



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

New Challenges of Economic and Business Development – 2016 *Society, Innovations and Collaborative Economy* International Scientific Conference

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ABSTRACTS

May 12–14, 2016, Riga, University of Latvia



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Faculty of Economics
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New Challenges of Economic and Business Development – 2016 *Society, Innovations and Collaborative Economy*

ABSTRACTS OF REPORTS

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New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DEVELOPMENT OF FAMILY SUPPORT POLICY IN LATVIA

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Key words: *child-care services, family support policy, fertility*

JEL code: J11-J13, J18

Almost two decades after Latvia regained political independence, demographic policies, including family policy, remained passive. Some governments declared their intentions to implement demographic recovery programs or elaborate pronatalist policy measures. However, family policy issues have gained notable importance just in recent years.

The aim of this paper is to assess the development of family support measures in Latvia since 1990 and its relation to the birth rate. Then to compare where Latvia stands in this respect into the broader context in the EU. The following research methods were used to reach the stated aim: monographic method, document analysis, interviews of experts, qualitative and quantitative data research. Data from EUROSTAT, Population Censuses, Central Statistical Bureau, Ministry of Welfare and other governmental institutions of Latvia were used for the study. The author conducted more expanded research on family support policy in Latvia and assessed it in relation to OECD indicators for evaluation of family policies. Conceptual recommendations regarding more efficient and sustained family support policy also have been provided.

In order to assess outcomes of family support policy measures the author has chosen following criteria: changes in demographic behaviour, public spending on family benefits, flexibility and importance of family support measures. Despite the fact that number of children born outside the marriage in Latvia is higher than average in EU, the issue has not been seriously addressed by Latvian Parliament and the legal framework on unregistered partnership is still not in agenda. There are multiple factors influencing fertility, though two of them deserve special attention: sustainability of family policy which has to be in close coloration with budgetary planning and sustained investments throughout childhood to stimulate avoidance of more costly interventions later in teenagers' life. Proportion of subsidized services is low in Latvia. Provision of child care services should be accessible when parental leave runs out. In this respect Latvia, though there has been achieved progress during last few years, still needs to improve accessibility and affordability of the child care services more rapidly.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

OPPORTUNITIES FOR PROJECT MANAGER COMPETENCE EVALUATION

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Key words: *project management standards, competence, evaluation*

JEL code: M12

Companies and organizations are increasingly using project management principles to improve the performance of new product and service development and deployment. This means that grows demand for professional project managers. Project manager profession is changing with the times. During the evaluation of project manager professionalism may be used a variety of standards, such as international project management association standards – International Competence Baseline 3.0. The history of this standard begins in 90th years of the 20th century. At the end of 2015 it was published the latest version of this standard – Individual Competence Baseline 4.0, which opens up completely new possibilities for competence evaluation of project management specialists.

The study carried out research and comparison of competences between both.

The research results show that the new standard version can be used much more widely. Each of the competencies described separately for individual projects, programs and project portfolios. This makes it possible to carry out the evaluation in more detail, using the definition of each competence element indicators.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

REVIEW OF THE LEGAL ISSUES OF EMPLOYEE SHARE OWNERSHIP IN EU

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Key words: *employee ownership, employee financial participation, legal framework*

JEL code: K22, M54

The paper examines legal issues concerning employee share ownership in the European Union and the latest achievements in the field by the European Commission.

The methodology used in the paper is analyse of the legislative proposals set in the EU Commission: Promotion of Employee Ownership and Participation and its' alleged impact on companies in EU member states is based on primary and secondary sources.

European Commission is still not offering common legal definition of employee share ownership and employee financial participation across EU member states. The author argues that different national laws in EU member states regulating employee financial participation is an important obstacle for international companies to implement employee share ownership schemes in cross-board situations. The “Common European Regime” proposed by European Commission would offer employers and employees a choice between two alternative employee financial participation regimes one originating in national legislation, the other in European legislation. That could be considered to be a great step towards solution of cross-border situations when international companies are obliged to apply different national laws when implementing employee share ownership schemes, thus causing inequality between employees from different EU member states.

This paper analysed problems with implementation process of employee share ownership schemes in cross-board situations and offered most suitable way to implement common EU wide regime on employee share ownership. Authors argue that the best way to implement common EU wide regime on employee share ownership would be a regulation apart from recommendation or directive. Thus avoiding most common transposition problems and offering a simple and uniform regulation for companies to choose in EU internal market.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

AUDIT CHANGES EXPECTED IN 2016 & 2017 IN LATVIA

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Key words: *financial statement, audit, audit review, auditor, auditor rotation, audit fee*

JEL code: M40, M42, M48

The main purpose of this paper is to describe the summary of the authors' recent research, related to the changes expected in audit market in Latvia in comparison with the global tendencies.

Annual report has become an important source of company's financial information available to the general public and the auditor's report provides additional assurance on the annual accounts: compliance with accounting standards and legislation.

Analysing the business environment for small and medium-sized enterprises in the EU, in recent years an issue has been raised, whether the information obligations or administrative burdens are proportionate to the national laws of the benefits? EC recognizes that small and medium-sized businesses has a central role in the European economies and aims "to improve the overall approach to business and policy-making: cutting the red tape, improving the legal framework".

In Latvia there are a total number of 167 thousand registered enterprises (by the Central Statistical Bureau, 2013), of which 93% corresponds to small and medium-sized enterprises in accordance with the EU regulations.

To demonstrate better audit market activities in Latvia the authors of the paper present key factor based on done new legislation analysis. Over the past two years in force is the Directive 2013/34/EU (hereinafter – Accounting Directive), its action is mainly focused on smaller companies with the aim of reducing the overall regulatory burden. EU Member States should adopt this Accounting Directive in a two-year period. In these terms, Latvia has approved new changes in existing law's and amendments on annual accounts of year 2016.

The results of the authors' research demonstrate that the law on annual accounts and consolidated accounts after the change of 2016 introduces a change not only of the statutory audit criteria (raising them), but also changes the annual report content and format changes of requirements that are currently affecting the statutory audits of the need for smaller enterprises, which has led to the introduction of a new compulsory audit service type "audit review".

Nevertheless done research shows important agents that can be analyzed in future investigations, these factors are: a question of mandatory rotation of auditors, audit fees and the new regulation for non-audit services has risen. It is important to note that the EU proposes that auditors be rotation new regulation, training and certification, increasing challenges of auditor profession keeping reputation and high quality services.

The research methodology is based on the comparative analysis of the requirements stipulated in documents regulating audit market in Latvia, the national legislation and scientific publications and other bibliographic sources. The paper covers the analysis of authors' conclusions as well as explores and highlights the latest tendencies.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

HOW TRUST IN ORGANIZATIONS AND INFORMATION SOURCES IMPACTS LATVIAN CONSUMERS' ATTITUDE TOWARDS GENETICALLY MODIFIED ORGANISMS

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Key words: *consumers, genetically modified organism, attitudes*

JEL code: D81, I18, O31, Q18

This research examined public opinion towards genetically modified organisms (GMO) used for food, feed and other industries in Latvia and how trust in organizations and information sources impacts attitudes toward these organisms.

Consumer attitude towards GMO depends on a number of factors including the information obtained from a variety of information sources (scientific papers, TV, radio, relatives, friends etc.) and trust in regulatory actors involved in decision making process and stakeholders. Many consumers report that they receive information about GMO food products from the media, Internet, and other news sources. These sources may be less reliable than scientific experts whom consumers trust more to present the facts. Trust in regulatory actors and stakeholders involved in handling of GMO is important, it being a primary source of information about new technologies. In all walks of life, individuals often look to others to help them make decisions, in particular, when they admit a personal lack of knowledge in that area. However, if these actors are not trusted, their claims are likely to fall on deaf ears, or be consciously rejected. A lack of trust in public officials in this regard is likely to further erode public support for use of GMO.

The survey method was chosen as a tool to collect data and elicit Latvian consumers' attitude towards use of GMO in different industries. The survey was composed of 18 questions; seven of them have been structured on ten- point Likert scale. The survey data of Latvia's inhabitants ($N = 1184$) were collected by the telemarketing company from September 2014 until June 2015. To select the units to be included in the sample systematic sampling was applied – every twentieth inhabitant was approached by phone call and invited to answer on survey questions.

In the frame of this research the part of the results obtained were discussed regarding the media's role in shaping public opinion, and the role public trust in organizations has on attitudes towards GMO in Latvia.

The results of Latvian consumers' survey showed Latvians' attitude towards GMO were sceptical; less positive towards genetically modified animals compared to genetically modified plants. It was also indicated that scientific publications were the most trustful information source on GMO but friends and relatives – the lowest evaluated information source. Public trust in organizations and stakeholders involved in handling of GMO plays an important role on consumers' attitude shaping regarding GMO.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

WOMEN ON BOARD AND SHAREHOLDER STRUCTURE

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Key words: *women on board, females on board, corporate governance, shareholder structure, gender equality*

JEL code: G30, M14

Female involvement in governance and management is the outcome of the political, legal and social systems as well as culture and religion at the country level. At the company level, women's presence on board is determined by certain company characteristics and is believed to be tied to firm's performance. We add to this literature by examining the links between women's presence on board and ownership structure in the post-transition Central European context. The goal of the paper is to identify how ownership concentration and shareholder identity are tied to the presence of women on board and is based on the empirical analysis of the composition of supervisory boards of 100 largest Polish companies for the period 2008-2014.

The female presence on board was estimated at 11%. The number of supervisory boards with chairwoman equals 8 boards in 2014. This data suggests that the female involvement in governance in Polish companies remains at the moderate level placing Polish boards slightly below the EU average. The changes in the corporate governance guidelines introduced at the Warsaw Stock Exchange were to assure for gender balance and reporting on the number of females on boards by companies. As the dynamic analysis carried out over the 2008-2014 period indicates, the guidelines have certain impact on the increase in reporting on gender balance without any effect on the presence of females on corporate boards in Poland. The econometric analysis identifies a link between ownership structure and presence of females on board. We find that the State as the dominant shareholder increases the participation of women on board. The results of the logit model show that shareholder identity in terms of individual, industry and financial investors as opposed to state ownership proves to have a negative influence over the presence of women on board.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

25 YEARS OF FINANCIAL REPORTING: THE CASE OF ESTONIA

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Key words: *financial statements, content analysis, Estonia*

JEL code: M40, M48

Financial statements are the principal means through which a company communicates its financial information to those outside it. Every country has its own requirements of financial reporting. Estonia has had market economy for 25 years. Through that time, financial statements have changed a lot. The aim of the current paper is to show how the balance sheet and income statement as the main financial statements have changed from 1991 to 2015.

The authors provide analysis of layouts of balance sheet and income statements (years 1991; 1995; 2003 and 2015). Through the composed figures, it is easy to see, how statements have changed. Quite different from others are 1991-year statements. This can be explained by the fact that there was a lack of experience how to prepare financial statements under conditions of market economy. The layouts of statements introduced in 1995 and 2003 are quite similar. The 2015-year statements are shorter, because many items have been moved to notes. There is a positive and negative effect on that. It is positive that financial statements have been simplified and include only essential information. At the same time, the main financial statements have lost a lot of information. To get this information, it is necessary to look at the notes.

Not all changes have been correct: some terms have been incorrectly used and some important words have been removed. In the paper, the two-factor variance model is used to estimate the changes in the quantity of words in financial statements. The indicators of rate variance and usage variance (volume variance, quantity variance) are calculated. From 1991 to 2015, the balance sheet and income statements have both lost approximately 100 words. During the last 10 years, the layouts of income statement have not changed as much as the balance sheet.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

E-LEARNING AS A FACTOR FOR FACILITATING THE DEVELOPMENT OF INFORMATION SOCIETY

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Key words: *e-learning, workload, information society*

JEL code: I210, I250

Nowadays, when rapidly changing information and communication technologies (ICT) influence all spheres of life, also the need for people acquiring new skills and knowledge for their professional and everyday life increases.

E-learning as a supplementary medium for acquiring new knowledge is used both in academic and life-long learning, as well as for training employees, thus the aim of the research was to provide suggestions how traditional classroom learning can be fully transferred to e-learning by means of modern communication and collaboration tools as well as to create e-learning workload balancing model. The theoretical research methods were used, mainly the study of literary sources.

The aspect of applying analogical thinking, identification of similarities and critical thinking was considered as a mechanisms by means of which the 21st century needs of education can be reached. Although the role of life-long learning as a factor for the development of information society and for facilitating human resource competencies is not under question, the problem arouses with the necessity of time for learning activities and tasks.

As each learning activity requires effort and concentration, it is crucial that adults can choose to acquire new knowledge and skills at their pace, at convenient place of location, and choosing the most appropriate means for communication and collaboration. Thus in modern society with its mobility and culture of using ICT e-learning has become a useful medium allowing self-regulated learning, learning in collaboration and providing opportunity to use real world simulations or demonstrations together with acquiring digital skills through learning process.

In order to reach the learning aims and not to lose motivation for learning, the balance in providing e-learning content has to be found between time and workload for the acquisition of new knowledge.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

GENERATIONAL DIFFERENCES IN PERCEPTION OF VALUES IN POST-SOVIET BUSINESS ENVIRONMENT

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Key words: *Values, Honesty, Post-Soviet Business Environment, generational differences, retail*

JEL code: M14

Ethical behaviour and honesty had an ambivalent meaning in the Soviet Union compared to the Western approaches. The aim of our research is to analyse generational differences with regard to honest behaviour and honesty as a personal value in Post-Soviet Business Environment: in Estonia and Latvia.

In this study we explore differences in approaches towards values and especially honesty amongst four generations of retail sector employees – starting from those, who were still to great extent exposed to pre-Soviet values, continuing employees who started their careers during the Soviet times and ending with those, who were educated and entered the workforce after the collapse of the Soviet Union. 622 service employees from 6 retail organizations in Estonia and Latvia were surveyed to assess likelihood of dishonest behaviour and to rank their values according to the Rokeach instrumental value scale.

Arguing that for post-Soviet countries rather specific events and timelines could have left the main impact on worldviews, in order to assess the generational differences, we define four generations currently active in the workforce – Post-war generation, Early Gen X, Transition generation and Millennials.

We confirm that despite dual morality and ambiguous ethics in the Soviet Union, twenty-five years after the collapse of the system retail sector employees tend to report likelihood of rather honest behaviour. Moreover older generations report higher likelihood of honest behaviour than younger generations. And Post-war and Early generation X, born between 1945 and 1970, rate honesty and responsibility higher as their individual values. We also find that in a post-Soviet context there are significant differences between early and late generation X, at least as far as honesty in the retail business environment is concerned.

Originality of this study is the following – the complexity of generational differences towards ethical behaviour, values and honesty amongst them has not been widely researched in Post-Soviet business environment.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

REASSESSING EFFICIENCY IN HUMAN DEVELOPMENT AMONG OECD COUNTRIES

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Key words: *Human Development, Efficiency, Data Envelopment Analysis*

Jel Code: C61 (Optimization Techniques), O15 (Human Development)

The measurement of human development has a potentially strong impact on investing the development gap and building of new policies. In broad terms, the human development approach appeared as a means to reallocate human beings at the center of the actions related to politics, economy, and society. Therefore correct and fair measurement has got a great importance. The human development index (HDI) is a measure of human development based on the three major dimensions such as *longevity, knowledge, and standard of living*.

In this paper, the assessment of the HDI for the OECD countries is reconsidered in the light of data envelopment analysis (DEA). Notably, our purpose is not to propose a new HDI; rather, to employ a DEA model for reassessing the efficiency scores with recently published data by UNDP (2015). The aim is therefore to provide complementary information for efficiency measure of HD in OECD countries.

Instead of a ranking the countries, human development is benchmarked on the basis of empirical observations of the best practice countries by applying output-oriented DEA. In this study, OECD countries were selected as the decision making units since the mission of the OECD is to promote policies that will improve the economic and social well-being of people around the world. Since the scores of all indicators (e.g. life expectancy, expected-mean school of year, and GNI per capita) are preferred to be as high as possible all the individual indicators are considered as outputs and a dummy input (equal to one) is assumed for all the countries as studied in the literature. Notably, we employed a DEA model for checking the rationality of the existing HDI values based on more reasonable conditions which are ignored in constructing the HDI, endogenously determined weights associated with outputs across DMUs.

After calculating DEA values we normalized the HDI to ensure comparability with the DEA values. Then, we utilized some basic statistics in order to find correlation between the values and also to test our hypothesis. As a result of the regression analysis, correlation coefficient was found to be 0.83 between normalized HDI values and DEA values that we calculated in this study. The fact that this value is close to one and positive shows that there is a positive correlation between the two values. On the other hand, according to “Kolmogorov Smirnov one sample test”, our hypothesis which is “The distribution of normalized HDI values follows our output oriented DEA model values” is accepted. Hence, the values that we calculated from DEA model are fit to HDI results.

Both calculations revealed that the three topmost (Norway, Australia, and Switzerland) and the three lowermost (Hungary, Turkey, Mexico) countries are the same. It can be observed that Norway (1), Australia (0,99046), and Switzerland (0,98516) record the highest first three values among the normalized HDI values while Norway, Australia, and Switzerland, record maximum value of “1” for DEA scores. The countries in the most favorable situation are usually among those that enjoy the highest level of human development as a result not only of their high level of GNI per capita, but also to their social policies applied.

In contrast, the countries whose current socioeconomic situation is far from their efficient frontiers including Hungary, Turkey, and Mexico share the worst three values for calculations. Normalized HDI values are 0,87711 for Hungary, 0,80614 for Turkey, and 0,80084 for Mexico while DEA values are 0,91783 for Mexico, 0,90535 for Hungary, and 0,90194 for Turkey. The largest gaps among the OECD countries are found in GNI per capita and mean years of schooling when comparing with the other factors which are life expectancy and expected years of schooling. Those countries especially Turkey and Mexico should increase their outputs level to their efficient frontier. The economists and policy makers may analyze the source of inefficiencies in our DEA models.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DEVELOPMENT OF BUSINESS EDUCATION FOR CIRCULAR ECONOMY IN LATVIA

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Key words: *circular economy, eco-design, business education, economics education, competencies*

JEL code: A20, D83, I25, Q01

To develop a sustainable, low carbon, resource efficient and competitive economy, transition to more circular economy is essential. Circular economy through eco-design, waste prevention and increased reuse and recycling of products, provides that value of products, materials and resources is maintained in the economy for as long as possible. Circular economy and eco-design are highlighted into EU policy perspective. Europe 2020 strategy emphasises the policy objectives of sustainable development and is focused to resource efficiency and EU competitiveness. In end of 2015, the European Commission adopted a Circular Economy Package that seems to be a crucial turning point for further implementation of eco-design concept into various economy sectors and will contribute to “closing the loop” of product lifecycles through greater recycling and reuse.

Scientific literature also urges to adapt circular economy principles and thinking to tackle current environmental problems, like resource depletion, pollution and climate change. Circular economy according to Ellen MacArthur Foundation definition is an industrial system that is restorative or regenerative by intention and design. Circular economy development initiatives create new challenges for business and policymaking and draw up the new perspectives. Implementation of circular economy principles in business and meeting targets of EU Action Plan for the Circular Economy calls for considerable change in business mindset and hence radical changes in business education.

The current paper aims to study what competencies students should acquire in business and economics education and formulate guidelines for human resource development through higher education according to circular economy requirements.

We use literature studies, semi-structured interviews and analysis of bachelor and master level business and economics study programmes syllabus in three Latvian higher education establishments as main methods for the study.

We concluded that study programmes in higher business and economics education should review the key competences regarding to circular economy issues. Proposed measures in circular economy development requires systems thinking, product lifecycle approach development, transdisciplinary knowledge, long-term thinking, having more flexible approaches in order to recognize interdisciplinary dimensions in environmental problem solving. Creativity, consciousness and proactive attitudes are competences, which could strengthen human resource capacity and eco-design competence. Human resource development according circular economy framework should be considered as a principal precondition for sustainable and competitive economy.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE INTERNET OF THINGS (IOT) BUSINESS POTENTIAL IN LATVIA

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Keywords: *Internet of Things, IoT, efficiency, innovations*

JEL code: M10, O30

During the recent years there is a growing topicality in business segment, as well as among individuals, of technologies that allow connecting a wide range of devices in a unified information environment, thereby providing automation and online monitoring of operations. Application of the solutions ranges from transportation and logistics to health care, environment and rescue and safety.

Including the devices in a single network allows achieving increased operational optimization, improved accuracy and efficiency; therefore, providing business potential in virtually any market or industry.

Although the topicality and prevalence of internet of things (IoT) grows with an increasing velocity, as smart devices are seamlessly included in the day-to-day operations of business environment, the benefits arising from the new digital technologies and online connectivity still remains largely underexplored in Latvia.

Hence, the aim of the paper is to identify the main development drivers and business potential of internet of things in Latvia by exploring the current experience and future readiness to optimize cost base, develop new technologies and business models, enter new markets or industries, as well as to strengthen cooperation with the current and potential business partners by capitalizing on 24/7 connectivity of a range of devices.

To achieve the above-stated aim, a web-based questionnaire is sent out to business organizations' representatives in Latvia where the respondents are asked to evaluate their current experience and future potential of application of internet of things solutions in their organization to achieve increased efficiency or develop new technologies or business models.

Research results indicate that even though the general awareness of the benefits internet of things has to offer can be seen as relatively high, the practical application of the respective solutions show that the technology adoption in this field is still fairly low; therefore, indicating unrealized potential of internet of things usage in day-to-day operations.

Practical implications of research results are mainly grounded in the opportunity to identify gaps that prevent business customers from wider application of internet of things solutions and, consequently, benefiting from opportunities in technological and efficiency advancement.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOCIAL PRACTICES OF RURAL POPULATION FOR RENEWAL OF SOCIETY IN LATVIA

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Key words: *renewal of society, social practices, cultural and economic traits*

JEL code: Z10, Z13

Renewal of society is a crucial point of Latvian reality because of depopulation, territorial polarization and shrinking processes during last decades. One of the tasks of local municipalities of rural territories has been to find ways of attracting people and promoting further development of rural territories. This is also the main issue of the project of the National Research Programme for the period 2014-2017, project 5.2.4. “Renewal of society through reducing the risk of depopulation, through demographic development and strengthening links with the diaspora for the transformation of the Latvian economy”.

Renewal of society includes a set of interpretations concerning its quantitative and qualitative solutions, e.g., demographic solutions as well as social and economical traits and practices. The aim of the article is to identify social practices of rural population that fits with theoretical statements of renewal of society and gives evidence of potential for rural communities to survive and develop.

The article is based on analysis of theoretical literature about renewal of society (Steiner R., Williams N., Matherne B., Brink C., Lawton K., Cooke G., Pearce N., Hody E. et al.) as well as empirical results collected using semi-structured interviews with representatives of local municipalities, entrepreneurs, farmers¹ and representatives of Rural Communities Parliament in Latvia.

Main results of the research reveal high level of cultural and educational activities in rural territories that have developed recently and serve as a way of surviving of rural population and contain certain potential for economic development of rural territories. New institutionalized practices have appeared in order to meet common purposes of local agents. To conclude, current cultural, social and economical practices are quite new and still fragile, but they are relevant to meet challenges of depopulation of rural areas of Latvia.

¹ Data collected during the project of the National Research Programme “Cultural environment development, preservation of the nature diversity and urbanisation processes within the context of the balanced development of Latvia”



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

A TWO-TIER OR ONE-TIER BOARD MODEL? THE NEED FOR CHANGE IN THE POLISH SYSTEM OF CORPORATE GOVERNANCE

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Key words: *corporate governance, board model, Poland*

JEL code: G34, M19

The role, structure and efficiency of corporate boards were widely discussed in the literature worldwide. The discussion became more intense and the critics more vociferous after the waves of managerial frauds, when these bodies turned out to be inefficient in the supervision of top managers. But despite their failings, corporate boards still play a crucial role in public companies and they are responsible for the supervision of executive activities, strategy formulation, accountability and policy making. This way, they ensure that companies create value for their shareholders and other stakeholders. Hence, some authors tried to discuss how to improve their structure and processes. Therefore, they examined the relationship between the appointment of independent directors, board committees or female directors and firm performance. The results of this research were ambiguous, but they contributed to the growth of our knowledge on corporate boards. In our study we argue that these bodies still need enhancement, and institutional changes are also necessary. We present the point of view that these changes are especially important in systems of corporate governance with a two-tier board model, such as the Polish system of corporate governance. However, the main aim of this article is the description of the main features of the Polish board model and the directions of its possible changes.

The article consists of three sections. In the first section, the origin and main features of the one-tier and two-tier board models are depicted. Moreover, we also present here board models in Europe, including their changes which have occurred in recent years. At the end of the section there are also described advantages and disadvantages of both board models are also described. The second section deals with the functions and composition of the Polish two-tier board model. Amongst others we present the results of our research on board structure and compare the features of the Polish two-tier boards with the features of corporate boards in other European countries. In the third section we present the opinions, the results of research and our point of view on institutional changes of the Polish board model. Finally, the summary and main conclusions are presented.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

IMPROVED VET GOVERNANCE FOR LABOUR MARKET TRAINING AT REGIONAL LEVEL

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Key words: *VET, governance, public administration, social partners*

JEL code: J24, J44, M53, I28

The development of qualified and competitive labour force at all levels is the issue of paramount importance for the social and economic development. Therefore new approaches for vocational education and training (VET) governance are being introduced and tested by Latvian public administrators responsible for the implementation of the VET reform. The role of co-operation between the local governments, the local entrepreneurs and VET providers is the key aspect in the new governance approach aiming at improved labour market training with closer links between the worlds of education and work. The aim of the research is to study the opinions of local stakeholders regarding new approaches in the implementation of the VET reform and VET governance for improved labour market training. The research is based on an empirical study implemented in Latvia - a survey among public administrators and employers, as well as a focus group discussion with social partners at local level. Research methods applied: studies of scientific publications and policy documents; a survey and focus group discussions. The conclusions have been drawn based on the analysis and comparison of the opinions of local public administrators and entrepreneurs regarding the introduction of new approaches in VET provision and VET governance at local level. The key finding: the VET systems should be more integrated into the local/regional administrative, economic, employment and societal contexts. This implies a close coordination between the public administrations, the education, training and employment providers. This also implies the new role of local public administrations in potentially taking the lead in developing locally/ regionally more integrated VET approaches – taking into consideration that VET in Latvia is primarily under the supervision of the centralised government. Consequently, the development of novel VET governance models in compliance with the improved legal framework and corresponding to the local characteristics is needed.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

LATVIAN EXPORT TO CHINA: ASSESSMENT AND FORECASTS

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Key words: *China, export, forecasting, Latvia*

JEL code: F17

Export is an indicator for assessment of companies' competitiveness in the foreign market. The Peoples' Republic of China (China) is the foreign market for European companies. The Chinese market is beneficial for companies because the GDP of China has been growing by at least 7% in the 21st century and its consumption continues to grow. Latvian export to China is four times less than import from China. The aim of the study is to investigate dynamics and structure of Latvian export to China (2004-2013), as well as to develop experts' forecasts for Latvian export to China until 2020. The methods of the study are experts' survey and statistical analysis. Experts' survey was conducted in January 2015. The study shows that Latvia has negative trade balance with China in the period 2004-2013. The main commodities for Latvian export to China are wood and articles of wood; metals and articles of metals; machinery and mechanical appliances, electrical equipment. They constituted 72% of Latvian export to China in 2013. Experts' survey indicates that Latvian export to China will continue to grow. The main commodities for Latvian export to China will remain the same but the prepared foodstuffs will experience the most remarkable growth.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

TRANSIT CARGO TRAFFIC AS A FACTOR OF ECONOMIC GROWTH IN BALTIC STATES

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Keywords: *economic growth, small countries, Baltic Sea region, foreign trade, cargo transportation*

JEL codes: C12, F14, F43, O41, R49

Economic growth is the key indicator of national development. The main theories of economic growth have evolved in the 20th century. In 1928 F. Ramsey have proposed dynamic application to the theory of growth. He was the first who has applied the utility function and has investigated economic growth in “seamless” economies. Comparative analysis of economic growth has been made by N. Kaldor in the 1960th. S. Kuznets investigated into the economic growth approach and the position of small countries in the world economy. He believes the growth leads to increasing of the external trade’s role, and the technical progress decreases importance natural resources. In the 1990th P. Krugman modified the utility function extending theoretic research on several national markets.

There are not any research accumulating different aspects of economic growth neither in small countries, no in large scale economies. The primary goal of the research is to determine the input of cargo transportation into the economic growth in small developed open economies. To reach the goal we propose international trade is a driver of international trade and economic growth.

Methodologies of the research are Spearman rank correlation criteria and t-test. Eurostat, ITC, World Bank and National Statistical Offices data bases for the period 2004-2014 are used for the hypothesis testing.

Main research findings are:

1. The geographical and goods structures of Baltic countries’ foreign trade are the same. Russia keeps a leading position as an exporter and an importer of Baltic states.
2. There are deep correlations between international trade and transport indicators, and economic growth in Latvia and Lithuania. In case of Estonia we didn’t find strong interdependencies.
3. Global economic crisis and mutual sanctions have influenced the goods turnover volumes in different ways. The volumes of bilateral turnover are decreased. Sanctions have not influenced significantly on the basic commodity groups yet.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DSS OBJECTIVES AND CONTENT: METHODOLOGICAL VIEW

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Keywords: *decision support system (DSS), possible results of the operation of DSS, the coverage of methodological information by DSS, the structure of DSS, the variant of generate solutions within the DSS*

JEL code: C80

The complexity of the development and adoption of management and economic decisions gives rise to the feasibility of the creation and use of decision support systems (DSS). The potentialities of use of such systems are determined by the content of the key methodological aspects of the establishment and operation of such systems, which determines the relevance of the study, and are an extension of the provisions in the articles published by the authors and textbook.

The aim of the research is to analyze the methodological aspects of the DSS processing and their substantial classification applicable to creation a specific DSS. The result of the study is a list of methodological aspects of the establishment and performance of DSS, as well as the possible content of each of those aspects, which determines the specificity, the boundaries and the capabilities of any particular DSS. The conclusions were made as follows. The specificity, the boundaries and the capabilities of a DSS are determined by the content of the following methodological aspects of creation thereof: the possible outcomes of the DSS performance, the degree of coverage of methodological information by a DSS, the structure of a DSS, the option of solution generation within the system. The aim of this study is the justification of an author's choice of significant methodological aspects of the establishment and operation of DSS, as well as the disclosure of their possible content, which determines the diversity of such systems.

Method of research: systematic and logical analysis taking into account the subordination of the created DSS to the goals and content of the developed management solution.

Results of research are the allocated main methodological aspects of creation and functioning DSS and their possible contents (detailed in the full paper):

- *the 1st – the possible results of a DSS operation*
- *the 2nd – the degree of coverage of methodological information by a DSS*
- *the 3rd – the structure of a DSS*
- *the 4th – the option of generation of solutions within the system*

The revealed methodological aspects of creation of DSS allow to define necessary structure and contents of created concrete DSS in advance.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

REGIONAL DEMOGRAPHIC DEVELOPMENT IN LATVIA – DOES POLICY MATTER?

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Key words: *regional development, demographic policy, content analysis*

JEL code: J11, J18, I38

While the local social and economic conditions have always been considered among core determinants of regional population change and included in most contemporary demographic studies and surveys conducted in Latvia, the academic and political attention to this topic has been notably growing since the restoration of independence in 1991 and the beginning of a new chapter in the country's demographic development. Past few decades have been marked by a notable decline in population throughout the country with many regions showing particularly significant losses in terms of both population numbers and their demographic structure. The pressing need to better understand the relations between local socio-economic and demographic dynamics and account for it in the national and the EU-wide policy response was repeatedly underlined by many recent studies, including those carried out by European Policies Research Centre and European Commission. There is a limited amount of factors capable of influencing the aforementioned socio-economic conditions on the national and / or regional level, and the direct policy actions carried out by the national or local government are among the most important of these factors, and the only ones which can be adjusted on relatively a short notice.

With the aim to better understand and gauge the potential impact of policy actions on the regional demographic change, author begins by reviewing the available theories and previous studies concerning regional demographic development and demographic policies. Then, author follows with the selection and content analysis of the available legal / policy documents, as well as the meeting proceedings of the national parliament – Saeima, accumulated over the last decade. Finally, author studies the selected documents and political statements in the context of the ongoing nationwide and regional demographic processes and estimates the causal effects and the overall correlation existing between the political actions and the actual regional demographic processes.

Study results indicate significant discrepancies between the regional demographic problems and the respective policy actions. Author concludes that over the last decade, Latvian policy makers have followed a reactive rather than pro-active approach to the emerging demographic risks in the country and its regions. On the purely political level, several critical regional demographic issues have been included in the official Saeima debates several years after being observed by the academic and government institutions. The responsible government ministries were more active in tackling the regional demographic issues in comparison to the legislators. However, most of the corrective policy actions have been largely linked with the nationwide development plans and programmes determined by the reliance on the EU Cohesion Policy funding. The lack of engagement with local stakeholders (outside of the framework of EU-funded projects) has been observed in cases of many demographically challenged local municipalities, and should be addressed in the future demographic and regional development policy planning.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

AVOIDING BANKRUPTCY IN ITALY. THE PREVENTIVE ARRANGEMENT WITH CREDITORS

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Key words: *Restructuring, Bankruptcy, Insolvency procedures, Preventive arrangement with creditors*

JEL code: G33, G34, K35

Italian bankruptcy law has been widely reformed since 2005 in order to introduce new legal procedures aimed at preserving troubled companies, discerning viable from irredeemable businesses, and increasing productivity through a more efficient management of insolvency proceedings. The Economist called this process “beautifying bankruptcy”. The excessive duration of bankruptcy cases has been repeatedly brought to the attention of the European Court of Human Rights, relating to the right to a fair trial in terms of reasonable duration. After the reform, the preventive arrangement with creditors (Concordato Preventivo) became Italy’s equivalent of America’s Chapter 11 and can be considered the main instrument used by small and medium-sized companies (and sometimes large ones) to manage insolvency by avoiding bankruptcy.

This paper provides an empirical analysis on filing of preventive arrangements with creditors in the Court of Milan, one of the largest in Italy, in the 2005-2014 period. Through the exam of 720 cases, 60% of the total number, the research shows the different features of the Procedure, analyzes the types of company that resort to it, and its diverse purposes of liquidation and restructuring.

Due largely to the newness of the legislation, along with the complexity of the Italian system, it is rather difficult to generalize conclusions. Nevertheless, this paper shows how preventive arrangements with creditors can be considered a more efficient instrument than the alternative bankruptcy, both in terms of timeframe as well as with creditors’ satisfaction. As part of the overall European reform process of insolvency proceedings following the 2014 Recommendation issued by the European Commission, Italy seems to provide useful insights for other countries within the European framework.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DUALISM OF TAXATION AND WELFARE TAX STRUCTURE

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Key words: *welfare, taxes, structure*

JEL code: E62, H23, I31

Economic policy of every society is oriented to welfare creation and distribution. According to Hird (2003) and others there is no precise definition on what welfare is. However, most researchers agree on three things: first – government is the institutions which should ensure the environmental conditions for welfare in society; second – welfare of individual cannot be separated from welfare of society and do not oppose it; third: welfare has two dimensions (objective and subjective) – Objective welfare can be described by satisfaction of objective material needs of human beings, while subjective – describes cognitive and emotional evaluation of life. We can say, that welfare of society can be interpreted as sum of individual welfares, where welfare is environment determined satisfaction of objective human needs evaluated by subjective experience.

Generally analysing taxes we can find dualism of taxation from the welfare point. First, all taxes *decrease* the welfare. Second, looking at the taxes as budgetary income and it could be assumed that the entire public budget is actually constructed and used to *increase* the welfare of citizens. So, all taxes might be assumed to be welfare influencing tax. However in this paper we distinguish the taxes *DIRECTLY* related to welfare (or later just *welfare taxes*), which have the most important influence on social wellbeing in *long run*. We distinguish two groups of such *welfare taxes*:

- the taxes on *CREATED long run* wealth (wealth and capital taxes) – represents the distribution role of taxes and social cohesion. That is mostly tax on physical and financial assets. It means that if you are richer (you have more assets) you have to pay taxes because you probably need more services from the state (like security, better governance of county, etc.) and you can help those who lack the most in the society.
- the taxes on *FUTURE long run* welfare – represents to create better society welfare directly in the future. The excise taxes (here is seed to be as future wealth) aims to decrease socially and personally unfavourable consumption (alcohol, smoking, fuel and others) and are oriented to better physical (material) and moral health of individuals (social wellbeing in the future).

These taxes are oriented to higher individual and especially whole social welfare creation in future in and can be assumed as *welfare tax*. This theoretical research is pointed to the hypothesis that *welfare taxes* could be related with the welfare being of the society; the aim of the paper is to define and to justify the new approach to *tax that are directly related to welfare*, what will help to maximize economic welfare through taxation. The methods used in this research are literature review and statistical comparative analysis. The approach proposed could lead to the use of the welfare taxes concept to search for optimal tax structure for social wellbeing.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE LINKAGE BETWEEN INDUSTRIAL EXPECTATIONS AND PRODUCTION: WHICH IS THE CAUSE?

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Key words: *industrial confidence indicator, production index, linkage, Germany*

JEL code: C82, D22, E03

Industrial confidence indicator is very important for economists as it is considered to be “the sibyl” of production level and macroeconomic tendencies. Actually it is calculated by statistic departments on the base of industry survey which is qualitative. Managers of the companies are asked to present an assessment of recent trends of production, the current levels of the order books and stocks, as well as expectations about the production, selling prices and employment.

Despite the usefulness of industrial confidence indicator for evaluation of macroeconomic situation, some authors doubt about the reliability of such indicator for prediction. Others state that this indicator just demonstrate the changes that already manifest in the real economy. So the question is still open and is needed to be considered. That’s why the purpose of this research is to test what type of relation between industrial confidence indicator and production indices exist, i.e. can production indices be forecasted by the industrial confidence indicator and is the industrial confidence indicator based on the current level of production?

Three techniques are applied for the analysis of the linkage between industrial confidence indicator and production indices: correlation analysis, Granger-causality test and autoregressive distributed lag model. The research is based on the analysis of eight Germany production indices (intermediate goods, capital goods, consumer goods, durable consumer goods, non-durable consumer goods, mining and quarrying, manufacturing, electricity, gas, steam and air conditioning supply) and industrial confidence indicator during the period of January 1995 – October 2015.

The results of the research showed that the changes of industrial confidence indicator have significant and positive impact on the changes of all production indices, except electricity, gas, steam and air conditioning supply. Meanwhile the changes of industrial confidence indicator can be explained only by the changes of two production indices, i.e. intermediate goods and mining and quarrying.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

LITHUANIAN ECONOMY IN THE CONFRONTATION OF RUSSIAN TRADE EMBARGO

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Key words: *trade embargo, Lithuania, Russia, export, economy*

JEL code: F140, F430, O520

International trade is very important activity for such a small European Union (EU) country as Lithuania. Historically EU member states were the biggest trade partners of Lithuania. It is important to stress, that until 2015 Russia was the second one and very important trade partner (share of total export was a least 20 percent). The situation changed after the August of 2014, when our biggest neighbor applied different aggressive trade bans to the Lithuanian milk and dairy products, vegetables as well as for meat production. Now the export to Russia composes just 9 percent of total export. Recently it is possible to hear different reflections and expert assessments about the impact of Russia trade embargo to the Lithuanian economy. One of the standpoints were more political nature, other – economic, and the third ones – combination of both. It is a key to stress that mostly all comments about embargo impact on states' economy are concerned with position of different economic sectors.

Economists state that Russian embargo was a challenge for Lithuania but opened many other possibilities for producers and farmers. Although the volume of exports of Lithuania's goods and services to Russia shrank greatly due to the embargo, it has only minimal impact on Lithuania's economy and did not stopped the growth of export. Taking into account such kind of standpoint, *paper analyses what problems* acquired after Russia trade embargo on Lithuanian products and how the producers managed to fight with such situation? *The aim of the paper* is to highlight the main trends of export of goods of Lithuanian origin and changes in strategies of actions of producers. In order to achieve this aim, short prehistory facts of Russia embargo for Lithuanian products were analysed. The structure of Lithuania's export was presented as well. It was stressed that Lithuanian export structure is mostly based on re-export (90 percent of total export) and just 10 percent is based on goods of origin of Lithuania. That is way the effect on macro-economy was not so harmful as it was expected from the side of Russia. The change in scope of export products to Russia was analysed as well.

Research methods used. Statistical data analysis, comparative analysis, constructivist approach, content analysis of official documents.

It was made common conclusion that despite the considerable losses because of the Russian embargo and the ban on certain food and agricultural imports from the EU and some other countries, Lithuania remained one of the fastest growing EU economies. The sectors most targeted at the Russian market were dairy and meat sectors and they are gradually refocusing on other markets now.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ANALYSIS OF CROWDFUNDING IN EUROPEAN UNION: PERFORMANCE AND PERSPECTIVES

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Key words: *crowdfunding, investment, alternative investment, finance*

JEL code: O16, O52, G19

After the great economic crisis of 2008, the absolute overcome of which is still a matter of discussion, such topics as the needed raise in private investments and possible support to Small and Middle enterprises (SME's) have been highlighted all over the European Union. Moreover, a great attention has been devoted to the acknowledgement of the possibilities alternative investment market might bring – in spite of the absent union understanding of the topic alternative investment managed to increase significantly the access to finance mainly to start-ups and SME's. The decent development of alternative investment market and the impressive capacity it holds is now a fact. Recent studies suggest European alternative finance market to reach 2,957 millions of euro by 2014. While being aware of various challenges alternative investment market faces, for instance weak legislative regulation and in some cases, overall investment market underdevelopment, there are cases where impressive investment activity has been noted.

The top target of this paper is while analysing the development of crowdfunding in European Union to perform a diverse analysis of this form of alternative investment and evaluate the potential crowdfunding might still possess. In order to implement a comprehensive analysis of crowdfunding the profile of potential investors, key sectors of interest as well as statistic data of the previous activity will be acknowledged. It is believed, that the provided analysis will not only promote the overall understanding of this type of alternative investment but while identifying the most common possibilities and drawbacks of crowdfunding attraction, would also introduce a certain benchmark for the further development of the alternative investment market especially in the countries, where a poor crowdfunding activity has been seen so far.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ATTRACTING FDI TO THE VISEGRAD GROUP COUNTRIES

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Key words: *Investment Attractiveness, FDI, Visegrad Group*

JEL code: F20, F21

A great deal of research on FDI demonstrates that the location decisions made by investors are influenced not only by determinants connected to the reasons behind FDI, but also by determinants resulting from the investment attractiveness of the host countries. There is a plenitude of factors decisive for investment attractiveness, some of them concentrate on macroeconomic factors (e.g. GDP, inflation, price level) while others emphasize institutional (e.g. law enforcement) or location variables (e.g. human capital endowment, and the proximity of core outlet markets). In the article, we have made attempt to identify factors determining the investment attractiveness of the New EU Member States using the Visegrad Group countries as examples. The choice of these four countries was dictated by geographic proximity, political, economic, and cultural similarities, as well as shared experiences of economic transformation.

In our study we engaged several groups of determinants of the investment climate connected, inter alia, with overall economic performance of the country, transport infrastructure, labour market situation, the size of the domestic market and business environment, household affluence, availability of State aid and investment incentives, IT advancement or corruption. Some of them have turned out to be statistically significant for the inflow of foreign direct investments into the Visegrad Group countries and, more broadly, to the so called new Member States of the European Union.

This article is structured as follows. First, it explores the existing literature on FDI definition and main effects of its inflow into the host country. Subsequently, we discuss the investment attractiveness and its determinants in theory and based on empirical studies. Further, we examined inward foreign direct investment flows in the Visegrad Group countries against the global performance in the area from 1990 to 2014. Then we discuss investment attractiveness of New Member States of the European Union in selected international rankings, paying special attention to the positions occupied by the four analysed countries. The final part studies the correlation between selected variables characteristic of investment attractiveness and the inflow of foreign investment. The study is based on statistical methods (Spearman's rank correlation and Pearson correlation). Lastly, we present the key conclusions. They demonstrated that factors important for the inflow of FDI are: infrastructure, market size, availability of suppliers, subcontractors, business partners and State aid schemes, including resources from the European Union budget.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE IMPACT OF SPECIAL ECONOMIC ZONES ON FDI INFLOW: EVIDENCE FROM POLISH REGIONS

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Key words: *FDI, Special Economic Zones, voivodeships*

JEL code: F21, F23, R11

One of prerogatives of the State is the ability to use instruments that could encourage market actors to undertake (or refrain from) specific activities. These instruments target primarily potential investors, also foreign ones. From their involvement in such activities, government authorities at different levels expect measurable benefits for the economy (at national and regional levels), such as, inter alia, new jobs, inflow of innovation, dissemination of better management methods or additional income from exports. One of the ways of convincing investors, in particular foreign ones, to take part in the implementation of state programmes and intentions is the development of Special Economic Zones (SEZ) designed to ensure more favourable business environment than those available in other locations.

Poland has created and develops the SEZ, which testifies to positive evaluations of their so far performance by central and local authorities as well as by the European Commission. These opinions, however, are not fully supported by the results of scientific research, which highlight, e.g., positive role of SEZ in attracting foreign direct investment (FDI) or creating new jobs but also point to their negative consequences, such as deepening regional disproportions in the country.

That is why the main goal of our study is to identify, to what extent the inflow of foreign investment was the effect of attractive incentives offered by SEZ and how much it owed to factors independent of them, in particular, to regional development. It will enable to assess SEZ impact upon convergence and regional polarization in Poland and, in a broader context, to assess the rationale of granting State aid.

The study uses statistical methods (Spearman's rank correlation, Eta and Pearson correlation). We also used data that inform about the inflow of foreign investment to SEZ at regional level and rankings of investment attractiveness of voivodeships. In accordance with our calculations, there are statistically significant positive relationships between FDI inflow to SEZ and collective, as well as partial, investment attractiveness coefficients and the level of economic advancement of voivodeships. Thus, it seems that SEZ deepen regional differentiation in Poland. The results may suggest the need to reconsider the so far applied policy designed to support investors. At the same time, they prove that State interference intended to mitigate market imperfections may itself become the source thereof.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

REGIONAL DIFFERENCES IN LIFE EXPECTANCY, REPORTED ACTIVITY LIMITATIONS AND CHRONIC MORBIDITY IN LATVIA DURING 2006-2014

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Key words: *self-perceived health, activity limitations, chronic morbidity, healthy life expectancy*

JEL code: J10, J14, J19

During the last decade life expectancy from birth for males and females in Latvia has increased. The gap between genders during these years have not changed significantly and remained one of the biggest in Europe. In 2014 it amounted 10.2 years. Life expectancy at age 65 for males and females has improved by 1.3 and 1.7 years respectively compared to the year 2006. Despite the apparent improvement of the indicator, keeping in mind population aging issue special attention should be paid to the quality of life and in particular to the healthy life expectancy at pre-retirement and retirement ages. The decrease of the relative share of years spent without activity limitations to total life expectancy at age 65 for both genders emphasizes the necessity and importance of the study of mentioned indicators to evaluate the real society benefits from increasing life expectancy. Unlike other countries in Latvia life expectancy in recent years is calculated only for males and females, while information on the indicator by area and region is missing. Previous studies has shown that differences between Latvian regions in terms of life expectancy and healthy life expectancy exist. The current study aims to analyze regional differences and development trends of life expectancy and healthy life expectancy based on activity limitations and chronic morbidity in Latvia during 2006-2014 as well as point out most problematic regions of the country.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOCIAL DISPARITY AND CONVERGENCE PROBLEMS IN THE EU STATES

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Key words: *Social disparity, EU strategy, convergence, cohesion*

JEL codes: A130, E130, I380, F630

The purpose of this paper is to investigate social development condition and convergence evaluation in the EU-28 states in the context of the EU social policy goals. The aim of this research is to estimate social disparities and social convergence problems in the European states by applying real valuations of well-being situations and development challenges in the EU member states for avoid social disparities.

The research methodology is based on the European Commission legitimate documents application and socio-economic strategies, on the convergence theory and convergence scenario calculations and on the social forecasts analysis in the EU states. This research present information about different socio-economic indicators, indexes and scheme of information's flows for convergence level estimation. This study contain objectives and general outlines of period 2014-2020 in the framework of Europe as a whole, as well its impact on the EU member states economics and living conditions. Changes of key socio-economic concepts impact on EU convergence policy and rapidity of convergence depends on the initial discrepancy of the development level in the EU states. The efficiency of European convergence policy can also be improved by significant economic growth and by clever choice of the country-specific social activities. This research investigate major information for social situations estimations in EU states as well as GDP growth, unemployment, population's income level and different welfare indicators.

The main results reflect the overall social situation valuation in the EU countries and present European convergence policy's impact on social development in the European states. The conclusions contain socio-economic situations appreciation in the context of European social strategy goals and social inequality problems clarification in the EU states.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

IMPACT OF FINANCIAL LITERACY ON DOMESTIC ECONOMIC ACTIVITY IN THE BALTIC STATES

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Key words: *financial literacy, domestic economic activity, neoliberal economics*

JEL code: A20

The research paper analyses the connection between financial literacy among several target audiences and the dynamics of domestic economic activity within the Baltic States (Estonia, Latvia and Lithuania). Considerable attention is also paid to literature about financial literacy and domestic economic activity in a historical, crisis-ridden and neoliberal perspective. By examining the relationship of financial literacy and domestic economic activity, a model based on the results of Delphi fuzzy method and a limited Organisation for Economic Co-operation and Development/International Network on Financial Education (OECD/INFE) Core survey, carried out in the Baltic States has been elaborated and examined, concluding, that the relationship is weak, but trends, that have been identified are clearly recognizable throughout iterations.

The lack of promotion and implementation of institutionalized targeted financial literacy activities in the Baltic States partially explains a positive association between financial knowledge and consumption behaviour, although survey results show levels of financial literacy above 74% throughout the Baltics. The development and analysis of the model has been successful as well, even though the results are statistically only partially significant. The analysis of the model still is important in illuminating the most important factors that influence domestic economic activity in the Baltic States and the relations with key financial literacy indicators.



ANALYSIS OF THE DEVELOPMENT IN PATIENT SAFETY OVER THE LAST 15 YEARS AND IDENTIFICATION OF BARRIERS AND CRITICAL SUCCESS FACTORS FOR IMPROVEMENT

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Key words: *Patient safety, hospital management, medical error*

JEL code: I11 (Analysis of Health Care Markets)

Background: Patient safety is a significant healthcare issue with substantial clinical and economic consequences. The extensive research in 1999 on patient safety stated that preventable medical errors in US were killing as many as 99,000 people per year (Kohn, 1999). This report increased awareness and concern about patient injuries worldwide.

Research aim: Nearly 10 years later, RAND Europe estimated that in the 27 European Union member states between 8% and 12% of patients admitted to hospital suffer from adverse events while receiving healthcare (Conklin, 2008). Since the report “To Err Is Human” was published in 1999, the awareness form public is growing, and further initiatives were established, however there is still no real improvement of patient safety measurable.

Implications of the paper: Hospital leaders are increasingly confronted by governmental, regulatory, and consumer groups to demonstrate organizational safety culture that assures patients safely from medical error. This article helps to understand what really happened or improved regarding patient safety over the last 15 years and may support answer the question “what can we do to improve patient safety?”

Design and Methods: A comprehensive review of patient safety literature globally. The review was a qualitative meta-analysis from which identified barriers and critical success factors for improvement.

Results: The scope of patient-safety initiatives has extended, but fifteen years after “To Err Is Human” there is reason to doubt if the systems has made significant progress. Further efforts to reduce the harm caused by our medical care system are rare and not centred. In the complex environment of health care systems, there are various barriers like lack of commitment, financial funding and education existing. To overcome these barriers one needs to consider critical success factors, as involvement of all stakeholders, creation of accountability through transparency, strong leadership and the measurement of the problem. Not every tool and method to improve patient safety is successful; managers have to be aware of barriers and success factors.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

METHODOLOGICAL APPROACH TO RESEARCH THE LINKAGE BETWEEN EMPLOYEE ENGAGEMENT AND GAMIFICATION OF HUMAN RESOURCE MANAGEMENT PROCESSES IN LATVIAN COMPANIES

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Key words: *Employee Engagement, Gamification, Human Resource Management*

JEL code: M54

Due to increasing global competition, Employee Engagement has become a top issue on Human Resource Management agenda. Worldwide management consultancies year after year keep providing research based evidence that Employee Engagement levels strongly influence productivity of a firm. Companies with higher Employee Engagement scores also have better Employer brand and are more competitive at hiring top talent.

Employee Engagement is historically medium to low in Latvian companies, according to the market surveys provider TNS who have been researching Employee commitment and engagement with their Employers for many years in a row. Percentage of actively engaged ones fluctuates around 13% only. At the same time, share of actively disengaged or “detractors” represent high 40% and more.

Research shows that the most engaging setting is game environment. People are most engaged when feeling playful. In medicine, researchers even have been experimenting with game environment to reduce permanent pain in patients who became so much engaged with a game that reported relative reduction in pain levels. Appropriately designed games have ability to engage people for hours and psychologists have been researching game dynamics required to achieve such high levels of engagement.

Human resources is one of the business areas where gamification has been successfully used in different companies worldwide. Processes like Recruitment, Onboarding, Training and Development, Performance Management, Reward and Recognition, Internal Communication, are most commonly being gamified.

Authors, therefore, have drawn the hypothesis that Employee Engagement in Latvia can be positively influenced through gamifying Human Resource Management processes. (Gamification for the purpose of this article is defined as application of game elements to the non-game context (S. Deterding, 2011)).

This article intends to propose methodology for researching the linkage between Employee Engagement and application of gamification in Human Resource Management processes at Latvian companies.

Throughout the article, authors will propose methodology for quantitative and qualitative research to find out how many companies in Latvia are using game elements in their Human Resource Management processes, which processes are most commonly gamified in Latvian companies and whether or not those companies that do use gamification as a tool experience relatively more engaged workforce.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

INTERNAL AUDIT METHODOLOGY AND LEGISLATION IN PUBLIC SECTOR OF EUROPE COUNTRIES

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Key words: *internal audit, public sector, internal control*

JEL code: M42

Currently there is no standard methodology and/or legislation guiding and regulating the Public Sector internal audit of European countries, resulting in different approaches and standards.

The aim of this research is to compare the Latvian state administration internal audit approach with approaches of specific European countries, in a way to determine the maturity of the former's internal audit approach. The study will compare internal audit methodology and legislation in United Kingdom, Germany, Malta, Estonia, Lithuania, Latvia and Poland, by evaluating internal audit maturity determinants.

The research process utilised is essentially based on two methodologies:

- An review of published data from European countries;
- A documents analysis: to include a study and evaluation of the existing normative acts and other scientific findings of internal audit methodology and legislation in the public sector of European countries.

The authors are of the opinion that a common internal audit procedures manual, standards and guidelines for the public administration (public sectors) in the European Union Member States will improve internal controls and internal audit data analysis around Europe.

The main results of the study will highlight the 'good and the bad' of the approaches and where improvements are required. When joining the European Union m had common requirements to implement internal audit systems and methodologies in public sector are prescribed by law, contrary system is in United Kingdom, where internal audit is not a regulatory enactments, but is included as a mandatory part of governance and system.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

PUBLIC AND BUSINESS RESEARCH AND DEVELOPMENT EXPENDITURES AND ECONOMIC GROWTH IN EU: A PANEL DATA ANALYSIS

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Key words: *R&D expenditures, economic growth, European Union, panel data model*

JEL code: O30, C23, F43

Theoretically, for achieving long term economic growth the amount of investments in research and development (R&D) is highly important. Within the Europe 2020 strategy, research, development and innovation are key policy components of the EU strategy for economic growth. The European Commission invites the member states to allocate 3% of GDP to R&D (with 2/3 realized by the private spending). Therefore, it is interesting to focus not only on the amount of R&D but also on its composition.

The purpose of the study is to assess the effect of private and public research and development expenditures on the economic growth in European Union countries. To accomplish the goal, following tasks were introduced. Firstly, descriptive statistic is presented to show differences in R&D intensity for the period 2000-2014 for EU countries. Then the distribution of R&D expenditures by public and private funds is presented. Secondly, theoretical and empirical literature background is given. As we analyse not only R&D amount, but also its composition by funding (private or public), the crowding-out effect is mentioned too. Thirdly, to evaluate effect of R&D on the economic growth, the panel study is applied. The dynamic panel was estimated using Generalized Methods of Moments (GMM), based on a production function approach. Following recommendations from the literature, we use first-differenced GMM estimator for our empirical growth model. The short-term estimates reflect immediate changes in economic growth due to a temporary increase in explanatory variable with assumption that other factors do not change. The long-run coefficients were deduced from error correction form. For robustness of results, several specifications of the model are compared.

Our main findings suggest statistically significant effect of private R&D intensity on GDP per working population. The short run elasticity coefficient of private R&D varies in the range 0.06-0.42% (depends on model specification and subsample). The log run elasticity coefficient of private R&D varies in the range 1.5-2.9% (depends on model specification). Statistical significance of public R&D is dependent on model specification. We did not receive evidence of crowding-out effect, because both private and public R&D had positive coefficients. Insignificant effect of domestic R&D in the business sector is not surprising result, the same conclusion dominates in empirical literature.

Some policy implications can be derived from our analysis. Our results suggest that policy in EU countries should put more focus on the distinction between private and public R&D, and governments should stimulate private R&D.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ELECTRONIC WORD OF MOUTH (EWOM) COMMUNICATION INFLUENCE ON CONSUMER PURCHASE DECISIONS IN BALTIC STATES

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Key words: *electronic word-of-mouth (eWOM), purchase decision, social networks, recommendation*

JEL code: M31, M39

Word of mouth communication is recognized by many authors as a very important marketing communication tool. Expansion of internet fosters appearance of new electronic word of mouth (eWOM) communication tools which allow consumers to exchange information and their opinions about brands and products also online. This information which consumers spread by the help of social networks, recommendation systems and other eWOM (electronic word of mouth) communication tools is one from many factors which influence consumer purchase decision. Research done in other countries does show that the influence of eWOM communication is increasing. Still, the authors' experience has shown that companies in Baltics are not yet utilizing the full potential of available eWOM communication tools. There exist prejudices and stereotypes that consumers in Baltics are often tended to express their negative opinions when leaving feedback and advising others on some brand or product.

Therefore, the aim of the paper is – to assess how the influence of eWOM tools is evaluated by on-line retailers and digital marketing experts in Baltic countries. To achieve the aim, the authors have defined following tasks for the paper: 1) To study the theoretical aspects of eWOM influence on consumer purchase decision; 2) To carry out an expert survey based research within Baltics about perceived eWOM influence on consumer purchase decision; 3) To monitor which recommendation systems are used by leading on-line retailers in Baltic states; 4) to draw conclusions and to make recommendations.

Research methods used are analysis of literature, expert survey and monitoring study. Analysis of literature contains review of scientific research results in the field mentioned above. An experts survey is gathering opinions from major stakeholders – leading online retailers and digital marketing experts in Baltics. Monitoring study gathers information which recommendation systems currently are used by leading e-retailers in Baltic states.

Research results reveal main global tendencies in eWOM communication usage and eWOM specifics in Baltic countries. Results provide suggestions for entrepreneurs and marketing specialists in Baltics. Research can be further continued by carrying out consumer survey which would discover eWOM communication specifics in Baltic countries from consumer perspective.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

OPERATION OF STATE-OWNED COMPANIES IN LATVIA

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Key words: *state-owned enterprise, state enterprise formation, state enterprise management*

JEL code: L32

Foundation of state-owned companies has a relatively long history. Over time, the state can both intensively found companies and, later on, make decisions on company privatization based upon situation assessment. These processes are defined state-specific goals, needs, and the state, as the company owner, defines specific functions and tasks of the company.

Bailey's (2010) statement: "As the regulatory movement of the 1930^s reflected the view that market failure was pervasive, so the deregulation movement of the late 1970^s and early 1980^s reflected the view that economic regulation of prices and entry was a government failure, generating misallocations and inefficiencies." The Latvian government has also admitted that involvement of public persons in commercial operation creates the risk of market disturbance. The main economically justified purpose of a public person participation in a capital company is the elimination of market deficiencies and, thereby, enhancement of public welfare.

Up until now, this sector in Latvia has been relatively poorly researched – operation of state-owned companies, therefore the authors of the researchers analyse the state-owned companies, their establishment purposes and scope of operation, for example, the number of employees, state capital investments and profit during two periods of time (1920^s-1940^s and the period after Latvia regained its independence). In addition, the authors of the research gather the main reasons and economic aspects, which are the reason for establishing the state companies in Latvia during the respective period of time, as well as the risks and problems identified in respect to their management and control. For comparison, also the data on state-owned companies located outside the state were summarized.

In the research qualitative analysis methods were used – analysis of scientific literature, normative acts and historical sources, as well as quantitative analysis methods – analysis of statistical data.

Both in the 20th and 21st century, profit-making is not the main argument for the state during the process of company establishment, as the owner. The reasons can be found in the economic and historical situation, for example, takeover of companies owned by other states, and in the social aspect, for example, companies operating in the hospital sector or cultural sector where a private owner is not able to make profits sufficient enough for the company operation and development.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MISUSE OF DERIVATIVES: CONSIDERATIONS FOR INTERNAL CONTROL

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Key words: *derivative misuse, internal control, communication, firm culture, regulatory environment*

JEL code: G23, M42

Derivatives are nowadays widely used globally both for speculative and hedging purposes. However, as experience shows, inadequate use of derivatives may cause severe problems and even bankruptcy of firms. Thus, it is essential to help organisations design a robust pro-active governance and internal control structure, which will help to prevent new financial debacles and scandals when using derivatives. Taking into account frequent use and the growing fraud caused by derivatives, the aim of the paper is to identify considerations for internal control important to ensure better governance of firms using derivatives. The main findings are based on an analysis of interviews that were conducted with experts directly or indirectly involved with derivatives from different European countries. The interviews were semi-structured following the approach proposed by Patton (1990). An analysis of the data collected from the interviews was carried out using a thematic approach.

The paper identifies and analyzes the main “sources” of derivatives misuse, including poor design and mis-categorization of instruments, convenience to blame derivatives, unsophisticated players, insufficient regulatory environment, poorly designed internal controls, inadequate communication, poor firm culture etc. This study provides an extensive analysis of the main recommendation for internal control concerning awareness of derivatives design, the human aspects, regulations, communication, knowledge and training. Sound internal controls could avoid new debacles without adding other restrictions to the market. The paper provides recommendations internal control important to ensure better governance of firms using derivatives.



New Challenges of Economic and Business Development – 2016

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EMIGRATION INTENTIONS IN POST-CRISIS LATVIA

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Key words: *emigration intentions, ethnic minorities, human capital*

JEL code: C15, J13, J15, J61

During the Great Recession, Latvia has featured the highest emigration rate among the EU member states. Emigration has become a serious challenge for country's demographic prospects and economic development.

This paper employs three recent waves (2013, 2014 and 2015) of representative population surveys to analyse the determinants of emigration intentions of population aged 18-64. To identify the effects of age, gender, household composition, educational attainment, ethnicity, citizenship, activity status, region of residence, type of settlement and household income on plans to emigrate in the near future, different discrete choice models (logit, ordered logit, generalised ordered logit, etc.) are applied. We find no evidence that emigration in general or brain drain in particular is slowing down. We also look at the dynamics of the effects of different factors on emigration plans.

The results have implication for social policy.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

OPTIMIZATION ON DECISION MAKING DRIVEN BY GLOBALIZATION AND DIGITALIZATION

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Key words: *decision making, globalization, digitalization*

JEL code: F60

Actuality of the topic: These days, two main trends are on the agenda of organizations; globalization and digitalization. The trend of globalization increased tremendously the complexity of business, e.g. global sourcing or a global customer base. While the trend of digitalization – a part of globalization – increased efficiency and transparency, new opportunities for organizations are appearing. The main activity of companies and their managers is strongly affected by these trends – making decisions to steer the organization.

Purpose of the paper: This new business world needs a robust decision process, because today decisions are mainly made under uncertainty due to the increased complexity. As an example, customers are today quite often more or less anonymous and the competitor is just “one klick away”. This paper will analyse the new view on decision theory and the need for a structured decision model. The question, if a rational model under the new business conditions will face a revitalization, in contrast to several behavioural models, the main trend of the recent years.

Methodical design and method: First the different views on decision theory will be analysed, the traditional approach of von Neumann and Morgenstern, the rational representatives of decision theory. Moreover behavioural aspects are relevant for a broader view on decision theory, as Kahneman and Tversky introduced the prospect theory. Second, based on a broad view on decision theory an evaluation of the variety of decision theories should be picutred. An introduction of the effects of globalization and digitalization will set the necessary view of the reader – this will complete the entire aspect of the paper.

Analysis: The question, why today’s need for a rational process is so important, will be analysed in this paper. The emotional aspect in decisions will affect the process and should be steered. Hence this aspect has to be taken into consideration, when discussing a more rational process of decisions, in this new business world of digitalization.

Conclusion: The first idea of “homo oeconomicus” is today more relevant than ever. In digitalized and globalized markets pure ratio should to be a driver of organizational decisions.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

CREATING A SCALABLE FLIPPED CLASSROOM ARRANGEMENT TO ENABLE PART TIME STUDIES TO FURTHER HUMAN DEVELOPMENT AND MANAGEMENT EDUCATION

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Keywords: *Flipped Classroom, Inverted Classroom, Blended Learning, E-Learning, Part Time Students*

JEL code: I21, I23, I25

A flipped classroom arrangement with a sensible mix of multimedia tools promotes meaningful and self regulated learning avoiding content consumption in face-to-face time and instead offer said content beforehand using various sources. This approach aims to minimize travel costs and further flexibility in learning to enable part time studies. This practice-oriented research with its explorative design will create a scalable arrangement for a B2B-Marketing course in higher education as well as guidelines for academic teaching and vocational training. In general, this project aims to broaden media and information competencies and strengthen collaboration in higher education.

Satisfying the special needs part-time students have results in plentiful strategies [1]. Time asserts to be the main issue in most of them [2]. Online and blended learning arrangements provide flexible online preparation so that teachers will be able to focus on meaningful learning when they actually meet their students. To address the need for time sensible teaching and learning a scheme of interchanging phases has been compiled in an explorative design by means of literature review to hold all necessary content yet minimizing face-to-face time while addressing all taxonomy levels (TL) [3]. Content delivery (TL 1,2) will mostly be covered in online preparation phases with methods of self regulated learning via videos, literature, wikis and so on while face-to-face sessions are reserved for knowledge acquisition (TL 3-5) by means of group work, debates, presentations and furthermore [3]. Students also monitor and evaluate their work and learning sustainably by using e-portfolios in subsequent online phases (TL 6). This approach promotes both diversity and individuality. Applying a mix of methods and tools, a successive introduction of media-tools and well planned face-to-face sessions will ensure that all students find their opportunity to learn and interact with other students and the teacher and reduce reservations towards new media or online collaborative work.

Applying the well-known method to further the part-time studies brings a yet unprecedented combination with new and unexpected potential and obstacles. To gain learning success, the didactical design for the scalable framework for part time students follows a more flexible and time saving way. To follow the requirements, we include e-portfolio elements and open consultations for individual learner support, keeping social effects with collaboration and flexibilize assessments by recording presentations and discuss topics in face-to-face sessions.

This project achieves two outcomes. Firstly, an independent scalable framework which can be adapted to different learners' and teachers' needs as well as different contents and number of students not only in part-time situations but in distant learning and regular courses as well. Secondly there will be an evaluation which will be interpreted and summarized in a guideline as well as patterns and lessons learned.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE WELL-BEING IN THE ACCOMPANYING ADMINISTRATIVE TERRITORIES OF THE METROPOLITAN: CASE OF LATVIA

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Key words: *well-being, satellite towns, objective and subjective well-being*

JEL code: I31, I38, O21, R58

An accompanying administrative territory or satellite town is a concept in urban planning that refers essentially to smaller metropolitan areas which are located somewhat near to, but are mostly independent of larger metropolitan areas. Taking into account the rapid social economic development of satellite towns, which leads to the population growth in these municipalities, it is important to ensure the well-being for their citizens. As the well-being concept is holistic and includes different dimensions, the methodology on evaluation of the well-being on local level should be developed taking into account the peculiarities of the accompanying administrative territory.

The aim of the paper is to analyse the well-being in accompanying administrative territories of Latvia.

In order to achieve the aim, following tasks are formulated:

1. to determine the accompanying administrative territories of Latvia;
2. to select the well-being indicators representing the well-being in the accompanying administrative territories of Latvia;
3. to design the Well-being index for the accompanying administrative territories of Latvia.

Main results and conclusions of the paper: based on designed methodology on identification of accompanying administrative territories, 25 accompanying administrative territories around Rīga were determined. The expert survey on selection of well-being indicators proved that indicators of different areas are needed to evaluate the well-being at satellite towns. The indicators related to remuneration, employment, demography, social safety and safety were selected. On the bases of selected well-being indicators, the Well-being index for accompanying administrative territories were designed and the accompanying administrative territories of Rīga accordingly evaluated. According to the developed Well-being index, accompanying administrative territories of Rīga were ranged.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DATA QUALITY ASPECTS IN LATVIAN INNOVATION SYSTEM

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Key words: *innovation, survey, data quality, data quality dimensions*

JEL code: C0, C13, O31

Innovation level of the companies in Latvia is one of the most important factors affecting the sustainable development of Latvian economy and long-term competitiveness. In order to evaluate the level of innovativeness, innovation surveys are conducted. These surveys are certainly among the most exploited statistical surveys used by economists to identify the determinants of innovation, the effects of innovation, the interrelations between various innovation indicators etc. (Mairesse, J. & Mohnen, P., 2010). According to recent results of innovation surveys in Latvia, Latvian innovative activity is low, for example, during the period 2008-2010 only 29.9% of enterprises were innovation active in Latvia, during the next reporting period 2010-2012, the proportion of innovative enterprises increased slightly and remained at the level 30.4% (Statistics database of the Central Statistical Bureau of Latvia).

The research and analysis of the quality of statistics is extremely important. The ESS Vision 2020, a common strategic response of the European Statistical System, adopted by the ESS Committee in May 2014, identifies five key areas in which common action is needed in order for European statistics to be “fit for the future”. The quality is one of these key areas (European Statistical System. ESS Vision 2020.). Until little analysis on the quality of the Latvian innovation surveys was made. Summarizing the scientific studies on theoretical aspects of statistical data quality, the author found that a greater contribution in this field gave the following foreign researchers: Wang R.Y., Strong D.M, Ballou D.P., Pazer H.L., English L., Lee Y., Strong D., Parker M. B., Redman T. C., Olson J. On the basis of scientific studies on data quality and methodological peculiarities of statistics on innovation, author developed an expert survey questionnaire and conducted an expert survey about the quality of the Latvian survey on innovation 2015. Based on the expert survey results, the author concluded that the most problematic data quality dimensions for survey on innovation are objectivity, data completeness, representativeness, methodological quality.

This paper provides information on the state of innovation in Latvia, identifies some methodological peculiarities of statistics on innovation as well as discusses the results of the expert survey on the quality of the survey on innovation in Latvia. Author identifies areas that should be developed in the innovation data collection process in Latvia and provides recommendations for improvement of innovation statistics in Latvia. The findings can be used by statisticians to raise the quality of innovation statistics in Latvia. Information on data quality and methodological peculiarities of statistics on innovation is useful for users of innovation statistics (policy-makers, entrepreneurs, scientists/researchers, students, media) to better adjust data to their needs as well as for respondents to recognize the impact of quality of submitted individual information during the innovation survey on the quality of overall statistical results. The theoretical and methodological evidence is based on the analysis of the economic literature, scientific works published by foreign scientists (Wang R.Y., Strong D.M, Ballou D.P., Pazer H.L., English L. etc.); the statistics database of the Central Statistical Bureau of Latvia; Eurostat methodological materials on innovation statistics. Bibliography review, as well as methods of statistical analysis such as grouping, processing and comparative analysis has mainly been used in the paper.



New Challenges of Economic and Business Development – 2016

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THE IMPACT OF PUBLIC EMPLOYMENT SERVICES ON JOB SEARCH OUTCOMES – THEORY, METHODS AND EVALUATION

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Key words: *theory of job search, public employment services, efficiency indicators*

JEL code: J64, H75

Public employment services (hereinafter – PES) operate as governments' tool for implementation of the employment policy, reduction of unemployment and facilitation of competitiveness of the labour market. The key task of the PES is matching of labour supply and demand in order to stabilize the labour market and provide sustainable employment. To achieve these goals, the PES implement employment programmes.

According to the job search theory, the outcome of job search depends on

1. jobseeker's human capital (education level, experience, professional and other ("soft") skills, health, etc.) personality traits (ambition, motivation etc.) and social capital (networks);
2. job search strategy (including the reservation wage) and intensity/effort of job seeking, but
3. the number of available vacancies and their distribution with respect to offered salary, required qualification and skills, terms and conditions of work.

The PES provide assistance in all above-mentioned respects:

1. it provides (either directly or by organising and financing) training of the unemployed to raise their human capital and employability;
2. help jobseekers to develop, implement, assessment and, if necessary, revise the strategy of job seeking;
3. improves the availability of information on vacancies to the jobseekers and availability of information on jobseekers to the employers.

The purpose of this study is to assess efficiency indicators of support methods provided by PES to jobseekers and to collect and analyse local labour market experts' opinions of on the efficiency of the support provided by PES and possible ways to improve it.

Using the job search theory as a conceptual framework, this study performs a comparative analysis and assessment of business models of the Latvian, Estonian and Danish PES, support measures implemented by these PES, as well as efficiency indicators used by them. Furthermore, for Latvia we present two city-level case studies using semi-structured interviews with eight labour market experts in Valmiera (a low-unemployment city) and Liepaja (a high-unemployment city).

The study results in conclusions regarding the relation of assessment indicators of the support provided by PES in job seeking with the elements of the theory of job search and recommendations for further research of the efficiency of the work of PES.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

CORPORATE SOCIAL POLICY: A NEW MODEL FOR CONSCIOUS ECONOMY

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Key words: *conscious economy (capitalism), corporate social responsibility, corporate social performance, corporate social policy, corporate social policy reconceptualization*

JEL code: M14

Problem statement and research aim. The modern model of social policy implemented in many countries, both at the macro (state) and the micro (companies) levels shows low efficiency. The lack of serious systemic shifts in the social sector, the growth of social risks testify the crisis of the idea and practice of the social state, give grounds to skeptical assessment of the corporate social performance effects. The latter necessitates rethinking the prevailing notions and theories, the formation of new research approaches, bringing the objectives and content of the corporate social policy (CSP) into line with modern challenges and risks, the implementation of a new model of CSP in practice.

The article shows the features of corporate social performance of major international and Russian companies, the reasons for its poor results, substantiates the necessity of transformation of the goals and content of CSP, reveals the basic principles and directions of the formation of the CSP version 2.0.

Research methods used. The propositions and conclusions of the paper are based on modern corporate social responsibility (CSR) and sustainable development conceptions, comparative analysis of scientific research approaches used and the results of studies of corporate social practices of Russian and international companies conducted by Russian and foreign research centers in 2004-2015 years, as well as on the results of research carried out at the Economics Faculty of St. Petersburg State University in 2008-2015 years, aimed at identifying the characteristics of social policy of Russian companies.

Main results and findings. The authors conclude on the necessity of CSP reconceptualization (one of its directions should be the integration of CSR, CSP and sustainable development issues); bringing the objectives and content of CSP in compliance with modern challenges and risks; the implementation of a new CSP model in the Russian companies practice. For its formation should be solved a set of interrelated problems of theoretical and applied research, such as the instrumentalization and operationalization of CSP, its professionalization and institutionalization. Their solution requires the joint efforts of academic, professional and business communities.

Practical implication. The results could be the basis for CSP reconceptualization and the formation of the modern CSP model.



BANKRUPTCY PREDICTION MODELS: CASE OF THE TRANSPORT AND STORAGE SECTOR IN LITHUANIA

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Key words: *bankruptcy, bankruptcy prediction models, logistic regression*

JEL code: G33

The article presents the results of the research in the development of bankruptcy prediction models in the sectors of construction and transport in Lithuania.

Financial failures of businesses have a negative impact on the interested parties including shareholders, creditors, clients, suppliers and employees. Therefore, in order to ensure business continuity and guarantee the interests of interested parties, it is crucial to constantly evaluate financial situation of companies, solve financial problems before companies become insolvent. *The object of the research* is bankruptcy prediction of companies.

The aim of the research is to create the bankruptcy prediction models in Lithuanian companies in construction and transport sectors. The formulation of the aim is drawn on the fact that mainly transport and construction companies have gone bankrupt since the world crisis. The article uses the following methods – modelling, statistical analysis and evaluation of corporate data.

The research of the application of bankruptcy forecasting models in Lithuania. Lithuanian scholars have contradictory opinions about the possibilities to apply bankruptcy prediction models. Empirical researches provide conflicting results as well. Having performed the analysis of the empirical research which has been carried so far, it was determined that by this research companies of different branches were tested. Also, conclusions about the applicability of bankruptcy prediction models in Lithuanian companies were drawn only after testing a small sample of companies.

Main results and findings of the study. The possibility to apply the models of logistic regression for bankruptcy prediction is investigated. A logistic regression model was developed on the basis of financial ratios. The financial ratios which statistically significantly differ in the financial statements of bankruptcy and non-bankruptcy companies (in Lithuanian companies in construction and transport sectors) 3 year before bankruptcy were distinguished in prior research works of authors.

During the first stage of research, the following was included in the model: a) all investigated financial ratios, b) financial ratios that show statistically significant differences in the group of bankruptcy and non-bankruptcy companies. It was determined that multicollinearity problem exists in such models. Therefore, these models cannot be used and they have to be improved. During the second, the forward method was applied, as initially the constants are determined and later independent variables are gradually included into the models, i.e., financial statements with a strong correlation relationship to the dependent variable. During the research the most appropriate model for predict bankruptcy of companies (in construction and transport sectors) was selected.

The designed models can be used by external users of financial statement information when making decisions for investment and company evaluation. Moreover, it is expedient to apply these models to predict bankruptcy of companies from the transport and storage sector.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE SUBSISTENCE SOURCES AND EMPLOYMENT OF INHABITANTS OF LATVIA

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Key words: *demography, employment, fertility, subsistence sources*

JEL code: J31, J13

The insufficiencies of income, lack of livelihood are important factors that impact the demographic situation in Latvia. The scientific researches show that employment is one of the key factors which are evaluated when planning a child.

The aim of the study is to examine the employment, income and livelihoods sources of inhabitants of Latvia. The tasks of the current study: analysis of scientific publications, analysis of statistical data. For data processing descriptive statistical indicators, cross tabulations are applied.

Main results: only about 72% of household income is income from paid employment and self-employment, large parts of the household income are another person's maintenance, pensions, benefits and other forms of financial aid, as well as other sources of subsistence. The smallest income from employment is in Latgale region and households with children up to the age of 15 years.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ANALYSIS OF ENTREPRENEURSHIP START OBSTACLES

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Key words: *Entrepreneurship start, obstacles, motivation, entrepreneurs*

JEL code: M13, Q28

For start-up of companies is paid a lot of attention by academic research as the start-up of companies are extremely important for economic development. The statistical data show that during the last years start-up of the companies in the country is decreasing.

The aim of the paper is to find aspects affecting start-up of companies with special attention to starting entrepreneur's views of obstacles for starting the companies.

Research methods applied for research: scientific publications analysis, survey of starting entrepreneurs (the number of respondents – 209). For survey data analysis it was applied evaluation scale the same as in analysis in different other counties to make comparisons of the research results. For data processing there were used descriptive statistics: indicators of central tendency or location (arithmetic mean, mode, median) as well as indicators of variability (standard deviation, range and other), cross tabulations by different aspects, as well as factor analysis to find complex factors from initial factors included in the survey.

The results of the survey have shown that most important obstacles are: complicated tax system, employees on whom relay and lack of managerial skills. Female starting entrepreneurs have indicated that there is a very big competition as well as lack of marketing training. Those aspects were different statistically significant for female and male respondents. The evaluations of entrepreneurs were not statistically different by the age group and previous experience in management work. Complex factors have been determined: infrastructure and unsafe environment; knowledge and skills in company management; business environment; lack of financial resources. One of the most important supporting factors for start-up of companies have been mentioned entrepreneurs knowledge and skills in company management.

The research results are used for entrepreneur organisations.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

FISCAL POLICY IN LATVIA: RISKS AND CHALLENGES

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Key words: *fiscal policy, fiscal risks, taxation, expenditures*

JEL code: E62, H20, H50

Until now the development of Latvia has not proved an effective and balanced implementation of a socio-economic policy in the country. There is a need for an unambiguous rapid economic breakthrough for a further development of the country where the implemented state fiscal policy is an important instrument. At present the economic development in the world and Europe, geopolitical situation, the migration of the population as well as the domestic problems of the development of Latvia pose new challenges to the government's fiscal policy, they create new fiscal risks and problems that require strong fiscal discipline and an efficient fiscal policy. Unfortunately, during the past years the fiscal policy in the country is not sustainable, each year it is adjusted and the government steps away from the previous decisions which cause the discontent of the society and as a whole it slows down the economic development.

The aim of the research is: to evaluate the fiscal policy in Latvia in accordance with the theoretical and practical conclusions of the scientific investigations in the world, to determine the main fiscal risks and to find the fiscal policy gaps in the formation of the revenues of the state budget as well as in the use of funds and to define the recommendations for making a sustainable fiscal policy in the country.

During the investigation the most essential factors which influenced the fiscal policy were determined: administrative, political, ideological, economic, international and the fiscal risks were summarized: quantified and not quantified as well as the recommendations have been worked out in order to minimize the risks and to reduce their negative influence. In the paper the development trends of the state expenditure structure have been critically analyzed and the drawbacks of the tax policy have been investigated. At the end of the research the authors have defined the necessary measurements for making a sustainable fiscal policy of a rapid economic development of the country and the decrease of social inequality.

During the investigation the qualitative and quantitative statistical research methods: graphics, method of data comparison were used.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SELF EVALUATION OF EMPLOYEES AS FACTOR FOR EFFECTIVE HUMAN MANAGEMENT AT A BIG COMPANY

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Key words: *human resource management, self– evaluation, attitude, factor analysis*

JEL code: J24, J44, J5, M54

Human resource management in a big company has some specifics have to be taken into account, those issues are analysed in academic research world-wide, as well as many international conferences are devoted to effective human resource management.

The aim of the current paper is to analyses results of self-evaluations of employees on their attitudes towards their feelings and evaluations on different aspects related to their employment including working environment, atmosphere in the company and management of the company.

Research methods applied: scientific literature analysis, survey of employees on 21 aspects of self-evaluations, comparison of results of the survey conducted several years ago. For data processing there are applied descriptive statistics: indicators of central tendency and location, indicators of variability, cross tabulations by different aspects (gender, age group, employment time in a company) and factor analysis to find out complex factors from the initial 21 analysed factors.

The results have shown that great importance has company internal culture, possibility to improve qualification and skills related to work performance and co-operation with colleagues.

The results are used in management of the company to find the best possible solutions in human resource management.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE SYSTEM OF PUBLIC SERVICES DELIVERY IN ST. PETERSBURG

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Key words: *public service, attainability of public services*

JEL code: H83

To develop a service governance it is required to be open for the information technologies, ensure a high degree of St. Petersburg authorities' information execution transparency and citizens' accessibility to information on the procedure public services delivery. Transition to public and municipal services e-delivery could significantly increase the services accessibility, reduce corruption risks, and reduce time and financial cost of the state and citizens.

The aim of the research is to identify features of the public services delivery system in St. Petersburg. The main focus of the research are a system of public services delivery and the portal of state and municipal services of St. Petersburg. The main objectives of the portal are improvement of the public and municipal services quality, decries paper document circulation providing the services, increase level of the citizens' comfort and satisfaction by the services delivered in St. Petersburg as well as increase their awareness of the services delivery in the megapolis. As the conclusion it was identified that the government of St. Petersburg is actively participated in improvement of public services attainability for the local population.

The research is descriptive by design. As research methods the document and statistical data analysis, comparison and synthesis is used. The results and findings of the research draw an example of the public service delivery system that could be a ground for further studies on the system's improvement, development and adaption in different cases. Besides the theoretical value of the article, the provided research results and conclusions could be helpful for practitioners i.e. another cities administration representatives that implement or develop a new public services delivery system as well as for the public administration of St. Petersburg considering improvements of the described system.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DESIGN CONCEPTS FOR PROMOTING SOCIALLY RESPONSIBLE SOLUTIONS

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Key words: *socially responsible design, social responsibility, design, architecture, design concepts*

JEL code: M19

Problem statement In recent years there has been growing interest about design concepts that seek for solutions that are more eco-effective and develop systems that have more positive output rather than less negative impact. Moreover, design concepts for socially responsible solutions in design and architecture industries are becoming even more complicated, asking for new knowledge and management methods.

Research aim is to take a critical look at the design concepts, in order to promote socially responsible solutions and concepts that have different meanings, purposes and approaches depending on their context and origin and to develop structured framework of these concepts.

Research method used is content analysis of scientific literature on design concepts that supports socially responsible solutions, abstract modeling and synthesis.

Main results and findings of the study are that there are great gaps between different design concept approaches and origins, education and practice in different areas that are involved in design and architecture processes. Design concepts and approaches solve only certain level or some parts of social issues and there is a gap between theoretical concepts and actual practices in creative industries. There is a lack of design management methods and assessment tools available for socially responsible design concepts.

Theoretical and practical implications of the work This study provides deeper understanding and determines gaps between design concepts applied for promoting socially responsible solutions and provides directions for further theoretical and practical research implications towards promoting socially responsible solutions in creative industries.

The main conclusions are that there is a gap in understanding of design meaning and purpose and there is a need for new design concept that supports life cycle thinking in all areas of social responsibility and multidisciplinary design management theory, methods and tools that helps to create, manage and evaluate socially responsible solutions and creates more eco-effective and socially responsible output, instead of mainly focusing on the reduction of negative impact on environment.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

POSSIBILITIES FOR EVALUATION OF MICRO AND SMALL ENTERPRISES' ACTIVITIES ON THE BASIS OF BUSINESS REGISTERS IN SELECTED EASTERN-EUROPEAN COUNTRIES

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Key words: *Accounting, Financial reporting, Small business, Eastern Europe*

JEL code: L25, M13, M41

Small and micro enterprises are an important element of European economies, both those within the EU as well as those outside it. They create almost half of the GDP in the European Union countries, employ nearly 50% of all workers, while the number of all registered micro and small companies constitutes almost 98% of all registered entities. Therefore, over the past several years, highly developed countries as well as those still developing, having a different political, social and cultural structure have been devoting much attention to these enterprises.

Economic practice proves that it is relatively easy to create a new company, but in order for it to provide itself financially and to become successful, effective management of its finances and an adequately fast and accurate assessment of the company's financial-asset situation are required. It is possible, if the managers can receive, in due time, reliable and sufficient financial data from the information system, which is based on accounting and the related registration systems.

The purpose of this research paper is to carry out a comparative analysis of the registration and reporting obligations of micro and small enterprises in selected Eastern-European countries (Latvia, Lithuania, Poland, Russia, Ukraine). These are countries with different levels of economic development, but a common political-economic ground, where the principles of market economy have been introduced at a similar time. Poland, Latvia and Lithuania are members of the European Union, as opposed to Russia and Ukraine. The analysis concerns the registration and reporting obligations of both, the entities which keep account books, as well as those which are not required to do so. Studies of the literature indicate that such comparison has not been conducted before. What is more, the authors' previous studies indicate limited possibilities of using classic indicators of financial analysis, in relation to the Polish micro and small enterprises not engaged in keeping account bookkeeping.

At the beginning of this article, criteria for classification of enterprises as micro, small and medium, resultant from legal regulations in selected countries, will be presented and compared. The results of the analysis of macroeconomic data, which are presented in the article, will indicate significance of this sector in individual countries.

Literature studies and analysis of the legal regulations allowed identification and comparison of the registration requirements resultant from the tax and balance sheet law regarding micro and small enterprises in the researched countries. A questionnaire developed by the authors was used for the analysis.

The results of the analysis indicate different ranges of the mandatory elements of the financial statements and of the additional information which the entities from the SME sector must prepare in individual countries. The differences also exist in case of simplified registration. As a result, the scope of the financial information for decision-making and for evaluation of the enterprises is not homogenous in the researched European countries. This impedes comparability, however, it can also be a prerequisite to seek the best solutions and practices, not only for the reporting purposes, but also for constructing effective information systems meeting the needs of the managers.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ENTREPRENEURSHIP AND THE BUSINESS CYCLE

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Key words: *necessity driven entrepreneurship, opportunity driven entrepreneurship, business cycle*

JEL code: E39, L26, M13

Entrepreneurship is considered to be an important driver for economic growth through employment, productivity improvements and overall welfare effects (Schumpeter, 1934, Acs and Audretsch, 1988, Wennekers un Thurik, 1999, Baumol, 2002, Acs and Storey, 2004). Theory suggests that economic recession can have two opposite effects on early-stage entrepreneurial activity. It is crucial to understand to what extent macroeconomic conditions influence entry rates of entrepreneurial activity, as well as whether entry rates vary pro- or counter-cyclically.

Changes in macroeconomic conditions brought substantial variation in the prevalence rate of early-stage entrepreneurs in Latvia. The prevalence rate was about 6.6% in 2005-2006, dropped to 4.4% in 2007, and then sharply increased to more than 10% in 2009.

The paper contributes to an understanding of how the concepts of necessity driven and opportunity driven entrepreneurship vary over the business cycle in Latvia (the country with highly volatile macroeconomic environment and with modest unemployment benefits). In particular, the paper discusses the way how the labour market conditions affect the entrepreneurial activity level as such as well as the balance between necessity and opportunity driven entrepreneurship.

Various graphical, statistical and econometric techniques were used for the analysis of repeated cross-section data of the Global Entrepreneurship Monitor (GEM) Adult Population Survey's (APS) for the time period from 2005 till 2014. The analysis of the data showed the counter-cyclical nature of early-stage entrepreneurial activity. Data seem to support what in the literature is labelled the "refugee" or "push" effect, i.e. good years see a larger share of entrepreneurs motivated by business opportunity, whereas bad years see a larger share of necessity driven entrepreneurs motivated by adverse labour market conditions.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ETHNIC DIFFERENTIATION OF MORTALITY, LIFE EXPECTANCY AND HEALTH IN LATVIA AT THE BEGINNING OF 21ST CENTURY

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Key words: *ethnicity, inequalities, health, mortality*

JEL code: I14

Ethnic origin of individuals together with citizenship and nationality are among variables used in socio-demographic statistics. Nevertheless not so many socio-demographic studies have explored mortality, life expectancy and health in relation to ethnicity (see: Bos, Kunst et. al, 2004; De Grande, Deboosere, 2012). Emerging literature in many countries on ethnicity and health contains a number of highly debated topics, with researchers disagreeing on terminology, focus, and approach (Haug, Courbage, Compton, 1998 and 2000; Laridon, 1999; Detels et. al, 2005).

During the Soviet period, only in time of Gorbachev's reforms, appeared evidence of existed ethnic inequalities in mortality in the former USSR (Dobrovolskaya, 1990). Studies on ethnic inequalities in mortality and life expectancy advanced in the three Baltic countries – Estonia, Latvia and Lithuania, after they regained independence (Krumins, 1992; Krumins, Usackis, 2000; Leinsalu, Vågerö, Kunst, 2004; Jasilionis, Shkolnikov et al, 2007; Baburin, Lai, Leinsalu, 2011; Karelson, Sakkeus, 2012).

The aim of this study is to analyze ethnic inequalities in mortality, life expectancy and health at the beginning of the 21st century.

Data and methods. Age-specific death rates, based on all available vital statistics, population estimates and census data, are calculated. Due to small numbers of population with particular ethnic background demographic indicators are calculated for time periods covering several years and for numerically larger ethnic groups. Life tables for Latvians and Russians – the two largest ethnic groups in country by sex and urban-rural residence in this study were calculated using Population census figures and data on deceased individuals by ethnicity during the two years before and after Population census. Ethnic differentiation in self-assessed health is analyzed based on SILC and health survey data.

Conclusions. Ethnic differentiation in health and mortality is affected mostly by heterogeneity within ethnic groups. Ethnic differences in health and mortality still exist, but they have diminished in the long term perspective.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

POST-CRISIS EVOLUTION AND CHALLENGES OF THE BANKING SECTOR: CASE OF LATVIA

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Keywords: *Financial crisis; bank profitability factors; Basel III*

JEL code: G210

The economic crisis revealed a number of problems in the banking risk management. Basel III calls for the strengthening of bank's capitals, the increase of liquid assets, and the reduction of overall risk level of the banking activities. Because of that many authors believe that a full adoption of Basel III will contribute to a greater financial stability of banks and reduce bank profits, as well as their profitability. However, in Latvia in the post-crisis years an increase of bank's profits has been observed.

In this article the development of Latvian banking system in the post-crisis period in comparison with pre-crisis tendencies was analysed. The author of this article assesses the bank profitability indicators, the level of bank capital adequacy, liquidity and the credit activity. The author evaluates the reasons of bank profit and profitability increase at the moment, as well as appraises the sustainability of this tendency.

The purpose of this research is the evaluation of the post-crisis development of the Latvian banking system and the impact of the Basel III Agreement on the further development of banking sector in Latvia.

In order to establish a causal link between the profitability of banking activities and the level of bank capital adequacy, liquidity and lending rates of growth, author designs a VAR model. Author also assesses the sensitivity of key bank profitability indicators, using the analysis of impulse responses.

Analysis approved that profitability increasing has short-term character, but full implementation of Basel III will be associated with reducing of the bank profitability.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

FINANCIAL MARKET INSTITUTIONS COMPETITIVENESS AND FINANCIAL CONVERGENCE

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Keywords: *financial convergence; financial conglomerate; financial conglomerate different subject's and joint competitiveness*

JEL code: G10, G20, G23, G20

Goal. The aim of the paper is to reveal the nature of the financial convergence as a mechanism for competitiveness increase of those financial market's different sectors actors which operate in a basic institutional and organizational form of financial convergence – the financial conglomerate.

Objectives. The goal of the study predetermines the following objectives: 1) concept of financial convergence understanding; 2) financial conglomerates definition as a basic institutional and organizational forms of financial convergence; 3) the formulation of the main factors contributing to the capital market's financial convergence of the insurance and pension particular sectors.

Methods. The study is based on the analysis-synthesis, historical and logical methods of investigation, methods of international comparisons.

Results and findings. The results and novelty of the study are: refined definitions of “financial convergence” and “financial conglomerate”; comparison of financial convergence in different countries and regions; selected lists of communities for various financial market's sectors, and areas of inter-sector competition; factors for the financial convergence of insurance and pension sectors; the content of specific parameters that determine the financial conglomerate as a basis institutional and organizational form of financial convergence.

Discussion. Financial convergence represents the interpenetration of financial market institutions which being separate entities competed with each other severely. It is pointed out aggressive and voluntary strategies of financial convergence. Voluntary convergence is based on a combination of their activity is primarily due to customer, product, technology and marketing combination of different financial market's sectors. It is a mechanism for these subjects simultaneously increasing competitiveness. So far as the study argues that the main institutional and organizational form of financial convergence is a financial conglomerate the latter reflects the specificity of the financial convergence and is characterized by increased competitiveness of firms belonging to it; informal association of firms entering into it; variety of forms of association capital firms within it.

Conclusions and Relevance. The study figured out that the financial convergence appeared to be the new way to improve the joint competitiveness of the subjects belonging to different sectors of the financial market.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOLVENCY II OVERALL INFLUENCE ON THE LATVIAN INSURANCE MARKET CHANGES

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Key words: *Solvency II directive, insurance, Non-life insurance, Latvian Insurance market changes*

JEL code: D04, L01, L11

The insurance industry has an important impact on the overall country economy situation. Starting from the 1st January 2016 the European (EU) Insurance market will have changes in the Solvency legislation. So called Solvency II (SII) is an EU legislative program expected to be implemented in all 28 Member States, including the United Kingdom (UK), by the 1st January 2016. It introduces a new, harmonized EU-wide insurance regulatory regime. The legislation replaces 14 EU insurance directives.

The Solvency I Directive 73/239/EEC was introduced in 1973. Already after introducing this directive, EU Solvency regime understood that changes in risk management are needed, and started to prepare the Solvency II Directive. During the last 5 years Insurance industry started to fill the SII influence on the overall companies operation.

The purpose of the article is to analyze last 5 years overall Latvian Insurance market positive and negative performance (changes of premium amount, losses amount, Loss ratios and etc) as well as insurance companies operation as such (companies amount increasing/shrinking, or consolidation/merger, and bankruptcy) from the perspective of the Solvency II preparation and implementation process. Taking into account that 70% of the premium insurance companies are gaining from the Non-life Insurance (examples: Motor Own Damage – MOD (or KASKO), Motor Third Party Liability – MTPL (or OCTA), Property and etc) the study will be oriented only on the Non-life Insurance industry.

Article task is to identify in what sense Solvency II implementation process has influenced Latvian insurance market overall changes, what took place during last 5 years. Taking into account that Insurance industry has an effect on the Latvian economy; the study gives the possibility to evaluate if the implementation of the SII had a significant impact, or it was only one part of the economy factors of influence.

In the paper the quantitative research method is used, the available Latvian Insurance market statistics as well as Insurance companies' balance sheets are analyzed.

During the research process will be analyzed the positive and negative Latvian insurance market changes as well as the Solvency II implementation process level of impact on these changes.

During the research process the positive and negative Baltic countries Insurance market changes as well as the Solvency II implementation process level of impact on these changes are analyzed. The main result of the paper is to analyze in what sense Solvency II implementation influenced the overall insurance market operation and what kind of consequences from these changes could be on the countries' economy.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ENERGY SECURITY OF LATVIA: CHALLENGES AND PERSPECTIVES

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Key words: *Energy efficiency, energy balance, liberalization of natural gas market*

JEL code: G38, H25

Energy is a sector that is closely linked to the introduction of technology, environmental requirements and energy efficiency. Energy is the sector, where long-term trends are predominant, that's why it is necessary to analyze the energy sector from the point of view of its future challenges and opportunities. In recent years, the EU issued a series of requirements and directives for energy sector, which aim to regulate the use and production of energy. Energy sector for the public is actually associated with the tariff changes. However, during the research, the authors analyze Latvian energy resources, the EU requirements, considering these questions in the prism of the global energy situation. The electricity and gas market situation has been assessed, as well as the share of renewable energy sources in the energy sector. Energy issues are also particularly important because of geopolitical escalation, so the question arises – how much of the energy necessary for Latvia we produce ourselves, how much we import and the most important – import from where? Methods of economic and statistical analysis have been applied during this research. The results of the research show, that energetics became one of the most powerful instruments of control in international relationships. Meanwhile energetics is supposed to become more significant as an aspect of national security. Security of Latvian energy supply can be improved by increasing the proportion of sparse generation capacity, by diversifying the selection of energy sources, by modernizing old output and increasing the capacity of Latvian interconnection.

During the analysis the authors have made the conclusions and proposals for the solution of current energy issues in Latvia. The costs of energy sources in Latvian manufacturing branch are comparatively high, relative to turnover these costs are the highest among European countries. There are two reasons for that: comparatively high tariff and low level of energy efficiency. For improving the situation it is necessary to apply the tools, which decrease the charge of tariff for energy- intensive enterprises, however only in cases, when their level of energy efficiency is specific and can increase the energy efficiency of manufacturing branch. Applied tools via stimulation and limitation should motivate an enterprise to be energy efficient. For example, stricter energy audit requirements could become one of the main priorities.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

LITHUANIAN ACCOUNTING DEVELOPMENT PHASES AND PERSPECTIVES

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Key words: *accounting, development phases, Lithuania*

JEL code: M410 (Accounting)

Accounting is an important element of any country's information formation system. Besides, accounting is usually called as business language, which is understandable in the same way in different countries and different periods. Accounting forms approximately 80% of financial information on companies and it is very important tool for the evaluation of position of the company as at micro level as well as in some aspects at macro level. During different periods of any country's history many factors made impact on development of its' economic conditions, regulatory requirements, information collection systems and etc. Evolution of Lithuanian accounting was long and complicated. It was influenced by different countries, especially by Tsarist Russia, Germany, France, Poland and the Soviet Union. Different factors made impact and formatted Lithuanian accounting system, have drawn its development tendencies.

The research aim is to investigate the evolution of Lithuanian accounting. Research methods are systematisation, comparison and summary of information. There are distinguished such Lithuanian accounting development phases: 1) accounting origins for the period of Grand Duchy of Lithuania (1251-1795); 2) Lithuania accounting status during the period of occupy by Czarist Russia (1795-1914) and World War I (1914-1918), 3) condition and regulation of accounting during the inter-war period (1918-1940) and World War II in Lithuania, 4) accounting organization and regulation during the Soviet occupation period in Lithuania (1944-1990), 5) Lithuanian accounting status and its transformation problems in the first decade of the restoration of independence (1990-2000), 6) Lithuanian accounting system integration into European accounting system (2001-2015), 7) important accounting system development trends, organizational, methodological and academic problems of accounting. The article investigates the key elements of regulation, achievements and problems of each Lithuanian accounting phase.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

RECENT LATVIAN LEGISLATIVE DEVELOPMENT ON PROCEDURES CONCERNING REGISTRABLE INTELLECTUAL PROPERTY OBJECTS IN THE FRAMEWORK OF INTELLECTUAL PROPERTY MANAGEMENT

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Key words: *intellectual property management, patent office, registration, dispute resolution, Latvia*

JEL code: K22, K39, O38

One intellectual property (IP) management area covers procedures relating to registrable IP objects such as trade marks, patents (utility models), designs, plant variety rights, and semiconductor topographies. These procedures may be either registration (including post-registration) or dispute resolution procedures. Depending on the level of efficiency of both types of procedure, one might ask whether IP management in a particular country may be considered as a burden or incentive for IP right holders and, more broadly, for development of a sustainable economy.

This paper deals with review of a recently adopted Latvian legal act – the Industrial Property Institutions and Procedures Act – concerning procedures for registrable IP objects. The research aim is to assess this legal act from the viewpoint of the efficiency of its regulation in the Latvian environment. The problem with this legal act stems not only from possibly inefficient procedures but also from failure to introduce any system in current IP regulation in Latvia. The research method is the methodology of law and economics, which operates by discussing the legal framework from an economic perspective.

This paper analyses regulation of procedures for registrable IP objects in the context of IP management. From the theoretical viewpoint, discussion focuses on essential elements of regulation for procedures of registrable IP objects, but, from the practical viewpoint, analyses the efficiency of this regulation in Latvia within the context of IP management. The conclusion demonstrates that this recent legal act may hardly achieve the aim of efficient IP management for two reasons. First, the aim may not be achieved due to insufficient and incomplete regulation of procedures relating to registrable IP objects. Second, this legal act fails to set clear guidelines for interrelation with other sui generis IP legal acts, therefore ipso facto precluding establishing a system for regulating IP in Latvia.



ANALYSES OF THE INFLUENCES OF ORGANIZATIONAL HIERARCHY AND GROUP PROCESSES IN RISK MANAGEMENT RELATED TO MEANINGFULNESS OF RISK ASSESSMENTS

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Key words: *Risk Management, Risk Assessment, Fat Tails, Organizational Theory, Group Processing*

JEL code: C01

Purpose. The implementation of effective risk management processes always involves numerous individual responsibilities and employees. All of them must make their own contribution within the organization. The respective organization structures play a key role in supporting the risk management processes. Individual and group-based decision-making processes are accorded just as much attention for the decision making as the influences from the social roles of the members of the process. In particular by handling quality-based risk measurements or stochastic models and simulations will not work (e.g. fat tails) the risk assessment have to be done by human judgment.

The main hypothesis of this research paper is that the group size in relation to the organizational hierarchy of the decision maker is important for the meaningfulness of risk assessments. At the bottom-level of organizational hierarchy the groups can be sized at least to one decider. On top-level trust and information groundwork should be that strong to size to only one decider. Larger groups have to be built for risk assessments in mid management. There are ways for calculating bigger sizing than one. When groups are too small the distribution of the risk assessments is higher than by midsized groups. On the other hand building large groups will only increase the processing time, not the quality of results.

Findings. A survey is designed as field-study base on different cases to evaluate the risk aversion of each decision making part (single person, midsized group, large group and different organization levels). An undertaken series of interviews of Risk Management Professionals compared with this field-study of business experts examines the differences in perception. Statistical analyses are the base for a clear statement of factors and values.

Implications. Risk management processes have to be more focused on organizational responsibilities than on technical details.

Design / Methodology. The results of an structured interview with risk management experts and an survey based on an artificial case study and introduction training with business professionals are source for an indirect group-comparison.

Research Limitations. Because of the impossibility to see into the future the study is based on two surveys to evaluate the different (or equal) output and a clear view about key indicator for building the right risk evaluation groups.

Practical implications. Risk management processes have to be more focused on organizational responsibilities than on technical details. Risk management processes have to be more focused on organizational responsibilities than on technical details.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE AWARENESS AND IMAGE OF LATVIA AS A TOURISM DESTINATION IN GERMANY AS A HIGH PRIORITY TARGET MARKET

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Key words: *tourism, destination, destination image, destination awareness*

JEL code: M31, L83

Competition between tourism destinations in recent decades has become global. The process of globalization in the tourism sector is even more significant than in other sectors, tourists are choosing their destinations out of hundreds of options and are influenced by many factors. Destination image and identity play a significant role in differentiating between objectively alike travel alternatives. Destination image can be defined as the sum of beliefs, ideas and impressions that people have of a place or a country. It is necessary for people to develop a positive attitude towards a country as a tourism destination before they make a choice to visit it.

The aim of the research is to examine the image of Latvia as a tourism destination among potential travellers in Germany as the high priority target market of Latvia. Three research questions that have been raised are: What is the level of recognition and awareness of Latvia as a tourism destination in Germany? Which are associations that are connected with Latvia as a tourism destination in terms of key words and colours and how they comply with the Latvian tourism brand concept? How is the image of Latvia in terms of several attributes of a tourism destination?

To achieve the aim of the study German residents survey was carried out. A face-to-face survey was conducted in June 2015 among local population of Germany in federal states of Bayern and Baden-Württemberg, the random sampling method was applied for data collection and 358 valid questionnaires have been gathered. The questionnaire was made to determine the recognition and the image of Latvia as tourism destination as well as to determine the associations in connection with Latvia expressed with key words and colours. Several tools and methods of the SPSS software were used for analysing the data: descriptive statistics, crosstabulation (including crosstabulation by age groups), data correlation (Pearson bivariate correlation).

Main results of the research show that the knowledge of German residents about Latvia as a travel destination is poor; the Latvian tourism brand concept both in colour and keyword terms correspond with the German citizens' perceptions about Latvia; German residents' associations with holiday travel in terms of colours meets Latvian tourism brand concept; German residents' associations with holiday travel in key words partly correspond with the Latvian tourism brand concept.

Main results and findings are addressed towards Tourism Department of Latvian Investment and Development Agency to improve marketing communication with Germany as a high priority tourism market of Latvia.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

INFLUENCING FACTORS OF RURAL AREAS DEVELOPMENT: VIDZEME REGION CASE ANALYSIS

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Maira Ore, Vidzeme University of Applied Sciences, Latvia

Key words: *sustainable development, smart development, rural areas, influencing factors*

JEL code: O18, R11, R23

An important precondition for welfare increase of any nation is providing a sustainable economic development and increasing the competitiveness of the country. Nowadays it is possible to attain by realizing a polycentric model of country's development based on a balanced development of territory of the country, availability of services and growth of economics. The statistical data show a significantly different pace and level of economic development in rural areas in Latvia, including in Vidzeme Planning Region. Therefore it is necessary to evaluate the factors that determine the differences mentioned above. Koceni and Mazsalaca Counties were selected for an expanded research in Vidzeme Region.

The goal of the research is to identify the factors influencing the differences of economic development among counties, thus serving as the basis for creating a model of balanced and sustainable rural and regional development in the context of smart development. In order to identify the factors that determine the level and pace of the development in the researchable counties and influence their performance, the authors used the monographic method, carried out a statistical data analysis, interviewed focus groups of municipal staff, entrepreneurs, representatives of non-governmental organizations, as well as conducted surveys of residents.

The article examines theoretical concepts of sustainable and smart development of the territory, carries out comparative analysis of economic development indicators in Koceni and Mazsalaca Counties in the context of sustainable development of rural areas. In the course of analysis the main groups of factors influencing economic development in rural areas were identified. The most important factors influencing performance of the territory are geographical location, entrepreneurial capabilities of residents, availability of land for agricultural purposes, municipality's attitude and support for entrepreneurship, intensity of cooperation among the municipality, entrepreneurs and non-governmental organizations.

The theoretical and practical results of the research will be used in the process of selecting indicators for creating a sustainable development model of rural areas and regions, as well as for defining the proposals for the municipalities' policy performance in the context of development of smart territories.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DEVELOPMENT OF LENDING RATES IN THE BALTIC COUNTRIES: COMMON AND DIVERGING ASPECTS

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Key words: *lending rate, interest rate pass-through, error correction model, credit risk of borrowers, banking risk*

JEL codes: C22, E43, G21.

After the global financial crisis, lending rates in the euro area countries have diverged substantially despite the common monetary policy and a similar legal setup overall in the region. However, the recent ECB's nonconventional monetary policy measures are widely accepted as effective tools in reducing heterogeneity of lending rates in the euro area countries; the European banking market has not yet returned to the pre-crisis level of integration. In the Baltic countries, lending rates have been among the highest in the region, mainly reflecting national differences in the market structure as well as relatively strict credit standards applied by banks in response to the changes in their perception of risk. In this context, a deeper econometric analysis could provide additional information about the common and diverging aspects of the dynamics of lending rates in the Baltic countries.

The aim of the paper is to explore the pass-through of funding costs of banks to lending rates in different lending segments in the Baltic countries during the period of 2005–2015 taking into account risk considerations. To reach the set objective, the paper addresses several issues. First of all, it assesses whether the pass-through from bank funding costs to lending rates and the speed of lending rate adjustment differ significantly for two alternative measures of funding cost of banks, namely the three-month EURIBOR rate and the weighted average cost of euro liabilities. Secondly, it addresses the question whether and how the credit risk of borrowers and the banking risk have affected previously observed relationships between lending rates and funding costs of banks. Finally, the work compares the pass-through from funding costs of banks to lending rates for different types of loans and across the Baltic States.

The dynamics of lending rates in the Baltic States is analysed with the error correction model. As a result, the conclusion was reached about superiority of the three-month EURIBOR rate as a measure of funding costs of banks. The measures characterising creditworthiness of borrowers and banking risk improve the statistical significance as well as economic interpretability of the obtained results. Across the Baltic States, the pass-through from funding costs of banks to lending rates is high. The long-term pass-through from funding costs of banks to lending rates tends to be higher in Lithuania, but creditworthiness of borrowers appears to have the strongest influence on lending rates in Latvia.

The obtained results could be helpful in evaluating ECB's monetary policy and its efficiency in the broad European context of banking market development. The expansionary monetary policy of the ECB could be ineffective if banks are reluctant to decrease lending rates appropriately taking due account of risk and profitability consideration. In addition, they provide deeper insight into main developments of the banking market in the Baltic countries.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOCIOECONOMIC SITUATION AND FERTILITY: A LATVIAN CASE

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Key words: *Socioeconomic situation, fertility, discourse*

JEL code: Z1 (Cultural Economics; Economic Sociology; Economic Anthropology)

Fertility is widely discussed in public media and policy relating it to social and economic aspects. For example, the Cabinet of Ministers Order No. 84 (2012) sets the improvement of the demographic situation as a priority in the cross-sectoral policy decisions. Family support forms to stimulate second, third and next children born in the family have been initiated, including fiscal incentives and implementing the principle of the progressivity in state support and creating a support program for the treatment of infertility. Fertility is closely linked to population statistics and increase in birthrate. Depopulation is often defined as a threat to a societal development. Likewise, the use of fertility concept itself has social and economic aspects that are essential for understanding fertility dynamics.

The aim of this paper is to explore how the ideas on socioeconomic development are included in fertility discourse in Latvia. This paper is based on doctoral research in progress. 30 semi-structured interviews (11 interviews with users of assisted reproduction techniques, 4 interviews with egg donors and 15 expert interviews) are analyzed. All data was processed using Atlas.ti. Foucauldian methodology of “archaeology of knowledge” allows conducting a systematic study of knowledge, where knowledge is localized in discourse. Fertility as an object of knowledge is fragmented and multi-sited phenomenon which outlines economic aspects and gender, age, family status and other social processes in defining fertility and its management.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

AIRPORT MANAGEMENT DURING MAJOR INCIDENTS

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Key words: *force-major, client-centred emergency management, major incidents, European airports, safety regulation*

JEL code: M16, M31, O32

In 2010 European air traffic was shut down for a week in response to volcanic ash from *Eyjafjallajokull* in Iceland. It was the largest shut down since World War II. The closure left 11 million passengers stranded in the places far from their homes with limited resources and help. Definitely, airdromes were unprepared for such the *force major* incident. One should mention that Europe is the busiest airspace in the world. *The International Air traffic Association* estimated € 1.3 billion losses only for the first week of interrupted traffic. 48% of the total air traffic or about 107 000 flights were cancelled. Airport managements did not have effective plans to organize evacuation. The situation showed that it was not enough to have communication with local governments, but having planned the actions across Europe or even globally. This is the new challenge for global economy and the paper is about offering the outline of the plan for the airports. The author stresses importance of adding the emergency plan to the agendas of airport managements. This should extend the safety regulations protocol and become a part of the Key Performance Indicators for the management.

The research aim is to study available resources on the subject and provide an outline of the problem to create ground for further research. The methods are monographic method and expert interview. The major finding is that authors and experts stress that there are emergency plans for evacuation of passengers at local level, but international. There is no plan available for major international shut down. Many experts were speculating that the probability of the event is minimal and this is why there are no preparations. At the same time the authors stressed the global climate changes and more intensive traffic. Nowadays, even minor incident, like faulty telephones at traffic control tower in the United Kingdom in December 2013, may cause 250 flights cancelations and 1000 flight delays.

In the conclusion the author stresses the importance of changes in the safety protocol of airports, new emergency situation management schemas to be created and the action plan preparations must be included to KPI of the administration boards. The discussion at the international level should be initiated. The body of research to unveil the more details of the problem and action plan models to be implemented.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE SYNDICATED LOAN MARKET – POST- OR PRE-CRISIS

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Key words: *banks, syndicated loans, financial crisis, global debt market*

JEL code: G21, G01, G15

Unlike the traditional bank credit, the syndicated loan is provided by a group of lenders and is managed by one or several banks. Each bank in the syndicate takes part with its own share of financing, the aim being to distribute the credit risk among the participating banks. In the last decade syndicated loans turned into one of the most dynamically developing segments of the global debt market. The annual volume of syndicated loans in 2015 reached the sum of 4.7 trillion USD compared to 1.8 trillion USD in the year of crisis 2009. Syndicated loans contribute considerably to economic development because they provide an important part of financing of large capital investments in industrial production, services and the public sector. The trends in the volumes of provided loans, their distribution according to sectors and purposes, setting prices of contracts and setting up the syndicate composition are the basic factors for providing a clear indication for the investment activity, market situation and the expectations of key investors.

The main purpose of the research lies in discovering the post-crisis challenges for the syndicated loan market development in Europe. The analysis of the regional and sector profiles of the provided syndicated loans in Europe in the 2009-2015 period sends contradictory messages that suggest pessimism rather than optimism. Based on that, the focus of the research widens to include issues about the evolution in the philosophy of syndicated financing, the development of the elements of the syndicated composition, the necessity to update the tools of risk management, the use of buffers and non-price compensatory mechanisms and the opportunities for making corrections in the price setting of the syndicated loan agreement.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

INCENTIVES TO ENTER THE LABOUR MARKET IN LATVIA

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Key words: *work incentives, participation tax rate, tax-benefit system, EUROMOD microsimulation model*

JEL code: C15, H24, H31

The aim of this paper is to analyse a number of reforms of the labour tax and benefit system that came into force since January 2016 (introduction of the progressive non-taxable minimum, increase in the amount of the allowance for children/dependents, solidarity tax charged on high salaries) with respect to their effect on the changes in incentives to enter the labour market. The *participation tax rate* (PTR) is used as the indicator of the incentive to work at the extensive margin. PTR is defined as the proportion of total gross earnings lost in the form of tax and withdrawn benefits when a person enters employment.

Using the European Union tax-benefit microsimulation model (EUROMOD) and the European Union Statistics on Income and Living Conditions (EU-SILC) survey microdata, PTRs are computed in two different ways and the results are compared. At first, PTRs are computed only for those in work by comparing disposable income in two scenarios: EUROMOD is run to simulate baseline disposable income where an individual's earnings are equal to actual earnings. Then, earnings are set to zero and simulate disposable income at zero earnings. The difference between the disposable incomes in these two scenarios is used in the calculations of the PTRs.

Another way of the calculation of PTRs takes into consideration both employed and unemployed and suggests using a classical wage equation (Heckman two stage estimation method) to predict the hypothetical wage rates for those actually not working on the basis of the observed workers' wage rates.

Estimates of the impact of selected reforms are made for different income groups by looking at the distribution of PTRs by deciles of disposable income in the baseline and reform scenarios. The results suggest that the progressive non-taxable minimum slightly reduces PTRs for low-income earners, nonetheless high PTRs in the lowest deciles suggests a particularly strong disincentive for low-income persons to participate in the labour market. Increase in the amount of the allowance for children/dependent reduces PTRs and improves incentives to increase labour supply at the extensive margin, while solidarity tax charged on high salaries could slightly increase the PTRs of high-income earners.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

OPPORTUNITIES OF DECENTRALISED FIGHTING DEPOPULATION

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Key words: *Public economics, Depopulation, Local Government, Marketing*

JEL code: H75, H77

Principle of the free movement of persons together with lucking behind economy of the majority of new EU member states leads to stable tendencies of depopulation. Attempts to improve situation by central governments in many cases are not efficient, particularly because centralistic approach – concentration of development resources in several sectors and in several development centres. Research aim is to analyse an alternative approach – fight depopulation by particular strategy of each local government, taking into account local opportunities on the basis of competition among territories.

Several policy analysis methods are applied to characterise main factors, which influence non popularity of local approach for development among leaders of municipalities. Paper is based on the experience of Latvian Association of Local and Regional Governments (LALRG) applying Norway Instrument to introduce strategic management approach in the Latvian municipalities.

Discussed proposals to achieve local improvements include: facilitation of structural changes in local economics by new paradigm: high level of remuneration instead of cheap workforce economics, high productivity instead of maximal employment, early specialisation of secondary education, active co-operation with local entrepreneurs and potential investors to achieve preferences compare to other municipalities in order to facilitate competitiveness, facilitating returning of youth after getting of education and experience abroad.

Complex of measures, proposed for implementation of such paradigm include introduction of local government marketing methods, gathering and analysis of information, which is not presently available, introduction of motivation measures, which yet are not typical for public sector, introduction of middle term budgets.

Among main obstacles to implement such ideas are: increasing tendencies of normativism and bureaucratisation in EU countries, increasing pressure of national auditing and controlling institutions, pressure from mass media to decrease local autonomy, problems of leadership among local politicians.

To improve situation the education level about public administration and public economics has to be increased as first priority.

Main conclusions are, that Local governments can substantially improve situation with their territory depopulation, however they only partly can influence factors of depopulation compare to EU, national government and private sector. Local strategy management process must be as flexible, as possible and content must be as different, as possible from content of strategies in neighbour municipalities.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

EU POLICY IMPACT ON HIGHER EDUCATION CAPACITY IN LATVIA¹

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Key words: *higher education, capacity, expert evaluation*

JEL code: E61, F62

Policy-making for the development of “Europe of Knowledge” has relied on a number of different policy instruments. Comparing their relative impact and also comparing their impact across national and institutional borders may provide new insights as to what instruments work in higher education (HE) reforms. Since both Bologna Process and Erasmus+, as well as EU research funding schemes include a number of various initiatives, it would be then possible to identify where effort should be put to make a difference in HE reforms and how to make the process more efficient. It is crucial especially for EU countries like Latvia, where the GDP per capita and the average income for inhabitants is comparatively.

The purpose of this research is to find main factors hindering the changes in higher education capacity and to emphasize the kinds of instruments to carry out policy changes.

We propose to make analysis based on capacity of the system.

Capacity is systems potential to realize systems function, thus authors have identified and offer five HE capacity elements:

- policy making capacity (what are the aims, desired outcome, are policies linked to other policies, policy implementation process etc.);
- legal capacity (normative base, accreditation system, potencial of state organizations etc.);
- the organisation of teaching and research capacity (including the relationship among the central level, constituent faculties and chairs or the internal organisation departments, curricular governance organization and structure, internal quality assurance mechanisms, external cooperation, etc.);
- funding capacity (including national resources and European funding as Horizon 2020, Erasmus+, etc.);
- information capacity (benchmarking exercises, exchange of good practices etc.).

Next step is the evaluation of quality for these elements. To do this, expert interviews will be carried out and they will judge about the quality of elements in the interval scale from 1 till 10.

After that, *authors will provide* matrix analysis of capacity elements to find interrelated impact by expert judging in scale -2, -1, 0, 1, 2. This two steps analysis shows the “bottle neck” elements of capacity and can be used to increase EU policy effectivity. It may identify the elements and the overall scope where change is necessary, then the order of regulations needed and also stimulus of change in capacity of HE.

¹ The research has been done under the project Nr. NFI/R/2014/006 “EU policies impact on the transformations of the higher education and research system in Norway and Latvia”



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

LATVIAN LABOUR MARKET DEVELOPMENT CHALLENGES AND PROBLEMS

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Key words: *economic activity, the labor market, the unemployment rate*

JEL code: E24, J21, J24

Since 2011 the growth of GDP in Latvia was positive and one of the fastest in EU, but the economy of Latvia is still in the recovery phase after the economic crisis, as the pre-crisis level of GDP has not been reached yet. Along with the worsening labour market indicators Latvia is currently facing new trends in its labour market. The article's scientific problem is to assess the main problems and development challenges of Latvian labour market. Significant problems in Latvian labor market are structural unemployment as well regional disparities in unemployment figures, which can be solved complex, attracting both national and EU structural funds and business funds for the development of depressive regions. Still actual is labour emigration and increase of labour cost because of economic growth and open labour market. The aim of research is to investigate Latvian labour market development tendencies during post crisis period (2010-2014) and to identify most significant problems, that limits more rapid employment increase, as well to evaluate expected structural changes in Latvian labour market and national economy till 2020. Major labour market challenges in future are related to the imbalances between higher education supply and labour market demand, large proportion of young people entering the labor market without any particular specialty and skills, shortage in labour with secondary professional education.

By the assessment of data there have been used methods of analysis and synthesis, reference and dynamical line. The main research sources include the information available in the databases of the CSB and Eurostat, as well as the studies and publications by the Ministries of Economics and National Employment Agency of the Republic of Latvia. Results of the analysis highlighted the potential economic policies to improve the situation in Latvian labour market. In order to promote increase of competitiveness of Latvian economy and labor market development, there is a need for further structural reforms that will facilitate the transition from low to medium and high-tech industries, as well productivity growth, improving innovation capacity, export promotion, access to finance, development of industrial zones, efficient use of resources.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOCIAL PARTICIPATION THROUGH VOLUNTEERING AS CO- PRODUCTION OF PUBLIC SERVICES: CASE STUDY OF LATVIA

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Key words: *Volunteering, Social participation, Active Citizenship, Co-production, Public good*

JEL code: D71, O15

Active civic and social participation is considered to be of a significance importance for a country's development in democratic societies. One of the very popular forms of active citizenship is volunteering – the third economy sector that produces civic goods and/or services which public and private sector are weak or inactive in. In this aspect volunteering is also a mean for organized civil society to participate in production of public services which in scientific literature is addressed to as co-production. Volunteering in Latvia is yet on its way to being considered as a valuable part of general active citizenship and social participation, and admittedly even further from being a serious part of co-production. Given that a co-production is comparatively new term and also a newly recognized trend in public administration, it is still more a topic in scientific research rather than a practice. However, there is growing number of good case examples both ongoing and recognized by the concept of co-production, as well as newly emerging from the concept. Comparing to other European countries volunteering in Latvia is a new way of social participation that mostly attracts youth and seniors. Volunteering is relatively recently recognized activity in Latvia, however this sector of economy is developing and has its achievements.

The aim of the research is to explore social participation in Latvia through volunteering, including its legal regulation and organizational setup, and in this regard to identify aspects and prospects of volunteering in Latvia within the concept of co-production of public services. Authors compare some aspects of volunteering as a part of social participation and co-production in Latvia to other European countries to identify common and different aspects and make conclusions for perspectives and good case practices. The authors also summarize the definitions of volunteering, social participation and co-production concepts and define the hypothesis for further studies to explore volunteering as a mean of social participation and co-production in Latvia. The research is exploratory by design. The main methods of the study applied are analysis and synthesis. The current research has both theoretical and practical application.

The study is organised within the framework of the EU program's "Europe for Citizens" international project "Volunteering – Code of Active Citizenship" implemented in cooperation with six partners from different EU member states under the leadership of Kaunas University of Technology.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

IMPRINTS OF GLOBAL AND LOCAL ECONOMICS: FAMILIES AND HOUSEHOLD ECONOMICS IN LATVIA

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Key words: *conscience economics, financial literacy, household economics*

JEL code: I3, Y8, Z1

The aim of paper is addressing the family and household economics as a crucial area for understanding the context for social innovations and conscience economy. It is based upon 3 year-research on financial literacy of Latvian adolescents and their families. It combines both quantitative and qualitative methods: a regionally representative household survey (561 households, including 203 double interviews), 29 qualitative interviews with 38 persons and participant observation in 8 families conducted by anthropology students at the University of Latvia. Starting as a project on financial education at schools it soon moved to the families as centre for forming financial literacy knowledge and skills. The logic and development of household economics allows answering questions of high resilience of Latvian population during years of austerity, comparatively low trust to formal financial instruments in investing, saving or borrowing money. Social solidarity, investment in durable goods and in morally highly valued products and possessions such as education or house in countryside, comprises a system of economics of its own rules. So, not the lack of knowledge but rather a different kind of knowledge expresses itself when families face formal economics. The paper shows that financial literacy of a person is deeply rooted in his or her household economics and any change and innovation in the larger economic system is possible only at the cost of transforming socially embedded economic behaviour in family.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

RELATIONSHIP MARKETING: CONSUMER BEHAVIOUR COMPARISON IN THE TRADITIONAL AND ONLINE TRADE MARKETS

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Valerijs Praude, University of Latvia, Latvia

Key words: *relationship marketing, customer behaviour, online trading*

JEL code: M31

Nowadays a consumer has become much more developed, more knowledgeable and more effective in taking his decisions concerning the market. Now it is more difficult to reach the consumer and to offer him some products. Therefore for a company to be able to communicate effectively with the customer the choice of the only one-way channel of communication would be wrong. Satisfaction, which appears there in consumers during and after the purchasing process, has become important. It produces a long-term relationship between the consumer and the company, forms loyalty and trust to the company's products / brands.

The aim of the paper is to evaluate the importance of relationship marketing as a factor of consumer behaviour in the online trading process.

The following methods were used – literature study and analysis, respondents survey and statistical analysis conducting.

The paper include a comparison of relationship marketing and consumer behaviour in online trading. In the perspective it could be a mistake to apply the same approach to communication with consumers in the traditional market and in the online trading market, because the consumer behaviour in those markets is different. During this study, the author analyses and evaluates not only differences in consumer behaviour in two different markets – the traditional and the Internet, but also finds the best possibility of relationship marketing of consumer behaviour on the Internet.

The study shows the main characteristics of the consumer in the online trading environment. The analyses of the conducted survey will help encourage relationship marketing efficiency in online trading.

The research results can be used practically in choosing effective communication with consumers, in creating a long-term relationship with them, and in using relationship marketing and adapting it to the Internet trading market.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THREATS TO SUSTAINABILITY OF NATIONAL PENSION SYSTEMS: THE RESULTS OF EUROPEAN AND BALTIC EXPERT POLL

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Key words: *pension systems, Baltic States, public pensions*

JEL code: H55, H75

The paper presents the results of the expert poll, where leading experts from 11 European countries were asked to fill the questionnaire elaborated by the author. The questionnaire included three major questions: assessment of measurement instruments of pension adequacy, assessment of measurement instruments of pension equity, assessment of pension sustainability threats. The proposed answers' entries have been developed on the basis of the analysis of respective academic literature and the author's previous research.

The answers were collected in person and electronically by e-mail in September-October 2015. The total amount of the responded questionnaires – 15 (7 experts from the Baltic States and 8 from other European countries). Mainly the pollees are European Social Policy Network (ESPN) national coordinators. The experts' responses have been analysed with the assistance of SPSS.

The first and foremost threat to future adequacy and overall sustainability of pension systems in the region is population ageing: all Baltic experts demonstrated great concern on that factor: Estonian, Latvian and Lithuanian experts gave scores from “8” to “10” (“10” was the highest possible score on the scale from “1” to “10”). On the second place the experts put the problem of labour market globalisation, leading, in our circumstances, to emigration of working-age population and further worsening of dependency ratio. The third place in this rating is taken by shadow economy with a significant amount of persons' earnings not covered by social insurance.

With the growing importance of the funded pillars, the sustainability of future pensions can be undermined also by poor performance of private pension funds, not able to generate sufficient levels of profitability (the Baltic experts scored this factor with “7” as average).

All the experts have also agreed that the sustainability may be threatened by disadvantageous labour market patterns: unemployment, part-time employment, spread of freelance and self-employment not properly secured by social insurance schemes.

Respective public policy measures should be taken in order to mitigate the threats identified by the experts.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

EVALUATION OF THE AUDIT QUALITY CONTROL REQUIREMENTS

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Key words: *Audit quality, control, audit requirements, quality factors*

JEL code: M42

Main purpose of the paper is to analyse audit quality, evaluate implementation of the quality control requirements and to present proposals of audit quality improvement. The research consists of three main parts: the analysis of literature, research methodology and analysis of the results received from the implemented research. The goal of the research is to evaluate conditions of audit quality requirements implementation. Based on research methodology experts evaluation method was chosen. Criteria for experts were determined and created questionnaire was described.

Based on experts' answers, the most difficult to implement requirements of Human Resources element. Main external factors, which auditor meets while implementing quality requirements are (1) audit market stagnation and decline in demand and (2) pressure to reduce prices for provided audit services. These two factors determine difficulties in implementation process and cause other factors, which determine difficulties in implementation on each element level. The core internal factor, which causes difficulties, is ability to ensure necessary and sufficient resources. If auditor would successfully manage implementation of this factor, implementation of other internal factors would be easier.

The conclusion and recommendations summaries all the relevant findings and states that the audit and its quality are important areas, providing clear benefits in today's economy. Audit is forced to react to developments on the internal and external factors. Over time and rapidly changing environment new threats and new needs occur, thus development of already existing standards and creation of new standards should take into account the economic situation in the audit market and other factors that determine the complexity of implementation quality requirements in daily auditor's activities.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MONITORING E-COLLABORATION: PREPARING AN ASSESSMENT CATALOGUE

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Key words: *eCollaboration, Collaborative Learning, eLearning, Assessment, Learning Analytics*

JEL code: D83 (Learning), O15 (HR), I21 (Analysis of education)

Problem statement: This paper is a part of an extensive action research project on learning analytics and focuses on the analysis criteria in Virtual Collaborative Learning (VCL) settings that have been applied for over 12 years now. Therein 40 students (mostly of the Business and Economic Faculty) work together in small groups of 3-6 members. They collaborate in international teams and solve ill-structured problems on a social software platform. During the 6 week working period they are supported by lecturers and e-tutors as virtual learning facilitators. Therefor we analyse how learning facilitators can increase their efficiency by (semi-)automated learning analytics. The starting points are monitoring criteria that enable the facilitator to identify learning problems and deduce adequate actions of intervention. However the sophisticated media-based learning environment does not allow to monitor the huge amount of criteria manually and appreciate the learning processes simultaneously. Hence an optimal support by the facilitators to reach the learning objectives cannot be guaranteed currently.

Research aim: For the purpose of the main project's research objective to ensure successful learning facilitating in formal e-learning settings through learning analytics, this paper fulfils the sub-goal of preparing an assessment catalogue for e-collaboration. To achieve this sub-goal the following research questions (RQ) will be addressed:

RQ1: What defines "good e-collaboration"?

RQ2: What are the differentiating dimensions for the assessment?

RQ3: What assessment criteria belong to these dimensions?

Research methods: For the data collection the authors used the systematic literature review. We analysed 11 selected databases of EBSCOhost regarding criteria for assessing collaboration based on social software within the context of education or enterprises.

Main results: The results of the literature search contain 634 publications that have been evaluated due to their relevance based on title, keywords and abstract in the next step. Thus we could narrow the potential publications down to less than 200. The remaining publications have been analysed according to the qualitative content analysis method to identify the characteristics of e-collaboration. As the overall results we can present the differentiating dimensions for e-collaboration as well as an overview of the appropriate assessment criteria.

Theoretical/practical implications: This article contributes a state-of-the-art of the current research findings on quality criteria of e-collaboration. The identified dimensions and criteria serve as a catalogue to assess the quality of e-collaboration projects. The results of this article show what assessments should be implemented in learning analytics for an e-collaboration project.

Conclusions: This research focuses on how to measure the quality of e-collaboration. For this purpose we worked out the assessment dimensions and the belonging criteria by using a systematic literature review. The results can be used as a basis for further learning analytics to support the learning supervisors in real-time.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

DEVELOPMENT OF SUSTAINABLE ROAD FINANCING MODEL, APPLICABLE TO THE REDUCTION OF ROAD REPAIR DEFICIT

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Key words: *road financing, road repair, development*

JEL code: R400, R420, R490

Road network is a ground of sustainable economic, human securitability and balanced national development. In order to create a single, integrated transport corridor offer there is a need of quality and arranged network of the roads.

In order to effectively and properly use Latvian road and rail networks, it requires a balanced, structured and sufficient amount of funding for maintenance and development of infrastructure. To be capable of ensuring the country's economic and social development, the transport system needs to be efficient and competitive. Increase of investments in the transport infrastructure and its improvements are widely used in many countries in such moments when there is a need to stimulate the economy or contribute to its development. Quality transport infrastructure is a prerequisite for the smooth functioning of the transport sector; transport infrastructure is the basis for economic growth. To meet the public demands for new or improved transport infrastructure according with increased volume of traffic and to make renewal of obsolete infrastructure, investments in the transport infrastructure, in the construction, renovation, improvement and maintenance are high. When deciding on the allocation of funding, the allocation of funding involved must be able to prioritize investment objects.

In particular, it is essential to be able to make the right decisions on the allocation of funding and investment opportunities, if the available funding has been substantially reduced.

The Study aims to explore the attraction of resources and distribution towards Latvian roads funding, as well as to develop proposals for improvements of methodology for financing and distribution of roads developments in comparison with the experience of other countries. To achieve the Study aims the following objectives are to be set: the analysis of road of development, resource raising and allocation of improving scientific knowledge study of different theoretical models of national road financing, creating of Latvian financing methodologies, its comparison with the experience of other countries, as well as the development of Latvian road resources necessary for development to attraction and distribution.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

WELFARE AS ONE OF CONSTITUTIONAL VALUES ESTABLISHED IN THE CONSTITUTION OF THE REPUBLIC OF LATVIA

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Key words: *welfare, constitution, fundamental rights*

JEL code: K19

Satversme (Constitution) of the Republic of Latvia consists of written norms, general principles and values. It is recognized that the State of Latvia is based on fundamental values that include fundamental rights, democracy, sovereignty, separation of powers and rule of law. Constitutional Court of the Republic of Latvia opposite to the opinion explored in the legal science in its rulings is not using term “core of the constitution”.

Welfare is one of the fundamental values which can be found in the Satversme *expressis verbis*. The latest norm: preamble of the Satversme establishes that the State of Latvia is established to promote welfare of the people of Latvia and each individual. Term “welfare” is established in the oath of the State President (but not Saeima member) who should work to promote welfare of the Latvian state and its inhabitants (Article 40). In accordance with the Article 116 and Article 1 of the Satversme, fundamental human rights can be limited if there is a legitimate aim or it is necessary to protect constitutional values; also welfare.

It can be concluded that term “welfare” is very broad: it covers common material wellbeing of society and also immaterial aspect that are necessary to ensure harmony in the functioning of society. Case law studies prove that welfare as a legitimate aim is used in many cases to justify limitation of very different legal regulation. Case law analyses shows that legal norms which protects interests of a child, limits the rights to social security, obligates persons to pay taxes, limits the rights to property, and regulates credit institutions or are very close connected with business environment and entrepreneurship, as well as guarantees the rights of specified persons (f.ex. insolvency procedure administrators) are reviewed by the Constitutional Court in the light of constitutional value – welfare, thus fulfilling the content of it. In some cases welfare is analysed together with another different constitutional values.

The aim of a paper is to cover the content of the value “welfare”, to analyse the real possibilities of the State President to promote welfare, as well as to analyse case law of the Constitutional Court. Aim of the research paper and conclusions are provided by using analytic, comparative, deductive and inductive research methods in social science.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

BANKING AND FINTECH: A CHALLENGE OR OPPORTUNITY?

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Key words: *banking innovations, FinTech, APIs*

JEL code: G21, M15

Global economy, growing importance of innovations as well as wide use of technologies have changed the banking business worldwide. Financial technologies (FinTech) has become an integral part of banking, and nowadays banks have started to compete beyond financial services facing increasing competition from non-financial institutions providing e.g., payment services. Start-up service providers, search engines and social networks have expanded their services “interfering” in the field traditionally covered by banks. The rapid rise of FinTech has changed the business landscape in banking asking for more innovative solutions. These recent tendencies require the banks to increase investment in financial technologies, rethink service distribution channels, especially the business-to-consumers models, increase further standardization of back-office functions etc. Some members of the financial services industry see the boom in FinTech as a threat to traditional banking industry. Others believe that FinTech has become a challenge that can be turned into an opportunity as it provides more flexibility, better functionality in some areas and aggregation of services.

The aim of the paper is to analyze the recent trends in banking, identifying opportunities and risks of FinTech for banks. A timely integration of FinTech into business allows banks to get an advantage in growing competition. This paper provides an extensive analysis of recent trends in banking and FinTech, examining experience of leading European and US banks, as well as surveys conducted among members of the financial services industry in different countries. The authors have studied the development of the financial innovation and technology market, assessed the existing regulations and practices applied in Europe in the field of FinTech, identified the main risks related to development of Fintech and financial innovations the banks are exposed to on the micro and macro level. The paper provides recommendations for regulators and banks to ensure reduction of operational risks associated with development of FinTech. Analysis of FinTech market has shown growing competition, including from non-financial institutions. The paper provides practical recommendations to commercial banks for strengthening the position in financial innovations and controlling the risks associated with introduction of financial innovations.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ESSENTIAL ELEMENTS OF BUSINESS PROCESS MODELLING

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Key words: *process, modelling, business, logic, elements*

JEL code: M12, M15, M53

Problem statement. In the scientific research of Business Administration and Management important role play different type of business process models which are used for very different purposes. Two sides of model usage are: misty business process models in the scientific research papers and strongly formalized notations and tools in real process modelling. It is necessary to reconcile both sides for scientific findings testing and converting them to the innovations.

Research aim. To identify essential elements and aspects of business process modelling. To develop business process modelling logic.

Research methods. Studies of business process modelling experience and scientific research, tools, notations, model development for different purposes.

Main results and findings. It is possible to define essential elements, aspects and stages for business process modelling. Modelling is abstracting, only main important details are maintained in the business process model. Criteria for details selecting is model purpose, but the set of essential things is represented in the every case. Inspection of essential elements allow to develop logically complete and interconnected different view and aspect models system which can be realized in formal notations or analysed, simulated and evaluated by applying different tools. Model development and usage can be defined as lifecycle with particularization and implementation.

Practical implementations. Modelling logic is implemented in different level (bachelor, master, doctoral) study courses, students are able to identify, to develop, to evaluate, to simulate business process models without assistance.

Conclusions. Introduction of modelling logic in personnel training will allow more widely to use IT tools in the business administration and management scientific research, in the business improving and reengineering.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

ASSESSMENT OF INTERNSHIP AS AN INTEGRATED COMPONENT OF THE EDUCATIONAL PROCESS FROM THE PERSPECTIVE OF STUDENT AND EMPLOYER

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Key words: *Integrated Component, Internship, Valuable Experience, Exploratory Factor Analysis*

JEL code: A29, I29

Internships as a temporary position with an emphasis on on-the-job training by employer are an essential component of the integrated educational process for academic and special professional study programs. Students of professional study program E-business and Logistics Management Systems of University of Latvia have two internships within the study process.

The aim of the paper is to evaluate the internship as a cooperation model among educational institution, industry employers, and students. By reviewing the surveys of students, who have taken internship, and employers, who ensure the workplaces for practice, different internship issues were considered. Data was collected in a two-year period and in majority represented internship in information technologies' and logistics' companies.

From a student's perspective the judgment of internship was achieved, essential benefits were named, self-appraisal for skills and experience evaluated. From the perspective of the industry – employer that workplaces ensured – motivation for cooperation was investigated, attained experience was evaluated.

Results of the research demonstrate: the motivation of companies, which hire students for internship, is not only to attract new employees but also to participate at students' vocational training process. 63% of employers find the skills and competences of students satisfactory, they specifically assess such abilities as ability to take responsibility, knowledge to use information technology, and motivation to work. 72% of students acknowledge that during the internship they have gained valuable experience for future careers, have learned new skills, techniques, improved communication skills, and achieved better understanding of company's operation and business processes.

For further research exploratory factor analysis for student survey data should be applied to identify the underlying relationships between measured variables and the most important factors of satisfaction with internship respectively.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

PROFILES OF LATVIAN SMES AS BORROWERS¹

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Key words: *SMEs financing, loans, banks*

JEL code: G21; L10; O12; 016

The availability of funding is one of the key problems in the small and medium-sized business not only in Latvia, but also all over the European economic space. The lack of funds results in the starvation of the economy preventing it from full-fledged development.

The data from the research conducted by the Business Association of Latvia and SEB bank show that 70% of the new entrepreneurs borrow the start-up capital from friends and family thus opting for the untraditional channels for raising funds (Business Association of Latvia, 2015). Several experts recommend considering the crowdfunding method for starting a business thus suggesting that the traditional channels of funding (bank loans etc.) do not work (Leiterts, 2014; Mančinskis, 2015).

According to statistics, the loan portfolio of the commercial bank system of Latvia (CBSL) steadily shrank in the period between 2008 and 2014. It, to a large extent, was due to the effect of the recession characterized by writing off the bad debts and gradual correction of the household indebtedness (Financial Stability Report, 2014).

The aim of the research is by developing the profiles of Latvian SMEs to analyse the factors that interfere with the availability of funding to the small and medium-sized companies and to design recommendations for the more effective raising of funding.

Enabling objectives of the research:

- Based on the SIBiL data, to develop the profiles of Latvian SMEs as borrowers;
- Based on the SIBiL and LURSOFT data, to analyse the demand for loans;
- To analyse the economic performance of established groups;
- To analyse the factors interfering with the availability of funding;
- To design recommendations for more efficient raising of funds.

In the research was used an unique set of data designed by Vjačeslavs Dombrovskis and his colleagues at TeliaSonera Institute of Riga School of Economics: SIBiL, Survey of Innovative Businesses in Latvia where they follow the development of more than 1200 small and medium-sized businesses (SMEs) in the area of manufacturing in the period from 2008 to 2015.

The results of the analyses will be discussed and recommendation will be provided for policy makers and academician in the last section.

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New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

TOWARDS MODEL OF CORPORATE IDENTITY MANAGEMENT AND OPPORTUNITIES FOR ITS IMPROVEMENT WITHIN HEALTH CARE INDUSTRY

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Key words: *corporate identity, corporate identity management, health care*

JEL code: M30, M31, I11

Corporate identity is an interdisciplinary management and marketing concept. Theoretical foundation indicates that efficient corporate identity management may facilitate the creation of company's competitive advantage in a form of increased customer satisfaction, leading to higher loyalty in long term.

The paper reflects the results of the corporate identity management research of the Latvian health sector experts, companies and patients, and introduces opportunities for the corporate identity management improvement on public health policy planning and health care policy implementation levels. This paper summarizes the results from the qualitative and quantitative studies carried out by the authors. The research methods include expert interviews, surveys of both, health care service providers and their customers (patients).

The research results indicate the need to categorize corporate identity dimensions into fully manageable, partly manageable and unmanageable dimensions. The main focus of company management should be directed towards fully manageable dimensions – to develop patient service culture, visual identity and sensory dimension management, along with corporate communication management including communication in digital space and social networks. By contrast, partially manageable and unmanageable dimensions can be utilized within corporate brand development to facilitate strengthening of the competitive advantage that is achieved by proper corporate identity management.

The outcome of the research can be practically implemented by different health care industry members, and a model for corporate identity management developed by authors can be used as additional management tool to improve corporate identity management in Latvian health care enterprises.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

CRITICAL FACTORS OF PRE-ACQUISITION DUE DILIGENCE IN CROSS-BORDER ACQUISITIONS

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Key words: *due diligence, information asymmetry, organizational learning, mergers, acquisitions, risk assessment*

JEL code: G34, G32

Cross-border acquisitions play an important role in corporate strategic development and international expansion. During the past decades, mergers and acquisitions have been intensively researched through the lenses of strategic management, corporate finance, behavioural finance etc. Despite the intense effort, the progress made is still fragmented and lacks unifying theories that approach the entire acquisition process on the one hand, and in-depth research of critical factors on the other. The intent of the research paper is to establish a vital link between research and practice of mergers and acquisitions. The research is based on theoretical analysis of the information asymmetry and the exploratory learning in the pre-acquisition phase of cross-border acquisition.

In detail, research investigates the critical factors – and their consideration in the extent of due diligence carried out in the pre-acquisition phase. Pre-acquisition due diligence theoretically conforms to organizational learning theory, which proposes the more the acquiring firm learns about the acquisition target, the higher the probability of a successful acquisition. The central hypothesis of this thesis states that due diligence, including the critical factors, in the pre-acquisition phase is related to acquisition success. The empirical evidence is based on data sample of cross-border acquisitions in the European market, made by firms from automotive industry. The main results support the proposition that Choice of Strategic Partner, Business Capabilities and HR Knowledge and Financial Factors and Acquisition Premium are critical factors of due diligence. They are positively related to successful cross-border acquisition. The strongest relationship is between business capabilities and knowledge transfer as the main asset for realization of synergy values and successful acquisition. In this context, the valuation of the business capabilities of the acquisition targets is classified as the main challenge for reflecting suitability of the acquisition price and establishing value generation from the combined firms in the post-acquisition phase.

By studying acquisition risk and critical factors – both success and failure reasons – this research has tested and proven a theoretically sound assessment framework that can pre-determine the success or failure of planned acquisition efforts. From a practical standpoint, the research results provide acquisition management with a simple method of evaluating acquisition candidates prior to the acquisition. Such a reference model is practically useful offering guidance for firms with acquisition needs.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MERGERS AND ACQUISITIONS: EXAMPLES OF BEST PRACTICE IN EUROPE AND LATVIA

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Key words: *mergers and acquisitions, firm value*

JEL code: G32, G34

The aim of this study is to research examples of mergers and acquisitions of European and Latvian firms, the motivation for these transactions and their results, and to show that the process of mergers and acquisitions has a positive impact on the development of the industry overall and on specific firms by increasing their competitiveness.

The authors analyse the reasons for, meaning and impact of mergers and acquisitions on firm development, focusing, first, on the example, of dairy companies in Europe and subsequently focusing on these processes in Latvian dairy industry.

The study is based on the qualitative and quantitative analysis of firm financial reports as well as reports of the International Dairy Federation, publications of the United Nations Food and Agriculture Organization, annual reports of the International Farm Comparison Network, reports on the dairy industry in the European Union, Latvian Central Union of Dairy Producers, Lursoft firm registry data, as well as reports of Ministry of Agriculture and Latvian Farm Consultation and Education centre.

The study also uses methods of statistical comparisons by analysing firm operations before the process of mergers and acquisitions, during the process, and subsequent periods. In this way the authors were able to identify the impact of mergers itself on particular firms or the industry, while abstracting from further developments in the firm and industry and the factors that affect those. The process of mergers and acquisitions in Latvian dairy industry had begun in 2011 and continued until 2013, however the positive impact of this process was fully offset due to the geopolitical situation in Europe in 2015. The deterioration in geopolitical climate due to Russian-Ukrainian relations left a big impact on economic processes affecting also the development strategy of dairy firms.

This study finds that often the problems of firm development are related the lack of financial management, in particular, deficiencies in decision making on mergers and acquisitions of firms.

Historical and statistical analysis, as well as comparisons of successful experiences in Europe and Latvia allow the authors to conclude that Latvian firms, when evaluating decisions on the possibilities for mergers and acquisitions have to be guided by the most important results of this process: possible increases in foreign direct investment and the growth in market share. This will, in turn, give the firms an opportunity to acquire new technologies, reorganize the manufacturing process, and start producing goods with larger value added. Ultimately, this will allow to increase firm values.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

EMAIL MARKETING AND ITS EFFICIENCY IN LATVIAN COMPANIES

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Key words: *email marketing, email campaigns, email sending, email advertising, email efficiency*

JEL code: M31

Nowadays, one of the largest sources of income for businesses is the ability to sell their products to obtain the greatest profit. To achieve that companies use a variety of marketing techniques and marketing channels. A good marketing strategy can ensure that the product sells itself, but also, to the first-time purchase companies have to make sure that a second purchase as well. As modern enterprises have fierce competition, and buyers have a broad range of options to choose substitutes, they must be in different ways attached to the company, for it to be able to earn on a regular basis. One of the ways is to get the buyer's loyalty and emotional attachment to the brand. Email marketing is the best tool to this.

Since nowadays consumers move to the digital environment, then that is where they are making purchases and also the best environment to attract buyers. The digital environment exists due to the dynamics of internet penetration. Because of the internet, there is email, the more people have an internet connection, the more email accounts are created and used. Thus, the email marketing is a logical step for enterprises to gain customer trust, build with them long-term loyal relationships and enhance company's sales results.

The goal is to evaluate email marketing effectiveness in Latvian market by the recourse theoretical analysis about email marketing, analysis of statistical data of internet and email penetration, as well as surveys taken by email senders, recipients, and experts.

The result of the analysis of the recourses and statistical data shows that a great future for email marketing. A number of email accounts are growing every day, and internet gets more accessible thanks to the internet providers that are expanding their network. Survey results show that email receivers are willing to make a purchase, thanks to the email they received. The trust level for email marketing is low. Email sender on other hand see high potential for email marketing and value its efficiency highly comparing to other internet marketing tools. Experts are sure that email marketing is still new in Latvia, and the good practice of email marketing will reach Latvian market in 2 to 3 years.

The conclusion is that as knowledge and usage of email marketing grows, email senders get more savvy and email receivers seeing the good practice by the companies will trust email marketing even more. That will result in revenue increase by email marketing.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

HUMAN RESOURCES MANAGEMENT USE OF SOCIAL NETWORK SITES TO RECRUIT EMPLOYEES

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Key words: *networks, employment seeking, human resources management*

JEL code: L14, E24, O15

Trust and data protection is an important and actual part of social network sites (SNS). The mechanism of SNSs is influenced by data security. Individuals are not providing information about them or provide access to resources if data protection is not given. Trust is needed to exchange information or resources. This paper investigates the use of SNSs relationships for the employment seeking process. In this paper is explained mechanism of SNSs under consideration of the employment seeking process. This provides human resources management (HRM) knowledge about the use of social networks to recruit new employees and explain the usefulness of social networks and SNSs to identify employment. *The aim* of the paper is to evaluate attitude of SNS users on their willingness to share information about employment possibilities. *The task* of this paper is to support HRM to be more successful with their recruiting of employees and the use of social networks for their recruiting process. This support the time to hire candidates and reduce the transaction costs to identify potential candidates. *Problematic questions* are related to willingness to share information about employment issues on SNSs as often employment seeking process could be sensitive one and persons could have no willingness to share this sensitive information. *The research methods:* analysis of scientific literature, interpretation, quantitative research of survey data using indicators of central tendency or location (arithmetic mean, mode, median), indicators of variability, cross tabulations, correlation analysis. Data analysis was carried out using SPSS (*Statistical Package for the Social Sciences*) program.

In this article was applied the quantitative *research method*, questionnaire. The online survey has been done in October 2015. In total 210 participants ($n = 210$) filled out the complete questionnaire. The results represented in the paper are obtained by use of SPSS program. For statistical analysis of data has been used frequency, indicators of central tendency or location: arithmetic mean (the average of the evaluations), median (the middle value in the list of range devaluations) and indicator of variability – standard deviation. Also for processing the data was used correlation analysis. The data collected in accordance with research ethics. SNSs users are online and they are well trained to use online tools. The questionnaire asked the participants to evaluate statements on a scale from one – very useful to six very unuseful. The evaluation of this statements explain the use of SNSs contacts, level of information about other SNSs members which is acceptable to transfer to other individuals and the level of trust in SNSs.

The interesting point is to evaluate the control level and readiness to provide information of SNSs contacts to employer for the employment seeking process. The result support to understand mechanism of SNSs, to test the social capital theory and provides HRM information how to use SNSs contacts from their employees for the recruiting process. HRM can use the full potential of SNSs because than the company has a competitive advantage. HRM is able to identify the best suitable candidates for the companies with the support of SNSs. The results give an answer about the acceptance of SNSs member to use their contacts at SNS for the employment seeking process to support their HRM. Individuals share and exchange information on SNSs but the openness and readiness to give the control and power about contacts to employer is mainly not accepted.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

COMPENSATING THE EFFECTS OF DEMOGRAPHIC SHIFT IN PUBLIC ADMINISTRATION. A LESSON LEARNED FROM A LESSONS LEARNED PROJECT

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Key words: *Knowledge Management, Electronic Government, Demographic Shift, Public Administration*

JEL code: M15, J26, H54

Topic is the demographic situation in the Public Administration of the Free State of Saxony, Federal Republic of Germany, especially the **intensified demographic situation for the public IT sector (electronic government)**. We present first results of an empirical analysis of the as-is situation. Based on these results, we roll out a medium term strategy for **(1) knowledge retention** (explicit and tacit knowledge of public IT experts), **(2) knowledge assessment** (which knowledge shall still be needed in future?) and **(3) knowledge sharing** (ontologies and workflow models = **knowledge codification** and sensitising and qualification programs for the future employees as blended learning arrangements = **knowledge personification**).

The **solution** suggested addresses (1) the imminent loss of work expertise caused by retirements (10% of all public employees within the next 5 years, 27% within the next 10 years; Statistisches Landesamt des Freistaates Sachsen 2013) and (2) the demand for leaner (and higher automated) administrative processes due to a general severe reduction of public employees in future. An effective public administration is important for the private sector, as it faces a shrinking population in a complex globalised world, demanding local and regional public support especially for SMEs (more than 90% of Saxonian SMEs have less than 10 employees; Unternehmensregister Sachsen, 2015).

Our research team consists of a network of knowledge management experts from Higher Education, IT and electronic government experts on municipal and regional level and representatives from the Saxonian State government being responsible for the modernisation of public administration and for the electronic government strategy of the Free State of Saxony. The main **research question** is: **“What knowledge shall get lost in the electronic government sector in Saxony when and where and how should this loss get compensated?”** Our research approach follows the **Design Science Research** paradigm (Hevner et al. 2004), the resulting IT artefacts are supported by mainly qualitative empirical analysis. The artefacts to be developed are (1) knowledge maps, ontologies and lessons learned describing the work experience of IT experts retiring or leaving public administration within the next 5-10 years (knowledge codification), (2) re-designed and automated administrative workflow models, reducing labour power and enhancing process quality (electronic government) and (3) blended learning arrangements (knowledge personification).

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New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

BLIND SPOT “INFORMATION RISK MANAGEMENT” (IRM) – THE DIFFERENT PERCEPTION OF EXPERIENCED MANAGERS AND IRM-PROFESSIONALS REQUIRE CHANGES IN MANAGEMENT THEORY’S

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Key words: *Information Risk Management, Management Theory, Decision Making, Enterprise Risk Management*

JEL code: C01, D81, O33

Purpose. Nowadays computer mediated communication (CMC) and the high volume of computed and stored information is getting a business on its own. Information is collected, aggregated, analyzed and used to create real business advantage and value but also risks within companies and also outside on the markets in a high volume. On the other hand, single individuals still need to deal and interpret this sheer mass of increasing information continuously.

Findings. The areas of decision making processes, methods and methodologies are well researched at all also on the base of Current Management Theories. The field of Information Risk Management as a sub-discipline of Enterprise-Risk-Management theories is in a constant change. This change is triggered by the dramatic ongoing changes in the computerized information management capabilities. Well accepted, in 21st century Information itself is a valuable asset. The correct information at the point in time needed decides on success – within milliseconds. Current Organizational Management theories don't take this constantly and rapidly changing environment into account. A undertaken series of 10 interviews of Information Risk Management Professionals compared with field-study of 131 Business Managers examines the differences in perception of related risks, actions and counter activities.

Implications. In Management Theory as well as in Organizational Theories the Information-Risk-Management discipline needs to be considered through the whole value chain as a separate value adding process and function. Esp. managers in middle management are exposed to this area risks, but might get into a conflict of interest between performing the required IRM-actions against showing a high cost-benefit rationale.

Design / Methodology. In an indirect group-comparison, 10 Information-Risk-Management-Experts were interviewed (structured interview), results are compared with 131 Professional Business Managers (Questionnaire) based on an artificial case study and introductory training on Information Risk Management

Research Limitations. This field study examines the differences found and reflects the results on the current well known theories. Derived change-proposals in Management Theory and Organizational Theory might be further developed and tested.

Practical implications. Information Risk Management as a discipline and as part of the organizational structure needs to be actively mandated and well implemented according business field and business needs by senior executives top-down, randomly assigned in mid-management or on shop-floor level it exposes the enterprise to a high economic risk.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

EVALUATION OF OPERATIONAL EFFECTIVENESS AND ECONOMIC VIABILITY IN AGRICULTURAL ENTITIES

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Key words: *efficiency, economic viability, analysis*

JEL code: M41; M49

Any kind of enterprise performance evaluation is a complex process that consists of many different stages. In theory there are a number of assessment models, individual indicators and systems for assessing the effectiveness. A special place among these systems occupy efficiency evaluation of agricultural entities. Examining operating agricultural entities Lithuania is not an exception, however Lithuanian agricultural entities operating efficiency is mostly examined only when contacting a credit institution or trying to get a support of the European Union (EU). This situation shows that Lithuania is giving too little attention to the operating efficiency of agricultural entities. In addition to both cases the evaluation of agricultural entities lacks of the precision. Creditors are assessing the agricultural operators by the system prepared for business assessment in which agribusiness specifics remains understated. When applying for EU support, the National Payment Agency under the Ministry of Agriculture checks the agricultural entities economic viability. Estimates are used in several kinds (profitability, debt coverage and debt) and all of them only superficially estimates the subject's condition. Because of this the farmers suffer when they often unsuccessfully try to implement the investment projects, thus restricting agricultural development opportunities. Also the economic viability of a Lithuanian agricultural entities is studied too little, and the theory of viability of agricultural entities that could provide useful information not only to the agriculture entity, but also to related ones is often ignored. The scientific studies pays too little attention to the agricultural entities assessment in the perspective of the economic viability, the proper selection and application of evaluation schemes. Therefore the problem is relevant in both theoretical and practical point of view resulting the need of the economic viability and efficiency assessment methodology in the studies of the agricultural subjects.

The aim of the study is to create the economic viability and efficiency evaluation methodology of the agricultural subjects. The research methods are the analysis of the scientific information sources, systematization and generalization of that information.

The article analyzes the various methods of efficiency assessment of the agricultural subjects in the view of economic viability and methodology, identifies the external and internal key factors affecting agricultural entities financial results and their impact on the economic viability. Based on the information analyzed in the article, the systemized methodology is presented to assess the level of efficiency and to evaluate the economic viability and effectiveness of agricultural entities, which allows a more accurate assessment of agricultural entities in view of the economic viability of the financial and non-financial factors.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SUSTAINABLE LEADERSHIP IN LITHUANIAN ORGANIZATIONS

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Key words: *sustainable leadership, organization, Lithuania*

JEL code: M10, Q01

Right now sustainable region development is in the center of attention of both politicians and business men, but some people still are sceptic towards it, because they see inconsistencies between what is being declared and what is actually going on in their countries, regions and organizations.

Scientific problem: Even though problems of sustainability in organizations are being analyzed in variety of scientific works in different disciplines, there is a lack of discussion about sustainable leadership. Sustainable leadership is crucial in influencing people, inducing change, creating public prosperity and cherishing values, which correspond with the highest principles of society. So the obvious scientific problem is inadequate understanding of sustainable leadership term in organizations and stemming insufficient implement of its principles in practice. Creation of sustainable organization is only possible for a leader whose thinking is sustainable.

Research aim: to do a sustainable leadership research in Lithuanian organizations.

Research object: Sustainable leadership.

Research methods: Scientific literature analysis, comparison, synthesis, methods of generalization and logical abstract, questionnaire. (We chose non-probable accidental respondent selection while using business association's addresses available on the internet. The questionnaire was done using a standardized form that was shared with respondents over the internet. Most questions in it were closed-ended, with a Likert grading scale. Data was analyzed with SPSS 15.0 software package.) The goal was to question organizations with help of Lithuania's statistics department's classification, which helps to work with organizations from different fields letting us to estimate in which fields there has been done the most progress and in which there still are problems considering sustainable leadership. 311 organizations agreed to participate in the research.

The results of the research point out that employees of the state were most likely to disagree with organizational goals to limit harmful exposure to nature, or with actions to eliminate it. Employees of the state were most likely to disagree with ideas of recycling or sparing use of electricity or paper, but in private organizations (both Lithuanian and foreign) employees were more inclined towards supporting these environmental views. On the other hand such events as picking up litter are more popular among employees of the state and respondents from organizations that have their capital from both state and private hands. Employees of strictly Lithuanian and private capital were not likely to be pleased about such events. Analysis of data showed that bigger organizations (from 100 to 999 employees) were more likely not to save paper, electricity or water than their smaller counterparts.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

INTERACTION OF ELEMENTS OF THE NATIONAL INNOVATION SYSTEM OF KAZAKHSTAN AT THE REGIONAL LEVEL

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Key words: *innovative economy, industry-government relation, innovation process, Kazakhstan*

JEL code: N15, O32

The development of the national innovation system directly depends on the effectiveness of innovation process at the regional level. Kazakhstan during the past 10 years actively creates conditions for the development of innovation, but the share of innovative products in the GDP remains low. The university-industry government linkages are not active. The aim of the article is to identify the main problems in the interaction of the innovation system actors at the regional level and provide the proposals for enhancing cooperation between science, entrepreneurs and government in R&D activity.

The study reveals a gap in the innovation process which takes place on the stages of prototyping and testing of innovations at the regional level. This gap is the case only for domestic R&D, involved into full innovation cycle, which starts from the creation of idea within the university or research institute and ends with the implementation in the form of new products or technologies on the enterprise. Methodology of the article includes scientific methods: system approach, analysis, synthesis, comparative approach, statistical method, cause-and-effect analysis, deduction.

The paper provides the mechanism of interaction between NIS institutions with the central role of technology parks and regional venture capital funds at the stage of prototyping and testing of innovation. Within the mechanism the services of technology park are not limited to business incubation, but include technical and technological expertise and receiving a prototype in laboratory conditions. Another feature of the mechanism is the financing of the innovation project not at the expense of state development institutions, but through the regional venture fund.

Overcoming this gap is of great importance for the development of an innovative system of Kazakhstan, as the domestic R&D is involved in the full innovation process and its implementation can give positive impact on the subsystems of the NIS, especially the innovative potential and innovative entrepreneurship.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

TWITTER AS A COMMUNICATION CHANNEL IN LATVIA'S TOP COMPANIES

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Key words: *Twitter, Latvia, communication tools, analysis*

JEL code: M31

Growing number of company social media accounts and social media users are indicators of social media importance in company communication strategies. These changes can also be observed in Latvia.

One of the most often used social media channels in Latvia is Twitter. Twitter has been developing through the years and offers users more communication, advertising and analytic possibilities than ever before. These changes have influenced how customers and companies communicate with each other. That is why systematically researches must be conducted in this field.

The aim of this paper was to conduct Twitter account analysis of 100 largest companies in Latvia to determine which Twitter metrics could influence the amount of company webpage visitors.

To achieve the aim of the paper several research methods were used: 1. Theoretical analysis to determine with Twitter metrics should be analysed; 2. Secondary data research method was used to: a. Collect data from Firms.lv database to determine which are the biggest companies by turnover in Latvia; b. Collect data from company Twitter accounts, such as: likes per tweet, retweets and other metrics; c. Collect data from company webpages, such as: total visitors, visitors from twitter and other metrics; 3. Statistical package for the social sciences (SPSS) was used to analyse collected data.

The main results of the paper were: 1. Authors discovered factors that can influence the number of visitors from Twitter to company website; 2. Authors developed suggestions that can increase amount of company website visitors from Twitter.

This paper is both theoretical and practical. In practice this paper can be used as an informational material when developing social media marketing strategies.

The theoretical contribution of this paper is that it can be used as a basis for other social media researches in Latvia.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

APPLICATION OF SOCIAL ACCOUNTING PRINCIPLES TO STATE-OWNED ENTERPRISES

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Key words: *accounting, state-owned enterprise, transparency, sustainability report*

JEL code: M14, M48

Information availability and disclosure are a precondition for effective governance of state-owned enterprises. The principles of social accounting are the tool that ensures information disclosure to the public about the operational environment of a state-owned enterprise and the justification for its achieved outcomes. Defined and publicly available goals are a characteristic feature of a good and effective practice of the management of state-owned shares. The research purpose is to study the development of social accounting principles and their application practice in the European state enterprises and, based on the research findings, to develop recommendations for ensuring the performance disclosure and transparency of state enterprises in Latvia. In the first part of the research, the authors pay the main attention to evaluating the operational goals of state enterprises in Latvia. In the second part requirements for information disclosure and publication of state-owned enterprises in particular European countries are studied. At the end, the authors summarise the main research findings and develop recommendations for ensuring disclosure and publication of sustainability reports of state enterprises in Latvia.

The monographic, analysis and synthesis methods, including interviews with experts have been used in the current research.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SMART INDUSTRIAL SPECIALIZATION: CASE OF LATVIA.

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Key words: *Industrial policy, specialization, Smart specialization strategy*

JEL code: L52

Latvia has gone unique pathway through economic development, which was related to several economic shocks, as well as remarkable growth in recent years. The economic model, which fostered an increase in domestic demand was not a sustainable and consequently led to an economic crisis. During after-crisis period transition to sustainable economic model is taking place in the economy of Latvia, in which exports and manufacturing are the key drivers of growth. In this stage of economic development concept of Industrial policy has been seen as potential to foster and support development in Latvia's economy. It shall be mentioned that debate on the necessity of industrial policy was initiated comparatively late after the independence, i.e., in 2008/2009, when the first analytical studies concerning necessity of the concept of industrial policy in Latvia were conducted, thus defining the role and activities of the State in fostering economic development. The first research was followed by recommendations from the Ministry of Economics regarding the role of the State in the economy. It should be noted that the recommendations of the Ministry of Economics and empirical studies highlighted the fact that theoretical and empirical studies of the economic science prove the benefits of an active state intervention in the economy which ensures that future development and welfare of the state can be free of restrictions and conditions imposed by the economic structure, and it forms an essential challenge for the present growth in Latvia

Similarly to development of Latvia's economy it is possible to look on development of industrial policy thinking, because it has gone through several changes in its fundamentals during last century including rapid changes in the set of necessary action for successful industrial policy.

Most recent trend within economic policy of the EU, is usage of so called smart specialization concept. Smart specialization is a policy concept developed by a group of academic experts in 2008, it very quickly made a significant impact on the policy audience in Europe. The idea of smart specialization has two sides. First, it is important to focus on certain domains in order to realise the potential for scale, scope and spillovers in knowledge production and secondly, it is important to focus on certain domains in order to develop distinctive and original areas of specialization for the future.

This paper discusses the development of industrial policy and economy of Latvia, assesses the smart specialization concept, and analyses the possibility of applying this concept within industrial policy of Latvia. The research is based on analysis of current macroeconomic situation and estimation of possibilities coming out of usage of Smart specialization strategy within Latvian industrial policy.

The main results and conclusions consists of authors assessments and finding where author have find out that it is not possible to adopt one size fits all solution to different economics, especially it is not applicable to small open economy like Latvia.



SETTING AN OPTIMAL LOAN PERFORMANCE WINDOW AND A BAD LOAN DEFINITION FOR THE CREDIT RISK ASSESSMENT MODEL FOR CREDIT UNIONS IN LITHUANIA

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Key words: *credit risk, credit unions, loan performance window, bad loan definition*

JEL code: G32

The aim of the research is to provide suitable methods for the setting of an appropriate definition of a bad loan and an optimal loan performance window for the statistical credit risk prediction models in credit unions. The article uses the following methods: survey, modelling, statistical analysis and evaluation of corporate loan data.

In the scientific literature, expert methods are usually applied in the analysis of the issues of credit risk model construction. However, the expert approach does not reflect the external environment, therefore, such methods cannot ensure high accuracy and can lead to significant losses for credit providers. For this reason, the authors have taken a different approach. Firstly, seeking to investigate business needs, expectations and risk tolerance of credit unions, a survey of these market players was conducted. The authors of this article surveyed 56 of existing 74 credit unions in Lithuania. Secondly, the Markov chain method for bad loan definition and ever delinquency curves, based on a cohort analysis for definition of optimal loan performance window were applied to a corporate loan data set from the credit union sector.

The survey has shown that credit unions are inhomogeneous in terms of tolerance of credit risk; most credit unions specified 90 days past due as a major bad loan indicator. However, a quantitative analysis shows that loans that reached 30 or 60 days past due in the first year, are characterised by a high probability of migrating to a worse state. In order to meet business needs of credit unions, we set 60 days past due as a major bad loan definition criterion and 25 months as an optimal loan performance window. The research results will contribute to the development of a state-of-the-art credit risk assessment and pricing model, suitable for use by credit unions having regard to the challenging modern financial market.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

SOCIAL POLICIES OF THE STATE IN THE CONTEXT OF GLOBALIZATION

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Key words: *social policies, welfare state, globalization*

JEL code: I30

A sharp change in the financial and demographic situation in many countries of the world leads to a change in the functions and scope of government involvement in the economy. The crisis of the model of the welfare state and social insurance systems in developed countries makes the search for a new socio-economic model of society that meets the challenges of globalization.

The aim of the article is analysis and evaluation of the social policies of the state with regard to their the adequacy of the challenges of globalization. Research object of this article is the socio-political activity of the state and other agents of social policy in the context of globalization. The tasks of the article are: a comparative analysis of models of social policies in developed countries (especially the EU); to assess their effectiveness in the context of globalization; analyze the relationship of the social policies of the state and economic growth; examine the nature of social change in the Russian model of state in modern conditions. This study uses a combination of methods of modern economic theory applied to the study of social and economic relations and the problems of global development. The main methods of this study are functional, comparative analyzes. The study shows that the main objective of social policy in the context of globalization is to create favorable social conditions of society. The social programs implemented by the state must ensure not only social justice, but also the market one.

The conclusions and results of the study can be used for theoretical study and forecasting of social and economic changes. Agencies the state could use the results to improve the efficiency of social policy.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MODERN TRENDS IN TAX PLANNING AND MINIMIZATION

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Key words: *tax, tax planing, business transfer*

JEL code: H20, H71, F38

Nowadays, financial globalization, business is international in nature, it is possible to make a business in the whole world, businessman's must pay close attention to the co-operation of national tax legislation and cooperation characteristics.

Globalizing World business is attractive to low-tax countries, tax havens. With the cooperation of those countries, tax planning, reduce costs, probably makes it possible to save a money on less invoices. For example, the Office in the Centre of London, a subsidiary is in Cyprus, the main production centre in Singapore, a major center of finance in the Netherlands, holding company in Luxembourg.

In practice, most common in those cases where the business is transferred to the neighboring country, where are lower taxes.

Consequently, if the company has succeeded in developing an effective tax planning schemes, in accordance with the co-operation of national tax jurisdiction, it is possible to increase the after-tax income, profits. With earned money they have opportunity to deposit investments to ensure the company's own development, increasing competitiveness and, in general of the national income.

Scientific urgency of paper is determined by tax planning opportunities for foreign economic cooperation.

The aim of the research: on the basis of theoretical and empirical analysis to find out advantages and disadvantages of transferring revenues to another country, and as a result optimizing tax payments.

The tasks of the research:

1. to investigate, sum up and critically analyse the opinions in the scientific literature about the meaning and pros and cons of the shifting of taxes;
2. to analyse critically the experience of the shifting of taxes in Latvia and other countries;
3. to define theoretical guidelines and to make practical recommendations how to use the shifting of taxes in the income an tax planing.

Research methods used: qualitative research methods: scientific literature review (Latvian and foreign literature and scientific publications) based on the analysis of legal norms, legal doctrine, specialized literature and case studies; logically – constructive; quantitative methods: mathematical and statistical methods: such as dynamic row analysis, the graphical method. For quantitative data the sources used are macroeconomic indicators from public databases and statistical series.

The research shows that the shifting of taxes does not create more money together, but less income for the State budget, but more for business, solution is only Global tax harmonization



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

POSITIONING STRATEGY DESIGN (*RADIO SWH*)

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Key words: *positioning, positioning strategy, brand, radio market*

JEL code: M31

The need for designing a positioning strategy and the topicality of the strategy issue are determined by the tough competition in the radio market of Latvia. As it can be seen from the analysis of the radio market of the country performed within the research, the market participants are predominantly profit and short-term oriented and only a few radio stations in their business are following a properly designed strategy for positioning their brand. In the radio market of Latvia a strong brand is to be seen as an effective long-term tool on the road to the market leader position *AS Radio SWH* group radio stations are aiming at in the future.

The aim of the research is, based on the theoretical aspects of the positioning strategy design, by studying the conditions of the company and brand development and by analyzing the essence of positioning models, to assess the current position of radio station *Radio SWH* in the market compared to the positions of its direct competitors and to design recommendations for the development of the brand positioning strategy of *Radio SWH*.

Research methodology: the Authors have analyzed the reference material and available research on the topic in accordance with the established aim: the quantitative data of the radio audience have been analyzed with the *Supernova* data processing software, radio sector and media agency specialists have been interviewed and expert opinions have been summarized.

In the theoretical analysis of the brand and its positioning strategies the Authors have compared the concepts designed by the marketing and brand management specialists and has examined their practical applicability in designing the brand positioning strategy of the radio station. Based on the study of the radio station listening habits of the inhabitants of Latvia the Authors analyse the overlapping of the target audiences of various radio stations. The Authors have also provided the demographic and psychographic profile of the consumers (listeners) of the main competing radio stations. The analysis suggests a considerable overlapping of the target audiences which confirms the need for strategic planning of the radio station brand development and strengthening of its position in the market. As a result, the Authors have identified the main direct competitor of the company, the *StarFM* radio station, and recommendations have been designed for the positioning strategy of *Radio SWH* regarding the competitor. Of practical significance are the positioning strategy guidelines which have been aligned with the mission, vision and core values of *Radio SWH*. The dynamics of the radio market and changes expected in the competition in the future underline the topicality of the radio station brand positioning that is clearly perceivable and understandable for the consumers (listeners).



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

PROFILE OF CURRENT AND POTENTIAL EMPLOYEES OF PUBLIC ADMINISTRATION IN LATVIA AND LITHUANIA: EMPIRICAL STUDY

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Key words: *Human Resource Management, Public Administration*

JEL code: J24, J45, O15

Organisations have many challenges connected to Human Resource Management (HRM). Some of them are directly linked to the lack of knowledge on peculiarities of current and potential employees. According to the author's previous studies, education on and work for Public Administration (PA) in Latvia and Lithuania has certain differences because of the a number of reasons including legislative circumstances and biased status of Public Administration employee in each of the countries. Both countries' PA organisations as employers can share experience and good cases to practice in field of HRM, therefore, it is important to explore profile of each country current and potential PA employees.

The major aspect of PA HRM that is a focus within the research presented is recruitment and retention. The aim of the research is to identify the main values, requirements and habits of Public Administration study programs' students (current and potential PA employees) in Latvia and Lithuania. The data are collected towards a survey that was conducted in tertiary education institutions that provide PA or other relevant graduate and/or postgraduate study program in Latvia and Lithuania.

The core difference between experience of Latvia and Lithuania lays in study programs supply. Tertiary education institutions of Lithuania provide graduate PA study programs as well as postgraduate ones, while there are only Master's programs available in Latvia. Therefore, majority of PA students in Latvia are PA employees older than 24 years. Students of PA study programs from Lithuania are mainly young unemployed people until 24 years, a part of whom wish to work for a private organisation, and employed in public sector postgraduate students. However, there is no significant difference between their values and requirement to the employer in cases of both countries. Salary, insurance, career/professional growth possibility and learning opportunities are the most important aspects that consider respondents selecting the employer considering a vacancy.

Respondents from both countries highlight as an important factor organisation's employer brand and its social responsibility considering an employer. Therefore, these two aspects are crucial to emphasize and work on for PA organisations; otherwise, in case of Lithuania a part of students with corresponding education could be employed by organisations that are more modern and publicly active as employers. The most important areas that PA organisations needs to pay attention on attracting and retaining employees are working environment and advancement opportunities; developing job advertisements, organisations should particularly focus on a part with a list of offers for employee.

The gained and analysed data had a benefit for practitioners, who are dealing with their organisations Employer Brand development including recruitment and retention activities improvement. This research also supports the theoretical approach to examination of generation Y representatives as employees and job seekers.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE USE OF CASH FLOW STATEMENT IN COMPANY'S FINANCIAL SITUATION EVALUATION

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Inta Millere, University of Latvia, Latvia

Key words: *cash flow statement, cash flow ratios, financial analysis, insolvency prediction*

JEL code: M41, M49

Every company's successful work is based on careful monitoring of its activities which must be formed on high-quality and accurate information. All decisions must be based only on true and visible facts by which company's efficiency can be evaluated. The author's personal experience shows that users of financial statements pay more attention to the balance sheet and profit and loss statement results and mostly use data of these statements to analyze the company's financial situation. The author draws attention to the fact that the profit or loss statement, even if it shows a positive result, may not always indicate the true picture of the company's solvency and financial stability because of the accrual basis, on which the profit and loss statement is based. If financial information isn't timely assessed, companies may be faced with financial difficulties, which can be prevented by paying more attention to the cash flow analysis.

In order to show the significance of a cash flow, the author set a goal to use the data from the financial statements of 15 liquidated companies in Latvia as opposed to the data of 15 stable and growing companies in Latvia thus assessing the importance of the cash flow statement in the evaluation process of the financial situation and make proposals for the improvement of the company's activities which are based on the information from the cash flow statement.

In order to reach the goal, the author analyzed theoretical aspects of the cash flow statement, did analysis of the financial situation and ratios of 15 liquidated and operating companies, as well as made a survey and an expert interview in order to determine the intensity of the usage of cash flow statements in practice. In order to provide the author's conclusions successfully, the absolute cash flow measures and ratios were shown by median, but to evaluate the quality of the ratios and show the average results of all ratios for all years the author used the arithmetic mean.

In the end the author pointed out the main cash flow ratios and financial indicators which need to be used for the evaluation of financial situation and came to the conclusion that cash flow statement can be used to evaluate companies financial situation and to estimate the future solvency.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MANAGEMENT OF THE *LEARNIT* INTERNATIONAL RESEARCH PROJECT IMPLEMENTATION: MAIN CHALLENGES AND FOCUS AREAS

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Key words: *educational management, research project, holistic approach*

JEL code: M150 IT

In the context of creating the European Research Area, many European universities are now engaged in different research activities including international research projects, which can make a valuable contribution to the development of an academic organization. Partnership of three higher education institutions from three countries was organized to implement LEARNIT research project: WSEI (University of Economics and Innovation, Poland), KVK (Klaipeda State College, Lithuania), and TSI (Transport and Telecommunication Institute, Latvia). The key project outcomes are supposed to be the properly equipped Learning Lab and software for mobile devices intended for enhancing the effectiveness of the learning process by stimulating students' concentration.

LEARNIT is a complex multidimensional research project that involves people of different professions and positions: researchers, managers, teachers, IT specialists and students. Therefore, the management of LEARNIT is a complicated process that requires strong integration of various resources, as well as different pedagogical and managerial procedures.

The aim of the paper is to address the main challenges faced by the LEARNIT management in the project implementation process, and to describe key focus areas of this project. The analysis provided in this paper is based on the academic literature review on the major educational and project management issues; it is also based on the author's experience as the project leader from Transport and Telecommunication Institute. The analysis performed in this paper allows the author to conclude that the implementation of a cross-disciplinary research project demands using the holistic approach to the management of heterogeneous organizational resources. The success of a cross-disciplinary research project is directly related to the accomplishment of a synergistic effect; the expected synergistic effect arises from strong cooperation between main functional domains of a university, so the project should be aligned with the appropriate management functions carried out in the agenda of functional area-specific strategies implementation. The author hopes that whatever lessons this analysis provides would be helpful to managers responsible for implementing a complex research project in a modern university.



New Challenges of Economic and Business Development – 2016

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SOCIAL POLICY OBJECTIVES IN THE CONTEXT OF POST-INDUSTRIAL SOCIETY

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Key words: *social policy, human capital*

JEL code: E61, E24

Problem statement. In general terms the purpose of social policy is human development, which can be defined as the process of empowering people (UNDP Report on human development 2010), thus in general the goal of social policy is to create the social pillar of sustainable development as a base of welfare.

The goal of social policy cannot be set once and for all countries and circumstances. It should be transformed in accordance with the stage of development of the country. Social policy in the industrial era was to promote the satisfaction of biological needs (A. Maslow classification). However, as a result of development in general and human development in particular, structure of needs and degree of urgency of their fulfillment are evolving. In 50-70 years of the XX century the basic model of the welfare state appeared; the events and processes of the 90-ies (globalization, post-industrial society) demanded its modernization. The financing of social policy at this time was faced with objective difficulties (changing population demographics, economic crises, high mobility resources, etc.).

The post-industrial economy is based on sectors, associated with the production and effective use of human capital. Social policy should be redirected to knowledge workers, and cannot be reduced to a simple material support of the needy. Accordingly, the objectives of social policy should be modified

Research aim. It will be useful to create, relatively speaking, a “set of goals” which can be combined depending on country characteristics. A multiplicity of social goals is normal now (as well as multiplicity of results); a system of goals can be represented in the form of “tree of objectives”. The social component of sustainable development depends set of factors (historical and cultural characteristics, basic values and orientations, the social demands of the population to the state) that will determine the content of the sub-goals of the first and subsequent levels. In determining the goals of social policy it is important to consider the experience of other countries, but not borrow it automatically.

Comparative analysis should be used as research method.

Main results and findings of the study. In Russia it is important to achieve the sub-goals of the first level. There are (1) the fight against poverty, the reduction of income differentiation and wealth of the people, supporting families, providing employment to everyone who wants to work and (2) the creation of equal conditions for independent people can achieve an acceptable standards of living.

Conclusions drawn. Social policy in the post-industrial economy aimed at achieving the following objectives (in accordance with the classification above they can be treated the second-level sub-goals): (1) decrease the negative influence of demographic trends; (2) improving the quality of the immigration influx and the stimulation of internal migration in accordance with the geography of demand for labor; (3) overcoming structural distortions of the labor market; increasing competition in the labor market; (4) overcoming poverty and excessive income differentiation; (4) the preservation and strengthening of comparative advantages of national human capital.



THE INDICATOR SYSTEMS AND THE SUITABILITY OF THEIR APPLICATION IN CONTROLLING DEPARTMENT ACTIVITY

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Key words: *controlling, the indicator systems, classification of indicator systems*

JEL code: M49

Various financial and non-financial indicators are of considerable significance in controlling system because they help to provide objective information on economic and financial situation of the company. However, because of the lack of information, the usage of single indicators is not always efficient. In order to avoid misinterpretation of the indicators and by taking into account the principle of controlling complexity, various indicator systems are formed. They allow not only to quantify the current situation and perform retrospective, operational and perspective diagnostics of financial position, but also to reveal the causes of the origin of the problems.

However, not every indicator system is equally able to highlight the weak points and identify the problems. It is also noteworthy that not every indicator system is characterized by the same level of compatibility of indicators, interconnections and strategic orientation. By considering this, it is possible to identify a problematical field of controlling system, which is the choice of appropriate indicators and their systems in order to provide relevant and structured information that is suitable to make management decisions. The aim of the research is to examine and classify the main financial and non-financial indicator systems and to evaluate the suitability of their application in the controlling department activity

A review of the main indicator systems, such as DuPont, EVA, BSC, ZVEI, RL, EFQM and others and the peculiarities of these indicator systems are revealed in the article. The result of the study is a dissection of the indicator systems to eight separate fields according to three dimensions: indicators compatibility level, indicators interconnection level and strategic orientation level. Considering the fact that controlling – as an instrument of company management – is oriented towards achieving operational and strategic objectives, strategic orientation level is considered the most important when choosing an indicators system. After performing the main indicator systems analysis, it was determined that the most significant, providing the most relevant amount of information in the controlling system is the BSC system assigned to the eighth field. Its features are: extensive orientation towards strategy, high indicators compatibility and strong relation among indicators. The research methods: comparative and systematic analysis of scientific literature, synthesis, induction, deduction. Generalized information provided applying graphical method.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

PREPARING BUSINESS STUDENTS FOR THE ENTERPRISE 2.0 – A CASE STUDY FROM GERMANY

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Keywords: *Virtual Collaborative Learning, Intercultural Communication, Enterprise 2.0, Web 2.0, Business Studies*

JEL code: A23, D83, I21

As Information and Communication Technologies continue to influence enterprise business processes, university students increasingly need adequate preparation for knowledge intensive professional work environments. This preparation is particularly important for business students who will have to adapt to the needs of different industries after their graduation and fulfil challenging requirements to achieve managerial and decision-making positions in their advanced career. However, essential skills for high performance at the modern workplace are usually not within the scope of regular formal university study programs.

The proposed paper presents an empirical case study of integrating German business students in a formal international masters course to develop their professional, interpersonal, communication, English language and intercultural skills by working in interdisciplinary teams with peers abroad in a Virtual Collaborative Learning setting based on purposely arranged Social Media and Web 2.0 applications.

Using a standardized guideline, seventeen participated students from Germany were provided with eight rubrics to reflect on their experience in this course. The written reports were then analysed using qualitative content analysis method to identify and categorize the advantages, disadvantages, impact, and enhancement potentials of this course as described by the students.

The results show high students' satisfaction with the flexibility of the learning environment, high interest in the effectiveness of the virtual collaboration method, and positive expected impact on the future academic and professional life. In addition to missing immediate members' reaction and body language as in face-to-face collaboration, students proposed less stressed time plan and more structured tasks and were less satisfied with the contribution of their international peers.

This empirical study provides implications for higher educational institutions to provide their students with international experience and valuable professional skills during their regular study programs and for enterprises that want to address qualified employees even before their graduation using enjoyable easy-to-use technologies.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE HISTORY OF FINANCIAL ANALYSIS, ITS FOUNDERS AND THEIR SCHOOLS

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Key words: *financial analysis, major schools, founders*

JEL code: B26

Financial analysis plays an important role in the life of every enterprise that works for the future and is ready for any kind of development, depending on opportunities and demand. The financial analysis indicators of an enterprise are to find already in the end of 19th century. The Renaissance (the second half of 19th century) is associated to the history of financial analysis with the emergence of a systematic approach to the accounting data analysis of the enterprise. This was facilitated by widespread of double entry accounting throughout the world, as well as the emergence of accountability forms, that are similar to the modern counterparts.

The aim of the paper – to examine the emergence and formation of financial analysis as a science, starting from the end of the 19th century

The authors of the paper first of all analyze the emergence of financial analysis, based on the different papers of the best financial analysis researchers from all over the world. The authors briefly review different points of view on the origins of the financial analysis, according to academics. Starting from the Renaissance time, the authors examine the emergence of systematic approach to the financial analysis. In the paper are analyzed first financial analysis schools from the second part of 19th century and from the beginning of the 20th century, where the major scientific figures of that time are marked. Next to the first financial analysis schools, the authors also examine the new financial analysis schools and their main achievements.

In the paper the authors are using qualitative method, logically constructive method and empirical research method.

Every author is defining the definition of financial analysis on its own way, depending on the extent of their needs. The authors of the paper analyzed the views of different international authors, it can be concluded, that the simplest financially analytical procedures were used already in Ancient China, Ancient Greece and Ancient Rome. It is known that first accounting records are dating back to the 30th century BC. The first time when ratios were used to analyze financial statements was in the second part of the 19th century in the last stage of Americas' movement towards industrial development. Many authors attribute the appearance of financial statement analysis with the transition of business managements from entrepreneurs-capitalists to the professional managers, and with the strengthening of the role of financial institutes in the economy during the above-mentioned stages. The authors of the paper analyzed five main financial analysis schools: Empirical Pragmatists School, Ratio Statisticians School, Multivariate Modellers School, Balance studies, Commercial calculations that originate already in the second half of the 19th century and in the beginning of 20th century and their main achievements and the main representatives. Based on the background of the above mentioned schools, the authors analyze the modern stage – the beginning of 20th-21st century, where the authors of the paper take six major financial analysis schools as a basis, they are: Distress Predictors School, Capital Marketers School, Pragmatic Empiricism, Deductive Approach, Inductive Approach, Confirmatory Approach.

Thus, summing up the work, it should be noted that the origins of the financial analysis could be traced far back in the past, even until the ancient times and the Middle Ages. However the development of financial analysis has always been closely linked to the evolution of accounting and statistical methods.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

REVEALING THE STAGE OF DEVELOPMENT OF LATVIAN CORPORATE BOND

Natalja Tocolovska, Stockholm School of Economics, Latvia

Key words: *Corporate bond market, comparative factor analysis, indicators, stage of development*

JEL code: G23, G24

The precondition for analysing the future and potential of Latvian corporate bond market development is to evaluate the current situation and the level of development of the market. Numerous researchers have analysed and measured the level of development of a particular region or country, still a clear framework to evaluate the level corporate bond market development in a country is missing. The academic literature available on the topic provides descriptive attempts to determine the level of development of the corporate bond market in the country, several academics have provided more comparative approach giving the qualitative research more structured approach, which can be applied as the measure of other corporate bond market development.

Existing academic researches on the topic can be divided into 2 groups: descriptive factor analysis: Fabella and Madhur (2003), Burger and Warnock (2005), Braun and Briones (2006), Stewart (2009), and Dittmar and Yuon (2007); and comparative factor analysis: the research by the World Bank introducing Bond market development indicators, Wyman (2015). The papers in the descriptive factor analysis group lack to provide a set of main aspects to measure the corporate bond market development. The findings of the studies are dissimilar and sometimes contrasting. Comparative factor analysis delivers a more structured way in corporate bond market analysis by identifying the main dimension of the influencing factors and suggesting the metrics for evaluating the corporate market development of the country.

The aim of this paper is to reveal the stage of development of Latvian corporate bond market based on the quantitative assessment by World Bank and Wyman (2015) framework. The paper reveals that while there is a progress in the stages of development: Latvian corporate bond market has entered Stage 2 (Enhance infrastructure/processes for corporate bond markets) of its corporate bond market development in 2012 and is shifting to the Stage 3 (Widening the issuer and investor base), the factors like skewness to the financial sector corporate bond issues, small size of the issues outstanding, low liquidity and wide bid-ask spreads in the secondary market drug the market from further progress. The paper argues that World Bank model opaque methodology opens the need for subjective interpretation of the results. The paper concludes with the suggestions for the further analysis while providing the further development of the model by World Bank.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MULTI-CHANNEL DISTRIBUTION APPROACHES IN BUSINESS: SPECIFICS AND APPLICATIONS

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Key words: *multi-channel distribution, multi-channel approaches, channel applications*

JEL code: M31

The dynamics in designing and applying new technologies in business has significant influence on the distribution channels of companies. The multi-channel distribution structures are always enriched with adding new channels. Investments in new channels are predetermined above all by the dynamic changes in consumer behavior in respect to the process of decision making for purchasing and stronger competition. As a reaction to changes companies try to find the suitable configuration of channels which should comply with the conditions of the environment, consumers' expectations and the priorities for long- and short-term development of business.

The aim of this study is to present the different approaches in designing multi-channel distribution, the advantages of using them and implementation issues when putting them into practice. Reviewed are the approaches of complementarity between channels, competition and integration between channels, with an emphasis on their characteristic features that distinguish one from another and make them recognizable. The research is based on an online survey among companies, registered in Bulgaria. This survey puts emphasis on companies, the distribution channels they use; the channels they add; and the multichannel approach they apply. Of interest are also companies' intentions to abandon some of the channels used in the past.

The results of the research show that adding new distribution channels to the already functioning ones emerges as one of the solutions to overcoming the negative effects of long-lasting recessions on businesses, often accompanied by a decline in sales and the outflow of customers.

The e-channel is the most preferable channel for adding to the previously existing structures of distribution in the last three years for the covered by the survey companies. The most often applied multichannel approach in companies' business, evident from conducted research, is based on complementarity between channels, followed by integration between channels and competition between them.

The interest of customers and companies in multi-channel distribution will continue to grow. The example of successful channel configurations will be transferred to different spheres of economy and social life, contributing to better customer service and efficient distribution of products and services.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

MULTI-CHANNEL DISTRIBUTION DRIVERS AND ARGUMENTS FOR ADDING NEW CHANNELS

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Key words: *multi-channel distribution, channel decisions, channel advantages*

JEL code: M31

The growing interest in multi-channel distribution and the development of new channel configurations in the last decade is an indisputable fact. The main drivers for the growth in using multi-channel structures and the business arguments for adding new distribution channels are issues of significant interest in this research.

The aim of this study is to make a review of the contemporary drivers of multi-channel distribution and identify the main companies' arguments for adding new marketing channels. The research is based on an online survey among companies registered in Bulgaria. The survey puts emphasis on the companies' distribution decisions and argumentation for adding new channels in the last three years.

The paper characterizes four major drivers for multichannel distribution growth: technological development, legal regulation, logistics industry progress and increasing number of customers using multiple channels to buy products. The paper discusses the technological developments driving forward the use of various types of channels (conventional, e-channels, vending channels, catalog channels, call channels, direct personal sales and so on). In the last decade the increasing legal regulation of distribution from a distance is also an indisputable factor for the growth in applying multi-channel distribution. A significant driver for the growth in using multi-channel distribution is the development of the logistics industry. The growing number of companies and the enhanced wide range of services they offer support channels from a distance to serve their consumers effectively. The growing number of individuals defined as "cross channel shoppers" who demonstrate active consumer behavior in purchasing by using many channels also stimulates companies to invest in adding new channels for ensuring the balance under the circumstances of supplying and demanding the specific products and services and providing effective "Place" to "Space" channel management.

The results of the research show that adding new distribution channels to the already functioning ones is mainly aimed at attracting new customers, covering new markets/market segments, increasing market share and revenues. The decisions to add new channels are taken primarily under the influence of owners of companies and the example of the best multi-channel practices in the industry.

In conclusion, the technological development will stimulate changes in the quantitative and qualitative parameters of channels, hence their functions and capacity. Applying new technologies in a distribution and logistics will remain important prerequisite for integrating separate channels in a uniform system which provides effective distribution through balancing the relations benefits/costs/risks for companies and consumers.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THREE SOURCES FOR THE PROJECT RISK REGISTER ANALYSIS

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Key words: *project, project risk management, project risk register, risk management process, project documentation*

JEL code: M00

The aim of the current research is to examine real projects risk registers to find correlations between the project management theory, especially the project risk management and real projects risk management practical results – the risk registers publicly available in the Internet.

The practical applicability of the risk registers does not guarantee theoretical accuracy. If project management is a science or sub-branch of science then theoretical accuracy is of not less importance than practical applicability. As a result of the research of the notion “risk” definitions analysis we can conclude that accurate definition of notions and the application of notions in compliance with the definition contents and volume is a necessary, but insufficient pre-condition for the creation of risk registers.

The current study concluded three previous real projects risk registers studies. Final study was carried out in-depth analysis of the risk term definitions, project risk management process, and project documentations requirements to create theoretical risk register. In-depth analysis was determined by results of the previous studies. The current study used qualitative methods for the risk term definitions, project risk management process, and project documentations requirements analysis, and quantitative methods to perform a comparison between the theoretical risk register and the real projects risk registers.

Previous studies found that the real projects risk registers are different among themselves and different between the theoretical risk register. Study result is development of the set of recommendations for risk register, who could provide a theoretically substantiated risk register development considering the real projects risk registers creating experience.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

GLOBAL EDUCATION FOR FUTURE BUSINESS LEADERSHIP. WHAT DO THE TEACHERS SAY?

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Key words: *Global education, integral theory, leadership*

JEL code: I21 (Analysis of Education), A21 (Economic Education and Teaching of Economics (pre-college))

In today's world of growing economic, political and cultural interconnectedness education in schools can affect the transformation of the economy and business. Achieving transformation through education and learning can be complex and painstakingly slow process, therefore it is important to look at causal factors which shape the competencies of the 21st century generation.

In this paper we took a closer look at emerging subfield of education – global education. Global education is not a new teaching subject, but an interdisciplinary field which emerged in education, especially in social sciences during the end of the 20th century. The main themes of global education are: globalization, economic and political interconnections, culture diversity, environment and sustainability, social justice and civic education. We show how these themes have become more relevant with the reference to business leadership qualities

The study examines internal and external factors that contribute to teacher's motivation in teaching about global issues.

Study design is based on integral theory formulated by Ken Wilber and Sean Esbjorn-Hargens, and examines four complementing dimensions – teacher's personal and social values as well as the role of institutional framework in their motivation to implement global education. The control group of 135 secondary school teachers who have participated in global education training project. Based on findings of survey questionnaires and focus groups we concluded that the motivation of teachers is positively affected by their personal values, beliefs and attitudes. The social values are not favourable for the implementation of global education but they do not seem to have a significant impact on the professional activity of the teachers. Legislative and institutional framework plays a neutral role teaching standards and programs for education curricula are compatible with the global development topics. The study recommends the supporting of teachers, their teaching methods and upscaling of several successful initiatives in schools.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE MOTIVATION AND BARRIERS FOR IMPLEMENTING THE EUROPEAN FOUNDATION FOR QUALITY MANAGEMENT EXCELLENCE MODEL IN LATVIAN ENTERPRISES

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Key words: *excellence, barriers, motivation, Excellence model*

JEL code: L15

Excellent organizations can achieve and sustain outstanding levels of performance that exceed meet the expectations of their stakeholders. The European Foundation for Quality Management (EFQM) Excellence Model allows people to understand the effect relationships between what their organisation does and the Results it achieves. This paper presents the results of the empirical study conducted enterprises which are immersed in the implementation process of the European Foundation for Quality Management excellence model. The aim is to find out what kind of factors impact the EFQM Business Excellence Model implementation.

To achieve the objective, were raised the following tasks: 1) to described the EFQM model, 2) on the basis of theoretical knowledge and the other results develop a questionnaire on the factors and their impacts on the EFQM Business Excellence Model use of enterprises, 3) on the basis of theoretical knowledge and the survey results to draw conclusions and make proposals to reduce the barriers in Latvian enterprises. The research is based on the following hypothesis- The Latvian executive' choice to use EFQM Business Excellence model to measure the business performance is influenced by many supporting and delaying factors.

The methodology consists of a descriptive analysis in order to determine the importance motivation and barriers. The results show the most important motivations that drive firms to implement the EFQM. The results show the most important motivations that drive firms to implement the EFQM, such as, management support and initiative.

The results show too that the most important barriers are related to the lack of physical and financial resources and the lack of time. The structure of barriers are made up of more groups: resource barriers, organizational barriers, behavioural and cultural barriers.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

THE DIGITAL ECONOMY & SOCIETY INDEX AND NETWORK READINESS INDEX: PERFORMANCE OF LATVIA ON EUROPEAN UNION ARENA

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Key words: *DESI, NRI, digitization, ITC, country marketing*

JEL code: F63, M31

Technologies are playing very important role in nowadays business and people lives. Some global and European level indices were created to be able to capture digitization and ITC related processes. One of such indicator is The Digital Economy and Society Index (DESI, European Union level) that was created in context with digital agenda for Europe in 2020. The other is Network Readiness Index (NRI, global level). Also other indicators exist showing country's performance compared with other countries. In this paper the authors compares these indicators between Latvia and other EU countries.

If we take some of the latest indicators in Latvia and compare with previous years, many have improved. This is good. Unfortunately, it turns out that it is not enough. It is revealed that overall Latvia show low performance in mentioned indicators compared with average level of European Union, as well as the other Baltic States. Accordingly in DESI 2015 Latvia has rank 18 (among 28 EU countries), while Lithuanian rank is 11, but Estonian is 7. If we take The Global Information Technology Report 2015, then Latvian rank is 33 (among 143 countries), while Lithuania is 31th and Estonia is 22.

Latvia is the lowest in the EU in Integration of Digital Technology dimension; very low indicators are related to selling on-line and cross-border online sales. Other indicators reveal that internet usage by businesses is very low, for example, companies don't fully use internet marketing.

There are at least two main cons for country showing low performance. First, these indicators highlight issues that should be improved and identify where more should be done to improve digitization impact on country's performance.

Second, the author analyzes indicators that are usually compared within different countries and widely published Thus providing policymakers and business with insights into current market conditions. For country place marketing it is essential to have better results in such indicators as DESI or NRI. This low performance can result in spoiled prestige, while high performance can improve country's reputation. We all know good examples of country level marketing. For instance, Finland for years is known as country with an excellent education system, because of showing high performance within some indicators that were widely compared with other countries.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

WHAT CAUSES THE GENDER WAGE GAP IN LATVIA?

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Key words: *gender wage gap; Oaxaca-Ransom decomposition; gender inequality; gender discrimination*

JEL code: J31, J71

Male-female wage gap raises concerns of possible discrimination in the labour market, therefore it is highly discussed topic not only in Latvia, but also in European Union as whole. In 2014 gender wage gap in Latvia indicated that men earn on average 14% more than women. European Commission (EC) points out that gender differences in average wage result in significantly lower lifetime earnings for women which in turn raise the poverty risk once the pension age is reached. Therefore EC highlights the importance of abolition of any form of gender discrimination.

We use micro data from Labour Force Survey for Latvia to estimate how gender wage gap has changed during the recent economic crisis and afterwards. We employ Oaxaca-Ransom decomposition method to find out how much of the gender wage gap is explained by differences in characteristics like education, job experience, occupation and sector and how much remains unexplained.

Our results imply that gender wage gap decreased during the economic crisis and then increased afterwards thus exhibiting procyclical behavior. In 2007 on average men earned approximately 25% more than women. In 2009 the difference shrank to 10% and then rose again to 14% in 2014. Oaxaca-Ransom decomposition results reveal that on average around one fifth of the observed gender wage gap is explained by differences in characteristics while remainder remains unexplained. Our results imply that with equal characteristics as well as distribution by sectors, occupations and fields of education, men would earn approximately 11% more than women. Education variables are the main factor in favor of women while segregation by sector is the main factor in favor of men. In Latvia women spend on average a year more in schooling than men do, therefore the observed wage gap is smaller than it would be if both genders had the same level of schooling.

These results have a significant implication when addressing the issue of equality in the labour market. For example policies that aim to reduce wage gap by increasing education attainment for women could close the observed wage gap, however it wouldn't solve the underlying causes of it.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

BUSINESS INFORMATICS AND SWEBOK: A WAY TO INTERCONNECTION

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Keywords: *Business Informatics, IT education standards, Software Engineering Body of Knowledge*

JEL code: I21

The aim of the research is to analyze the conformity of training curriculum in the area of business informatics at the Saint Petersburg State University to the requirements of the SWEBOK standard. The results of the research would be setting the conditions necessary for training Russian PhD-students according to the international standards of Software Engineering (SE) and recommendations for the corresponding improving of IT-education programs in the University.

International cooperation in the field of higher qualification scientific personnel training is supported by the project Joint Programs and Framework for Doctoral Education in Software Engineering in the European Union Erasmus+ Program Capacity Building in Higher Education. The overall aim of the project is to support the development, modernization and internalization of SE higher education in the target countries according to the SWEBOK international standard and at the same time to help all partner countries to strengthen their PhD programs and make them more attractive for international students. The project will facilitate building and offering of sustainable multi-disciplinary and multi-regional perspective programs for educating the next generation of software engineering professors.

The project proposes training for qualified teaching staff of all partner universities and for PhD students in the target countries. During the 2015-2018 eleven European universities, including the St. Petersburg State University, will share their experience in creating educational environment according to the international standards. The program is structured in several intense schools which will be organized by different universities. It will help to share specific expertise of partner universities in different areas. Each university can nominate PhD students to attend the different schools. Target countries also can train their staff in these schools. These schools are held in different knowledge areas and disciplines providing typical PhD student information which he or she cannot acquire in one specific university. Individual PhD students can select the best suited schools according to their research profile and create personal path in the proposed program. PhD students and their supervisors will be offered courses on advanced techniques of SE and reviews of the best practices of research projects. Help will be provided in preparation of high-quality scientific publications on the subject, which includes the following areas: Research Methods in the age of Software as a Service, Advanced methods and tools of SE, Problem-based learning in the field of SE, Human-computer interaction in SE, Models of SE and modeling, Mathematical and computational foundations of SE, SE: A View from the point of view of economics and business. The last area of the research is widely represented in the Faculty of Economics of Saint Petersburg State University, business informatics courses being taught here for several years by highly qualified staff. Training is conducted in the following areas: Investment Analysis of SE Projects, Risk Analysis and Risk Management of SE Projects, Business Intelligence for SE Costing, Technics and Methodology of Simulation Modeling in SE, Perfect Software Engineer Competences, Economics and Competitiveness of SE Education.

The results of the preliminary analysis of the compliance of IT-education programs of the Saint Petersburg State University to SWEBOK standard will be reported.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

TO THE DEVELOPMENT OF DATA MINING TECHNIQUES FOR DECISION MAKING SUPPORT IN A COMPETITIVE ENVIRONMENT

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Keywords: *business/competitive intelligence, methods for collecting/processing information, modeling and prediction, systems of decision-making support, management, competitiveness*

JEL code: C80

The report focuses on the main directions of work on the stated topic. The topic is supported by grant of the Russian Foundation for Research appropriated for prioritized direction of activity within the framework of the project “Methods of Data Mining to support management decisions in a competitive environment.” The aim of the project is to develop models and methods for assessing the competitiveness of Russian business on the basis of intelligent analysis of a wide variety and significant volume of data that characterize the market dynamics thus establishing the fundamentals of the managerial decision-making based on quantitative and qualitative methods of exact sciences and modern information technology.

As a result of interdisciplinary research on resources and technologies the project will allow to estimate labor costs of collecting and analyzing of information resources, software engineering, and data mining technologies at all stages of life cycle of development and implementation of business intelligence in Russian business. It is supposed to adapt data mining techniques, including approaches related to soft computing, to the goals and objectives of business intelligence, performance evaluation, and terms of use for data mining techniques to support decision making management in a competitive environment. This, consequently, will allow to plan the creation of business intelligence infrastructure for Russian business and to justify management decisions on optimization of this activity. The collection, processing, and use of significant amounts of variety of informational materials with the usage of computers and networks, and traditional methods of compliance with laws and ethical standards require special skills, technology and resources. Special importance is given to “big data”, industrial standards of the in-depth analysis. In this regard, the integrated project will focus on the development of relevant contemporary requirements for competitive intelligence professional training, as far as formulation of recommendations for creation of the training system for specialists, and will develop a set of educational programs for Russian higher school along with the estimation of their development and implementation costs.

The study of international and Russian experience of implementation of educational programs for specialists in the field of business intelligence in tertiary education, as well as analysis of conceptual approaches to evaluating the effectiveness of these programs will result in offers of new directions and activities for developing a system to assess its implementation in the Russian tertiary education. As a consequence, new models and methods will be developed and justified for evaluating the Russian universities’ effectiveness and competitiveness in the context of educational programs realization in the field of Business Intelligence. Thus, the outcomes of the project should be: a) mathematical methods and corresponding algorithms for mining data sets in order to develop promising options for the enterprises’ development in a competitive environment, b) economically feasible proposals on the administrative, personnel and infrastructure solutions for the effective implementation of competitive intelligence in Russian business, c) recommendations on training personnel involved in the tertiary school educational process for training in the field of competitive intelligence. Some specific results in these directions will be presented.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

EVALUATION OF CURRENT LOCATION AND PROSPECTS OF THE EUROPEAN AND RUSSIAN UNIVERSITIES AMONG THE WORLD'S LEADING UNIVERSITIES WITH THE USE OF NEURAL NETWORK METHODS CLUSTERING OF DATA

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Key words: *international university's ratings, clustering, Self-organizing Kohonen maps*

JEL code: C80

Globalization of the processes of knowledge creation and transfer in the field of education makes competition between universities stronger. Universities should constantly improve their efficiency to be competitive in the market of educational services and hold positions among other leading universities.

The paper presents the results of research on evaluating the positions of the European and Russian universities in the world university ranking, which is based on the use of the neural network methods of clustering. The method of clustering based on the self-organizing Kohonen maps allows to get university ranking with a minimum level of subjectivity.

The main objectives of the research are the following:

- detection of clusters (groups) of universities on the basis of targets indicators of their activities presented in the database InCites™;
- evaluation of the current location of the European and Russian universities among the world's leading universities;
- identification of the targets indicators of universities activities which is necessary to reach for Russian and European universities to enter the leading clusters.

To reach the goals of the current research were selected 8 sufficient indicators characterized various activities of universities.

Clustering of universities is fulfilled using the construction of self-organizing Kohonen maps, which are based on the artificial neural networks models.

The results of clustering allow us to identify five groups of universities with similar characteristics and thus with similar goals and opportunities for development. Thus, it is fruitfully to analyze tendencies of development for each individual cluster.

Below is presented a possible interpretation of the most significant results obtained from the evaluation of trends of universities development:

- there is a significant increase in the share of foreign teachers, not only among universities of cluster, focused on international activity, but also among the universities, which occupy a middle position. The described trend may indicate that many universities as a priority goal in their strategic development chose the internationalization of educational services, which may allow them to enter the group of leading universities;
- dynamics of development of all universities included in the study sample, over the period 2004-2012 indicates a steady increase in the number of publications according to Web of Science;
- there is a common trend of reducing the ratio of academic staff to the number of students that, according to the author, due to the increase in the number of students studying in leading universities.



New Challenges of Economic and Business Development – 2016

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THE IMPACT OF LATVIAN UNIVERSITY ENTREPRENEURIAL EDUCATION ON THE UNIVERSITY STUDENTS' ENTREPRENEURIAL ATTITUDES AND INTENTIONS TO START A BUSINESS

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Key words: *entrepreneurial education; entrepreneurial intentions; entrepreneurial attitudes*

JEL code: A22

The paper aims to examine the influence of entrepreneurial education on entrepreneurial attitude and intention of Latvian higher education institutions students to start a business.

The study question is as follows: how does the entrepreneurial education effect the students' perceptions of and motivations towards entrepreneurship and their willingness to innovate and create new ventures to facilitate economic growth. To which extent can the entrepreneurial attitude among Latvian students be influenced by exposure to entrepreneurial education?

The sample is composed of Latvian higher education institutions undergraduate students in their final year of Bachelor's entrepreneurship study program.

A quantitative methodology employed a questionnaire that consisted of four groups of questions. All questions were answered with the use of a 5-point Likert type scale.

Primary data were collected from a survey of 9 Latvian higher education institutions.

The results of the analysis show that student's exposure to entrepreneurship education has a positive influence on the students' entrepreneurial intentions. The results also show that the impact of business education on entrepreneurial attitude is more significant for male students than for female students.

Further research might seek to examine the effect of the entrepreneurship education on students' entrepreneurial activities and behaviour after graduation.



New Challenges of Economic and Business Development – 2016

May 12–14, 2016, Riga, University of Latvia

NINE MONTHS OF QUANTITATIVE EASING IN THE EUROZONE: EMPIRICAL EVIDENCE FROM BAYESIAN VAR

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Key words: *Asset Purchase Programme, quantitative easing, Eurozone, Eurosystem, Bayesian VAR.*

JEL code: C54, E47, E58.

The European Central Bank announced the Asset Purchase Programme (APP) on January 22, 2015 in order to prevent the Eurozone economy from entering a deflationary spiral and to achieve its main goal – maintain price stability. The purchases of public and private securities started in March 2015 and are intended to be carried out until March 2017 or until inflation path is consistent with inflation target. The programme amounts to €60 billion of monthly purchases. The aim of this paper is to evaluate macroeconomic effects of the APP on the Eurozone's output and inflation in the first nine months of implementation. It is necessary to understand whether quantitative easing can be used to stimulate output and inflation when stable conditions prevail in financial markets.

In order to assess the macroeconomic effects of the APP, the author estimates a Bayesian vector autoregression (VAR) with Minnesota – Litterman prior. The model is then used to conduct counterfactual analysis. The counterfactual scenario is based on empirical evidence from Altavilla *et al.* (2015) which suggests that, on average, the APP lowered the euro area long – term bond yields by about 40 basis points at 10 – year maturity. The author implements this impact on long – term interest rates by constructing a counterfactual path for the long – term interest rate spread. The results from the Bayesian VAR model suggest that the APP has had a positive impact both on output and inflation after the first nine months of implementation. The analysis also indicates that quantitative easing is an effective policy option to boost output and price level in times of low financial stress as the results do not significantly differ from studies which evaluate the effects of quantitative easing in other countries during the financial crisis.



New Challenges of Economic and Business Development – 2016

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PREDICTIVE ANALYTICS AND CLOUD COMPUTING TECHNOLOGIES FOR THE BUSINESS DATA ANALYSIS

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Key words: *analytics, data mining, predictive modelling*

JEL code: M15, M53

Problem statement

Predictive analytics integrates a multitude of methods of analysis, both the historical facts and current data for the compilation of predictions about possible future events. Predictive analytics is used in a variety of areas: trade, insurance, medicine, finance, banking, etc. But it is quite a complex set of methods and technologies. In order to use it in practice, firstly a correct approach to the choice of algorithms and analysis techniques is required, and secondly the ability to correct work with data is required. In addition, the use of predictive analytics rarely makes a significant improvement in existing business processes at once, improvements are gradual. Therefore, it is necessary to evaluate adequately the expected results.

Research aim

The study aims to analyse the approaches of the use of predictive analytics techniques. To show and analyse predictive analytics models application possibilities for business data analysis from a variety of data sources, including big data.

Research methods

The research on the use of the predictive analytics cloud computing technology is performed by means of scientific literature study and by practical application of predictive modelling techniques and applications for business data analysis.

Conclusions

Choosing an appropriate model and algorithm from a set of available ones is largely dependent on the structure of the data on the nature of the problem being solved by the prediction task. Correct use of predictive modelling techniques can help to improve decision-making process.

The study shows the application of predictive modelling technology for analysis of the company's business process data. The paper displays the predictive model development stages, gives the comparative analysis of models, gives a better model for justification and shows the use of the model forecasting including as a web service.

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