three experiments have been conducted to gauge the impact of increase in Pakistan's exports on various economic aggregates of Pakistan. In the first simulation (SIM-I) Pakistan's exports have been increased by 5%, in the second simulation (SIM-II) by 10% and in the third simulation (SIM-III) by 15%.

RESULTS

Domestic output level of most of the commodities has risen. Incomes and expenditures of all the households have risen that results in rise of utility level of all the households. Moreover, all the households have also recorded an increase in the values of compensating variation which implies higher level of welfare for households. However, the value of compensating variation for non-agriculture households has risen more than that of agriculture households indicating pro-urban effect.

IMPLICATIONS

The findings of the study reveal that increase in exports has favourable impact on the performance of macroeconomic variables of the economy i.e. GDP, public and private consumption, savings and investment. Equality among the households has improved as the inequality indices have registered declining trend. All this suggests that export promotion measures should be incorporated in poverty alleviation, income equality and economic growth strategies.

ORIGINALITY VALUE

Three experiments are performed to gauge the impact of increase in Pakistan's exports on its various economic aggregates. Pakistan's exports have been increased by 5% in the first simulation (SIM-I), in the second simulation (SIM-II) by 10% and in the third simulation (SIM-III) by 15%. The findings of the study reveal that increase in exports has favourable impact on the performance of macroeconomic variables of Pakistan's economy i.e. GDP, public and private consumption, savings and investment.

KEY WORDS

Economics, export, economic aggregates, CGE model, economic growth, sustainable development, Pakistan, poverty alleviation

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2.36. TREASURY STOCK PURCHASES FOR THE PURPOSE OF AVOIDING DAMAGE FOR THE CORPORATION: EMPIRICAL ANALYSIS IN SERBIA, SRPSKA REPUBLIC, MONTENEGRO AND CROATIA

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OBJECTIVES

The aim of this paper is to investigate to what extent treasury stock buyback program may prevent damage of the companies in Serbia, Srpska Republic, Montenegro and Croatia.

METHODOLOGY

Regression analysis will be used to test whether the treasury stock purchases for preventing damage for the company for the consequence has reducing the downside trend of company's stock prices in the crisis period and during regular activities. For the purpose of analysis stock quotation will be used from the Belgrade Stock Exchange, Montenegro stock exchange, Banjaluka Stock exchange and Zagreb Stock exchange. For the purpose of identifying motives, number of shares purchased besides the information taken from the website of various stock exchanges we will use the management report information regarding companies experiencing treasury stock purchases.

RESULTS

Treasury stock purchases for preventing damage is very common motive for entering into this transaction especially in financial crisis time period. In this paper we will research whether using existing or current legal norms and laws regarding

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treasury stock really prevent companies from Serbia, Srpska Republic, Montenegro and Croatia of experiencing damage.

IMPLICATIONS

This research has implication on lawmakers, investors, managers and academicians. In the context of lawmakers, research will be of importance because the legal norms and laws should be changed if current legal context does not contribute companies and prevent economic and financial damage. Investors and managers will use the results especially in the crisis period because this manuscript will help them to reveal real possibilities of current legal norms. This is a pioneer research in Balkan and it will help theorists to formulate new concepts and theories.

ORIGINALITY VALUE

Even when strict rules and regulations regarding treasury stock purchases is implemented in some countries all of them allow companies to purchase their own stocks to prevent damage. This is true for the countries that we take into analysis. Although, legal rules are different so we will focus our analysis on current legal norms in different Balkan countries. When stock markets are not developed and illiquid buying back own stocks does not have positive effects for the companies stock prices. If stock buyback does not prevent damage for the company it will for sure provoke larger damage for the stockholders and the benefits will be on the side of speculative investors. If the research shows that this is the case in Balkan countries, we predict that legal norms in those countries should be changed in order to avoid speculative transactions in the financial markets.

KEY WORDS

Stock repurchase, Serbia, R. Srpska, Montenegro, Croatia

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2.37. THE IMPACT OF NATIONAL DEBT IN INTERNATIONAL FINANCE AND SMALL OPEN ECONOMIES

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OBJECTIVES

External debt implies hard burden for any economy. Financial crisis has resulted in changed relationship to national debt in international finance. Debt is considered to be more sovereign than the state because key decisions of over-indebted countries are not taken by their governments but by the clubs of creditors. Experts believe that rescheduling or writing-off some portions of debt of over-indebted countries would be the most appropriate solution for the relationship to creditors, to the richest countries. As a rule, such negotiations take a long time, they are dramatic and unpleasant. Generally, common formula reads *no reform, no money*.

METHODOLOGY

The analysis is based on scientific methods using foreign and domestic scientific and literature, with the application of general scientific methods. The aim was to point to the connection and the mutual conditionality of the analyzed state and trends, and also to the inadequate methodology for calculating the public debt of Serbia (statistical involvement). Also, the method of comparison, synthesis, classification and descriptions was used. In particular, statistical methods were used with comparative overview, by country, comparable to Serbia.

RESULTS

The external debt of most European countries is calculated in euros, and to a lesser extent in dollars. However, it should be held in mind that the countries borrowing in foreign currencies do not have, and cannot even have reliable data -

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indicators of real consumption. With about 80 percent of the debt in foreign currencies, Serbia is among them. Therefore, as long as the course of the domestic currency is overestimated, the financial picture is far from reality, and the risk of the outbreak of the financial crisis is greater than the one that the indices of indebtedness show.

IMPLICATIONS

External debt represents a burden for any economy. Long financial crisis has made the change and attitude towards the national debt in international finance. It is believed that the debt autonomously from the state, because the key decisions in debated countries do not make their government than clubs of creditors. Many experts believe that the renegotiation or write-off of part of the debt, indebted countries was the fairest solution in relation to creditors, the richest countries. These negotiations, as a rule, they last a very long time and the character of the dramatic and harrowing. The question is whether the increase in debt of wrong economic policy of austerity, the global crisis or not implement in reforms leading to fiscal balance a social justice. Serbia's public debt is falling but far from the level that official statistics show.

ORIGINALITY VALUE

In the circumstances of growing globalization, the question is raised whether small countries like Serbia or Greece can implement their policy in any sphere. Small countries vs. big ones more obvious, i.e. the countries are less sovereign if their external debt is higher, and the key decisions are taken not by governments but by the club of creditors.

KEY WORDS

Serbian economy, national debt, international finance, over-indebtedness

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2.38. THE IMPLICATIONS OF THE IMPLEMENTATION OF THE BPM CONCEPT ON BUSINESS PERFORMANCE OF INSURANCE COMPANIES

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OBJECTIVES

The main goal of the authors was to research the effects of BPM concept on business performance of insurance companies. BPM concept means Business Process Management. It is well known that business processes represent the „heart“ of the organization. Today, in global economy, companies are facing with the hard and intensive competition on the market. Companies want to be market leaders, not followers. Because of that, it is extremely important that organization represents one highly orchestrated entity, in which all departments work together on the realisation of the business goals – long term surviving on the market and maximization of profit. Humans are the most responsible factor for the change of global climate. In the selfish race for the maximization of profit, they forgot to care about the nature. They are paying the bigger and the bigger price, so ecology is becoming a scientific discipline with number one rating. Management of the entity, wants to present it in public as a social responsible business entity. Important „business weapon“ that management can use for this purpose is BPM (for example company can become paperless). Countries in transition are trying to implement strategies of successful companies, so that they can compete with them in the global market, and to reduce the difference between them and leading economies in the world.

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METHODOLOGY

Authors of this paper used mix of several methodological approaches. They used: case study, development studies, correlation studies and evaluation studies. All mentioned methods were adequate for realisation of the goals of the research. Case study was used because authors wanted to present the BPM concept in foreign economies (Companies BonitaSoft and Capgemini, and their cooperation with insurance companies in the world). Also, they were researching the BPM concept implementation in the domestic economy (Milenijum insurance and Triglav insurance). This paper contains a mix of development, correlation and evaluation study, because authors wanted to find out how did implementation of the BPM concept affected business performance of mentioned insurance companies, was there any correlation between implementation of the concept and performances, and was the implementation done in the right way.

RESULTS

Authors analyzed financial reports of mentioned insurance companies before and after BPM concept, so that they could get a conclusion about the subject they researched. The results have shown quite correlation between implementation of the BPM concept and business performance of the insurance companies. Also, authors of this paper are reserved about the results they found out, in the way that there is a possibility of different conclusion if other insurance companies were involved in this research.

IMPLICATIONS

BPM concept is well known in world leading economies, but it represents one specific and timeless subject. It is highly important to achieve symbiosis between researchers on the universities and practitioners. Researchers can support practitioners with their research results, in the way to help them to become more successful, agile, and innovative. Authors think that in countries in transition the importance of BPM concept will be figured out in the years to come.

ORIGINALITY VALUE

BPM concept represents a real refreshment in academic environment in countries in transition. Authors used data from insurance companies that are market leaders in Serbia, when we talk about BPM concept. This paper should have a significant influence on management in insurance companies in Serbia and other countries in transition to be aware of its importancy. Only in that way, with

Part II.

existence of fear of competition, companies will work hard to be inventive, flexible and better than other market players.

KEY WORDS

Management, organization, business processes, BPM approach (Business Process Management approach), business results, benchmarking

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Part III.
**SOCIAL CHALLENGES OF UNEQUAL
GROWTH: SOCIAL PILLAR**

3.1. ECONOMIC AND SOCIAL DIMENSION OF SUSTAINABLE DEVELOPMENT: CASE SERBIA 1995-2015

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OBJECTIVES

Serbia as a country with very slow transition to market economy has some disproportion about realization of idea of sustainability. From previous documents in strategic development we can see the Serbian economy as “knowledge-based sustainability economy” till 2021, no matter what was economic sector that generated economic growth. From the other side, in social pillar there no full attention of inequality and social disproportions. Because of these objective of this papers is to reshape idea of sustainability with socio-economic aspect, special with results of researches that are good base for theoretical background. After that on case of Serbia we will show importance of socio economic aspect of sustainable development.

METHODOLOGY

In this paper we will use multiple regression. It is appropriate method because we want to predict the value of real GDP growth rate on the value of growth rate of added value in different sectors. In this research dependent variable is real GDP growth rate as a measure of economic dimension of development. Independent variables or predictors are gross value added growth rate by different sectors. As a dummy variable will be financial crisis, as binary variable. Period of observation will be from 1995 till 2015.

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RESULTS

We show that social - economic dimension in Serbia is very important. We identify that using ceteris paribus approach increasing of value added in processing industry for 1% can cause of real GDP growth rate for almost 0,2 percentage points. As a important sector for economic growth we identified agriculture and trade sector. In area of services only post services were important for economic growth. At the same time we identify income inequality and social disproportion in different business sector. All of these put new light on economic and social dimension in Serbia.

IMPLICATIONS

In the sustainability discourse we find much disagreement about the idea of sustainability resulting in the unsatisfactory situation that this idea is limited by arbitrariness and therefore loses its action guiding power. From the other side, there is wide consensus that the idea of sustainability figures as one of the leading models for societal development by indicating the direction in which societies ought to develop. Strong evidence in this paper can sent message to macroeconomic policy makers of importance of economic sector that can generate economic growth and at the same time try to find solutions for reduce income inequality level.

ORIGINALITY VALUE

Economic theory and practice show that sustainability claims to have action-guiding power and calls for particular orientations of actions. On the early beginning at the end of 1990s sustainability is the basic survival capacity of humans in society. Today, after almost 30 years of idea of sustainability, realization of this idea focused on more than 17 goals. All these goals have different priority in different countries. It is a matter of country development level, but, last economic crisis, social and economic dimension put on high priority level. This paper put special light on economic and social dimension of sustainability in Serbia after analyzing period of last 20 years.

KEY WORDS

Sustainable growth, inequality, classes, capitalism, market economy

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3.2. SUSTAINABLE DEVELOPMENT AND THE QUESTION OF ITS SOCIAL DIMENSIONS

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OBJECTIVES

The authors point out the importance of sustainable development's social dimension (especially in developing countries like Serbia) and its link with other two dimensions: economic and environmental. They analyse and compare international documents (adopted by the United Nations and European Union) and relevant national legislative framework, suggesting the adoption of a more extensive concept of social dimension of sustainable development and a wider range of its indicators.

METHODOLOGY

Content analysis was applied in order to precisely define social component of sustainable development and its correlation with its other two dimensions: economic and environmental, as well as to single out and discuss its most relevant indicators. Doctrinal legal research method was used to critically analyse the provisions of international and national legal sources (including conventions, regulations, laws, strategic documents, action plans etc.) pertinent to the issue of

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sustainable development with special focus on its social dimension. Comparative legal research method was applied in order to examine whether the goals of sustainable development and means for its achievement set in Serbian national legislation correspond to those proclaimed on universal and European level.

RESULTS

There is no universally accepted definition of social dimension of sustainable development and its indicators. This makes its measuring and comparison challenging and unreliable, particularly since it cannot be observed separately from economic and environmental components. There are several strategic documents dealing with social dimension of sustainable development. There is a correlation between social and environmental dimension of sustainable development but it should be explored more profoundly.

IMPLICATIONS

This paper has implications for law and policy makers since it invites them to re-examine the compatibility of relevant national strategic documents with United Nations' and European Union's standards regarding social dimension of sustainable development. It also invites researchers to establish a universal and extensive definition of this term, to set up a broader list of its indicators as well as to empirically analyse the link between sustainable development's social and environmental component.

ORIGINALITY VALUE

The paper draws attention to key issues regarding social dimension of sustainable development starting from its definition, indicators and linkage to economic and environmental aspects. It also highlights the most relevant strategic documents, drawing a comparison between national and international standards in this field. It is focused on the link between environmental and social dimension, which is important in the context of environmental crises and social injustice as its consequence.

KEY WORDS

Sustainable development, sustainability, environment, ecology, economy, social, environmental crises

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3.3. POVERTY AND FAMILY QUALITY OF LIFE IN THE REPUBLIC OF SERBIA

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OBJECTIVES

Family quality of life is a complex construct that refers to the conditions where the family's needs are met, and their members enjoy living together. Poverty is, on the other hand, one of the qualitative indicators of social exclusion, a phenomenon that affects individuals and families in Serbia in the transition period. This study examines the impact of poverty on the quality of life in families living in the Republic of Serbia.

METHODOLOGY

This study was designed and conducted as a non-experimental, descriptive and explorative. A random sample consisted of 154 families residing in the Republic of Serbia.

The Beach Center (FQOL) Family Quality of Life Scale (Hoffman et al., 2006) on Serbian was used.

Poverty was operationalized through material status and housing conditions, both subjectively assessed on a three-level scale (below average, average, above average). Material status was related to the monthly household income, average income per member, and whether the housing issues was resolved or family owned a car. Housing conditions were assessed in relation to the living space size (total and per household member), existing sanitary conditions, availability of clean and warm water and electricity, heating method and the use of modern information and communication systems and technologies (fixed and/or mobile

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telephone, computer, internet). Family quality of life included four domains (Family interaction, Parenting, Emotional well-being, Physical well-being) and overall FQOL score.

RESULTS

Results were analyzed by descriptive statistics, and FQOL differences were examined in relation to the family material status, housing conditions and average monthly household income as independent variables. Kruskal-Wallis H-Test indicated statistically significant differences between three FQOL domains and overall score in relation to material status and housing conditions ($p < .05$), excepted for Parenting ($p > .05$). Positive and small to medium statistically significant correlations were found between all four domains and overall score with the average income ($p < .01$).

IMPLICATIONS

Families with below average material status and housing conditions are at risk of low FQOL. The differences are most obvious in physical/material well-being, and the least at parenting as seen through the activities that adult family members do to help children grow and develop in multiple areas of life (Park et al., 2003; Hoffman et al., 2006). The low levels of parental satisfaction with FQOL are associated with lower levels of monthly household income, therefore indicating the influence that poverty has on quality of life of families in the Republic of Serbia.

ORIGINALITY VALUE

This study adds to the previous knowledge about impoverished families by indicating that the relationships among family members and the environment in which the family functions, their emotional and internal aspects of life, as well as their physical, material and financial well-being are connected to their material status, housing conditions and income. Additionally, family income is associated with parenting aspect of family life.

KEY WORDS

Poverty, family, family quality of life, physical well-being, material status, Serbia

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3.4. THE RELATIONSHIP BETWEEN ECONOMIC GROWTH, EMPLOYMENT AND INCOME INEQUALITY: TIME SERIES EVIDENCE FROM ROMANIA AND TURKEY

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OBJECTIVES

This econometric analysis follows:

- description of the relationship between the real economic growth rate like as dependent variable and Employment growth rate and Gini coefficient like as independent variables;
- building an econometric model for both countries (Romania and Turkey) to analyze how it can respond to the research question asked;
- validation of the results by means of statistical tests;
- prediction of real economic growth rate (dependente variable) according to the Employment growth rate and Gini coefficient (independent variables);
- explaining the effect of the Employment growth rate and Gini coefficient (independent variables) on the real-economic growth rate (dependent variable).

METHODOLOGY

The method used is multiple regression, represented by the equation:

$$y=f(x_1+x_2+...+x_k) + \varepsilon.$$

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Model is tested if can be expressed by the linear relationship:

$$y_i = \alpha + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_k x_{ki} + \epsilon_i,$$

where:

y is dependent variable, for our case is real economic growth rate

x is independent variables, for our case Employment growth rate and Gini coefficient;

ϵ is aleatory variable

α, β are regression coefficients

RESULTS

The results indicate that the decrease of income inequality and increase employment influence positive the economic growth. Increasing employment tends contributes to a more equitable distribution of income.

IMPLICATIONS

The research can contribute to the foundation and promotion of adequate economic policies for achieving sustainable economic growth through the achievement of an economically and socially efficient economic and social system favorable to the globalization trend of the markets.

ORIGINALITY VALUE

This paper is an empirical research and time series evidence is instructive because can provide valuable pointers for policy makers.

KEY WORDS

GDP, employment, Gini coefficient, models, Romania, Turkey

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3.5. THE POTENTIAL OF MEDIUM-SIZED ENTERPRISES IN INDUSTRIAL SECTOR OF THE SERBIAN ECONOMY¹

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OBJECTIVES

The aim of the research is to determine the economic and financial power of medium-sized enterprises registered in the Republic of Serbia in the sector C: Manufacturing. The subject of the research are values of financial performance of enterprises in the period 2011-2015. The research period provides the comparability of data over time and the identification of movement dynamics of basic development indicators.

METHODOLOGY

Economic and financial power of enterprises was assessed by using the method of financial analysis. Financial analysis was carried out based on the information disclosed in the official financial statements of enterprises which are publicly available on the website of the Business Registers Agency. With the application of financial analysis, the yield, asset and financial position of enterprises was determined (Rodić, J. et al., 2007; Đuričin, S., 2011; Đuričin, S., 2012; Đuričin, S, and Beraha, I, 2012; Đuričin, S, and Beraha, I, 2013; Đuričin, S, and Bodroža, D, 2013; Đuričin, S., and Beraha, I., 2014; Đuričin, S, and Jovanović, O, 2016; Đuričin,

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU), OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements) and TR 31005 (Modern Biotechnological Approach to Solving the Problem of Drought in Agricultural of Serbia), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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A, and Beraha, I, 2016; Đuričin, S, and Đukić, M, 2017). In order to assess the yield position of enterprises, an analysis of the structure and arrangement of total revenues, structure and arrangement of gross financial result and profitability was performed. In order to assess the asset position of enterprises, an analysis of the structure and source of assets and of the efficiency of current asset management was performed, and for the purpose of assessing financial position of enterprises an analysis of liquidity, solvency and indebtedness was conducted.

RESULTS

The largest number of medium-sized enterprises from the manufacturing industry operates in a low-tech and medium-low technology fields. The results of the research indicate that in order to improve the yield, asset and financial position of enterprises measures aimed at improving global sales and purchasing parity prices, achieving a higher degree of real capacity utilization, productivity growth, optimization of production assortment, synchronizing production by type and volume with sales of finished products, improvement of business efficiency, etc. are to be implemented.

IMPLICATIONS

The implications of the improvement of business operations of medium-sized enterprises in the sector C: Manufacturing primarily have the economic, and indirectly the wider social significance. Increasing the potential of these enterprises would provide an opportunity to strengthen national competitiveness and export, and indirectly reduce unemployment i.e. improve labor market conditions in the Republic of Serbia. The improvement of business operations of medium-sized enterprises in the manufacturing sector would contribute to enhancing their technological structure i.e. would provide the possibility of producing higher added value products thus increasing competitiveness and export. These enterprises currently absorb 40% of the total workforce of all medium-sized enterprises, and improving their business operations and increasing their potentials would impact the further growth of employment and living standards of workers.

ORIGINALITY VALUE

The special significance of the research is reflected in the original data that testify about the economic and financial power of medium-sized enterprises in the sector C: Manufacturing. This primarily refers to the ability of monitoring the basic indicators of financial analysis in space and time. The spatial analysis provides the

possibility for assessing yield, asset and financial position of each of the observed enterprise compared to the competition, while time analysis enables the determination of movement dynamics of basic development indicators.

KEY WORDS

Medium-sized enterprises, industry sector, economic and financial power, yield position, asset position, financial position, unemployment, labor market

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3.6. ECONOMIC DEVELOPMENT THROUGH ISLAMIC FINANCING: THE CASE OF BOSNIA AND HERZEGOVINA

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OBJECTIVES

The paper aims to provide insight into the potential of Islamic banking and finance (IBF) as a more ethical financing option contributing to economic development.

The objectives include:

1. Investigate IBF as an alternative, more ethical financing option than conventional financing;
2. Present alternative products offered by IBF and their contribution to economic development;
3. Present the case of Bosnia and Herzegovina (B&H), a transition economy with high unemployment and limited economic activity, and the benefits that IBF products have provided for economic growth.

METHODOLOGY

The research will provide an extensive review of the literature on IBF, the products and services including the PLS model, as well as the direct role of IBF in economic development through the promotion of various economic activities. The literature which will be reviewed includes articles from peer-reviewed journal and other authentic and reputable academic sources. Based on the literature review, a practical case will be presented as evidence of the same. The case of B&H will be presented through the Turkish Financing line offered by Bosna Bank international (BBI), the only Islamic bank operating in B&H. The financing line provides financing based on the PLS financing scheme of diminishing Musharakah. Data on the operation of the financing line will be collected from official reports created by BBI. We will investigate where financing was placed, who it was provided to, what industries it targeted and what the effects of the financing are. Both retail and

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corporate clients will be considered to provide an overall picture of how the financing line has contributed to economic development.

RESULTS

The results include:

1. IBF is founded on ethical principles and encourages the maintenance of justice, fairness and equality in all economic transactions.
2. IBF products encourage dispersion of risk and equal distribution of wealth, including profit-loss sharing (PLS) model.
3. IBF and PLS models have contributed to economic development.
4. The case of BBI shows successful implementation of financing using PLS models and their direct contribution to poverty alleviation (financed 9,280 returnees), job creation (2,320 position created) and overall economic development.

IMPLICATIONS

The research has theoretical and practical implications. It will fill the literature gap since no research explores the economy of B&H, which serves as an appropriate case for other transition economies and conventional financial systems with significant Muslim populations, such as France and Germany. With the recent Migrant crisis, the Muslim population in countries with conventional economies is increasing. These individuals require financing to establish new lives, where IBF products offer financing and establish long-term schemes contributing to economic development.

ORIGINALITY VALUE

This paper is the first look at the relationship between IBF and economic development in B&H, which is a case that can be transferable to similar contexts. It also provides both a theoretical and practical perspective, whereby appropriate literature is reviewed and an example of the successful implementation of the PLS model is presented. This example shows the significance of IBF and its contribution to economic development.

KEY WORDS

Islamic finance, economic development, diminishing Musharakah, economic development, poverty alleviation

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3.7. PUBLIC SECTOR WAGE PREMIUM IN SERBIA: COMPARISON OF LINEAR REGRESSION AND MATCHING APPROACH ESTIMATES¹

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OBJECTIVES

Previous research on public sector wage premium in Serbia are typically based on the linear regression models and full sample of public and private sector workers, which ignore the fact that there are combinations of individual and job characteristics in the sectors which are not comparable. We address this issue by comparing the estimates of linear regression and matching methods, which account for the differences in incomparable jobs.

METHODOLOGY

In addition to the standard Blinder-Oaxaca decomposition, to account for the incomparability of jobs we use recently developed Nopo decomposition (Nopo, 2008). Blinder-Oaxaca decomposition splits the total unadjusted difference in wages between the sectors to two components: explained part - which is due to the differences in workers' characteristics; and unexplained part - which is due to differences in returns to these characteristics and which represents an estimate of the public sector wage premium. Within the Nopo decomposition, in the first phase, matching techniques are used to determine the overlap of public and private sector workers in relevant characteristics, after which the differences in wages between comparable employees of different sectors are split to explained and unexplained part, similarly to Blinder-Oaxaca decomposition. To estimate the

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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public sector wage premium we use the data from the Labour Force Survey from 2014.

RESULTS

Results show that the difference in the average hourly wages between the sectors in Serbia in 2014 stood at 32.3%. Nopo decomposition indicates that 5% of the total wage differential is due to incomparability of the public and private sector jobs. These differences mainly affect the estimate of the explained part of the gap, while the difference between the public sector wage premium estimates according to Blinder-Oaxaca (17.4%) and Nopo decomposition (15.8%) is not statistically significant.

IMPLICATIONS

Previous research on the public private wage differences have found that there is a high public sector wage premium in Serbia. These research were largely based on the linear regression models, which adopt an "out-of-support assumption", i.e. the full comparability of the public and private sector workers. This research has shown that the public sector wage premium in Serbia is estimated as high even when the incomparability of the jobs is accounted for.

ORIGINALITY VALUE

Previous research on public sector wage premium in Serbia were largely based on the linear regression methods. Estimating public private wage differences in such manner suffers from specification error and causes biased estimates. In this research, for the first time, matching approach estimator is applied, which pays special attention is paid to the fact that there are combinations of individual and job characteristics in one sector that cannot be found in the other.

KEY WORDS

Public sector wage premium, Nopo decomposition, matching approach, Serbia

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3.8. SKILLS AND SUSTAINABLE EMPLOYMENT IN SERBIA¹

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OBJECTIVES

The objective of this paper is to assess the process of matching the skills available by the workforce and the skills demanded by the employers. Skills mismatch problem is mainly caused by the structural unemployment in Serbia. Unfavourable structure of both the employed and unemployed may cause problems with skills matching. Additionally, unfavourable structure of skills can prolong the job searching time and induce the increase of social expenditures.

METHODOLOGY

The methodology that will be used for the purpose of this research will be primarily based on the statistical analysis. Monitoring of the skills matching process largely depends on the reliable data on the demand and supply of skills in the labour market. In case of Serbia, there is an accurate source of such data based on the yearly survey conducted on a sample of active enterprises which operations are spread regionally and by the sector of economic activity. However, at least two sources of the data, depending on the level of their availability, will be consulted. The data will be extracted from the Statistical Office of Serbia databases, as well as from the National Employment Service periodicals. When necessary those data will be combined with other international sources, including Eurostat, ILO data bases, and the like.

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia

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RESULTS

The expected result of this study is to provide better insights into the process of matching the skills and jobs in the Serbian labour market. Key findings of this research will show how skills contribute to the increase in employability as measured by formal qualifications of different participants in the labour market. However, the conclusions derived by this analysis may be limited due to the data availability and the level of comparability.

IMPLICATIONS

The purpose of this paper is to show to what extent the shortage of skills causes labour market frictions, on the one side, and what are the potential implications of skill shortages and gaps on the social and economic policy, on the other. It is expected that this analysis will provide the assessment of skills gaps, their scope and incidence, at the level of education and occupational groups.

ORIGINALITY VALUE

To the best knowledge of the author there is a limited number of similar studies that analyse skills related issues in the Serbian labour market. The intention of this paper is to fill the existing gap and provide some preliminary findings to support policies associated with the enhancement of labour market participants' employability.

KEY WORDS

Employability, labour market, skills, structural unemployment

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3.9. DIGITAL SKILLS AS UNDERLYING COMPETENCIES OF WORKFORCE IN SERBIA¹

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OBJECTIVES

After almost twenty years of 21st century Serbia faces a high rate of unemployment, which is influenced by many factors and one of them is the general level of education of the population. For that reason the main objective of this research paper is to determine the level of ICT literacy of the working age population in Serbia and to measure the correlation of the level of ICT literacy and employability. We consider this subject very important having in mind that the digital skills become one of the basic element for the national growth and competitiveness.

METHODOLOGY

In order to obtain comparability of results with other European countries we decided to apply methodology for calculation of Digital skills indicator created by Eurostat in cooperation with European Commission (DG CNECT) based on the Digital Competences Framework - Individuals' level of digital skills (code: isoc_sk_dskl_i). This is a composite indicator for evaluation of knowledge of individuals aged 16-74 in several areas (information, communication, problem solving, and software skills) which can be used as a proxy of their digital competences and skills. For the purpose of this pilot research we collected xxx

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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surveys in Serbia mainly relying on the questions from Eurostat methodology, but we also include additional questions regarding to the status of employment and the employment form in order to examine correlation between the level of digital competences and employability. We used Pearson correlation coefficient for this purpose.

RESULTS

Results presented in this research need to be considered with reserve, due to non-representational sample, but it does not deviate significantly from Eurostat indicator. According to results, in the area of Information skills 12% of sample has no skills, 7% has basic and 78% has above basic skills, in the area of Communication skills also 12% has no skills, 16% has basic while 70% has above basic skills. The situation in the area of Problem solving is a bit different – 29% has no skills, 16% has basic skills and 54% has above average skills. Finally, in the area of Software skills 34% has no skills, 24% has basic skills and 40% has above basic skills. Overall indicator of digital skills showed that 13% of sample has no skills or their skills cannot be assessed, 50% has low and basic skills, while 37% has above basic skills. Pearson test founds correlation between the level of digital skills and level of education and the type of business activity.

IMPLICATIONS

Results of the research presented in this paper could provide impact on national policies in Serbia. The main legal document *National Strategy of Information Society Development* should be supported by appropriate regulations and policies that would target identified problems in the area of digital literacy. This paper can be used in the process evidence based policy as underlying document.

ORIGINALITY VALUE

Scientists in Serbia have begun to deal more with the phenomena of digital literacy in the last decade, but the researches are rare and non-systematic. One of the most valuable empirical study of Serbian society is *Digital literacy of employers and students in Serbia* provided by Lakić, et. al (2012) which covered 733 employers and 344 students. This research is step further because it is based on Eurostat methodology and its results are comparable with other EU countries.

KEY WORDS

ICT literacy, digital literacy, iSkills, Serbia, Eurostat methodology, employability, Digital Skills Index, digital competence

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3.10. EMPIRICAL EVIDENCE OF THE BRAIN DRAIN EFFECT ON SERBIA'S ECONOMIC GROWTH AND DEVELOPMENT

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OBJECTIVES

The aim of this research is to provide insight to phenomena of the brain drain of highly skilled individuals and to explore tendencies of the brain drain. This paper explores migrational patterns, economic and cultural links as aspects of motivation towards a potential migration. The data collected throughout the research carried out are potentially capable of systematically showing the issues that the Republic of Serbia is facing on macro and micro level repeated on the annual basis.

METHODOLOGY

Focus group consists of third and fourth year university students, hence they stand on a crossroads of deciding whether to search possibilities for further education or employment in the Republic of Serbia or abroad. Since research surveys were handed out to them while still in the county and before this group was divided into those who will stay and those who will migrate, tendencies and rate of individuals who will migrate can be clearly depicted and calculated with quantitative methods, as well as compared to the focus group as a whole to provide an information on the percentage of students interested in migrating. The aim of this paper is to explore tendencies and variables related to migrational motivations, 743 surveys were conducted and distributed to ensure the

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representability of the data that was to be processed. Research data was calculated in SPSS quantitative data analysis program. To ensure that collected data are heterogeneous surveys were given out to 17 different university departments.

RESULTS

Out of 743 data subjects specifically surveyed for this research, 431 said that they are considering leaving the country after they graduate. As results show, perception of personal financial state is also important when making the decision whether to stay or leave the country of origin. The research was carried out on the University of Novi Sad and the University Business Academy. Since only the students in one region were surveyed in the future the research can also be implemented in other regions in Serbia. Therefore, the data gathered can be more profound.

IMPLICATIONS

Presented results identify the tendencies and aspirations of highly skilled population group. Policy makers of the country should take steps towards ensuring that higher percentage of this focus group will stay in the country. Based on the data about motivation to migrate, policy makers can create strategies that will ensure that lower percent of population will have motivations to move abroad, since the motives named in the data could be imputed into those strategies and motivate them to stay.

ORIGINALITY VALUE

The original value of this paper is to identify and rationalise motives towards moving abroad. To ensure the quality of the paper theoretical basis, research proposal as well as data analysis method are imbedded in empirical sociological research. Gathered results and data are later on explored and built upon economical perspective, so we can track how examined circumstances affect Serbia's economical growth and development. Such multidisciplinary approach insures valid data gathering and interpretation.

KEY WORDS

Brain drain, globalization, tactics, high education, migration

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3.11. ACCEPTANCE OF INNOVATION IN THE FORM OF INTERNET MEDIA BY CONSUMERS IN THE REPUBLIC OF SERBIA

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OBJECTIVES

The paper presents acceptance and adoption of online media through direct marketing, by consumers in the Republic of Serbia. It is a sort of innovation in marketing in terms of the way of communication between bidders and consumers, as well as in modern ways of purchasing. The aim of the research is to explore the current situation in Serbia regarding this matter. The research question reads: To what extent do consumers in Serbia use innovative forms of communication (over the Internet) with companies for information purposes and to what extent do they buy through certain Internet media?

METHODOLOGY

The methodological approach of the study involves the application of the descriptive-analytical method to explain the innovations in marketing and diffusion of knowledge and technologies in Internet. The research was conducted in the Republic of Serbia in the period June-July 2017. Target groups were consumers aged 15 to 64 in order to examine their habits and preferences regarding the use of DM's Internet media. For the purpose of the research, a questionnaire was used in two forms: the Internet questionnaire (a link to the respondents) and a questionnaire of the same content in printed form. It's a simple random sample. The structure of respondents according to gender, age

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and place of residence corresponds to the proportions according to the stated characteristics in the Statistical Yearbook of the Republic of Serbia 2016 (SORS), which ensured the representativeness of the sample. The sample consists of 1532 respondents, and the statistical error is 2.5% (confidence interval 95%). When processing data and interpreting the results, SPSS was used and within it descriptive and comparative statistics (χ^2 test, t-test, ANOVA, regression and correlation).

RESULTS

Most consumers in Serbia use the Internet direct marketing media for information, while smaller percentage of consumers conducts online purchase. 78% of consumers order products/services over the Internet at least once a year. Purchase is conducted more through domestic sites than foreign (65%/43%). There is correlation between variables like age of consumers and the following dependent variables: frequency of using web to inform about products/services, frequency of ordering products/services over the web, the frequency of visiting and ordering through social networks.

IMPLICATIONS

Innovation in marketing is one of the key factors on which the overall innovation index of Serbia depends. Innovation implies openness to change, successful management and acceptance of changes, and is most often viewed as a property of the organization, but it is also necessary to consider the other side of the market - consumers and their willingness to accept knowledge and technology regarding new methods of communication and purchase. The number of consumers in Serbia who are shopping over the web is increasing, so companies should strongly focus on internet marketing.

ORIGINALITY VALUE

The study provides an insight into the habits and preferences of consumers in Serbia regarding the use of online direct marketing media to inform about products/services, companies and online ordering. Usually studies on this topic are not sufficiently useful for the application of marketing strategies. The obtained information from the research will be useful for the business practice of Serbian companies in the field of internet marketing, especially because the changes in internet marketers are fast and require to be explored and monitored continuously.

KEY WORDS

Innovations, internet media, direct marketing, knowledge and technology diffusion, consumers, Serbia

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3.12. DEMOGRAPHIC CHANGES AND SUSTAINABLE DEMOGRAPHIC DEVELOPMENT IN THE WESTERN BALKANS

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OBJECTIVES

The contemporary challenges of the sustainable development are significantly determined by the demographic trends and by the need for human capital as an important factor for developing a knowledge based economy. The main goal of this paper is to identify the challenges of the sustainable development in terms of the changes and current demographic situation in the Western Balkan countries, as well as to detect the importance of creating and implementing comprehensive and consistent population policies.

METHODOLOGY

The analysis is based on the relevant indicators for demographic changes identified in the Sustainable Development Strategy of the EU. The following indicators are considered: Employment rate of older workers; Demography (Life expectancy, Population growth, Total Fertility Rate, Migration and Old-age dependency); Old-age income adequacy (Income level of over-65s compared to before); Public finance sustainability (Government debt, Retirement, The impact of aging on public expenditure). This approach is determined by the aspiration of the Western Balkan countries to join EU. The comparative analysis is made for the following countries: Albania, Bosnia and Herzegovina, Croatia, Montenegro, Republic of Macedonia and Serbia. The available data from the Eurostat statistics,

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the national statistical offices and other relevant data sources for the last decade are used. Also, relevant researches from the observed countries considering the demographic development and adopted population policies are consulted.

RESULTS

The population growth rate in all Western Balkan countries is decreasing due to the below replacement fertility rate and intensified emigration abroad. It implicates accelerated demographic aging accompanied with increase of the life expectancy at age 65 and old-age dependency ratio. Majority of the countries have huge government debt as a percentage of GDP. All are facing with increased impact of aging on the public expenditures and on the pension system sustainability. It assumes consistent and comprehensive population policies, with particular attention on the emigration abroad. The main limitation of these results is the lack of data for some of the indicators for the demographic changes.

IMPLICATIONS

The results of the analysis show that the demographic changes are big challenge for the sustainable development in all Western Balkan countries. They have implications in many domains and should be in the focus not only of the demographers, but of the researchers and policy makers in different fields of the macroeconomics as well. The lack of data for old-age income adequacy and public finance sustainability imposes the need for comprehensive database in each country as a precondition for continuous monitoring of the demographic changes and for creating appropriate policies regarding the sustainable development.

ORIGINALITY VALUE

According to the reviewed literature there isn't comparative research about the demographic changes in terms of the sustainable development in the Western Balkan countries. The added value of this research is in the comparison of the demographic indicators and recognizing their importance for the sustainable demographic development of this region as one of the key preconditions for the future sustainable development. Based on the results of this research, the common areas where the population policies of this countries should be directed, are identified.

KEY WORDS

Demographic change, sustainable development, employment rate of older workers, demography, old-age income adequacy, public finance sustainability, population policy, Western Balkan

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3.13. MIGRATION, INTEGRATION AND ENTREPRENEURSHIP: INSIGHTS FROM THE SERBIAN EXPERIENCE

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OBJECTIVES

The objective of this article is to explore entrepreneurship as a form of economic integration within two migrant groups: long term settled refugees and returnees in Serbia, and to investigate their motives as well as macro, meso and micro factors affecting their business practices. Economic integration outcomes of migrants can be a valuable indicator in helping policy makers tackling unequal growth challenges. ,

METHODOLOGY

This paper summarizes recent studies, some of which have not yet been published. The results of two qualitative research are outlined, whose target groups are transnational entrepreneurs returnees (TNE) in Serbia and long term settled refugee entrepreneurs (LSRE) from the former republics of Yugoslavia in Serbia. All but two respondents are the owners of micro and micro and small business enterprises. The first research was conducted in 2013 through semi-structured face-to-face interviews (15) and on-line survey (47) with TNE. The second research was conducted in 2014 through focus groups (3 FG with LSRE from Croatia and BiH), referring also to the additionally processed 2011 census data.

The qualitative method was applicable because of insufficient quantitative data and novelty of the phenomenon not enough recognized by the official statistics. The presented views and opinions of the entrepreneurs enable better revealing the challenges of economic integration.

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RESULTS

In spite of different motives for starting the firms (emergency for LSRE vs. opportunity solution for TNE), the outcome is good economic integration. Both groups rely on family and their own social networks, especially for starting and developing business.

Through transnational activities, both LSRE and TNE use opportunities and overcome obstacles by maximizing material and non-material profits. Innovation of their business come from the fact that they rely on networks spanning borders.

IMPLICATIONS

The findings contribute to better understanding both determinants and obstacles of migrant entrepreneurship (ME), which are important public policy issues, given the strong increase in different types of mobility worldwide, modes of integration and links between societies of origin and destination. Adjusting political response towards measures that promote ME aids to recognizing the potential of ME contribution to the development through direct economic investment, but also through bringing entrepreneurial spirit, knowledge transfers, etc.

ORIGINALITY VALUE

Scientific knowledge about the relation between migration and entrepreneurship is limited in transition economy countries without large immigration pressure, such as Serbia. The results of our research provide the evidence that entrepreneurship, especially through transnational economic activity, facilitates integration for different migrant groups. The focus on migration-entrepreneurship nexus can also contribute to better definition of national and regional level tools for monitoring socioeconomic inequalities.

KEY WORDS

Migration, entrepreneurship, economic development, transnationalism, integration, Serbia

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3.14. THE IMPACT OF EMIGRATION/IMMIGRATION ON THE DEVELOPMENT OF SERBIA

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OBJECTIVES

The Eighth Millennium Goal of the UN defines migration as the development of a partnership in the world for the purpose of development.

The goal of this paper is in line with the mentioned goal - to help understand migration in Serbia as development of partnership for the purpose of development and how they influence the development of Serbia in general.

We live in times of great migrations that are mostly caused by political or economic conditions. What impact does it have on those countries where most emigrants emigrate and the ones from which they emigrate, or how migrations affect the country's development strategy? What is the situation in Serbia? How does emigration and immigration affect Serbia and its development? What is the impact of falling births in Serbia on the development of a development strategy? Attempting to answer these questions is the main task of this paper.

By analyzing the content of the literature dealing with this issue, the data collected in the projects that are the topic of migration in Serbia, especially in the project of 8 countries including Serbia, the paper is trying to find out how migration can contribute to the development of Serbia.

The logical question is - how can the country from which people more often emigrate can be developed by migration, how can it contribute to the realization of the UN Millennium Goal?

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How can those who have emigrated contribute to the development of their home country, and that this is not just remittances (money sent to the land of relatives) whose roads are not easy to follow? These are the questions that this paper asks for answers.

METHODOLOGY

Numerous studies have been done on migrations, authors from a number of countries have looked at them from their aspects, created maps that migrate documents, designed theories about migrations, and statistical institutes have tasks and try to do them as conscientiously as possible to serve us a multitude data on migrants and migrations.

Our desire is to add already existing knowledge in order to be closer to the ability to understand migrations and to help plan migration related activities.

With a global picture of the migration flows, which is necessary for understanding this phenomenon, we would put a special emphasis on Serbia.

By analyzing the content of past research, literature research, and monitoring events related to migrants and migration, we believe that we can contribute in the efforts to answer all the questions asked. The main document used as the source of information is the study of Migration and Development in Serbia. The Migration and Development Study in Serbia was created as part of the global project of the International Organization for Migration (IOM)

We expect that additional analyzes of already collected data on migrations and national states in the areas where people migrate and immigrate will give us some of the answers.

The hypothesis that the work is checking is: Migration in Serbia can be a driver of development based on culture and education.

RESULTS

Migration is always accompanied by a man. Distance calls people, in them life seems better, "human" and richer. He migrated in peaceful and wartime times. Because he wanted it and because he had to. Far more often the distances are unknown, foreign countries, but migration to countries of origin - closer or further - is rare. Migration has done the both Americas as they are now, Australia, too.

Something different is the migratory flows characteristic of Asia and Africa, while Europe with all its diversity and countless wars, today with its appeal, perhaps more than before, is a special phenomenon.

Serbia is a country from which people emigrate much more often. The wars in the Balkans have contributed to the fact that in Serbia, not long ago, people migrated - voluntarily or forcibly, with a decision made in different conditions, with or without pressure. Emigrate working-age people who want a better life. Serbia is old and it becomes a problem.

Serbia should be looked at with particular reference to the migrations that are permanent and occasional in this region, seasonal and even daily.

Yugoslavia from which Serbia was founded was a country where, thanks to the politics of non-alignment and the quality of educational institutions, numerous students from non-aligned countries educated themselves. Serbia still has respectable universities today. Is it possible that the young people of many friendly countries, including the Serbian diaspora, can be attracted to study in Serbia again? What to include in the academic program and what to do to get it? Certainly we cannot pair the developed countries in production with much, but we can arrange the country so that it is the place to come to study, to engage in sports, to participate in them or to visit cultural events.

Managing migration at all levels is especially important for young people in Serbia who are increasingly see Serbia as the country in which they would like to work.

IMPLICATIONS

This work draws attention to the immense influence of migrations on today's world. They affect both individuals and societies, countries, regions. Because of its great importance it is necessary that migration be the topic of research of both the governmental and non-governmental sectors. Their influence is also important for the adoption of national-level strategies (such as: Strategy for Development of the Republic of Serbia for the period 2011-2020, Social Protection Development Strategy, Republic of Serbia Public Health Strategy, Strategy for Development of Education in Serbia 2020 and others).

Migrations are an important topic for economists, but also sociologists, anthropologists, statisticians, and a number of other researchers from various

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fields. Migrations are particularly important to direct research when education and health are concerned.

Following the decrease in the number of inhabitants in Serbia, we conclude that it is necessary to analyze the migration and as a cause and as a consequence of the decline in the number of inhabitants in our country.

ORIGINALITY VALUE

The originality of this work is that it emphasizes the possibility that migrations can contribute to development of the Republic of Serbia. This fact is based on real potentials such as education and for diaspora and foreign students, their participation in sport and the emphasis on cultural values. This work can stimulate thinking and further research on migration, or the desire to engage in migration in the domain of development, as much as it is possible. Also, dealing with this topic reduces stereotypes about migration and migrants and reduces tensions that accompany these phenomena.

Particularly important is the fact that the use of this topic benefits the entire community: researchers, the academic community, and society in general.

KEY WORDS

Migration, development, Serbia, education, UN, partnership, migrants, strategy

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3.15. ECONOMICS AND MORALITY – HOW TO RECONCILE ECONOMIC THINKING AND BROADER SOCIAL THINKING

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OBJECTIVES

The objective of this paper is to present a virtue-ethics perspective on economics, a novel analytical approach that combines economic thinking with broader social thinking. This approach allows us to overcome the sharp divide between private and public morality, one of the defining characteristics of neo-liberal political ideology. A reconciliation of economic thinking and broader social thinking is needed in order to better formulate policies that, within a harmonious social setting and in particular in small open economies, lead to sustainable economic growth.

METHODOLOGY

We first argue that the neo-liberal divide between private and public morality is deeply controversial from the point of view of virtue ethics. We then propose an innovative method that joins the lens of virtues-ethics with the toolkit of neoclassical economics. In particular, we emphasize that the efficiency of any given allocation of goods is a category which can be evaluated only subject to a certain set of preferences. The choice of the set of preferences is determined by a desired system of values, and this link between the preferences which determine utility functions of individuals and the system of values which inspires them can in our view reconcile and align economic thinking with broader social thinking.

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RESULTS

We demonstrate that the range of goods important for human flourishing – from the point of view of virtue-ethics thus subject to moral regulation – is broader than proposed by the neo-liberal ideology. Moreover, that market decisions that involve these goods lead to consequences which cross the border between the private and public sphere. Furthermore, using our approach we present a multitude of contemporary problems of the economy and the society as market failures, introducing the possibility to use the standard remedies to market failures to treat them.

IMPLICATIONS

We argue that the need to reconcile economic thinking with broader social thinking is important for any society, but in particular for both the social wellbeing and the sustainability of economic growth in small open economies, even more so if they recently underwent economic transition. Our virtue-ethics perspective on economics can support some government intervention with the aim of correcting market failures – preserving the economic wellbeing, national culture, sovereignty – as well as solidarity between societies in such a similar situation.

ORIGINALITY VALUE

We present a novel analytical approach that is able to integrate broader social thinking into economic thinking and that is not at all in clash with the contemporary economic theory. We illustrate how virtue ethics can be combined with the toolkit of neo-classical economics to provide a critique to the neo-liberal ideology using the tools and concepts of the economic science itself. This allows us to formulate suggestions for policies that should lead to more sustainable, culture-sensitive, and equitable growth, in particular in small open economies.

KEY WORDS

Value-ethics, human flourishing, neoliberalism, neoclassical economics, preferences, market failure, economics and philosophy, small open economies

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3.16. REFORMS OF THE PENSION SYSTEM IN TRANSITION COUNTRIES¹

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OBJECTIVES

The pension insurance system in Serbia in the last two decades is characterized by numerous reforms. The ultimate outcome of these reforms is a completely unsustainable system of compulsory pension insurance. In order to examine the causes and consequences of such a situation, the system of compulsory pension insurance is analyzed in the work through the prism of the previous reforms through which this system was going. Therefore, the subject of this paper is the analysis of the functioning of the pension insurance system in Serbia in the last two decades from the aspect of the characteristics of the reforms that were implemented in this period. The aim of the paper is to determine the possible modalities of pension reforms based on the analysis of previous positive and negative experiences from the previous reforms of the pension insurance system in Serbia, as well as international experiences, starting from the need to effectively manage demographic and economic risks, in order to ensure long-term financial stability and the sustainability of the pension insurance system. If we continue with the existing pension insurance system in our country, with all the

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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problems that the Serbian economy faces, the sustainability of the existing pension system will be called into question. The aim of the paper is to propose directions and measures for solving the problems in the pension insurance system in order to solve, partially or completely, the problem of its unsustainability.

METHODOLOGY

The work uses scientific methods of description and classification in order to describe the pension systems and the way of their creation, determine the objectives and tasks of functioning, and perform the basic classification of the model.

An analogy used to compare data on economic and demographic trends and the basic parameters of the functioning of pension systems in certain groups of countries (developed, transition countries and developing countries), or certain forms or models of pension systems (systems of intergenerational solidarity and capitalized pension systems). Statistical methods applied when analyzing demographic and economic risks and basic parameters of pension systems and their tendencies.

RESULTS

The interconnectedness of insurance and economic growth has been proven, as savings through private pension funds are stimulating and lending economic investments. In transition countries, such as the Republic of Serbia, there is an economic crisis, due to the collapse of many companies in the privatization process and the process of integration and rapprochement with the European Union. Member states and candidate countries have an obligation to respect the directives and programs of the European Union in terms of economic restructuring, pension system reform and social inclusion. In the Republic of Serbia, there was a crisis in the pension system due to many factors such as: high mortality rates, aging of the population, decline in fertility and birth rates, unemployment, inadequate economic structure, non-competitiveness of the economy, foreign trade deficit, deficit in gross domestic product, and public debt. The appropriate economic policy, the choice of the appropriate foreign partners, the proper choice of Greenfield direct foreign investments, would create conditions for industrial development, export increase, employment, and GDP growth, which would positively influence the increase in the net wage rate, the adequacy of pension benefits and the sustainability of the pension system.

IMPLICATIONS

The important theoretical contribution of the paper relates to the extensive analysis of the advantages and disadvantages of introducing the second pillar of compulsory supplementary pension insurance, in order to consider the possibility of its introduction in Serbia through the reform that will be proposed in this doctoral dissertation. The experiences of countries that have implemented systemic pension reform are not identical. Therefore, there is a need for analyzing and comparing existing reforms in Serbia, as well as analyzing foreign experiences, to investigate and determine acceptable modalities for future pension reform, bearing in mind negative economic and demographic trends, as well as an underdeveloped and inadequate institutional framework.

ORIGINALITY VALUE

The original contribution of this paper is that it indicates that the system of pension insurance should be sustainable, it is necessary to improve the demographic picture in the Republic of Serbia. In order to improve the demographic picture in the Republic of Serbia, it is necessary to create adequate conditions for increasing employment. When the institutional conditions for increasing employment are created, it will be possible to adopt an effective model of the pension system reform in Serbia, in line with EU regulations.

KEY WORDS

Social insurance, pension system, pension benefits, pension system reform, pension plans, pension models, state, demographic picture

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3.17. PROGRAMS AND SERVICES IN THE COMMUNITY AS A SOCIAL CHALLENGE TO FAMILIES WITH A CHILD WITH PHYSICAL DISABILITY IN URBAN, SUBURBAN AND RURAL TYPE OF COMMUNITY IN SERBIA

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OBJECTIVES

Families with children with physical disability experience various environmental barriers in their community. In order to achieve social inclusion as an ultimate goal of social equality, it is important to identify the impact of certain environmental factors important for the active involvement of children with physical disability. This paper presents the results of research conducted in order to examine the current state of programs and services in different communities as an environmental barrier to families with a child with cerebral palsy.

METHODOLOGY

This study was designed and conducted as a non-experimental, descriptive and explorative. A total of 114 families with a child with cerebral palsy was included in a survey; 66 lived in urban, 22 in suburban and 26 in rural areas of the Republic of Serbia. The average age of 64 boys and 50 girls was 12 years 10 months. *The Craig Hospital Inventory of Environmental Factors for Children – Parent Version* (CHIEF-CP; McCauley et al., 2013) on Serbian was used. Results were analyzed by descriptive statistics, while differences were examined in relation to the type of community as an independent variable using non-parametric Kruskal-Wallis H-test.

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RESULTS

Kruskal-Wallis *H*-Test indicated statistically significant differences in frequency ($p=.006$), magnitude ($p=.003$) and overall impact ($p=.002$) among families who lived in an urban, suburban and rural type of community. Perceived lack of programs and services for children with physical disability was the highest rated as a barrier in suburban communities compared to urban and rural ones. The main study limitations are related to convenience sampling and the lack of information on the representativeness of our sample. Additionally, the results were based on parents' perspectives solely.

IMPLICATIONS

The main implications are related to the need to improve support systems of social inclusion in suburban areas. Improving the structure of environmental factors should be implemented by removing the existing barriers, according to the needs of families with a child with a physical disability. Future studies could examine what changes and what kind of programs and community services parents refer to as needed and/or desired, and relate this information to specific environmental factors.

ORIGINALITY VALUE

To our knowledge, this is the first study that includes both the frequency and the magnitude of the impact of lack of programs and services as a problem faced by children with cerebral palsy and their families in our country. Moreover, the comparative overview of the different types of communities is provided. This study adds to the previous knowledge about environmental barriers to full social inclusion in the population of children with physical disabilities by indicating suburban communities as the priority one in the planning of future steps in social policy.

KEY WORDS

Services in community, social inclusion, disability, suburban, rural, type of community, environmental barrier

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3.18. WHICH FACTORS DRIVE THE LEARNER'S READINESS TO STUDY ONLINE? THE CASE OF SERBIA¹

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OBJECTIVES

Having in mind the fact that people in Serbia are often unwilling to improve their knowledge and expertise through online educational programs in both formal and informal settings, the primary objective of his research is to identify the key factors driving the learner's readiness to study online in Serbia.

METHODOLOGY

A group of 100 respondents divided into two categories of 50 people who are currently participating in some online educational program, on one side, and other 50 people who are using conventional educational programs in terms of acquiring new knowledge and skills, on the other side, will be used in order to conduct a research of key attributes of online educational programs which are recognized by potential learners as most important. Using forms and questionnaire the attitudes of the participants towards successful online education will be investigated. Afterwards a set of different qualitative and quantitative techniques will be used in order to determine the correlation of different characteristics of online learning programs and users' attitudes towards those programs in order to investigate the most important characteristics which drive the learner's decisions to study online.

RESULTS

The key results of this research are clearly identified characteristics of online educational programs which are in accordance with potential learners

¹ This paper is a part of research projects number III47009 (European Integrations and Socio-economic Changes in the Economy of Serbia on the Way to the EU) and OI179015 (Challenges and Prospects of Structural Changes in Serbia: Strategic Directions of Economic Development and Harmonization with the EU Requirements), financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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expectations regarding efficient online education as well as with expected learning outcomes. The advantage of synchronous over asynchronous modes of online learning are presented and vice versa. The online learning readiness factor will be composed and relation of this factor and learner's attitudes will be examined.

IMPLICATIONS

The implications of this research are important in terms of identifying the characteristics of online learning course in accordance with learner's expectations which would be very important for the formal and informal educational organizations in Serbia in terms of better understanding the actual needs of their learners and in terms of creating better educational courses.

ORIGINALITY VALUE

Online educational courses in Serbia are very rare. The people which are more technologically savvy are engaging in different online courses provided by foreign educational institutions. The rest of the population in Serbia are still restrained when it comes to involving an online learning course. There are no known research focusing on the learner's readiness to study online in Serbia and that is the main value of this research.

KEY WORDS

Online learning, readiness to study online, online learning programs characteristics

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3.19. ECOLOGICAL EDUCATION AND SUSTAINABLE DEVELOPMENT

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OBJECTIVES

The subject of the paper is ecological education and its significance for the concept and practice of sustainable development. The author provides arguments in support of the stand that the formation of ecological awareness as the goal of ecological education is, in terms of the collective mentality, the *condition sine qua non* of a new concept and practice of sustainable development. The paper also thematizes the challenge to the scientific study of these problems contained in the concept of "*sustainable growth*", which a group of ecological economist placed in the academic discourse as early as in the ninety seventies.

METHODOLOGY

The multicausal character of the studied phenomena conditioned a methodical eclecticism which was used in their research, with emphasis on the *method of analysis* and the *method of interpretation* ("hermeneutic method").

RESULTS

The key result or the conclusion of the research is that the future of humankind, in the current state of the ecological devastation of our planet, can be secured only through the redefinition of the humanity's overall attitude to its natural environment – in a word, with a new, *ecological ethics*, as an integrated system of ecological knowledge, the criteria of the valuation of the ecological situation and the ecologically correct behaviour. It is education that should play the key role in the formation of the new global morality in each society.

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IMPLICATIONS

The results of the research primarily address the academic public, above all, the members of the public engaged in social sciences, or, more specifically, *pedagogy*. Those findings should empower the awareness of the creators of educational policies, but also of those practicing in pedagogy, regarding the significance of the ecological dimension of education or of its fundamental remodelling in line with the new, emergency ecological situation in which humanity has found itself in the past several decades.

ORIGINALITY VALUE

The research on which this study is based should offer additional, more powerful and more convincing arguments on the importance of education for the formation of a new and radically different attitude of humankind towards its natural environment, which represents the anthropological condition for a sustainable economic development as a essential requirement for the survival of humankind in the literal, physical sense of the word

KEY WORDS

Ecology, education, ecological awareness, ecological ethics, sustainable development

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